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PSA Schedule of Rates for

BUILDING WORKS

Eleventh Edition 2015



PSA Schedule of Rates for Building Works

ELEVENTH EDITION 2015

London: The Stationery Office



Published by TSO (The Stationery Office), part of Williams Lea,
and available from:

Online

www.tsoshop.co.uk

Mail, Telephone, Fax & E-mail

TSO

PO Box 29, Norwich, NR3 1GN

Telephone orders/General enquiries: 0870 600 5522

Fax orders: 0870 600 5533

E-mail: customer.services@tso.co.uk

Textphone 0870 240 3701

TSO@Blackwell and other Accredited Agents

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First published 2015

ISBN 978 0 11 708234 2

Printed in the United Kingdom by The Stationery Office

Foreword

This is the Eleventh Edition of The Schedule of Rates for Building Works and is the latest in a line of dating back to 1840, now produced by Carillion.

Carillion has many years of experience in compiling Schedules of Rates for use by construction professionals in both the private and public sectors. This derives from origins within the Property Services Agency where a comprehensive portfolio of construction publications was developed to meet the needs of the Government Estate.

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A Schedule of Rates computer system can enable Employers, Consultants and Contractors working on Measured Term Contracts to process Works Orders and Estimates with the minimum of input. It offers substantial savings in time, accuracy and improved presentation over manual methods.

One of the main benefits is to dramatically reduce the time spent by surveyors writing out and calculating the value of a Works Order or Estimate, including squaring dimensions, extending them by a rate and applying Contract percentages. By retaining the Order details, an Order Ledger is created and various reports on the Contract can be generated automatically.

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Further advice is also available in "PSA Schedule of Rates - A Training Manual : Measurement and Pricing Guidance with Worked Examples" ISBN: 948-011-706832-2, £95.00.

PSA Schedules of Rates

To obtain advice and information, please contact:

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These monthly updating percentages may be used as a contractual basis for the reimbursement of increased costs for measured term contracts let on all PSA Schedules of Rates or other forms of maintenance contracts as well as assisting in updating estimates.

Available from:

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London SW1P 3AD.

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Order online at www.bcis.co.uk/online (subscription service).

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1: General Directions

GENERALLY

Preambles

Preambles which apply to all Sections are contained in this General Directions Section.

Preambles which apply only to specific Sections and Sub-Sections are contained within the particular Section.

Format

This document is generally structured using the RICS New Rules of Measurement Work Sections.

To assist users who are familiar with the previous versions of the PSA Schedule of Rates for Building Works measured using SMM7 in Common Arrangement format please find below a table comparing the original and new format.

Comparison table between original format (SMM7) and revised format (NRM2)

SMM7 - Work Section	NRM2 - Work Section
A General Directions Generally Preliminaries Method of measurement Rates Definitions	1 General Directions Generally Preliminaries Method of measurement Rates Definitions
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A4 Contractor's General Cost Items A44 Temporary works; Scaffolding	1.2.8 Temporary Works Access scaffolding
C Cleaning, Renovation and Alteration C30 Shoring C40 Cleaning masonry and concrete C41 Repairing and renovating masonry C45 Damp proof course renewal and insertion C90 Alterations	3 Demolitions Shoring, façade retention and temporary works 4 Alterations, repairs and conservation) Repairs/cleaning/renovating and) conserving Damp proof course renewal and insertion Alteration work to existing buildings

1: GENERAL DIRECTIONS

SMM7 - Work Section	NRM2 - Work Section
D Groundwork D20 Excavation and filling E10 In situ concrete (membranes only) D50 Underpinning	5 Excavation and Filling Site clearance/preparation, excavations, disposal, fillings and membranes 8 Underpinning
E In Situ Concrete E10 In situ concrete E20 Formwork for in situ concrete E30 Reinforcement for in situ concrete E40 Designed joints in in situ concrete E41 Worked finishes and cutting to in situ concrete E42 Accessories cast into in situ concrete	11 In Situ Concrete Works In situ concrete Formwork Reinforcement Designed joints in in situ concrete Surface finishes to in-situ concrete Accessories cast into in situ concrete In-situ concrete sundries
F31 Precast concrete sills, lintels, coping and features	13 Precast Concrete Precast concrete sills, lintels, copings and other units
F Masonry F10 Brick/block walling F20 Natural stone rubble walling F21 Natural stone ashlar walling and dressings F22 Cast stone ashlar walling and dressings F30 Accessories and sundry items for brick, block and stone walling	14 Masonry Brick/block walling Natural stone rubble walling and dressings Natural stone ashlar walling and dressings Artificial/cast stone walling and dressings Forming cavity, damp proof courses, joint reinforcement, fillets, pointing, joints, wedging and pinning, creasing and proprietary and individual spot items
G Structural and Carcassing Metal and Timber G12 Isolated Structural Metal Members G30 Metal profiled sheet decking G20 Carpentry, timber framing and first fixing G32 Edge supported and reinforced wood wool slab decking K11 Rigid sheet flooring, sheathing, linings and casings K20 Timber board flooring, linings and casings	15 Structural Metalwork) Structural steelwork and structural) aluminium work 16 Carpentry Timber framing and first fixings)) Timber, metal and plastics boarding,) sheeting, decking, casings and linings)))
H Cladding and Covering H71 Lead sheet coverings and flashings H72 Aluminium sheet coverings and flashings H73 Copper sheet coverings and flashings H74 Zinc sheet coverings and flashings J41 Built up felt roof coverings	17 Sheet Roof Coverings)) Sheet metals))) Bituminous felts

1: GENERAL DIRECTIONS

SMM7 - Work Section	NRM2 - Work Section
H Cladding and Covering H60 Plain roof tiling H61 Fibre cement slating H62 Natural slating H65 Single lap roofing tiling	18 Tile and Slate Roof and Wall Coverings Plain tiling Fibre cement slating Natural slating Plain and Interlocking tiling
J Waterproofing J21 Mastic asphalt roofing, insulation and finishes J30 Liquid applied damp proofing J31 Liquid applied waterproof roof coatings J40 Flexible sheet damp proofing	19 Waterproofing Mastic asphalt roofing Applied liquid tanking or damp proofing Applied liquid roofing Flexible sheet tanking or damp proofing
K Linings, Sheathing and Dry Partition K10 Plasterboard dry linings, partitions and ceilings	20 Proprietary Linings and Partitions Drylining and partitioning systems to walls and ceilings
H Cladding and Covering H21 Timber weatherboarding H30 Fibre cement profiled sheet cladding, covering and siding H31 Metal profiled sheet cladding, covering and siding H32 Plastics profiled sheet cladding, covering and siding	21 Cladding and Covering Weatherboarding))) Profiled sheet cladding or roofing))
K Linings, Sheathing and Dry Partition K13 Rigid sheet fine linings and panelling K20 Timber board flooring, linings and casings K30 Panel partitions K32 Panel cubicles P20 Unframed isolated trims, skirtings and sundry items P21 Ironmongery	22 General Joinery Floor, wall and ceiling boarding, sheeting, panelling, linings and casings Timber, metal and plastics boarding, sheeting, decking, casings and linings Proprietary partitions, panels and cubicles Proprietary partitions, panels and cubicles Unframed isolated trims, skirtings, or sundry joinery items General ironmongery not associated with windows and doors
L Windows, Doors and Stairs L10 Windows and rooflights P21 Ironmongery L20 Doors, shutters and hatches P21 Ironmongery L30 Stairs, walkways and balustrades	23 Windows, Screens and Lights Associated Ironmongery 24 Doors, Shutters and Hatches Associated Ironmongery 25 Stairs, Walkways and Balustrades
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1: GENERAL DIRECTIONS

SMM7 - Work Section	NRM2 - Work Section
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M Surface Finishes	28 Floor, Wall, Ceiling and Roof Finishings
M10 Cement sand and concrete screed and toppings	)
M11 Mastic asphalt flooring	)
M12 Trowelled rubber latex flooring	)
M20 Plastered, rendered and roughcast coatings	)
M30 Metal mesh lathing for plastered coatings	) Insitu, tiled, block, mosaic, sheet, applied
M40 Quarry and ceramic tiling	) liquid or planted finishes
M42 Wood block flooring	)
M50 Plastics and lino tiling and sheeting	)
Q37 Green roofs	Roof finishes include grass, sedum and the like live finishes
M60 Painting and clear finishing	29 Decoration
M52 Decorative papers and fabrics	Painting and clear finishing
	Decorative papers or fabrics
K40 Demountable suspended ceilings	30 Suspended Ceilings
	Demountable suspended ceilings
P Building Fabric Sundries	
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N10 General fixtures and equipment	General fixtures and equipment
N11 Domestic kitchen fittings	Kitchen fittings
N13 Sanitary appliances and fittings	Sanitary appliances and fittings
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R12 Drainage below ground	Storm Water and Foul Drain Systems
R13 Land drainage	Land Drainage

1: GENERAL DIRECTIONS

SMM7 - Work Section	NRM2 - Work Section
Q Paving, Planting and Fencing	35 Site Works
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Q20 Granular sub-bases to roads and pavings	)
Q21 In situ concrete roads and pavings	)
Q22 Coated macadam roads and pavings	)
Q23 Gravel and hoggin pavings	) Road, Path Pavings and Hard
Q24 Interlocking brick and block pavings	) Landscaping
Q25 Slab, brick, sett and cobble paving	)
Q26 Special surfacings	)
Q50 Site/Street Furniture/Equipment	)
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S Piped Supply Systems	38 Mechanical Services
S10 Cold water	)
S11 Hot water	) Primary equipment, terminal equipment
S60 Fire hose reels	) and fittings, pipework and pipe
S65 Fire hydrants	) ancillaries, etc
P Building Fabric Sundries	41 BWIC with Electrical and Mechanical Installations
P31 Holes, chases and covers for services	Work for Services Installations in New and Existing Buildings
P30 Trenches, pipeways and pits for buried engineering services	Work for External Services Installations
Z General items	50 General Items
Z20 Fixings	Fixings

1: GENERAL DIRECTIONS

PRELIMINARIES

All Inclusive Rates

The Rates in this Schedule are all inclusive and, as such, include for Preliminaries.

Significant preliminary items

When assessing any adjustment to be tendered to the level of the Rates, consideration must be given to any unique preliminary items which could be encountered. The following list gives examples only and does not limit the actual requirements encountered.

- Establishment charges, overheads and profit.
- Nature and location of the Works.
- Liabilities and insurances.
- Access to the Works.
- Existing services.
- Plant, tools, vehicles and transport.
- Site organisation, security, health and safety.
- Water, lighting and power.
- Temporary works: eg hardstandings, accommodation, storage, telephones, fencing, footways and gantries.
- Statutory obligations.

Agreed rates for materials

Where using a "fixing only" or "laying only" rate for materials paid for by the Contractor or where the Contractor is supplying only materials, reimbursement of the cost of materials, unless the Conditions of Contract state otherwise, will be made on the basis of agreed current market or invoice rates delivered to site or store (after the deduction of all discounts obtainable for cash, insofar as they exceed 2½ per cent, and of all trade discounts, rebates and allowances) with the addition of 5 per cent to cover profit and all other liabilities. Such reimbursement shall not be subject to further adjustment.

Value of old Items

Unless specifically agreed otherwise, all old items for disposal will become the sole property of the Contractor.

Fixing, jointing or form of construction

Where not particularly specified, the methods of fixing, jointing or form of construction are at the Contractor's discretion and must be entirely suitable and of good practice for the work in hand.

Sub-Contractors and Suppliers

In the case of work ordered to be placed with a Sub-Contractor or Supplier, the Contractor, unless the Conditions of Contract state otherwise, will be reimbursed the net agreed amount of their account (after the deduction of all discounts obtainable for cash, insofar as they exceed 2½ per cent, and of all trade discounts, rebates and allowances) with the addition of 5 per cent to cover profit and all other liabilities. Such reimbursement shall not be subject to further adjustment.

Asbestos removal

Observe all statutory requirements and Health and Safety Executive guidance. A Licensed Contractor must be appointed for removal of asbestos-based products.

1: GENERAL DIRECTIONS

METHOD OF MEASUREMENT

Measurement rules

This Schedule stands alone. Where not self-evident from the Item descriptions, the rules of measurement are stated.

Every effort has been made to adhere to the RICS New Rules of Measurement; Detailed measurement for building works 1st Edition (NRM 2), but by the very nature of the Schedule's uses some expansion and changes are necessary.

Measurement and billing

Measure work net as fixed in position unless otherwise stated.

Take dimensions used in calculating quantities to the nearest 10 mm.

Bill all quantities to the nearest two decimal places of the billing unit for each particular item.

Voids

Unless otherwise stated, minimum deductions for voids refer only to openings or wants within the boundaries of the measured work.

Always deduct openings or wants at the boundaries of measured work, irrespective of size.

Do not measure Items for widths not exceeding a stated limit where these widths are caused by voids.

Nominal sizes

All sizes are nominal unless otherwise stated.

Size ranges

Sizes expressed as " to " , are to be read as "exceeding but not exceeding".

1: GENERAL DIRECTIONS

RATES

Base Date

The Rates in this Schedule reflect the costs of resources as at the fourth quarter 2014.

Multiplying factors

Where two or more multiplying factors are to be applied to a Rate, the factors are first to be multiplied together and not added.

Rates expressed per unit of thickness, etc.

Rates per unit of thickness, width, girth, or the like:
Pay for part of a unit as a whole unit.

Rates quoted "per 1 000 mm² or 10 000 mm² of sectional area:"

Calculate the Rates proportionally for the actual section area.

Tidal Work

Where work has to be carried out between low and high water marks, multiply the Rates by the following factors:

Items of labour and materials - *multiply by 1.20*

Items of labour only - *multiply by 1.50*

The Rates so computed take account of all extra costs associated with tidal working including extra payments, special clothing, boat hire, intermittent working, extra risk of loss of materials and plant, etc.

Rates throughout exclude (except where otherwise stated)

Steeplejacks:

Work normally executed by steeplejacks.

Compressed air:

Work carried out in compressed air.

Work under water:

Work carried out in or under water.

Drawings:

Preparing drawings.

Rates throughout include (except where otherwise stated)

All Rates:

For preliminaries, labour, waste and lost time.

For supplying and delivering materials, unloading and getting into store or other approved position.

For storage of materials.

For assembling, fitting and fixing materials in position.

For carrying out work in any circumstances, unless otherwise stated. It is assumed that work carried out in disadvantageous circumstances (e.g. work in occupied buildings, alterations, repairs or extensions) will be offset by work carried out in advantageous circumstances.

For working at any height unless otherwise stated.

For carrying out the work in accordance with the requirements of the Specification clauses whether or not these are repeated elsewhere.

For executing in sections as necessitated by the nature of the work or to suit the chosen method of working.

For any break in working after the continuity of the work has been interrupted by any temporary obstruction not specifically stated in this Schedule.

For providing samples and tests.

For protecting old and new works from damage.

1: GENERAL DIRECTIONS

RATES - *continued*

For square cutting.

For fixing to new or old backgrounds.

For keeping the site free from all surplus materials, rubbish and debris arising from the execution of the Works.

For leaving the site clean and tidy on completion of the Works.

Taking out, taking up or the like:

For breaking up, cutting away, stripping or the like.

For work incidental to alterations but not for the complete demolition of a structure.

For taking out from any background unless otherwise stated.

For getting out from the interior to the exterior of the building and lowering or hoisting to ground level as necessary by means of barrows and wheeling gangways, chutes, bagging, bucketing or hoists.

For removing off the site to an approved place of disposal including payment of landfill tax and any other charges in connection therewith.

For removing to stack or other place of storage on site as ordered.

For carefully taking out all materials ordered to be stacked or removed to store for re-use.

For carefully taking out all fixings both from the background and from the item removed.

For all necessary cleaning of materials removed to store in preparation for re-use.

For providing all necessary dust sheets and tarpaulin coverings.

For laying dust by adequate sprinkling with water.

For all necessary dismantling of bulky fittings or the like preparatory to removing to stack or store.

Fixing only or laying only:

For fixing only or laying only new items or items previously set aside for re-use.

For taking delivery, storing and sending back returnable packings.

For obtaining from stack or other place of storage on site.

For handling, loading, unloading, protecting, transporting to the site of the work, hoisting, lowering, assembling and fixing complete.

For all fixing or jointing materials required.

Resecuring:

For fixing in position loosened components or materials.

For removing and renewing damaged or defective fixing or jointing materials as required.

Work in repairs:

For removing any existing work.

For new work to match existing.

For all preparatory work and making good.

For jointing new to existing work.

For work of any width.

Composite items:

For assembling, breaking down into suitable sections for transport and installation and subsequent reassembly and any adjustment necessary for fixing.

Plugging:

For providing and fixing approved proprietary plugs or, at the Contractor's discretion, for fixing by approved mechanical means.

Work to crossfalls:

For intersections.

1: GENERAL DIRECTIONS

DEFINITIONS

Project Manager (PM)

The person appointed by the Employer to act on his behalf.

Approved or ordered

Approved or ordered by the PM.

Or equivalent Alternative

Alternative articles and materials to those described and approved by the PM in writing.

BS, BS EN and BS EN ISO

The latest British Standard (published by the British Standards Institution) referred to by its serial number, including any amendments, revisions or replacements.

Plant rooms

Heating chambers, machinery rooms, tank rooms or the like whose prime function is the enclosure of mechanical or electrical plant and equipment.

Staircase areas

Within a stairwell. When a stairwell is not well defined, include all work requiring execution from the stair or landing structure. Landings forming extensions or parts of the main floor slab are not included.

Store

A permanent or temporary structure providing security and weather protection for storage purposes within or in close proximity to the site.

Masonry (as a background for fixing)

Includes concrete, brick, block or stone.

Timber (as a background for fixing)

Includes all forms of timber and manufactured building board, etc.

1.11: Employer's Requirements: Temporary Works

TEMPORARY SCREENS, HOARDINGS AND FENCING

Notes

For all necessary bolts, holes, dogs, spikes and folding wedges.

Screens, hoardings and fencing:

Pay for only where specifically ordered in addition to the Contractor's Obligations described in the "General Directions".

For dismantling and removing within a period of six calendar months. Where specifically ordered in writing to be left in position for a longer period than six calendar months, pay an additional 10 per cent for each additional calendar month or part of a month. When payment has been made for use and waste for a total period of twelve months, the whole of the materials will become the property the Employer.

Rates for the following include

Generally:

For use and waste of timber.

For putting together, erecting, fixing to any back-ground, maintaining, adjusting, striking, removing and making good.

Item		
1.11	<i>Square Metre</i>	<i>£</i>
	Screen: dust proof: sealing joints and edges with masking tape	
001	polythene sheet: draped	3.11
	timber frame	
	polythene sheet lining	
002	one side	15.65
003	both sides	18.77
	insulation board lining	
004	one side	18.01
005	both sides	23.47
	hardboard lining	
006	one side	19.73
007	both sides	26.92
008	Screen: weather proof: timber frame: insulation board lining one side: waterproof lining other side	22.84
	<i>Each</i>	
009	Extra over Items 1.11.004 to 1.11.008 for single access door not exceeding 1.00 m wide: rebates, stops and ironmongery	47.00
	<i>Metre</i>	
010	Hoarding: next main thoroughfare: 2.00 m high: constructed of any suitable material	38.00

1.11: EMPLOYER'S REQUIREMENTS FOR TEMPORARY WORKS

TEMPORARY SCREENS, HOARDINGS AND FENCING

Item		
1.11	<i>Each</i>	£
	Extra over Item 1.11.010 for	
011	single access gate not exceeding 1.00 m wide: rebate, stops and ironmongery	35.50
012	pair of access gates 1.00 to 2.50 m wide: rebate, stops and ironmongery	66.38
	<i>Metre</i>	
	Fencing: chestnut pale or similar	
013	1.05 m high	17.40
014	1.50 m high	29.18
	<i>Each</i>	
015	Extra over Items 1.11.013 and 1.11.014 for access gate and posts not exceeding 1.00 m wide: suitable hangings and fastenings	46.74
	<i>Metre</i>	
	Temporary mesh panels 3.00 m wide 2.00 m high including feet, stabilisers and pedestrian and vehicle access	
016	not exceeding or first 6 panels	21.70
017	ADD for additional panels	10.94

EMERGENCY COVERINGS TO EXISTING BUILDINGS

Notes

Tarpaulins:
Pay for only where specifically ordered as *emergency* coverings to existing buildings not provided for in the Contractor's Obligations described in the "General Directions".

Pay for each tarpaulin up to a maximum total period of eight weeks. Make no further payment for tarpaulins retained for periods exceeding eight weeks.

Rates for the following include

Generally:
For providing tarpaulins and all battens, ropes, weights or the like at any height and in any position so as to completely protect the works covered.

For maintaining.

For taking down and removing from site.

	<i>Each</i>	1	2
		First week or part	Each additional week or part
		£	£
Tarpaulin			
018	not exceeding 20 m ²	37.80	10.35
019	20 to 30 m ²	44.80	16.10
020	30 to 40 m ²	52.95	23.00

1.2.8: Temporary Works

SCAFFOLDING

Specification

Scaffolds: provide to safely and effectively execute the work ordered, including such numbers of towers and mobile towers as are necessary to carry out the work economically and to meet the programme required by the PM.

Definition of terms

Scaffold: a temporarily provided structure used to obtain access to or from the work and to perform work. Structures primarily used to support hoists, plant and equipment and ladders, trestles, cat walks, crawler boards or other similar means are not included.

Painters bridging scaffold: a scaffold composed of such platforms (other than close boarded) and supported by roof trusses or similar structural members, as are necessary for the execution of the work.

Bridging scaffold: a scaffold composed of close boarded platforms supported by roof trusses or similar structural members.

Tower scaffold: a scaffold with both horizontal dimensions less than 3.50 m.

Mobile tower scaffold: a scaffold with both horizontal dimensions less than 3.50 m which can be moved to a new location without complete dismantling.

Notes

Suspended scaffolds, cradles, cantilever scaffolds or the like:

Pay for at Rates agreed between the PM and the Contractor.

Method of measurement

Birdcage, putlog and independent tied scaffolds:

Measure the face area of the building, structure and the like, or the area in the case of birdcage scaffolds.

Measure height from the base of the scaffold to the highest working platform on each section used for executing the work.

Painters bridging and bridging scaffolds:

Measure the gross floor area under the work executed from the scaffold.

Mobile tower and Tower scaffolds:

Measure height from the base of the scaffold to the highest working platform used during the life of the scaffold.

1.2.8: TEMPORARY WORKS

SCAFFOLDING - *continued*

Rates for the following include

Generally:

For all requisite tubes, fittings of every description, working platforms, fixed handholds, guard rails, toe boards, access ladders, ties, putlogs or the like.

For delivery, all handling and removal.

For erecting, maintaining for as long as is necessary for the execution of the work ordered, and dismantling on completion.

For altering and adapting the scaffold (except to pass mobile tower scaffolds around or under obstructions) for as many times as necessary for the satisfactory execution of the work ordered.

For any work to new or existing buildings necessary for erecting, securing and supporting scaffolds and making good any damage.

Bridging and mobile tower scaffolds:

For moving as many times as necessary.

Item		
1.2.8	<i>Cubic Metre</i>	£
001	Birdcage scaffold - <i>not exceeding 4 weeks</i>	6.91
002	ADD for each additional week or part	0.29
003	Tower scaffold - <i>not exceeding 1 week</i>	6.29
004	ADD for each additional week or part	4.72
	<i>Square Metre</i>	
005	Putlog scaffold - <i>not exceeding 4 weeks</i>	10.58
006	ADD for each additional week or part	0.58
007	Independent tied scaffold - <i>not exceeding 4 weeks</i>	14.95
008	ADD for each additional week or part	0.63
009	Painters bridging scaffold - <i>not exceeding 1 week</i>	3.42
010	ADD for each additional week or part	0.92
011	Bridging scaffold - <i>not exceeding 1 week</i>	15.54
012	ADD for each additional week or part	2.29
	<i>Metre of height</i>	
013	Mobile tower scaffold - <i>not exceeding 1 week</i>	36.51
014	ADD for each additional week or part	27.72
	<i>Each</i>	
015	Alter and adapt mobile tower scaffold to pass around or under an obstruction: any size or type	18.19

2: Off-site Manufactured materials, Components and Buildings

SECTION IS NOT USED AND THIS PAGE LEFT BLANK INTENTIONALLY

TEMPORARY SHORING

For putting together, erecting, maintaining, adjusting striking and removing.

For all necessary bolts, holes, dogs, spikes, nails and folding wedges.

- For dismantling and removing within a period of six calendar months. Where specifically ordered in writing to be left in position for a longer period than six calendar months, pay an additional 10 per cent for each additional calendar month or part of a month. When payment has been made for use and waste for a total period of 12 months, the whole of the materials will become the property of the Employer.

Metal props or struts:
For delivery and removal.

For the provision of small timber pads if required.

For the provision of small timber pads if required.

For the provision of small timber pads if required.

Timber shoring:

For use and waste of timber.

15

4: Alterations, Repairs and Conservation

CLEANING MASONRY AND CONCRETE

GENERALLY

Specification

Comply with BS 8221-1 in respect of:

- a. means of access;
- b. protection of building fabric, external and decorative fixtures;
- c. protection of operatives, building users and public.

Rates for the following include

For cleaning by the most appropriate method.

CLEANING OF CONCRETE

Specification

Cleaning: comply with Section 8 of BS 8221-1.

Removal of specific deposits: in addition to the cleaning specified, remove deposits as specified in Section 9 of BS 8221-1.

Item		Square Metre	£
4	Cleaning existing concrete surfaces; over 500 mm wide		
001	to floors		3.12
002	to walls		3.75
	filling in nails holes and surface imperfections and leaving smooth		
003	to walls		7.49
004	to soffits		8.98
005	ADD for removing deposits		1.56

CLEANING OF MASONRY

Specification

Cleaning: comply with Section 6 of BS 8221-1.

Removal of specific deposits: in addition to the cleaning specified, remove deposits as specified in Section 9 of BS 8221-1.

		Square Metre	£
	Cleaning existing brick or block surfaces; over 500 mm wide		
006	to walls		4.37
007	ADD for removing deposits		1.87

4: ALTERATIONS, REPAIRS AND CONSERVATION

REPAIRING AND RENOVATING MASONRY

GENERALLY

Specification

Method: comply with the general requirements of BS 8221-2 and use the particular method of repair specified in the Section of BS 8221-2 stated below:

- pointing and bedding mortars (Section 6);
- repointing (Section 7);
- stone masonry repair (Section 8)
- brickwork repair (Section 9).

RE-FACING EXISTING BRICKWORK

Notes

Number of bricks:

Calculate the actual number of bricks required and add 10 per cent for waste.

Common bricks:

For work in any mortar.

Facework:

For finishing joints fair.

Facing bricks:

For facework one side to match existing.

Rates for the following include

Cutting out:

For brickwork built in any mortar.

Facing bricks Column A:

For jointing and pointing in cement or cement-lime mortar.

Re-facing:

For everything except the cost of bricks.

Facing bricks Column B:

For jointing and pointing in white or coloured cement or cement-lime mortar or with coal ash substituted for sand as ordered.

For new or old bricks.

Item		1 2 3		
		Common Bricks	Facing bricks A	Facing bricks B
		£	£	£
4	Square Metre			
	Cutting out decayed, defective or cracked work and re-facing: any bond: in patches			
008	exceeding 1.00 m ²	129.23	162.62	171.40
009	0.10 to 1.00 m ²	150.16	188.19	198.75
010	ADD for facework one side to match existing	10.05	-	-
	Each			
011	isolated brick or bricks in group not exceeding 0.10 m ² : facework one side to match existing	3.58	4.62	4.77

4: ALTERATIONS, REPAIRS AND CONSERVATION

RE-TOPPING CHIMNEYS

Notes

Cleaning and stacking old bricks:
Pay for at the Rates in this Section (page 23).

Facework, composite work, cement weatherings, chimney terminals and flue linings:
Pay for at the Rates for new work in Section 14.

Number of bricks:
Calculate from the Tables in Section 14.

Method of measurement

Taking down chimney stack:
Measure brickwork only. Make no deduction for voids.

Rates for the following include

Taking down chimney stack:
For taking down projections, cappings, pots, cowls, linings and flaunchings.

Laying only brickwork:
For everything except the cost of bricks.

For laying new or old bricks.

For flush or projecting bands, weathering or the like.

For any parging and coring reconstructed portion of flue.

Item		
4	<i>Square Metre - per half-brick thickness</i>	£
	Taking down chimney stack	
012	for the top 2.00 m of stack	38.10
013	below the top 2.00 m of stack	23.13
	Laying only brickwork to re-build chimney stack: in cement mortar	
014	for the top 2.00 m of stack	90.38
015	below the top 2.00 m of stack	86.39

RE-POINTING EXISTING BRICKWORK OR BLOCKWORK

Rates for the following include

For brushing and cleaning down to remove dust, dirt, flaking paint or the like.

Generally:
For brickwork or blockwork of any description.

For wetting joints.

		1	2
		Existing brickwork	Existing blockwork
	<i>Square Metre</i>	£	£
	Raking out lime, cement-lime or decayed cement mortar joints 20 mm deep: pointing		
016	in cement or cement-lime mortar	22.39	15.26
017	in white, coloured or coal ash cement or cement-lime mortar	25.47	-
	<i>Metre</i>		
018	isolated joint of door or window frame or the like	2.90	2.90
019	ADD for pointing in mastic instead of mortar	4.29	4.29

4: ALTERATIONS, REPAIRS AND CONSERVATION

RE-FACING EXISTING STONework

Rates for the following include

Re-facing:

For everything except the cost of stone.

Cutting out:

For stonework built in any mortar.

For jointing and pointing in cement or cement-lime mortar to match existing.

Item		1	2	3
		Bath	Portland	York
		£	£	£
4	<i>Square Metre - per 25 mm of depth</i>			
	Cutting out decayed, defective or cracked work and refacing in patches			
020	exceeding 1.00 m ²	22.82	27.92	32.32
021	0.10 to 1.00 m ²	27.92	34.37	39.85
	<i>Each - per 25 mm of depth</i>			
022	not exceeding 0.10 m ²	4.17	5.16	5.89

RE-POINTING AND RE-DRESSING EXISTING STONework

Rates for the following include

Mortar:

For coloured mortar, or substituting for sand, crushed stone or stone dust of the same type as the stone used.

Generally:

For brushing and cleaning down to remove dust, dirt, flaking paint or the like.

	<i>Square Metre</i>	£
	Raking out decayed mortar joints: pointing in cement or cement-lime mortar	
023	ashlar: to a depth of 10 mm	10.55
024	squared rubble or squared rubble brought to courses: to a minimum depth of 13 mm	16.19
025	random rubble or random rubble brought to courses: to a minimum depth of 13 mm	22.34
	<i>Metre</i>	
026	isolated joint: to a minimum depth of 13 mm	3.15
	<i>Square Metre</i>	
027	Re-dressing decayed face of existing stonework with picked face to hard freestone: any type: re-pointing: in cement or cement-lime mortar	99.91

4: ALTERATIONS, REPAIRS AND CONSERVATION

DAMP PROOF COURSE RENEWAL AND INSERTION

SILICONE INJECTION DAMP PROOFING

Specification

White spirit based silicone solution for injection:

- system: Agrément certified.
- installation: to BS 6576 by a firm approved by system manufacturer.

Drill: one course of brick, block or stone work at approximately 100 mm intervals, ensuring full saturation of silicone solution, to form an damp proof course at floor level.

Making good to exposed injection holes:

- mortar mix: a type recommended by the injection system manufacturer to match existing masonry in colour and texture;
- installation: fully fill holes. finish neatly and flush;
- approval of appearance: obtain approval for first few holes before completing the remainder.

Guarantee:

- type: insured protection. Administered by an independent insurance protection company.
- documentation: provide certificates/guarantees at completion of installation.

Notes

Existing finishings:

Measure and price removal and reinstatement of finishings separately.

Rates for the following include

Generally:

For filling injection holes and making good to match existing.

Item	Metre	£
4	Damp proofing	
	brick wall	
028	half-brick thick	11.50
029	one-brick thick	20.04
030	one-and-a-half brick thick	31.91
031	ADD for each additional half-brick thickness	9.94
	block wall	
032	75 mm thick	8.73
033	100 mm thick	9.40
034	150 mm thick	13.88
035	215 mm thick	18.55
	stone wall	
036	not exceeding 100 mm thick	12.17
037	100 mm to 200 mm thick	17.54
038	ADD for each additional 50 mm of thickness	10.74

INSERTED DAMP PROOF COURSES

Specification

Reference to other Sections: the Preambles to Section 14 Damp Proof Courses apply equally to this Section where appropriate.

Method of measurement

Generally:

Measure the area covered with no allowance for laps. Make no deduction for voids not exceeding 0.50 m².

4: ALTERATIONS, REPAIRS AND CONSERVATION

INSERTED DAMP PROOF COURSES - *continued*

Rates for the following include

For cutting out in alternate lengths not exceeding 1.00 m.

For bedding in cement mortar.

For pointing exposed edges.

Sheet damp proof course:

For laying in single layer.

For laying with 150 mm laps in length and full lap at angles.

For dressing projecting edges up or down as ordered.

Slate damp proof course:

For laying in two courses breaking joint.

Curved work:

For all necessary cutting.

Item
4

Square Metre

Inserting in old wall: cutting out one course of brick or block: replacing bricks or blocks

damp proof course: sheet

039 not exceeding 225 mm wide 456.30 414.18 498.89 58.44

040 exceeding 225 mm wide 397.85 355.74 440.45 43.84

cavity tray

041 exceeding 225 mm girth 514.74 472.63 557.34 -

Square Metre

damp proof course: slate

042 not exceeding 225 mm wide 626.52 116.89

043 exceeding 225 mm wide 568.08 87.66

Sheet or slate damp proof course

044 Where curved on plan: price at the foregoing Rates multiplied by 1.20.

Preformed cavity trays

Metre

£

Inserting preformed cavity tray in old wall: cutting out one course of brick or block: replacing bricks or blocks

045 not exceeding 300 mm girth 294.60

046 300 to 400 mm girth 314.65

047 400 to 600 girth 338.03

1	2	3	4
Horizontal or stepped			ADD
Bitumen	Pitch	Lead	where
	polymer		vertical
£	£	£	£

1	2
Horizontal	ADD
or	where
stepped	vertical
£	£

4: ALTERATIONS, REPAIRS AND CONSERVATION

ALTERATION WORK TO EXISTING BUILDINGS

GENERALLY

Specification

Support of existing structure: support existing structure as necessary during cutting of new openings or replacement of structural parts. Do not allow new work to be overstressed when removing supports.

Notes

Filling in openings:

Pay for at the Rates in the relevant Section.

Shoring:

Pay for at the Rates in Section 3.

Demolition of complete structures:

Pay for at Rates agreed between the PM and the Contractor.

Method of measurement

Concrete, brickwork, blockwork or stonework:

Measure overall including the thickness of finishings except for finishings ordered to be removed separately. Measure such finishings separately.

Forming or enlarging openings in concrete, brickwork, blockwork or stonework:

Measure the net finished size of the opening required with such additions as necessary to accommodate new lintels or the like. Deduct the areas of any existing openings incorporated in the new opening.

CONCRETE

Rates for the following include

Generally:

For cutting to line at boundary of work.

For cutting reinforcement in reinforced concrete.

Item			
		1	2
		Plain	Reinforced
		£	£
4	<i>Cubic Metre</i>		
	Taking out		
048	machine base or similar small unit	109.85	157.55
049	bed	111.31	150.22
050	slab	133.23	183.25
051	wall	156.71	209.25
052	beam or beam casing: attached or isolated	135.01	187.67
053	column or column casing: attached or isolated	123.84	175.56
054	staircase	137.67	185.22
	Cutting to form or enlarge opening through		
055	slab	406.48	541.11
056	wall	479.27	637.22

4: ALTERATIONS, REPAIRS AND CONSERVATION

CONCRETE - *continued*

Item		
4	<i>Square Metre</i>	<i>£</i>
057	Cutting to reduce thickness of concrete: trimming surface: not exceeding 25 mm thick	17.23
058	ADD for each additional 25 mm of thickness	13.14
059	ADD where reinforcement exposed and protected	8.48
	<i>Each</i>	
060	Cutting out end of steel section not exceeding 200 mm in depth: from concrete	56.48
061	ADD for making good concrete to match adjacent finish	12.51
062	Taking up steel floor clip	4.15
063	ADD for cutting out and making good concrete to match adjacent finish	8.26

BRICKWORK AND BLOCKWORK

Notes	For taking down concrete or stone lintels, copings, band courses, dressing or the like when taken down in conjunction with the brickwork or blockwork.
<i>Making good jambs or the like:</i> Pay for at the Rates in Section 14.	
<i>Cleaning and stacking old bricks:</i> Count only serviceable stacked bricks approved as suitable for re-use.	<i>Cleaning and stacking old bricks:</i> For bricks of any description previously built in lime or cement-lime mortar.
Rates for the following include	For cleaning off mortar and dirt and stacking where directed.
<i>Taking down, cutting or the like:</i> For work of any description in any type of mortar.	

	<i>Square Metre - per 25 mm of thickness</i>	<i>£</i>
064	Taking down brickwork	2.04
065	Taking down reinforced brickwork	2.76
	Cutting to form or enlarge opening through	
066	brickwork	4.35
067	reinforced brickwork	6.26
	<i>Each - per 25 mm of depth</i>	
068	Cutting pocket or hole for needle or shore not exceeding 0.10 m ² section area in existing brickwork	1.77
	<i>Thousand</i>	
069	Cleaning and stacking old bricks for re-use	155.97

4: ALTERATIONS, REPAIRS AND CONSERVATION

BRICKWORK AND BLOCKWORK - *continued*

Item		
4	<i>Square Metre - per 25 mm of thickness</i>	<i>£</i>
070	Taking down blockwork	1.52
071	Cutting to form or enlarge opening through blockwork	3.17

STONework

Notes

Stone dressings taken down in conjunction with brickwork:
Pay for at the Rates for taking down brickwork.

Rates for the following include

Generally:
For stone of any description in any mortar.

	<i>Cubic Metre</i>	<i>£</i>
072	Taking down rubble walling	42.60
073	Taking down dressed stonework	67.55
074	Cutting to form or enlarge opening through dressed stonework	184.76
	<i>Each - per 25 mm of depth</i>	
	Cutting pocket or hole in dressed stonework for needle or shore	
075	not exceeding 0.05 m ² sectional area	4.53
076	0.05 to 0.10 m ² sectional area	6.35
	<i>Metre</i>	
077	Taking out slate floor fillet and bedding material: not exceeding 75 mm deep	3.35
	Taking out slate bench fillet or skirting and bedding material	
078	not exceeding 75 mm wide	4.19
079	75 to 150 mm wide	6.69

ISOLATED STRUCTURAL STEEL MEMBERS

	<i>Kilogramme</i>	<i>£</i>
	Taking down steelwork: any description	
080	without unbolting, cutting or burning off fittings	0.49
081	including unbolting, cutting or burning off fittings	0.76

4: ALTERATIONS, REPAIRS AND CONSERVATION

CARPENTRY, TIMBER FRAMING AND FIRST FIXINGS

Item		
4	<i>Metre</i>	<i>£</i>
	Taking down	
082	carcassing timber: any description - <i>per 10 000 mm² of section areas</i>	3.13
083	furring piece: any size	1.89
084	fillet, roll or the like: any size	1.54
085	fascia, eaves or verge soffit board: any description: any size	2.10
	<i>Square Metre</i>	
086	gutter board or the like: any description: any thickness: including any bearers	7.53

DECKING

Rates for the following include

Generally:
For horizontal or sloping work.

For removing all eaves pieces or the like.

	<i>Square Metre</i>	<i>£</i>
	Stripping decking: any thickness	
087	metal	13.65
088	wood wool	5.84
089	fibre cement	8.77

TIMBER WEATHER BOARDING

Rates for the following include

Generally:
For horizontal, sloping or vertical work.

	<i>Square Metre</i>	<i>£</i>
090	Taking down weather boarding: any thickness: including any battens	5.84

4: ALTERATIONS, REPAIRS AND CONSERVATION

COVERING AND CLADDING

Method of measurement

For de-nailing as necessary.

Stripping sheet metal roof covering:

Add flashings, weatherings, hips, ridges, gutters or the like to the superficial measurement.

Stripping profiled cladding sheets:

For sheets of any description.

For removing eaves pieces, barge boards, ridge cappings or the like.

Rates for the following include

Generally:

For horizontal, sloping or vertical work.

Stripping slating or tiling:

For slating or tiling of any description.

For resecuring roof boarding after removal of any roofing material.

For removing double courses, verges, ridge or hip coverings, valleys, existing mortar in bedding, weather fillets or the like.

Item		Square Metre	£
4			
	Stripping profiled cladding sheets		
091	fibre cement		4.88
092	fibre cement insulated sandwich construction		5.84
093	metal		4.88
094	GRP single skin		4.88
095	GRP double skin		5.84
096	Stripping slating or tiling		3.42
097	ADD for taking off battens		1.23
098	ADD for taking off counter battens		0.49
099	ADD for stripping underlay		1.46
	Stripping sheet metal roof covering		
	lead		
100	weight not exceeding Code 5		5.72
101	weight Code 6, 7 or 8		6.84
102	aluminium, copper or zinc		6.26
		Metre	
103	Burning out existing lead from groove		16.25

4: ALTERATIONS, REPAIRS AND CONSERVATION

MASTIC ASPHALT ROOFING

Method of measurement

Hacking up roofing:
Add turn-ups, turn-downs, gutters or the like to the superficial measurement.

Rates for the following include

Generally:
For horizontal, sloping or vertical work of any area, width, thickness or description.

For stripping off insulation boarding.

Item			
4		<i>Square Metre</i>	£
	Hacking up roofing		
104	with loose underlay: to masonry or timber		7.12
105	with nailed underlay: expanded metal reinforcement: to timber		9.61
106	keyed: to masonry		8.17
		<i>Metre</i>	
107	Taking up lightning conductor fixed in position with asphalt dabs		1.04

BUILT UP FELT ROOFING

Method of measurement

Stripping felt roof covering:
Add turn-ups, turn-downs, gutters or the like to the superficial measurement.

Stripping bitumen-felt roof covering:
For stripping felt of any description however fixed to base in any width and any number of layers, including chippings if any.

For trimming edges of adjacent felt where required.

Rates for the following include

For stripping off insulation boarding.

Generally:
For horizontal, sloping or vertical work.

For resealing roof boarding after removal of any roofing material.

		<i>Square Metre</i>	£
	Stripping		
108	bitumen-felt roof covering: to timber		2.69
109	bitumen-felt roof covering: to masonry		3.19
		<i>Metre</i>	
110	Taking up lightning conductor fixed in position with felt pads		1.04

4: ALTERATIONS, REPAIRS AND CONSERVATION

LININGS, SHEATHINGS AND CASINGS

Item		1	2	3
		Plasterboard	Manufactured building board	Timber
		£	£	£
4	Square Metre			
	Taking off: any description: any thickness including battens: from			
111	wall, column or duct	6.99	4.50	5.69
112	floor	-	4.73	5.96
113	ceiling or beam	8.04	5.00	6.19
114	roof: flat or sloping	-	5.28	6.54

DRY PARTITIONS

	Square Metre	£
	Taking down	
115	timber panelled partition, wall panelling, cupboard front or the like	13.80
116	proprietary demountable partition: any description: any thickness	15.25
117	plasterboard stud partition: any description: any thickness	21.52
	Cutting to form or enlarge opening through	
118	proprietary demountable partition: any description: any thickness	41.70
119	plasterboard stud partition: any description: any thickness	70.92

PANEL CUBICLES

Notes	Rates for the following include
<i>Reference to other Sections:</i> The Preambles to Section 22 apply equally to this Section unless otherwise stated.	<i>Generally:</i> For cutting out or removing pedestals fixed to floor. For taking down trims.

4: ALTERATIONS, REPAIRS AND CONSERVATION

SUSPENDED CEILINGS

Rates for the following include

For work in any area or width or length.

Generally:

For work internally or externally.

Item		<i>Square Metre</i>	£
4	Taking down		
121	suspended ceiling tiles: leaving suspension system in position: any description any thickness		2.78
122	suspended ceiling and suspension system: any description: any thickness		9.23

WINDOWS

		1	2	3	4
		Area			ADD for
		not	1.00 m ² to	2.00 m ² to	each
		exceeding	2.00 m ²	3.00 m ²	additional
		1.00 m ²			1.00 m ²
	<i>Each</i>	£	£	£	£
	Taking out single or composite timber casement window and frame: timber surround: accessories: glass				
123	in conjunction with taking down wall	9.27	12.18	15.11	2.93
124	preparatory to filling in opening: cutting out fixings	42.37	55.03	68.17	13.14
125	preparatory to renewing window and/or frame: cutting out fixings: removing timber surround from frame	50.63	65.75	81.82	15.84
	Taking out single or multi-light cased frame and sashes: accessories: weights: glass				
126	in conjunction with taking down wall	9.73	12.93	16.08	3.19
127	preparatory to filling opening: cutting out fixings	44.33	57.48	71.37	13.90
128	preparatory to renewing window and/or frame: cutting out fixings: removing timber surround from frame	53.10	68.68	85.70	16.57
	Taking out single or composite metal window: any type: timber surround: accessories: glass: opening gear				
129	in conjunction with taking down wall	6.87	8.95	11.02	2.20
130	preparatory to filling opening: cutting out fixings	30.89	39.93	49.61	9.36
131	preparatory to renewing window and/or frame: cutting out fixings: removing timber surround from frame	36.81	48.04	59.59	11.64
	Taking out single or composite plastics casement window and frame: timber surround: accessories: glass				
132	in conjunction with taking down wall	7.90	10.40	12.68	2.70
133	preparatory to filling in opening: cutting out fixings	35.56	45.95	56.98	10.72
134	preparatory to renewing window and/or frame: cutting out fixings: removing timber surround from frame	42.32	55.32	68.63	13.32

4: ALTERATIONS, REPAIRS AND CONSERVATION

DOORS

Item		1	2	3
		Area		ADD for
		not	2.00 m ² to	each
		exceeding	3.00 m ²	additional
4	<i>Each - per door leaf</i>	2.00 m ²		1.00 m ²
		£	£	£
135	Taking down door: any type: including ironmongery: leaving frame in position	14.62	20.46	3.42
136	ADD for taking out floor springs and top pivots	-	26.30	-
	Taking out timber door and frame: any type			
137	in conjunction with taking down wall	5.35	7.81	1.73
138	preparatory to filling in opening: cutting out fixings	24.81	35.39	8.35
139	preparatory to renewing door or frame: cutting out fixings	28.60	41.70	9.05
	Taking out metal door and frame: any type			
140	in conjunction with taking down wall	8.95	11.02	2.20
141	preparatory to filling opening: cutting out fixings	39.93	49.50	9.36
142	preparatory to renewing door or frame: cutting out fixings	48.04	59.59	11.56
	Taking out plastics door and frame: any type			
143	in conjunction with taking down wall	10.30	12.68	2.50
144	preparatory to filling in openings: cutting out fixings	45.95	56.98	10.82
145	preparatory to renewing door or frame: cutting out fixings	55.32	68.53	13.32

STAIRS, WALKWAYS AND BALUSTRADES

	<i>Kilogramme</i>	£
146	Taking down mild steel or cast iron section: any description	0.76
	<i>Metre</i>	
147	Taking down steel tubular handrail, baluster or the like and fittings: any weight: any diameter	5.35

4: ALTERATIONS, REPAIRS AND CONSERVATION

SURFACE FINISHES

Notes	For work in any area or width or length.
<i>Hacking down cornices or mouldings:</i> Do not measure when in association with hacking down plastering from walls or ceilings.	<i>Hacking down plastering:</i> For the removal of any cornices or applied plaster mouldings or features.
Rates for the following include	<i>Hacking up asphalt floor:</i> For horizontal, sloping or vertical work of any thickness or description.
<i>Generally:</i> For work internally or externally.	

Item	Square Metre	£
4		
	Hacking down plastering, cement backing or rendering: any description: any thickness	
148	from wall or column	3.88
149	from soffit or beam	4.72
	Hacking down plastering, cement backing or rendering: any description: any thickness: including timber, plasterboard or metal lathing: removing all nails, staples or the like	
150	from wall or column	6.99
151	from soffit or beam	8.04
152	Hacking down ceramic wall tiling and cement backing: any description: any thickness	11.17
153	Hacking down terrazzo or mosaic wall covering and cement backing: any description: any thickness	11.98
	Hacking up asphalt flooring: any thickness	
154	with loose underlay: to concrete	6.41
155	keyed: to masonry	7.23
156	Hacking up cement screed or floor or granolithic floor: not exceeding 25 mm thick	5.96
157	ADD for each additional 25 mm of thickness	3.83
158	Taking up composition block floor: any description: any thickness: bedding material	5.06
159	Taking up wood block floor: any description: any thickness	7.07
160	ADD for removing bitumen from bed	4.05
161	Taking up plastic tile floor: any thickness	3.96
162	ADD for removing adhesive bedding compound from bed	3.31
	Taking up lino or vinyl sheet and underlay if any: any description: any thickness	
163	laid without adhesive	1.25
164	laid with adhesive	3.73
165	ADD for removing adhesive bedding compound from bed	3.31

4: ALTERATIONS, REPAIRS AND CONSERVATION

SURFACE FINISHES - *continued*

Item		
4	<i>Square Metre</i>	<i>£</i>
166	Hacking up clay tile paving: any description: any thickness: bedding material and building paper separator if any	4.42
167	Hacking up terrazzo or mosaic paving: any description: any thickness	5.96
	<i>Metre</i>	
168	Hacking down moulding or cornice: not exceeding 150 mm girth on face	1.22
169	ADD for each additional 150 mm of girth on face	0.56
170	Hacking down moulding or cornice including bracketing: not exceeding 150 mm girth on face	1.77
171	ADD for each additional 150 mm of girth on face	0.90
172	Hacking down cement, granolithic or clay tile skirting and backing: any height: any thickness	1.99
173	Taking up plastic skirting: any height: any thickness	1.58
SUNDRY INSULATION		
	<i>Square Metre</i>	<i>£</i>
	Taking down flexible insulation: any type: any thickness: including any battens: from	
174	wall	1.23
175	floor or flat roof	1.46
176	pitched roof: within roof space	2.05
UNFRAMED ISOLATED TRIMS, SKIRTINGS AND SUNDRY ITEMS		
	<i>Metre</i>	<i>£</i>
177	Taking off timber skirting, architrave or the like: any size: including any grounds and backings	2.22
	<i>Square Metre</i>	
178	Taking off metal sheeting: any description: any thickness: from door, frame, kerb or the like	7.30
	<i>Metre</i>	
179	Taking off metal trim or threshold: any size: any section shape	0.26

4: ALTERATIONS, REPAIRS AND CONSERVATION

ROADS AND PAVINGS

Rates for the following include

Breaking up bituminous bound materials:
For black top surfacing to concrete roads or pavings.

Generally:
For breaking through for insertion of ducts, pipe lines or the like.

Item 4	Metre	£
	Taking up including any haunching: any size	
	precast concrete	
180	kerb	5.32
181	edging	2.90
182	channel	5.32
	granite	
183	kerb	2.90
184	sett string course - <i>per row</i>	2.90
	brick	
185	edging	2.90
	<i>Cubic Metre</i>	
	Taking up sub-base or roadbase	
186	hardcore or granular material	23.01
187	concrete or other cement bound material	63.61
	Breaking up road	
188	plain concrete	65.61
189	reinforced concrete	85.41
	<i>Square Metre</i>	
190	Breaking up bituminous bound materials: not exceeding 75 mm total thickness	4.37
191	ADD for each additional 25 mm of thickness	1.35
192	Taking up stone or concrete flag paving: not exceeding 75 mm thick	3.80
193	Taking up granite sett paving: not exceeding 150 mm thick	8.53
	Taking up cobblestone paving: not exceeding 130 mm thick	
194	hoggin base	8.60
195	concrete base	12.72
196	Taking up brick paving: not exceeding 125 mm thick	6.34

4: ALTERATIONS, REPAIRS AND CONSERVATION

RAINWATER AND FOUL DRAINAGE ABOVE GROUND

Rates for the following include

Generally:

For taking out pipework gutters and fittings from any position.

For all cutting or otherwise disconnecting as required unless otherwise stated.

Item		Metre	1	2	3
			Diameter		
			not exceeding 50 mm	50 to 100 mm	100 to 150 mm
			£	£	£
4	Taking out pipe				
197	plastics		2.12	3.38	4.85
198	fibre cement		2.29	3.69	5.32
199	pressed steel		2.22	3.55	5.13
200	aluminium		2.29	3.62	5.27
201	copper or stainless steel		2.53	4.07	5.85
202	cast iron		2.77	4.38	6.36
203	lead		3.19	5.09	7.31
		Metre	1	2	
			Overall width		
			not exceeding 100 mm	100 to 200 mm	
			£	£	
	Taking down gutter: any shape				
204	plastics			4.07	4.89
205	fibre cement			4.49	5.37
206	pressed steel			4.28	5.13
207	aluminium			4.38	5.23
208	cast iron			5.30	6.36

4: ALTERATIONS, REPAIRS AND CONSERVATION

RAINWATER AND FOUL DRAINAGE ABOVE GROUND - *continued*

Item			
4	<i>Metre</i>		£
	Taking down box, boundary wall or valley gutter: pressed steel		
209	not exceeding 750 mm girth		8.96
210	exceeding 750 mm girth		15.35
	<i>Each</i>		
211	Taking out rainwater head: any material: any size		5.82
		1	2
		Diameter	
		not exceeding 50 mm	exceeding 50 mm
		£	£
212	Taking out trap: any material: unscrewing or uncoupling joint both ends (applicable only where trap to be re-used or renewed)	11.97	13.69
213	ADD for burning out soldered joint one end	10.26	11.97
	<i>Each</i>		£
	Burning out caulked lead joint: for disconnection of cast iron pipe or fitting (applicable only where pipe or fitting to be re-used or renewed)		
214	50 mm diameter		8.28
215	75 mm diameter		12.28
216	100 mm diameter		16.28
217	150 mm diameter		24.52
218	225 mm diameter		36.80
219	Taking out brass ferrule or thimble: cement joint to glazed ware: soldered joint to lead including burning out: 75 to 100 mm diameter		20.52
	Taking out brass ferrule or thimble: soldered joint to lead: caulked joint to lead including burning out		
220	not exceeding 50 mm diameter		36.21
221	50 to 75 mm diameter		47.61
222	75 to 100 mm diameter		58.72

4: ALTERATIONS, REPAIRS AND CONSERVATION

DRAINAGE BELOW GROUND

Notes

Excavation and reinstatement:
Measure separately.

Rates for the following include

Generally:
For all cutting or otherwise disconnecting as required unless otherwise stated.

Item		1	2	3	4
		Diameter of drain			
		not exceeding 100 mm	100 to 150 mm	150 to 225 mm	225 to 300 mm
4	Metre	£	£	£	£
223	Taking up concrete or clay pipework and fittings	1.66	2.08	2.70	3.44
224	Taking up concrete, clay or plastics land drain pipework and fittings	1.44	1.83	2.46	3.19
225	Taking up plastics or pitch fibre pipework and fittings	0.84	1.25	1.46	1.66
226	Taking up iron pipework and fittings	2.84	3.73	6.84	10.26
	ADD where				
227	with shingle or gravel bed	1.25	1.46	1.87	2.29
228	with shingle or gravel covering	1.87	2.20	2.82	3.44
229	with concrete bed and haunching	4.76	5.55	7.15	8.89
230	with concrete bed and covering	8.59	9.94	12.95	15.87
231	Taking up suspended iron pipework: fittings: supports	13.69	15.39	17.41	20.52
232	Taking up clay channel with concrete bed	3.82	4.76	6.61	8.43
	Each				
	Taking up gully with concrete surround				
233	not exceeding 600 mm deep	3.82	4.23	5.16	5.97
234	exceeding 600 mm deep	5.55	6.35	7.81	9.12
235	Taking off cast iron fresh air inlet: any pattern: cutting or burning out lead joint	5.81	7.03	-	-
236	Burning out caulked lead joint: for disconnection of cast iron pipe or fitting (applicable only where pipe or fitting to be re-used or renewed)	7.03	11.66	14.63	17.56

4: ALTERATIONS, REPAIRS AND CONSERVATION

DRAINAGE BELOW GROUND - *continued*

Item		£
4	<i>Each</i>	
	Plugging end of disused drain with concrete: any mix: for a length of at least 300 mm	
237	not exceeding 100 mm diameter	10.35
238	150 mm diameter	11.41
239	225 mm diameter	13.71
240	300 mm diameter	17.58
241	375 mm diameter	21.41
242	450 mm diameter	25.28
	<i>Square Metre</i>	
243	Breaking up concrete wall of manhole: not exceeding 100 mm thick	11.21
244	ADD for each additional 25 mm of thickness	2.36
245	Breaking up reinforced concrete wall of manhole: not exceeding 100 mm thick	14.11
246	ADD for each additional 25 mm of thickness	2.97
	Breaking up brick wall of manhole	
247	half-brick thick	11.34
248	one-brick thick	20.08
249	one-and-a-half-brick thick	28.61
250	Breaking up concrete benching, channels and branches: 150 to 450 mm thick	18.10
251	Breaking up concrete bed to manhole: not exceeding 100 mm thick	4.68
252	ADD for each additional 25 mm of thickness	1.21
253	Breaking up reinforced concrete cover slab to manhole: not exceeding 100 mm thick	10.38
254	ADD for each additional 25 mm of thickness	2.21
	<i>Cubic Metre</i>	
	Filling disused manhole	
255	with selected excavated material	15.71
256	with approved granular material	76.72
257	with concrete: grade 20N/mm ² 20 mm aggregate	191.21

4: ALTERATIONS, REPAIRS AND CONSERVATION

HOT AND COLD WATER INSTALLATIONS

Notes

Excavation and reinstatement:
Measure separately.

Taking out taps to sanitary appliances:
Pay for at the Rates in Section 32.

Rates for the following include

Generally:

For turning off water, venting and draining as required.

For removing pipework and fittings from any position.

For all cutting or otherwise disconnecting as required.

Item
4

Metre

Taking out pipe

		1	2	3	4
		Diameter			
		not exceeding 25 mm	25 to 50 mm	50 to 75 mm	75 to 100 mm
		£	£	£	£
258	plastics	2.60	4.00	-	-
259	steel	3.42	5.44	7.15	8.86
260	copper or stainless steel	3.15	4.55	6.26	7.73
261	lead	4.55	6.01	7.90	9.95

Taking out water main

		1	2	3	4	5
		Diameter				
		75 mm	100 mm	150 mm	200 mm	225 mm
		£	£	£	£	£
262	cast iron or ductile iron	2.70	3.45	4.99	6.46	7.22

Each

Taking out tap or valve: unscrewing or uncoupling joint one or both ends
(applicable only where tap or valve to be re-used or renewed)

		1	2
		Diameter	
		not exceeding 25 mm	25 to 50 mm
		£	£
263	Taking out tap or valve: unscrewing or uncoupling joint one or both ends (applicable only where tap or valve to be re-used or renewed)	8.56	11.97
264	ADD for burning out soldered joint one end	6.84	10.26

4: ALTERATIONS, REPAIRS AND CONSERVATION

HOT AND COLD WATER INSTALLATIONS - *continued*

Item		1	2	3	4	5
		Diameter				
		75 mm	100 mm	150 mm	200 mm	225 mm
4	<i>Each</i>	£	£	£	£	£
265	Taking out sluice valve with flanged ends: disconnecting two flanged joints	16.28	21.65	31.91	42.17	47.06
266	Taking out sluice valve with flanged ends: spigot and socket connecting pieces: disconnecting two flanged joints: burning out two caulked lead joints	35.09	46.17	68.99	91.22	102.60

		1	2	3
		Fibre cement	Plastics	Steel
		£	£	£
	<i>Each</i>			
	Disconnecting and taking out cold water cistern and cover			
267	not exceeding 450 litres capacity	19.46	18.54	22.23
268	450 litres to 2 250 litres capacity	58.04	55.30	66.36
269	2 250 litres to 4 500 litres capacity	105.92	100.89	121.07

		£
270	hot water tank or calorifier: any material: not exceeding 225 litres capacity.	23.94

	<i>Metre</i>	
	Taking off lagging or other preformed insulation from pipe	
271	not exceeding 50 mm diameter	2.00
272	50 mm to 100 mm diameter	3.24

	<i>Each</i>	
273	Taking off lagging or other preformed insulation from hot water tank or calorifier: not exceeding 225 litres capacity	2.08
	Taking off slab insulation: any thickness: from cistern	
274	not exceeding 450 litres capacity	3.12
275	450 litres to 2 250 litres capacity	5.20
276	2 250 litres to 4 500 litres capacity	7.28

4: ALTERATIONS, REPAIRS AND CONSERVATION

FIRE HOSE REELS

Rates for the following include

Generally:

For turning off water and draining as required.

Item		Each	£
277	Disconnecting and taking out fire hose reel: any type		11.39

WORK TO EXISTING BOLTS

		1	2	3
		Diameter		
		not exceeding 25 mm	25 to 50 mm	50 to 75 mm
		£	£	£
Disconnecting and taking out bolt: any type				
278	not exceeding 150 mm long	0.84	1.28	4.19
279	150 to 300 mm long	1.39	1.96	6.98
280	300 to 450 mm long	1.96	2.79	9.76
281	Disconnecting and removing rusted-in bolts by any means: price at the above Rates multiplied by 2.00.			

5: Excavating and Filling

GENERALLY

Specification

Safety: ensure the safety of all personnel working in and around excavations.

Protection: protect excavations against frost.

Water disposal:

- keep excavations free of water at all times;
- remove water so that it does not enter construction work;
- where pumping is necessary form sumps clear of excavations for permanent work.

Obstructions: report to the PM details of any underground obstructions.

Excavations taken too wide or too deep: backfill as ordered at the Contractor's own expense.

Foundation bottoms:

- excavate the last 150 mm of trenches immediately prior to laying concrete;
- inform the PM and obtain his instructions if natural bearing bottom cannot be found at the prescribed depths because solid rock is encountered, the ground is made up or is otherwise unsuitable for building upon;
- obtain approval before laying concrete.

Definition of terms

Ground level: ground, stripped or reduced level.

Rock: a material which in the opinion of the PM can only be removed by means of wedges, special plant or explosives.

Ground water: excludes spring or running water.

Non hazardous materials : any materials that do not required special precautions taken when handling, transporting or disposing.

Notes

Excavation below ground water level:

If ground water is encountered in the course of excavation, the water level will be established by the PM before pumping is commenced (in tidal conditions this will be the average of the mean high and low levels), and the level so established will be taken as the water level throughout the period of the execution of the order notwithstanding any changes.

Depths stated:

Relate to ground level.

Earthwork support:

this work shall only be measured where it has been specifically specified in the contract documents or if instructed by the PM to provide support during the course of the works.

Method of measurement

Excavating and disposal:

Measure the void to be occupied by, or vertically above the permanent work. Make no allowance for variations in bulk or for the extra space for earthwork support.

Rates for the following include

Excavating, disposal and filling:

For multiple handling unless specifically ordered.

Curved earthwork support:

For any extra costs of curved excavation.

5: EXCAVATING AND FILLING

SITE PREPARATION

Method of measurement

Tree:
Measure girth 1.00 m above ground.

Tree stump:
Measure girth at top.

Rates for the following include

Removing, clearing:
For grubbing up roots.

For disposing of materials off site.

For filling voids with suitable material.

Item			1	2	3
			Girth		
			500 mm	1.50	
			to	to	exceeding
			1.50 m	3.00 m	3.00 m
			£	£	£
5	Each				
	Removing				
001	tree		162.25	389.31	745.64
002	tree stump		44.16	94.14	179.56
		Metre			£
	Removing hedge: removing trees and stumps not exceeding 500 mm girth in the run of the hedge				
003	not exceeding 1.50 m high				33.97
004	1.50 to 2.00 m high				43.16
005	2.00 to 3.00 m high				52.34
		Square Metre			
006	Clearing site of bushes, scrub, undergrowth: removing trees and stumps not exceeding 500 mm girth within area cleared				1.87
007	Lifting turf for preservation: minimum 40 mm thick: removing not exceeding 50 m: stacking				7.33
		Square Metre			
	Remove hard surface paving				
008	concrete paving - per 25 mm of thickness				1.20
009	reinforced concrete paving - per 25 mm of thickness				1.61
010	concrete or stone flag paving: not exceeding 75 mm thick				1.79
011	brick paving: not exceeding 125 mm thick				2.36
012	stone sett or cobble paving: not exceeding 150 mm thick				3.30
013	coated macadam or asphalt paving - per 25 mm of thickness				1.01

5: EXCAVATING AND FILLING

EXCAVATING

Definition of terms

For keeping the excavations free of surface water.

Unstable ground: running silt, running sand, loose gravel or the like.

Excavating below ground water level:

For keeping excavations free of ground water.

Rates for the following include

Excavating:

For excavating by hand or machine any material encountered (including hardcore) except where otherwise stated.

Excavating in unstable ground:

For keeping excavations in stable conditions.

Item					
5	Square Metre				
014	Topsoil for preservation: 150 mm depth				£ 0.70
015	ADD or DEDUCT for each 25 mm variation in depth				0.08
		1	2	3	4
		Maximum depth not exceeding			
		0.25 m	1.00 m	2.00 m	4.00 m
	Cubic Metre	£	£	£	£
	Bulk excavation				
016	to reduce levels	6.24	6.07	6.29	6.83
017	basement or the like	-	9.05	10.73	14.38
	Foundation excavation				
018	trench not exceeding 0.30 m wide	19.30	19.14	19.60	-
019	trench exceeding 0.30 m wide	13.80	13.95	14.90	18.11
020	for pile cap and ground beam between piles	21.86	24.16	29.38	39.07
021	pit	15.69	14.16	16.20	18.77
022	Benching sloping ground to receive filling	16.22	13.10	17.62	26.65
	Cubic Metre				£
023	ADD to Items 5.017 to 5.021 where starting over 0.25 m below ground level - for each 1.00 m below				4.74
	Extra over excavation irrespective of depth for excavating				
024	below ground water level.....				20.59
025	in unstable ground.....				61.77
026	below ground water level in unstable ground.....				82.35
	Extra over excavation irrespective of depth for breaking out				
027	rock				52.68
028	concrete				48.86
029	reinforced concrete				73.85
030	brickwork, blockwork or stonework				26.47
031	Where excavation in existing building, price at the foregoing Rates <i>multiplied by 1.40</i> .				
032	Where hand excavation is specifically ordered, price at the foregoing Rates <i>multiplied by 2.00</i> .				

5: EXCAVATING AND FILLING

EXCAVATING - continued

Item		
5	<i>Metre</i>	£
	Extra over excavation irrespective of depth for excavating	
033	next to existing service or group of services	13.06
	<i>Each</i>	
034	around existing service or group of services crossing excavation	38.94

EARTHWORK SUPPORT

Definition of terms

Unstable ground: running silt, running sand, loose gravel or the like.

Earthwork support next to roadway or existing building: earthwork support which, in the opinion of the PM, is required to protect any adjacent roadway or building from movement or damage.

Earthwork support below ground water level or in unstable ground:

Measure from the commencing level of the excavation to the full depth.

Distances between opposing faces:

Classify with adjoining work at intersections, corners or ends of trenches or the like.

Method of measurement

Earthwork support:

Measure the full depth to all vertical and sloping earthwork faces exceeding 45° from horizontal, whether or not support is required, except to faces not exceeding 0.25 m high.

Rates for the following include

Generally:

For providing everything to uphold the sides of excavation by whatever means necessary including sheet steel piling unless this is ordered as a specific design requirement.

		1	2	3
		Maximum depth not exceeding		
		1.00 m	2.00 m	4.00 m
	<i>Square Metre</i>	£	£	£
	To face of excavation: distance between opposing faces			
035	not exceeding 2.00 m	5.77	6.68	7.81
036	2.00 to 4.00 m	6.13	7.39	9.68
037	exceeding 4.00 m	10.78	13.94	18.34
	ADD where			
038	below ground water level	10.68	11.82	13.20
039	in unstable ground	8.21	8.98	10.06
040	next to roadway	6.51	7.79	7.91
041	next to existing building	5.64	6.19	6.84
042	inside existing building	5.97	6.87	7.33
043	in unstable ground; inside existing building	10.17	11.41	12.31
	left in: where specifically ordered			
044	timber	5.00	6.28	7.89
045	sheet steel piling	186.28	172.35	166.67

5: EXCAVATING AND FILLING

DISPOSAL

Definition of terms

Landfill Tax:

- Landfill Tax (Amendment) Regulations 2010 and Environmental Permitting (England and Wales) Regulations 2010 as amended; deals with the detailed implementation aspects of the tax, such as registration and accounting procedures; and
- Landfill Tax (Qualifying Material) Order 2011 (SI 2011 No. 1017): defines the categories of waste to which the lower rate of tax applies.

Inactive: inactive (or inert) wastes listed in the Landfill Tax (Qualifying Material) Order 2011.

Active: all other taxable waste (non-hazardous material).

Rates for the following include

Generally:

For any type of excavated or broken out material.

Disposing off site:

For removing off the site to a place of disposal including payment of landfill tax and any other charges in connection therewith.

Item
5

Cubic Metre

1	2	3
Without Landfill Tax	Including Landfill Tax	
	Inactive	Active
£	£	£

Excavated material

046	off site	17.39	23.14	182.99

Retaining excavated material on site

047	not exceeding 25 m and depositing			8.46

048	ADD for each additional 50 m			0.69

£

FILLING

Specification

Earth filling: approved readily compacted subsoil, free from harmful contaminants or vegetable matter and suitable for the location.

Granular filling: gravel, sandy soil or other approved material free from fines, clay or other harmful matter.

Spread filling: in layers; compact and consolidate each layer before spreading the next.

Hardcore: hard stone, concrete, coarse gravel, sound slag or hard broken brick, free from rubbish or other deleterious matter, capable of passing in every direction a ring of diameter not greater than two thirds thickness of bed, subject to a maximum diameter of 150 mm and graded so that when compacted, filling is dense and without voids.

Spread hardcore: in layers and compact:

- with mechanical plant until all movement in the hardcore ceases;
- until all voids are full and surface is smooth and even.

Approval: backfill only with approval.

Method of measurement

Filling generally:

Measure as equal to the void filled.

Measure the average thickness after compaction.

5: EXCAVATING AND FILLING

FILLING - *continued*

Rates for the following include

Topsoil filling:

For lightly compacting, digging over and leaving for planting free of weeds, large stones and debris.

Filling of any material except topsoil:

For compacting in layers not exceeding 150 mm thick.

Hardcore obtained from the excavations or demolitions:

For selecting for re-use and breaking to required sizes.

Item		1	2	3	4	5	6
		Selected preserved topsoil	Selected excavated material arising from excavations on site	Imported material Earth	Granular	Hardcore Obtained from the excavations or demolitions	Imported
5	Cubic Metre	£	£	£	£	£	£
	Filling to excavation						
049	final thickness not exceeding 500 mm	-	19.17	25.05	53.44	24.92	47.55
050	final thickness exceeding 500 mm	-	15.99	21.86	50.26	20.77	43.40
	Filling to make up levels						
051	exceeding 50 mm but not exceeding 500 mm thick	20.17	21.36	27.23	55.63	27.77	50.40
052	exceeding 500 mm thick	16.81	17.79	23.67	52.06	23.14	45.77
	Square Metre						
053	Surface packing: to vertical or battered face exceeding 15° from horizontal	-	3.66	3.66	3.66	5.47	5.47

SURFACE TREATMENTS

	Square Metre	£
	Levelling or grading to falls and slopes not exceeding 15° from horizontal: compacting	
054	ground	1.74
055	earth or granular filling	1.74
056	hardcore filling	2.60
057	bottom of excavation	0.60
058	Blinding bed not exceeding 50 mm thick; sand; 50 mm thick	3.48
059	Trimming sloping surface exceeding 15° from horizontal	2.09
060	Trimming bottom or side of excavation in rock to falls, slopes or cambers	24.61

5: EXCAVATING AND FILLING

FLEXIBLE SHEET MEMBRANES

Specification

Waterproof building paper:

- to BS 1521;
- loose lay in a single layer with minimum 150 mm laps.

Polythene sheet:

- translucent or black opaque;
- loose lay in a single layer with minimum 150 mm laps.

Geotextile fabric:

- Terram filter membrane or other equal and approved
- loose lay in a single layer with minimum 150 mm laps.

Definition of terms

Horizontal:

Includes slopes not exceeding 10° from horizontal

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00 m².

Rates for the following include

Generally:

For all cutting, holing, notching and bending.

For extra material for laps.

Item
5

Square Metre

		1	2
		Waterproof building paper: grade	
		A1F	B1F
		£	£
061	Sheeting: horizontal: on ground, filling, sub-base or the like	2.73	1.62

		1	2	3	4	5
		Polythene sheet: gauge				
		250	500	1000	1200	2000
		£	£	£	£	£
062	Sheeting: horizontal: on ground, filling, sub-base or the like	0.98	1.05	1.21	1.33	2.35

		1	2	3	4
		Geotextile fabric: Terram			
		500	700	1000	2000
		£	£	£	£
063	Sheeting: horizontal: on ground, filling, sub-base or the like	0.93	1.05	1.20	1.33

5: EXCAVATING AND FILLING

POWER PUMPING

Notes

Generally:

When not in connection with removing surface water or ground water encountered during excavations, working time only (i.e. the actual hours of pump running time) will be paid for the use of pumps as ordered.

Rates for the following include

Generally:

For bringing to and removing from the site.

For moving about the site as required.

For hoses.

For operating and attendance.

For disposal of water.

Item	Hour	£
5		
	Single diaphragm pump	
064	75 mm	7.21
065	100 mm	7.58
	Double diaphragm pump	
066	75 mm	7.94
067	100 mm	9.86
	Self-priming centrifugal pump	
068	50 mm	3.68
069	75 mm	5.26
070	100 mm	8.11
071	150 mm	10.05

6: Ground Remediation and Soil Stabilization

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7: Piling

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8: Underpinning

GENERALLY

Reference to other Sections: the Preambles to other Sections apply equally to this Section unless otherwise stated.

Specification

Sequence: before commencement inform the PM of the sequence of operations and any special procedural requirements.

Maximum lengths: do not execute underpinning in lengths exceeding 1.50 m.

Simultaneous underpinning: obtain approval before undertaking underpinning less than 1.00 m apart between excavated faces.

Temporary supports: provide and maintain all shoring and face supports necessary during

excavation and underpinning. Alter and adapt as necessary and clear away when no longer required or leave in if ordered.

Notes

Generally:

Rates in other Sections apply to underpinning work where Rates are not given in this Section.

Temporary supports:

Pay for at the Rates in Section 3.

Rates for the following include

Generally:

For work in lengths not exceeding 1.50 m.

EXCAVATING

Method of measurement

Width allowances:

Relate to the total depth of excavation measured from the top of the preliminary trench to the base of the underpinning pit and are:

- 1.00 m where the total depth is not exceeding 1.50 m;
- 1.50 m where the total depth is 1.50 to 3.00 m;
- 2.00 m where the total depth is exceeding 3.00 m.

Preliminary trench:

Measure the width of preliminary trench as the sum of any projection of the retained foundation beyond the face of the wall plus any projection of the underpinning beyond the face of the retained foundation plus the width allowance.

Underpinning pit:

Measure the width of underpinning pit as the sum of the width of the retained foundation plus any projection of the underpinning beyond the face of the retained foundation plus the width allowance.

Item

8

Cubic Metre

		1	2	3
		Maximum depth not exceeding		
		1.00 m	2.00 m	4.00 m
		£	£	£
001	Preliminary trench to underside of existing foundation	26.45	29.95	37.81
002	Underpinning pit below underside of existing foundation	61.77	68.13	81.48

8: UNDERPINNING

EARTHWORK SUPPORT

Item		1	2	3
		Maximum depth not exceeding		
		1.00 m	2.00 m	4.00 m
8	Square Metre	£	£	£
	To face of excavation in preliminary trench: distance between opposing faces			
003	not exceeding 2.00 m	10.06	11.81	13.79
004	2.00 to 4.00 m	10.59	12.83	16.72
005	exceeding 4.00 m	16.94	21.71	28.35
	To face of excavation in underpinning pit: distance between opposing faces			
006	not exceeding 2.00 m	13.27	15.77	19.16
007	2.00 to 4.00 m	13.98	17.37	23.29
008	exceeding 4.00 m	22.67	29.85	39.86

WORK TO EXISTING

	Cubic Metre	£
Cutting away projecting foundation		
009	concrete	210.89
010	reinforced concrete	314.69
011	brickwork	116.14
	Metre	
Preparing underside of existing work to receive pinning up of new work		
012	not exceeding 300 mm wide	4.99
013	ADD for each additional 300 mm of width	3.50

IN SITU CONCRETE

	Cubic Metre	£
014	ADD to the Rates for foundation or isolated foundation: plain or reinforced: any mix: for working in underpinning	56.15

8: UNDERPINNING

BRICKWORK			
	1	2	3
	Brick thickness		
	One	One and a half	ADD for each additional half-brick
<i>Square Metre</i>	£	£	£
ADD to the Rates for laying only: any type of brick: any mortar: for work in underpinning	15.74	21.77	6.01
<i>Metre</i>			
ADD to the Rates for wedging and pinning to underside of existing construction: for work in underpinning	7.22	8.74	1.45

9: Diaphragm Walls and Embedded Retaining Walls

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10: Crib Walls, Gabions and Reinforced Earth

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11: In situ Concrete Works

IN SITU CONCRETE

SPECIFICATION

Generally

British Standards: concrete to comply with BS 8500-2 and BS EN 206-1 unless otherwise specified. Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

Constituent materials

Ordinary and rapid-hardening Portland cement: to BS EN 197-1 and manufactured by a BSI Registered Firm.

Sulphate-resisting Portland cement: to BS EN 197-1 and manufactured by a BSI Registered Firm.

Do not use pulverised fuel ash, ground granulated blast furnace slag and/or any other cementitious materials or admixtures.

Aggregates: from natural sources to BS 8500-2 BS EN 12620. Do not use marine aggregates or aggregates which contain chlorides unless approved.

Recycled aggregate: to BS 8500-2, clause 4.3.

Water: to be clean and uncontaminated. Obtain approval for other than mains supply.

Admixtures: do not use without prior approval. Do not use calcium chloride and admixtures containing calcium chloride.

Definitions

Designated mixes: in accordance with BS 8500-1.

Standard mixes: in accordance with BS 8500-1 and BS 8500-2, clause 9.

Ready mixed concrete

Production plant: currently certified by body accredited by UKAS to BS EN ISO/IEC 17065 for conformity certification of ready-mixed concrete .

Source: obtain from one source if possible. Otherwise, submit proposals.

Approved suppliers: submit name and address of depot before any concrete is delivered.

Site mixed concrete

Mixing: to BS 8000-2.1, subsections 2, 3 and 4.

Batching by mass:

- accuracy of measuring devices: to BS EN 206-1, clause 9.6.2.2;
- tolerances for quantity of constituent material: to BS EN 206-1, table 21.

Quality control of concrete

Provide PM with any information required in the prescribed form regarding the concrete and constituent materials before commencing concreting. Submit when requested details as listed in BS 8500-1, clause 5.2.

Testing

Testing and sampling:

- testing: to BS 8500-1 and BS EN 12390-5 as appropriate;
- nonconformity: obtain instructions immediately;
- recording: maintain complete correlated records

Testing facilities:

- laboratory: accredited by UKAS or other national equivalent;
- name and UKAS reference number: submit in advance of making trial mixes or concrete for use in the works;
- transport of samples: pack and transport samples to selected or nominated testing laboratory.

Test results:

- submission of reports: within one day of completion of each test;
- reports on site: a complete set, available for inspection;
- test certificates: instruct laboratory to send two copies of each certificate to PM.

Concrete production

Handling and storage of constituent materials:

- a. cement: obtain in sealed bags or containers, store in dry enclosed conditions on a raised platform separating different types of cement. Use in order of delivery.
- b. aggregates: store on a hard, clean base which permits free drainage keeping different types and sizes separate. Protect from frost and contamination by deleterious materials.

Batching and mixing: comply with BS 8500-1. Do not use frozen or frost covered materials. Ensure workability of concrete is such that:

- a. it can be readily worked into corners and angles of forms and around reinforcement.
- b. constituent materials do not segregate and free water does not collect at the surface during placing.

Placing and compacting

Avoidance of contamination: avoid contamination, segregation or loss of ingredients, by cleaning transporting equipment immediately after use or whenever cement or aggregate is changed. Remove free water.

Placticity: place concrete whilst it is still sufficiently plastic for full compaction to take place. Record time and date of all concrete pours.

Compaction: compact concrete thoroughly around reinforcement, duct formers, inserts and into corners of formwork. Ensure full compaction and amalgamation with previous batches. Do not allow segregation.

Construction joints: lightly roughen entire face to expose coarse aggregate. Thoroughly wire brush to remove all loose material. Ensure face is clean and damp before fresh concrete is placed.

Cold weather workings: do not place concrete when air temperature is below 6°C:

- a. do not cast against frozen surfaces;
- b. maintain temperature of placed concrete at not less than 7°C for at least five days after placing by covering with mineral wool or glass fibre insulation or any other;
- c. do not use water spraying or wet coverings when freezing temperatures are likely;
- d. cover concrete surfaces with an insulating material when temperature reaches 10°C and is falling.

Frost damage: remove and replace concrete damaged by frost.

Curing concrete

Curing period: not less than 7 days unless otherwise ordered.

Curing method: as directed and either:

- a. waterproof sheeting kept in close contact; or
- b. absorbent material kept damp; or
- c. a curing compound.

Curing compounds: of proprietary manufacture and:

- a. approved before use;
- b. having a minimum efficiency of 90 per cent when tested to BS 7542.
- c. containing solvent based resin and fugitive dye.

Application of curing compound:

- a. apply immediately after finishing operations;
- b. apply uniformly at manufacturer's recommended rate and in accordance with manufacturer's instructions;
- c. do not place or store any building materials on concrete surfaces before end of curing period;
- d. remove any remaining traces of compounds by steam cleaning or other suitable, non abrasive method.

11: IN SITU CONCRETE WORKS

GENERALLY

Definition of terms

Horizontal work: includes blinding, beds, pile caps, column bases, ground beams, coffered troughed slabs, landings, beams, attached beams, beam casings, shear heads, upstands whose height is less than three times their width, kerbs and copings.

Sloping work: includes blinding, beds, slabs, steps and staircases, kerbs, copings, and any attached beams, upstands, shear heads or similar.

Vertical work: includes columns, attached columns, column casings, walls, retaining walls, filling to walls, parapets, or upstand beams where height is greater than three times the width.

Sundry in-situ concrete work: includes backsills, machine and plant bases and the like.

Method of measurement

Concrete volume:

Measure net but make no deductions for the following:

- deflection of formwork,
- reinforcement,
- steel sections,
- cast in accessories;
- voids not exceeding 0.05 m³ except voids in troughed and coffered slabs,

Thickness range:

Exclude projections and recesses.

Rates for the following include

Concrete generally:

For Standard or Designated Mixes.

For ordinary Portland cement unless otherwise stated.

For medium or high workability.

For cast into formwork unless otherwise described.

For hand compacting or mechanically vibrating.

For curing.

For protecting concrete by any means when poured on or against earth or unblinded hardcore.

Bed:

For laying in bays where ordered.

1	2	3	4
Plain		Reinforced	
Thickness			
not exceeding 300 mm	exceeding 300 mm	not exceeding 300 mm	exceeding 300 mm
£	£	£	£

11: IN SITU CONCRETE WORKS

IN SITU CONCRETE: 20 N/mm²: 20 mm AGGREGATE - continued

Item		1	2
		Plain	Reinforced
		£	£
11	<i>Cubic Metre</i>		
	Sundry in-situ concrete work not exceeding 300mm wide or thick		
022	Horizontal.....	161.78	165.52
023	Sloping.....	161.78	165.52
024	Vertical.....	161.78	165.52
	Sundry in-situ concrete work exceeding 300mm wide or thick		
025	Horizontal.....	121.85	125.59
026	Sloping.....	121.85	125.59
027	Vertical.....	134.33	138.07
			£
	ADD to the foregoing Rates where		
028	reinforced in excess of 5% by volume		2.62
029	watertight concrete construction		24.96

11: IN SITU CONCRETE WORKS

ADJUSTMENT TO FOREGOING RATES FOR OTHER MIXES AND CEMENTS

Item		1	2	3
		Plain or reinforced		
		Ordinary cement	Rapid-hardening cement	Sulphate-resisting cement
		£	£	£
11	<i>Cubic Metre</i>			
	ADJUST for Standard or Designated Mix			
	7.5 N/mm ²			
030	40 mm aggregate	-8.59	23.95	-3.11
031	20 mm aggregate	-6.27	31.51	0.10
	10 N/mm ²			
032	40 mm aggregate	-6.27	31.51	0.10
033	20 mm aggregate	-4.00	38.73	3.20
	15 N/mm ²			
034	40 mm aggregate	-2.98	38.92	4.08
035	20 mm aggregate	-2.07	44.94	5.85
	20 N/mm ²			
036	40 mm aggregate	-1.61	46.46	6.50
037	20 mm aggregate	-	51.59	8.71
038	10 mm aggregate	2.90	60.84	12.67
	25 N/mm ²			
039	20 mm aggregate	2.90	60.84	12.67
040	10 mm aggregate	5.28	68.40	15.93
	30 N/mm ²			
041	20 mm aggregate	4.83	67.02	15.32
042	10 mm aggregate	8.75	79.22	20.64

11: IN SITU CONCRETE WORKS

SURFACE FINISHES AND CUTTING TO IN SITU CONCRETE

GENERALLY

Specification

Tamped finish:

- general requirement: do not wet surface of concrete to assist surface working;
- method: tamp surface with edge of a board or beam to give an even texture of parallel ribs.

Wood float/trowel finish: use a wood trowel/float give an even texture within specified deviations.

Steel trowel/float finish: use a steel trowel/float to produce a smooth even surface free from trowel/float marks within specified deviations.

Power float finish: allow concrete to stiffen sufficiently to be properly worked. Produce smooth even surface free from pitting, grooving and indentation within specified deviations.

Power grinding:

- power grind within the period 24 to 36 hours after placing;
- employ a trained and skilled operator;
- hand finish areas inaccessible to power grinder;
- produce a smooth even finish within specified deviations.

Permissible deviation of floated and ground finishes to be:

- abrupt irregularities: nil;
- gradual irregularities from 3000 mm straight edge: 3 mm.

Scored finish:

- general requirement: do not wet surface of concrete to assist surface working;
- metal comb finish: scratch with a metal comb to give a slightly roughened even surface;
- brush finish: scratch surface with a stiff brush give a slightly roughened even surface.

Notes

Surface hardener:

Pay for at the Rates in Section 28.

Holes exceeding 0.30 m²:

Pay for at the Rates in Section 4.

WORKED FINISHES

Rates for the following include

Worked finishes:

For producing by hand or mechanical means.

Making good:

For making good to match adjacent surface.

Cutting:

For cutting set or existing concrete.

Mortice:

For any shape.

For dishings, pockets, sinkings or the like.

Mortars:

For any mix.

Item		Square Metre	£
11	To top surfaces		
043	tamping		2.75
044	trowelling		4.50
045	floating		3.12
046	power floating		2.75
	ADD to the foregoing Rates where		
047	sloping		1.25
048	to falls		0.62
049	to crossfalls		1.00

11: IN SITU CONCRETE WORKS

FORMWORK

SPECIFICATION

Materials

Materials: wood, plywood, metal or plastic sheet material of sufficient strength, rigidity and durability and capable of providing the formed finish ordered.

Release agents: neat oil plus surfactant or mould cream emulsion.

Workmanship

Construct in accordance with Section 6.2.6 of BS 8110-1 and BS 5975 and ensure that formwork:

- a. is accurately placed in correct position, true to line and level, dimensionally correct and grout tight;
- b. faces in contact with concrete are clean and either well wetted without an accumulation of surplus water at bottom or treated with a release agent.

Propping: provide adequate propping before and after striking formwork to prevent construction loads causing excessive deflection or damage to structure.

Retention: retain formwork in position for not less than the periods shown below unless otherwise ordered:

- a. vertical faces: 7 days;
- b. soffits of slabs: 14 days;
- c. soffits of beams: 21 days.

Striking: strike formwork without damaging concrete.

Formed finishes

Basic finish: rub down prominent irregularities, make good voids, honeycombing and any large defects with cement-sand mortar (1:3).

Plain finish:

- a. ensure that formwork, concrete and concrete placing produces surfaces:
 1. free from voids, honeycombing and other large defects;
 2. with tie holes in a regular pattern;
 3. even and to required profiles;
 4. free from discolouration due to contamination or grout leakage.
- b. do not allow deviation to exceed:
 1. abrupt irregularities: 5 mm;
 2. gradual irregularities expressed as maximum permissible deviation from 3000 mm straight edge: 10 mm.
- c. make good blow holes and tie holes with cement-sand mortar (1:3) of matching colour.
- d. rub down any projecting fins.

Fine finish:

- a. ensure that formwork, concrete and concrete placing produces surfaces:
 1. free from voids, honeycombing, other defects and blow holes greater than 5 mm in diameter;
 2. with tie holes and formwork panel markings in a regular pattern;
 3. even and to required profiles and with clean, sharp and true arrises;
 4. with minor colour variations only and free from discolouration due to contamination or grout leakage.
- b. do not allow deviations to exceed;
 1. abrupt irregularities: 3 mm;
 2. gradual irregularities expressed as maximum permissible deviation from 3000 mm straight edge: 6 mm.
- c. make good blow holes and tie holes with cement-sand mortar (1:3) of matching colour. Work mortar well into voids keeping concrete damp to allow mortar to harden slowly.

11: IN SITU CONCRETE WORKS

SPECIFICATION - *continued*

Super fine finish:

- a. use formwork panels as large as possible and have arrangement of panels approved;
- b. ensure joints in forms to column and beams occur wherever practicable only at natural breaks or changes in direction;
- c. use only approved cover spacers;
- d. ensure that formwork material and construction, concrete and concrete placing produces surfaces:
 1. free from voids, honeycombing, other defects and blow holes greater than 5 mm in diameter;
 2. with tie holes in a regular pattern;
 3. even and to required profiles and with clean, sharp and true arrises;
 4. without colour variations and discolouration.
- e. do not allow deviations to exceed;
 1. abrupt irregularities: nil;
 2. gradual irregularities expressed as maximum permissible deviation from 3000 mm straight edge: 3 mm.
- f. grind all surfaces immediately after striking formwork using a power operated carborundum faced grinding appliance to remove the outer skin of cement. Remove all ground off material from the concrete surface;
- g. make good, when directed, blow holes and tie holes with cement-sand mortar (1:3) of matching colour. Work mortar well into voids keeping concrete damp to allow mortar to harden slowly;
- h. coat surface with a lime slurry protective coating;
- i. fine buff and clean down slurried surfaces at time instructed by PM and leave all surfaces smooth, even, of uniform colour and free from defects, at time ordered.

GENERALLY

Method of measurement

Generally:

Measure to concrete surfaces of the finished structure which require temporary support during casting.

Rates for the following include

Formwork generally:

For basic finish.

For all square, curved and raking cutting.

For vertical or horizontal formwork as appropriate.

11: IN SITU CONCRETE WORKS

SIDES EDGES OR THE LIKE

Definition of terms

Foundation: includes bases and pile caps.

Edge of suspended slab: excludes edges associated with attached beams at slab perimeters.

Method of measurement

Passings of ground beams:
Make no deductions.

Item		1	2	3
		Exceeding 500 mm high	Not exceeding 250 mm high	250 to 500 mm high
		<i>Square Metre</i>	<i>Metre</i>	
		£	£	£
11				
070	Side of foundations and bases	34.65	10.93	17.77
	Edges of horizontal work			
071	side of ground beam or edge of bed	37.85	11.93	20.11
072	edge of suspended slab	-	15.61	25.66
073	machine base or plinth	42.04	13.64	22.74

SOFFITS OF HORIZONTAL WORK

Definition of terms

Soffit of slab:
Includes stair landings occurring at floor levels.

Method of measurement

Voids:
Make no deductions for voids not exceeding 5.00 m².

	<i>Square Metre</i>	£
074	Soffit of slab: not exceeding 300 mm thick	47.29
075	Soffit of landing: not exceeding 300 mm thick	50.70
076	ADD for each additional 150 mm of thickness of slab or landing	3.98

11: IN SITU CONCRETE WORKS

BEAMS AND COLUMNS

Method of measurement

Attached beam and upstands:
Include edges of suspended slabs associated with beams and upstands at slab perimeters.

Passings of subsidiary beams or other projections:
Make no deductions.

Rates for the following include

Generally:
For ends.

For column kickers.

For casings to steel beams and columns

Shape is deemed to be regular

Item		
11	<i>Square Metre</i>	<i>£</i>
077	Sides and soffits of isolated beams	67.75
078	Sides and soffits of attached beams	64.96
079	Sides of upstand beams	52.12
080	Sides of isolated columns	58.09
081	Sides of attached column	55.33

FACES OF WALLS AND OTHER VERTICAL WORK

Definition of terms

Wall: includes isolated columns and column casings whose length on plan exceeds four times their thickness.

Wall kickers:

Make no deductions for area of wall kickers.

Area of walls exceeding 3.00 m high:
Include the area below 3.00 m high.

Method of measurement

Voids:

Make no deduction for voids not exceeding 5.00 m².

	<i>Square Metre</i>	<i>£</i>
082	Vertical	43.17
083	Battered one face	49.39
084	Battered both faces	79.60
	ADD where wall	
085	interrupted	2.82
086	exceeding 3.00 m high	5.47

11: IN SITU CONCRETE WORKS

FACES OF WALLS AND OTHER VERTICAL WORK - continued

Item 11		1	2	3
		Not exceeding 5 m ²	5 m ² to 10 m ²	Exceeding 10 m ²
		£	£	£
	<i>Each</i>			
	Extra over for openings for doors or the like			
087	thickness not exceeding 250 mm	118.46	170.81	227.72
088	ADD for each additional 25 mm of thickness of wall	2.98	4.28	5.70

SPECIAL SHAPES

	<i>Metre - per 25 mm of girth</i>			£
	Extra over formwork for			
089	recess, rebate or the like			1.48
090	nib or the like			1.91
	<i>Metre</i>			
091	Throat or groove: any size			2.51
092	Chamfer or splayed internal angle - <i>per 25 mm of width</i>			1.51

WALL ENDS, SOFFITS AND STEPS IN WALLS

	Wall end, soffit or step or opening in wall			
	<i>Metre</i>			£
093	not exceeding 250 mm wide			15.07
094	250 to 500 mm wide			23.69
	<i>Square Metre</i>			
095	exceeding 500 mm wide			48.77

STAIRFLIGHTS

Method of measurement		Rates for the following include		
<i>Stairflight:</i> Measure length between top and bottom nosings.		<i>Stairflight:</i> For formwork to soffit, risers and strings.		
Measure width overall.		For waist of any thickness.		
		For risers and strings of any type and size.		
	<i>Metre</i>			£
096	Stairflight: 1000 mm wide			167.47
097	ADD or DEDUCT for each 100 mm variation in width			10.97

11: IN SITU CONCRETE WORKS

SLOPING TOP SURFACES

Item			1	2
			Not exceeding 15° from horizontal	Exceeding 15° from horizontal
			£	£
11		Square Metre		
098	Sloping top surfaces		21.76	27.82

STEPS IN HORIZONTAL WORKS

			1	2	3
			Not exceeding 250 mm high	250 to 500 mm high	Exceeding 500 mm high
			£	£	£
		Metre			
099	Steps in top surfaces		14.52	23.64	41.80
100	Steps in soffits		13.02	20.88	36.67

WALL KICKERS

Method of measurement

Wall kicker:
Measure along the centre line of the wall.

Rates for the following include

Wall kicker:
For formwork to both sides.

For formwork of any height.

For surge board.

		Metre	£
101	Wall kicker		16.28
102	Suspended wall kicker		19.46

ADJUSTMENTS TO THE FOREGOING RATES

		Square Metre	£
	ADD for formwork to soffit or soffit of beam (measured to the area of the soffit only) where		
103	not exceeding 3.00 m high		no adjustment
104	3.00 to 4.50 m high		5.15
105	4.50 to 6.00 m high		8.14
106	sloping one way, not exceeding 15° from horizontal		3.35
107	sloping two ways, not exceeding 15° from horizontal		6.69
108	sloping one way, exceeding 15° from horizontal		7.96
109	sloping two ways, exceeding 15° from horizontal		15.90

11: IN SITU CONCRETE WORKS

ADJUSTMENTS TO THE FOREGOING RATES - continued

Item 11	Formwork other than basic finish: price at the foregoing Rates multiplied by the following factors:	
110	plain finish	multiply by 1.125
111	fine finish	multiply by 1.25
112	super fine finish	multiply by 1.50
	Curved formwork of any shape: price at the foregoing Rates multiplied by the following factors:	
113	not exceeding 2.00 m radius	multiply by 1.75
114	2.00 to 3.00 m radius	multiply by 1.50
115	3.00 to 5.00 m radius	multiply by 1.25
116	5.00 to 15.00 m radius	multiply by 1.05
117	exceeding 15.00 m radius	no adjustment
118	Formwork left in: price at the foregoing Rates for basic finish multiplied by 1.50.	

MORTICES AND HOLES

Definition of terms

Hole: those not exceeding 5.00 m².

Rates for the following include

Mortice:
For any shape.

For dishings, pockets, sinkings or the like.

		1	2	3
		Depth		
		not exceeding 250 mm	250 to 500 mm	500 mm to 1.00 m
		£	£	£
<i>Each</i>				
Mortice				
119	not exceeding 500 mm girth	10.02	12.16	20.72
120	500 mm to 1.00 m girth	17.00	19.41	38.31
121	ADD for each additional 1.00 m of girth	13.58	15.94	24.90
Hole				
122	not exceeding 500 mm girth	15.59	19.55	29.93
123	500 mm to 1.00 m girth	24.96	28.20	55.88
124	ADD for each additional 1.00 m of girth	19.45	25.06	35.36
				£
125	Cutting and fitting around projecting pipe, continuity bar or the like			2.08

11: IN SITU CONCRETE WORKS

REINFORCEMENT

GENERALLY

Materials

Quality Assurance:

- reinforcement: To BS 4449, BS 4482 or BS 4483;
- cutting and bending: To BS 8666.

Supply: obtain all steel bar and fabric reinforcement:

- from firms belonging to the UK Certification Authority for Reinforcing Steels (CARES) Scheme for firms of approved capability;
- ensuring that it is traceable to its parent casts.

Design: to BS 8110-1.

Cover spacers: 10 mm aggregate concrete, cement-sand (1:2) mortar or plastic of approved type.

Chairs: provide as necessary to support reinforcement in position.

Workmanship

Fixing reinforcement:

- standard: to BS 7973-1 and 2;
- installation: in addition to any spacers and shown on drawings or schedules, provide adequate support, tie securely and maintain the specified cover;
- tying:
 - wire type: 16 gauge black annealed;
 - ends of tying wire: Prevent intrusion into the concrete cover. Remove loose ends.

Inspection and rejection: inspect and reject bends and hooks showing signs of cracking or brittleness.

Accuracy: check information on bar bending schedules for compatibility with drawings, report discrepancies to the PM and obtain his instructions.

Site operations: provide on-site facilities and:

- confine cutting and bending by non CARES Licensees to minor adjustments and cutting of random lengths of secondary reinforcement made on site;
- comply with BS 8666.

Cold bending: bend bars on approved machines.

Hot bending: hot bend only with approval.

Rebending: do not rebend, bend after fixing or straighten any bars without approval.

Hooks: do not provide hooks unless shown on the bar bending schedule.

Position of reinforcement: secure reinforcement and maintain in proper positions with the correct cover shown in the drawings by means of temporary or permanent chairs, spacers, etc and ample use of tying wire. Bend back all ends of wire well clear of the formwork.

Placed concrete: do not insert any bars into concrete.

Definition of terms

Straight: without bends or hooks.

Notes

Spacers and chairs:

Measure only where not at the discretion of the Contractor and pay for at the Rates for links.

Method of measurement

Bar reinforcement:

Make no allowance in weight for surface treatments or rolling margin.

Fabric reinforcement:

Measure the area covered with no allowance for laps. Make no deductions for voids not exceeding 1.00 m².

Rates for the following include

Generally:

For obtaining test certificates as required or ordered.

For tying wire.

For spacers and chairs which are at the discretion of the Contractor.

For horizontal, sloping or vertical bars of any length.

For laps not exceeding 225 mm in fabric.

For bent fabric includes wrapped around steel members.

Fixing only reinforcement:

For everything *except* the cost of bars or fabric.

11: IN SITU CONCRETE WORKS

HOT ROLLED MILD STEEL (GRADE B500B) ROUND BARS TO BS 4449

Item 11	Kilogramme	1	2
		Supplying and fixing	Fixing only
		£	£
Bars other than links: straight, curved or bent			
126	6 mm diameter	2.32	1.18
127	8 mm diameter	2.05	1.01
128	10 mm diameter	1.84	0.85
129	12 mm diameter	1.74	0.76
130	16 mm diameter	1.62	0.64
131	20 mm diameter	1.41	0.47
132	25 mm diameter	1.41	0.47
In links or the like: bent			
133	6 mm diameter	2.61	1.43
134	8 mm diameter	2.32	1.18
135	10 mm diameter	2.10	1.00

HOT ROLLED HIGH YIELD STEEL (GRADE B500B) DEFORMED BARS TO BS 4449

		1	2	3	4
		Supplying and fixing		Fixing only	
		Straight bars	Curved or bent bars	Straight bars	Curved or bent bars
Kilogramme		£	£	£	£
Bars other than links					
136	6 mm diameter	1.85	2.07	1.09	1.27
137	8 mm diameter	1.69	1.90	0.93	1.09
138	10 mm diameter	1.50	1.70	0.76	0.93
139	12 mm diameter	1.37	1.59	0.68	0.85
140	16 mm diameter	1.27	1.38	0.60	0.68
141	20 mm diameter	1.07	1.20	0.43	0.51
142	25 mm diameter	1.06	1.14	0.43	0.51
143	32 mm diameter	0.97	1.08	0.35	0.43
144	40 mm diameter	0.90	1.07	0.35	0.43

11: IN SITU CONCRETE WORKS

STEEL FABRIC TO BS 4483: LONG MESH FABRIC: 100 X 400 mm MESH

Item		1	2	3	4
		Nominal mass per m ²			
		2.61 kg	3.41 kg	4.34 kg	6.72 kg
11	<i>Square Metre</i>	£	£	£	£
145	Fabric	4.49	5.18	6.14	8.53
	<i>Metre</i>				
	Fabric: with main bars along the length				
146	strip not exceeding 300 mm wide	2.13	2.33	2.74	3.69
147	strip 300 to 450 mm wide	2.53	3.00	3.53	4.80
148	Bending	2.60	2.93	3.43	4.27
149	Raking cutting	4.78	5.52	6.24	7.41
150	Curved cutting	6.97	8.08	9.14	10.89

STEEL FABRIC TO BS 4483: SQUARE MESH FABRIC: 200 X 200 mm MESH

		1	2	3	4	5
		Nominal mass per m ²				
		1.54 kg	2.22 kg	3.02 kg	3.95 kg	6.16 kg
	<i>Square Metre</i>	£	£	£	£	£
151	Fabric	3.54	4.28	5.00	5.98	8.46
	<i>Metre</i>					
	Fabric					
152	strip not exceeding 300 mm wide	1.60	2.06	2.28	2.68	3.62
153	strip 300 mm to 450 mm wide	2.07	2.60	2.93	3.46	4.69
154	Bending	1.92	2.27	2.60	3.09	4.27
155	Raking cutting	3.65	4.17	4.74	5.47	7.49
156	Curved cutting	5.20	5.93	6.90	8.03	10.94

11: IN SITU CONCRETE WORKS

STEEL FABRIC TO BS 4483: STRUCTURAL MESH FABRIC: 100 X 200 mm MESH

Item		1	2	3	4	5	6
		Nominal mass per m ²					
		3.05 kg	3.73 kg	4.53 kg	5.93 kg	8.14 kg	10.90 kg
11	<i>Square Metre</i>	£	£	£	£	£	£
157	Fabric	7.42	5.77	6.69	8.27	10.80	13.71
	<i>Metre</i>						
	Fabric: with main bars along the length						
158	strip not exceeding 300 mm wide	3.00	2.51	2.90	3.44	4.39	5.35
159	strip 300 to 450 mm wide	4.01	3.36	3.78	4.52	5.78	7.11
160	Bending	2.60	3.09	3.43	3.93	4.60	5.19
161	Raking cutting	4.93	5.47	6.29	6.73	8.06	8.77
162	Curved cutting	7.28	9.29	10.05	11.12	11.76	12.43

FIXING ONLY STEEL FABRIC: ANY TYPE

		1	2	3	4	5	6	7	8	9
		Nominal mass per m ²								
		1 to	1.75 to	2.5 to	3.25 to	4 to	5 to	6 to	7 to	9 to
		1.75 kg	2.5 kg	3.25 kg	4 kg	5 kg	6 kg	7 kg	9 kg	11 kg
	<i>Square Metre</i>	£	£	£	£	£	£	£	£	£
163	Fabric	2.06	2.23	2.31	2.40	2.56	2.74	2.90	3.20	3.53
	<i>Metre</i>									
	Fabric: with main bars along the length									
164	strip not exceeding 300 mm wide	1.12	1.45	1.53	1.61	1.70	1.78	1.96	2.12	2.29
165	strip 300 to 450 mm wide	1.35	1.52	1.68	1.85	2.02	2.19	2.27	2.36	2.52
166	Bending	1.92	2.17	2.60	3.09	3.43	3.93	4.27	4.60	5.19
167	Raking cutting	3.52	4.01	4.52	5.19	5.95	6.28	7.04	7.45	7.96
168	Curved cutting	4.95	5.61	6.53	7.53	8.54	9.04	10.05	10.55	10.80

11: IN SITU CONCRETE WORKS

DESIGNED JOINTS IN IN SITU CONCRETE

GENERALLY

Specification

Formwork: wood, plywood, metal or plastic sheet that will:

- result in all joints showing a straight line;
- accommodate any projecting reinforcement without bending or displacement.

Construct formwork for designed joints:

- ensuring faces are clean prior to assembly and placing of concrete;
- straight, vertical or horizontal as ordered;
- with rigid stop ends;
- fixed with top edge true to line at joints in floor slabs.

Formwork gaps and voids: do not allow concrete to enter formwork gaps and voids.

Timing: do not place concrete simultaneously on both sides of joints.

Minimum retention period: retain formwork in position for not less than 7 days unless otherwise ordered.

Joint filler: waterproof, compressible, non-extruding pre-moulded filler with high recovery factor after compression at temperatures below 50°C.

Fix joint filler accurately in position ensuring correct space is left for sealant.

Sealants: approved joint sealant.

Sealing: ensure that joint surfaces are clean, dry, smooth, undamaged and, where required, primed.

Notes

Construction joints located at the discretion of the Contractor:

Do not measure.

Rates for the following include

Joints generally:

For all necessary formwork.

For continuity of reinforcement as required.

For rounded arrises where required.

Ordinary joint:

For lightly roughening entire face to expose coarse aggregate, thoroughly wire brushing to remove all loose material, cleaning and wetting face before fresh concrete is placed against it.

Bitumen coated joint:

For coating face with bitumen.

Watertight joint:

For lightly roughening face to expose coarse aggregate by mist-spraying or lightly chipping by approved mechanical means, wire brushing and wetting to achieve complete watertightness.

Filled joint:

For pre-moulded joint filler 25 mm thick and all cutting.

DESIGNED JOINTS

Item		1	2	3	4
		Ordinary	Bitumen coated	Watertight	Filled
11	Metre	£	£	£	£
	Formed joint: width or depth				
169	not exceeding 150 mm	11.09	12.95	13.83	15.15
170	150 to 300 mm	17.80	18.96	20.53	21.70
171	300 to 450 mm	29.61	31.60	34.03	35.94
172	ADD where formwork notched and fitted around reinforcement	13.40	13.40	13.40	20.09

11: IN SITU CONCRETE WORKS

DESIGNED JOINTS - *continued*

Item 11	<i>Metre</i>	<i>£</i>
	Joint at boundary of the work against existing abutment: existing face cleaned, roughened and coated with cement slurry: width or depth	
173	not exceeding 150 mm	4.97
174	150 to 300 mm	7.41
175	300 to 450 mm	9.65
176	Forming surface groove: any shape: any size	1.05
	Sealant: 25 x 25 mm	
177	bitumen compound	4.95
178	polysulphide compound	9.56

ACCESSORIES CAST INTO IN SITU CONCRETE

	<i>Each</i>	<i>£</i>
179	Wall tie: stainless steel: double triangle type to BS 1243: not exceeding 200 mm long	1.99
180	Dovetail anchor slot: stainless steel: not exceeding 100 mm long	2.69
181	Brick anchor: stainless steel: any pattern	2.35
182	Cement-in socket: stainless steel: for bolt not exceeding 20 mm diameter	3.96
183	Floor clip: galvanised steel	2.46

IN SITU CONCRETE SUNDRIES

Rate for the following include

Grouting:
For formwork or temporary means of support to exposed edges and the like.

	<i>Square Metre</i>	<i>£</i>
184	Grouting with mortar: any mix: under stanchion base or grillage: 25 mm thick	45.76
185	ADD for each additional 5 mm of thickness	8.98

12: Precast/Composite Concrete

SECTION IS NOT USED AND THIS PAGE LEFT BLANK INTENTIONALLY

13: Precast Concrete

PRECAST CONCRETE GOODS

GENERALLY

Reference to other Sections: the Preambles to Section 11 apply to this Section unless otherwise stated.

Notes

Reinforcement:

Pay for at the Rates in Section 11 unless otherwise stated.

Areas stated in Item descriptions:

Are extreme cross-sectional areas.

Rates for the following include

Generally:

For moulds and temporary supports.

For all necessary handling reinforcement.

For leaving surface rough as necessary to receive applied finish unless otherwise stated.

For bedding and pointing in any mortar.

In the case of fine finish work, for flush pointing the work proceeds.

For Standard or Designated Mixes mechanically vibrated.

For casting in lengths suitable to their use.

For fixing to curve where this does not involve curved units.

For assembling and jointing units supplied in parts.

Linear items:

For any cutting to lengths as necessary to produce ends, angles or the like.

Projecting nibs:

For any profile including throats, rebates, splays or chamfers but excluding moulded or curved profiles.

Fine finish:

For finishing as described in 'Formed finish-Fine' in Section 11.

LINTELS

Item	Metre	1	2	3	4	5	6	7	8
		Keyed surface exposed faces				Fine finish exposed faces			
		20 N/mm ²		25 N/mm ²		20 N/mm ²		25 N/mm ²	
		Aggregate							
		20 mm	10 mm	20 mm	10 mm	20 mm	10 mm	20 mm	10 mm
13		£	£	£	£	£	£	£	£
Lintel: rectangular									
001	not exceeding 12 500 mm ²	18.46	18.53	18.56	18.62	20.95	21.05	21.08	21.16
002	12 500 to 25 000 mm ²	29.49	29.58	29.65	29.75	33.22	33.36	33.43	33.57
003	25 000 to 37 500 mm ²	32.80	32.91	32.99	33.11	36.28	36.43	36.51	36.66
004	37 500 to 50 000 mm ²	41.99	42.14	42.25	42.40	46.98	47.18	47.30	47.50
005	50 000 to 62 500 mm ²	66.36	66.69	66.84	67.17	73.84	74.24	74.39	74.81
006	62 500 to 75 000 mm ²	70.69	71.05	71.23	71.58	79.43	79.87	80.05	80.48
007	75 000 to 87 500 mm ²	86.61	87.03	87.24	87.66	97.00	97.53	97.74	98.27
008	87 500 to 100 000 mm ²	98.15	98.62	98.88	99.35	109.39	109.96	110.22	110.80
Lintel: boot shaped									
009	not exceeding 50 000 mm ²	53.79	53.98	54.10	54.29	58.78	59.02	59.13	59.39
010	50 000 to 100 000 mm ²	74.30	74.55	74.81	75.06	80.53	80.86	81.11	81.43

13: PRECAST CONCRETE

SILLS, COPINGS AND PIER CAPS

Rates for the following include

Coping:
For ends, angles and intersections.

Sill:
For ends, angles and stoolings.

Item		Metre	1	2	3	4
			Fine finish exposed faces			
			20 N/mm²		25 N/mm²	
			Aggregate			
			20 mm	10 mm	20 mm	10 mm
13			£	£	£	£
	Sill: throated					
	not exceeding 12 500 mm²					
011	grooved: weathered		30.84	30.95	30.98	31.08
012	sunk weathered		31.71	31.81	31.84	31.96
	12 500 to 25 000 mm²					
013	grooved: weathered		39.41	39.55	39.62	39.76
014	sunk weathered		40.28	40.42	40.49	40.64
	25 000 to 37 500 mm²					
015	grooved: weathered		52.16	52.35	52.43	52.43
016	sunk weathered		53.04	53.23	53.31	53.51
	37 500 to 50 000 mm²					
017	grooved: weathered		64.79	65.03	65.15	65.39
018	sunk weathered		65.68	65.92	66.03	66.29
	Coping: weathered: twice throated					
019	not exceeding 12 500 mm²		27.83	27.93	27.97	28.06
020	12 500 to 25 000 mm²		37.41	37.56	37.63	37.77
021	25 000 to 37 500 mm²		46.92	47.10	47.18	47.36
		Each				
	Pier cap: throated: weathered					
022	300 x 300 x 75 mm		12.81	12.86	12.87	12.93
023	400 x 400 x 75 mm		18.34	18.41	18.43	18.52
024	525 x 525 x 100 mm		30.49	30.60	30.67	30.80

13: PRECAST CONCRETE

TAKING OFF AND FIXING ONLY PRECAST CONCRETE LINTELS, SILLS AND COPINGS

Rates for the following include

Fixing only:
For pointing in mortar and refixing cramps.

Item		Metre	1	2
			Taking	Fixing
			off	only
13			£	£
	Lintel			
025	not exceeding 25 000 mm ²		-	10.36
026	25 000 to 37 500 mm ²		-	16.97
027	37500 to 50000 mm ²		-	20.72
	Sill			
028	not exceeding 25 000 mm ²		9.73	10.36
029	25 000 to 37 500 mm ²		14.62	16.97
030	37 500 to 50 000 mm ²		19.47	20.72
	Coping			
031	not exceeding 37 500 mm ²		9.73	18.45
032	37 500 to 50 000 mm ²		12.97	23.08

STEPS AND LANDINGS

Specification

Integral facing: 32 mm granolithic facing with coarse chromite grain admixture as described in Section 28.

Treads: where ordered, to be prepared for and to have approved patent non-slip inserts the full length less 150 mm, fixed with non-ferrous countersunk screws.

Rates for the following include

Generally:
For integral facing to top surfaces.

For keying undersides for plaster or render coatings unless otherwise stated.

13: PRECAST CONCRETE

STEPS AND LANDINGS - *continued*

Item		1	2	3	4	5	6
		20 N/mm²: 20 mm aggregate			25 N/mm²: 20 mm aggregate		
		305 x	330 x	380 x	305 x	330 x	380 x
		205 mm	190 mm	165 mm	205 mm	190 mm	165 mm
13	Metre	£	£	£	£	£	£
033	Bottom step: chamfered: splayed	66.15	66.53	67.08	66.30	66.68	67.23
034	Spandril step: chamfered: splay rebated: splayed	70.74	71.15	71.99	70.89	71.30	72.14
Extra for							£
035	fine finish soffit						3.38
036	non-slip insert: 25 mm wide						24.07
Each							
037	fair end: integral facing						4.52
038	wall hold						6.90

14: Masonry

BRICK/BLOCK WALLING

GENERALLY

Specification

Constituent materials for mortar:

- cement: to BS EN 197-1 and manufactured by a BSI Registered Firm;
- masonry cement: to BS EN 413-1;
- sand: to BS EN 13139;
- hydrated lime powder and lime putty: to BS EN 459-1;
- ready mixed lime/sand mix: to BS EN 998-1 and 998-2.

- plasticizer: to BS EN 934-3 and manufactured by a BSI Kitemark Licensee;
- pigments for coloured mortar: to BS EN 12878;
- water: clean and uncontaminated. Obtain approval for other than mains supply.

Mix Proportions: mix constituent materials in proportion by volume as the following Table:

BS EN 998-2 Mortar classes

Type No.	BS Mortar Designation	A Cement-sand	B Cement: ready mixed lime/sand (proportions of lime and sand as given in brackets)	C Cement-sand with plasticizer	D Masonry cement-sand
1	M12	1:3	1:3 (1:12)	-	-
2	M6	-	1:4½ (1:9)	1:3-4	-
3	M4	-	1:6 (1:6)	1:5-6	1:4-5
4	M2	-	1:9 (1:4½)	1:7-8	1:5½-6½

Coloured Portland cement mortars: added pigments must not exceed 10% of the weight of the cement used, except for carbon black which must not exceed 3% by weight of cement.

Ready mixed mortar: to BS EN 998-1 and 2, mortar designation as specified for the Type No scheduled in Table. Do not use for structural masonry without approval.

Site mixed mortar: mix in the proportions by volume as specified for the Type No scheduled in Table.

Setting time: use mortars containing cement within two hours of mixing unless retardants have been added. Discard unused mortar.

Cold weather: do not mix mortar unless precautions are taken to ensure that it has a minimum temperature of 4°C when laid.

Finishing of mortar joints not visible: strike off with trowel as work proceeds joints not visible in finished work.

GENERALLY - *continued***Definition of Terms**

Walls: includes skins of hollow walls.

Composite work: walls, etc built of more than one type of brick or block in the thickness of the wall.

Isolated pier: isolated walls whose length on plan is not exceeding four times their thickness, except where caused by openings.

Projection: attached piers (whose length on plan is not exceeding four times the thickness of projection), plinths, oversailing courses or the like.

Notes

Work generally:
Vertical unless otherwise stated.

Method of measurement

Generally:
Measure brickwork and blockwork on the centre line of the material unless otherwise stated. Make no deductions for:

- a. voids not exceeding 0.50 m²;
- b. flues, lined flues and flue blocks where voids and work displaced are together not exceeding 0.50 m².

Measure deductions for string courses, lintels, sills, plates and the like as regards height to the extent only of full brick or block courses displaced and as regards depth to the extent only of full half-brick beds displaced.

Building against other work and bonding to other work:

Measure where the other work is existing or consists of a differing material.

Extra over for facework:
Measure on the exposed face.

Arch:
Measure the mean girth or length on face.

Rates for the following include

Generally:
For English or Flemish bond, or stretcher bond in the case of half-brick walls or blockwork, unless otherwise stated.

For rough cutting new work except rounded or chamfered angles.

For fair straight, raking or splay cutting new work.

For rough horizontal chases in new work.

For raking out joints of brickwork to a depth of 13 mm as the work proceeds as key for plaster or render coatings, or for the use of grooved bricks at the Contractor's option.

For labour in eaves filling.

For centering.

Cement mortar:
For any of the mortars in Type 1 of the Mortar Type Table.

Cement-lime mortar:
For any of the mortars in Types 2, 3 or 4 of the Mortar Type Table.

Any mortar:
For any mortar in the Mortar Type Table including mortar incorporating sulphate-resisting cement.

Curved work:
For extra material.

Building against other work:
For bedding in mortar.

Bonding to other work:
For extra material for bonding.

Bonding end of new wall to existing:
For any approved method of bonding to suit the particular circumstances.

For extra material for bonding and for cutting sockets.

14: MASONRY

GENERALLY - *continued*

Facework:

For selecting bricks and blocks with undamaged arrises and flat surfaces.

For finishing joints with flush, concave, weathered or recessed joint as the work proceeds, unless otherwise stated.

Fair angle:

For vertical, raking or horizontal angles.

Arch:

For all cutting to arch and wall.

For ends.

Sill, threshold or coping:

For angles and ends.

Fair cutting brickwork:

For cutting not exceeding half-brick deep.

Making good existing facework:

For pointing to match existing.

COMMON BRICKWORK: LAYING ONLY: GENERALLY

Notes

Number of bricks:

Calculate from the following Table:

Number of common bricks per square metre including waste.		
Thickness of wall	65 mm and 67 mm	73 mm
Half-brick stretcher bond	65	59
Half-brick honeycomb bond	39	35
One-brick	128	116
One-brick honeycomb bond	78	70
One-and-a-half brick	191	173
ADD for each additional half-brick thickness	63	57
One-brick curved not exceeding 2 m radius	140	127
One-brick curved exceeding 2 m radius	134	122

For linear items calculate the actual number of bricks required and add 10 per cent for waste.

Rates for the following include

Generally:

For everything *except* the cost of bricks.

For laying new or old bricks of any of the following types:

1. Clay common bricks to BS EN 771-1;
2. Calcium silicate common bricks to BS EN 771-2;
3. Approved common bricks as ordered, nominal size 219 x 105 x 67 or 73 mm.

14: MASONRY

COMMON BRICKWORK: LAYING ONLY: IN CEMENT - LIME MORTAR

Item		1	2	3	4
		Brick thickness			
		Half	One	One-and-a-half	ADD for each additional half-brick
14	Square Metre	£	£	£	£
001	Wall	41.39	76.49	105.57	29.24
002	Wall: in honeycomb bond: one third area void	38.96	63.01	-	-
	ADD where				
003	in filling existing opening	14.20	25.81	38.92	9.73
004	building overhand	14.20	25.81	38.92	9.73
005	building against other work	7.16	7.16	7.16	-
	bonding to other work				
006	forming pockets	5.34	5.34	5.34	-
007	cutting pockets: in existing brickwork or blockwork	12.04	12.04	12.04	-
008	cutting pockets: in existing stonework	34.40	34.40	34.40	-
	curved on plan				
009	not exceeding 2 m radius	25.08	40.10	47.71	22.22
010	exceeding 2 m radius	17.85	30.22	43.07	12.85
011	curved bricks: not exceeding 2 m radius	31.26	50.06	-	-
012	Isolated pier	-	95.40	133.86	38.61
013	Isolated casing	49.83	82.57	115.60	33.70
014	Chimney stack	-	95.40	133.86	38.61
	Square Metre - per half-brick thickness				£
	ADD where				
015	in cement mortar				2.45
016	sulphate-resisting cement used instead of ordinary cement				0.32

14: MASONRY

COMMON BRICKWORK: LAYING ONLY: IN CEMENT - LIME MORTAR - *continued*

Item		1	2	3	4
		Brick projection			
		Half	One	One-and-a-half	ADD for each additional half-brick
14	<i>Metre - per half-brick width</i>	£	£	£	£
	Projection				
017	vertical	5.99	10.32	13.86	4.24
018	horizontal	5.99	10.32	13.86	4.24
	ADD where bonding to other work				
019	forming pockets	5.31	9.06	12.08	2.98
020	cutting pockets: in existing brickwork	6.77	10.53	13.54	3.29
					£
	ADD where				
021	in cement mortar				0.28
022	sulphate-resisting cement used instead of ordinary cement				0.03
	<i>Square Metre</i>				
	Extra over for facework				
023	exceeding half-brick wide				9.21
024	exceeding half-brick wide: building overhand				14.00
025	exceeding half-brick wide: curved on plan: not exceeding 2 m radius				10.13
026	exceeding half-brick wide: curved on plan: exceeding 2 m radius				9.68
	<i>Metre</i>				
027	not exceeding half-brick wide				2.08
028	Fair chamfered or rounded external angle: any girth				7.53
	<i>Each</i>				
029	end or mitre				1.68
				1	2
	<i>Metre</i>			One ring	Two ring
				£	£
	Rough brick on edge arch: any type: through				
030	half-brick wall			8.82	15.51
031	one-brick wall			17.42	26.02
032	one-and-a-half brick wall			26.21	40.49
033	two-brick wall			35.02	52.47

14: MASONRY

COMMON BRICKWORK: SUNDRIES - *continued*

Item 14			1	2
			New	Existing
			brickwork	brickwork
		<i>Square Metre</i>	£	£
044	Rough cutting		Incl	36.00
		<i>Metre</i>		
	Rough cutting rounded or chamfered angle			
045	not exceeding 75 mm wide/girth		5.34	10.51
046	75 to 150 mm wide/girth		7.12	12.89
	Fair cutting			
047	to curve		10.47	20.93
048	straight		Incl	8.18
049	raking or splayed		Incl	15.71
050	birdsmouth angle		10.47	-
051	squint angle		11.52	-

		1	2	3	4	5
		Thickness				ADD where
		Half-brick	One-brick	One-and-a-half brick	Not exceeding 300 mm hollow	making good existing facework - per side
	<i>Metre</i>	£	£	£	£	£
052	Preparing top of existing wall for raising	2.47	4.96	7.45	5.43	-
053	Bonding end of new wall to existing	11.95	23.25	34.18	24.99	4.05
054	Making good with new brickwork: pockets in existing wall where old wall removed	19.45	31.51	38.63	37.38	-
055	ADD for facework to new brickwork: to match existing	4.05	6.60	9.13	7.85	-
056	Making good with new brickwork: plain jamb of opening cut in existing wall: bonding new to existing	20.94	40.70	60.50	-	9.11
057	ADD for rebated jamb	-	20.26	24.75	-	-
058	Making good with new brickwork: half-brick thick: plain jamb of opening cut in existing hollow wall: closing cavity: not exceeding 75 mm wide: bonding new to existing	-	-	-	47.30	9.11
059	ADD for rebated jamb	-	-	-	17.38	-

14: MASONRY

COMMON BRICKWORK: SUNDRIES - *continued*

Item 14	Metre	£
	Closing cavity: not exceeding 75 mm wide: with brickwork	
060	half-brick thick: vertical	11.58
061	one-brick thick: vertical	12.73
062	one course deep: horizontal	13.59

ENGINEERING BRICKWORK: LAYING ONLY: GENERALLY

Notes

Number of bricks:

Calculate from the following Table:

Number of engineering bricks per square metre including waste.		
Thickness of wall	65 mm and 67 mm	73 mm
Half-brick stretcher bond	62	56
One-brick	122	110
One-and-a-half brick	182	164
ADD for each additional half-brick thickness	60	54
One-brick curved not exceeding 2 m radius	134	121
One-brick curved exceeding 2 m radius	128	116

For linear items calculate the actual number of bricks required and add 5 per cent for waste.

Rates for the following include

Generally:

For everything *except* the cost of bricks.

For laying new or old bricks of any of the following types:

1. Clay engineering bricks to BS EN 771-1 Class A or B;
2. Approved engineering bricks as ordered, nominal size 219 x 105 x 67 or 73 mm.

Arch, sill, threshold or coping:

For facework to exposed faces.

ENGINEERING BRICKWORK: LAYING ONLY: IN CEMENT MORTAR

		1	2	3	4
		Brick thickness			
		Half	One	One-and-a-half	ADD for each additional half-brick
		£	£	£	£
063	Wall	52.67	95.62	132.57	37.12
	ADD where				
064	in filling existing opening	12.79	23.23	35.03	8.75
065	building overhand	15.78	28.68	43.24	10.81

	1	2	3	4
	Brick thickness			
	Half	One	One-and-a-half	ADD for each additional half-brick
<i>Square Metre</i>	£	£	£	£

		Half brick			
<i>Metre - per half-brick width</i>		£	£	£	£
	Projection				
076	vertical	7.05	11.56	17.19	5.66
077	horizontal	7.05	11.56	17.19	5.66
	ADD where bonding to other work				
078	forming pockets	6.79	10.59	14.40	3.81
079	cutting pockets: in existing brickwork	7.48	11.78	16.07	4.30
					£
080	ADD where sulphate-resisting cement used instead of ordinary cement				0.07

ENGINEERING BRICKWORK: LAYING ONLY: IN CEMENT MORTAR - *continued*[illegible]

Rates for the following include

For everything including bricks.

For work in cement mortar.

Item		
14	<i>Square Metre</i>	<i>£</i>
098	Rough cutting existing brickwork	46.95
	<i>Metre</i>	
	Rough cutting rounded or chamfered angle	
099	not exceeding 75 mm wide/girth	7.53
100	75 to 150 mm wide/girth	10.05
	Fair cutting	
101	to curve	13.26
102	birdsmouth angle	14.28
103	squint angle	15.71

		1	2	3	4
		Thickness			ADD where
		Half-brick	One-brick	One-and-a-half brick	making good existing facework - per side
<i>Metre</i>		£	£	£	£
104	Preparing top of existing wall for raising	2.44	4.89	7.35	-
105	Bonding end of new wall to existing	16.93	29.47	43.50	4.21
106	Making good with new brickwork: pockets in existing wall where old wall removed	24.55	38.88	48.85	-
107	ADD for facework to new brickwork: to match existing	4.21	6.72	9.27	-
108	Making good with new brickwork: plain jamb of opening cut in existing engineering brick wall: bonding new to existing	27.21	53.27	76.82	9.40
109	ADD for rebated jamb	-	23.97	29.24	-

		£
	Closing cavity: not exceeding 75 mm wide: with brickwork	
110	half-brick thick: vertical	15.02
111	one-brick thick: vertical	16.42
112	one course deep: horizontal	17.45

14: MASONRY

FACING BRICKWORK AND COMPOSITE WORK: LAYING ONLY: GENERALLY

Rates for the following include

Generally:

For everything *except* the cost of bricks.

For laying new or old bricks of any of the following types:

1. Clay facing bricks to BS EN 771-1;
2. Calcium silicate facing bricks to BS EN 771-2;
3. Approved facing bricks as ordered, nominal size 219 x 105 x 67 or 73 mm.

For additional labour where facings of more than one type or colour are used in association.

For the even distribution of multi-coloured facings throughout the finished work.

Column A:

For jointing and pointing in cement-lime mortar.

Column B:

For jointing and pointing in white or coloured cement-lime mortar or with coal ash substituted for sand as ordered.

Column C:

For jointing in cement-lime mortar, raking out to a depth of 20 mm as the work proceeds and pointing with a weathered or recessed joint as the scaffolding is struck in white or coloured cement or cement-lime mortar or with coal ash substituted for sand as ordered.

FACING BRICKWORK: LAYING ONLY

Notes

Number of bricks:

Calculate from the following Table:

Number of facing bricks per square metre including waste.		
Thickness of wall	65 mm and 67 mm	73 mm
Half-brick stretcher bond	62	56
Half-brick in English bond with snapped headers	62	56
One-brick	122	110

For linear items calculate the actual number of bricks required and add 5 per cent for waste.

Rates for the following include

Arch, sill, threshold or coping:

For facework to exposed faces.

Item	14	Square Metre	1	2	3
			A	B	C
			£	£	£
		Wall: half-brick thick			
		stretcher bond			
113		facework one side	59.97	65.15	69.47
114		facework both sides	66.26	70.77	74.20
		English bond			
115		snapped headers: facework one side	70.70	76.51	80.87
116		snapped headers: building against other work: facework one side	71.84	78.41	82.87
		ADD where			
117		in cement mortar	2.45	2.45	2.45
118		in filling existing opening	15.94	15.94	15.94

14: MASONRY

FACING BRICKWORK: LAYING ONLY - *continued*

Item		1	2	3
		A	B	C
14	<i>Square Metre</i>	£	£	£
	Wall: one brick thick			
119	garden wall bond: facework both sides	108.95	111.60	126.64
120	English bond: facework both sides	109.37	112.22	127.19
121	Flemish bond: facework both sides	109.78	112.85	127.60
	ADD where			
122	in cement mortar	5.15	5.15	5.15
123	in filling existing opening	25.81	25.81	25.81
	<i>Metre</i>			
	Extra for fair return			
124	not exceeding half-brick wide	2.85	2.85	3.31
125	half-brick to one-brick wide	4.27	4.27	4.74
126	Fair chamfered or rounded external angle: any girth	7.53	7.53	7.53
	<i>Each</i>			
127	end or mitre	1.68	1.68	1.68
	<i>Metre - per half-brick width</i>			
	Projection: facework to face and margins - <i>per half-brick projection</i> <i>from face of wall</i>			
128	vertical	8.56	9.42	10.05
129	horizontal	8.56	9.42	10.05
	ADD where bonding to other work			
130	forming pockets	7.77	7.77	7.77
131	cutting pockets: in existing brickwork	8.57	8.57	8.57
	<i>Metre</i>			
132	Flat arch: brick on end: one-brick high on face: half-brick wide soffit	41.01	41.11	47.82
133	ADD for cambered soffit	3.51	3.51	3.51
	Segmental or semi-circular arch: two half-brick rings: one-brick high on face			
134	half-brick wide soffit	35.71	35.77	55.64
135	one-brick wide soffit	54.92	55.05	86.74

14: MASONRY

FACING BRICKWORK: LAYING ONLY - *continued*

Item		1	2	3
		A	B	C
		£	£	£
14	<i>Square Metre</i>			
	Brick on edge sill, threshold or coping: raking or horizontal: square or rounded external angles: set level or weathering			
136	one-brick wide	26.90	27.14	33.84
	ADD where curved on plan			
137	not exceeding 2 m radius	2.82	2.82	2.82
138	exceeding 2 m radius	1.51	1.51	1.51
139	one-and-a-half brick wide	38.38	38.78	45.48
	ADD where curved on plan			
140	not exceeding 2 m radius	5.39	5.39	5.39
141	exceeding 2 m radius	2.73	2.73	2.73
	Brick on end sill, threshold or coping: raking or horizontal: square or rounded external angles: set level or weathering			
142	half-brick wide	24.93	25.04	31.73
	ADD where curved on plan			
143	not exceeding 2 m radius	2.60	2.60	2.60
144	exceeding 2 m radius	1.29	1.29	1.29

COMPOSITE WORK: LAYING ONLY: EXTRA OVER COMMON BRICKWORK IN CEMENT LIME MORTAR FOR FACING BRICKWORK

Notes

Number of bricks:
Calculate from the following Table:

For linear items calculate the actual number of facing bricks required and add 5 per cent for waste. DEDUCT the same number of common bricks.

Number of facing bricks per square metre including waste.		
Bond	Facing bricks and DEDUCT	
	Common bricks	
	65 mm	73 mm
	and	
	67 mm	
English bond	92	82
English bond with snapped headers	62	56
Flemish bond	81	73
Flemish bond with snapped headers	62	56
ADD where curved on plan		
not exceeding 2 m radius	8	8
ADD where curved on plan		
exceeding 2 m radius	4	4

Method of measurement

Generally:
Measure on the exposed face.

Rates for the following include

Column B
For the extra cost of providing Column B type mortar through the full thickness of the faced wall.

Band:
For ends and angles.

14: MASONRY

COMPOSITE WORK: LAYING ONLY: EXTRA OVER COMMON BRICKWORK IN CEMENT LIME MORTAR
FOR FACING BRICKWORK - *continued*

Item		1	2	3
		A	B	C
14	<i>Square Metre</i>	£	£	£
	Facework: exceeding half-brick wide			
145	English bond	22.10	26.78	32.38
146	Flemish bond	23.10	27.46	33.38
147	English or Flemish bond with snapped headers	24.74	29.11	34.55
	ADD where			
148	building overhand	6.43	6.68	7.97
149	curved on plan: exceeding 2 m radius	2.25	2.31	2.98
150	curved bricks: not exceeding 2 m radius	9.02	9.25	11.96
	<i>Metre</i>			
151	Facework: not exceeding half-brick wide	3.74	5.07	5.64
	Plain band: horizontal: not exceeding 300 mm wide on face: facework to face and margins - <i>per 75 mm of height</i>			
152	sunk not exceeding half-brick width from face of wall	5.06	5.68	6.49
153	projecting not exceeding half-brick width from face of wall	8.69	9.20	10.10
	Brick on end band: horizontal: one-brick high on face: facework to face - <i>per 75 mm of height</i>			
154	flush	24.56	25.42	26.66
155	sunk not exceeding half-brick width from face of wall: facework to margins	29.56	30.56	32.45

FACING BRICKWORK AND COMPOSITE WORK: SUNDRIES

Rates for the following include

Generally:

For everything *including* bricks.

For work in any mortar.

	<i>Metre</i>	£
	Fair cutting	
156	to curve	16.74
157	birdsmouth angle	17.58
158	squint angle	18.58

14: MASONRY

BLOCKWORK: GENERALLY

Specification

For any work size.

Aggregate concrete blocks (dense and light-weight aggregates): to BS EN 771-3.

For blocks to bond with standard format metric or 67 or 73 mm bricks with 8 to 10 mm joints.

Autoclaved aerated concrete blocks: to BS EN 771-4.

For blocks keyed or textured on both sides and for striking off and leaving rough joints as key for plaster or render coatings.

Method of measurement

For forming solid ends, reveals and angles, reversing blocks as necessary.

Pier:

Measure in multiples of the thickness of the blocks.

Fair angle:

For cutting or rubbing or purpose made blocks as necessary.

Rates for the following include

Generally:

For everything including blocks.

14: MASONRY

BLOCKWORK: DENSE AGGREGATE CONCRETE BLOCKS: IN CEMENT LIME MORTAR

Item		1	2	3	4	5	6	7	8	9
		Thickness of blocks								
		75 mm	90 mm	100 mm	115 mm	140 mm	150 mm	190 mm	200 mm	215 mm
14	<i>Square Metre</i>	£	£	£	£	£	£	£	£	£
	Hollow or cellular blocks: compressive strength not exceeding 5 N/mm ²									
159	wall	30.08	34.44	36.74	43.75	53.49	58.77	77.38	79.96	85.48
160	isolated pier	32.40	36.72	39.15	46.51	56.83	62.15	81.77	84.31	90.15
161	isolated casing	31.92	36.58	39.05	46.36	56.57	62.04	81.40	84.19	90.00
162	chimney stack	32.86	36.85	39.24	46.64	57.06	62.25	82.12	84.41	90.29
	ADD where compressive strength									
163	5-10 N/mm ²	0.94	1.02	1.01	1.41	1.40	1.55	2.15	2.30	2.45
164	10-15 N/mm ²	1.27	1.39	1.37	1.74	1.73	1.90	2.67	2.85	3.04
165	15-20 N/mm ²	1.89	2.07	2.02	2.42	2.39	20.91	3.40	3.63	3.89
166	20-35 N/mm ²	2.53	2.76	2.70	3.08	3.06	3.37	4.12	4.38	4.68
167	cavities of blocks filled solid with concrete (15 N/mm ²)	5.70	7.25	8.31	9.65	12.20	13.17	17.08	18.16	19.60
	Solid blocks: compressive strength not exceeding 5 N/mm ²									
168	wall	33.25	37.46	41.22	50.51	56.22	61.70	76.80	79.11	82.93
169	isolated pier	35.56	39.73	43.62	53.25	59.57	65.09	81.18	83.46	87.61
170	isolated casing	35.09	39.58	43.53	53.11	59.32	64.98	80.80	83.35	87.46
171	chimney stack	36.02	40.09	43.71	53.39	59.81	65.18	81.54	83.56	87.75
	ADD where compressive strength									
172	5-10 N/mm ²	2.52	3.00	3.01	4.37	2.29	2.37	4.58	4.80	5.77
173	10-15 N/mm ²	1.85	1.84	1.84	2.56	2.51	2.46	3.06	3.01	3.27
174	15-20 N/mm ²	3.76	3.80	3.89	5.49	5.64	5.67	6.70	6.76	7.16
175	20-35 N/mm ²	5.08	5.13	5.23	7.35	7.68	7.73	9.30	9.36	9.88
	ADD to Items 14.159 to 14.175 where									
176	in filling existing opening	4.93	5.61	6.08	6.77	7.95	8.41	10.29	10.79	11.89
177	facework - <i>per side</i>	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78
178	in cement mortar	0.56	0.70	0.76	0.87	1.09	1.15	1.46	1.53	1.63

14: MASONRY

BLOCKWORK: LIGHTWEIGHT AGGREGATE CONCRETE BLOCKS: IN CEMENT LIME MORTAR

Item		1	2	3	4	5	6	7	8	9
		Thickness of blocks								
		75 mm	90 mm	100 mm	115 mm	140 mm	150 mm	190 mm	200 mm	215 mm
14	Square Metre	£	£	£	£	£	£	£	£	£
	Hollow or cellular blocks: compressive strength not exceeding 5 N/mm ²									
179	wall	32.26	36.80	39.63	46.61	53.13	58.32	72.17	74.55	82.64
180	isolated pier	34.57	39.08	42.03	49.37	56.48	61.70	76.56	78.90	87.31
181	isolated casing	34.10	38.94	41.94	49.22	56.21	61.59	76.19	78.79	87.16
182	chimney stack	35.03	39.20	42.12	49.51	56.71	61.80	76.91	79.01	87.45
	ADD where compressive strength									
183	5-10 N/mm ²	0.77	0.77	0.77	0.97	0.92	0.93	1.16	1.16	1.59
184	10-15 N/mm ²	1.56	1.55	1.55	1.94	1.84	1.86	2.35	2.35	3.19
185	cavities of blocks filled solid with concrete (15 N/mm ²)	5.70	7.25	8.31	9.65	12.20	13.17	17.08	18.16	19.60
	Solid blocks: compressive strength not exceeding 5 N/mm ²									
186	wall	33.81	38.57	41.81	47.14	55.13	59.88	76.90	78.42	83.94
187	isolated pier	36.12	40.85	44.22	49.88	58.48	63.27	81.28	82.77	88.62
188	isolated casing	35.65	40.70	44.13	49.74	58.22	63.16	80.90	82.66	88.47
189	chimney stack	36.58	41.20	44.31	50.03	58.72	63.37	81.64	82.87	88.76
	ADD where compressive strength									
190	5-10 N/mm ²	0.91	0.91	0.91	1.10	1.04	1.02	1.21	1.21	1.47
191	10-15 N/mm ²	2.07	2.07	2.06	2.54	2.36	2.36	3.15	3.15	3.83
	ADD to Items 14.179 to 14.191 where									
192	in filling existing opening	4.93	5.61	6.08	6.77	7.95	8.41	10.29	10.79	11.89
193	facework - <i>per side</i>	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78
194	in cement mortar	0.56	0.70	0.76	0.87	1.09	1.15	1.46	1.53	1.63

14: MASONRY

BLOCKWORK: AUTOCLAVED AERATED CONCRETE BLOCKS: IN CEMENT LIME MORTAR

Item	Square Metre	1	2	3	4	5	6	7	8
		Thickness of blocks							
		75 mm	100 mm	125 mm	140 mm	150 mm	200 mm	215 mm	255 mm
14		£	£	£	£	£	£	£	£
	Solid blocks:								
195	Wall	30.02	37.63	44.17	54.21	58.40	77.42	82.67	95.12
196	Isolated pier	31.86	40.12	47.02	57.29	61.67	81.65	87.19	100.92
197	Isolated casing	31.40	39.86	46.86	57.04	61.58	81.55	87.04	100.80
198	Chimney stack	32.32	40.04	47.16	57.52	61.77	81.75	87.34	99.95
	ADD where								
199	in filling existing opening	5.00	6.05	6.96	7.62	8.34	10.47	11.28	14.15
200	smooth faced blocks and facework - <i>per side</i>	6.10	6.41	7.22	7.43	7.68	8.97	9.35	10.02
201	in cement mortar	0.56	0.76	0.97	1.09	1.15	1.55	1.67	1.98

BLOCKWORK: INSULATING CONCRETE/FOAM BLOCKS: IN CEMENT LIME MORTAR

Specification

Insulating concrete/foam blocks: Agrément certified.

Solid blocks: medium density concrete with expanded polystyrene facing.

Hollow blocks: lightweight concrete with expanded polystyrene filling.

		1	2	3	4	5
		Hollow blocks		Solid blocks		
		Thickness				
		125 mm	130 mm	140 mm	130 mm	180 mm
Square Metre		£	£	£	£	£
Blocks: compressive strength not exceeding 5 N/mm²						
202	wall	55.86	57.62	60.94	69.24	86.63
203	isolated pier	57.93	59.69	64.03	72.36	80.85
204	isolated casing	57.78	59.52	63.81	72.21	90.26
ADD where						
205	compressive strength 5 to 10 N/mm²	0.95	0.94	0.93	0.53	0.59
206	in filling existing opening	6.96	7.19	7.62	7.19	9.61
207	facework - <i>per side</i>	4.78	4.78	4.78	4.78	4.78
208	in cement mortar	0.97	0.99	1.06	0.99	1.37

Generally:

For any type of blockwork.

For any mortar.

For extra materials where required.

1	2	3	4	5	6	7
Thickness of blocks						
not exceeding 100 mm	100 to 125 mm	125 to 150 mm	150 to 200 mm	200 to 250 mm	exceeding 250 mm	ADD where making good existing facework <i>-per side</i>
£	£	£	£	£	£	£
10.86	14.71	18.48	19.65	22.18	26.05	-
1.67	1.96	2.24	2.37	2.48	2.65	-
3.60	4.98	6.83	7.60	9.86	11.17	-
6.43	8.21	12.34	13.86	17.07	19.62	-
17.61	25.23	32.52	35.78	45.44	48.61	6.51
6.39	8.73	11.74	12.26	15.73	16.61	-
7.13	9.49	11.98	13.97	17.43	18.87	-

14: MASONRY

SURFACE TREATMENTS

Rates for the following include

Generally:
For brushing and cleaning down to remove dust, dirt, flaking distemper or the like.

Raking out:
For cutting out.

Pointing:
For wetting joints.

Item		
14	Square Metre	£
	Raking out existing lime, cement-lime or decayed cement mortar joints: 13 mm deep: to form key	
221	brickwork	11.24
222	blockwork	7.49
	Hacking face: existing plain or painted surface: to form key	
223	common brickwork or blockwork	4.99
224	engineering or glazed brickwork	7.49
	Forming key: for plaster or render coating: existing plain or painted brickwork or blockwork of any type	
225	with approved PVA emulsion based bonding liquid	3.09
226	with bitumen based bonding liquid	5.30

14: MASONRY

GROOVES AND CHASES

Rates for the following include

Groove:

For raking out joint, raking out and enlarging joint or cutting groove as necessary.

Item	Metre	1	2	3	4	5	6
		Common brickwork or facing brickwork		Engineering brickwork		Blockwork	
		New	Existing	New	Existing	New	Existing
		£	£	£	£	£	£
Groove for							
227	water bar or the like	4.52	6.69	8.37	11.72	4.52	6.69
228	turn-in of flashing	2.71	5.13	2.71	5.13	2.71	5.13
229	turn-in of flashing: stepped	3.77	6.68	3.77	6.68	4.89	7.77
230	turn-in of flashing: raking	6.20	9.21	12.56	15.90	6.20	9.21
231	nib of asphalt	7.04	10.42	15.07	18.42	7.53	10.05
232	nib of asphalt: vertical	8.37	11.05	16.74	20.93	9.21	12.05
ADD where							
233	grouting with mortar	0.74	0.98	0.74	0.98	0.74	0.98
234	pointing with mortar	0.24	0.48	0.24	0.48	0.24	0.48
235	re-wedging flashing	-	3.35	-	3.35	-	3.35
Chase: not exceeding 150 mm deep							
236	not exceeding 150 mm high: horizontal	Incl	22.26	Incl	44.54	Incl	22.26
237	not exceeding 150 mm wide: vertical or raking	15.90	23.94	31.81	47.89	15.90	23.94
238	150 to 225 mm high: horizontal	Incl	26.80	Incl	53.58	Incl	26.80
239	150 to 225 mm wide: vertical or raking	18.42	27.62	35.68	55.26	18.42	27.62

14: MASONRY

MORTICES, CUTTING AND PINNING AND CUTTING OUT

Item		1	2	3
		Common brickwork or blockwork	ADD where making good facework	ADD where making good facework to facing brickwork
14	Each	£	£	£
240	Mortice for bolt or the like: not exceeding 25 mm diameter: not exceeding 100 mm deep	1.51	0.58	1.07
241	ADD for each additional 50 mm of depth	0.76	0.29	0.60
242	Mortice not exceeding 50 x 50 x 100 mm deep: grouting with mortar	3.01	1.13	2.12

	Each	1	2	3	4
		Common brickwork	Blockwork	ADD where making good facework	ADD where making good facework to facing brickwork
		£	£	£	£
Cutting and pinning end of					
243	lintel or the like	8.37	6.28	1.68	3.65
	metal section				
244	not exceeding 250 mm in depth	8.37	6.28	1.68	3.65
245	250 to 500 mm in depth	12.56	9.41	2.38	4.40
246	exceeding 500 mm in depth	15.62	11.72	3.35	7.30

	Each	1	2	3	4
		Common brickwork not exceeding 75 mm deep	Blockwork ADD for each additional 25 mm of depth	not exceeding 75 mm deep	ADD for each additional 25 mm of depth
		£	£	£	£
Cutting into or through work to release end of					
247	bracket, rag bolt or the like not exceeding 55 mm diameter	7.49	3.12	5.61	2.08
	metal section				
248	not exceeding 250 mm in depth	9.36	3.74	7.47	3.12
249	250 to 500 mm in depth	14.04	5.61	10.52	4.16
250	exceeding 500 mm in depth	18.72	6.49	14.04	4.74
251	Items in engineering brickwork: price at the Rates for common brickwork multiplied by 2.00.				

14: MASONRY

FLUES, FLUE LININGS AND FILLING AROUND FLUES

REFRACTORY BRICKWORK: GENERALLY

Rates for the following include

Generally:

For everything *including* bricks.

REFRACTORY BRICKWORK: INSULATING BRICKS

Specification

Insulating bricks: diatomaceous earth insulating bricks 64 or 73 mm high:
a. density: not less than 690 kg/m³;
b. compressive strength: not less than 4.8 N/mm²;
c. thermal conductivity value: 0.144 W/mK.

Mortar: diatomaceous earth and Portland cement binder mixed and applied as recommended by the manufacturer of the of the insulating bricks.

Item			
14	Square Metre		£
252	Flue lining: half-brick thick: facework one side		284.95
253	Flue lining: half-brick thick: facework one side: bonding to surrounding brickwork with insulating brick headers every fourth course		358.27

		1	2	3
		Diameter of hole		
		150 mm	230 mm	300 mm
	Each	£	£	£
254	Hole for pipe or the like: through one-and-a-half brick side of flue of one-brick common brick outer wall and half-brick insulating brick lining: turning half-brick bullseye arch around: facework both sides, for full thickness of side: cutting and making good: fire resisting packing around pipe or the like with fire cement	143.53	163.25	179.40

		1	2	3
		Size of opening		
		not exceeding 0.10 m ²	0.10 to 0.20 m ²	0.20 to 0.30 m ²
	Each	£	£	£
255	Forming opening: through one-and-a-half brick side of flue of one-brick common brick outer wall and half-brick insulating brick lining: flat arch over: facework both sides: returning insulating brick through full thickness of side: with facework all round: cutting and making good	95.99	116.52	133.27

Specification

64 or 73 mm high, from an approved manufacturer, jointing in fire cement.

Item		£
14	<i>Square Metre</i>	
256	Flue lining: half-brick thick: facework one side	351.47
257	Flue lining: half-brick thick: facework one side: forming cavity not exceeding 75 mm wide between fire brick and outer wall: bridging cavity with one header per square metre cut and fitted (but not bonded) to outer wall	357.06

Specification

Classification: Type A1.

Are nominal internal dimensions.

For notice plates to comply with Building Regulations.

		1	2	3	4	5
		Square	Circular			
		185 x	Diameter			
		185 mm	125 mm	150 mm	185 mm	250 mm
		£	£	£	£	£
	<i>Metre</i>					
258	Lining	102.18	87.98	93.12	95.08	172.42
	<i>Each</i>					
259	Extra for bend	69.36	47.33	50.46	53.58	123.37

14: MASONRY**EXTRA OVER WALLS FOR PERIMETERS AND ABUTMENTS****WALL BONDING TIES****Specification**

Bonding ties: Agrément certified from an approved manufacturer. Stainless steel for internal and external use, suitable for both brick and blocks with integral ties, coach screws, plugs and washers.

Rates for the following include

Generally:
For plugging and screwing to existing masonry.

Item
14

Metre

260	Bonding tie	7.52	11.09	14.64	18.40

1	2	3	4
For wall thickness			
60 to 75 mm	100 to 115 mm	125 to 180 mm	190 to 260 mm
£	£	£	£

PRECAST CONCRETE - COPINGS**Specification**

Precast concrete coping units: to BS 5642-2, Section 2.

Rates for the following include

Generally:
For bedding, jointing and pointing in any mortar.

For fixing to curve where this does not involve curved units.

Notes

Cross-section sizes stated in Item descriptions:
Are extreme cross-sectional dimensions.

For any cutting to length.

261	Coping: butt jointed: splayed or saddle back section: twice throated	37.77	41.45	48.63	52.26	56.22

£

262	ADD for joggle mortar joints: any size coping	1.33

Each

Extra for

263	angle	16.38

264	fair end	4.21

265	returned end	21.48

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EXTRA OVER WALLS FOR OPENING PERIMETERS

TILE SILLS

Specification

Concrete plain tiles: to BS EN 490 and 491:

- a. size: 267 x 165 mm;
- b. from an approved manufacturer.

Clay plain machine made roofing tiles: to BS EN 538, 539-1, 539-2, 1024 and 1304 and of a frost resistant quality:

- a. size: 265 x 165 mm;
- b. from an approved manufacturer.

Rates for the following include

Generally:

For concrete or clay tiles.

For ends and angles.

For pointing.

For work in any mortar.

Item		Metre	£
14			
	Sill: projecting 35 mm from face of wall: set weathering		
	single course		
266	265 or 267 mm wide		15.15
267	not exceeding 265 or 267 mm wide: cutting		17.94
	double course: breaking joint		
268	265 or 267 mm wide		24.12
269	not exceeding 265 or 267 mm wide: cutting		29.69

PRECAST CONCRETE - SILLS

Specification

Precast concrete sills: to BS 5642-1, Section 2 with plastics inserts for fixing windows.

Notes

Cross-section sizes stated in Item descriptions:
Are extreme cross-sectional dimensions.

Rates for the following include

Generally:

For bedding, jointing and pointing in any mortar.

For fixing to curve where this does not involve curved units.

For any cutting to length.

		1	2	3	4	5
		Size of cross-section				
		145 x 105 mm	165 x 105 mm	190 x 105 mm	225 x 105 mm	300 x 105 mm
	Metre	£	£	£	£	£
	Sill: twice throated: sunk weathered					
270	rebated	19.61	22.30	-	-	-
271	grooved	-	22.29	26.17	27.98	33.88
	Each					
272	Extra for stooled end	1.62	1.83	2.12	2.51	3.35

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FORMING CAVITY

FORMING AND SEALING CAVITIES

Specification	For keeping cavity clear of mortar droppings.
<i>Cavity wall ties:</i> stainless steel to BS 1243, vertical twist type to Figure 3 and Table 3, 200 mm long.	<i>Forming cavity with wall ties:</i> For spacing ties at 900 mm horizontal and 450 mm vertical intervals.
Rates for the following include	For additional ties at the sides of all openings.
<i>Forming cavity:</i> For forming weep holes at base of cavity.	<i>Building in ends of wall ties:</i> For straightening as necessary.

Item			
14		<i>Square Metre</i>	£
	Forming cavity in hollow wall: not exceeding 75 mm wide		
273	without wall ties		2.39
274	with wall ties: building in ends		5.39
	Forming cavity between wall and other work: not exceeding 75 mm wide		
275	without wall ties		2.37
276	building in ends of wall ties cast into concrete		3.20
277	with wall ties: building in ends one side: cutting and pinning ends one side: to existing brickwork or blockwork		13.65
		<i>Metre</i>	
278	Bridging cavity: not exceeding 75 mm wide: one course of slates: butt jointing: bedding in cement or cement-lime mortar: horizontal		9.07
279	Sealing cavity: slates 112.5 mm wide: double course: breaking joint: bedding in cement mortar: vertical - per 25 mm width of cavity		17.20
280	Curved work: price at the foregoing Rates multiplied by 1.20.		

CAVITY INSULATION

Specification	Rates for the following include
Cavity insulation:	<i>Generally:</i>
a. mineral fibre batt insulants to BS EN 13162 fully filling cavity: plastic disc restrainers:	For square cutting.
b. expanded polystyrene to BS EN 13163 fixed with adhesive: butt joints.	For cutting and fitting around wall ties.

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CAVITY INSULATION - *continued*

Item		1	2	3	4	5
		Thickness				
		50 mm	65 mm	75 mm	85 mm	100 mm
14	<i>Square Metre</i>	£	£	£	£	£
281	Cavity insulation: mineral fibre: vertical	5.65	7.15	8.91	9.98	10.44
	<i>Metre</i>					
282	Raking cutting	1.29	1.59	2.01	2.29	2.35
		1	2	3	4	5
		Thickness				
		25 mm	40 mm	50 mm	60 mm	75 mm
	<i>Square Metre</i>	£	£	£	£	£
283	Cavity insulation: expanded polystyrene board: vertical	4.96	7.27	8.30	9.28	10.26
	<i>Metre</i>					
284	Raking cutting	0.67	1.14	1.29	1.43	1.56

DAMP PROOF COURSES

Specification

Bitumen damp proof course: to BS 6398.

Polyethylene damp proof course: to BS 6515.

Pitch polymer damp proof course: from an approved manufacturer.

Lead damp proof course: to BS 743 Code 4, bitumen coated both sides.

Slate damp proof course: to BS 743.

Preformed cavity trays: Agrément certified from an approved manufacturer. Polypropylene for use with steel, precast or in situ lintels complete with stop ends. Single maximum length 2.40 m but make up lengths available for additional lengths.

Method of measurement

Generally:

Measure the area covered with no allowance for laps. Make no deduction for voids not exceeding 0.50 m².

Rates for the following include

Generally:

For bedding in cement mortar.

For pointing exposed edges.

Sheet damp proof course:

For laying in single layer.

For laying with 150 mm laps in length and full lap at angles.

For dressing projecting edges up or down as ordered.

Slate damp proof course:

For laying in two courses breaking joint.

Curved work:

For all necessary cutting.

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DAMP PROOF COURSES - *continued*

Sheet damp proof courses

Item	Square Metre	1	2	3	4	5	6	7	8
		Horizontal or stepped							ADD
		Bitumen: type				Poly-ethylene	Pitch polymer	Lead	where vertical
		A	B	D	E				
14		£	£	£	£	£	£	£	£
	On surface								
285	not exceeding 225 mm wide	24.21	21.99	34.52	33.67	16.04	18.57	85.10	6.91
286	exceeding 225 mm wide	23.47	21.25	33.79	32.94	15.43	17.96	82.66	6.59
	Cavity tray								
287	exceeding 225 mm girth	24.85	22.63	35.17	34.32	15.99	20.95	86.84	-

Slate damp proof courses

	Square Metre	1	2
		Horizontal or stepped	ADD where vertical
		£	£
	On surface		
288	not exceeding 225 mm wide	74.36	12.21
289	exceeding 225 mm wide	72.92	11.62

Sheet or slate damp proof course

290 Where curved on plan: price at the foregoing Rates multiplied by 1.20.

Preformed cavity trays

	Metre	£
	Cavity tray	
291	not exceeding 300 mm girth	10.86
292	300 to 400 mm girth	15.97
293	400 to 600 mm girth	24.09

14: MASONRY**JOINT REINFORCEMENT****Specification**

Meshwork joint reinforcement: to BS EN 845-3.

Width: approximately 40-50 mm less in width than wall or leaf.

Placement: lay on an even bed of mortar in a continuous strip with full laps at angles. Keep back 20 mm from face of external work, 12 mm back from face of internal work and finish joint to normal thickness.

Method of measurement

Generally:

Measure the length covered with no allowance for laps.

Rates for the following include

Generally:

For 225 mm laps.

For folding at corners.

Item		<i>Metre</i>	£
14	In wall		
294	100 mm wide		3.14
295	112.5 mm wide		4.06
296	225 mm wide		4.43

FILLETS**Rates for the following include**

Generally:

For angles and ends.

		1	2
		Hacking	Cement
		off	mortar
	<i>Metre</i>	£	£
	Weather or angle fillet: straight or curved: trowelling smooth: width on face		
297	not exceeding 50 mm	1.04	3.05
298	50 to 75 mm	1.25	3.90
299	75 to 100 mm	1.56	4.66
300	100 to 150 mm	1.78	5.59
301	150 to 200 mm	2.08	6.98
302	200 to 250 mm	2.50	8.33

14: MASONRY

JOINTS

Specification	Rates for the following include
<i>Joint filler:</i> waterproof, compressible, non-extruding pre-moulded with high recovery factor.	<i>Generally:</i> For work in any type of brickwork or blockwork.
<i>Back-up material:</i> preformed cellular strip material.	For 12 mm joint filler.
<i>Primer:</i> as recommended by sealant manufacturer.	For primer.
<i>Joint design:</i> to BS 6093.	For sealant.
<i>Sealant selection:</i> to BS 6213.	
<i>Sealant:</i> to BS EN ISO 11600 Type F.	

Item		Metre	£
14	In brickwork: vertical		
303	half-brick wide		5.90
304	one-brick wide		9.58
	In blockwork: vertical		
305	100 mm wide		5.90
306	150 mm wide		9.02
307	215 mm wide		9.58
	ADD where sealing		
308	one edge		5.14
309	both edges		9.17

14: MASONRY

WEDGING AND PINNING

Rates for the following include

Generally:

For everything including bricks or blocks.

For work in any mortar.

Item		1	2	3	4	5
		Thickness Half-brick	One-brick	One-and-a half brick	Not exceeding 300 mm hollow	ADD where making good existing facework -per side
14	Metre	£	£	£	£	£
Common brickwork						
310	wedging and pinning with slates in mortar	13.08	18.85	39.28	26.39	1.36
311	wedging and pinning: with new brickwork: between new concrete lintel or the like and underside of existing constructions	11.99	22.17	35.95	24.38	3.23
Engineering brickwork						
312	wedging and pinning: with new brickwork: between new concrete lintel or the like and underside of existing construction	14.59	27.04	43.75	29.62	3.23

1	2	3	4	5	6	7
Thickness of blocks						ADD where
not exceeding 100 mm	100 to 125 mm	125 to 150 mm	150 to 200 mm	200 to 250 mm	exceeding 250 mm	making good existing facework -per side
£	£	£	£	£	£	£

Concrete blockwork: any type						
313	wedging and pinning: with new blockwork: between new concrete lintel or the like and underside of existing construction	8.81	12.20	15.43	20.14	24.20
					30.18	3.00

14: MASONRY

CREASING

Specification

Concrete plain tiles: to BS EN 490 and 491 from an approved manufacturer.

Clay plain tiles: to BS EN 538, 539-1, 539-2, 1024 and 1304, from an approved manufacturer.

Rates for the following include

Generally:
For nibless concrete or clay tiles.

For ends and angles.

For pointing.

For work in any mortar.

Item		Metre	1	2	3
			Thickness of wall under		
			Half-brick	One-brick	One-and-a-half-brick
			£	£	£
14	Creasing to wall: projecting 35 mm from face of wall both sides: weather fillet in mortar both sides				
314	single course		11.21	14.00	21.38
	ADD where curved on plan				
315	not exceeding 2 m radius		0.86	1.17	1.50
316	exceeding 2 m radius		0.45	0.60	0.76
317	double course: breaking joint		18.16	21.63	32.04
	ADD where curved on plan				
318	not exceeding 2 m radius		1.27	1.09	1.96
319	exceeding 2 m radius		0.63	0.77	1.01

14: MASONRY

PROPRIETARY AND INDIVIDUAL SPOT ITEMS

ALUMINIUM-BRONZE DOWELS AND CRAMPS

Notes

Mortices and sinkings and running with mortar or lead:
Measure separately.

Item		Each	£
14	Dowel		
320	20 x 20 x 100 mm long		6.67
321	20 x 20 x 150 mm long		9.19
	Cramp		
322	6 x 25 x 150 mm girth		6.15
323	6 x 25 x 300 mm girth		10.49
324	13 x 25 x 150 mm girth		8.40
325	13 x 25 x 300 mm girth		14.06

AIR BRICKS

Specification

External airbricks: terracotta to BS 493 Class 1.

Internal ventilating gratings: galvanised cast iron to BS 493 Class 2.

Rates for the following include

Generally:
For building into new or existing work.

For pointing around in mortar.

Notes

Openings for airbricks and ventilating gratings:
Measure separately.

		1	2	3
		Co-ordinating size		
		225 x 75 mm	225 x 150 mm	225 x 225 mm
	Each	£	£	£
326	Airbrick: square hole or louvre pattern	5.21	7.49	14.36
	Ventilating grating			
327	square hole pattern: lightweight	5.21	7.49	14.36
328	louvre pattern	10.15	12.55	19.60
				£
329	Cutting out airbrick or ventilating grating: any type: not exceeding 450 x 450 mm: in brickwork or blockwork: making good to receive similar size			8.37
330	Cutting out mesh behind grating			1.39

14: MASONRY

CHIMNEY TERMINALS

Specification

Clay flue terminals: to BS EN 1457-1 and 1457-2.

Notes

Sizes stated:
Are nominal internal dimensions.

Removing chimney terminal or the like:
Do not measure when stack is re-topped.

Rates for the following include

For notice plates to comply with Building Regulations.

Item
14

Each

Chimney terminal: setting and flaunching in cement mortar: trowelling smooth

		1	2	3	4	5
		Nominal height				
		300 mm	450 mm	600 mm	750 mm	900 mm
		£	£	£	£	£
331	185 x 185 mm square at base and 150 mm diameter at top	83.90	88.61	126.05	139.25	247.27
332	185 mm diameter at base and 150 mm diameter at top	55.46	66.41	98.44	125.24	126.91
333	150 mm diameter	55.30	66.25	105.03	125.07	160.44

						£
334	Removing chimney terminal or sheet steel or similar cowl: breaking up flaunching as necessary: preparing for re-setting old or new					15.10
335	Fixing only chimney terminal or sheet steel or similar cowl previously set aside for re-use: setting and flaunching in cement mortar: trowelling smooth					28.81
336	DEDUCT where in association with re-topping stack					16.19

PRECAST CONCRETE

Specification

Prestressed concrete lintels: to BS EN 845-2.

Notes

Cross-section sizes stated in Item descriptions:
Are extreme cross-sectional dimensions.

Rates for the following include

Generally:
For bedding, jointing and pointing in any mortar.

For fixing to curve where this does not involve curved units.

For any cutting to length.

14: MASONRY

PRECAST CONCRETE - *continued*

Item		1 Keyed finish exposed faces	2 Fine finish exposed faces
		£	£
14	<i>Each</i>		
	Prestressed reinforced concrete lintel: 600 mm long		
337	100 x 65 mm	13.46	10.96
338	ADD or DEDUCT for each 150 mm variation in length up to a maximum length of 2 500 mm	1.59	1.33
339	150 x 65 mm	15.07	12.57
340	ADD or DEDUCT for each 150 mm variation in length up to a maximum length of 2 500 mm	1.94	1.69
341	190 x 65 mm	16.20	13.62
342	ADD or DEDUCT for each 150 mm variation in length up to a maximum length of 2 500 mm	2.24	1.83
343	220 x 65 mm	20.25	17.76
344	ADD or DEDUCT for each 150 mm variation in length up to a maximum length of 2 500 mm	3.14	2.89
345	265 x 65 mm	22.02	19.53
346	ADD or DEDUCT for each 150 mm variation in length up to a maximum length of 2 500 mm	3.54	3.29

GALVANISED PRESSED STEEL

Specification

Rates for the following include

Galvanised pressed steel lintels: to BS EN 845-2.

Generally:
For building in.

For bedding and pointing in any mortar.

Each

£

Galvanised pressed steel lintel

1 000 mm long:

for internal partition

347	75 mm wide	19.71
348	ADD or DEDUCT for each 100 mm variation in length up to a maximum length of 1 200 mm	1.69
349	100 mm wide	24.71
350	ADD or DEDUCT for each 100 mm variation in length up to a maximum length of 2 500 mm	2.07
351	150 mm wide	34.11
352	ADD or DEDUCT for each 100 mm variation in length up to a maximum length of 2 500 mm	2.96

14: MASONRY

GALVANISED PRESSED STEEL - *continued*

Item			
14		<i>Each</i>	£
	Galvanised pressed steel lintel		
	1 200 mm long:		
	for cavity wall		
353	not exceeding 275 mm wide		50.61
354	ADD or DEDUCT for each 100 mm variation in length up to a maximum length of 2 500 mm		3.83

SUNDRY METALWORK: GALVANISED STEEL

Specification		Rates for the following include	
<i>Galvanised steel:</i> to BS EN 10025-1 and 10025-5 galvanised to BS EN ISO 1461.		<i>Generally:</i> For any size or section shape.	
		1	2
		Supplying	Fixing only
		and fixing	
	<i>Kilogramme</i>	£	£
355	Bearer, arch bar or the like: building in	3.81	2.07
	<i>Each</i>		£
356	Coping cramp: bent: building in		1.67

NATURAL STONE RUBBLE WALLING AND DRESSINGS

GENERALLY

Specification

Stone for random rubble walling: irregular shaped stones supplied with at least one bonder for each square metre of finished wall.

Preparation of stone: roughly shape stones to suit walling.

Mortar materials and mix proportions: as specified in this Section (page 77).

Mortar types: use the following mortar types detailed in the Mortar Type Table in this Section (page 77) unless otherwise ordered:

Granite, quartzite or similar	Type 1
Dense sandstone and cast stone	Type 3
Limestone and porous sandstone	Type 4

Notes

Work generally:
Vertical unless otherwise stated.

Cutting etc new or old stonework in position:
Measure and pay for at the Rates in this Section (pages 121 - 123).

Method of measurement

Generally:
Measure mean dimensions. Make no deductions for:

- voids not exceeding 0.50 m²;
- flues, lined flues and flue blocks where voids and work displaced are together not exceeding 0.15 m².

Bonding to other work:

Measure where the other work is existing or consists of a differing material.

Rates for the following include*Generally:*

For everything except the cost of stone.

For any kind of stone of any profile.

For rough and fair square cutting.

For fair returns, ends, angles or the like on superficial items.

For ends, angles or the like on linear items.

For labour in eaves filling.

Mortar:

For the use of coloured mortar, or substituting for sand, crushed stone or stone dust of the same type as the stone used.

Laying only stone previously set aside for re-use:

For cleaning off beds and joints and stacking prior to use.

Pointing:

For finishing joints by striking off flush as the work proceeds.

Bonding to other work:

For extra material for bonding.

Bonding end of new wall to existing:

For extra material for bonding and for cutting pockets.

14: MASONRY

STONework: LAYING ONLY

Item		1	2
		Laying only new stonework	Laying only stonework previously set aside for re-use
14	Square Metre	£	£
357	Wall: random uncoursed: not exceeding 300 mm thick	63.84	71.10
358	ADD for each additional 50 mm of thickness	3.35	3.75
	ADD where		
	bonding to other work		
359	forming pockets	33.13	33.13
360	cutting pockets: in existing stonework	34.94	34.94
361	bringing to courses at average 750 mm vertical intervals - <i>per side</i>	7.38	7.38
362	pointing - <i>per side</i>	7.30	7.30
	Metre		
363	Coping: not exceeding 300 x 300 mm: horizontal: pointing exposed faces: levelling rubble walling	51.82	57.70
	ADD for		
364	each additional 50 mm of width	6.91	7.74
365	each additional 50 mm of height	5.72	6.42
366	Bonding end of new wall to existing: not exceeding 300 mm thick	11.39	11.39
367	ADD for each additional 50 mm of thickness	1.96	1.96
368	Rough raking or circular cutting: not exceeding 300 mm thick	25.12	25.12
369	ADD for each additional 50 mm of thickness	4.19	4.19
370	Fair raking or circular cutting: not exceeding 300 mm thick	60.28	60.28
371	ADD for each additional 50 mm of thickness	10.05	10.05

NATURAL STONE ASHLAR WALLING AND DRESSINGS

GENERALLY

Specification

Stone for ashlar walling and dressings: supplied cut to size and dressed.

Mortar materials and mix proportions: as specified in this Section (page 77).

Mortar types: as specified in this Section (page 77).

Natural bed: lay stones so that natural bed is:

- horizontal in plain walling;
- vertical and at right angles to wall face in cornices and other projecting stones, horizontal in quoin stones or end stones which are to be specially selected compact, non-laminated stones;
- parallel to the radial centre line of each stone, and at right angles to the wall face, in arches.

Accuracy: keep courses level and perpend vertical and in line. Plumb joint and wall faces as work proceeds.

Definition of terms

Wall: includes skins of hollow walls.

Column: walls whose length on plan is not exceeding four times their thickness, except where caused by openings.

Attached column: includes attached piers and pilasters.

Band course: includes mouldings, enrichments, cornices or the like.

Notes

Work generally:
Vertical unless otherwise stated.

Band courses, copings or the like:
Horizontal unless otherwise stated.

Method of measurement

Generally:

Measure mean dimensions. Make no deductions for:

- voids not exceeding 0.50 m²;
- flues, lined flues and flue blocks where voids and work displaced are together not exceeding 0.10 m².

Bonding to other work:

Measure where the other work is existing or consists of a differing material.

Plain band exceeding 300 mm wide:

Measure as wall.

Quoin and jamb:

Measure on the vertical angle.

Arch:

Measure the mean girth or length on face.

Rates for the following include

Generally:

For finishing joints slightly proud as the work proceeds and subsequently cleaning off flush in a continuous operation.

For cleaning on completion.

For fair returns, ends, angles or the like on superficial items.

For ends, angles or the like on linear items unless otherwise stated.

For templates and patterns.

Mortar:

For the use of coloured mortar, or substituting for sand, crushed stone or stone dust of the same type as the stone used.

Cement mortar:

For any of the mortars in Type 1 of the Mortar Type Table in this Section (page 77).

Cement-lime mortar:

For any of the mortars in Types 2, 3 or 4 of the Mortar Type Table in this Section (page 77).

14: MASONRY

STONework: LAYING ONLY

Rates for the following include

Generally:

For everything *except* the cost of stone.

For plain or moulded stonework whether in masonry walls or in dressings to brickwork.

Laying only stonework previously set aside for re-use:

For removing old cramps and dowels, cleaning off beds and joints, sorting and marking for position and stacking prior to re-use.

Curved work:

For extra material.

Bonding to other work:

For extra material for bonding.

Bonding end of new wall to existing:

For extra material for bonding and for cutting pockets.

Item
14

Square Metre

1	2
Laying only new stonework	Laying only stonework previously set aside for re-use
£	£

Wall

372	not exceeding 100 mm thick	44.60	49.59
373	ADD for each additional 50 mm of thickness	17.41	19.91
374	not exceeding 100 mm thick: bonding to other work	57.37	62.36
375	ADD for each additional 50 mm of thickness	23.00	25.50
376	ADD where curved on plan: any radius - per 50 mm of thickness	3.88	3.88
377	Chimney stack: not exceeding 100 mm thick	51.88	56.87
378	ADD for each additional 50 mm of thickness	20.23	22.72

Metre - per 10 000 mm² of sectional area

379	Isolated column	5.84	6.34
380	Attached column	5.84	6.34
381	Lintel, sill, mullion or transom	8.03	8.52
382	Quoin or jamb stone: attached or isolated	5.84	6.34
383	Band course or the like	6.87	7.36
Coping			
384	horizontal	4.58	5.07
385	raking	5.46	5.96

14: MASONRY

STONEMWORK: LAYING ONLY - *continued*

Item		1	2
		Laying only new stonework	Laying only stonework previously set aside for re-use
14	<i>Metre - per 10 000 mm² of sectional area</i>	£	£
386	Capping	6.87	7.36
387	Step	6.87	7.36
388	Flat arch	8.03	8.52
389	Segmental or semi-circular arch	11.21	11.71
	<i>Metre</i>		
390	ADD to Items 14.379 to 14.389 where curved on plan: any radius: any sectional area	6.74	6.74
	<i>Each - per 0.025 m³</i>		
391	Winder	17.07	18.32
392	Landing	17.07	18.32
393	Pier cap	19.71	20.71
394	Chimney cap	19.71	20.71
	<i>Each</i>		
	Extra for single stone		
395	exceeding 0.50 m ³ but not exceeding 1.50 m long - <i>per 0.25 m³ of total volume</i>	23.90	23.90
396	1.50 to 2.00 m long - <i>per 10 000 mm² of sectional area</i>	1.67	1.67
397	2.00 to 2.50 m long - <i>per 10 000 mm² of sectional area</i>	2.10	2.10

		1	2	3
		Existing stonework		
	<i>Metre</i>	Bath	Portland	Granite
		£	£	£
398	Bonding end of new wall to existing - <i>per 25 mm of wall thickness</i>	1.28	1.87	5.30
399	ADD where making good rubbed or tooled face of existing wall - <i>per side</i>	2.09	4.19	12.56
400	Quoining up jamb of opening: bonding to other work - <i>per 25 mm of wall thickness</i>	1.39	2.02	5.82
401	ADD where making good rubbed or tooled face of existing wall - <i>per side</i>	2.09	4.19	12.56

14: MASONRY

STONework: YORK STONE

Specification

York stone: hard paving quality free from visible laminations and other defects.

Rates for the following include

Cover stones:

For sawn beds, coped edges.

For bedding and jointing in cement mortar on steelwork.

For additional mortar to cover rivet heads where required.

Template:

For sawn beds, three coped edges, one tooled edge.

For bedding and jointing in cement mortar.

For chamfer along the inner edge of the bearing face where required.

Hinge stone:

For sawn beds, three coped edges, one tooled edge.

For mortice for hinge fangs.

For building in.

1	2	3	4	5	6	7
Supplying and laying new stones			Laying only old stones previously set aside for re-use			Taking out
Thickness						Any thickness
75 mm	100 mm	150 mm	75 mm	100 mm	150 mm	
£	£	£	£	£	£	£

Item
14

Metre

Cover stone: rectangular section

402 225 mm wide 47.48 62.99 99.34 10.86 13.54 18.84 3.66

403 300 mm wide 62.17 85.96 133.24 13.87 19.03 24.47 4.57

Each

404 Extra for fair end: any width 2.09 2.79 4.19 - - - -

Template: rectangular section

405 225 x 225 mm 10.27 13.70 22.20 1.99 2.56 4.08 1.53

406 225 x 337.5 mm 15.64 20.90 33.19 3.24 4.23 6.06 2.31

407 300 x 450 mm 27.30 37.48 58.12 5.57 7.46 9.48 3.75

408 300 x 675 mm 39.58 54.81 90.86 6.98 9.79 17.89 5.64

409 Hinge stone: rectangular section: 225 x 225 mm - - 22.43 - - 4.19 1.53

14: MASONRY

REMOVING AND RE-SETTING HEARTH AND COVER STONES

Rates for the following include

Taking out:

For cleaning off beds and joints.

Re-setting:

For bedding and jointing in cement-lime mortar.

Item		Each	1	2	3	4
			Taking out		Re-setting	
			Thickness			
			not exceeding 75 mm	75 to 100 mm	not exceeding 75 mm	75 to 100 mm
			£	£	£	£
	Hearth or cover stone					
410	not exceeding 0.50 m ²	6.24	9.36	17.68	26.05	
411	0.50 to 1.00 m ²	10.91	14.04	34.66	49.92	
412	1.00 to 1.50 m ²	15.59	18.72	51.62	74.72	

CUTTING STONE PREVIOUSLY SET ASIDE FOR RE-USE IN PREPARATION FOR RE-FIXING

		Square Metre	1	2	3	4
			Bath	Portland	York	Granite
			£	£	£	£
413	Rough cutting to reduce thickness on bed or the like - <i>per 25 mm of depth</i>		41.86	83.72	146.51	239.55
		<i>Metre - per 25 mm of girth</i>				
	Rough cutting to form					
414	rebate		1.99	3.99	6.69	11.72
415	chase or groove		2.38	4.78	8.14	14.06
		<i>Metre - per 25 mm of thickness</i>				
	Fair cutting					
416	straight		2.09	4.19	7.12	12.56
417	raking		2.29	4.60	7.75	13.81
418	curved		2.51	5.03	8.57	15.07

14: MASONRY**CUTTING ETC NEW OR OLD STONework IN POSITION****Rates for the following include***Pointing, grouting or making good:*

For cement and stone dust mortar.

Item		1	2	3	4
		Bath	Portland	York	Granite
14	<i>Square Metre</i>	£	£	£	£
419	Rough cutting - <i>per 25 mm of depth</i>	46.05	92.09	159.07	275.07
	<i>Metre</i>				
420	Groove: for turn-in of flashing or nib of asphalt: pointing	10.53	15.56	20.63	33.19
421	Throat	5.52	10.05	13.40	22.26
422	Throat: curved to any radius	10.05	18.42	25.12	41.02
	<i>Each</i>				
423	Mitre or stop	1.68	3.35	5.69	10.05
	<i>Each - per 25 mm of depth</i>				
	Mortice: grouting with mortar				
424	not exceeding 2 500 mm ²	2.31	4.40	7.34	12.78
425	2 500 to 5 000 mm ²	4.31	8.22	13.73	23.93
426	5 000 to 7 500 mm ²	5.78	11.03	18.37	31.96
427	7 500 to 10 000 mm ²	7.05	13.33	22.91	40.02
	Mortice: caulking with lead				
428	not exceeding 2 500 mm ²	10.90	13.00	15.93	21.37
429	2 500 to 5 000 mm ²	15.46	19.37	25.13	35.91
430	5 000 to 7 500 mm ²	17.78	22.70	30.56	43.63
431	7 500 to 10 000 mm ²	25.31	31.33	41.14	55.05
	<i>Each</i>				
	Sinking for cramp: not exceeding 225 mm long: mortice each end				
432	grouting with mortar	4.42	8.60	14.04	25.35
433	caulking with lead	10.61	14.80	19.83	29.87
	<i>Kilogramme</i>				£
434	Lead: running into mortice, sinking, groove or the like				16.48

14: MASONRY

CUTTING ETC NEW OR OLD STONEMWORK IN POSITION - *continued*

Item		1	2	3	4
		Bath	Portland	York	Granite
14	<i>Each - per 25 mm of depth</i>	£	£	£	£
	Opening for airbrick, ventilating grating or the like: plain dressed				
435	not exceeding 0.10 m ²	4.76	9.11	15.02	26.85
436	0.10 to 0.20 m ²	10.52	19.21	32.04	57.43
437	0.20 to 0.30 m ²	16.30	29.29	49.07	88.02
	<i>Each</i>				
	ADD where opening rebated: any thickness of wall				
438	not exceeding 0.10 m ²	22.07	43.99	74.75	131.86
439	0.10 to 0.20 m ²	47.29	94.14	156.71	282.57
440	0.20 to 0.30 m ²	72.50	144.24	238.67	433.26

SURFACE TREATMENTS

Specification

Bitumen solution:
to BS 3416 Type 1 of brushing consistency.

	<i>Square Metre</i>	£
441	Slurry of lime putty and stone dust: in protective coating: to stonework: cleaning off and rubbing down at completion	10.30
442	Bitumen solution: in two coats: to concrete, brickwork or cement rendering: where backing to stone	9.06

RESECURING AND REMOVING METALWORK

	<i>Each</i>	£
443	Resecuring loosened dowel, rag bolt, baluster or the like; re-cutting existing lead filled mortice: caulking with lead	15.20
444	Removing rag bolt: cutting away stonework or concrete: making good in cement mortar	5.83

14: MASONRY

CENTERING

Method of measurement

For strutting, shoring, bolting, wedging, easing, striking and removing.

Span:

Measure clear width on springing line.

For cutting.

For scribed and splayed edges.

Rates for the following include

Work generally:

For supports not exceeding 3.00 m high.

Item			1	2	3
			Span		
14	Each		1.00 m	2.00 m	3.00 m
			£	£	£
	Arch				
445	flat or slightly cambered: 150 mm surface width		19.32	25.25	32.72
446	ADD for each additional 50 mm of surface width		3.11	6.83	9.07
447	segmental: 150 mm surface width: rise not exceeding 20% of span		23.14	44.92	65.86
448	ADD for each additional 50 mm of surface width		3.94	4.59	5.81
449	segmental: 150 mm surface width: rise 20 to 40% of span		35.71	52.18	78.04
450	ADD for each additional 50 mm of surface width		3.91	5.81	6.88
451	semi-circular: 150 mm surface width		48.12	66.96	93.43
452	ADD for each additional 50 mm of surface width		4.53	6.66	7.41
			1	2	3
			not	1.00 m	2.00 m
			exceeding		
			0.50 m		
			£	£	£
453	Bullseye: soffit and invert: 150 mm surface width		25.10	45.59	60.32
454	ADD for each additional 50 mm of surface width		4.05	5.07	6.12
					£
455	Notching for key block, projecting voussoir or the like - <i>per 25 mm of girth</i>				0.84

ARTIFICIAL/CAST STONE WALLING AND DRESSINGS

GENERALLY

Notes

Laying only cast stonework:

Measure and pay for at the Rates for laying only natural stone rubble walling and dressings in this Section.

Centering:

Measure and pay for at the Rates in this page above.

15: Structural Metalwork

STRUCTURAL STEELWORK

GENERALLY

Specification

Method of manufacture: to BS EN 10025-1 and 2
Do not use steel produced by the Bessemer or rimming steel.

Surface defects and repair: ensure that the surface quality and any repairs are in accordance with BS EN 10025-1 and 2 or BS EN 10210-1 as appropriate.

Hot rolled sections except angles and hollow sections:

- grade of steel to BS EN 10025-1 and 2;
- sizes and tolerances on universal beams and column sections:
 - sizes: in accordance with BS 4-1;
 - tolerances: in accordance with BS EN 10055;
- sizes and tolerances of joist and channel sections to BS 4-1.

Hot rolled angles:

- grade of steel to BS EN 10025-1 and 2;
- sizes and section properties to BS EN 10056-1;
- tolerances on shape and dimensions: to BS EN 10056-2.

Hot rolled hollow sections:

- grade of steel to BS EN 10210-1;
- sizes, tolerances and section properties to BS EN 10210-2.

Fabricate in the workshop to BS 5950-2.

Holing:

- form holes to BS 5950-2;
- remove all burrs from holes;
- filling of incorrect holing is not permitted.
Members with incorrect holing will be rejected by PM;
- drill holes for bolts.

Welding: comply with BS EN 1011-2 and execute in the fabrication workshop unless otherwise ordered.

Erection: comply with BS 5950-2 unless otherwise ordered.

Safety: comply with the relevant regulations and recommendations on safety.

Stability: ensure stability at all stages of construction.

Notes

Welding, cutting, notching and drilling on site:
Pay for only where such work cannot of necessity be executed at the workshop and is specifically ordered.

Bolts:

Pay for at the rates in Section 50.

Measure of measurement

Generally:

Measure overall lengths of members. Make no deductions for splay cuts or mitred ends or for the mass of metal removed to form notches and holes each less than 0.10 m² in area, measured in the plane.

Make no allowance for the weight of weld fillets bolts, nuts, washers, rivets and protective

Mass of Steel:

For measurement purposes take the mass of steel as 785 kg/m² per 100 mm thickness (7.85 t/m³).

Fittings and bolts:

Measure separately.

15: STRUCTURAL METALWORK

GENERALLY - *continued*

Rates for the following include

Steel sections:

For any size, weight or length.

For plain or built-up members.

For all the welding, cutting, notching and drilling at the workshop.

For removing loose millscale and rust and cleaning unpainted steel to be encased in concrete.

For submission of two copies of manufacturer's test certificates to the PM.

STEEL: GRADE S275

Item		<i>Kilogramme</i>	<i>£</i>
15			
	Beam, bracing, purlin, cladding rail or the like		
001	angle section.		2.29
002	tee section		2.29
003	joist section		2.53
004	channel section		2.46
005	universal section		2.28
006	castellated universal section		2.60
007	rolled hollow section		2.91
008	Fittings (measure bolts separately)		4.96
	ADD to the foregoing Rates for		
009	steel grade S355		0.05

FIXING ONLY PROPRIETARY MEMBERS

	<i>Kilogramme</i>	<i>£</i>
010	Lattice joist or the like: any section: any size	1.50

15: STRUCTURAL METALWORK

REFIXING STEELWORK PREVIOUSLY SET ASIDE FOR RE-USE

Notes

New items:

Pay for new steel fittings and bolts and welding, cutting, notching and drilling old steelwork at the Rates for new work.

Rates for the following include

Refixing steelwork:

For loading and transporting within the site.

For sorting, cleaning off loose dirt or rust, cleaning and scraping down to bare metal at meeting faces of new connections.

Item		Kilogramme	£
15			
	Refixing old steelwork: any description		
011	without bolting fittings.		1.52
012	including bolting fittings		1.81

CUTTING AND DRILLING ON SITE

Rates for the following include

Generally:

For old or new steel.

For making good protective treatment.

		1	2	3
		Thickness of steel		
		not exceeding 10 mm	10 to 20 mm	20 to 30 mm
		£	£	£
	<i>Metre</i>			
013	Cutting: straight, raking or curved	43.84	87.66	131.50
	<i>Each</i>			
014	Notching or the like - per 25 mm of girth	2.43	4.76	7.19
	Hole			
015	not exceeding 15 mm diameter	2.93	3.89	4.88
016	15 to 30 mm diameter	3.42	4.88	6.34
017	Cutting and drilling on site where executed in position: at the foregoing Rates multiplied by 1.50.			

15: STRUCTURAL METALWORK

WELDING ON SITE

Rates for the following include

Generally:

For old or new steel.

Item			
15		<i>Metre</i>	£
	Fillet weld: 90°		
018	5 mm leg length		12.93
019	6 mm leg length		14.98
	Butt weld: single vee		
020	not exceeding 6 mm metal		19.39
021	6 to 13 mm metal		21.45
	Butt weld: double vee		
022	6 to 13 mm metal		25.85
		<i>Each</i>	
	Plug weld including drilling: total number of welds		
023	not exceeding 20		4.31
024	20 to 50		3.23
025	50 to 100		2.15
026	Welding end of thread of bolt to secure nut		3.44
027	Welding on site where executed in position: price at the foregoing Rates multiplied by 2.00.		

SURFACE TREATMENT AT THE WORKSHOP

Specification

Preparation: to BS EN ISO 12944-4. Remove fins, burrs, sharp edges and weld spatter and clean out crevices.

Surface finish: blast clean to BS EN ISO 8501-1, grade Sa 2½.

Priming:

a. priming paint: metallic zinc rich to BS 4652.

b. application: to BS EN ISO 12944-7.

Galvanising: to BS EN ISO 1461, coating thickness 85 microns.

		1	2
		One coat	ADD for each additional coat
	<i>Square Metre</i>	£	£
028	Preparing and priming	6.83	2.23
	<i>Kilogramme</i>		£
029	Preparing and galvanising weighted items generally		0.58

15: STRUCTURAL METALWORK

PROFILED METAL DECKING

GENERALLY

Specification

Fixing devices: type recommended by the sheet decking manufacturer.

Laying and fixing: lay and fix in accordance with the manufacturer's recommendations.

Prevention of damage: do not force decking, components or accessories into position or otherwise induce abnormal stresses.

Safety precautions: ensure safety of persons necessarily employed on the work. Deny access to others.

Rates for the following include

Generally:

For 150 mm end laps.

For single corrugation side laps.

For fixing to structural supports at any spacing appropriate to the sheets to be fixed.

For fixing side laps at 450 mm centres.

Height:

Up to 5.00m from finished floor level.

For drilling for fixings.

Cutting, hole or notching:
For any thickness.

15: STRUCTURAL METALWORK

STEEL SHEET DECKING

Specification

Steel sheet decking: manufactured from hot-dip zinc coated steel to BS EN 10326:

a. coating type to Table 2;

b. coating mass to Table 4;

c. coating finish to Table 2;

d. from an approved manufacturer.

	1	2	3	4	5	6	7	8
	Supplying and fixing				Fixing only			
	Profile depth							
	35 mm	48 mm	63 mm	100 mm	35 mm	48 mm	63 mm	100 mm
	£	£	£	£	£	£	£	£
	43.88	45.08	48.50	51.72	11.37	12.57	13.78	15.00
	48.51	49.76	53.52	56.63	11.95	13.17	14.36	15.57
	53.98	55.19	58.74	-	12.82	14.03	15.25	-
	22.08	22.08	22.39	22.89	16.48	16.48	16.48	16.48
	19.31	19.31	19.62	20.11	13.71	13.71	13.71	13.71
	16.54	16.54	16.85	17.34	10.94	10.94	10.94	10.94
	21.55	21.55	21.78	22.15	17.43	17.43	17.43	17.43
	31.19	31.19	31.53	32.09	25.01	25.01	25.01	25.01
	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73
	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30

15: STRUCTURAL METALWORK

STRUCTURAL ALUMINIUM WORK

PROFILED METAL DECKING

GENERALLY

Specification

Fixing devices: type recommended by the sheet decking manufacturer.

Laying and fixing: lay and fix in accordance with the manufacturer's recommendations.

Prevention of damage: do not force decking, components or accessories into position or otherwise induce abnormal stresses.

Safety precautions: ensure safety of persons necessarily employed on the work. Deny access to others.

Rates for the following include

Generally:
For 150 mm end laps.

Height:
Up to 5.00m from finished floor level.

For single corrugation side laps.

For fixing to structural supports at any spacing appropriate to the sheets to be fixed.

For fixing side laps at 450 mm centres.

For drilling for fixings.

Cutting, hole or notching:
For any thickness.

15: STRUCTURAL METALWORK

ALUMINIUM SHEET DECKING

Specification

Aluminium sheet decking: manufactured from aluminium to BS EN 485-1 to 4, alloy designation 3103 H18 and from an approved manufacturer.

	1	2	3	4	5	6	7	8
	Supplying and fixing				Fixing only			
	Profile depth							
	35 mm	48 mm	63 mm	100 mm	35 mm	48 mm	63 mm	100 mm
	£	£	£	£	£	£	£	£
15	52.74	53.81	57.97	62.20	11.63	12.70	13.90	15.00
040	58.56	59.64	64.32	69.39	13.08	14.16	15.38	16.46
042	18.57	18.57	19.04	19.58	12.39	12.39	12.39	12.39
043	16.64	16.64	17.11	17.65	10.45	10.45	10.45	10.45
044	14.72	14.72	15.19	15.73	8.53	8.53	8.53	8.53
045	17.95	17.95	18.30	18.69	13.40	13.40	13.40	13.40
046	26.19	26.19	26.70	27.30	19.37	19.37	19.37	19.37
047	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
048	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84

16: Carpentry

GENERALLY

Specification

Timber source:

- a. timber (including timber for wood based products): obtain from well managed forests/ plantations in accordance with:
 1. the laws governing forest management in producer country or countries;
 2. international agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- b. documentation: provide either:
 1. documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied; or
 2. evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

Timber generally:

- a. quality: timber to be free from all drying defects, evidence of insect or fungus attack, twist, warp and indication of shrinkage;
- b. reduction by planing to finished sizes:
 1. softwood: to BS EN 1313-1, Table NA.4;
 2. hardwood: to BS EN 1313-2 Table NA.1;
- c. moisture content:
 1. structural timber: not exceeding 19%;
 2. non-structural timber: within the range 16-19% at fabrication and erection stages.

Structural timber:

- a. timber: to BS 5268-2:
 1. use only heartwood, do not use sapwood;
 2. stress graded to BS 4978 where ordered;
 3. strength class: to BS EN 338;
- b. workmanship: comply with BS 8000-5.

Fixings:

- a. nails to BS 1202-1, of suitable size and type for use;
- b. screws to BS 1210 of suitable size and type for use.

Cutting treated timber: re-treat all surfaces of treated timber exposed by cutting, boring etc with matching preservatives applied in two coats by brush.

Definition of terms

Truss member: includes members of trussed, rafters, trussed beams, trussed purlins, trussed partitions or the like.

Rafters and associated roof timbers: includes rafters, hip and valley rafters, ridge boards, ceiling joists, binders and bracing.

Wall plate: structural members only and includes bearers.

Partition and wall member: includes struts and noggings.

Support: includes grounds, battens, drips, upstands, kerbs or the like.

Framed Support: members jointed together other than butt jointed.

Gutter board: includes sides.

Fascia board: includes barge boards.

Notes

Screwing, plugging and holes for bolts:
Pay for at the Rates in Sections 22 and 26.

Bolts:
Pay for at the Rates in Section 50.

16: CARPENTRY

GENERALLY - *continued*

Method of measurement

Timber sizes:

Measure the finished size.

Sectional areas:

Multiply the width by the depth without deduction.

Strutting:

Measure over joists.

Supports and framed supports:

Measure overall.

Gutter boards:

Measure gutter boards and sides overall as individual components.

Rates for the following include

Generally:

For nailing or bolting (measure bolts and holes separately).

For all labours unless otherwise stated.

For any assembly after preservative treatment, when ordered.

Wrought timber:

For all pencil rounded arrises.

Curved work:

For work of any radius.

For all cutting and work necessary to obtain curve.

Linear and enumerated items:

For all necessary raking cutting where average or maximum sizes are stated.

PRESERVATIVE TREATMENT

Specification

Pre-application requirements: apply treatment:

- a. only if moisture content of timber is less than 20%;
- b. after machining and before assembly.
Exceptionally, doors may be treated after assembly and machining.

Certification: provide the PM with a certificate to accompany each consignment of timber, components, etc to site stating that the required preservative treatment has been carried out.

Organic solvent preservatives: class F/N solution to BS 5707. Apply by double vacuum process to BS 5707. The treatment to be carried out by a licensed processor of an approved specialist firm.

Creosote preservative: to BS 144.

Item

16

Metre - Per 10 000 mm² of sectional area

£

ADD to the Rates for softwood where preservative treatment is ordered

001	organic solvent applied by double vacuum process	0.52
002	creosote	0.78

16: CARPENTRY

TIMBER FIRST FIXING

STRUCTURAL SAWN SOFTWOOD

Item		1	2
		Supplying and fixing	Fixing only
16	<i>Metre - Per 10 000 mm² of sectional area</i>	£	£
003	Truss member	9.76	6.05
004	Rafters and associated roof timber	9.66	6.03
005	Purlins	8.29	4.70
006	Wall plates	7.90	4.35
007	Roof and floor joists	8.29	4.70
008	Beams	9.66	6.03
009	Posts or columns	9.66	6.03
010	Partition and wall members	10.10	6.46
	ADD for stress grading to BS 4978: where ordered		
011	General Structural (GS) grade	0.31	-
012	Special Structural (SS) grade	0.63	-
	ADD where		
013	sectional area not exceeding 5 000 mm ²	0.87	0.63
014	required in lengths exceeding 6.00 m long	0.35	-
	curved not exceeding 1.00 m average radius		
015	sectional area not exceeding 5 000 mm ²	4.20	4.20
016	sectional area exceeding 5 000 mm ²	5.70	5.70
	curved exceeding 1.00 m average radius		
017	sectional area not exceeding 5 000 mm ²	3.30	3.30
018	sectional area exceeding 5 000 mm ²	4.05	4.05
	<i>Metre</i>		£
	Herringbone strutting		
019	50 x 50 mm between joists not exceeding 150 mm deep.		7.67
020	ADD for each additional 25 mm of depth		0.76
	Block strutting		
021	50 mm thick between joists not exceeding 150 mm deep		10.94
022	ADD for each additional 25 mm of depth		1.35

16: CARPENTRY

STRUCTURAL SAWN SOFTWOOD - *continued*

Item			1	2	3
			Sectional area		
			not exceeding 10 000 mm ²	10 000 to 20 000 mm ²	20 000 to 30 000 mm ²
			£	£	£
16	<i>Each</i>				
	Packing piece				
023	not exceeding 16 mm thick		0.93	1.08	1.23
024	16 to 25 mm thick.		1.06	1.23	1.44
025	25 to 38 mm thick		1.18	1.45	1.69

			1	2
			Sectional area	
			not exceeding 5 000 mm ²	5 000 to 10 000 mm ²
			£	£
	Cleat			
026	not exceeding 200 mm long		4.44	5.22
027	200 to 300 mm long		6.01	6.98

			1	2
			Extreme sectional area	
			not exceeding 5 000 mm ²	5 000 to 10 000 mm ²
			£	£
	Sprocket: shaped			
028	not exceeding 300 mm long		4.60	5.57
029	300 to 600 mm long		7.54	9.05

		<i>Metre</i>	£
	Wrought surface on sawn items		
030	plain - <i>per 25 mm of width</i>		0.38
031	irregular - <i>per 25 mm of girth</i>		0.59
032	Raking cutting - <i>per 25 mm of timber thickness</i>		3.60
033	Curved cutting - <i>per 25 mm of timber thickness</i>		5.41

16: CARPENTRY

STRUCTURAL SAWN SOFTWOOD - continued

Item			
16	<i>Each</i>		£
	Scarfed joint: cutting existing timber in position: (measure bolts, holes and wedges separately)		
034	not exceeding 5 000 mm ² sectional area		13.40
035	5 000 to 10 000 mm ² sectional area		16.74
036	10 000 to 20 000 mm ² sectional area		20.09
	SAWN SOFTWOOD		
		1	2
		Members	ADD or
		2 500 mm ²	DEDUCT
		sectional	for each
		area	1 000 mm ²
			variation in
			sectional
			area of
			members
<i>Square Metre</i>		£	£
	Butt jointed support: members not exceeding 450 mm centres each way		
037	exceeding 300 mm wide	20.76	1.36
<i>Metre</i>			
038	not exceeding 300 mm wide	10.72	0.94
<i>Square Metre</i>			
	Framed support: members not exceeding 450 mm centres each way		
039	exceeding 300 mm wide	32.43	1.47
<i>Metre</i>			
040	not exceeding 300 mm wide	16.32	1.02
<i>Metre - Per 1 000 mm² of sectional area</i>			£
	Individual support		
041	not exceeding 2 000 mm ² sectional area		1.51
042	2 000 to 4 000 mm ² sectional area		1.35
043	exceeding 4 000 mm ² sectional area		1.27
<i>Each</i>			
044	not exceeding 300 mm in length: any size		1.54

16: CARPENTRY

SAWN SOFTWOOD - continued

Item			1	2
			Width	
			38 mm	50 mm
16	<i>Metre</i>		£	£
045	Firring - per 25 mm of average depth		0.81	1.04
		<i>Metre - Per 1 000 mm² of sectional area</i>		£
046	Fillet: triangular.			1.13

SAWN HARDWOOD

Rates for the following include

Taking down:
For taking out fixings and supports *except* built-in supports.

		<i>Square Metre</i>	£
047	Snow grating: 63 x 50 mm bearers at 1 000 mm extreme centres: scaloped: 38 x 25 mm slats at 58 mm centres		71.68
	Snow grating: any description		
048	taking down		4.04
049	fixing only		33.64

16: CARPENTRY

WROUGHT SOFTWOOD

Item		1	2
		Members 2 500 mm ² sectional area	ADD or DEDUCT for each 1 000 mm ² variation in sectional area of members
16	<i>Square Metre</i>	£	£
	Butt jointed support: members not exceeding 450 mm centres each way		
050	exceeding 300 mm wide	24.04	2.66
	<i>Metre</i>		
051	not exceeding 300 mm wide	13.13	1.90
	<i>Square Metre</i>		
	Framed support: members not exceeding 450 mm centres each way		
052	exceeding 300 mm wide	38.57	2.98
	<i>Metre</i>		
053	not exceeding 300 mm wide	19.23	2.07
	<i>Metre - Per 1 000 mm² of sectional area</i>		£
	Individual support		
054	not exceeding 2 000 mm ² sectional area		2.45
055	2 000 to 4 000 mm ² sectional area		2.29
056	exceeding 4 000 mm ² sectional area		2.21
	<i>Each</i>		
057	not exceeding 300 mm in length: any size		1.92
	<i>Metre - Per 1 000 mm² of sectional area</i>		
058	Fillet: triangular.		1.67
059	Roll: any shape		2.36
BEDDING PLATES			
	<i>Metre</i>		£
060	Bedding plate: not exceeding 125 mm wide: in mortar: any mix.		3.22

16: CARPENTRY

WORK TO EXISTING TIMBER

Item		
16	<i>Metre</i>	£
061	Planing existing softwood in position by hand - <i>per 25 mm of girth</i>	0.54
062	Levelling up uneven joist, rafter or the like: sawn softwood firrings not exceeding 50 mm average deep	3.39
	<i>Each</i>	
	Taking down old timber roof truss: tightening wedges, bolts, cotters or the like: refixing	
063	not exceeding 8 m wide overall	257.89
064	8 to 12 m wide overall	464.19

FASCIAS, BARGEBOARDS, SOFFITS AND THE LIKE

WROUGHT SOFTWOOD

		1	2	3	4
		Thickness			
		16 mm	22 mm	29 mm	35 mm
	<i>Square Metre</i>	£	£	£	£
	Gutter board				
065	exceeding 600 mm maximum wide	49.81	56.55	64.57	71.88
	<i>Metre</i>				
066	not exceeding 600 mm maximum wide - <i>per 25 mm</i> <i>of average width</i>	1.68	1.91	2.16	2.39
	<i>Each</i>				
	Cesspool: dovetailed				
067	any size: with outlet cut and dished	24.75	27.49	31.31	35.50
	<i>Square Metre</i>				
	Fascia board				
068	exceeding 600 mm wide	36.09	42.58	50.43	57.60
	<i>Metre</i>				
069	not exceeding 600 mm wide - <i>per 25 mm of width</i>	1.17	1.39	1.63	1.86
	<i>Square Metre</i>				
	Eaves or verge soffit board				
070	exceeding 600 mm wide	36.09	42.58	50.43	57.60
	<i>Metre</i>				
071	not exceeding 600 mm wide - <i>per 25 mm of width</i>	1.17	1.39	1.63	1.86
	<i>Square Metre</i>				
072	ADD where boards tongued and grooved	3.91	4.47	5.36	6.10

16: CARPENTRY

WROUGHT SOFTWOOD - continued

Item		1	2	3	4
		Thickness			
		16 mm	22 mm	29 mm	35 mm
16	<i>Metre</i>	£	£	£	£
073	Raking cutting	4.80	5.77	6.53	7.41
074	Curved cutting	7.20	8.66	9.81	11.11
075	Scribing	4.66	4.66	4.66	4.66
076	Heading joint to existing	4.17	4.17	4.17	4.17
	<i>Each</i>				
077	Notching - per 25 mm of girth	0.29	0.29	0.29	0.29
	<i>Metre</i>				£
078	Each throat, groove, rebate, splay-rebate, rounding, chamfer, splay moulding or beading				0.55
079	ADD where crossgrain				0.58
	<i>Each</i>				
080	Stop on labour: plain, splayed or shaped				0.46

PLYWOOD

Specification

Plywood: veneer plywood to BS EN 636.

- a. bond quality to BS EN 314-2: Class 3;
- b. appearance class to BS EN 635-3: III both sides;
- c. face veneer species: coniferous.

		1	2	3	4
		Thickness			
		9 mm	12 mm	18 mm	24 mm
	<i>Square Metre</i>	£	£	£	£
	Gutter board				
081	exceeding 600 mm maximum	33.43	39.53	50.07	62.33
	<i>Metre</i>				
082	not exceeding 600 mm maximum wide - per 25 mm of average width	1.16	1.37	1.70	2.07
	<i>Square Metre</i>				
	Fascia board				
083	exceeding 600 mm wide	26.78	32.89	41.76	54.03
	<i>Metre</i>				
084	not exceeding 600 mm wide - per 25 mm of width	0.90	1.10	1.37	1.74

16: CARPENTRY

PLYWOOD - *continued*

Item		1	2	3	4
		Thickness			
		9 mm	12 mm	18 mm	24 mm
16	<i>Square Metre</i>	£	£	£	£
	Eaves or verge soffit board				
085	exceeding 600 mm wide	28.46	34.56	43.42	55.71
	<i>Metre</i>				
086	not exceeding 600 mm wide - <i>per 25 mm of width</i>	0.97	1.17	1.43	1.79
087	Raking cutting	5.04	5.66	6.54	8.18
088	Curved cutting	7.56	8.50	9.82	12.25
089	Scribing	3.70	3.70	3.70	3.70
090	Heading joint to existing	3.37	3.37	3.37	3.37
	<i>Each</i>				
091	Notching - <i>per 25 mm of girth</i>	0.23	0.23	0.23	0.23

MINERAL FIBRE REINFORCED BOARD

Specification

Mineral fibre board:

- sanded surface finish, from an approved manufacturer;
- surface spread of flame classification: Class 1 to BS 476-7.

		1	2	3
		Thickness		
		6 mm	9 mm	12 mm
	<i>Square Metre</i>	£	£	£
	Eaves or verge soffit board			
092	exceeding 600 mm wide	27.44	47.60	58.24
	<i>Metre</i>			
093	not exceeding 600 mm wide - <i>per 25 mm of width</i>	0.68	1.22	1.50
094	Raking cutting	4.38	6.04	6.89
095	Curved cutting	6.04	8.52	9.80
096	Scribing	2.98	2.98	2.98
	<i>Each</i>			
097	Notching - <i>per 25 mm of girth</i>	0.17	0.17	0.17

16: CARPENTRY

BOARDING, FLOORING, SHEETING, DECKING, CASINGS, LININGS, SARKING AND THE LIKE

GENERALLY

Specification

Fixings: nails to BS 1202.

Cutting treated timber: re-treat all surfaces of treated timber exposed by cutting, boring, etc, with matching preservative applied in two coats by brush.

Workmanship: comply with BS 8000-5.

Definition of terms

Wall: includes jambs and sills to openings and recesses in walls and attached columns.

Ceilings: includes soffits to openings and recesses in walls, all faces of recesses in ceilings and attached beams.

Sloping: sloping both exceeding 10° from the horizontal and exceeding 10° from the vertical.

Notes

Preservative treatment:
Pay for at the Rates in this Section (page 134).

Screwing, plugging and pelleting:
Pay for at the Rates in Section 22.

Isolated beam and isolated column: includes faces of attached beams and attached columns which have a different finish from the adjoining face.

Method of measurement

Generally:
Make no deduction for voids not exceeding 0.50 m².

Isolated beam and isolated column:
Measure girth on the external finished face.

Timber sizes:
Measure the finished size.

Rates for the following include

Generally:
For internal work unless otherwise stated.

For nailing to timber base.

Ceiling:
For horizontal or sloping.

Item
16

Clear finished timber

098 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this section multiplied by 1.05.

SAWN SOFTWOOD

Specification

Sawn softwood: free from all drying defects, evidence of insect or fungus attack, twist, warp and indication of shrinkage.

Jointing: plain square-edged butt joints.

Nailing: punch nails below face of board.

Rates for the following include

Generally:
For internal or external work.

16: CARPENTRY

SAWN SOFTWOOD - *continued*

Item		1	2	3	4	5
		Supplying and fixing				Fixing only
		Thickness				Any
		19 mm	25 mm	32 mm	38 mm	thickness
16	<i>Square Metre</i>	£	£	£	£	£
	Exceeding 600 mm wide					
099	wall	14.47	17.47	22.83	23.86	10.01
100	floor	14.04	17.04	22.41	23.28	9.59
101	ceiling	14.88	17.88	23.25	24.12	10.43
	roof					
102	flat	14.66	17.53	23.03	23.92	10.21
103	sloping	15.72	18.58	24.09	25.25	11.27
104	top or cheek of dormer	21.16	27.80	37.06	42.00	24.24
105	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	11.14	12.09	13.44	14.23	11.70
	Isolated beam or column: girth					
106	not exceeding 600 mm	33.72	40.35	49.62	54.56	36.80
107	600 to 1200 mm	23.45	30.08	39.35	44.21	26.53
108	exceeding 1200 mm	15.92	22.55	31.82	35.75	19.00
	ADD to ceiling or beam where ceiling level					
109	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97	1.97
110	5.00 to 6.50 m above floor	3.42	3.42	3.42	3.42	3.42
	ADD where					
111	laid diagonally	2.51	2.93	3.35	3.77	3.35
112	edges shot and close jointed	3.19	3.35	3.85	4.22	1.92
	ADD where in repairs					
113	not exceeding 1 m ²	27.97	27.97	27.97	27.97	27.97
114	1 to 5 m ²	14.24	14.24	14.24	14.24	14.24
	<i>Metre</i>					
115	Raking cutting	5.36	6.36	7.53	8.79	-
116	Curved cutting	8.20	9.63	11.22	12.89	-
117	Scribing	4.69	5.87	6.36	7.53	6.36
118	Jointing to existing	4.19	4.19	4.19	4.19	4.19
	<i>Each</i>					
119	Hole: for pipe or the like	3.01	3.01	3.01	3.01	3.01
120	Notching - <i>per 25 mm of girth</i>	0.33	0.33	0.33	0.33	0.33

16: CARPENTRY

WROUGHT SOFTWOOD

Specification

Flooring: to BS 1297.

Boards other than flooring: quality, moisture content and species to BS 1297.

Jointing: plain square-edged butt joints.

Nailing: punch nails below face of board. Except roofs, stop nail holes with stopper.

Rates for the following include

Generally:
For internal or external work.

Item		Square Metre	1	2	3	4	5
			Supplying and fixing				Fixing only
			Thickness				Any
			16 mm	19 mm	21 mm	28 mm	thickness
16			£	£	£	£	£
	Exceeding 600 mm wide						
121	wall		18.41	21.80	26.58	30.39	10.15
122	floor		-	-	24.36	27.05	7.94
123	ceiling		22.60	25.29	30.21	34.58	13.79
	roof						
124	flat		18.41	21.52	26.02	29.56	9.60
125	sloping		20.08	23.61	28.54	32.49	12.12
126	Top or cheek of dormer		29.29	33.25	38.58	42.95	20.49
127	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m² (not applicable to repairs)						
			12.42	13.46	14.67	15.77	12.43
	Isolated beam or column: girth						
128	not exceeding 600 mm		41.01	44.97	51.98	58.02	32.21
129	600 to 1200 mm		30.97	34.91	40.26	44.62	22.16
130	exceeding 1200 mm		22.60	26.54	31.89	36.25	13.79
	ADD to ceiling or beam where ceiling level						
131	3.50 to 5.00 m above floor		1.97	1.97	1.97	1.97	1.97
132	5.00 to 6.50 m above floor		3.42	3.42	3.42	3.42	3.42
	ADD where						
133	tongued and grooved		2.16	2.38	2.28	2.19	0.92
134	tongued and grooved and V-jointed or beaded one side		5.37	6.27	5.88	5.64	0.92
135	secret nailed		1.39	1.39	1.39	1.39	1.39
136	laid diagonally		4.19	4.19	4.19	4.19	4.19
137	surface finished for polishing		2.12	2.12	2.12	2.12	2.12
	ADD where in repairs						
138	not exceeding 1 m²		30.98	30.98	30.98	30.98	30.98
139	1 to 5 m²		15.90	15.90	15.90	15.90	15.90

16: CARPENTRY

WROUGHT SOFTWOOD - continued

Item		1	2	3	4	5
		Supplying and fixing				Fixing only
		Thickness				Any
		16 mm	19 mm	21 mm	28 mm	thickness
16	Metre	£	£	£	£	£
	Finished angle: tongued and mitred					
140	internal	5.58	5.58	5.58	5.58	5.58
141	external	5.58	5.58	5.58	5.58	5.58
142	Nosing or margin: 75 mm wide: tongued and grooved to edge of boarding	-	-	4.88	5.50	4.24
143	ADD where rounded	-	-	1.92	1.92	1.92
144	ADD for crossgrain groove	-	-	1.68	1.68	1.68
145	Raking cutting	5.28	6.53	8.04	9.04	-
146	Curved cutting	8.54	9.21	10.88	15.07	-
147	Scribing	4.69	4.69	4.69	4.69	4.69
148	Jointing to existing	4.19	4.19	4.19	4.19	4.19
	Each					
149	Hole: for pipe or the like	3.01	3.01	3.01	3.01	3.01
150	Notching - per 25 mm of girth	0.30	0.30	0.30	0.30	0.30
151	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - per metre of girth	5.64	5.80	5.97	6.14	-

16: CARPENTRY

WORK TO EXISTING FLOORING

Rates for the following include

Generally:

For punching nails and re-stopping.

For scraping to parts inaccessible to plane or sanding machine.

Item		
16	Square Metre	£
152	Planing surface of existing wrought softwood floor.	20.93
	Power sanding to a smooth and even surface	
153	existing wrought softwood floor	10.21
154	existing wrought hardwood floor	12.67
	Resecuring flooring not exceeding 38 mm thick	
155	softwood	8.71
156	hardwood	12.89

PLYWOOD

Specification

Plywood: to BS EN 636:

- a. bonding quality: to BS EN 314-2, Class 1;
- b. appearance class: III both sides; to BS EN 635.

Preservative treatment: organic solvent preservatives class F/N solution to BS 5707 and manufactured by a BSI Registered Firm. Apply by double vacuum process to BS 5707. This treatment to be undertaken by a licensed processor of an approved specialist firm.

Fixing plywood sheathing to flat roofs:

- a. lay only that area of sheets which can be covered with the permanent finish the same day;
- b. nail sheets at 300 mm centres along intermediate supports;
- c. protect completed sheathing from weather until laying of roof covering has commenced.

Rates for the following include

Generally:

For internal or external work.

16: CARPENTRY

PLYWOOD - *continued*

Item		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		6 mm	9 mm	12 mm	18 mm	24 mm	thickness
16	<i>Square Metre</i>	£	£	£	£	£	£
	Exceeding 600 mm wide						
157	wall	9.90	12.50	17.42	22.45	28.69	9.44
158	floor	8.50	11.04	15.85	20.77	26.92	7.67
159	ceiling	10.74	13.27	18.26	23.26	29.47	10.22
	roof						
160	flat	9.83	12.67	18.14	23.16	29.52	10.27
161	sloping	11.35	13.62	19.30	25.29	31.58	12.33
162	top or cheek of dormer	16.36	18.87	24.79	30.79	36.16	16.91
163	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	7.20	7.58	8.41	9.25	10.27	7.61
	Isolated beam or column: girth						
164	not exceeding 600 mm	17.78	22.43	31.18	37.66	43.82	20.18
165	600 to 1200 mm	14.88	19.39	26.35	33.42	41.78	15.81
166	exceeding 1200 mm	12.18	16.69	23.64	30.73	39.09	13.11
	ADD to ceiling or beam where ceiling level						
167	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97	1.97	1.97
168	5.00 to 6.00 m above floor	3.42	3.42	3.42	3.42	3.42	3.42
	ADD for						
169	grade I veneer - <i>per side</i>	6.53	7.84	5.98	7.15	8.41	-
170	grade II veneer - <i>per side</i>	5.69	5.93	3.84	5.69	-	-
171	WBP bond type	1.54	3.25	1.52	2.43	5.69	-
172	tongued and grooved joints	-	-	1.71	1.90	4.15	-
173	preservative treatment	1.12	1.52	2.52	5.47	7.05	-
174	durability rating H	1.12	1.52	2.52	5.47	7.05	-
175	Marine grade to BS 1088-1	2.42	1.97	0.51	1.39	3.24	-
	ADD where in repairs						
176	not exceeding 1 m ²	21.30	21.30	21.30	21.30	21.30	21.30
177	1 to 5 m ²	10.65	10.65	10.65	10.65	10.65	10.65
	<i>Metre</i>						
178	Raking cutting	3.50	3.90	3.97	6.73	8.18	-
179	Curved cutting	4.11	4.74	4.88	10.05	12.42	-

16: CARPENTRY

PLYWOOD - *continued*

Item							
		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		6 mm	9 mm	12 mm	18 mm	24 mm	thickness
		£	£	£	£	£	£
16	<i>Metre</i>						
180	Scribing	3.06	3.06	3.06	3.63	3.63	3.63
181	Chamfer	2.82	2.82	2.82	3.35	3.35	3.35
182	Jointing to existing	2.82	2.82	2.82	3.35	3.35	3.35
	<i>Each</i>						
183	Hole: for pipe or the like	3.90	3.90	3.90	3.90	3.90	3.90
184	Notching - <i>per 25 mm of girth</i>	0.17	0.17	0.17	0.30	0.30	0.30
185	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	6.38	6.54	6.81	6.97	7.15	-

BLOCKBOARD

Specification

Blockboard:

- a. bond type: MR;
- b. appearance grade: III both sides.

Preservative treatment: organic solvent preservatives class F/N solution to BS 5707 and manufactured by a BSI Registered Firm. Apply by double vacuum process to BS 5707

This treatment to be undertaken by a licensed processor of an approved specialist firm.

Rates for the following include

Generally:

For internal or external work

		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		12 mm	18 mm	25 mm	thickness
		£	£	£	£
	<i>Square Metre</i>				
	Exceeding 600 mm wide				
186	wall	22.15	24.16	33.94	10.99
187	floor	21.34	23.32	32.07	9.13
188	ceiling	22.99	24.43	34.49	11.55
	roof				
189	flat	22.76	25.13	35.72	12.78
190	sloping	24.10	26.07	36.03	13.09

16: CARPENTRY

BLOCKBOARD - *continued*

Item		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		12 mm	18 mm	25 mm	thickness
16	Square Metre	£	£	£	£
	Exceeding 600 mm wide				
191	top or cheek of dormer	29.34	35.14	45.01	22.07
192	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m² (not applicable to repairs)	13.60	14.43	16.23	13.17
	Isolated beam or column: girth				
193	not exceeding 600 mm	35.47	38.25	47.45	22.45
194	600 to 1200 mm	28.93	30.89	39.72	15.76
195	exceeding 1200 mm	24.96	26.88	35.35	12.41
	ADD to ceiling or beam where ceiling level				
196	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97
197	5.00 to 6.50 m above floor	3.42	3.42	3.42	3.42
	ADD for				
198	grade I veneer - <i>per side</i>	4.98	7.51	6.53	-
199	grade II veneer - <i>per side</i>	0.81	3.63	1.28	-
200	preservative treatment	1.77	2.66	3.54	-
	ADD where in repairs				
201	not exceeding 1 m²	21.30	21.30	21.30	21.30
202	1 to 5 m²	10.65	10.65	10.65	10.65
	<i>Metre</i>				
203	Raking cutting	4.05	6.72	8.20	-
204	Curved cutting	4.97	10.05	12.44	-
205	Scribing	3.63	3.63	3.63	3.63
206	Chamfer	3.35	3.35	3.35	3.35
207	Jointing to existing	3.35	3.35	3.35	3.35
	<i>Each</i>				
208	Hole: for pipe or the like	3.90	3.90	3.90	3.90
209	Notching - <i>per 25 mm of girth</i>	0.30	0.30	0.30	0.30
210	Extra over for access panel: screwing with brass screws cups (measure battens separately) - <i>per metre of girth</i>	6.81	6.97	7.15	-

16: CARPENTRY

LAMINBOARD

Specification

Laminboard:

- a. bond type: MR;
- b. appearance grade: III both sides.

Preservative treatment: organic solvent preservatives class F/N solution to BS 5707 and manufactured by a BSI Registered Firm. Apply by double vacuum process to BS 5707

This treatment to be undertaken by a licensed processor of an approved specialist firm.

Rates for the following include

Generally:

For internal or external work.

Item					
		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness	Any		
16	Square Metre	12 mm	18 mm	25 mm	thickness
		£	£	£	£
	Exceeding 600 mm wide				
211	wall	23.31	30.07	38.19	10.99
212	floor	22.51	29.23	36.33	9.13
213	ceiling	24.15	30.34	38.74	11.55
	roof				
214	flat	23.92	31.04	39.97	12.78
215	sloping	25.27	31.98	40.28	13.09
216	top or cheek of dormer	30.50	41.06	49.27	22.07
217	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	13.77	15.24	16.81	13.17
	Isolated beam or column: girth				
218	not exceeding 600 mm	36.73	44.69	52.08	22.45
219	600 to 1200 mm	30.15	37.06	44.17	15.76
220	exceeding 1200 mm	26.12	32.79	39.61	12.41
	ADD to ceiling or beam where ceiling level				
221	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97
222	5.00 to 6.50 m above floor	3.42	3.42	3.42	3.42
	ADD for				
223	grade II veneer - <i>per side</i>	3.17	5.81	7.49	-
224	preservative treatment	3.35	4.69	6.11	-
	ADD where in repairs				
225	not exceeding 1 m ²	21.30	21.30	21.30	21.30
226	1 to 5 m ²	10.65	10.65	10.65	10.65

16: CARPENTRY

LAMINBOARD - *continued*

Item			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			12 mm	18 mm	25 mm	thickness
16		<i>Metre</i>	£	£	£	£
227	Raking cutting		7.56	8.49	9.51	-
228	Curved cutting		11.35	12.70	14.28	-
229	Scribing		3.63	3.63	3.63	3.63
230	Chamfer		3.35	3.35	3.35	3.35
231	Jointing to existing		3.35	3.35	3.35	3.35
		<i>Each</i>				
232	Hole: for pipe or the like		3.90	3.90	3.90	3.90
233	Notching - <i>per 25 mm of girth</i>		0.30	0.30	0.30	0.30
234	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>		6.47	6.47	6.49	-

PARTICLEBOARD

Specification

Particleboard: to BS EN 312, General purpose Type P1 and Kitemark certified.

Fixing particleboard: nail sheets at 200 mm centres along edges and 400 mm centres along intermediate supports with nails driven in at an angle and heads punched below surface.

Sealed surface: surface pre-sealed with two coats of approved polyurethane sealer.

Rates for the following include

Generally:
For internal or external work.

			1	2	3	4	5	6
			Supplying and fixing					Fixing only
			Thickness					Any
			12 mm	15 mm	18 mm	22 mm	25 mm	thickness
		<i>Square Metre</i>	£	£	£	£	£	£
	Exceeding 600 mm wide							
235	wall		9.44	11.25	12.21	14.33	15.26	8.67
236	floor		8.97	10.17	11.55	13.63	17.17	7.48
237	ceiling		10.64	11.85	13.23	15.55	19.34	9.65
	roof							
238	flat		9.81	11.01	12.39	14.72	18.50	8.81
239	sloping		11.48	12.68	14.06	16.39	20.18	10.49

16: CARPENTRY

PARTICLEBOARD - *continued*

Item		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		12 mm	15 mm	18 mm	22 mm	25 mm	thickness
16	<i>Square Metre</i>	£	£	£	£	£	£
	Exceeding 600 mm wide						
240	top or cheek of dormer	16.50	17.71	19.08	21.41	25.21	15.51
241	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding (not applicable to repairs)	11.03	11.41	11.81	12.35	13.08	11.11
	Isolated beam or column: girth						
242	not exceeding 600 mm	16.50	18.47	20.72	23.89	28.69	17.61
243	600 to 1200 mm	14.00	15.12	16.54	18.86	22.83	11.74
244	exceeding 1200 mm	11.90	13.03	14.44	16.77	20.73	9.65
	ADD to ceiling or beam where ceiling level						
245	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97	1.97	1.97
246	5.00 to 6.50 m above floor	3.42	3.42	3.42	3.42	3.42	3.42
	ADD for						
247	interior fitments - dry conditions Type P2	1.75	1.86	2.25	4.50	2.12	-
248	interior fitments - humid conditions Type P3	-	-	2.55	4.98	-	-
249	load bearing - dry conditions Type P4	-	-	3.16	6.00	-	-
250	load bearing - humid conditions Type P5	-	-	6.50	11.21	-	-
251	tongued and grooved joints	-	-	0.28	0.37	0.49	-
252	sealed surface - <i>per side</i>	5.26	5.26	5.26	5.26	5.26	-
253	melamine face - <i>both sides</i>	1.84	2.16	3.23	4.30	6.31	-
	ADD where in repairs						
254	not exceeding 1 m ²	21.30	21.30	21.30	21.30	21.30	21.30
255	1 to 5 m ²	10.65	10.65	10.65	10.65	10.65	10.65
	<i>Metre</i>						
256	Raking cutting	3.67	3.71	3.85	3.99	4.14	-
257	Curved cutting	5.09	5.15	5.36	5.58	5.76	-
258	Scribing	3.35	3.35	3.35	3.35	3.35	3.35
259	Chamfer	3.06	3.06	3.06	3.06	3.06	3.06
260	Jointing to existing	3.06	3.06	3.06	3.06	3.06	3.06
	<i>Each</i>						
261	Hole: for pipe or the like	3.90	3.90	3.90	3.90	3.90	3.90
262	Notching - <i>per 25 mm of girth</i>	0.30	0.30	0.30	0.30	0.30	0.30
263	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	5.64	5.64	5.64	5.65	5.65	-

16: CARPENTRY

FIRE RESISTING NON-ASBESTOS BOARD: PREMIUM

Specification

Fire resisting board: non-asbestos, fire resisting board of limited combustibility.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

Fixing fire resisting board: nail sheets at 200 mm centres along edges and 400 mm centres along intermediate supports. Punch heads below surface.

Rates for the following include

Generally:

For internal or external work.

Item		Square Metre	1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			6 mm	9 mm	12 mm	thickness
			£	£	£	£
16	Exceeding 600 mm wide					
264	wall		24.92	44.09	53.22	11.36
265	floor		24.22	42.49	52.21	10.49
266	ceiling		26.74	45.00	54.73	13.63
	roof					
267	flat		25.47	43.75	53.46	12.37
268	sloping		27.99	46.25	55.98	14.88
269	top or cheek of dormer		35.52	53.80	63.51	22.41
270	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)		16.92	20.13	22.14	16.35
	Isolated beam or column: girth					
271	not exceeding 600 mm		37.06	58.86	70.94	25.13
272	600 to 1200 mm		33.29	53.83	64.66	16.58
273	exceeding 1200 mm		30.15	50.69	61.53	14.08
	ADD to ceiling or beam where ceiling level					
274	3.50 to 5.00 m above floor		2.93	2.93	2.93	2.93
275	5.00 to 6.50 m above floor		5.13	5.13	5.13	5.13
	ADD where in repairs					
276	not exceeding 1 m ²		31.95	31.95	31.95	31.95
277	1 to 5 m ²		15.97	15.97	15.97	15.97

16: CARPENTRY

FIRE RESISTING NON-ASBESTOS BOARD: PREMIUM - *continued*

Item			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			6 mm	9 mm	12 mm	thickness
16		<i>Metre</i>	£	£	£	£
278	Raking cutting		5.50	5.58	5.77	-
279	Curved cutting		7.64	7.74	8.04	-
280	Scribing		5.03	5.03	5.03	5.03
281	Chamfer		4.60	4.60	4.60	4.60
282	Jointing to existing		4.60	4.60	4.60	4.60
		<i>Each</i>				
283	Hole: for pipe or the like		5.85	5.85	5.85	5.85
284	Notching - <i>per 25 mm of girth</i>		0.45	0.45	0.45	0.45
285	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>		8.14	8.14	8.14	8.14

FIRE RESISTING NON-ASBESTOS BOARD: HIGH PERFORMANCE

Specification

Fire resisting board: non-asbestos, fire resisting non-combustible board.

Fire resistance:
Non-combustible to BS 476-4.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

Fixing fire resisting board: nail sheets at 200 mm centres along edges and 400 mm centres along intermediate supports. Punch heads below surface.

Rates for the following include

Generally:
For internal or external work.

			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			6 mm	9 mm	12 mm	thickness
		<i>Square Metre</i>	£	£	£	£
	Exceeding 600 mm wide					
286	wall		26.31	32.97	41.18	11.36
287	floor		25.61	31.37	40.17	10.49
288	ceiling		28.13	33.88	42.69	13.63
	roof					
289	flat		26.86	32.63	41.42	12.37
290	sloping		29.38	35.13	43.94	14.88

16: CARPENTRY

FIRE RESISTING NON-ASBESTOS BOARD: HIGH PERFORMANCE - *continued*

Item		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		6 mm	9 mm	12 mm	thickness
16	Square Metre	£	£	£	£
	Exceeding 600 mm wide				
291	top or cheek of dormer	36.92	42.68	51.47	22.41
292	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not exceeding 1 m² (not applicable to repairs)	17.11	18.54	20.41	16.35
	Isolated beam or column: girth				
293	not exceeding 600 mm	38.65	46.15	57.19	25.13
294	600 to 1200 mm	34.88	41.12	50.91	16.58
295	exceeding 1200 mm	31.74	37.98	47.77	14.08
	ADD to ceiling or beam where ceiling level				
296	3.50 to 5.00 m above floor	2.93	2.93	2.93	2.93
297	5.00 to 6.50 m above floor	5.13	5.13	5.13	5.13
	ADD where in repairs				
298	not exceeding 1 m²	31.95	31.95	31.95	31.95
299	1 to 5 m²	15.97	15.97	15.97	15.97
	Metre				
300	Raking cutting	5.50	5.58	5.77	-
301	Curved cutting	7.64	7.74	8.04	-
302	Scribing	5.03	5.03	5.03	5.03
303	Chamfer	4.60	4.60	4.60	4.60
304	Jointing to existing	4.60	4.60	4.60	4.60
	Each				
305	Hole: for pipe or the like	5.85	5.85	5.85	5.85
306	Notching - per 25 mm of girth	0.45	0.45	0.45	0.45
307	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - per metre of girth	8.14	8.14	8.14	8.14

16: CARPENTRY

HARDBOARD

Specification

Hardboard: to BS EN 622-2, standard Type HB and manufactured by a BSI Kitemark Licensee.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

Decorative laminated plastics sheet veneered boards: to BS 4965.

Fixing hardboard: nail boards at 200 mm centres along edges and 400 mm centres at intermediate supports. Punch heads below surface.

Fixing enamelled faced and plastics veneered hardboard: apply adhesive in accordance with manufacturer's recommendations to all supports.

Item	Square Metre						
		1			2	3	4
		Supplying and fixing			Fixing only		
		Thickness			Any		
3.2 mm	4.8 mm	6.4 mm	thickness				
16		£	£	£	£		
	Exceeding 600 mm wide						
308	wall	5.50	8.52	10.25	4.98		
309	floor	5.08	8.14	9.82	4.55		
310	ceiling	5.92	8.98	10.66	5.39		
311	ADD to wall, floor or ceiling where not exceeding 600 mm wide or in area not exceeding 1 m² (not applicable to repairs)	8.77	9.29	9.63	8.88		
	Isolated beam or column: girth						
312	not exceeding 600 mm	12.43	15.67	17.40	11.39		
313	600 to 1200 mm	9.76	13.58	14.89	8.88		
314	exceeding 1200 mm	8.92	12.33	14.05	8.04		
	ADD to ceiling or beam where ceiling level						
315	3.50 to 5.00 m above floor	1.96	1.96	1.96	1.96		
316	5.00 to 6.50 m above floor	3.35	3.35	3.35	3.35		
	ADD for						
317	flame retardant - <i>per side</i>	3.55	6.27	6.08	-		
318	tempered Type HB. HLA	1.30	0.90	0.01	-		
319	enamelled faced one side	2.70	3.76	4.17	-		
320	decorative laminated plastics sheet veneer - <i>per side</i>	25.97	25.97	25.97	-		
321	taping joints	1.04	1.04	1.04	1.04		
	ADD where in repairs						
322	not exceeding 1 m²	15.07	15.07	15.07	15.07		
323	1 to 5 m²	7.53	7.53	7.53	7.53		

16: CARPENTRY

HARDBOARD - *continued*

Item			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			3.2 mm	4.8 mm	6.4 mm	thickness
16		<i>Metre</i>	£	£	£	£
324	Raking cutting		2.29	2.50	2.68	-
325	Curved cutting		3.35	3.61	3.89	-
326	Scribing		2.21	2.21	2.21	2.21
327	Chamfer		1.96	1.96	1.96	1.96
328	Jointing to existing		1.96	1.96	1.96	1.96
		<i>Each</i>				
329	Hole: for pipe or the like		3.90	3.90	3.90	3.90
330	Notching - <i>per 25 mm of girth</i>		0.30	0.30	0.30	0.30
331	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>		2.94	2.94	2.94	2.94

MEDIUM BOARD

Specification

Medium board: to BS EN 622-3, Type MBL and manufactured by a BSI Kitemark Licensee.

Fixing medium board: nail boards at 200 mm centres along edges and 400 mm centres at

intermediate supports. Punch heads below surface.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			6 mm	9 mm	12 mm	thickness
		<i>Square Metre</i>	£	£	£	£
	Exceeding 600 mm wide					
332	wall		16.82	21.72	28.38	4.69
333	ceiling		17.66	22.55	29.22	5.53
334	ADD to wall or ceiling where not exceeding 600 mm wide in area not exceeding 1 m ² (not applicable to repairs)		6.54	7.60	8.91	5.53
	Isolated beam or column: girth					
335	not exceeding 600 mm		25.38	31.33	39.30	12.22
336	600 to 1200 mm		21.62	27.16	34.53	9.72
337	exceeding 1200 mm		20.78	26.32	33.70	8.88

16: CARPENTRY

MEDIUM BOARD - *continued*

Item 16	Square Metre	1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		6 mm	9 mm	12 mm	thickness
		£	£	£	£
	ADD to ceiling or beam where ceiling level				
338	3.50 to 5.00 m above floor	2.01	2.01	2.01	2.01
339	5.00 to 6.50 m above floor	3.68	3.68	3.68	3.68
	ADD for				
340	flame retardant - <i>per side</i>	2.43	3.27	5.21	-
341	taping joints	1.04	1.04	1.04	1.04
	ADD where in repairs				
342	not exceeding 1 m ²	17.08	17.08	17.08	17.08
343	1 to 5 m ²	8.71	8.71	8.71	8.71
	Metre				
344	Raking cutting	2.76	3.77	4.77	-
345	Curved cutting	4.85	5.58	5.87	-
346	Scribing	2.17	2.17	2.17	2.17
347	Chamfer	1.94	1.94	1.94	1.94
348	Jointing to existing	1.94	1.94	1.94	1.94
	Each				
349	Hole: for pipe or the like	3.90	3.90	3.90	3.90
350	Notching - <i>per 25 mm of girth</i>	0.23	0.30	0.30	0.30
351	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	3.53	3.53	3.53	3.53

DRY PROCESS BOARD (MDF)

Specification

Exterior use: Class 1, 2 or 3 to BS EN 335

Dry process board (MDF): to BS EN 622-5, Type MDF.

Fixing dry process board (MDF): nail boards at 200 mm centres along edges and 400 mm centres at intermediate supports. Punch heads below surface.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		9 mm	12 mm	15 mm	18 mm	25 mm	thickness
Square Metre		£	£	£	£	£	£
Exceeding 600 mm wide							
352	wall	11.78	13.60	14.64	16.63	21.60	7.76
353	floor	11.25	13.06	14.10	15.92	20.69	7.06
354	ceiling	13.03	14.87	15.90	17.72	22.49	8.98

16: CARPENTRY

DRY PROCESS BOARD (MDF) - *continued*

Item		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		9 mm	12 mm	15 mm	18 mm	25 mm	thickness
16	<i>Square Metre</i>	£	£	£	£	£	£
	Exceeding 600 mm wide						
	roof						
355	flat	12.14	13.96	15.00	16.81	21.60	8.15
356	sloping	13.94	15.76	16.79	18.62	23.22	9.82
357	top or cheek of dormer	19.33	21.16	22.20	24.01	28.61	14.85
358	ADD to wall, floor, ceiling, roof or dormer where not exceeding 600 mm wide or in area not not exceeding 1 m ² (not applicable to repairs) . . .	9.61	10.40	11.09	11.87	13.02	10.37
	Isolated beam or column: girth						
359	not exceeding 600 mm	19.26	21.83	23.51	26.07	32.06	16.38
360	600 to 1200 mm	16.57	18.50	19.54	21.57	27.12	11.35
361	exceeding 1200 mm	14.32	16.26	17.28	19.33	24.41	9.26
	ADD to ceiling or beam where ceiling level						
362	3.50 to 5.00 m above floor	1.97	1.97	1.97	1.97	1.97	1.97
363	5.00 to 6.50 m above floor	3.42	3.42	3.42	3.42	3.42	3.42
	ADD for						
364	melamine face - <i>both sides</i>	-	-	3.40	2.71	-	-
365	exterior quality	6.57	8.14	9.50	10.72	14.56	-
	ADD where in repairs						
366	not exceeding 1 m ²	21.30	21.30	21.30	21.30	21.30	21.30
367	1 to 5 m ²	10.65	10.65	10.65	10.65	10.65	10.65
	<i>Metre</i>						
368	Raking cutting	3.67	3.71	3.78	3.85	3.99	-
369	Curved cutting	5.09	5.15	5.26	5.36	5.58	-
370	Scribing	3.35	3.35	3.35	3.35	3.35	3.35
371	Chamfer	3.06	3.06	3.06	3.06	3.06	3.06
372	Jointing to existing	3.06	3.06	3.06	3.06	3.06	3.06
	<i>Each</i>						
373	Hole: for pipe or the like	3.90	3.90	3.90	3.90	3.90	3.90
374	Notching - <i>per 25 mm of girth</i>	0.30	0.30	0.30	0.30	0.30	0.30
375	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	5.64	6.05	6.47	6.89	7.31	-

16: CARPENTRY

SOFTBOARD

Specification

Softboard: to BS EN 622-4, Type SB.

Flame retardant: surface spread of flame classification: Class 1 to BS 476-7.

Temporarily secure boarding along intermediate supports and hang for 48 hours before nailing is completed.

Fixing softboard: nail boards at 200 mm centres along edges and 400 mm centres at intermediate supports. Punch heads below surface.

Item			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			12 mm	18 mm	24 mm	thickness
			£	£	£	£
16		<i>Square Metre</i>				
	Exceeding 600 mm wide					
376	wall		7.38	11.21	13.27	8.10
377	ceiling		7.94	12.05	14.11	8.94
378	ADD to wall or ceiling where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)		5.04	5.69	6.27	5.20
	Isolated beam or column: girth					
379	not exceeding 600 mm		12.45	14.74	16.54	10.61
380	600 to 1200 mm		11.40	13.52	15.20	9.78
381	exceeding 1200 mm		9.72	11.86	13.52	8.10
	ADD to ceiling or beam where ceiling level					
382	3.50 to 5.00 m above floor		1.96	1.96	1.96	1.96
383	5.00 to 6.50 m above floor		3.60	3.60	3.60	3.60
	ADD for					
384	flame retardant		2.82	4.76	6.15	-
385	taping joints		1.04	1.04	1.04	1.04
	ADD where in repairs					
386	not exceeding 1 m ²		17.08	17.08	17.08	17.08
387	1 to 5 m ²		8.71	8.71	8.71	8.71
	<i>Metre</i>					
388	Raking cutting		2.68	3.01	3.52	-
389	Curved cutting		3.43	3.93	4.44	-
390	Scribing		2.51	2.51	2.51	2.51
391	Chamfer		2.17	2.17	2.17	2.17
392	Jointing to existing		2.17	2.17	2.17	2.17

16: CARPENTRY

SOFTBOARD - *continued*

Item			1	2	3	4
			Supplying and fixing			Fixing only
			Thickness			Any
			12 mm	18 mm	24 mm	thickness
16	Each		£	£	£	£
393	Hole: for pipe or the like		3.90	3.90	3.90	3.90
394	Notching - <i>per 25 mm of girth</i>		0.30	0.30	0.30	0.30
395	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>		3.53	3.62	3.63	-

MINERAL FIBRE REINFORCED BOARD

Specification

Mineral fibre reinforced board:
from an approved manufacturer:

- flame retardant; surface spread of flame classification: Class 1 to BS 476-7;
- surface finish: sanded.

Fixing mineral fibre reinforced board: nail boards at 200 mm centres along edges and 400 mm centres at intermediate supports. Punch heads below surface.

			1	2	3	4	5	6
			Supplying and fixing					Fixing only
			Thickness					Any
			6 mm	9 mm	12 mm	19 mm	25 mm	thickness
		<i>Square Metre</i>	£	£	£	£	£	£
	Exceeding 600 mm wide							
396	wall		13.43	18.88	24.05	47.24	53.28	5.69
397	ceiling		13.86	19.30	24.46	47.67	53.69	6.11
398	ADD to wall or ceiling where not exceeding 600 mm wide or in area not exceeding 1m ² (not applicable to repairs)		5.66	6.79	7.88	11.55	12.74	5.95
	Isolated beam or column: girth							
399	not exceeding 600 mm		21.49	27.66	27.96	59.96	66.77	12.39
400	600 to 1200 mm		18.07	23.77	30.03	53.44	59.73	9.88
401	exceeding 1200 mm		15.56	21.25	26.65	50.93	57.21	7.36
	ADD to ceiling or beam where ceiling level							
402	3.50 to 5.00 m above floor		2.01	2.01	2.01	2.01	2.01	2.01
403	5.00 to 6.00 m above floor		3.60	3.60	3.60	3.60	3.60	3.60
	ADD where in repairs							
404	not exceeding 1 m ²		21.37	21.37	21.37	21.37	21.37	21.37
405	1 to 5 m ²		10.68	10.68	10.68	10.68	10.68	10.68

16: CARPENTRY

MINERAL FIBRE REINFORCED BOARD - *continued*

Item		1	2	3	4	5	6
		Supplying and fixing					Fixing only
		Thickness					Any
		6 mm	9 mm	12 mm	19 mm	25 mm	thickness
16	<i>Metre</i>	£	£	£	£	£	£
406	Raking cutting	5.69	6.97	8.15	12.73	14.06	-
407	Curved cutting	8.04	9.76	11.64	18.42	20.30	-
408	Scribing	3.06	3.06	3.06	3.06	3.06	3.06
409	Chamfer	2.82	2.82	2.82	2.82	2.82	2.82
410	Jointing to existing	2.82	2.82	2.82	2.82	2.82	2.82
	<i>Each</i>						
411	Hole: for pipe or the like	3.90	3.90	3.90	3.90	3.90	3.90
412	Notching - <i>per 25 mm of girth</i>	0.30	0.30	0.30	0.30	0.30	0.30
413	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	3.53	3.53	3.62	3.63	3.63	-

WOOD WOOL CEMENT SLABS

Specification

Wood wool cement slabs: to BS EN 13168.

Fixing wood wool cement slabs: nail boards at 200 mm centres along edges and 400 mm centres at intermediate supports. Punch heads below surface.

		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		25 mm	38 mm	50 mm	thickness
	<i>Square Metre</i>	£	£	£	£
	Exceeding 600 mm wide				
414	wall	20.73	25.68	30.90	14.89
415	ceiling	21.10	26.93	32.29	16.15
416	ADD to wall or ceiling where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	16.87	19.06	21.16	19.08

16: CARPENTRY

WOOD WOOL CEMENT SLABS - *continued*

Item		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		25 mm	38 mm	50 mm	thickness
16	Square Metre	£	£	£	£
	Isolated beam or column: girth				
417	not exceeding 600 mm	46.14	54.13	61.27	42.52
418	600 to 1200 mm	40.24	48.00	54.97	37.49
419	exceeding 1200 mm	35.21	42.98	49.96	32.46
	ADD to ceiling or beam where ceiling level				
420	3.50 to 5.00 m above floor	2.01	2.01	2.01	2.01
421	5.00 to 6.50 m above floor	3.60	3.60	3.60	3.60
	ADD where in repairs				
422	not exceeding 1 m²	30.30	30.30	30.30	30.30
423	1 to 5 m²	15.13	15.13	15.13	15.13
	Metre				
424	Raking cutting	4.36	4.52	4.69	-
425	Curved cutting	5.69	5.87	6.03	-
426	Scribing	3.35	3.35	3.35	3.35
427	Chamfer	2.82	2.82	2.82	2.82
428	Jointing to existing	2.82	2.82	2.82	2.82
	Each				
429	Hole: for pipe or the like	3.90	3.90	3.90	3.90
430	Notching - <i>per 25 mm of girth</i>	0.30	0.30	0.30	0.30
431	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>	7.31	8.48	10.20	-

LAMINATED PLASTIC SHEETS

Specification

Decorative laminated sheets: to BS EN 438-1, classification HGS.

Fixing decorative laminated sheets: fix with approved adhesive to manufactured board or sheet.

Rates for the following include

Generally:
For balancing veneer.

16: CARPENTRY

LAMINATED PLASTIC SHEETS - *continued*

Item		1	2
		Supplying	Fixing only
		and fixing	
		not exceeding 2 mm thick	Any thickness
16	<i>Square Metre</i>	£	£
	Exceeding 600 mm wide		
432	wall	43.92	17.32
433	ceiling	48.10	21.51
434	ADD to wall or ceiling where not exceeding 600 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	24.61	20.93
	Isolated beam or column: girth		
435	not exceeding 600 mm	54.72	25.69
436	600 to 1200 mm	53.88	24.85
437	exceeding 1200 mm	53.04	24.01
	ADD to ceiling or beam where ceiling level		
438	3.50 to 6.50 m above floor	1.96	1.96
439	5.00 to 6.50 m above floor	3.35	3.35
	ADD where in repairs		
440	not exceeding 1 m ²	25.12	25.12
441	1 to 5 m ²	16.74	16.74
	<i>Metre</i>		
442	Raking cutting	7.37	2.24
443	Curved cutting	12.85	2.82
444	Scribing	2.51	2.51
445	Jointing to existing	2.27	2.27
	<i>Each</i>		
446	Hole: for pipe or the like	3.90	3.90
447	Notching - <i>per 25 mm of girth</i>	0.55	0.55

16: CARPENTRY

TRIMS

Rates for the following include

Generally:
For mitres, angles and ends.

Item			1	2
			Supplying and fixing	Fixing
16		<i>Metre</i>	£	£
	Trim: fixing with adhesive			
	mineral fibre: flat strip			
448	70 x 6 mm		4.22	3.44
449	70 x 12 mm		4.99	3.77
	flexible plastics			
450	flat strip 25 mm wide		2.38	2.05
451	angle 20 x 20 mm		3.02	2.06

WORK TO EXISTING FLOORING

Rates for the following include

For scraping to parts inaccessible to sanding machine.

Generally:
For punching nails and re-stopping.

		<i>Square Metre</i>	£
452	Power sanding to a smooth and even surface: existing particleboard floor.		3.52
	Resecuring flooring not exceeding 25 mm thick		
453	particleboard		7.82
454	hardboard		3.35

16: CARPENTRY

EDGE SUPPORTED REINFORCED WOOD WOOL SLAB DECKING

GENERALLY

Specification

Wood wool cement slabs: to BS EN 13168.

Edge reinforcement: galvanised steel.

Insulating strip: cork or other material supplied by slab manufacturer.

Nails: galvanised steel large flat-headed nails, length to suit slab thickness.

Fixing clips: steel, galvanised to BS EN ISO 1461 of a type recommended by slab manufacturer.

Laying generally:

- a. centre joints between ends of slabs over supports and stagger in alternate courses;
- b. do not force slabs into position or otherwise induce abnormal stresses.

c. protect from weather until weatherproof covering is laid.

Unreinforced slabs: lay so that they are continuously supported along the long edges.

Safety precautions: treat decking as a fragile roof at all times. Take precautions to ensure:

- a. safety of persons necessarily employed on the work. Deny access to others;
- b. protection of the decking from damage by the provision of adequate walkways, additional supports or other means. Do not subject decking to point or shock loads or otherwise overload. Do not wheel barrows etc on unprotected or insufficiently supported slabs.

DECKING

Method of measurement

Voids:

Make no deduction for voids not exceeding 0.50 m².

Rates for the following include

Generally:

For fixing to structural supports at any spacing appropriate to the size of slabs to be fixed.

For supplying and fixing warning notices.

Item
16

Square Metre

1	2	3	4
Supplying and fixing		Fixing only	
Thickness			
50 mm	75 mm	50 mm	75 mm
£	£	£	£

Exceeding 600 mm wide

455	decking: unreinforced slabs: fixing to timber with nails	20.96	23.99	7.64	11.10
456	ADD for fixing to steelwork with clips	3.17	3.59	3.17	3.59
457	ADD where slab edges reinforced	27.49	40.45	3.35	5.03

16: CARPENTRY

DECKING - *continued*

Item			1	2	3	4
			Supplying and fixing		Fixing only	
			Thickness			
			50 mm	75 mm	50 mm	75 mm
16		<i>Square Metre</i>	£	£	£	£
	ADD where in repairs					
458		not exceeding 1 m ²	21.00	20.95	17.83	17.88
459		1 to 5 m ²	10.51	10.49	8.92	8.95
460		5 to 10 m ²	5.08	5.08	4.45	4.47
		<i>Metre</i>				
461		Covering rebate with insulating tape	2.47	2.47	0.92	0.92
462		Sealing joint: bitumen felt tape bedded in hot bitumen	1.92	1.92	1.68	1.68
463		Raking cutting	5.05	5.81	2.51	3.35
464		Curved cutting	7.66	8.71	3.85	5.03
		<i>Each - per 100 mm of girth</i>				
465		Hole	1.51	2.13	1.51	2.13
466		Notching	0.87	0.95	0.87	0.95

16: CARPENTRY

METAL AND PLASTIC ACCESSORIES

METAL FIXINGS, FASTENINGS AND FITTINGS

Specification

Metalwork generally: mild steel galvanised to BS EN ISO 1461 after manufacture unless stated and from an approved manufacturer.

Item		Each	1	2	3	4	5
			Girth				
			600 mm	800 mm	1000 mm	1200 mm	1600 mm
16			£	£	£	£	£
	Restraint strap: bent or twisted: screwing to softwood and plugging and screwing to masonry						
467	2.5 x 30 mm		7.74	8.76	9.49	10.22	11.56
468	5 x 30 mm		8.68	9.67	10.87	11.95	13.40

		Each	1	2	3	4	5	6
			Joist size					
			50 x 100 mm	50 x 150 mm	50 x 200 mm	75 x 100 mm	75 x 150 mm	75 x 200 mm
			£	£	£	£	£	£
	Joist hanger: to BS EN 845-1: pressed or seam welded: 2.5 mm thick							
469	fixing to softwood		4.42	4.83	5.64	6.53	8.19	9.49
470	building into joints of brickwork or blockwork		3.78	4.38	4.75	5.57	7.57	8.23

471	Framing anchor: timber to timber: pressed or seam welded: 1 mm thick: any type: not exceeding 150 mm long							£	3.85

		Each	1	2	3	4	5	6	7
			Length						
			51 mm	100 mm	152 mm	203 mm	254 mm	305 mm	354 mm
			£	£	£	£	£	£	£
	Nail plate: 1 mm thick: ribbed: separate nail type								
472	76 mm wide	0.70	0.90	1.15	1.48	1.76	2.00	2.23	
473	114 mm wide	0.86	1.18	1.52	1.86	2.17	2.47	2.74	
474	152 mm wide	1.07	1.51	1.86	2.27	2.63	2.45	3.19	

16: CARPENTRY

METAL FIXINGS, FASTENINGS AND FITTINGS - *continued*

Item		1	2	3	4	5	6
		Nominal size					
		38 mm	51 mm	64 mm	67 mm	76 mm	102 mm
16	<i>Each</i>	£	£	£	£	£	£
	Timber connector: to BS EN 912 (measure bolts and holes separately)						
475	round toothed plate: single sided	1.23	1.70	2.05	-	2.61	-
476	round toothed plate: double sided	1.74	2.34	2.84	-	3.54	-
477	split ring: bevelled sides: mortice in timber	-	2.65	3.34	-	-	8.12
478	shear plate: mortice in timber	-	-	-	4.62	-	12.24

17: Sheet Roof Coverings

BITUMINOUS FELTS

GENERALLY

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00 m².

Rates for the following include

Jointing to existing:

For all preparatory work, bonding in as necessary and making good.

FELTS

Specification

Approved firms: employ an approved specialist firm for laying felt roof coverings.

Maintenance period: the work shall be subject to a maintenance period of 18 months from the day after that on which the work as ordered is certified as complete by the PM.

Bottom layer (venting base layer): glass fibre bitumen felt to BS EN 13707 Type 3G, perforated.

Bottom layer (three layer system): polyester based, bitumen felt to BS EN 13707 Type 5U.

Bottom layer (two layer system): glass fibre bitumen felt to BS EN 13707 Type 3B.

Bottom layer or intermediate layer: 125 g/m² minimum (core weight) HP elastomeric bitumen felt with polyester reinforcement and sanded finish from an approved manufacturer.

Top layer (cap sheet): 250 g/m² minimum (core weight) HP elastomeric bitumen felt with polyester reinforcement and sanded, granule, aluminium foil faced or copper foil faced finish from an approved manufacturer.

Primer for cementitious and metal surfaces: cut back bitumen with:

- maximum volatile solvent 60% by weight;
- viscosity Redwood No 2 at 21° C, 25 sec maximum.

Bonding compound: bitumen having a softening point and penetration for classification of 85/25, 95/25 or 105/35 for pitches not exceeding 5° and 115/15 for pitches exceeding 5°.

Hot applied bitumen compound for bedding chippings: cut-back bitumen to BS EN 13924 or BS EN 12591.

Mineral aggregate chippings: hard light coloured coloured non absorbent natural stone chippings, nominal 14 mm single size to BS EN 13043.

Solar reflective paint: white solar reflective coating for application by roller, brush or spray.

Steel nails: to BS 1202-1, Table 4, galvanised round extra large headed felt or clout nails, 20 mm long for fixing felt sheets.

Felt strips: high performance polyester based, bitumen felt to BS EN 13707 Type 5U, 150 mm wide.

Plastics moisture vents: from an approved manufacturer.

Workmanship: comply with BS 8000-4 and the recommendations of BS 8217 unless otherwise specified.

Roofing contractor's agreement: before work starts obtain felt roofing contractor's written agreement that the base is suitable and that fall is not less than 1 in 40.

FELTS - *continued*

Laying bottom layer and vapour barrier (partially bonded):

- a. loose lay perforated venting base layer;
- b. lay vapour barrier or bottom layer and fully bond to base layer.

Laying bottom layer and vapour barrier (nailed or fully bonded):

- a. fix bottom layer of felt with 50 mm side laps and 75 mm head laps as follows:
 1. timber boarded surfaces: nail to deck;
 2. plywood, wood wool and cementitious surfaces: tape construction joints with felt strips and fully bond bottom layer felt to deck;
 3. profiled metal decking: prime and apply bonding compound to crowns of profile and fully bond bottom layer to crowns;
- b. lay vapour barrier or intermediate layer and fully bond to bottom layer.

Laying intermediate and top layers:

- a. apply continuous even coating of hot bonding compound to surface to receive felt at the rate of 1.5 kg/m²;
- b. lay felt and apply pressure to give a good bond;
- c. remove surplus compound as the work proceeds;
- d. lay sheets in the direction of the roof slope or falls with 50 mm minimum side laps and 100 mm minimum head laps so that the laps do not obstruct the flow of water. Break joint between layers.

Granule faced felts: prevent adhesion of surplus bonding compound to surface.

Solar reflective coatings: apply in accordance with manufacturer's recommendations.

Chippings: apply hot bitumen dressing compound at the rate of 1.5 kg/m² and immediately dress with chippings closely bedded at the rate of 16 kg/m². Remove surplus loose chippings.

Notes

Walkway tiles:

Pay for at the Rates in Section 19.

Grooves and pointing in mortar:

Pay for at the Rates in Section 14.

Rates for the following include

Generally:

For fully bonding bottom layer in hot bonding compound to any base, except where nailed to timber base. Make no adjustment to the Rates where the bottom layer is partially bonded.

For holing, notching and bending.

For extra material for laps.

For working to metal flashings or the like and for sealing.

Linear items:

For fair edges.

For dressing over tilting fillets.

For ends and angles except where otherwise stated.

For jointing to existing except where otherwise stated.

Collars:

For all extra material and labours required including cutting and fitting around pipes, standards or the like passing through new roofing and sealing.

Linings to cesspools and similar enumerated items:

For dressing over fillets and similar labours excluding cutting and fitting to outlets.

17: SHEET ROOF COVERINGS

FELTS - *continued*

Item		1	2	3	4	5	6	7	8
		Bitumen felt - <i>Each layer</i>							
		Venting base layer	Bottom layer polyester based bitumen felt	Bottom layer bitumen glass fibre	Elastomeric bitumen polyester				
					Bottom or inter- -mediate layer	Cap sheet			
17	<i>Square Metre</i>	£	£	£	£	£	£	£	£
	Roof covering horizontal or to falls, crossfalls or slopes: any width not exceeding								
001	10° pitch	7.50	7.80	7.11	8.67	13.83	16.05	28.32	50.50
002	sloping 10° to 45° pitch	8.37	8.50	7.94	9.40	14.95	17.34	30.18	52.49
003	vertical or sloping exceeding 45° pitch	9.07	9.12	8.58	9.97	15.82	18.37	31.64	54.15
	ADD for								
	taping construction								
004	joints with felt strip	2.86	3.81	2.67	4.26	-	-	-	-
005	priming base	1.59	1.59	1.59	1.59	-	-	-	-
	ADD for solar reflective treatment								
006	paint of approved type: in two coats	-	-	-	-	5.92	5.92	5.92	5.92
007	chippings in hot bitumen . . .	-	-	-	-	8.33	8.33	8.33	8.33
	ADD where in repairs								
008	not exceeding 1 m ²	15.23	15.34	15.20	15.46	16.01	16.28	17.83	21.11
009	1 to 5 m ²	9.21	9.28	9.17	9.37	9.78	9.87	10.88	13.02
010	5 to 10 m ²	3.15	3.14	3.13	3.23	3.43	3.51	4.04	5.19
	<i>Metre</i>								
011	Fair edge	0.84	0.84	0.84	0.84	0.84	0.84	1.51	2.01
012	Raking cutting	1.60	1.66	1.52	1.77	2.32	2.60	5.15	9.19
013	Curved cutting	2.12	2.23	1.85	2.39	3.14	3.43	6.79	12.08
014	Jointing to existing	1.39	1.39	1.39	1.39	1.39	1.39	2.51	3.35
	<i>Metre</i>								£
015	Plastics piping under roofing felt across movement joint.								6.81

17: SHEET ROOF COVERINGS

FELTS - *continued*

Item		1	2	3	4	5	6	7	8	9
		Bitumen felt - <i>Each layer</i>								
		Venting base layer	Bottom layer polyester based bitumen felt	Bottom layer bitumen glass fibre	Elastomeric bitumen polyester				ADD where in repairs: any type	
					Bottom or inter- -mediate layer	Cap sheet				
17	<i>Metre</i>	£	£	£	£	£	£	£	£	£
	Turn-up or turn down at abutment, eaves or verge, skirting, flashing or apron: welted drip									
016	not exceeding 200 mm girth	4.21	4.40	4.20	4.57	5.31	5.60	10.37	16.71	0.89
017	<i>ADD for each additional 200 mm girth</i>	2.78	2.98	2.77	3.14	3.89	4.17	7.84	13.29	0.59
	Gutter, lining to channel or covering to kerb									
018	not exceeding 200 mm girth	3.73	3.92	3.71	4.08	4.83	5.12	9.46	15.50	0.72
019	<i>ADD for each additional 200 mm girth</i>	2.78	2.98	2.77	3.14	3.89	4.17	7.84	13.29	0.59
020	ADD for turning into groove and wedging	2.93	3.66	3.66	3.66	4.38	4.38	5.26	7.00	0.46
	ADD where									
021	raking	1.63	1.68	1.60	1.75	2.05	2.16	4.14	6.73	0.38
022	stepped	2.27	2.33	2.22	2.43	2.83	2.92	5.09	8.12	0.59
	<i>Each</i>									
	Extra over gutter, lining to channel or covering to kerb: any girth for									
023	stopped end	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
024	returned end	6.05	6.20	5.96	6.20	6.34	6.52	6.68	7.49	5.90
025	angle	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
026	intersection	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
027	jointing to existing	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78

17: SHEET ROOF COVERINGS

FELTS - *continued*

Item		1	2	3	4	5	6	7	8	9
		Bitumen felt - <i>Each layer</i>								ADD where in repairs: any type
		Venting base layer	Bottom layer polyester based bitumen felt	Bottom layer bitumen glass fibre	Bottom or inter- -mediate layer	Elastomeric bitumen polyester Cap sheet				
						Sanded finish	Granule finish	Aluminium foil faced	Copper foil faced	
17	<i>Each</i>	£	£	£	£	£	£	£	£	£
	Lining to cesspool or outlet through parapet wall: total surface area									
028	not exceeding 0.20 m²	7.21	7.30	7.10	7.48	8.27	8.65	15.89	24.37	1.58
029	0.20 to 0.40 m² . .	10.14	10.34	9.94	10.68	12.22	12.89	23.82	37.86	2.09
030	0.40 to 0.60 m² . .	13.08	13.37	12.77	13.88	16.16	17.12	31.75	51.34	2.61
	Collar: around pipe, standard or the like: not exceeding 150 mm high: overall diameter									
031	not exceeding 55 mm	5.06	5.18	4.97	5.34	6.08	6.37	11.74	18.55	1.06
032	55 to 110 mm . . .	6.76	6.81	6.56	7.03	7.96	8.34	15.34	24.13	1.43
033	exceeding 110 mm	7.79	7.95	7.60	8.25	9.53	10.04	18.56	29.76	1.58
034	Outlet or dishing to gully	5.92	6.08	5.78	6.45	7.94	8.53	16.58	28.18	0.84
										£
035	Pad: single layer sanded or granule finish bitumen felt: for fixing lightning conductor or the like: fully bonded: not exceeding 150 x 150 mm									0.74
036	Roof ventilator: plastics: bonding with hot bitumen									20.56

17: SHEET ROOF COVERINGS

INSULATION AND VAPOUR BARRIERS

Specification

Under-felt insulants:

- resin bonded compressed granular natural cork. Thermal conductivity within the range 0.035 to 0.045 W/mk;
- expanded borosilicate glass board. Thermal conductivity within the range 0.037 to 0.045 W/mk.
- rigid resin bonded mineral fibre board. Thermal conductivity within the range 0.033 to 0.036 W/mk.

Vapour barrier: high performance SBS modified bitumen felt incorporating a bonded 0.05 mm minimum thickness aluminium foil and 125 g/m² high performance polyester or glass fibre woven base providing tensile strength not less than 400 N.

Bonding compound: bitumen having a softening point and penetration classification of 85/25, 95/25 or 105/35 for pitches not exceeding 5° and 115/15 for pitches exceeding 5°.

Laying vapour barrier: lay vapour barrier and fully bond to base or bottom felt layer. Extend vapour barrier a minimum of 150 mm at perimeter and abutments to allow for upturn around edge of insulation and bonding to upper surfaces.

Laying insulant: apply hot bonding compound to the vapour barrier, lay boards with staggered butt joints, apply pressure to ensure a continuous bond.

Protect from the weather including edges until laying of roof covering.

Rates for the following include

Generally:

For holing and notching.

For extra material for laps and turning up vapour barrier.

		1	2	3	4	5	6	7	8	9	
		Cork board			Glass board		Fibre Board				
		Thickness									
Item		25 mm	40 mm	50 mm	40 mm	60 mm	80 mm	30 mm	60 mm	90 mm	
17	Square Metre	£	£	£	£	£	£	£	£	£	
	Roofing insulation										
	vapour barrier: any										
	base: any width										
037	horizontal or to falls, crossfalls or slopes not exceeding 10° pitch	10.21	16.17	22.45	23.31	32.91	42.52	8.67	13.32	23.22	
038	sloping 10° to 45° pitch	10.67	16.80	23.35	23.94	34.07	44.21	9.22	14.34	24.36	
	ADD where in repairs										
039	not exceeding 1 m²	5.69	7.92	10.19	10.12	13.74	17.28	5.42	7.53	10.89	
040	1 to 5 m²	2.86	3.96	5.08	5.05	6.83	8.61	2.71	3.75	5.38	
041	5 to 10 m²	1.90	2.63	3.38	3.40	4.60	5.66	1.76	2.52	3.62	
	Metre										
042	Raking cutting	2.22	3.45	4.73	4.85	6.81	8.69	1.98	3.05	5.07	
043	Curved cutting	3.34	5.18	7.11	7.26	10.20	13.12	2.94	4.55	7.48	

17: SHEET ROOF COVERINGS

EAVES TRIM

Specification

Eaves trim: aluminium to BS EN 12020-1, grade EN-AW 6063T4 or EN-AW 6063T6.

Rates for the following include

Generally:
For drilling and screwing with aluminium screws.

For ends.

Item
17

Metre

		1	2	3	4
		Width on face			ADD
		not exceeding 50 mm	50 to 100 mm		where in repairs:
		Length of fixing arm			any size
		not exceeding 50 mm	50 to 105 mm	not exceeding 105 mm	
		£	£	£	£
044	Eaves trim: to timber	6.12	7.59	10.63	0.62

Each

045	Extra for angle	4.99	5.66	6.92	0.49

WORK TO EXISTING ROOFING

Square Metre

£

046	Cleaning screeded, concrete or insulation board base after removal of felt roofing (measure stripping felt separately).	1.00
047	Removing old chippings from bitumen felt roofing	1.25
048	Cleaning and preparing old bitumen felt roofing to receive new chippings or new layer of felt	1.25

17: SHEET ROOF COVERINGS

LEAD SHEET COVERINGS AND FLASHINGS

GENERALLY

Specification

Milled lead sheet: to BS EN 12588.

Copper clips: sheet copper to BS EN 1172, designation R220 in welts, seams and rolls, R240 elsewhere; dipped in solder if exposed to view.

Lead clips and tacks: 50 mm wide cut from Code 6 lead sheet.

Copper nails: to BS 1202-2, jagged shank, 25 mm long.

Solder: to BS EN ISO 9453

Workmanship: comply with BS 6915.

Sheet sizes for roof coverings:

- a. not to exceed 2 500 mm long;
- b. not to exceed 2.25 m² in area.

Sheet sizes for wall coverings:

- a. not to exceed 2 400 mm long;
- b. not to exceed 1.70 m² in area.

Definition of terms

Flashing: includes cover and apron flashings.

Collar: includes pipe sleeves.

Notes

Underlay felt:

Measure separately.

Grooves and pointing in mortar:

Pay for at the Rates in Section 14.

Timber rolls and drips:

Pay for at the Rates in Section 16.

Method of measurement

Generally:

Make no deduction for voids not exceeding 1.00 m².

Measure boundary work only to voids exceeding 1.00 m².

Rates for the following include

Generally:

For all clips and tacks required.

Covering:

For work in isolated areas.

For work to falls and crossfalls.

For forming voids not exceeding 1.00 m² other than holes for pipes or the like.

For dressing into hollows, recesses or the like.

Flashings and other linear items:

For extra material for laps or seams.

For intermediate laps not exceeding 100 mm long unless otherwise stated.

For work of any profile.

For ends, angles and intersections unless otherwise stated.

Catchpits, sumps or the like:

For all dressing to fillets and similar labours including burned, brazed, welded or soldered angles and seams but excluding holes and jointing to outlets.

Collars and spigot outlets:

For all bends and splay cutting to ends in associated new sheet metal covering for pipe or member passing through.

Wedging:

For lead wedges.

Work in repairs:

For unsealing joints in sheets where appropriate.

17: SHEET ROOF COVERINGS

LEAD SHEET

Item		1	2	3	4	5
		1.80 mm thick (code blue)	2.24 mm thick (code red)	2.65 mm thick (code black)	3.15 mm thick (code white)	3.55 mm thick (code orange)
17	<i>Square Metre</i>	£	£	£	£	£
	Exceeding 500 mm wide roof or wall covering					
049	flat	74.69	94.28	112.72	133.69	151.44
	pitch					
050	10° to 50°	84.95	110.79	132.12	157.63	177.10
051	exceeding 50° or vertical	102.05	126.76	151.48	179.86	203.33
	ADD where					
052	to dormer or the like	34.20	46.17	54.72	64.99	73.53
	in repairs					
053	not exceeding 1 m ²	9.68	11.97	14.26	17.10	18.81
054	1 to 5 m ²	7.97	9.68	11.97	14.26	15.97
055	5 to 10 m ²	6.26	7.42	9.13	10.84	12.55
	ADD to roof, wall or dormer where not exceeding 500 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	25.51	31.68	37.87	44.97	50.84
	<i>Metre</i>					
	ADD to items 17.049 to 17.051 and 17.056 additional materials for (see page 181 for labours on lead sheet)					
057	drips not exceeding 50 mm high	9.13	11.43	13.52	16.07	18.14
058	welts not exceeding 50 mm high	8.23	9.26	10.18	11.32	12.24
	rolls not exceeding 50 mm wide and 50 mm high					
059	wood or hollow core	12.68	15.87	18.78	22.31	25.19
060	seams	5.07	6.35	7.51	8.92	10.07
061	laps	25.37	31.74	37.55	44.62	50.37
062	Upstands not exceeding 500 mm high - <i>per 25 mm of girth</i>	2.55	3.17	3.78	4.50	5.08
063	Downstands not exceeding 500 mm deep - <i>per 25 mm of girth</i>	2.68	3.30	3.92	4.63	5.22

17: SHEET ROOF COVERINGS

LEAD SHEET - *continued*

Item		1	2	3	4	5
		1.32 mm thick (code green)	1.80 mm thick (code blue)	2.24 mm thick (code red)	2.65 mm thick (code black)	ADD where in repairs: any thickness
17	<i>Metre</i>	£	£	£	£	£
	Flashing: not exceeding 150 mm girth					
064	horizontal, sloping or vertical	10.43	14.09	18.08	21.53	1.71
065	stepped	13.27	17.50	22.62	26.66	2.84
066	ADD for each additional 25 mm of girth	2.19	2.92	3.74	4.47	0.35
067	Weathering: not exceeding 225 mm girth: horizontal, sloping or vertical: welted joints not exceeding 2.25 m apart	44.39	52.01	61.26	72.00	9.13
068	ADD where welted joints not exceeding 1.25m apart . .	6.34	11.51	12.44	13.77	1.13
069	ADD for each additional 25 mm of girth	4.43	5.27	6.27	7.45	1.01
070	Hip or ridge: not exceeding 300 mm girth: horizontal or sloping: 150 mm minimum laps	30.87	40.14	50.15	58.41	5.13
071	ADD for each additional 25 mm of girth	3.20	4.29	5.44	6.41	0.77
		1	2	3	4	5
		1.80 mm thick (code blue)	2.24 mm thick (code red)	2.65 mm thick (code black)	3.15 mm thick (code white)	ADD where in repairs: any thickness
	<i>Metre</i>	£	£	£	£	£
072	Gutter or secret gutter: not exceeding average 400 mm girth: sloping	54.37	65.85	75.83	90.30	9.68
073	ADD for welded joints to sheeting	15.25	18.77	21.39	25.37	2.29
074	ADD for each additional 25 mm of girth	3.35	4.05	4.66	5.54	0.71
	<i>Each</i>					
	Catchpit, sump or the like: total surface area					
075	not exceeding 0.20 m ²	55.25	69.71	83.42	99.35	14.26
076	0.20 to 0.40 m ²	79.17	100.64	124.10	147.43	17.10
	Outlet: total surface area					
077	not exceeding 0.20 m ²	43.86	55.45	66.32	78.83	10.84
078	0.20 to 0.40 m ²	70.61	89.79	107.00	126.91	15.97
	Collar around pipe or the like: not exceeding 150 mm high: soldered joint to cast iron, lead or copper pipe: burned joint to sheeting: overall diameter					
079	not exceeding 55 mm	14.94	18.75	22.46	26.25	5.13
080	55 to 110 mm	23.02	28.95	34.68	41.11	6.26
081	exceeding 110 mm	32.36	40.78	48.83	57.72	8.56

17: SHEET ROOF COVERINGS

LEAD SHEET - *continued*

Item		1	2	3	4
		1.32 mm thick (code green)	1.80 mm thick (code blue)	2.24 mm thick (code red)	2.65 mm thick (code black)
17	<i>Each</i>	£	£	£	£
	Soaker: hand to others for fixing				
082	0.025 to 0.05 m ²	4.09	4.98	-	-
083	0.05 to 0.075 m ²	6.06	7.38	-	-
084	0.075 to 0.10 m ²	8.21	9.96	-	-
	Slate: collar around pipe or the like: not exceeding 150 mm diameter: not exceeding 150 mm high: hand to others for fixing				
085	300 x 300 mm	19.46	24.05	28.87	37.88
086	390 x 390 mm	24.83	31.53	38.56	45.10
087	450 x 450 mm	29.56	38.09	47.09	55.22
	Saddle: hand to others for fixing				
088	not exceeding 0.10 m ²	11.22	13.39	16.61	20.33
089	0.10 to 0.20 m ²	18.62	22.48	28.08	34.26
090	0.20 to 0.40 m ²	29.52	36.41	45.91	55.69

LABOURS ON LEAD SHEET

	<i>Metre</i>	£
	Copper nailing	
091	exceeding 50 mm centres	3.74
092	not exceeding 50 mm centres	7.48
093	Welted edge	6.84
094	Beaded edge	3.42
095	Shaped edge	6.84
096	Turning into groove: wedging	8.64
097	Welted seam	7.97
098	Soldered seam or angle	20.14
099	Burned seam or angle	35.12
	Dressing into hollow, condensation channel or over moulding	
100	not exceeding 75 mm girth	4.28
101	75 to 150 mm girth	6.84

17: SHEET ROOF COVERINGS

LABOURS ON LEAD SHEET - *continued*

Item		
17	<i>Metre</i>	£
	Dressing over	
102	fillet	3.42
	corrugated sheeting	
103	along corrugations	5.72
104	across corrugations	11.39
	troughed sheeting	
105	along troughs	5.13
106	across troughs	10.84
107	slates or plain tiles	13.69
	pantiles or interlocking tiles	
108	along rolls	17.10
109	across rolls	20.52
	glass and glazing bars	
110	along bars	4.85
111	across bars	10.26
112	Dressing between layers of bitumen felt roofing	2.29
113	Raking cutting	5.36
114	Curved cutting	7.35
	<i>Each</i>	
	Bossed end: any girth	
115	to roll	8.56
116	to hollow, condensation channel or moulding	2.84
	Bossed angle: any girth	
117	to roll	13.69
118	to hollow, condensation channel or moulding	4.85
	Bossed intersection: any girth	
119	to roll	17.10
120	to hollow, condensation channel or moulding	6.26
121	Dressing into outlet pipe or the like	8.56
122	Cast dowel	11.97
123	Soldered dot including brass screw, washer and sinking in wood	15.08
124	Hole: for pipe or the like: through any thickness of sheet	7.69

17: SHEET ROOF COVERINGS

REPAIRS TO LEAD SHEET

Item		
17	<i>Metre</i>	£
125	Turning back flashing: any description: re-dressing	3.42
	Cleaning out and filling with copper bit solder	
126	crack in covering, flashing or gutter	16.72
	<i>Each</i>	
127	hole: not exceeding 700 mm ²	7.15
128	Cutting out soldered dot: removing screw and washer: renewing complete	33.89

REFIXING EXISTING LEAD FLASHING

Rates for the following include	For repointing in mortar (any mix).
<i>Generally:</i>	For redressing over slates, tiles, corrugated
For any type of lead.	sheeting etc.
For refixing with new wedges.	

	<i>Metre</i>	£
	Refixing existing flashing: not exceeding 150 mm girth	
129	horizontal, sloping or vertical	15.84
130	stepped	20.96
131	ADD for each additional 25 mm of girth	2.29

17: SHEET ROOF COVERINGS

UNDERLAY

Specification	Rates for the following include
<i>Waterproof building paper:</i> to BS 1521 Class A, Grade 1F.	<i>Generally:</i> For extra material for laps.
<i>Needled non-woven polyester textile:</i> weight not less than 200 g/m².	For perforations for pipes or the like.
<i>Galvanised felt nails:</i> to BS 1202-1, Table 4	For notching around obstructions.
<i>Copper felt nails:</i> to BS 1202-2, Table 3.	

Item		1	2	3
		Building paper	Textile	ADD where in repairs: any type
		£	£	£
17	<i>Square Metre</i>			
	Covering			
132	flat or sloping: laps not exceeding 50 mm: laid loose	4.44	4.04	0.97
	flat, sloping or vertical: butt joints			
133	fixing with galvanised felt nails	6.51	6.11	1.27
134	fixing with copper felt nails	6.80	6.39	1.27
	<i>Metre</i>			
135	Raking cutting	2.71	2.63	-
136	Curved cutting	3.22	3.14	-

17: SHEET ROOF COVERINGS

ALUMINIUM SHEET COVERINGS AND FLASHINGS

GENERALLY

Reference to other Sections: the Preambles to Lead Sheet Coverings and Flashings apply equally this Section unless otherwise stated.

Specification

Aluminium sheet: to BS EN 485-1 to 4, 0.8 mm thick with mill finish:

- a. for roofing:
 1. alloy grade: 1050A SIB;
 2. temper designation to BS EN 515: H12;
- b. for flashings:
 1. alloy grade: 1050A;
 2. temper designation to BS EN 515: O;

Clips:

- a. cut from aluminium sheet, specified for roofing, to dimensions shown in CP 143-15, Fig. 4;
- b. secure with aluminium nails to BS 1202-3, 25 mm long.

Workmanship: comply with the recommendations of CP 143-15.

Contact between dissimilar materials: prevent direct contact between aluminium and copper, brass or bronze. Paint or isolate iron and steel in direct contact with aluminium.

Notes

Painting iron and steel:
Pay for at the Rates in Section 29.

Rates for the following include

Flashings:
For intermediate single lock welts.

Wedging:
For aluminium wedges.

ALUMINIUM SHEET

Item		
17	<i>Metre</i>	£
	Flashing: not exceeding 150 mm girth	
137	horizontal, sloping or vertical	8.41
138	stepped	9.53
139	ADD for each additional 25 mm of girth	1.29
140	ADD where in repairs - per 25 mm of girth	0.45
	<i>Each</i>	
	Soaker: hand to others for fixing	
141	0.025 to 0.05 m ²	2.22
142	0.05 to 0.075 m ²	3.14
143	0.075 to 0.10 m ²	4.23
	<i>Metre</i>	
144	Turning into groove: wedging	8.59
	Dressing over	
145	fillet	5.13
	corrugated sheeting	
146	along corrugations	7.42
147	across corrugations	14.26

17: SHEET ROOF COVERINGS

ALUMINIUM SHEET - *continued*

Item		Metre	£
17	Dressing over		
	glass and glazing bars		
148	along bars		6.50
149	across bars		11.56

SELF ADHESIVE ALUMINIUM FACED BITUMEN BACKED WEATHERPROOF SEALING STRIP

Rates for the following include	For removing protrusions to prevent puncturing of the sealing strip.
<i>Generally:</i>	
For fixing in accordance with the manufacturer's instructions.	For extra material for laps.
	For intermediate laps minimum 25 mm long.
For filling all depressions and gaps exceeding 3 mm wide in the background with mortar (any mix).	For treating surfaces with one coat of priming solution as recommended by the manufacturer.

	Metre	£
	Flashing: horizontal, sloping or vertical: girth	
150	100 mm	6.84
151	150 mm	9.14
152	225 mm	11.07
153	300 mm	13.17
154	450 mm	21.08

COPPER SHEET COVERINGS AND FLASHINGS

GENERALLY

<i>Reference to other Sections:</i> the Preambles to Lead Sheet Coverings and Flashings apply equally this Section unless otherwise stated.	<i>Nails:</i> copper to BS 1202-2 Table 3, jagged shank, 25 mm long.
	<i>Workmanship:</i> comply with the recommendations of CP 143-12.
Specification	<i>Contact between dissimilar metals:</i> prevent between copper sheeting and dissimilar metals other than brass and lead.
Copper sheet: to BS EN 1172, rolled, material designation Cu-DHP, stamped or labelled with material condition designation, nominal thickness and finish.	
a. for roof and wall coverings: temper R240 (½ hard).	Rates for the following include
b. for flashings and other weatherings: temper R220 (soft temper).	<i>Flashings and other linear items:</i>
	For intermediate single lock welts.
<i>Clips:</i> sheet copper to BS EN 1172, hot rolled, temper R220 (soft temper).	<i>Wedging:</i>
	For copper wedges.

17: SHEET ROOF COVERINGS

COPPER SHEET

Item			
		1	2
		0.55 mm thick	0.70 mm thick
17	<i>Square Metre</i>	£	£
	Exceeding 500 mm wide roof or wall covering		
155	flat	116.51	129.58
	pitch		
156	10° to 50°	125.06	139.22
157	exceeding 50° or vertical	133.61	148.40
	ADD where		
158	to dormer or the like	38.76	42.76
	in repairs		
159	not exceeding 1 m ²	19.39	21.10
160	1 to 5 m ²	15.97	17.10
161	5 to 10 m ²	12.55	13.69
162	ADD to roof, wall or dormer where not exceeding 500 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	33.41	37.10
	<i>Metre</i>		
	ADD to items 17.155 to 17.157 and 17.162 additional materials for (see page 189 for labours on copper sheet)		
163	drips not exceeding 50 mm high	8.66	9.79
164	welts not exceeding 50 mm high	3.85	4.35
	rolls not exceeding 50 mm wide and 50 mm high		
165	wood	12.03	13.58
166	seams	4.81	5.44
167	laps	24.06	27.17
168	Upstands not exceeding 500 mm high - <i>per 25 mm of girth</i>	3.35	3.70
169	Downstands not exceeding 500 mm deep - <i>per 25 mm of girth</i>	3.48	3.84

17: SHEET ROOF COVERINGS

COPPER SHEET - *continued*

Item		1	2	3
		0.55 mm thick	0.70 mm thick	ADD where in repairs: any thickness
17	<i>Metre</i>	£	£	£
	Flashing: not exceeding 150 mm girth			
170	horizontal, sloping or vertical	15.77	19.54	2.29
171	stepped	20.90	24.67	3.42
172	ADD for each additional 25 mm of girth	3.13	3.51	0.54
173	Gutter or secret gutter: not exceeding 400 mm girth, sloping	59.70	65.62	11.39
174	ADD for each additional 25 mm of girth	3.25	3.65	0.59
	<i>Each</i>			
175	Catchpit, sump or the like: total surface area			
176	not exceeding 0.20 m ²	71.19	86.11	14.26
	0.20 to 0.40 m ²	101.33	124.34	20.52
177	Outlet: total surface area			
178	not exceeding 0.20 m ²	55.21	69.01	11.39
	0.20 to 0.40 m ²	80.80	98.69	16.32
	Collar around pipe or the like: not exceeding 150 mm high: brazed joint to metal pipe and to sheeting: overall diameter			
179	not exceeding 55 mm	22.90	28.15	5.72
180	55 to 110 mm	30.98	39.86	6.84
181	exceeding 110 mm	44.91	54.65	11.39
	Soaker: hand to others for fixing			
182	0.025 to 0.05 m ²	4.12	4.22	-
183	0.05 to 0.075 m ²	5.90	6.36	-
184	0.075 to 0.10 m ²	8.22	8.86	-

17: SHEET ROOF COVERINGS

LABOURS ON COPPER SHEET

Item		
17	<i>Metre</i>	£
	Copper nailing	
185	exceeding 50 mm centres	3.74
186	not exceeding 50 mm centres	7.48
187	Welted edge	9.13
188	Beaded edge	7.42
189	Turning into groove: wedging	8.65
190	Welted seam	12.55
191	Welted joint to sheeting	15.73
	Dressing into hollow, condensation channel or over moulding	
192	not exceeding 75 mm girth	6.84
193	75 to 150 mm girth	8.56
	Dressing over	
194	fillet	5.13
	glass and glazing bars	
195	along bars	6.26
196	across bars	11.39
197	Raking cutting	3.36
198	Curved cutting	6.59
	<i>Each</i>	
	Capped end: any girth	
199	to roll	5.72
200	to capping	6.84
	Capped intersection: any girth	
201	to roll	11.97
202	to capping	13.69
203	Brazed end to dressing into hollow, condensation channel or moulding: any girth	10.26
204	Dressing into outlet pipe or the like	6.26
205	Hole: for pipe or the like: through any thickness of sheet	6.50

17: SHEET ROOF COVERINGS

UNDERLAY

Specification

Wood pitch impregnated felt:
from an approved manufacturer.

Copper felt nails:
to BS 1202-2, Table 3.

Rates for the following include

Generally:
For perforations for pipes or the like.

For notching around obstructions.

Item			
17		Square Metre	£
	Covering: butt joints		
206	flat or sloping: laid loose		5.43
207	flat, sloping or vertical: fixing with copper felt nails		7.79
208	ADD where in repairs		1.46
		Metre	
209	Raking cutting		2.90
210	Curved cutting		3.40

17: SHEET ROOF COVERINGS

ZINC SHEET COVERINGS AND FLASHINGS

GENERALLY

Reference to other Sections: the Preambles to Lead Sheet Coverings and Flashings apply equally this Section unless otherwise stated.

Specification

Zinc sheets: to BS EN 988.

Nails: cut zinc not less than 25 mm long.

Workmanship: comply with the recommendations of CP 143-5.

Notes

Labours:
Pay for at the Rates in Copper Sheet Section.

Underlay:
Pay for at the Rates in Copper Sheet Section.

Rates for the following include

Flashings and other linear items:
For intermediate single lock welts.

Wedging:
For zinc wedges.

ZINC SHEET

Item			
		1	2
		0.65 mm thick	0.80 mm thick
17	Square Metre	£	£
	Exceeding 500 mm wide roof or wall covering		
211	flat	87.04	87.75
	pitch		
212	10° to 50°	95.60	96.88
213	exceeding 50° or vertical	104.14	105.43
	ADD where		
214	to dormer or the like	33.61	38.48
	in repairs		
215	not exceeding 1 m ²	16.51	17.10
216	1 to 5 m ²	13.10	13.98
217	5 to 10 m ²	10.26	10.84
218	ADD to roof, wall or dormer where not exceeding 500 mm wide or in area not exceeding 1 m ² (not applicable to repairs)	26.04	26.36

17: SHEET ROOF COVERINGS

ZINC SHEET - *continued*

Item			
		1	2
		0.65 mm thick	0.80 mm thick
17	<i>Metre</i>	£	£
	ADD to items 17.211 to 17.213 and 17.218 additional materials for (see page 189 for labours on copper sheet)		
219	drips not exceeding 50 mm high	5.51	5.13
220	welts not exceeding 50 mm high	2.45	2.28
	rolls not exceeding 50 mm wide and 50 mm high		
221	wood	7.65	7.12
222	seams	3.06	2.85
223	laps	15.31	14.24
224	Upstands not exceeding 500 mm high - <i>per 25 mm of girth</i>	9.49	9.04
225	Downstands not exceeding 500 mm deep - <i>per 25 mm of girth</i>	9.63	9.18

		1	2	3
		0.65 mm thick	0.80 mm thick	ADD where in repairs: any thickness
		£	£	£
	<i>Metre</i>			
	Flashing: not exceeding 150 mm girth			
226	horizontal, sloping or vertical	12.28	14.52	2.29
227	stepped	14.85	17.09	3.42
228	ADD for each additional 25 mm of girth	2.31	2.43	0.44
229	Hip or ridge: not exceeding 300 mm girth: horizontal or sloping	37.16	39.89	7.42
230	ADD for each additional 25 mm of girth	3.09	3.80	0.78
231	Gutter or secret gutter: not exceeding 400 mm girth: sloping	49.28	51.81	11.39
232	ADD for each additional 25 mm of girth	3.05	3.21	0.71

17: SHEET ROOF COVERINGS

ZINC SHEET - *continued*

		1	2	3
		0.65 mm thick	0.80 mm thick	ADD where in repairs: any thickness
Item				
17	<i>Each</i>	£	£	£
	Catchpit, sump or the like: total surface area			
233	not exceeding 0.20 m²	47.16	60.41	14.26
234	0.20 to 0.40 m²	73.81	93.47	20.52
	Outlet: total surface area			
235	not exceeding 0.20 m²	40.32	51.28	11.39
236	0.20 to 0.40 m²	66.96	79.79	16.32
	Collar around pipe or the like: not exceeding 150 mm high: soldered joint to metal pipe and sheeting: overall diameter			
237	not exceeding 55 mm	20.73	24.09	2.29
238	55 to 110 mm	27.24	33.96	5.13
239	exceeding 110 mm	37.20	45.71	9.13
	Soaker: hand to others for fixing			
240	0.025 to 0.05 m²	2.90	2.83	-
241	0.05 to 0.075 m²	4.19	3.85	-
242	0.075 to 0.10 m²	5.90	5.69	-
	<i>Metre</i>			£
	Zinc nailing			
243	exceeding 50 mm centres			3.01
244	not exceeding 50 mm centres			6.06

18: Tile and Slate Roof and Wall Coverings

PLAIN TILING

GENERALLY

Specification

Battens: softwood to BS 5268-2:

- strength class: C16 or C24;
- moisture content: not exceeding 22% at time of fixing;
- preservative treated with organic solvent preservatives using the double vacuum process specified in Section 16.

Nails: to BS 5534; Clause 4.12, for fixing:

- underlay: zinc-coated steel, extra large head 20 mm long;
- battens: zinc-coated steel, cut or wire, 32 to 45 mm longer than thickness of battens;
- plain tiles: copper, 45 mm long x 3 mm diameter;

Mortar for bedding and pointing: as specified in BS 5534, Table 6.

Mechanical fixings: as specified in BS 5534, Clause 4.12

Workmanship: comply with BS 5534 and 8000-6.

Method of measurement

Voids:

Make no deduction for voids not exceeding 1.00 m².

Measure boundary work only to voids exceeding 1.00 m².

Rates for the following include

Covering:

For sawn softwood battens not exceeding 25 x 36 mm fixed with nails (but not counter-battens).

For forming voids not exceeding 1.00 m² other than holes for pipes or the like.

Ridge, hip, vertical angle or valley tiles or cappings:

For straight or raking cutting tiling both sides.

For fitted ends.

Linear items described as raking:

For all necessary cutting.

Plugging battens:

For fixings at 350 mm centres.

Plugging and screwing battens:

For fixings at 600 mm centres.

Jointing to existing:

For all preparatory work, lifting and refixing existing, jointing or bonding in as necessary and making good.

Boundary work (hips, eaves, verges, ridges etc):

For undercloaks, cutting, bedding and pointing in mortar, end, angles and intersections.

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIXING ONLY PLAIN (DOUBLE LAP) TILES

Rates for the following include

For laying tiles to 65 mm lap.

Generally:

For everything except underlay felt and the cost of tiles and cappings.

Covering, pitch not exceeding 50°:

For nailing every fifth course of tiles with two nails to each tile.

For laying tiles and fittings of the following types:

1. Clay plain roofing tiles and fittings to BS EN 538, 539, 1024 and 1304, frost resistant quality, size 265 x 165 mm;
2. Concrete plain roofing tiles and fittings to BS EN 490 and 491, Group A, size 267 x 165 mm.

Covering, pitch exceeding 50° and vertical:

For nailing every course of tiles with two nails to each tile.

Item		£
18	<i>Square Metre</i>	
	Roof or wall covering	
001	pitch not exceeding 50°	19.45
002	ADD for nailing alternate courses	1.17
003	pitch exceeding 50°	24.74
004	vertical	23.62
005	DEDUCT where on existing battens: sloping or vertical	12.94
	ADD where	
006	25 x 50 mm battens, sloping or vertical	0.98
007	battens plugged	4.52
008	battens plugged and screwed	7.75
	Patch repair: exceeding 30 tiles: sloping or vertical (measure battens separately)	
009	not exceeding 5 m ²	17.05
010	5 to 10 m ²	16.42
	<i>Each</i>	
	Patch repair: not exceeding 30 tiles: including all labours: sloping or vertical (measure battens separately)	
011	single or first tile	9.20
012	ADD for each additional tile	1.13
	<i>Metre</i>	
013	Abutment	5.64
	ADD where	
014	raking	8.89
015	curved	13.41

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIXING ONLY PLAIN (DOUBLE LAP) TILES - *continued*

Item		
18	<i>Metre</i>	£
016	Eaves	6.49
	ADD where	
017	raking	8.89
018	curved	13.41
019	Verge	6.80
	ADD where	
020	raking	8.92
021	curved	13.64
	Ridge or hip	
022	round or angular capping	7.18
023	angular or curved tiles	7.95
024	ADD where in repairs	3.30
025	Hip: bonnet tiles	10.06
026	ADD where in repairs	4.40
027	Vertical angle: angular or curved tiles	11.20
	Valley	
028	angular or curved tiles	14.62
029	swept	16.51
	<i>Each</i>	
	Extra for	
030	end filled with mortar	2.04
031	end filled with matching tile slips in mortar (cost of slips included)	3.43
032	mitred angle	4.85
033	mitred intersection	5.27
034	Hole: for pipe or the like: through any type of plain tiling	8.77
	<i>Metre</i>	
035	Cutting to valley	5.84
036	Raking cutting	8.92
037	Curved cutting	13.64
038	Winchester cutting	16.51
039	Jointing to existing	5.84

FITTINGS

Specification

Rates for the following include

Hip irons: steel strip 25 mm wide x 6 mm thick galvanised after manufacture to BS EN ISO 1461 and holed for two No 12 wood screws.

Eaves ventilator:
For ends and angles.

Eaves ventilator:

- type: plastics air ducting tray minimum 25 mm depth to BS 5250;
- from an approved manufacturer.

Item 18	Each	£		
040	Fixing only ventilator tile: not exceeding 450 mm long			1.46
		1	2	3
		Fixing only	Supplying	ADD where
			and fixing	in repairs
		£	£	£
	Hip iron: screwing to timber			
041	300 mm girth: bends	2.43	3.20	2.43
042	400 mm girth: scrolled	2.43	3.57	2.43
043	Soaker	0.97	*	0.30
044	Metal slate	0.97	*	0.30
	Saddle			
045	not exceeding 0.10 m ²	8.56	*	2.56
046	0.10 to 0.20 m ²	12.82	*	4.28
047	0.20 to 0.40 m ²	17.10	*	5.13
	Metre			£
	Eaves ventilator: nailing to timber rafters at			
048	600 mm centres			2.33
049	450 mm centres			2.62
050	350 to 450 mm centres			2.91

* See 17.082 - 17.090 for Rates for supplying and fixing these items

UNDERLAY

Specification

Rates for the following include

Underlay:

- a. reinforced bitumen membrane to BS 8747 Type 1F;
- b. agrément certified plastics type;
- c. micro-perforated reinforced breathable underlay.

Generally:

For extra material for laps.

For perforations for pipes or the like.

For notching around obstructions.

Lap: 150 mm horizontally and 300 mm vertically.

18: TILE AND SLATE ROOF AND WALL COVERINGS

UNDERLAY - *continued*

Item		1	2	3
		Felt	Plastics	Breathable
18	<i>Square Metre</i>	£	£	£
	Covering: sloping or vertical			
051	fixing with battens (measure battens separately)	6.06	6.29	6.37
052	nailing	4.36	4.68	4.76
053	ADD where in repairs	1.46	1.39	1.39
	<i>Metre</i>			
054	Raking cutting	2.52	2.44	2.45
055	Curved cutting	3.02	2.92	2.93

SUNDRIES

		1	2	3
		Nailing	Plugging	Plugging and screwing
	<i>Square Metre</i>	£	£	£
056	Softwood counter batten: not exceeding 25 x 40 mm: at 600 mm centres: sloping or vertical	2.00	2.96	5.72
057	ADD for each 50 mm decrease in centres	0.23	0.35	0.68
	<i>Metre</i>			
058	Softwood batten or counter batten: not exceeding 25 x 40 mm: sloping or vertical: in repairs	1.53	2.08	4.52
				£
	Bedding in mortar: covering: any type: on wall			
059	112.5 mm wide			2.39
060	225 mm wide			3.80
061	337.5 mm wide			5.69
062	Raking out and repointing longitudinal and cross joints: at verge, ridge, hip or the like			4.46
	<i>Each</i>			
	Copper fixing clip: 1.2 mm thick: nailing with copper nails: bending: in repairs			
063	20 x 225 mm			2.01
064	20 x 300 mm			2.68

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIBRE CEMENT SLATING

GENERALLY

Reference to other Sections: the Preambles to Plain Tiling Section apply equally to this Section unless otherwise stated.

Notes

Fittings, Underlay and Sundries:
Pay for at the Rates in Plain Tiling Section on pages 197 and 198.

FIBRE CEMENT SLATES

Specification

Fibre cement slates:

- slates: to BS EN 492, type NT (non-asbestos);
- coloured: from an approved manufacturer;
- fix with copper nails to BS 1202-2.

Rates for the following include

Generally:

For everything including slates and cappings but not underlay felt.

For laying slates to 75 mm lap.

For fixing each slate with two nails and one copper disc rivet.

Item
18

Square Metre

1	2	3
Slate size		
600 x 300 mm	500 x 250 mm	400 x 200 mm
£	£	£

Roof or wall covering

065	pitch not exceeding 50°	30.56	38.48	46.59
066	pitch exceeding 50°	32.75	40.66	48.79
067	vertical	37.87	45.78	53.90

068	DEDUCT where on existing battens: sloping or vertical	3.59	3.94	4.61

ADD where

069	laid to 100 mm lap	1.66	2.78	4.40
070	25 x 50 mm battens: sloping or vertical	0.39	0.48	0.62
071	battens plugged	1.66	2.04	2.67
072	battens plugged and screwed	2.82	3.48	4.55

Patch repair: exceeding 20 slates: sloping or vertical (measure battens separately)

073	not exceeding 5 m ²	35.74	43.16	50.45
074	5 to 10 m ²	32.82	40.24	47.53

Each

Patch repair: not exceeding 20 slates: including all labours: sloping or vertical (measure battens separately)

075	single or first slate	16.72	16.26	15.72
076	ADD for each additional slate	4.95	4.65	4.23

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIBRE CEMENT SLATES - *continued*

Item		
18	<i>Metre</i>	£
077	Abutment	6.36
	ADD where	
078	raking	4.78
079	curved	8.48
080	Eaves	11.09
	ADD where	
081	raking	4.78
082	curved	8.48
083	Verge	10.61
	ADD where	
084	raking	4.78
085	curved	8.48
086	Ridge or hip: two piece angle capping with 205 mm wings: securing with 6 mm diameter rustproof screws and washers	19.07
087	ADD where in repairs	3.25
088	Valley gutter: securing with rustproof screws and washers	5.53
	<i>Each</i>	
	Extra for	
089	mitred angle	5.36
090	mitred intersection	5.75
091	Hole: for pipe or the like: through any type of covering	8.03
	<i>Metre</i>	
092	Cutting to valley	5.84
093	Raking cutting	8.92
094	Curved cutting	13.64
095	Jointing to existing	5.84

18: TILE AND SLATE ROOF AND WALL COVERINGS

NATURAL SLATING

GENERALLY

Reference to other Sections: the Preambles to Plain Tiling Section apply equally to this Section unless otherwise stated.

Notes

Fittings, Underlay and Sundries:
Pay for at the Rates in this Plain Tiling Section on pages 197 and 198.

FIXING ONLY NATURAL SLATES

Rates for the following include

Generally:

For everything except underlay felt and the cost of slates and cappings.

For laying slates and fittings of any of the following types:

1. Slates to BS EN 12326-1;
2. Clay ridge and hip tiles to BS EN 538, 539, 1024 and 1304, frost resistant quality;

3. Concrete ridge and hip tiles to BS EN 490 and 491.

For laying to 75 mm lap.

For centre nailing each slate with two nails.

Slates of random sizes:

For lengths from 610 mm to 305 mm with 75 mm minimum lap.

Item	Square Metre	1	2	3	4	5
		Slates of uniform size				Slates of random size
		610 x 305 mm	510 x 255 mm	460 x 230 mm	405 x 205 mm	
18		£	£	£	£	£
	Roof or wall covering					
096	pitch not exceeding 50°	12.33	13.92	15.49	16.71	18.92
097	pitch exceeding 50°	14.13	15.86	17.68	18.95	21.70
098	vertical	15.89	18.19	20.31	21.83	25.01
099	DEDUCT where on existing battens: sloping or vertical . . .	3.55	4.38	5.06	5.80	4.99
	ADD where					
100	25 x 50 mm battens: sloping or vertical	0.40	0.49	0.56	0.64	0.56
101	battens plugged	1.60	1.98	2.28	2.61	2.24
102	battens plugged and screwed	2.76	3.38	3.90	4.46	3.84
	Patch repair: exceeding 20 slates: sloping or vertical (measure battens separately)					
103	not exceeding 5 m ²	19.23	20.39	23.30	27.37	29.33
104	5 to 10m ²	16.82	18.07	20.84	23.74	25.24
	<i>Each</i>					
	Patch repair: not exceeding 20 slates: including all labours: sloping or vertical (measure battens separately)					
105	single or first slate	15.63	15.33	15.19	15.05	16.13
106	ADD for each additional slate	3.74	3.69	3.62	3.57	3.85

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIXING ONLY NATURAL SLATES - *continued*

Item		1	2
		Slates of uniform size	Slates of random size
18	<i>Metre</i>	£	£
107	Abutment	3.83	4.17
	ADD where		
108	raking	4.38	4.38
109	curved	8.77	8.77
110	Eaves	3.94	4.27
	ADD where		
111	raking	4.38	4.38
112	curved	8.77	8.77
113	Verge	5.20	5.92
	ADD where		
114	raking	4.38	4.38
115	curved	8.77	8.77
116	Ridge or hip: round or angular capping	13.43	14.17
117	ADD where in repairs	3.66	3.80
	Valley		
118	laced	16.94	18.12
119	swept	12.57	13.14
	<i>Each</i>		
	Extra for		
120	end filled with mortar	2.04	2.04
121	mitred angle	4.85	4.85
122	mitred intersection	5.27	5.27
123	Hole: for pipe or the like: through any type of covering	11.68	13.14
	<i>Metre</i>		
124	Cutting to valley	4.17	4.17
125	Raking cutting	4.38	4.38
126	Curved cutting	8.77	10.24
127	Mitring valley or hip	8.77	8.77
128	Mitring vertical angle	8.77	8.77
129	Jointing to existing	5.84	5.84

18: TILE AND SLATE ROOF AND WALL COVERINGS

PLAIN AND INTERLOCKING TILING

GENERALLY

Reference to other Sections: the Preambles to Plain Tiling Section apply equally to this Section unless otherwise stated.

Notes

Fittings, Underlay and Sundries:
Pay for at the Rates in Plain Tiling Section on pages 197 and 198.

FIXING ONLY SINGLE LAP TILES

Specification

Nails: to BS 1202, for fixing single lap tiles: copper, size as recommended by the manufacturer.

Eaves and verge single lap tile clips: supplied by tile manufacturer.

For laying tiles and fittings of the following types:

1. Clay normal roll pantiles and fittings, size 350 x 250 mm;
2. Concrete normal roll pantiles and fittings, size 420 x 280 mm;
3. Concrete single lap (interlocking) roofing tiles and fittings to BS EN 490 and 491, Group B, size 381 x 229 mm.

Rates for the following include

Covering:
For everything except underlay and the cost of tiles and cappings.

For laying tiles to 75 mm end lap and sufficient side lap.

For nailing every course with a nail to every hole provided in each tile.

Item				
		1	2	3
		Pantiles	Concrete interlocking	
		Clay	Concrete	tiles
		£	£	£
18	<i>Square Metre</i>			
	Roof covering pitch			
130	not exceeding 50°	9.48	7.62	9.12
131	exceeding 50°	10.10	8.29	10.64
132	DEDUCT where on existing battens	4.68	3.77	4.24
133	ADD where 25 x 50 mm battens	0.37	0.29	0.32
	Patch repair: exceeding 20 tiles (measure battens separately)			
134	not exceeding 5 m ²	10.05	7.57	9.12
135	5 to 10 m ²	9.40	7.11	8.53
	<i>Each</i>			
	Patch repair: not exceeding 20 tiles: including all labours (measure battens separately)			
136	single or first tile	16.40	15.76	16.19
137	ADD for each additional tile	3.99	3.55	3.80

18: TILE AND SLATE ROOF AND WALL COVERINGS

FIXING ONLY SINGLE LAP TILES - *continued*

Item		
18	<i>Metre</i>	£
138	Abutment	5.64
	ADD where	
139	raking	8.89
140	curved	13.41
	ADD for plain tile listing: bedding and pointing in mortar (cost of slips included)	
141	100 mm wide	8.69
142	150 mm wide	10.17
143	Eaves	7.95
	ADD where	
144	raking	8.89
145	curved	13.41
146	ADD for filling end of rolls with mortar	2.04
147	Verge	8.99
	ADD where	
148	raking	8.92
149	curved	13.64
150	Ridge or hip: round or angular capping	12.60
151	ADD where in repairs	3.30
152	ADD for plain tile galleting (cost of tile gallets included) - <i>per side</i>	2.36
153	Valley: troughed tiles	8.95
	<i>Each</i>	
	ADD to Item 18.153 for	
154	end filled with mortar	2.04
155	end filled with matching tile slips in mortar (cost of slips included)	3.43
156	mitred angle	4.85
157	mitred intersection	5.27
158	Hole: for pipe or the like: through any type of single lap tiling	11.68
	<i>Metre</i>	
159	Cutting to valley	5.84
160	Raking cutting	8.92
161	Curved cutting	13.64
162	Jointing to existing	5.84

19: Waterproofing

GENERALLY

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00m².

Rates for the following include

Jointing to existing:

For all preparatory work and making good.

MASTIC ASPHALT ROOFING

Specification

Approved firms: employ an approved specialist firm for laying asphalt. Removal of old work and sundry repairs may be carried out by the Contractor where permitted by the PM.

Maintenance period: the work shall be subject to a maintenance period of 18 months from the day after that on which the work as ordered is certified as complete by the PM.

Mastic asphalt for roofing: to BS 6925 Type R988, containing 25% (±5%) lake asphalt and manufactured by a BSI Kitemark Licensee.

Mastic asphalt for walkway tiles: to BS EN 13108, grade Sand manufactured by a BSI Kitemark Licensee.

Isolating membrane: black sheathing felt to BS 8747 Type 4A(i).

Reinforcement: galvanised expanded lathing to BS EN 13658-1 and 2, not less than 0.46 mm thick. Bitumen coated.

Primer:

- for cementitious and masonry surfaces: proprietary high bond type acceptable to asphalt contractor;
- for metal surfaces: bitumen with 60% by weight volatile solvent and of viscosity Redwood No. 2 at 21°C, 25 sec maximum.

Bonding compound:

- for walkway tiles: oxidised bitumen with a penetration to BS EN 1426, BS 2000-49 of 20 to 30 at 25° C and a softening point (ring and ball) to BS EN 1426, BS 2000-58 at 80° to 100° C;
- for bedding chippings; hot applied cut-back bitumen to BS EN 13924, Table 2, Grade 50 at 40° C or BS EN 12591 as appropriate.

Rubbing sand: clean coarse sand from natural deposits, to pass a 600 micron sieve and be retained on a 200 micron sieve.

Mineral aggregate chippings: hard light coloured non absorbent natural stone chippings, 14 mm nominal size to BS EN 13043.

Solar reflective paint: white solar reflective coating for application by roller, brush or spray.

Walkway tiles: glass fibre reinforced cement paving tiles.

Plastics moisture vents: from an approved manufacturer.

Workmanship: comply with BS 8218, BS 8000-4 and the recommendations of BS 8218 unless otherwise stated.

MASTIC ASPHALT ROOFING - *continued*

Roofing contractor's agreement: before work starts obtain roofing contractor's written agreement that the base is suitable and complies with BS 8218 except that falls shall be to even gradients of not less than 1 in 40.

Horizontal surfaces and surfaces not exceeding 10° pitch: lay isolating membrane loose with 50 mm laps.

Vertical surfaces and surfaces exceeding 10° pitch:

- a. bonding to masonry and cementitious surfaces:
 1. remove laitence from concrete surfaces;
 2. brush mortar joints to masonry;
 3. apply one coat high bond primer in accordance with manufacturer's instructions;
- b. bonding to timber surfaces:
 1. lay isolating membrane with 50 mm laps;
 2. lay steel lathing with long side of diamond across slope and pitch of horizontal strands upwards;
 3. fix lathing at 150 mm centres with clout nails or staples through isolating membrane;
 4. butt joint lathing to continue mesh pattern and fix edges at 75 mm centres to prevent springing;
- c. apply first coat of asphalt by trowel in small dabs to completely cover surface and ensure full adhesion. Apply succeeding coats by float.

Skirtings:

- a. apply first coat by trowel in small dabs to ensure full adhesion, apply succeeding coats by float;
- b. tuck top edge of skirting upstand into 25 x 25 mm chase;
- c. form weathered top and point to a flush finish with mortar (any mix).

Internal angle fillets: form fillets at internal angles between vertical, sloping and horizontal surfaces as follows:

- a. apply hot asphalt to warm and clean surfaces to receive fillet;
- b. remove temporary asphalt application and form solid asphalt fillet in two coats with finished face width not less than 50 mm.

Joints: lay each coat in bays with junctions staggered.

- a. not less than 150 mm in horizontal work;
- b. not less than 75 mm in vertical work.

Pipes through roofs: dress asphalt around pipe or sleeve and form collar not less than 150 mm high with 50 mm two coat angle fillet at base.

Sand rubbing: thoroughly rub in sand with a wooden float to break up bitumen film immediately after laying top coat and while still warm. Prevent sand from spreading over exposed edges of bay. Ensure that the entire horizontal surface of asphalt is treated. Do not use a brush or broom to spread sand.

Solar reflective coatings: apply in accordance with manufacturer's recommendations.

Chippings: apply hot bitumen dressing compound at the rate of 1.5 kg/m² and immediately dress with chippings closely bedded at a rate of 18 kg/m². Remove surplus loose chippings.

Walkway tiles: apply bitumen primer to underside of tiles and asphalt surface and allow to dry and:

- a. bond tiles to asphalt surface with hot bitumen bonding compound. Prevent excess compound from being squeezed between the tiles;
- b. lay in bays approximately 9 m²;
- c. leave 75 mm gap at angle fillets and perimeter to upstands.

Notes

Grooves and pointing in mortar:
Pay for at the Rates in Section 14.

Method of measurement

Skirtings, linings to gutters or the like:
Measure girth on face.

19: WATERPROOFING

MASTIC ASPHALT ROOFING - *continued*

Rates for the following include

Generally:

For cutting to line.

For working to metal flashings or the like.

Work subsequently covered:

For all edges and arrises.

N.B. Where the work is not to be covered, measure edges and arrises in addition.

For all necessary gritting and scoring.

Isolating membranes and reinforcement:

For cutting, holing, notching and bending.

For extra material for laps.

Asphalt in direct contact with metal surfaces:

For cleaning, scoring, wire brushing and priming with bitumen to form key for asphalt.

Arrises:

For rounded and chamfered angles.

Internal angle fillets:

For ends and angles.

Skirtings, fascias and aprons:

For edges, drips and arrises.

For internal angle fillets.

For dressing over tilting fillets.

For turning nibs into grooves and extra material.

For stopped and fair ends and angles.

For jointing to existing.

Linings to gutters and channels and covering to kerbs:

For edges and arrises.

For internal angle fillets.

For dressing over tilting fillets.

Collars:

For working to any thickness or number of coats.

For arrises and internal angle fillets.

For binding wire mesh.

Linings to cesspools and similar enumerated items:

For arrises, internal angle fillets and similar labours *excluding* working to outlets.

Item

19 Work executed in small quantities

Where the combined total area of asphalt roofing, executed in one building at the same time under one or more orders falls within the categories shown, multiply Rates 19.004 to 19.093 by the following factors:

001	not exceeding 10 m ²	multiply by 3.00
002	10 to 25 m ²	multiply by 1.30

Work executed overhead or in confined situations

003	Work and labours carried out overhead or in confined situations (where at least 0.60 m of working space cannot be provided): Rates 19.004 to 19.089 multiply by 1.20.

19: WATERPROOFING

MASTIC ASPHALT ROOFING - *continued*

Item		
19	<i>Square Metre</i>	£
	Roofing: 20 mm thick: sand rubbing: exceeding 500 mm wide	
	horizontal or to falls, crossfalls or slopes not exceeding 10° pitch: two coats	
004	any base: isolating membrane	29.64
	sloping 10° to 45° pitch: three coats	
005	masonry base: priming base	36.93
006	timber base: isolating membrane: reinforcement	47.81
	vertical or sloping exceeding 45° pitch: three coats	
007	masonry base: priming base	43.87
008	timber base: isolating membrane: reinforcement	55.67
009	ADD where not exceeding 500 mm wide; any width	14.31
	ADD for solar reflective treatment: any width	
010	paint of approved type: in two coats	6.59
011	chippings in hot bitumen	3.24
	ADD for walkway tiles: any width	
012	300 x 300 x 8 mm tiles: priming and bedding	43.44
	<i>Metre</i>	
	Cutting walkway tiles	
013	raking	3.36
014	curved	4.20
	Skirting: 13 mm thick: two coats: masonry base: priming base: girth	
015	not exceeding 150 mm	13.89
016	150 to 225 mm	20.87
017	225 to 300 mm	27.77
018	ADD for each additional 50 mm of girth	1.93
019	ADD where raking	1.81

19: WATERPROOFING

MASTIC ASPHALT ROOFING - *continued*

Item		
19	<i>Metre</i>	<i>£</i>
	Skirting: 20 mm thick: three coats: timber base: isolating membrane: reinforcement: girth	
020	not exceeding 150 mm	17.58
021	150 to 225 mm	26.44
022	225 to 300 mm	35.20
023	ADD for each additional 50 mm of girth	3.34
024	ADD where raking	3.34
	Apron or fascia: 20 mm thick: two coats: concrete base: priming base: girth	
025	not exceeding 150 mm	15.61
026	150 to 225 mm	23.47
027	225 to 300 mm	31.22
028	ADD for each additional 50 mm of girth	1.44
029	ADD where raking	2.75
	Lining to gutter: 20 mm thick: three coats: to falls	
	concrete base: priming base: isolating membrane: average girth	
030	not exceeding 150 mm	16.23
031	150 to 225 mm	24.37
032	225 to 300 mm	32.34
033	ADD for each additional 50 mm of average girth	3.68
	timber base: isolating membrane: reinforcement: average girth	
034	not exceeding 150 mm	20.00
035	150 to 225 mm	30.06
036	225 to 300 mm	39.81
037	ADD for each additional 50 mm of average girth	4.43
	<i>Each</i>	
	Extra for: any girth	
038	stopped end	1.12
039	returned end	5.78
040	angle	2.22
041	intersection	2.50
042	jointing to existing	0.75

19: WATERPROOFING

MASTIC ASPHALT ROOFING - *continued*

Item		
19	<i>Metre</i>	£
	Lining to channel: curved in section: 20 mm thick: two coats: to falls	
	concrete base: isolating membrane: average girth	
043	not exceeding 150 mm	12.32
044	150 to 225 mm	18.34
045	225 to 300 mm	24.41
046	ADD for each additional 50 mm of average girth	2.14
	timber base: isolating membrane: reinforcement: average girth	
047	not exceeding 150 mm	14.66
048	150 to 225 mm	22.07
049	225 to 300 mm	29.34
050	ADD for each additional 50 mm of average girth	2.81
	<i>Each</i>	
	Extra for: any girth	
051	stopped end	0.61
052	returned end	2.86
053	angle	0.72
054	intersection	0.92
055	jointing to existing	0.61
	<i>Metre</i>	
	Covering to kerb: 13 mm thick sides: 20 mm thick top: two coats: masonry base: priming base: girth	
056	not exceeding 150 mm	16.89
057	150 to 225 mm	25.35
058	225 to 300 mm	33.80
059	ADD for each additional 50 mm of average girth	1.93
	<i>Each</i>	
	Extra for any girth	
060	stopped end	0.41
061	returned end	1.62
062	angle	0.75
063	jointing to existing	0.61

19: WATERPROOFING

MASTIC ASPHALT ROOFING - *continued*

Item		
19	<i>Metre</i>	<i>£</i>
064	Internal angle fillet	3.84
065	Fair edge	0.69
066	Rounded edge	1.16
067	Undercut drip	1.67
068	Arris	1.16
069	Turning nib into groove: extra material	1.30
070	Solid water check roll	5.77
071	Jointing to existing	2.39
	<i>Each</i>	
	Collar: around pipe, standard or the like: not exceeding 150 mm high: overall diameter	
072	not exceeding 55 mm	8.58
073	55 to 110 mm	11.68
074	exceeding 110 mm	13.08
	Covering to bonding block: 20 mm thick: two coats	
	concrete base: priming base: total surface area	
075	not exceeding 0.10 m ²	16.43
076	0.10 to 0.20 m ²	21.70
	timber base: isolating membrane: reinforcement: total surface area	
077	not exceeding 0.10 m ²	16.85
078	0.10 to 0.20 m ²	25.02
	Lining to cesspool or outlet through parapet wall: 20 mm thick: two coats: masonry base: priming base: isolating membrane: total surface area	
079	not exceeding 0.20 m ²	26.14
080	0.20 to 0.40 m ²	32.87
081	0.40 to 0.60 m ²	38.81
082	Outlet or dishing to gully	13.86
083	Roof ventilator: plastics: bonding with hot bitumen	19.56
084	Dab for fixing lightning conductor or the like: not exceeding 150 x 150 x 25 mm thick	0.91

19: WATERPROOFING

INSULATION AND VAPOUR BARRIERS

Specification

Under-asphalt insulant: rigid bonded mineral fibre board. Thermal conductivity within the range 0.033 to 0.036 W/mK.

Vapour barrier: high performance polyester fleece weighing not less than 125 g/m² or woven glass fibre both with a minimum tensile strength of 400 N in longitudinal and transverse directions.

Primer: proprietary high bond type acceptable to asphalt contractor.

Bonding compound: oxidised bitumen with a penetration to BS EN 1426, BS 2000-49 of 20 to at 25°C and a softening point (ring and ball) to BS EN 1426, BS 2000-58 at 80° to 100°C.

Laying vapour barrier:

- a. prime concrete and cementitious screed surfaces with bitumen primer brushed well in and allow 24 hours to dry;
- b. apply continuous even coating of hot bonding compound to base at a rate of 1.5 kg/m² and lay vapour with 100 mm side and end laps fully bonded;

- c. turn up and fully bond vapour barrier to abutments for overall thickness of roof insulation. Seal to roof outlet flanges and to pipes or sleeves passing through roof.

Laying insulant: apply hot bonding compound to surface beneath insulant. Lay boards with staggered butt joints. Apply pressure to ensure a continuous bond. Leave a continuous 25 mm wide gap at abutment with vertical surfaces for infilling with asphalt.

Protect from weather including edges until laying of roof covering.

Rates for the following include

Generally:

For holing and notching.

For extra material for laps and turning up vapour barrier.

Item
19

Square Metre

Roofing insulation: vapour barrier: screed or concrete base:
exceeding 500 mm wide

085	horizontal or to falls, crossfalls or slopes not exceeding 10° pitch	7.69	14.19	27.95
086	sloping 10° to 45° pitch	11.33	18.22	31.97
087	ADD where not exceeding 500 mm wide; any width	4.42	4.42	4.42
	<i>Metre</i>			
088	Raking cutting	1.63	2.31	3.66
089	Curved cutting	2.45	3.65	5.49

19: WATERPROOFING

EAVES TRIM

Specification

Eaves trim: mill finished preformed aluminium.

Rates for the following include

Generally:

For drilling and screwing with aluminium screws.

For ends.

Item			1	2	3	4
			Width on face		ADD	
			not exceeding 50 mm	50 to 100 mm	not exceeding 105 mm	where in repairs: any size
			Length of fixing arm			
			not exceeding 50 mm	50 to 105 mm	not exceeding 105 mm	
			£	£	£	£
19		<i>Metre</i>				
090	Eaves trim: to timber		6.12	7.59	10.63	0.62
		<i>Each</i>				
091	Extra for angle		4.99	5.66	6.92	0.49

SUNDRY REPAIRS

Rates for the following include

Generally:

For any thickness of covering

		<i>Metre</i>	£
	Cutting out crack in old asphalt roof covering: making good with		
092	new material to match existing		15.09
093	mastic of an approved proprietary brand		14.09
		<i>Each</i>	
	Cutting out detached blister in old asphalt roof covering:		
	not exceeding 0.50 m ² : making good with		
094	new material to match existing		15.09
095	mastic of an approved proprietary brand		10.96

19: WATERPROOFING

APPLIED LIQUID ROOFING

GENERALLY

Definition of terms

Horizontal: includes falls, crossfalls and slopes not exceeding 10° pitch.

Vertical: includes slopes exceeding 10° pitch.

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00m².

Measure the extra girth of corrugations.

Rates for the following include

Generally:
For preparing base.

For cutting to line.

For working around all pipes, obstructions or the like.

BLACK BITUMEN SOLUTION

Specification

Black bitumen solution: to BS 3416 Type 1.

Item		1	2
		Two coats	Three coats
19	Square Metre	£	£
	Roof coating: metal base: exceeding 500 mm wide		
096	horizontal	3.73	5.07
097	vertical	3.91	5.26
098	ADD where not exceeding 500 mm wide; any width	1.33	2.02
099	ADD where corrugated	0.87	1.29
100	ADD where in repairs not exceeding 10m ²	2.85	4.19

19: WATERPROOFING

LIQUID BITUMEN PROOFING

Specification

Liquid bitumen proofing:

- black or green proprietary type from an approved manufacturer;
- apply evenly by brush.

Item		1	2	3
		Fibre cement sheeting	Metal sheeting	Felt roofing
19	Square Metre	£	£	£
	Roof coating: exceeding 500 mm wide			
101	horizontal: black coat: initial coat	2.58	2.43	2.28
102	ADD for each additional black coat	2.23	2.08	1.93
103	ADD for each green coloured coat	4.00	3.83	3.65
104	vertical: black coat: initial coat	2.70	2.55	2.40
105	ADD for each additional black coat	2.36	2.21	2.06
106	ADD for each green coloured coat	4.13	3.96	3.77
107	ADD where not exceeding 500 mm wide; any width	1.38	1.29	0.81
108	ADD where corrugated	1.15	1.15	1.15
109	ADD where in repairs not exceeding 10m ²	2.30	2.30	2.30

19: WATERPROOFING

APPLIED LIQUID TANKING OR DAMP PROOFING

GENERALLY

Specification

Cold applied membranes:

- black bitumen solution to BS 3416 Type 1;
- rubberised bitumen emulsion from an approved manufacturer.

Application of cold applied membranes:

- apply evenly by brush or airless spray;
- bond damp proof courses projecting from walls to membrane so that damp proofing is continuous;
- allow adequate drying time between coats.

Hot applied membranes: asphaltic bitumen with:

- flashpoint of at least 275° C, when tested to BS EN ISO 2592, BS 2000-36;
- solubility of at least 99.5%, when tested to BS EN 12592;
- penetration of 5 mm ± 1 mm at 25 °C and drop in penetration after 5 hours at 163 °C not to exceed 20%, when tested to BS EN 1426, BS 2000-49;
- softening point of between 47°C and 56°C, when tested to BS EN 1426, BS 2000-58;
- loss on heating of 0.2% maximum by weight, when tested to BS EN 13303, BS 2000-506

Bitumen primer: bitumen solution or emulsion.

Application of hot applied membranes:

- prime base surface with bitumen primer, brush well in and allow to dry;
- pour membrane hot in uniform coats to a thickness of 1.5 mm each coat;

- maintain steady temperature not exceeding 176° C in the pot whilst pouring;
- bond to horizontal damp proof courses in walls.

Definition of terms

Horizontal: includes falls, crossfalls and slopes not exceeding 10° pitch.

Vertical: includes slopes exceeding 10° pitch.

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00m².

Rates for the following include

Generally:

For preparing base.

For cutting to line.

For bonding to edges of adjoining damp proof courses.

For working around all pipes, obstructions or the like.

19: WATERPROOFING

COLD APPLIED MEMBRANES

Item		1	2	3	4
		Black bitumen solution		Rubberised bitumen emulsion	
		Two coats	Three coats	Two coats	Three coats
		£	£	£	£
19	<i>Square Metre</i>				
	Damp proofing: concrete or brickwork base: exceeding 500 mm wide				
110	horizontal	7.22	10.71	13.19	19.63
111	vertical	8.73	12.89	14.87	22.14
112	ADD where not exceeding 500 mm wide; any width	3.11	4.50	7.36	10.88
113	ADD where in repairs not exceeding 10m ²	2.93	4.19	2.93	4.19

HOT APPLIED MEMBRANES

	<i>Square Metre</i>	£
	Damp proofing: concrete or brickwork base: priming base: two coats: exceeding 500 mm wide	
114	horizontal	15.74
115	vertical	18.78
116	ADD where not exceeding 500 mm wide; any width	6.91
117	ADD where in repairs not exceeding 10 m ²	4.58

19: WATERPROOFING

FLEXIBLE SHEET TANKING OR DAMP PROOFING

GENERALLY

Definition of terms

Horizontal: includes falls, crossfalls and slopes not exceeding 10° pitch.

Vertical: includes slopes exceeding 10° pitch.

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00m²

Rates for the following include

Generally:

For work of any width.

For preparing base.

For all cutting, holing, notching and bending.

For extra material for laps.

For bonding to edges of adjoining damp proof courses.

POLYTHENE SHEET

Specification

Polythene sheet:

- translucent or black opaque.
- loose lay in a single layer with minimum 150 mm laps.

Item
19

Square Metre

Damp proofing: masonry base

		1	2	3	4	5
		250	500	1000	1200	2000
		gauge	gauge	gauge	gauge	gauge
		£	£	£	£	£
118	horizontal	0.94	0.99	1.24	1.59	2.37
119	vertical	1.41	1.46	1.73	2.12	2.90
120	ADD where in repairs not exceeding 10 m ²	0.31	0.31	0.31	0.31	0.31

Metre

Turn-up at abutment: masonry base: girth

121	not exceeding 200 mm	0.64	0.66	0.77	0.93	1.15
122	200 to 400 mm	0.99	1.00	1.16	1.44	1.81

19: WATERPROOFING

BITUMEN FELT MEMBRANES

Specification

Bitumen felt membranes: hessian based, coated both sides with asphaltic bitumen, total weight 5.44 kg/m²

Loose lay in a single layer with minimum 100 mm laps. Bond at laps and to horizontal damp proof courses in walls with asphaltic bitumen.

Item		
19	<i>Square Metre</i>	<i>£</i>
	Damp proofing: masonry base	
123	horizontal	8.76
124	vertical	9.65
125	ADD where in repairs not exceeding 10 m ²	0.72
	<i>Metre</i>	
	Turn-up at abutment: masonry base: girth	
126	not exceeding 200 mm	3.42
127	200 to 400 mm	5.14

PLASTICS-BITUMEN COMPOSITE MEMBRANES

Specification

Plastics-bitumen composite membranes: self adhesive polythene-bitumen composite incorporating a 1.5 mm minimum bituminous composition element protected with a removable backing paper and 500 gauge polythene bonded together.

- a. prime base surfaces where required using brush or broom ensuring complete coverage;
- b. remove any backing paper from membrane and press down firmly;
- c. work from centre to edge removing trapped air as application proceeds;
- d. overlap sheets at least 100 mm;
- e. ensure full bond at laps and with horizontal damp proof courses;
- f. do not lay when temperatures are 5° C or below.

Bitumen primer: bitumen solution or emulsion.

Lay: in accordance with manufacturer's instructions and:

	<i>Square Metre</i>	<i>£</i>
	Damp proofing: masonry base	
128	horizontal	11.19
129	vertical	12.01
130	ADD where in repairs not exceeding 10 m ²	1.93
	<i>Metre</i>	
	Turn-up at abutment: masonry base: girth	
131	not exceeding 200 mm	4.47
132	200 to 400 mm	7.20

20: Proprietary Linings and Partitions

METAL FRAMED SYSTEMS TO WALLS

METAL STUD PARTITIONS

Specification

Metal studs and channels: cold rolled steel sections to BS EN 10162, hot-dip zinc coated to BS EN 10143.

Gypsum plasterboard: 12.5 mm tapered edge wallboard to BS EN 520.

Insulation: mineral wool to BS EN 13162 and BS 476-7.

Notes

Timber plates and fixings for fittings:
Pay for at the Rates in Section 16.

Labours on plasterboard:
Pay for at the Rates under Gypsum Plasterboard.

Method of measurement

Generally:
Measure the mean length of partition.

Voids:
Make no deduction for voids not exceeding 1.00 m².

Rates for the following include

Generally:
For metal floor and head channels fixed to timber plates.

For metal studs at 600 mm centres.

For screwing plasterboard to metal studs and channels.

Fair ends and angles:
For additional metal stud.

For facing with plasterboard.

Tee junctions:
For additional metal stud.

Abutments to different wall surfaces:
For metal stud plugged and screwed to wall.

Abutments to door openings or the like:
For 38 x 48 or 70 mm wrought softwood cavity spacer screwed to metal stud.

Item
20

Metre

Partition: 2400 mm high

001	boarded one side	49.15	66.18	50.04	67.07
002	ADD for each 300 mm variation in height	4.68	6.60	4.73	6.65
003	boarded both sides	80.67	114.77	81.56	115.66
004	ADD for each 300 mm variation in height	8.23	12.05	8.28	12.10

1	2	3	4
48 mm Metal studs	70 mm Metal studs		
Layers of plasterboard			
One	Two	One	Two
£	£	£	£

20: PROPRIETARY LININGS AND PARTITIONS

METAL STUD PARTITIONS - *continued*

Item 20	Metre	1	2	3	4
		48 mm Metal studs		70 mm Metal studs	
		Layers of plasterboard			
		One	Two	One	Two
		£	£	£	£
	Extra over for horizontal fixing channel: at plasterboard joint				
005	boarded one side	4.69	4.69	4.69	4.69
006	boarded both sides	9.41	9.41	9.41	9.41
007	Angle: boarded one or both sides	4.82	6.60	4.95	6.73
008	Tee junction: boarded one or both sides	4.62	4.62	4.75	4.75
009	Abutment: different wall surface: boarded one or both sides	6.70	6.70	6.83	6.83
	Abutment: opening for door or the like				
010	boarded one side	7.30	8.97	7.43	9.10
011	boarded both sides	8.97	12.32	9.10	12.44
012	Fair end: boarded one or both sides	4.53	6.13	4.81	6.56
	Each				
	Hole				
013	boarded one side	3.35	4.19	3.35	4.19
014	boarded both sides	6.69	8.37	6.69	8.37
	Notching - per 25 mm of girth				
015	boarded one side	0.33	0.41	0.33	0.41
016	boarded both sides	0.67	0.84	0.67	0.84
	Square Metre				£
	Insulation: fixing in cavity				
017	25 mm thick				7.00
018	50 mm thick				9.30
019	100 mm thick				13.96

RESECURING AND FIXING ONLY METAL STUD PARTITIONS

	<i>Square Metre</i>	£
	Partition: any type	
020	resecuring	13.24
021	fixing only	26.05
022	ADD for cutting and fitting as necessary to suit new position	3.52

DRYLINING TO WALLS AND CEILINGS

GENERALLY

Specification

Nails: to BS 8000-8, Section 3.1.3, Table 1: "Lengths of fixings for plaster boards".

Jointing tape and compound: as recommended by wallboard manufacturers.

Workmanship: comply with BS 8000-8 and BS 8212.

Fixing plasterboard:

- a. centre edges of wallboards on battens;
- b. leave gap between edges and ends of boards in accordance with the manufacturer's recommendations;
- c. fix boards in accordance with the manufacturer's recommendations.

Jointing taper edge boards:

- a. apply joint tape using Ames auto-taper;
- b. bed tape firmly into joint cement and free from trapped air bubbles;
- c. apply three layers of joint cement with appropriate Ames finishers. Allow to dry between applications.

Definition of terms

Reveal or soffit of opening or recess in lining exceeding 600 mm wide: to walls, beams or columns.

Lining: excludes proprietary systems and timber base.

Method of measurement*Generally:*

Measure length or area on face over obstructions.

Make no deduction for voids in linings measured linearly other than for those voids which extend full height, full girth or full width.

Make no deduction for voids not exceeding 0.50 m² in linings measured superficially.

Measure recesses where for part height only and not where full height.

Rates for the following include*Generally:*

For internal work.

For nailing to timber base.

For additional labour for overhand work.

20: PROPRIETARY LININGS AND PARTITIONS

GYPSUM PLASTERBOARD

Specification

Gypsum plasterboard:

- a. wallboard: to BS EN 520, Type A;
- b. vapour control grade: to BS EN 520, Type A;
- c. improved fire protection grade: to BS EN 520, Type F;
- d. improved sound insulation grade: to BS EN 520, Type D;
- e. moisture resistant grade: to BS EN 520, Type H1.

Item 20	Metre				
		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness	Any thickness		
		9.5 mm	12.5 mm	15 mm	thickness
		£	£	£	£
	Lining				
023	to wall: 2400 mm high	19.54	21.01	26.99	15.81
024	ADD or DEDUCT for each 300 mm variation in height	2.46	2.65	3.39	2.00
025	to column, beam or bulkhead: not exceeding 300 mm girth	8.95	7.72	9.45	6.27
026	ADD for each additional 300 mm girth	3.01	3.30	4.19	2.97
	to reveal or soffit of opening or recess				
027	not exceeding 300 mm wide	6.88	7.72	9.48	6.52
028	300 to 600 mm wide	13.75	15.44	18.89	13.09
	ADD where				
029	fire resistant grade - per 300 mm of height, girth or width	-	0.43	0.40	-
030	vapour check grade - per 300 mm of height, girth or width	-	0.33	0.32	-
031	sound resistant grade - per 300 mm of height, girth or width	-	0.69	0.71	-
032	moisture resistant grade - per 300 mm of height, girth or width	-	0.70	0.72	-
	Square Metre				
033	Lining: to ceiling	9.06	9.68	11.89	7.54
	ADD where				
034	fire resistant grade	-	1.39	1.35	-
035	vapour check grade	-	1.10	1.09	-
036	sound resistant grade	-	2.27	2.38	-
037	moisture resistant grade	-	2.31	2.44	-
	ADD to lining to ceiling, beam or bulkhead (except in staircase area) where ceiling level				
038	3.50 to 5.00 m above floor	2.10	2.10	2.10	2.10
039	5.00 to 6.50 m above floor	3.51	3.51	3.51	3.51

20: PROPRIETARY LININGS AND PARTITIONS

GYPSUM PLASTERBOARD - *continued*

Item 20		1	2	3	4
		Supplying and fixing			Fixing only
		Thickness			Any
		9.5 mm	12.5 mm	15 mm	thickness
	<i>Square Metre</i>	£	£	£	£
	ADD where				
040	in staircase area	4.21	4.21	4.21	4.21
041	in plant room	1.40	1.40	1.40	1.40
	ADD where in repairs				
042	not exceeding 1 m²	23.12	23.12	23.12	23.12
043	1 to 5 m²	11.50	11.50	11.50	11.50
	<i>Metre</i>				
	Angle				
044	internal	5.04	3.80	3.98	3.47
045	external	4.61	4.78	4.97	4.46
	Abutment				
046	plain	3.07	3.24	3.43	2.92
047	irregular	3.34	3.52	3.69	3.19
048	Raking cutting	2.99	3.20	3.46	2.79
049	Curved cutting	7.18	7.28	7.87	6.88
050	Jointing to existing	2.79	2.79	2.79	2.79
	<i>Each</i>				
051	Hole: for pipe or the like	3.90	3.90	3.90	3.90
052	Notching - <i>per 25 mm of girth</i>	0.29	0.29	0.29	0.29
053	Extra over for access panel: screwing with brass screws and and cups (measure battens separately) - <i>per metre of girth</i>	4.45	4.62	4.89	4.15

INSULATED GYPSUM PLASTERBOARD

Specification

- Insulated gypsum plasterboard:* comprising:
- 12.5 mm tapered edged wallboard facing to BS EN 520, Type A;
 - expanded polystyrene backing; or
 - phenolic foam backing.

20: PROPRIETARY LININGS AND PARTITIONS

INSULATED GYPSUM PLASTERBOARD - *continued*

Item 20	Metre	1	2	3	4	5	6	7	8	
		Supplying and fixing								Fixing only
		Expanded polystyrene backing				Phenolic foam backing			Any type:	
		Overall thickness								any
		22 mm	30 mm	40 mm	50 mm	50 mm	55 mm	60 mm	thickness	
		£	£	£	£	£	£	£	£	
Lining										
054	to wall: 2400 mm high	31.43	33.29	36.56	39.64	52.31	55.87	60.44	19.61	
055	ADD or DEDUCT for each 300 mm variation in height	3.93	4.19	4.61	5.00	6.54	7.02	7.60	2.50	
056	to column, beam or bulkhead; not exceeding 300 mm girth	10.52	10.76	12.51	14.17	13.13	13.59	15.50	9.23	
057	ADD for each additional 300 mm girth	4.82	5.06	5.46	5.72	7.43	7.89	8.45	3.53	
	to reveal or soffit of opening or recess									
058	not exceeding 300 mm wide	10.52	10.78	12.52	14.18	13.13	13.60	15.51	8.92	
059	300 to 600 mm wide . .	16.62	17.10	19.87	22.51	21.84	22.75	25.85	14.03	
060	ADD where vapour check grade - per 300 mm of height, girth or width	0.56	0.64	0.68	0.72	-	-	-	-	
	Square Metre									
061	Lining: to ceiling	14.08	14.94	16.33	17.64	22.78	24.35	26.28	8.76	
062	ADD where vapour check grade	1.86	2.14	2.25	2.44	-	-	-	-	
	ADD to lining to ceiling, beam or bulkhead (except in staircase area) where ceiling level									
063	3.50 to 5.00 m above floor	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	
064	5.00 to 6.50 m above floor	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	
	ADD where									
065	in staircase area	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	
066	in plant room	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	
	ADD where in repairs									
067	not exceeding 1 m²	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12	
068	1 to 5 m²	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	

20: PROPRIETARY LININGS AND PARTITIONS

INSULATED GYPSUM PLASTERBOARD - *continued*

Item		1	2	3	4	5	6	7	8
		Supplying and fixing							Fixing only
		Expanded polystyrene backing				Phenolic foam backing			Any type:
		Overall thickness							any
		22 mm	30 mm	40 mm	50 mm	50 mm	55 mm	60 mm	thickness
20	Metre	£	£	£	£	£	£	£	£
	Angle								
069	internal	3.91	4.08	4.27	4.43	4.60	4.76	4.93	3.76
070	external	5.01	5.18	5.35	5.51	5.68	5.85	6.01	4.84
	Abutment								
071	plain	3.34	3.51	3.67	3.84	4.00	4.17	4.34	3.16
072	irregular	3.51	3.67	3.84	4.00	4.17	4.34	4.51	3.34
073	Raking cutting	3.59	3.66	3.74	3.81	4.42	4.55	4.68	3.06
074	Curved cutting	8.34	8.43	8.54	8.66	9.58	9.78	9.96	7.53
075	Jointing to existing	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06
	Each								
076	Hole: for pipe or the like	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
077	Notching - <i>per</i> <i>25 mm of girth</i>	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
078	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of</i> <i>girth</i>	5.35	5.41	6.10	6.43	7.04	7.33	7.59	5.68

GALVANISED STEEL BEADS

Specification

External angle reinforcing bead: perforated galvanised mild steel angle, size 25 x 25 mm.

	<i>Metre</i>	£
079	Angle bead	2.28

RESECURING LININGS

	<i>Square Metre</i>	£
	Resecuring lining	
080	to wall or column	8.27
081	to ceiling or beam	9.73

21: Cladding and Covering

WEATHERBOARDING

GENERALLY

Specification

Timber: to BS 1186-3.

Timber quality:

- a. to receive paint finish: class 2;
- b. to receive clear finish: class CSH

Breather paper lining: from an approved manufacturer.

Fixings:

- a. nails: to BS 1202. Length not less than the thickness of the board being fixed.
- b. screws: to BS 1210.

Cutting treated timber: re-treat all surfaces treated timber exposed by cutting, boring matching preservatives applied in two brush.

Workmanship: to BS 8000-5.

Definition of terms

Wall: includes jambs and sills to openings recesses in walls and attached columns.

Sloping: sloping both exceeding 10° from horizontal and exceeding 10° from the vertical.

Finished angle: where angles are other butt jointed.

Notes

Preservation treatment:
Pay for at the Rates in Section 16.

Battens:
Pay for at the Rates in Section 16.

Screwing, plugging, and pelleting:
Pay for at the Rates in Section 22.

Method of measurement

Generally:
Measure width of each face.

Make no deduction for voids not exceeding 0.50 m².

Timber sizes:
Measure the finished size.

Rates for the following include

Generally:
For internal or external work.

For nailing to battens.

For breather paper lining.

For pencil rounded arrises.

Item
21

Clear finished timber

- 001 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this Section multiplied by 1.05.

21: CLADDING AND COVERING

SOFTWOOD

Item		1	2	3
		Supplying and fixing		Fixing only
		Sawn:	Wrought:	Sawn or
		150 x 25 mm thick boards	144 x 19 mm thick boards	wrought: any size
21	Square Metre	£	£	£
	Wall vertical or sloping: exceeding 600 mm wide			
	feather edged: 10 mm thin edge			
002	32 mm laps	21.13	24.24	11.65
003	38 mm laps	22.37	26.11	12.34
	shiplap			
004	19 mm laps	-	18.35	6.64
	ADD where			
005	not exceeding 600 mm wide	16.48	21.37	11.13
	in repairs			
006	not exceeding 1 m²	16.48	21.37	11.13
007	1 to 5 m²	10.45	12.66	6.73
	Metre			
	Raking cutting			
008	feather edge	4.55	5.09	3.35
009	shiplap	-	3.62	2.23
	Curved cutting			
010	feather edge	5.95	6.80	3.60
011	shiplap	-	5.34	3.60
012	Heading joint to existing	2.23	2.23	2.23
	Each - per 25 mm of girth			
013	Notching	0.14	0.14	0.14

21: CLADDING AND COVERING

WROUGHT WESTERN RED CEDAR

Rates for the following include

Generally:

For fixing with horizontal or vertical joints.

Item				
		1	2	3
		Supplying and fixing		Fixing only
		144 x 13 mm boards	144 x 19 mm boards	Any size
21	<i>Square Metre</i>	£	£	£
014	Wall boarding: shiplap with 19 mm laps or tongued, grooved and V-jointed (fixing with joints vertical if required): vertical or sloping: exceeding 600 mm wide	47.73	45.80	14.08
	ADD where			
015	not exceeding 600 mm wide	26.94	28.34	11.13
	in repairs			
016	not exceeding 1 m ²	26.94	28.34	11.13
017	1 to 5 m ²	16.02	16.71	6.73
	<i>Metre</i>			
018	Raking cutting	11.88	12.11	2.21
019	Curved cutting	16.25	16.49	3.60
020	Heading joint to existing	2.21	2.21	2.21
	<i>Each - per 25 mm of girth</i>			
021	Notching	0.14	0.14	0.14

21: CLADDING AND COVERING

PROFILED SHEET CLADDING OR ROOFING

FIBRE CEMENT PROFILED SHEET CLADDING, COVERING AND SIDING

GENERALLY

Specification

Fibre cement profiled cladding sheets:

- a. to BS EN 494;
- b. profile:
 1. pitch: not exceeding 150 mm nominal;
 2. overall height: not exceeding 60 mm;
- c. from an approved manufacturer.

Lining sheets: ribbed sheets to suit cladding sheets and from the same manufacturer.

Profiled GRP sheets: from an approved of a size and profile to suit cladding sheets.

Accessories: of the same manufacture as the sheets and to match pitch, profile and colour as appropriate.

Mastic lap sealing strip: preformed strip with butyl or preformed strip with butyl or polyisobutylene base.

Insulation:

- a. type: glass fibre;
- b. 'U' value: to comply with Part L of the Building Regulations.

Fixings:

- a. size and type to suit sheets and structural framings;
- b. galvanised or plastics coated with plastics caps and washers;
- c. conforming to sheet manufacturer's recommendations.

Design and workmanship: comply with BS 8219 and BS 5427-1.

Safety precautions: prevent unauthorised access to the area below the roof whilst roofing is under construction and do not allow any person on to roofing without use of crawling boards.

Warning notices: warning sign as BS 5499-5 code 8.C.0072 with supplementary text sign, lettering 'DANGER Fragile Roof' and mandatory sign as BS 5499-5 code 11.A.0103 with supplementary text sign, lettering 'Use crawling boards'.

Location of fixing holes:

- a. roofing sheets: crown of corrugations;
- b. cladding sheets: trough of corrugations.

Sealing laps: seal laps in accordance with sheet manufacturer's recommendations.

Method of measurement

Voids:

Make no deduction for voids not exceeding 1.00 m².

Measure boundary work only to voids exceeding 1.00 m².

Rates for the following include

Generally:

For profiles to run vertically or with the slope.

For fixing to structural supports at any spacing appropriate to the sheets to be fixed.

For drilling for fixings.

For forming voids not exceeding 1.00 m² other than holes for pipes or the like.

For supplying and fixing warning notices.

Fibre cement profiled cladding sheets:

For 150 mm end laps.

For 70 mm minimum side laps on large profile sheets or 114 mm minimum side laps on small profile sheets.

Accessories fixed in conjunction with sheeting:

For any extra fixings necessary.

Jointing to existing:

For all preparatory work, lifting and refixing existing, jointing or bonding in as necessary and making good.

Boundary work:

For ends, angles and intersections unless otherwise stated.

21: CLADDING AND COVERING

FIBRE CEMENT PROFILED CLADDING SHEETS

Item		1	2	3
		Supplying and fixing		Fixing only
		Natural	Acrylic	Any type
		colour	coated	
21	<i>Square Metre</i>	£	£	£
	Roof covering to timber: exceeding 600 mm wide: pitch			
022	not exceeding 50°	24.07	26.45	5.93
023	exceeding 50°	26.02	28.41	7.89
024	Wall cladding: to timber: exceeding 600 mm wide: vertical	26.53	28.91	8.40
	ADD where			
025	to steelwork	1.66	1.66	1.66
026	side laps sealed	1.58	1.58	1.58
027	end laps increased to 300 mm: all laps sealed	1.71	1.71	1.71
028	sheeting curved in the length: any radius	19.10	21.49	0.97
029	sheeting in less than full sheet width at return to reveal or the like	10.07	10.67	5.54
	ADD where			
030	not exceeding 600 mm wide	21.76	22.06	21.44
	in repairs			
031	not exceeding 1 m ²	21.76	22.06	21.44
032	1 to 5 m ²	16.05	16.31	15.59
033	5 to 10 m ²	10.28	10.49	10.24
	Extra over roof covering or wall cladding for			
034	1.60 mm GRP sheet: to match profile	17.46	15.08	5.26
	<i>Metre</i>			
035	cranked crown sheet	19.65	24.87	1.20
	<i>Each</i>			
	soaker flange with collar: for pipe: overall diameter			
036	not exceeding 125 mm	56.58	66.90	14.62
037	125 to 175 mm	58.86	69.17	14.62
038	175 to 225 mm	61.15	71.46	14.62
	<i>Metre</i>			
039	Raking cutting	10.55	10.78	8.77
040	Curved cutting	18.17	18.63	14.62
041	Jointing to existing	12.33	12.33	11.68
	<i>Each</i>			£
042	Hole: for pipe or the like: through any type of covering or cladding			4.38

21: CLADDING AND COVERING

FIBRE CEMENT PROFILED INSULATED SANDWICH CONSTRUCTION

Rates for the following include

For timber battens not exceeding 20 x 25 mm as spacers fixed above purlin lines between cladding and lining sheets.

Generally:

For fibre cement profiled cladding sheets.

For sealing laps.

For lining sheets.

For insulation.

Item			1	2	3
			Supplying and fixing	Fixing only	
			Natural colour outer membrane	Acrylic coated outer membrane	Any type
			£	£	£
21	Square Metre				
	Roof covering: to timber: exceeding 600 mm wide: pitch				
043	not exceeding 50°		57.25	62.02	14.28
044	exceeding 50°		61.13	65.91	18.18
045	Wall cladding: to timber: exceeding 600 mm wide: vertical		63.58	68.36	21.09
	ADD where				
046	to steelwork		2.32	2.32	2.32
047	sheeting curved in the length: any radius		38.69	43.47	2.43
048	sheeting in less than full sheet width at return to reveal or the like		18.66	19.86	7.00
	ADD where				
049	not exceeding 600 mm wide		30.83	31.43	28.92
	in repairs				
050	not exceeding 1 m ²		30.83	31.43	28.92
051	1 to 5 m ²		24.24	24.74	20.46
052	5 to 10m ²		17.64	18.03	16.08
	Extra over roof covering or wall cladding for				
053	1.60mm GRP sheet: double skin: side, top and bottom closers: to match profile		23.60	18.83	7.30
	Metre				
054	cranked crown sheet including underlining		12.39	16.07	1.84
	Each				
	soaker flange with collar: hole through inner lining and insulation: for pipe: overall diameter				
055	not exceeding 125 mm		58.04	68.36	17.54
056	125 mm to 175 mm		60.32	70.63	17.54
057	175 to 225 mm		62.61	72.92	17.54

21: CLADDING AND COVERING

FIBRE CEMENT PROFILED INSULATED SANDWICH CONSTRUCTION - *continued*

Item			1	2	3
			Supplying and fixing		Fixing only
			Natural	Acrylic	Any type
			colour	coated	
			outer	outer	
21	Metre		membrane	membrane	
			£	£	£
058	Raking cutting		24.84	25.31	22.49
059	Curved cutting		45.34	46.28	40.18
060	Jointing to existing		21.30	21.30	20.46
<i>Each</i>					£
061	Hole: for pipe or the like: through any type of covering or cladding				8.77

FIBRE CEMENT BOUNDARY WORK AND ACCESSORIES

			1	2	3	4	5
			Supplying and fixing		Fixing only	ADD to	Resecuring
			Natural	Acrylic	Any type	columns	any type
			colour	coated		1 to 3	
						where in	
	Metre		£	£	£	£	£
062	Eaves: filler piece or closure piece		11.34	11.34	3.42	0.97	2.43
063	Verge or fascia barge board: not exceeding 600 mm girth		22.61	25.19	5.70	1.46	4.15
<i>Each</i>							
Extra for							
064	crown crank		39.48	43.27	4.88	1.46	3.89
065	apex mitre		33.68	36.20	10.72	2.43	-
<i>Metre</i>							
Ridge: two piece adjustable capping							
066	close fitting one side: plain wing one side		23.05	26.20	7.21	1.46	5.97
067	close fitting one side: northlight one side		23.05	26.20	7.21	1.46	5.97
068	close fitting one side: ventilating one side		27.45	31.49	7.21	1.46	5.97
069	close fitting both sides		23.05	26.20	7.21	1.46	5.97
070	ventilating both sides		27.45	31.49	7.21	1.46	5.97

21: CLADDING AND COVERING

FIBRE CEMENT BOUNDARY WORK AND ACCESSORIES - *continued*

Item		1	2	3	4	5
		Supplying and fixing		Fixing only	ADD to columns	Resecuring any type
		Natural colour	Acrylic coated	Any type	1 to 3 where in repairs	
21	<i>Each</i>	£	£	£	£	£
	Extra for					
071	ridge finial	20.82	24.24	6.36	1.46	4.77
072	ridge ventilator	147.67	176.26	4.88	1.46	3.89
073	expansion joint	23.97	27.99	3.89	0.97	2.93
	<i>Metre</i>					
074	Hip: two piece adjustable capping	26.97	30.82	7.72	1.97	6.03
	<i>Each</i>					
	ADD to item H30.074 for					
075	end filled with mortar: any mix	3.71	3.71	3.71	0.49	-
076	mitred intersection	7.30	7.30	7.30	1.97	-
	<i>Metre</i>					
077	Vertical angle: not exceeding 600 mm girth	21.49	24.68	5.58	1.46	4.05
078	Expansion joint	16.74	16.74	5.58	1.46	4.05
	<i>Each</i>					
	Extra for					
079	crown crank	7.44	10.76	4.88	1.46	3.89
080	capped end	8.31	9.20	3.89	0.97	2.93
	<i>Metre</i>					
081	Underlining expansion joint	4.49	4.88	2.43	0.49	1.97
	<i>Each</i>					
	Extra for					
082	crown crank	7.82	8.81	2.93	0.97	2.43
	<i>Metre</i>					
	Flashing					
083	under glazing type	15.49	17.83	3.89	0.97	2.93
084	horizontal Z type	11.33	12.80	4.09	0.97	2.94
085	Apron: flashing piece	12.70	14.47	3.89	0.97	2.93

21: CLADDING AND COVERING

FIBRE CEMENT BOUNDARY WORK AND ACCESSORIES - *continued*

Item		1	2	3	4	5
		Supplying and fixing		Fixing only	ADD to columns	Resecuring any type
		Natural colour	Acrylic coated	Any type	1 to 3 where in repairs	
21	Metre	£	£	£	£	£
	Filler piece					
086	to jamb	17.19	19.96	3.42	0.97	2.43
087	to lintel	12.82	14.74	3.42	0.97	2.43
088	to side of sandwich construction	14.05	16.17	3.42	0.97	2.43
089	Retainer piece: to sandwich construction	14.05	16.17	3.42	0.97	2.43
090	S or Z Type louvre blade	18.61	20.96	6.20	1.46	4.15
	<i>Each</i>					
	Round base ventilator: nominal diameter					
091	152 mm	176.24	199.63	59.26	14.62	44.46
092	229 mm	238.73	274.64	59.26	14.62	44.46
093	305 mm	415.63	486.90	59.26	14.62	44.46

METAL PROFILED SHEET CLADDING, COVERING AND SIDING

GENERALLY

Reference to other Sections: the Preambles to Section 21 apply equally to this Section unless otherwise stated.

GALVANISED STEEL CORRUGATED SHEETS

Specification

Galvanised steel corrugated sheets:

- to BS 3083 and BS EN 508-1;
- corrugation pitch: 76.2 mm;
- coating type: 600.

Workmanship: comply with CP 143-10, Section 4 figures 1 to 3 and BS 5427-1 Section 4.

Laps: lay sheets with side and end laps in accordance with CP 143-10, Section 3, paragraph 3.3. Fix side laps at 450 mm centres with seam bolts.

21: CLADDING AND COVERING

GALVANISED STEEL CORRUGATED SHEETS - *continued*

Item 21	Square Metre	1	2	3	4		
		Supplying and fixing			Fixing only		
		Thickness			Any		
		0.60 mm	0.80 mm	1.00 mm	thickness		
		£	£	£	£		
	Roof covering: to timber: exceeding 600 mm wide: pitch						
094	not exceeding 50°	18.20	20.16	22.07	8.83		
095	exceeding 50°	20.16	22.29	24.39	11.28		
096	Wall cladding: to timber: vertical	19.78	21.84	23.85	11.93		
	ADD where						
097	to steelwork	4.26	4.26	4.26	4.26		
098	sheeting curved in the length or width: any radius	12.19	14.12	16.02	2.56		
099	sheeting in less than full sheet width at return to reveal or the like	9.56	10.66	11.74	8.77		
	ADD where						
100	not exceeding 600 mm wide	20.83	22.84	24.83	21.44		
	in repairs						
101	not exceeding 1 m²	20.83	22.84	24.83	21.44		
102	1 to 5 m²	15.28	16.77	18.24	15.59		
103	5 to 10 m²	9.67	10.60	11.53	10.24		
	Metre						
104	Raking cutting	18.09	19.81	21.55	18.12		
105	Curved cutting	26.93	29.54	32.14	27.69		
106	Bending edge of sheet parallel to corrugations	12.18	13.33	14.47	-		
107	Jointing to existing	8.29	9.76	11.22	-		
	Each				£		
108	Hole: for pipe or the like: through any thickness of covering or cladding				7.30		
		1	2	3	4	5	6
		Supplying and fixing			Fixing only	ADD to	Resecuring
		Thickness			Any	columns 1	any
		0.60 mm	0.80 mm	1.00 mm	thickness	to 4 where	thickness
	Metre	£	£	£	£	in repairs	£
109	Ridge: plain capping: plain wing both sides	11.33	12.11	12.83	5.72	1.46	3.89
110	Flashing: preformed: twice bent: not exceeding 225 mm girth: fixing over opening	12.45	13.40	14.27	4.38	1.31	3.42
111	Filler piece: preformed rubber, bitumen or cellular plastics block	3.97	3.97	3.97	2.92	0.63	2.16
112	ADD where raking	1.61	1.61	1.61	-	-	-

21: CLADDING AND COVERING

ALUMINIUM PROFILED SHEETS

Specification	<i>Workmanship:</i> comply with CP 143-1 and BS 5427-1.
<i>Aluminium profiled sheets:</i> to BS 4868 and BS EN 508-2.	<i>Laps:</i>
a. thickness: 0.70 mm;	a. roofing sheets: not less than double corrugation side laps, 150 mm end laps;
b. BS profile type: S;	b. cladding sheets: not less than single corrugation side laps, 100 mm end laps;
c. pitch: 76.2 mm;	c. fix side laps at 450 mm centres with seam bolts.
d. substrate aluminium to BS EN 485-1 to 4: i. alloy designation: 3103; ii. temper designation to BS EN 515: H18;	
e. surface finish: mill.	

Item		1	2
		Supplying and fixing	Fixing only
21	Square Metre	£	£
	Roof covering: to timber: exceeding 600 mm wide: pitch		
113	not exceeding 50°	27.46	9.63
114	exceeding 50°	29.59	11.59
115	Wall cladding: to timber: exceeding 600 mm wide: vertical	28.59	12.73
	ADD where		
116	to steelwork	4.26	4.26
117	sheeting curved in the length or width: any radius	23.75	2.43
118	sheeting in less than full sheet width at return to reveal or the like	10.99	5.54
	ADD where		
119	not exceeding 600 mm wide	18.54	12.32
	in repairs		
120	not exceeding 1 m ²	18.54	12.32
121	1 to 5 m ²	12.98	10.29
122	5 to 10 m ²	9.58	8.83
	Extra over roof covering or wall cladding for		
123	1.60 mm GRP sheet: to match profile	13.52	2.90
	Each		
	flashing: preformed with sleeve 150 mm long: welted edges: sealing edges across corrugations with preformed rubber or cellular plastics filler block		
124	150 x 300 mm: for pipe not exceeding 55 mm overall diameter	51.99	5.35
125	300 x 450 mm: for pipe 55 to 110 mm overall diameter	85.93	5.84

21: CLADDING AND COVERING

ALUMINIUM PROFILED SHEETS - *continued*

		1	2		
Item 21		Supplying and fixing	Fixing only		
		£	£		
126	Raking cutting	15.32	13.14		
127	Curved cutting	23.35	18.99		
128	Bending edge of sheet parallel to corrugations	9.73	9.73		
129	Jointing to existing	6.79	6.79		
<i>Metre</i>					
<i>Each</i>			£		
130	Hole: for pipe or the like: through any thickness of covering or cladding		5.84		
		1	2	3	4
		Supplying and fixing	Fixing only	ADD to columns 1 and 2 where in repairs	Resecuring
<i>Metre</i>		£	£	£	£
131	Verge or vertical angle: not exceeding 400 mm girth	9.99	4.21	1.05	3.77
132	Ridge or hip: plain capping: plain wing both sides	11.50	4.88	1.46	3.89
<i>Each</i>					
133	Extra for ridge finial	61.04	6.24	1.46	4.78
<i>Metre</i>					
Flashing: preformed: twice bent: fixing over opening					
134	not exceeding 150 mm girth	4.60	3.70	0.76	2.97
135	150 to 225 mm girth	6.43	3.84	0.81	3.08
136	225 to 300 mm girth	7.38	3.98	0.84	3.20
137	Plain angle: not exceeding 400 mm girth: plugging and screwing one side to masonry with galvanised screws at 450 mm centres: grouting with mortar: any mix	16.76	11.12	2.37	8.21
138	Filler piece: preformed rubber, bitumen or cellular plastics block	3.97	2.92	0.63	2.16
139	ADD where raking	1.61	-	-	-

21: CLADDING AND COVERING

PLASTICS PROFILED SHEET CLADDING, COVERING AND SIDING

GENERALLY

Reference to other Sections: the Preambles to Section 21 apply equally to this Section unless otherwise stated.

Specification

Plastics corrugated sheets: from an approved manufacturer.
a. corrugation pitch: 76.2 mm;

Glass reinforced plastics corrugated translucent sheets: from an approved manufacturer.
a. corrugation pitch: 76.2 mm;

Workmanship: comply with manufacturer's instructions and BS 5427-1.

Laps: lay sheets with side and end laps in accordance with manufacturer's instructions.

PLASTICS PROFILED SHEETS

Item		1	2	3	4	5
		Plastics corrugated sheets		Glass fibre reinforced plastics sheets		Fixing only
		Clear	Coloured	Normal	Fire Resisting	Any thickness
21	Square Metre	£	£	£	£	£
	Roof covering: to timber: exceeding 600 mm wide: pitch					
140	not exceeding 50°	17.45	19.01	29.67	35.17	7.03
141	exceeding 50°	19.40	20.96	31.63	37.12	8.98
142	Wall cladding: to timber: exceeding 600 mm wide: vertical . .	19.04	20.47	30.25	35.28	9.49
	ADD where					
143	to steelwork	4.50	4.50	4.50	4.50	4.50
144	sheeting curved in the length or width: any radius	8.13	8.91	5.62	4.40	2.93
145	sheeting in less than full sheet width at return to reveal or the like	11.81	12.19	14.86	16.24	9.20
	ADD where					
146	not exceeding 600 mm wide	23.22	23.41	24.75	25.44	21.92
	in repairs					
147	not exceeding 1 m²	23.22	23.41	24.75	25.44	21.92
148	1 to 5 m²	18.62	18.79	19.90	20.47	17.54
149	5 to 10 m²	12.56	12.68	13.57	14.03	11.68
	Metre					
150	Raking cutting	15.63	15.79	16.82	17.37	14.62
151	Curved cutting	26.88	27.19	29.28	30.35	24.84
152	Jointing to existing	7.74	7.80	8.25	8.48	7.30
	Each					£
153	Hole: for pipe or the like: through any thickness of covering or cladding					5.84

21: CLADDING AND COVERING

PLASTICS WEATHERBOARDING

Item		1	2	3
		Shiplap profile	V-joint profile	Fixing only
		£	£	£
21	<i>Square Metre</i>			
	Walls: vertical or sloping: trims			
154	exceeding 600 mm wide	88.09	88.95	17.07
	ADD where			
155	not exceeding 600 mm wide	14.06	15.07	12.56
	in repairs			
156	not exceeding 1 m ²	14.28	15.31	14.80
157	1 to 5 m ²	10.99	11.78	11.39
	<i>Metre</i>			
158	Raking cutting	11.94	12.11	3.46
159	Curved cutting	17.05	17.35	4.34
160	Heading joint to existing	2.51	2.51	2.51
	<i>Each - per 25 mm of girth</i>			
161	Notching	0.17	0.17	0.17

22: General Joinery

UNFRAMED ISOLATED TRIMS, SKIRTINGS AND SUNDRY JOINERY ITEMS

GENERALLY

Specification

Timber and workmanship: to BS EN 942 and BS 1186-3.

Timber quality:

- a. to receive paint finish: class 2;
- b. to receive clear finish: class CSH.

Preservative treatment: re-treat all timber surfaces, previously treated, exposed by site works subsequent to preservative treatment with two liberal applications of the preservative used in the initial treatment of the timber.

Notes

Preservative treatment:

Pay for at the Rates in Section 16.

Isolated handrails or grab rails:

Pay for at the Rates in Sections 25.

Shop priming:

Pay for at the Rates in Section 29.

Method of measurement

Timber sizes:

Measure the finished size.

Sectional areas:

Multiply the width by the depth without deduction.

Rates for the following include

Timber generally:

For nailing and gluing.

For pencil rounded arrises.

For ends, angles, mitres, intersections or the like, except on hardwood members exceeding 0.003 m² finished sectional area.

Curved work:

For work of any radius.

For all cutting and work necessary to obtain curve.

Screwing timber:

For drilling and for letting in countersunk heads of screws flush.

Item
22

Clear finished timber

- 001 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this Section multiplied by 1.05.

Douglas Fir

- 002 Where Douglas Fir is ordered, price at the Rates for softwood and associated labours in this Section multiplied by 1.35

Hardwoods

- 003 Where specific hardwoods are ordered, price at the Rates for hardwood and associated labours in this Section multiplied by the factors given in this Section (items 22.058 to 22.063 page 247)

22: GENERAL JOINERY

STOCK SECTIONS: WROUGHT SOFTWOOD

Specification

Softwood trims: to BS 1186-3.

Item	Metre	1	2	3	4	5	6
		Width					
		45 mm	70 mm	95 mm	120 mm	140 mm	170 mm
22		£	£	£	£	£	£
	Skirting, picture rail, architrave or the like: chamfered and rounded, rounded or bevel rounded						
004	13 mm thick	3.75	4.61	5.47	6.23	-	-
005	20 mm thick	-	5.28	6.24	7.07	7.92	8.68
							£
	Cover fillet: twice chamfered or moulded						
006	11 x 33 mm						2.62
007	11 x 45 mm						2.76
	Scotia or quadrant						
008	11 x 11 mm						1.55
009	13 x 13 mm						1.86
010	20 x 20 mm						2.38
011	27 x 27 mm						3.30
	Half round						
012	13 x 33 mm						2.91
013	20 x 45 mm						4.17

	1	2	3	4	5	6
	Supplying and fixing				Fixing only	
	Softwood		Hardwood		Any timber	
	Sectional areas of member					
	not exceeding 500 mm ²	ADD for each additional 100 mm ²	not exceeding 500 mm ²	ADD for each additional 100 mm ²	not exceeding 500 mm ²	ADD for each additional 100 mm ²
Metre	£	£	£	£	£	£
Skirting, picture rail, architrave or the like	3.02	0.33	4.52	0.52	3.24	0.33
Cover fillet, stop, trim, bead, nosing or the like . . .	2.86	0.31	4.19	0.48	3.00	0.30
<i>Each</i>						
Plinth block: splayed or moulded						
not exceeding 150 mm high	4.26	0.43	5.14	0.53	0.52	0.05
150 to 225 mm high	4.69	0.48	5.69	0.59	4.61	0.47

	1	2	3	4	5	6
	Supplying and fixing					
	Softwood			Hardwood		
	Thickness					
	19 mm	25 mm	32 mm	19 mm	25 mm	32 mm
Metre	£	£	£	£	£	£
Isolated shelf or worktop: 100 mm wide	3.77	4.58	5.36	7.83	8.98	10.34
ADD for each additional 25 mm of width	0.60	0.71	0.85	1.47	1.63	1.87
Window board: rounded edge: 100 mm wide	6.37	7.69	8.99	11.86	13.77	15.88
ADD for each additional 25 mm of width	1.36	1.01	1.21	1.83	2.07	2.37
ADD for bearers	2.62	2.62	2.62	3.43	3.43	3.43
<i>Each</i>						
Returned end	5.26	6.15	7.03	7.79	9.19	10.49
Returned notched end	6.51	7.41	8.29	9.04	10.44	11.74

22: GENERAL JOINERY

NON-STOCK SECTIONS: WROUGHT TIMBER - *continued*

Item		1	2	3	4	5	6
		Supplying and fixing					
		Softwood			Hardwood		
		Thickness					
		12 mm	19 mm	25 mm	12 mm	19 mm	25 mm
22	Metre	£	£	£	£	£	£
025	Lining or casing to service duct or the like: not exceeding 100 mm wide: brass screws and cups	4.17	4.97	5.78	6.46	9.29	10.35
026	ADD for each additional 25 mm of width	0.52	0.63	0.77	0.94	1.53	1.70

		1	2	3
		Supplying and fixing		Fixing only
		Thickness		Any
		19 mm	25 mm	thickness
	Each	£	£	£
	Back board or the like: softwood: chamfered all round: plugging and screwing			
027	not exceeding 0.10 m ²	14.42	14.78	12.88
028	0.10 to 0.15 m ²	16.86	17.40	14.56
029	0.15 to 0.20 m ²	19.30	20.01	16.23
030	ADD where in repairs: any size	3.35	3.35	3.35

Labours

		1	2
		Softwood	Hardwood
		£	£
	Metre		
031	Each throat, groove, flute, rebate, splay rebate, rounding, chamfer, splay weathering, moulding or beading	0.55	1.10
032	ADD where crossgrain	0.55	1.10
033	ADD for each additional 25 mm of girth of moulding in excess of 100 mm	0.12	0.23

Each

034	Stop on labour: plain, splayed or shaped	0.41	0.84

Metre

035	Tonguing at back, including groove	1.25	2.51
036	Cross tonguing including grooves	2.68	5.36
037	Curving in thickness	2.35	4.69
038	Scribing to fit treads and risers	7.12	14.24

Each

	Extra over hardwood member exceeding 0.003 m ² finished sectional area for		£
039	fitted or fair end		4.60
040	returned end or mitre		8.37

22: GENERAL JOINERY

WROUGHT SOFTWOOD TONGUED AND GROOVED BOARDING

Item		1	2
		Thickness	
		12 mm	19 mm
22	Square Metre	£	£
041	Cistern casing (measure battens separately)	24.53	29.08
042	Cistern cover: in sections: 19 x 69 mm ledges: 13 mm fibre insulating board lining	42.07	47.46

TARGET COVERINGS

Item		1	2
		Taking off	Fixing only
		£	£
22	Square Metre		
043	Building paper: fixing to target frame with adhesive	0.93	1.51
044	Hessian canvas to target: turning over at edges: sewing where required	1.56	3.36

SCREWING AND PLUGGING TIMBER

Notes	Rates for the following include
<i>Screwing and plugging timber:</i> Do not measure separately where included in the item descriptions.	<i>Pelleting:</i> For counter sinking as required.

		1	2
		Softwood	Hardwood
		£	£
	Metre		
	ADD to the Rates for timber for fixing with		
045	steel screws	0.39	0.72
046	brass screws	0.61	0.94
047	brass screws and cups	0.82	1.15
048	ADD for pelleting	4.36	4.39
			£
	ADD for plugging to masonry		
049	single row		1.75
	Each		
050	isolated		0.48

22: GENERAL JOINERY

SCREWING AND PLUGGING TIMBER - *continued*

Item		
22	<i>Metre</i>	<i>£</i>
	ADD for fixing through tiled finish or the like	
051	single row of fixings	2.09
	<i>Each</i>	
052	isolated fixing	0.59

HOLES IN TIMBER

		1	2	3
		Softwood	Hardwood	Manufac- -tured building board
	<i>Each - per 12 mm of thickness</i>	<i>£</i>	<i>£</i>	<i>£</i>
053	Hole: for bolt or the like	0.17	0.25	0.20
054	ADD for countersinking head or nut	0.25	0.33	0.29
055	ADD for pelleting head or nut	0.87	0.89	0.89
056	ADD where faced with plastic veneer or the like and where a fair face is required when exposed to view	2.79	2.79	2.79

22: GENERAL JOINERY

FLOOR, WALL AND CEILING BOARDING, SHEETING, PANELLING, LININGS AND CASINGS

GENERALLY

Notes

Preservative treatment:
Pay for at the Rates in Section 16.

Screwing, plugging and pelleting:
Pay for at the Rates in this Section (page 245).

Method of measurement

Timber sizes:
Measure the finished size.

Item
22

Clear finished timber

- 057 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this section multiplied by 1.05.

Hardwoods

Where specific hardwoods are ordered, multiply the Rates for hardwood and associated labours in this Section by the following factors:

058	European Beech, Iroko, Makore, Obeche, Padang and Ramin	no adjustment
059	Agba, Lauan, African Mahogany, Dark Red Meranti and Sapele	multiply by 1.15
060	Elm, Utile and African Walnut	multiply by 1.40
061	Afrormosia, Brazilian Mahogany and Maple	multiply by 1.55
062	Ash and European or Japanese Oak	multiply by 1.85
063	Teak	multiply by 2.50

22: GENERAL JOINERY

WROUGHT HARDWOOD

Specification

Wrought Hardwood: free from all drying defects, evidence of insect or fungus attack, twist, warp and indication of shrinkage.

Jointing: tongued and grooved joints.

Nailing: punch nails below face of board and stop nail holes with stopper.

Rates for the following include

Generally:
For internal work

Item			1	2	3	4	5
			Supplying and fixing	Fixing only			
22	Square Metre		Thickness	Any			
			16 mm	19 mm	21 mm	28 mm	thickness
			£	£	£	£	£
	Exceeding 600 mm wide						
064	wall		53.33	58.37	82.28	104.28	18.45
065	floor		52.07	57.12	81.03	103.03	17.19
066	ceiling		56.37	61.26	84.73	106.51	20.90
067	ADD to wall, floor or ceiling where not exceeding 600 mm wide or in area not exceeding 1m ² (not applicable to repairs)		24.84	26.30	27.76	29.22	26.30
	Isolated beam or column: girth						
068	not exceeding 600 mm		76.35	85.80	112.79	138.56	43.93
069	600 to 1200 mm		73.00	82.46	109.45	135.21	40.58
070	exceeding 1200 mm		69.66	79.11	106.09	131.86	37.24
	ADD to ceiling or beam where ceiling level						
071	3.50 to 5.00 m above floor		1.97	1.97	1.97	1.97	1.97
072	5.00 to 6 .50 m above floor		3.42	3.42	3.42	3.42	3.42
	ADD where						
073	V-jointed or beaded one side		15.81	17.49	19.19	20.88	-
074	secret nailed		5.76	6.15	6.54	6.95	1.33
075	heading joints end matched		6.36	6.36	6.36	6.36	6.36
076	surface finished for polishing		3.17	3.17	3.17	3.17	3.17
	ADD where in repairs						
077	not exceeding 1 m ²		63.63	63.63	63.63	63.63	63.63
078	1 to 5 m ²		31.81	31.81	31.81	31.81	31.81
	Metre						
	Finished angle: tongued and mitred						
079	internal		10.38	10.38	10.38	10.38	10.38
080	external		10.38	10.38	10.38	10.38	10.38
081	Nosing or margin: 75 mm wide: tongued and grooved to edge of boarding		11.20	13.21	16.53	19.76	11.73
082	ADD where rounded		0.84	0.84	0.84	0.84	0.84
083	ADD for crossgrain groove		4.19	4.19	4.19	4.19	4.19

22: GENERAL JOINERY

WROUGHT HARDWOOD - *continued*

Item 22			1	2	3	4	5
			Supplying and fixing				Fixing only
			Thickness				Any
			16 mm	19 mm	21 mm	28 mm	thickness
		<i>Metre</i>	£	£	£	£	£
084	Raking cutting		11.39	11.97	13.40	14.57	-
085	Curved cutting		17.33	18.17	20.09	22.10	-
086	Scribing		6.97	6.97	6.97	6.97	6.97
087	Jointing to existing		6.20	6.20	6.20	6.20	6.20
		<i>Each</i>					
088	Hole: for pipe or the like		5.03	5.03	5.03	5.03	5.03
089	Notching - <i>per 25 mm of girth</i>		0.41	0.41	0.41	0.41	0.41
090	Extra over for access panel: screwing with brass screws and cups (measure battens separately) - <i>per metre of girth</i>		9.32	9.49	9.65	9.83	-

RIGID SHEET FINE LININGS AND PANELLING

RESECURING AND FIXING ONLY WALL PANELLING

			1	2
			Softwood	Hardwood
			£	£
		<i>Square Metre</i>		
	Wall panelling, cupboard fronts, doors and partitions to match			
091	resecuring		13.11	16.74
092	fixing only		19.68	25.12
093	ADD for cutting and fitting as necessary to suit new position		10.05	15.07

22: GENERAL JOINERY

PROPRIETARY PARTITIONS, PANELS AND CUBICLES

PANEL PARTITIONS

FIXING ONLY PARTITIONS

Specification

Fix partitions in accordance with the manufacturer's/designer's instructions.

Nails, screws, filler and sealing material: those recommended by the partition manufacturers for use with their products.

Method of measurement

Generally:
Measure the mean length of partition.

Make no deduction for voids which do not extend full height.

Rates for the following include

Generally:
For internal work.

For all jointing between panels.

For all necessary temporary fixing clamps, wedging and supports.

For fixing complete including supplying nails, screws, plugs, filler and sealing material.

Item				
		1	2	3
		Height		
		2400 mm	2700 mm	3000 mm
		£	£	£
22	<i>Metre</i>			
	100 mm Partition: width of panels			
094	100 to 600 mm	53.21	59.87	66.52
095	900 mm	49.86	56.52	63.17
096	1200 mm	48.20	54.02	59.82
	Extra for			£
097	fair end.			6.03
098	angle			10.72
099	intersection with similar partition or doorset			4.69
100	intersection with different wall surface			9.55
101	timber fixing batten for securing fittings or the like: fixing to partition			9.26
102	timber head cavity member: fixing to metal head channel			11.76
	<i>Square Metre</i>			
103	Insulation: fixing cavity			2.79
	<i>Each</i>			
104	Hole: for pipe or the like			4.01
105	Notching - per 25 mm of girth			0.47

22: GENERAL JOINERY

RESECURING PANEL PARTITIONS

Item		
22	<i>Metre</i>	£
	Resecuring partition: any type: height	
106	2400 mm.	5.58
107	2700 mm.	6.28
108	3000 mm.	6.97

PANEL CUBICLES

FIXING ONLY CUBICLES

Definition of terms

Cubicle: includes door, ironmongery or the like, excludes trims.

Trim: separate items fixed on site at junction of cubicles and at junctions with adjoining construction.

Method of measurement

Cubicle:
Measure the face of the fronts, sides, ends and divisions including doors, posts, panels and and the height of the cubicle excluding pedestals.

Rates for the following include

Generally:
For internal work.

For any proprietary type of prefabricated cubicle.

For fixing cubicle and supports to any back-ground by means except cutting and pinning.

For fixing hinges and hanging doors.

Trim:
For ends and angles.

	<i>Square Metre</i>	£
109	Cubicle.	18.14
	<i>Metre</i>	
110	Trim.	3.55

22: GENERAL JOINERY

GENERAL IRONMONGERY NOT ASSOCIATED WITH WINDOWS AND DOORS

GENERALLY

Notes

Mortices and grooves in brickwork or blockwork:
Pay for at the Rates in Section 14.

Cutting background metal:
Pay for at the Rates in Section 15.

Hinges for the cupboard doors and the like:
Pay for at the Rates in Section 24.

Bolts for fixing ironmongery to background:
Pay for at the Rates in Section 50.

Rates for the following include

Generally:
For fixing to timber unless otherwise stated.

For fixing with matching screws.

For drilling, sinking and mortising in timber.

For all necessary normal pattern keeps, sockets, striking plates or the like unless otherwise stated.

For cutting back striking plates where required to suit frame.

Fixing to timber:
For drilling through any material other than metal, tiled finish or the like.

Track to sliding door gear:
For all necessary connectors to joints in the length.

22: GENERAL JOINERY

VENTILATORS

Item		1	2	3
		150 x	225 x	225 x
		75 mm	75 mm	150 mm
22	<i>Each</i>	£	£	£
	Ventilator: plugging and screwing to masonry			
	open pattern			
111	aluminium	8.15	8.26	10.42
112	BMA finish	11.76	17.42	14.87
	hit-and-miss pattern			
113	BMA finish	16.64	18.84	27.81
114	chromium plated	16.99	21.10	28.76

TAKING OFF AND FIXING ONLY

Notes

Generally:
All screws for fixing will be supplied with the ironmongery.

Bolts

		1	2	3	4
		Taking off	Fixing only		
		Any size	not exceeding 100 mm	100 to 150 mm	150 to 300 mm
	<i>Each</i>	£	£	£	£
115	Cupboard bolt: straight or necked	1.00	4.19	-	-

Locks, latches, catches and fasteners

		1	2
		Taking off	Fixing only
		£	£
116	Cupboard, drawer or till lock	2.27	12.56
117	Padlock	0.33	0.33
118	Cupboard catch	1.33	5.28
119	Ball or roller catch	1.68	6.69
120	Hasp and staple	1.00	4.19
121	Quadrant stay or roller	1.33	5.03
122	Cabin hook and eye	1.33	3.35
123	Cabin hook and eye: plugging and screwing eye to masonry	1.51	5.87

22: GENERAL JOINERY

TAKING OFF AND FIXING ONLY - *continued*

Item 22		1	2
		Taking off	Fixing only
		£	£
	Handles		
	<i>Each</i>		
124	Cupboard, cabinet or drawer knob	0.33	1.33
125	Drawer handle	0.67	2.51
126	Recessed drawer handle	0.67	8.37
	Hooks		
127	Cleat hook	0.51	1.92
128	Coat hook or hat and coat hook	1.51	1.92
	Cup hook or screw eye		
129	not exceeding 50 mm nominal size	0.33	1.33
130	exceeding 50 mm nominal size	1.51	2.01
	Brackets and plates		
	Shelf bracket: projection		
131	not exceeding 150 mm	1.68	3.35
132	150 to 300 mm	2.17	5.03
133	300 to 450 mm	2.51	5.87
134	Handrail bracket	1.51	5.03
135	Bucket bracket	1.51	5.03
136	Mirror plate	0.84	3.35
137	Pulley: single or double: screw or face fixing	2.17	5.69
138	ADD for plugging to masonry	-	4.19
	Cupboard sliding door track		
	<i>Metre</i>		
	Top or bottom track: fibre or plastics: single or double		
139	face fixing	1.00	4.19
140	fixing in groove provided: gluing or screwing	2.17	8.37
	<i>Each</i>		
141	Sheave	0.51	1.68
142	Slide	0.51	1.68

23: Windows, Screens and Lights

WINDOWS AND ROOFLIGHTS

TIMBER: GENERALLY

Specification

Timber: to BS EN 942.

Timber quality:

- a. to receive paint finish: class 2;
- b. to receive clear finish: class CSH.

Preservative treatment: re-treat all timber surfaces, previously treated, exposed by site works subsequent to preservative treatment with two liberal applications of the preservative used in the initial treatment of the timber.

Workmanship for carpentry, joinery and general fixings on site: to BS 8000-5.

Replacement window installation: to BS 8213-4.

Factory assembled timber windows: to BS 644.

Notes

Screwing, plugging, pelleting and holes for bolts:
Pay for at the Rates in Section 22 (page 245).

Shop priming:
Pay for at the Rates in Section 29.

Preservative treatment:

Pay for at the Rates in Section 16 unless otherwise stated.

Method of measurement

Timber sizes:

Measure the finished size.

Sectional areas:

Multiply the width by the depth without deduction.

Rates for the following include

Generally:

For nailing and gluing.

For pencil rounded arrises.

For assembly after preservative treatment.

Curved work:

For work of any radius.

For all cutting and work necessary to obtain curve.

Item
23

Clear finished timber

- 001 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this section multiplied by 1.05.

Hardwoods

- 002 Where specific hardwoods are ordered price at the Rates for hardwood in this Section multiplied by the factors given in Section 22 (items 22.058 to 22.063 on page 247)

23: WINDOWS, SCREENS AND LIGHTS

STOCK PATTERN CASEMENT WINDOWS AND FRAMES: WROUGHT TIMBER

Rates for the following include

For preservative treatment.

Generally:

For windows without glazing bars.

For die cast non-ferrous aluminised lacquered furniture and hinges.

For projecting sills 133 x 70 mm extreme, of two members tongued together or of single member out of the solid.

Item
23

Each

1	2	3	4	5
Height				
750 mm	1050 mm	1200 mm	1350 mm	1500 mm
£	£	£	£	£

Window

softwood

003	488 mm wide: one opening light.	137.08	149.36	157.08	-	-
004	630 mm wide: one opening light	147.57	159.85	167.60	180.91	187.60
005	630 mm wide: one opening casement: one opening ventlight over	-	211.29	217.98	225.04	232.78
006	1200 mm wide: one full height opening casement: one opening ventlight	255.28	270.77	280.08	294.99	-
007	1770 mm wide: one full height opening casement: one opening ventlight	-	248.40	257.72	272.63	-
008	1770 mm wide: two full height opening casements: one opening ventlight	303.35	310.17	314.31	318.47	-
009	1770 mm wide: two opening casements: two opening ventlights over	-	438.89	451.27	464.44	478.95
010	2339 mm wide: two opening casements: two opening ventlights over	-	457.69	470.10	483.26	497.77

hardwood

011	488 mm wide: one opening light.	182.08	202.15	213.89	-	-
012	630 mm wide: one opening light	197.35	219.59	231.43	248.20	259.51
013	630 mm wide: one opening casement: one opening ventlight over	-	285.49	296.23	307.34	319.61
014	1200 mm wide: one full height opening casement: one opening ventlight	351.12	376.56	390.97	411.31	-
015	1770 mm wide: one full height opening casement: one opening ventlight	-	359.20	374.07	393.92	-
016	1770 mm wide: two full height opening casements: one opening ventlight	427.73	439.92	446.76	453.62	-
017	1770 mm wide: two opening casements: two opening ventlights over	-	611.79	632.52	672.36	678.42
018	2339 mm wide: two opening casements: two opening ventlights over	-	645.55	666.55	688.29	713.81

23: WINDOWS, SCREENS AND LIGHTS

NON-STOCK PATTERN CASEMENT WINDOWS AND FRAMES: WROUGHT TIMBER

Item		1	2	3	4
		Softwood	Hardwood		
		Thickness			
		32 mm	44 mm	32 mm	44 mm
23	Square Metre	£	£	£	£
019	Casement, fanlight, borrowed light, lantern-side, casement door or sidelight: rebated and rounded or moulded: in single pane	85.88	88.79	162.40	170.64
	ADD where divided into panes				
020	not exceeding 0.10 m²	27.95	27.74	51.84	53.66
021	0.10 to 0.50 m²	14.44	14.86	27.81	29.20
022	0.50 to 1.00 m²	4.86	4.90	9.04	9.29
	Skylight or lantern-top: rebated for glass: glazing bars at				
023	300 mm centres	94.84	97.98	184.64	194.01
024	400 mm centres	86.24	88.99	167.89	176.26
025	500 mm centres	81.22	84.31	158.45	166.76
026	600 mm centres	77.81	80.67	151.70	159.39
	Metre				
027	Throat to bottom edge	0.55	0.55	1.10	1.10
	Each				
028	Fitting and hanging light on butts (measure butts separately)	10.88	10.88	13.40	13.40
029	Fitting and centre hanging light: extra labour cutting and mitring beads (measure pivots separately)	14.24	14.24	17.58	17.58
030	Fitting light to slide (measure track and runners separately)	12.56	12.56	15.07	15.07

DOUBLE-HUNG SASH WINDOWS: WROUGHT TIMBER

Specification

Cased frames:

- 19 mm rounded or beaded outside linings;
- 19 mm inside linings;
- 25 mm pulley stiles and head pocket pieces;
- 13 mm back linings;
- 6 mm parting slips;
- 10 mm parting beads;
- 16 x 25 mm inside beads;
- 145 x 70 mm hardwood sunk weathered, throated and check throated sill;
- tongue and groove members together;
- two and three light windows to have double -cased mullions to match the cased frames.

Sashes:

- moulded and rebated for glass with splayed or splay rebated rails;
- splayed bottom edge and moulded horns.

Sash pulleys: brass faced with nylon wheels circular grooved for lines or square grooved for chains.

Sash chains: "2 x 2 link" round back of hard, bright, mild sheradized steel links with phosphor bronze rivets, complete with connections.

Hanging:

- softwood sashes not exceeding 25 kg in weight; hang on cords;
- softwood sashes exceeding 25 kg in weight and hardwood sashes; hang on sash chains.

23: WINDOWS, SCREENS AND LIGHTS

DOUBLE-HUNG SASH WINDOWS: WROUGHT TIMBER - *continued*

Method of measurement

Double-hung sash window:
Measure over the frame and sill.

Rates for the following include

Window:
For single, two or three light windows.

For moulded horns, splayed bottom edges, rebated meeting rails and grooves.

			1	2	3	4
			Softwood with		Hardwood	
			hardwood sill			
			Sash thickness			
Item			32 mm	44 mm	32 mm	44 mm
23		Square Metre	£	£	£	£
Window: in single pane						
031	not exceeding 0.75 m²		337.73	331.97	617.09	644.00
032	0.75 to 1.25 m²		309.27	302.67	562.67	577.02
033	exceeding 1.25 m²		281.90	273.37	508.25	518.42
ADD where divided into panes						
034	not exceeding 0.10 m²		27.95	27.74	51.84	53.66
035	0.10 to 0.50 m²		14.44	14.86	27.81	29.20
036	0.50 to 1.00 m²		4.86	4.90	9.04	9.29
Metre						
Extra for						
037	deep bottom rail		6.06	5.87	11.17	11.36
038	deep bottom bead as draught-board		7.19	6.99	13.40	13.59
Each						
Fitting and hanging sash: cast iron weights: sash pulleys						
039	on cords		33.91	38.00	-	-
040	on chains		61.42	65.50	67.63	72.75

ADJUSTMENTS TO THE FOREGOING RATES

Casement or double hung sash windows with curved heads:

- 041 Measure square and price at the foregoing Rates. Price the curved portion from the springing upwards at the foregoing Rates multiplied by 1.50.

Circular windows:

- 042 Measure square and price at the Rates for rectangular work multiplied by 2.25.

23: WINDOWS, SCREENS AND LIGHTS

FIXING ONLY WINDOWS: WROUGHT TIMBER

Rates for the following include

Generally:

For single or composite windows of any pattern.

For assembling the component parts and accessories.

For cutting glazing beads to length.

Item		1	2	3	4
		Area	ADD for		
		not exceeding 0.50 m ²	0.50 to 1.00 m ²	1.00 to 2.00 m ²	each additional 1.00 m ²
		£	£	£	£
23	Each				
	Window				
043	softwood	29.22	38.00	53.10	10.24
044	hardwood	30.68	39.94	56.02	11.20
045	ADD where glazed before fixing	10.24	13.14	18.99	3.89

FIXING ONLY ROOFLIGHTS: WROUGHT TIMBER

Rates for the following include

Generally:

For single or composite roof lights of any pattern.

For assembling the component parts and accessories.

For fixing and dressing aluminium flashings.

		1	2	3	4
		Area	ADD for		
		not exceeding 0.50 m ²	0.50 to 1.00 m ²	1.00 to 2.00 m ²	each additional 1.00 m ²
		£	£	£	£
046	Roof light: softwood: aluminium external trim: pre-glazed with sealed double glazed unit: screwing to timber	42.87	56.05	69.22	15.40

23: WINDOWS, SCREENS AND LIGHTS

REPAIRING WINDOWS AND ROOFLIGHTS: WROUGHT TIMBER

Definition of terms

Sash: sash of any size to cased frame or to sliding or casement window, fanlight, sash, shutter or the like.

Upper sash: upper sash of any size to cased frame where cords or chains to upper sash are renewed separately.

Notes

Renewing sash cords and sash chains:
Pay for removing and refixing each sash fitted with new cords or chains.

Pay for new sash cords or chains in addition.

Rates for the following include

Taking out:
For removing sash cords or chains.

Resecuring:
For taking off beads, regulating and refixing.

Refixing:
For refitting.

For refixing cords or chains and belaying cleats in the case of fanlights.

Refixing in other frame:
For cutting to size and fitting.

Item
23

Each

1	2	3	4	5	6	7	8
Softwood				Hardwood			
Taking out	Resecuring or easing and adjusting without taking out	Refixing in		Taking out	Resecuring or easing and adjusting without taking out	Refixing in	
		same frame	other frame			same frame	other frame
£	£	£	£	£	£	£	£
10.05	6.69	13.40	19.54	13.40	10.05	16.74	25.12
13.40	8.37	16.46	22.06	16.74	12.56	22.06	33.20
20.09	11.72	22.61	27.07	23.44	17.58	32.65	49.39
6.69	3.35	6.14	5.03	6.69	5.03	10.60	16.19
6.69	1.68	6.69	6.69	6.69	1.68	10.05	10.05
Per sash							£
where sash chains are substituted for cords (measure							
.....							6.69
Per cord							
sh, fanlight or the like (where sash or fanlight is not taken							
.....							1.39

	1	2
	Softwood	Hardwood
	£	£
<i>Each - per item of ironmongery</i>		
Small piece or plug let into sash or frame where ironmongery removed	5.03	11.17

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23: WINDOWS, SCREENS AND LIGHTS

REPAIRING WINDOWS AND ROOFLIGHTS: WROUGHT TIMBER - *continued*

Item		1	2
		Softwood	Hardwood
		£	£
23	<i>Per sash</i>		
065	Taking out sash: any type: cramping up, re-wedging and re-pinning joints with mastic: taking apart if necessary for renewal of parts and refixing in same frame	65.92	82.00
	<i>Each</i>		
066	Repairing corner of sash: 150 x 150 mm mild steel angle repair plate let in flush	92.99	96.34
067	Renewing pocket piece of cased sash frame (excluding removing and replacing beads)	8.58	17.09
			£
068	Caulking sill of sash frame (any width) with mastic and untarred spun-yarn: carefully raking out and drying joint (not measurable when in conjunction with refixing frame)		13.85
	<i>Square Metre</i>		
	Fixed skylight		
069	resecuring		13.14
070	taking down		26.30
071	fixing only previously set aside for re-use		32.15

RENEWING SASHES AND CASEMENTS: WROUGHT TIMBER

Specification

Sashes:

- moulded and rebated for glass with splayed or splay rebated meeting rails;
- splayed bottom edge with moulded horns.

Sash chains: "2 x 2 link" round back of hard, bright, mild sheradized steel links with phosphor bronze rivets, complete with connections.

Rates for the following include

Renewing sash or casement:

For taking out existing.

For taking out and refixing beads as necessary.

23: WINDOWS, SCREENS AND LIGHTS

RENEWING SASHES AND CASEMENTS: WROUGHT TIMBER - *continued*

Item		1	2	3	4
		Softwood		Hardwood	
		Sash thickness			
		32 mm	44 mm	32 mm	44 mm
23	<i>Square Metre</i>	£	£	£	£
072	Renewing sash: in single pane	149.93	158.96	255.23	272.69
	ADD where divided into panes				
073	not exceeding 0.10 m²	27.95	27.74	51.84	53.66
074	0.10 to 0.50 m²	14.44	14.86	27.81	29.20
075	0.50 to 1.00 m²	4.86	4.90	9.04	9.29
	<i>Each</i>				
	Fitting and hanging sash on and including				
076	new cords: existing weights and sash pulleys	14.33	15.46	-	-
077	new chains: existing weights and sash pulleys	28.84	29.97	31.07	32.19
078	new cords and new cast iron weights: existing sash pulleys: taking out old weights	27.98	32.07	-	-
079	new chains and new cast iron weights: existing sash pulleys: taking out old weights	42.49	46.59	48.70	53.83
	<i>Square Metre</i>				
080	Renewing casement, fanlight, borrowed light, lantern-side, casement door or sidelight: rebated and rounded or moulded: in single pane	95.30	98.20	175.73	183.94
	ADD where divided into panes				
081	not exceeding 0.10 m²	27.95	27.74	51.84	53.66
082	0.10 to 0.50 m²	14.44	14.86	27.81	29.20
083	0.50 to 1.00 m²	4.86	4.90	9.04	9.29
	<i>Metre</i>				
084	Throat	0.55	0.55	1.10	1.10
	<i>Each</i>				
085	Fitting and hanging light on butts (measure butts separately)	10.88	10.88	13.40	13.40
086	Fitting and centre hanging light: extra labour cutting and mitring beads (measure pivots separately)	14.24	14.24	17.58	17.58
087	Fitting light to slide (measure track and runners separately)	12.56	12.56	15.07	15.07

23: WINDOWS, SCREENS AND LIGHTS

SURROUNDS FOR STEEL WINDOWS: WROUGHT TIMBER

Rates for the following include

Generally:

For surrounds with standard sills.

For galvanised mild steel fixing cramps and building in or for plugging and screwing to masonry.

Item	Each	1	2	3	4	5	6	7	8
		Overall height							
		259 mm	564 mm	767 mm	970 mm	1173 mm	1376 mm	1580 mm	2088 mm
		£	£	£	£	£	£	£	£
Softwood surround:									
overall width									
088	665 mm	52.56	56.35	60.10	69.95	76.29	83.40	86.02	-
089	970 mm	56.35	58.41	66.65	76.29	83.40	86.02	96.86	117.32
090	1275 mm	62.62	69.08	74.73	86.86	90.06	99.54	105.24	125.57
091	1580 mm	71.51	82.04	88.72	95.01	99.44	107.56	118.77	-
092	1884 mm	-	79.22	83.40	96.86	102.81	106.64	114.29	129.94
Hardwood surround:									
overall width									
093	665 mm	94.52	98.57	108.12	124.82	137.75	148.03	154.07	-
094	970 mm	101.19	104.85	119.57	138.18	148.51	153.88	173.24	209.07
095	1275 mm	111.96	123.83	132.72	156.31	158.65	177.80	186.75	224.76
096	1580 mm	128.69	147.78	158.55	170.19	176.72	187.85	214.60	-
097	1884 mm	-	140.85	150.60	170.40	184.81	191.23	202.00	230.23

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23: WINDOWS, SCREENS AND LIGHTS

TAKING OUT AND RESECURING WINDOW FRAMES: WROUGHT TIMBER

Rates for the following include

Taking out:

For taking out holdfasts, water bars or the like and detaching from frame and making good.

Refixing:

For bedding sills and water bars in mastic.

For cutting to size and fitting.

Item		taking out	same opening	other opening	taking out	same opening	other opening
23	Each	£	£	£	£	£	£
	Cased or solid frame for sashes or wood surround for metal window: any size: architraves and window board if any						
107	not exceeding 0.50 m ²	4.74	42.39	49.68	6.98	55.52	67.22
108	0.50 to 1.00 m ²	5.03	45.31	54.06	7.53	59.90	73.06
109	1.00 to 2.00 m ²	6.69	60.42	71.59	10.05	78.90	96.44
110	ADD for each additional 1.00 m ²	1.68	15.38	17.54	2.51	18.99	23.38
	ADD where including sashes or metal windows						
111	not exceeding 0.50 m ²	2.38	16.22	24.69	3.48	24.69	36.67
112	0.50 to 1.00 m ²	2.51	17.54	26.86	3.77	26.61	39.84
113	1.00 to 2.00 m ²	3.35	23.38	35.58	5.03	35.06	52.60
114	ADD for each additional 1.00 m ²	0.84	5.98	8.77	2.51	8.48	12.77
	ADD where including sashes or metal windows, linings and soffits						
115	not exceeding 0.50 m ²	4.74	49.27	59.16	6.98	74.01	88.63
116	0.50 to 1.00 m ²	5.03	52.60	64.35	7.53	79.86	96.44
117	1.00 to 2.00 m ²	6.69	70.13	85.25	10.05	105.20	127.12
118	ADD for each additional 1.00 m ²	1.68	17.87	20.88	2.51	25.33	30.83

23: WINDOWS, SCREENS AND LIGHTS

REPAIRING WINDOW FRAMES: WROUGHT TIMBER

Item		
23	<i>Each</i>	£
	Renewing defective part of window frame: cutting out old: splicing in only new piece to match existing (pay for new piece at the Rates for new work)	
119	softwood	16.74
120	hardwood	21.77

BEDDING FRAMES OR THE LIKE

Specification

Joint filler: waterproof, compressible, non-extruding pre-moulded with high recovery factor.

One-part polysulphide-based sealant: to BS EN ISO 11600.

	<i>Metre</i>	£
	Bedding wood frame or sill	
121	in mortar (any mix)	3.58
122	in joint filler	5.44
	ADD for pointing	
123	in mortar - <i>per side</i>	1.24
124	in coloured mortar - <i>per side</i>	1.30
125	in sealant - <i>per side</i>	2.15

CRAMPS

Specification

Cramps: 250 mm x 25 mm x 2 mm mild steel, bent and twice drilled for 14 gauge screws, fishtailed at one end: galvanised to BS EN ISO 1461 after manufacture.

	<i>Each</i>	£
126	Cramp: screwing to timber: building in one end	1.59

23: WINDOWS, SCREENS AND LIGHTS

METAL WINDOWS: GENERALLY

Notes

Mortices for lugs in existing concrete:
Pay for at the Rates in Sections 11.

Mortices for lugs in existing brickwork:
Pay for at the Rates in Section 14.

Bedding and pointing:

Pay for at the Rates in Timber Windows section.

Rates for the following include

Generally:

For taking off and replacing rubber seals and gaskets if necessary.

FIXING ONLY METAL WINDOWS

Rates for the following include

Generally:

For single or composite windows of any pattern or combined units of windows and doors.

For assembling the component parts and accessories.

Item
23

Each

1	2	3	4
Area			ADD for
not exceeding 0.50 m ²	0.50 to 1.00 m ²	1.00 to 2.00 m ²	each additional 1.00 m ²
£	£	£	£

Window or door and frame

127	screwing to timber	18.69	22.39	26.11	5.18
	building in lugs				
128	to new masonry	16.55	19.87	23.29	4.76
129	to old masonry (measure pockets separately)	20.53	25.01	29.79	7.72
130	plugging and screwing to masonry	22.40	27.62	32.82	7.77
131	ADD where glazed before fixing	9.79	11.98	16.36	3.19

WORK TO EXISTING METAL WINDOWS

	<i>Each opening sash</i>		£
132	Easing sash in position: oiling or greasing hinges, butts and opening gear		12.70

23: WINDOWS, SCREENS AND LIGHTS

FIXING ONLY METAL ROOF LIGHTS

Rates for the following include

Generally:

For single or composite roof lights of any pattern.

For assembling the component parts and accessories.

Item					
		1	2	3	4
		Area			ADD for
		not exceeding 0.50 m ²	0.50 to 1.00 m ²	1.00 to 2.00 m ²	each additional 1.00 m ²
23	Each	£	£	£	£
	Roof light: pre-glazed				
133	screwing to timber	42.87	56.05	69.22	15.40
134	plugging and screwing to masonry	47.24	61.54	75.83	17.60

WORK TO EXISTING METAL ROOFLIGHTS

	Each opening light	£
135	Easing in position: oiling or greasing hinges, butts and opening gear	15.87

WELDING

Specification

Workmanship: comply with BS EN 1011-1 and -2.

	Each	£
136	Welding ironmongery item to metal window, door or frame	4.82

23: WINDOWS, SCREENS AND LIGHTS

PLASTIC WINDOWS: GENERALLY

Notes

Bedding and pointing:

Pay for at the Rates in Timber Windows section unless otherwise stated.

FIXING ONLY PLASTIC WINDOWS

Specification

For cutting glazing beads to length.

One-part polysulphide-based sealant:
to BS EN ISO 11600.

For taking off and refixing rubber seals and gaskets if necessary.

Rates for the following include

Trim:

For any size or section shape.

Generally:

For single or composite windows of any pattern or combined units of windows and doors.

For cutting to length.

For bedding and pointing in sealant.

For assembling the component parts and accessories.

Item		1	2	3	4
		Area	ADD for		
		not exceeding 0.50 m ²	0.50 to 1.00 m ²	1.00 to 2.00 m ²	each additional 1.00 m ²
		£	£	£	£
23	<i>Each</i>				
	Window or door and frame				
137	screwing to timber	20.24	24.38	28.70	4.16
138	plugging and screwing to masonry	26.81	32.42	38.01	6.36
139	ADD where glazed before fixing	14.29	17.92	24.52	4.74
	<i>Metre</i>				£
140	Trim				1.92

23: WINDOWS, SCREENS AND LIGHTS

WORK TO EXISTING PLASTIC WINDOWS

Item		
23	<i>Each opening sash</i>	£
141	Easing sash in position: oiling or greasing hinges, butts and opening gear	20.38

FIXING ONLY PLASTIC DOMED ROOFLIGHTS

Specification

For assembling the component parts and accessories.

One-part polysulphide-based sealant:
to BS EN ISO 11600.

Trim:
For any size or section shape.

Rates for the following include

For cutting to length.

Generally:
For square or rectangular domed roof lights of
any pattern.

For bedding and pointing in sealant.

		1	2	3	4
		Area			ADD for
		not	0.50 to	1.00 to	each
		exceeding	1.00 m ²	2.00 m ²	additional
		0.50 m ²			1.00 m ²
		£	£	£	£
		<i>Each</i>			
		Domed roof light			
142	screwing to timber	22.53	43.40	70.93	13.49
143	plugging and screwing to masonry	26.81	48.77	77.57	15.72
		<i>Metre</i>			
144	Trim				1.92

23: WINDOWS, SCREENS AND LIGHTS

ASSOCIATED IRONMONGERY

GENERALLY

Specification

Butts and hinges: to BS EN 1935.

Notes

Mortices and grooves in brickwork or blockwork:
Pay for at the Rates in Section 14.

Cutting background metal:
Pay for at the Rates in Section 15.

Drilling background metal:
Pay for at the Rates in Section 26.

Bolts for fixing ironmongery to background:
Pay for at the Rates in Section 50.

Rates for the following include

Generally:
For fixing to timber unless otherwise stated.

For fixing with matching screws.

For drilling, sinking and mortising in timber.

For all necessary normal pattern keeps, sockets, striking plates or the like unless otherwise stated.

For cutting back striking plates where required to suit frame.

Fixing to timber:
For drilling through any material other than metal, tiled finish or the like.

23: WINDOWS, SCREENS AND LIGHTS

TAKING OFF AND FIXING ONLY

Notes

Generally:

All screws for fixing will be supplied with the ironmongery.

Item		1		2	
		Taking off		Fixing only	
		£		£	
23	<i>Pair</i>				
145	Casement angle hinges: 64 mm	1.68		6.69	
146	Easy clean hinges: 70 mm	2.17		8.37	
	Sash fittings				
	<i>Pair</i>				
147	Sash centres or friction pivots	3.19		16.74	
	<i>Each</i>				
148	Sash pulley	2.17		8.37	
	Locks, latches, catches and fasteners				
	<i>Each</i>				
149	Window lock	3.19		12.56	
150	Fanlight catch	1.51		5.58	
151	Sash fastener	1.51		5.58	
152	Sash pulley	2.17		5.58	
153	Casement fastener	1.51		5.58	
154	Quadrant stay or roller	1.33		5.03	
155	Casement stay: one or two pin	1.51		4.19	
156	Child lock/restrictor	1.51		5.58	
157	Fanlight opener: not exceeding 400 mm arm: worm wheel, pulley and endless cord	4.19		16.74	
	Handles				
	<i>Each</i>				
158	Sash lift	1.51		2.93	
159	Flush sash lift	1.51		12.56	
	Draught excluders				
	<i>Metre</i>				
	Draught strip				
160	foam plastic: self adhesive	0.33		1.51	
161	rubber or plastics	0.51		2.17	
162	copper alloy	1.33		5.03	

23: WINDOWS, SCREENS AND LIGHTS

WORK TO EXISTING IRONMONGERY

		£
Item		
23	Taking off existing and fixing only new with set screws (supplied) to existing metal window (measure drilling and tapping separately)	
163	casement fastener	5.03
164	casement stay or pin	4.19

TIMBER: GENERALLY

Notes

Definition of terms

Rates for the following include

Door:
For fitting and hanging.

STOCK PATTERN DOORS: WROUGHT SOFTWOOD

Item	Each	1	2	3	4
		Size			
		610 x	686 x	762 x	838 x
		1981 mm	1981 mm	1981 mm	1981 mm
		£	£	£	£
001	Matchboarded, ledged and braced door: to BS 459	-	67.36	69.02	76.19
002	Matchboarded, framed, ledged and braced door: to BS 459	-	86.04	87.71	95.88
Panelled interior door: 34 mm thick					
003	type 10	58.44	60.12	61.79	67.02
004	type 2G	-	-	101.10	-
005	type 2GG	-	-	100.64	-
006	type 50	-	84.77	87.75	-
007	type 3A	-	-	130.31	-
Panelled exterior door: 44 mm thick					
008	type 10	-	-	104.03	105.71
009	type 2XG	-	-	126.27	127.95
010	type 2XGG	-	124.60	126.27	127.95
011	type 50	-	-	104.39	-
012	type 3A	-	-	136.53	140.24
					£
Pair of panelled exterior doors: 1168 x 1981 mm: 44 mm thick					
013	type 20				232.17
014	type 70				241.79

24: DOORS, SHUTTERS AND HATCHES

STOCK PATTERN FLUSH DOORS

		1	2	3	4	
		Size				
		686 x	762 x	838 x	813 x	
Item		1981 mm	1981 mm	1981 mm	2032 mm	
24	Each	£	£	£	£	
015	Cellular core hardboard faced interior door: 34 mm thick	51.66	53.23	57.78	58.62	
016	Cellular core plywood faced exterior door: 34 mm thick	100.27	101.95	105.56	107.23	
017	Solid core plywood faced exterior door: lipped on two long edges: 44 mm thick	102.60	103.21	106.65	107.26	
018	Half hour fire check hardboard faced interior door: 44 mm thick	82.18	83.02	87.54	88.38	
019	Half hour fire check plywood faced exterior door: lipped on two long edges: 44 mm thick	115.62	117.30	120.90	122.57	
020	One hour fire check plywood faced interior or exterior door: lipped all round: 54 mm thick	204.29	205.97	209.55	211.23	
					£	
ADD for rectangular opening for glass: any size: loose matching beads: brass screws and cups						
021	solid core plywood faced door					54.22
022	half hour hardboard faced door					54.22
023	half hour plywood faced door					54.22

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN DOORS: WROUGHT SOFTWOOD BOARDED

Definition of terms

Overall thickness: the total thickness measured over framing, ledges, braces and boarding.

1	2	3	4	5	6
Ledged			Ledged and braced		
Overall thickness					
38 mm	44 mm	51 mm	38 mm	44 mm	51 mm
£	£	£	£	£	£

Item
24

Square Metre

Door: tongued, grooved and V-jointed or beaded one or both sides

13 mm boarding

024	not exceeding 0.75 m ²	117.83	126.21	-	129.13	134.30	-
025	0.75 to 1.50 m ²	90.80	96.04	-	98.84	103.03	-
026	exceeding 1.50 m ²	72.61	77.34	-	78.07	81.58	-

19 mm boarding

027	not exceeding 0.75 m ²	-	129.06	139.13	-	140.21	147.07
028	0.75 to 1.50 m ²	-	96.13	104.58	-	104.31	109.62
029	exceeding 1.50 m ²	-	76.91	83.58	-	82.37	87.26

1	2	3	4
Overall thickness			
38 mm	44 mm	51 mm	57 mm
£	£	£	£

Door: framed, ledged and braced: tongued, grooved and V-jointed or beaded one or both sides

13 mm boarding

030	not exceeding 0.75 m ²	211.82	218.96	234.90	-
031	0.75 to 1.50 m ²	160.83	166.06	177.63	-
032	exceeding 1.50 m ²	127.86	132.31	141.11	-

19 mm boarding

033	not exceeding 0.75 m ²	-	-	242.89	252.44
034	0.75 to 1.50 m ²	-	-	184.64	189.54
035	exceeding 1.50 m ²	-	-	146.13	150.16

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN DOORS: WROUGHT SOFTWOOD PANELLED

Specification

Panelled doors:

- a. plywood panels not less than 9 mm thick for 32 mm doors and not less than 12 mm thick for 38 mm and 44 mm doors;
- b. plywood: to BS EN 636;
 1. bond type: MR in interior doors, WBP in exterior doors;
 2. appearance grade II.

Mouldings: work on the solid.

Rates for the following include

Door with panels open for glass:

For loose glazing beads with brass screws and cups.

Item	Square Metre	1	2	3	4	5	6	7	8	9
		Thickness								
		32 mm			38 mm			44 mm		
		1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels
		£	£	£	£	£	£	£	£	£
24	Panelled door: square both sides									
036	not exceeding 0.75 m ²	171.45	188.35	193.09	204.08	221.33	225.30	230.77	232.33	243.69
037	0.75 to 1.50 m ²	129.43	140.09	144.62	152.63	165.22	167.70	171.81	173.48	182.92
038	exceeding 1.50 m ²	85.68	93.18	96.80	101.51	108.59	112.22	112.26	113.31	119.82
	ADD to Items 24.036 to 24.038 for									
039	each bead butt face	10.09	10.28	10.04	10.22	10.36	10.12	11.43	11.33	10.84
040	each bead flush face	12.31	12.52	12.27	12.44	12.60	12.35	13.65	13.57	13.08
041	each moulded face	6.69	7.82	8.92	6.69	7.82	8.92	6.69	7.82	8.92
042	panels filled in with louvres housed both ends to stiles . .	10.72	-	-	11.06	-	-	12.47	-	-
	moulded both sides door: rebated all round									
043	top panel or panels open for glass	12.32	14.69	-	11.41	13.89	-	11.41	13.89	-
044	panels divided into panes not exceeding 0.10 m ²	12.50	14.87	-	11.59	14.08	-	11.59	14.08	-
045	DEDUCT from the foregoing Rates where door square both sides with all panels open for glass: rebated all round	2.42	1.68	-	4.35	3.27	-	4.35	3.27	-

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN DOORS: WROUGHT SOFTWOOD PANELLED - *continued*

Item	Metre	1	2	3
		Thickness		
		32 mm	38 mm	44 mm
24		£	£	£
046	Rebated bottom edge	2.79	3.35	4.19
047	Rounded heel or stile or rebated or rounded or beaded meeting stile	3.35	4.19	5.03

NON-STOCK PATTERN DOORS: WROUGHT HARDWOOD PANELLED

Specification

Mouldings: work on the solid.

Panelled doors:

- plywood panels not less than 9 mm thick for 32 mm doors and not less than 12 mm thick for 38 mm and 44 mm doors;
- plywood; to BS EN 636;
 - bond type: MR in interior doors, WBP in exterior doors;
 - appearance grade II.

Rates for the following include

Door with panels open for glass:

For loose glazing beads with brass screws and cups.

Square Metre

1	2	3	4	5	6	7	8	9
Thickness								
32 mm			38 mm			44 mm		
1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels
£	£	£	£	£	£	£	£	£

Panelled door: square both sides

048	not exceeding 0.75 m ²	247.70	275.17	283.00	289.67	315.80	326.74	311.63	327.89	351.47
049	0.75 to 1.50 m ²	220.87	245.21	254.48	257.92	279.19	291.74	276.82	291.30	313.36
050	exceeding 1.50 m ²	174.69	193.14	201.34	203.50	221.80	231.04	219.89	230.74	248.86

ADD to Items 24.048 to 24.050 for

051	each bead butt face	26.70	25.82	23.58	29.04	27.66	24.98	32.46	30.39	27.04
052	each bead flush face	31.15	29.72	27.50	33.49	31.56	28.90	36.92	34.29	30.96
053	each moulded face	12.27	13.95	16.19	12.27	13.95	16.19	12.27	13.95	16.19

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN DOORS: WROUGHT HARDWOOD PANELLED - *continued*

Item		1	2	3	4	5	6	7	8	9
		Thickness								
		32 mm			38 mm			44 mm		
		1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels	1 or 2 panels	3 or 4 panels	5 or more panels
24	<i>Square Metre</i>	£	£	£	£	£	£	£	£	£
	ADD to Items 24.048 to 24.050 for									
054	panels filled in with louvres housed both ends to stiles . .	16.30	-	-	16.64	-	-	18.04	-	-
	moulded both sides door: rebated all round									
055	top panel or panels open for glass	23.60	27.11	-	22.69	26.31	-	22.69	26.31	-
056	panels divided into panes not exceeding 0.10 m ²	23.95	27.46	-	23.05	26.67	-	23.05	26.67	-
057	DEDUCT from the foregoing Rates where door square both sides with all panels open for glass: rebated all round	1.99	1.05	-	3.92	2.63	-	3.92	2.63	-

	<i>Metre</i>	1	2	3
		Thickness		
		32 mm	38 mm	44 mm
		£	£	£
058	Rebated bottom edge	5.87	6.69	7.53
059	Rounded heel or stile or rebated or rounded or beaded meeting stile	6.69	7.53	8.08

ADJUSTMENTS TO THE FOREGOING RATES

060 Doors with curved heads:

Measure square and price at the foregoing Rates. Price the curved portion from the springing upwards at the foregoing Rates multiplied by 1.50.

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN FLUSH DOORS

Specification

Hollow or cellular core flush doors:

- facing: hardboard or plywood;
- plywood: to BS EN 635 appearance grade II; thickness sufficient to mask core construction;
- hardwood lipping: to all edges of exterior plywood faced doors;
- glazing apertures: hardwood lipped;
- adhesive: to BS 1203/1204 type MR in interior doors, type WBP in exterior doors;
- from an approved manufacturer.

Solid core flush doors:

- plywood facing: to BS EN 635 appearance grade II; thickness sufficient to mask core construction;
- hardwood lipping: to all edges;
- glazing apertures: hardwood lipped;
- adhesive: to BS 1203/1204 type MR in interior doors, type WBP in exterior doors;
- from an approved manufacturer.

Item		1		2	
		Thickness			
		35 mm	40 mm		
24	Square Metre	£	£		
	Door: interior: hollow or cellular core: hardboard faced				
061	not exceeding 0.75 m ²	35.74	39.96		
062	0.75 to 1.50 m ²	29.82	33.04		
063	exceeding 1.50 m ²	27.19	26.62		
	Each				
064	Extra for rectangular opening for glass: any size: loose matching glazing beads with brass screws and cups	54.22	54.22		

		1	2	3	4	5	6	7	8
		Hollow cored: plywood faced				Solid cored			
		Interior		Exterior		Interior		Exterior	
		Thickness							
		35 mm	40 mm	40 mm	44 mm	40 mm	44 mm	40 mm	44 mm
	Square Metre	£	£	£	£	£	£	£	£
	Door								
065	not exceeding 0.75 m ² . . .	72.05	78.15	90.07	89.69	94.38	100.42	110.48	117.56
066	0.75 to 1.50 m ²	59.66	65.49	74.13	75.58	83.50	89.33	99.13	105.51
067	exceeding 1.50 m ²	49.68	55.28	62.89	64.23	74.75	79.81	89.99	95.07
	Each								
	Extra for opening for glass: any size: loose matching glazing beads with brass screws and cups								
068	rectangular	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22
069	circular	81.34	81.34	81.34	81.34	81.34	81.34	81.34	81.34

24: DOORS, SHUTTERS AND HATCHES

NON-STOCK PATTERN FLUSH DOORS - *continued*

Item		1	2	3	
		Thickness			
		35 mm	40 mm	44 mm	
24	Metre	£	£	£	
070	Rebated bottom edge, rounded heel or stile or rebated meeting stile	3.35	4.05	4.74	
Square Metre				£	
071	ADD to the Rates for plywood faced flush doors where appearance grade E: matching hardwood lipping and loose glazing beads (measure one side overall)			6.33	
		1	2	3	4
		Interior		Exterior	
		Half-hour	One-hour	Half-hour	One-hour
Square Metre		£	£	£	£
Fire check flush door					
072	not exceeding 0.75 m²	86.62	193.52	125.99	198.55
073	0.75 to 1.50 m²	74.09	170.67	110.04	175.70
074	exceeding 1.50 m²	65.01	155.66	98.99	160.69
Each					
075	Extra for rectangular opening for glass: any size: loose matching glazing beads with brass screws and cups	54.22	-	54.22	-

FIXING ONLY TIMBER DOOR SETS

Definition of terms

Door set supplied in assembled form: door set supplied assembled, complete with leaves hung on butts and with removable bottom edge lipping.

Door set supplied in knock-down form: members supplied with joints prepared for assembly and all frame members pre-drilled for nailing.

Rates for the following include

Generally:

For fixing only softwood or hardwood.

For easing and adjusting and lubricating hinges.

For hanging door leaves on 1½ pairs of butts to single swing.

For cutting glazing beads, trim, architraves, beads and insulation to length.

For fixing only rockwool packing around frames.

24: DOORS, SHUTTERS AND HATCHES

FIXING ONLY TIMBER DOOR SETS - *continued*

Item		Each	1	2	3
			Supplied in assembled form	ADD where supplied in knock-down form	ADD for fixing solid overpanel
24			£	£	£
	Door set: frame and trim				
	single leaf				
076	800 x 2100 mm		56.82	16.02	-
077	900 x 2100 mm		58.70	16.57	-
078	900 x 2700 mm: overpanel: deflection head		69.02	25.99	10.43
079	900 x 3000 mm: overpanel: deflection head		73.13	27.67	13.39
080	1200 x 2700 mm: overpanel: deflection head		86.51	32.63	16.32
081	1200 x 3000 mm: overpanel: deflection head		91.41	34.58	-
082	1200 x 2100 mm: sidelight		69.09	32.56	-
083	1200 x 2700 mm: sidelight: overpanel: deflection head		83.74	34.73	16.32
084	1200 x 3000 mm: sidelight: overpanel: deflection head		93.66	37.04	18.50
	one-and-a-half leaf				
085	1200 x 2100 mm		70.01	32.56	-
086	1500 x 2100 mm		82.97	34.51	-
087	1200 x 2700 mm: overpanel: deflection head		83.66	36.26	13.39
088	1200 x 3000 mm: overpanel: deflection head		93.59	38.01	16.72
089	1500 x 2700 mm: overpanel: deflection head		107.61	38.92	17.19
090	1500 x 3000 mm: overpanel: deflection head		117.22	41.50	18.61
	double leaf				
091	1800 x 2100 mm		87.22	38.77	-
092	1800 x 2700 mm: overpanel: deflection head		123.36	43.10	18.69

24: DOORS, SHUTTERS AND HATCHES

FIXING ONLY AND REPAIRING TIMBER DOORS

Definition of terms

Softwood door: includes hardwood veneered or hardwood lipped.

Notes

Major repair:

Pay for renewing defective parts of door in addition.

Rates for the following include

Minor repair:

For piecing out door and frame where ironmongery removed.

For easing and adjusting.

Major repair:

For piecing out door and frame where ironmongery removed.

For dismantling as necessary, cramping and re-wedging with new glued wedges and pinning and setting in mastic.

For easing and adjusting.

Item

24

Each

Door: any type: any thickness

093	not exceeding 2.00 m ²	38.81	47.58	23.38	29.22
094	2.00 to 5.00 m ²	64.69	76.37	38.00	48.21
095	5.00 to 7.00 m ²	83.47	98.08	52.60	64.29

1	2	3	4
Fixing only door		Resecuring door on existing hangings	
Softwood	Hardwood	Softwood	Hardwood
£	£	£	£

1	2
Softwood	Hardwood
£	£

Fixing only "up-and-over" type garage door: frame:
opening gear: accessories: opening area

096	not exceeding 5.00 m ²	142.69	166.06
097	5.00 to 7.00 m ²	187.98	219.66
098	ADD for each additional 1.00 m ²	26.80	31.19

24: DOORS, SHUTTERS AND HATCHES

DOOR FRAMES AND LININGS: WROUGHT TIMBER - *continued*

		1	2	3	4	5	6
		Softwood			Hardwood		
		Thickness					
Item		13 mm	19 mm	25 mm	13 mm	19 mm	25 mm
24	Metre	£	£	£	£	£	£
108	Lining to door or opening in wall: not exceeding 75 mm wide: tonguing at angles	6.07	8.07	10.37	10.09	13.39	17.45
109	ADD for each additional 25 mm of width	1.58	2.10	2.71	2.68	3.59	4.69

		1	2
		Softwood	Hardwood
		£	£
	Metre		
110	Each throat, groove, flute, rebate, splay rebate, rounding, chamfer, splay weathering, moulding or beading	0.55	1.13
111	ADD where curved	0.14	0.29

		Each
112	Stop on labour: plain, splayed or shaped	0.44 0.70
113	Labours to existing timber in position: price at the foregoing Rates multiplied by 3.00.	

TAKING OUT, RESECURING AND REFIXING FRAMES AND LININGS: WROUGHT TIMBER

Rates for the following include

Taking out door frame, lining and threshold:

For taking out holdfasts, water bars or the like and detaching from frame and making good.

Refixing:

For bedding sills and water bars in mastic.

For cutting to size and fitting.

		1	2	3	4	5	6
		Softwood			Hardwood		
		Resecuring			Taking out and		
		without	refixing in		without	refixing in	
		taking out	same	other	taking out	same	other
			opening	opening		opening	opening
Each		£	£	£	£	£	£
Frame or lining: any size: for door							
114	not exceeding 2.00 m ²	10.05	35.06	46.76	15.07	52.60	70.13
115	2.00 to 5.00 m ²	15.07	52.60	64.29	22.32	78.90	96.44
116	exceeding 5.00 m ²	20.09	70.13	81.82	30.14	105.20	122.73

24: DOORS, SHUTTERS AND HATCHES

REPAIRING DOOR FRAMES: WROUGHT TIMBER

Item		
24	<i>Each</i>	£
	Renewing defective part of door frame: cutting out old: splicing in only new piece to match existing (pay for new piece at the Rates for new work)	
117	softwood	16.74
118	hardwood	21.77

DOWELS

Specification

Dowels: mild steel galvanised to BS EN ISO 1461.

Note

Cramps:
Pay for at the Rates in Section 23.

		1	2
		To	To
		softwood	hardwood
	<i>Each</i>	£	£
119	Dowel: 20 mm diameter: 75 mm long: mortice	2.83	3.62
120	ADD for additional mortice	1.68	2.51

METAL DOORS: GENERALLY

Reference to other Sections: the Preambles to Section 23: Metal Windows apply equally to this Section.

Notes

Welding ironmongery:
Pay for at the Rates in Section 23.

FIXING ONLY METAL DOORS

		1	2	3
		Area		ADD for
		not	2.00 to	each
		exceeding	3.00 m ²	additional
		2.00 m ²		1.00 m ²
	<i>Each</i>	£	£	£
	Casement door and frame			
121	screwing to timber	26.11	32.00	5.18
	building in lugs			
122	to new masonry	21.88	24.91	3.77
123	to old masonry (measure pockets separately)	26.28	30.03	5.23
124	plugging and screwing to masonry	32.82	39.49	7.77
125	ADD where glazed before fixing	16.36	19.55	3.19

24: DOORS, SHUTTERS AND HATCHES

FIXING ONLY METAL DOORS - *continued*

Item		1	2	3
		Opening area	ADD for	
		not	5.00 to	each
		exceeding	7.00 m ²	additional
		5.00 m ²		1.00 m ²
24		£	£	£
	"Up-and-over" type garage door and frame: opening gear: accessories (measure new timber surround separately)			
126	screwing to timber	88.10	117.62	16.17
127	plugging and screwing to masonry	88.38	118.08	16.23

STEEL ANGLE DOOR FRAMES

Specification

Steel: to BS EN 10025-1 and -2.

Holing: form holes to BS 5950-2.

Welding: comply with BS EN 1011-1 & 2 and in the fabrication workshop unless otherwise ordered.

Rates for the following include

Generally:

For angle section not exceeding 10 kg/m.

For mitred and welded angles.

For lugs.

For holes and notchings for ironmongery.

Notes

Galvanising:

Pay for at the Rates in Section 15.

		1	2
		Supplying and fixing	Fixing only
		£	£
	<i>Kilogramme</i>		
	Door frame: building in lugs at not exceeding 450 mm centres: for door		
128	not exceeding 2.00 m ²	2.82	0.97
129	2.00 to 5.00 m ²	2.78	0.97

WORK TO EXISTING METAL DOORS

	<i>Each</i>	£
130	Easing door in position oiling or greasing hinges, butts and opening gear	17.03

24: DOORS, SHUTTERS AND HATCHES

PLASTIC DOORS: GENERALLY

Reference to other Sections: the Preambles to Section 23: Plastic Windows apply equally to this Section.

FIXING ONLY PLASTIC DOORS AND FRAMES

Item		1	2	3
		Area not exceeding 2.00 m ²	2.00 to 3.00 m ²	ADD for each additional 1.00 m ²
24	<i>Each</i>	£	£	£
	Casement door and frame			
131	screwing to timber	37.82	41.32	4.16
132	plugging and screwing to masonry	43.59	49.42	6.36
133	ADD where glazed before fixing	24.52	33.11	4.74
	<i>Metre</i>			£
134	Trim			1.92

24: DOORS, SHUTTERS AND HATCHES

ASSOCIATED IRONMONGERY

GENERALLY

Specification

Butts and hinges: to BS EN 1935.

Definition of terms

Sliding door gear grades: to BS EN 1527:

- light pattern sliding door gear (grade 1): for doors not exceeding 50 kg;
- medium pattern sliding door gear (grade 2 or 3): for doors 51 to 330 kg;
- heavy pattern sliding door gear (grade 4): for doors exceeding 330 kg.

Notes

Mortices and grooves in brickwork or blockwork:
Pay for at the Rates in Section 14.

Cutting background metal:
Pay for at the Rates in Section 15.

Drilling background metal:
Pay for at the Rates in Section 26.

Bolts for fixing ironmongery to background:
Pay for at the Rates in Section 50.

Rates for the following include

Generally:
For fixing to timber unless otherwise stated.

For fixing with matching screws.

For drilling, sinking and mortising in timber.

For all necessary normal pattern keeps, sockets, striking plates or the like unless otherwise stated.

For cutting back striking plates where required to suit frame.

Fixing to timber:
For drilling through any material other than metal, tiled finish or the like.

Floor spring:
For providing and filling with oil.

Set of lock or latch furniture:
For two knobs or handles with backplates and spindles as required. For providing key labels as required.

Track to sliding door gear:
For all necessary connectors to joints in the length.

CAST IRON

Item		1		2	
		75 mm	100 mm	75 mm	100 mm
	Pair	£	£	£	£
	Butt hinges: self colour				
135	standard	8.49	9.21		
136	rising	18.18	20.85		

24: DOORS, SHUTTERS AND HATCHES

PRESSED STEEL

Item		Pair	1	2
			75 mm	100 mm
			£	£
24	Butt hinges: self colour			
137	medium		5.73	6.30
138	heavy		7.42	7.88
139	heavy double pressed		9.20	10.79
140	rising		15.85	17.28
				£
141	Casement angle hinges: 64 mm: sheradised			8.95
142	Easy clean hinges: 70 mm projection: sheradised			12.03

STEEL

	Pair	1	2	3	4
		250 mm	300 mm	375 mm	450 mm
		£	£	£	£
	Tee hinges: black japanned				
143	medium	11.63	12.75	15.26	18.01
144	heavy	13.51	15.20	19.02	23.93
		1	2	3	4
		305 mm	355 mm	450 mm	600 mm
		£	£	£	£
	Hook and band hinges: galvanised				
	light				
145	hook on plate	17.93	19.98	24.98	32.22
146	reversible: iron sockets	19.96	21.80	27.16	36.73
		1	2	3	4
		406 mm	457 mm	610 mm	900 mm
		£	£	£	£
	heavy				
147	hook on plate	22.86	27.99	40.38	63.04
148	cranked: hook on plate	23.29	28.70	41.95	54.56
149	reversible: iron sockets	28.37	29.92	42.29	56.27
	Metre	1	2	3	4
		Width	30 mm	40 mm	50 mm
		25 mm	£	£	£
	Water bar: galvanised: bedding in mastic				
150	3 mm thick	8.69	9.41	10.38	11.57
151	5 mm thick	9.56	10.02	11.32	12.77
152	6 mm thick	10.34	10.79	12.33	13.97

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24: DOORS, SHUTTERS AND HATCHES

TAKING OFF AND FIXING ONLY

Notes

Generally:

All screws for fixing will be supplied with the ironmongery.

Item	Hinges		1	2
			Taking off	Fixing only
			£	£
24		<i>Each</i>		
161	Piano hinge - per 25 mm of length		0.25	0.51

			1	2	3	4
			Taking off	Fixing only		
			Any size	not exceeding 50 mm	50 to 100 mm	100 to 150 mm
		<i>Pair</i>	£	£	£	£
162	Butt hinges		2.43	4.19	6.69	8.37
163	Rising butt hinges		2.43	-	9.71	12.56
164	Backflap hinges		2.43	4.19	6.69	8.37
165	Parliament hinges		4.36	-	12.89	16.74
166	Single or double action spring hinges		9.37	-	33.49	41.86

			1	2	3	4	5
			Taking off	Fixing only			
			Any size	not exceeding 300 mm	300 to 450 mm	450 to 600 mm	600 to 750 mm
			£	£	£	£	£
167	Tee or cross-garnet hinges		4.19	10.05	15.07	20.09	25.12
168	Hook and band or collinge's hinges		5.87	13.40	20.09	26.80	33.49

24: DOORS, SHUTTERS AND HATCHES

TAKING OFF AND FIXING ONLY - *continued*

Item 24	Door springs				
		1	2		
		Taking off	Fixing only		
	Each	£	£		
169	Floor spring and top centre: single or double action	10.29	85.40		
170	Overhead door closer: single or double action	5.52	33.49		
171	Door closer: Perko type	5.52	38.51		
172	Door spring: coil	2.17	8.37		
173	Door spring: helical	3.85	15.07		
174	Door selector	5.52	28.46		
	Bolts	1	2	3	4
		Taking off	Fixing only		
		Any size	not exceeding 100 mm	100 to 150 mm	150 to 300 mm
		£	£	£	£
		175	Tower or barrel bolt: straight or necked	1.33	4.19
176	Flush bolt: slide or lever action	3.52	18.84	22.18	29.30
		1	2	3	4
		Taking off	Fixing only		
		Any size	600 mm	900 mm	1200 mm
		£	£	£	£
		177	Monkey tail bolt	4.19	12.56
				1	2
				Taking off	Fixing only
				£	£
178	Espagnolette bolt			10.55	41.86
179	WC indicating bolt			6.20	16.74
180	Panic bolt for single door			7.20	46.05
181	Panic bolt for double doors			14.24	54.42

24: DOORS, SHUTTERS AND HATCHES

TAKING OFF AND FIXING ONLY - *continued*

Item	Locks, latches, catches and fasteners	1	2
		Taking off	Fixing only
		£	£
24	<i>Each</i>		
182	Mortice lock or latch: to existing mortice	2.93	2.78
183	Rim lock	2.93	12.56
184	Rim dead lock	2.93	11.72
185	Mortice lock	2.93	37.67
186	Mortice lock: half or full rebated	3.19	46.05
187	Mortice dead lock	3.19	46.05
188	Rim budget lock	2.27	10.05
189	Mortice budget lock	2.93	21.77
190	Locking bar: not exceeding 450 mm long: with staple plate	2.93	10.29
	Locking bar: with pivot and plate, hook plate and staple plate		
191	not exceeding 600 mm long	3.19	11.72
192	600 to 1000 mm long	3.35	14.73
193	ADD where with additional hook plate	0.33	1.17
194	Padlock	0.33	0.33
195	Thumb latch	2.93	16.74
196	Rim latch	2.93	12.05
197	Cylinder rim night latch	2.93	12.05
198	Mortice latch	2.93	30.98
199	Cylinder mortice night latch	2.93	30.98
200	Escutcheon	0.25	0.84
201	Set of knob furniture	1.68	3.85
202	Set of lever furniture	1.68	4.19
203	Centre door knob	1.00	2.93
204	Turn button	0.33	1.33
205	Turn button on plate	0.33	1.92
206	Ball or roller catch	1.68	6.69
207	Hasp and staple	1.00	4.19
208	Door stop: rubber	0.33	1.33
209	Door stop: rubber buffer or silencer on plate	0.51	1.68

24: DOORS, SHUTTERS AND HATCHES

TAKING OFF AND FIXING ONLY - *continued*

Item	Handles	1	2
		Taking off	Fixing only
		£	£
24	<i>Each</i>		
	Door handle (with or without plate): any type		
210	not exceeding 150 mm	1.00	3.85
211	150 to 300 mm	1.33	5.03
212	300 to 450 mm	1.68	6.69
213	Cylinder pull	1.68	6.69
214	Flush ring handle	3.19	12.56
	Finger plate		
215	not exceeding 450 mm long	0.84	3.35
216	exceeding 450 mm long	1.00	4.19
	Kicking plate		
217	not exceeding 700 mm long	1.33	5.58
218	exceeding 700 mm long	1.84	7.04
219	Door knocker	2.51	10.05
220	Letter plate or plate and knocker	1.51	20.93
	Light pattern sliding door gear		
	<i>Metre</i>		
221	Top track	4.01	15.41
222	Bottom track: fixing in groove provided	3.35	13.06
223	Door guide: groove in wood	4.69	18.42
	<i>Each</i>		
224	Hanger	2.01	7.87
225	Top or bottom guide	2.01	7.04
226	Sheave or trolley	2.01	7.87
	Medium pattern sliding door gear		
	<i>Metre</i>		
227	Top track: fixing to brackets (measure brackets separately)	1.51	6.69
228	Bottom track: any type: fixing in groove provided	3.19	12.89
	<i>Each</i>		
229	Bracket: any type	1.51	6.69
230	Hanger: any type	2.51	9.21
231	Bottom roller guide	2.17	8.54

24: DOORS, SHUTTERS AND HATCHES

TAKING OFF AND FIXING ONLY - *continued*

Item	Heavy pattern sliding door gear	1	2
		Taking off	Fixing only
		£	£
24	<i>Metre</i>		
232	Top track: fixing to brackets (measure brackets separately): not exceeding 5 m above ground or floor level	2.01	7.87
233	ADD for each additional 2 m of height	1.00	3.68
234	Bottom track: any type: fixing in groove provided	3.68	14.40
	<i>Each</i>		
235	Bracket: any type	2.01	7.87
236	Hanger: any type	3.35	13.89
237	Bottom roller: any type	3.19	12.56
	Draught excluders		
	<i>Metre</i>		
	Draught strip		
238	foam plastic: self adhesive	0.33	1.51
239	rubber or plastics	0.51	2.17
240	copper alloy	1.33	5.03

WORK TO EXISTING IRONMONGERY

Notes	<i>Fitting new keys to existing locks without removal of lock:</i>
<i>Picking lock:</i>	For oiling lock.
Do not pay for when a new steel key is supplied and fitted to the lock.	
	<i>Taking off and refixing lock:</i>
	For oiling and adjusting lock and supplying new fixing screws as required.
Rates for the following include	
	For taking off and refixing furniture.
<i>Adjusting:</i>	
For easing, cleaning and oiling.	

Door springs

	<i>Each</i>	£
241	Floor spring: single or double action: taking out: taking apart: adjusting, providing and filling with new oil as required: refixing (measure taking down door separately)	35.17
242	Overhead door closer: adjusting	17.58

24: DOORS, SHUTTERS AND HATCHES

WORK TO EXISTING IRONMONGERY - *continued*

Item	Locks	1	2	3	4	5	6
		Cupboard, drawer or press lock	Rim or mortice lock	Padlock	Cylinder lock	Brass or gunmetal magazine lock	Chubb, Hobbs or other patent lock
	<i>Each</i>	£	£	£	£	£	£
243	Oiling lock	1.39	1.39	0.84	1.39	1.39	1.39
244	Taking off lock: adjusting and refixing	4.36	7.04	3.35	6.45	12.39	10.72
245	Picking lock	6.28	10.05	5.03	9.37	16.74	15.07
246	New steel key: fitting to lock: without removing lock	13.28	13.28	13.28	-	-	-
247	New key to cylinder lock: cutting to sample provided: fitting to lock	-	-	-	11.45	-	-
	New key: fitting to lock: taking off and refixing old lock						
248	steel	17.47	21.65	13.28	-	-	30.03
249	gunmetal	-	-	-	-	24.94	29.13
250	New spring: fitting to lock: taking off and refixing old lock	13.96	18.15	13.96	-	-	-
							£
251	Stamping 3 mm letter or numeral on key or label or disc - <i>per letter or numeral</i>						0.25
252	Metal disc and split ring						3.16
	<i>Each</i>				1	2	3
					Taking off	Fixing only	Adjusting
					£	£	£
253	Box, staple or striking plate				3.35	8.88	4.19
254	Knob or lever fitting: to existing spindle: new set screw where required				0.84	3.85	4.01
Cell door fittings							
	<i>Each</i>						£
	Taking out existing and fixing only new to inspection aperture						
255	wire gauze						2.85
256	oval rim						8.37
257	cast iron gauze plate and gauze						4.19
258	eye glass and drop escutcheon						11.22
259	Taking out existing and fixing only new inspection plate, rim, eyeglass, drop escutcheon and wire gauze complete: altering hole in door as necessary						23.44

25: Stairs, Walkways and Balustrades

TIMBER: GENERALLY

Reference to other Sections: the Preambles to Section 23 apply equally to this Section.

Structural and safety requirements: to BS 5395.

STAIRS: WROUGHT TIMBER

Specification

Treads and risers: tongued and grooved and glue blocked together with backs of treads screwed to risers.

Item		1	2	3	4
		Softwood		Hardwood	
		13 mm	19 mm	13 mm	19 mm
		risers	risers	risers	risers
25	Square Metre	£	£	£	£
001	Tread and riser: 25 mm tread with rounded nosing: 75 x 100 mm sawn softwood carriage and brackets	130.82	136.15	230.15	240.80
	<i>Each</i>				
002	Returned end: nosed end to tread crossgrain: tongued and mitred angle to riser	10.76	11.19	17.08	17.87
003	Quadrant end: glue blocked and veneered riser	58.28	62.22	91.10	97.27
004	Projecting semi-circular end: glue blocked and veneered riser	97.07	103.09	151.98	158.00
	<i>Square Metre</i>				
005	Winder and riser: 25 mm tread with rounded nosing: 75 x 100 mm sawn softwood carriage and brackets (measure winder net)	152.69	157.32	259.23	267.90
	<i>Each</i>				
	Housing and wedging including groove				
006	end of tread and riser	8.37	8.37	12.56	12.56
007	end of nosing and riser	4.19	4.19	6.28	6.28
008	narrow end of winder and riser	5.58	5.58	8.37	8.37
009	wide end of winder and riser	11.17	11.17	16.76	16.76

25: STAIRS, WALKWAYS AND BALUSTRADES

STAIRS: WROUGHT TIMBER - *continued*

Item		1		2	
		Softwood		Hardwood	
		£		£	
25	Square Metre				
010	Landing: 25 mm thick: crosstongued including grooves: hardwood tongues: sawn softwood bearers	67.01		129.70	
	Metre				
011	Nosing: 69 x 25 mm: rounded: tongued including groove	7.95		13.60	
	Each				
012	Returned end	4.19		6.28	
013	Mitre	2.79		4.19	
		1	2	3	4
		Softwood		Hardwood	
		Thickness			
		13 mm	25 mm	13 mm	25 mm
	Metre	£	£	£	£
014	Apron lining: 150 mm wide	13.83	20.18	24.51	36.58
015	ADD for each additional 25 mm of width	2.06	2.98	4.07	6.27
	Each - any width				
016	Housed end including groove	9.76	11.72	14.65	17.58
017	Mitre	8.13	9.76	12.21	14.65
		1	2	3	4
		Softwood		Hardwood	
		Thickness			
		32 mm	44 mm	32 mm	44 mm
	Metre	£	£	£	£
018	String: 250 mm wide: plugging	29.52	37.27	58.97	76.31
019	ADD for each additional 25 mm of width	2.65	3.29	5.39	6.85
020	Cut string: 200 mm wide	29.33	35.95	61.94	76.65
021	ADD for each additional 25 mm of width	3.14	3.91	6.88	8.61
	Each - any width				
	Extra for				
022	short ramp	38.04	45.63	75.87	91.49
023	short wreath (each quarter turn or less)	62.56	75.20	124.75	150.02
024	Splay fitted end	10.76	13.06	19.14	23.38
025	Framed end	13.20	16.07	23.06	28.22
026	Framed end on rake	17.43	21.13	30.11	36.66
027	Mitre	12.60	15.30	22.21	27.11

25: STAIRS, WALKWAYS AND BALUSTRADES

STAIRS: WROUGHT TIMBER - *continued*

Item		1	2	3	4
		Softwood		Hardwood	
		Sectional end of member			
		not exceeding 500 mm ²	ADD for each additional 100 mm ²	not exceeding 500 mm ²	ADD for each additional 100 mm ²
		£	£	£	£
25	Metre				
	Handrail				
028	mopstick or four times rounded	1.70	0.21	3.27	0.43
029	fully moulded	2.13	0.26	3.77	0.47
030	ADD for grooving for core rail and screwing	0.51	0.05	0.84	0.08
	Each				
	Extra for				
031	quadrant bend or short ramp	2.60	0.28	4.38	0.45
032	short wreath	4.28	0.44	7.18	0.74
033	Splay fitted end	0.76	0.09	1.31	0.15
034	Rounded, moulded or framed end	0.93	0.10	1.59	0.17
035	Framed end on rake	1.09	0.13	1.87	0.21
036	Mitre	0.60	0.07	1.04	0.12
037	Heading joint in straight length (measure handrail screw separately)	0.76	0.09	1.31	0.10
038	Heading joint of ramped and straight (measure handrail screw separately)	1.09	0.13	1.87	0.21
	Metre				
039	Capping: grooved: twice rounded or moulded	1.78	0.23	3.21	0.41
	Each				
	Extra for				
040	quadrant bend or short ramp	2.60	0.28	4.38	0.45
041	short wreath	4.28	0.44	7.18	0.74
042	Splay fitted end	0.76	0.09	1.31	0.15
043	Framed end	0.93	0.10	1.59	0.17
044	Framed end on rake	1.09	0.13	1.87	0.21
045	Mitre	0.60	0.07	1.04	0.12

25: STAIRS, WALKWAYS AND BALUSTRADES

REPAIRING STAIRCASES

Notes

New work in repairs:
Pay for at the Rates for new work.

Rates for the following include

Generally:
For softwood or hardwood except where otherwise stated.

Taking down and refixing:
For taking out defective parts.

Item		1	2	3
		Taking down	Resecuring	Taking down and refixing in same position
25	<i>Square Metre</i>	£	£	£
057	Staircase complete or in part: excluding handrails and balusters: including strings, newels, carriages, treads, risers and spandrels (measure only treads, risers, strings and spandrels)	17.54	23.38	55.52
	<i>Metre</i>			
058	Handrail: straight or curved	1.39	1.85	4.40
	<i>Each</i>			
059	Baluster, bracket, scroll or nosing return to cut string	1.13	1.50	3.55
060	Isolated tread or riser	6.60	8.81	20.91
	<i>Square Metre</i>			£
	Renewing nosing to worn tread: cutting out old tread for a width of 125 mm: providing and fixing new nosing with glued and dowelled joints to old tread not exceeding 32 mm thick			
061	new softwood nosing to softwood staircase			39.73
062	new hardwood nosing to hardwood staircase			69.66
	<i>Metre</i>			
	Metal non-slip strip: screwed			
063	nosing: not exceeding 140 mm wide		4.19	6.69
064	filling-in strip: 50 to 140 mm wide		2.79	4.66

25: STAIRS, WALKWAYS AND BALUSTRADES

SUNDRIES

Rates for the following include

Generally:

For twice creosoting softwood before assembly.

Taking down:

For taking out fixings and supports except built-in supports.

Item		Metre	1	2	3
			Sawn softwood		
			Width		
			400 mm	500 mm	600 mm
25			£	£	£
	Cat ladder				
065	38 x 38 mm rungs at 250 mm centres: jointing and screwing to 50 x 50 mm strings		14.43	15.07	15.71
	Duckboard				
066	50 x 38 mm slats at 75 mm centres: four times screwing each to two 50 x 38 mm runners		21.02	22.39	23.74
067	ADD where runners 75 x 50 mm		2.10	2.10	2.10
		Metre	1	2	3
			Wrought softwood		
			Width		
			400 mm	500 mm	600 mm
			£	£	£
	Cat ladder				
068	32 x 32 mm rungs at 250 mm centres: jointing and screwing to 44 x 44 mm strings		19.90	20.61	21.33
	Duckboard				
069	44 x 32 mm slats at 75 mm centres: four times screwing each to two 44 x 32 mm runners		29.19	30.96	32.74
070	ADD where runners 69 x 44 mm		3.99	3.99	3.99
					£
	Cat ladder: any description				
071	taking up and setting aside				1.32
072	fixing only				1.35
	Duckboard: any description				
073	taking up and setting aside				2.01
074	fixing only				2.01

25: STAIRS, WALKWAYS AND BALUSTRADES

METAL: GENERALLY

Specification

Steel: to BS EN 10025-1 and -2.

Machine screws and nuts: to BS EN ISO 1580 and 7045.

Rivets: from approved manufacturer.

Holing: form holes to BS 5950-2.

Bimetallic corrosion: prevent metallic contact of dissimilar metals, likely to cause bimetallic corrosion, by insulation at contact points.

Welding: comply with BS EN 1011 and execute in the fabrication workshop unless otherwise ordered.

Balustrades: to BS 6180.

Notes

Galvanising:
Pay for at the Rates in Section 15 unless otherwise stated.

Mortices for lugs in concrete:
Pay for at the Rates in Section 11.

Mortices for lugs in brickwork or blockwork:
Pay for at the Rates in Section 14.

Bolts:
Pay for at the Rates in Section 50.

Rates for the following include

Generally:
For any size or section shape unless otherwise stated.

For lugs for building in or screws for fixing as appropriate.

Welding:
For leaving as laid unless otherwise stated.

STEEL CAT LADDERS, GRILLES OR THE LIKE

Specification

Steel access ladders: to BS 4211: Class A galvanised to BS EN ISO 1461 after fabrication.

Rates for the following include

Cat ladder, grille or the like:
For flat metal strings or frames.

For round bars or rungs.

For all curved work to ends of cat ladders.

For all supports, lugs and fixings.

For drilling holes.

Item
25

Kilogramme

075

Cat ladder, grille or the like: steel: framed: riveting or welding and finishing smooth

1	2
Supplying and fixing	Fixing only
£	£
11.22	0.97

25: STAIRS, WALKWAYS AND BALUSTRADES

STEEL ISOLATED BALUSTRADES

Rates for the following include

For countersunk set screwing, riveting or welding members and finishing smooth.

Generally:

For balustrades or railings consisting of handrail or core rail, balusters between handrail or core rail and bottom rail and standards with fanged, forged or flattened ends for building in or bolting.

For drilling holes.

For framed work.

For balustrades or railings with balusters with fanged, forged or flattened ends for building in or bolting where bottom rail is omitted.

For ends, angles and intersections of balustrades or railings.

Item			
		1	2
25	Kilogramme	Supplying and fixing £	Fixing only £
076	Handrail, core rail or bottom rail	6.21	2.22
077	Intermediate rail	6.36	2.22
078	ADD where curved in plane of bar	0.79	-
079	Baluster or standard	7.54	2.22
	<i>Each</i>		
	Extra for		
080	ramp	18.99	-
081	wreath	23.38	-
082	scroll	36.52	-
083	quadrant bend in plane of bar	29.22	-

STEEL ISOLATED TUBULAR HANDRAILS AND BALUSTRADES

Specification

Clamp type fittings:
from an approved manufacturer.

Steel tubes: to BS EN 10255.

Galvanising: hot dip to BS EN ISO 1461.

Method of measurement

Screwed fittings: malleable cast iron to BS 143 and 1256.

Handrail, baluster or the like:
Measure over all fittings.

25: STAIRS, WALKWAYS AND BALUSTRADES

STEEL ISOLATED TUBULAR HANDRAILS AND BALUSTRADES - *continued*

Item		1	2	3	4	5	6
		Light weight				Medium weight	
		Black		Galvanised		Galvanised	
		Nominal size					
		40 mm	50 mm	40 mm	50 mm	40 mm	50 mm
25	Metre	£	£	£	£	£	£
084	Handrail, baluster or the like	18.23	20.07	22.51	25.61	24.23	27.36
	Each						
	Extra for						
085	made bend	17.54	23.38	-	-	-	-
086	made bend: re-galvanising	-	-	21.03	27.03	23.95	29.95
	Extra for welded joint finished smooth						
087	mitred angle	4.59	5.70	-	-	-	-
088	intersection	3.68	4.59	-	-	-	-
	Extra for screwed fitting						
089	straight connector	11.42	13.72	12.17	14.73	12.17	14.73
090	elbow	12.73	14.50	13.82	15.82	13.82	15.82
091	tee junction	20.87	26.63	22.31	28.55	22.31	28.55
092	double tee junction	33.18	41.38	36.02	44.80	36.02	44.80
093	flange floor plate: screwing to timber	15.15	16.39	17.17	18.42	17.17	18.42
094	flange floor plate: bolting	15.65	17.35	17.68	19.39	17.68	19.39
	Extra for clamp type fitting						
095	straight coupling	11.11	10.99	7.90	8.95	7.91	8.36
096	elbow	12.52	17.63	8.37	10.50	9.35	15.04
097	side outlet elbow or two socket tee	17.14	16.87	13.35	15.77	13.98	14.26
098	three socket tee	15.71	20.53	12.93	13.94	12.54	17.94
099	two socket cross	14.95	18.34	10.63	13.04	11.78	15.76
100	side outlet tee	16.85	22.92	11.07	12.04	13.65	20.33
101	four socket cross	23.92	25.43	20.92	23.60	20.78	22.84
102	light flange: screwing to timber	12.97	13.05	8.95	10.91	9.80	10.43
103	railing standard flange: bolting	16.34	21.08	12.09	14.56	13.14	18.49
	Extra for fitting with welded joints finished smooth						
104	6 mm flange plate: drilling and screwing to timber	9.26	9.55	-	-	-	-
105	6 mm flange plate: drilling and bolting	10.10	10.38	-	-	-	-

26: Metalwork

GENERAL METALWORK

STEEL

Specification

Steel: to BS 1449-1:

- a. condition: cold reduced;
- b. finish: full.

Welding: comply with BS EN 1011.

Method of measurement

Metal covering:

Make no deduction for voids not exceeding 0.50 m².

Rates for the following include

Screwing:

For rustproofed round or countersunk head screws.

For holes and screws.

For countersinking holes for countersunk head screws.

Item
26

Square Metre

Covering: to door, bench top or the like:
screwing to timber

001	exceeding 300 mm wide	60.35	64.73	66.32	71.78	78.26	80.60

Metre

002	not exceeding 300 mm wide - <i>per 25 mm of width</i>	3.29	1.79	1.84	1.98	2.14	2.20

Screwing to timber at edge

003	not exceeding 150 mm centres	4.35	5.19	6.03	4.35	5.19	6.03

004	150 to 300 mm centres	2.62	3.46	4.30	2.62	3.46	4.30

005	Raking cutting	13.96	24.53	31.83	17.46	33.09	46.18

006	Curved cutting	27.93	49.07	63.69	34.93	66.18	92.38

007	Chamfered or slightly rounded edge finished smooth	4.47	5.03	5.58	4.47	5.03	5.58

008	Bending at edge	10.05	13.40	16.74	10.05	13.40	16.74

26: METALWORK

STEEL FABRIC AND EXPANDED METAL

Specification

Steel fabric: welded hard drawn wire to BS 4483.

Weldmesh: from an approved manufacturer.

Steel expanded metal: in general accordance with BS 405: diamond mesh 19 x 51 mm.

Item		1	2	3	4	5	6	7	8
		Steel fabric		Weldmesh (4 mm wire)				Steel expanded metal	
		Ref. A98	Ref. B283	Plain	Galvanised		2.44 kg/m² 8.59 kg/m²		
		1.54 kg/m²	3.73 kg/m²	50 x 50 mm	75 x 75 mm	50 x 50 mm	75 x 75 mm		
26	Square Metre	£	£	£	£	£	£	£	£
	Covering: to partition or the like								
	exceeding 300 mm wide								
009	stapling to timber with galvanised staples	16.64	33.18	40.65	39.80	45.69	44.60	11.59	29.42
010	spot welding to metal . .	34.76	50.47	57.50	56.68	-	-	-	-
011	wiring to metal with 2 mm annealed iron wire	23.79	40.33	47.36	46.54	52.20	51.15	19.04	32.96
	Metre								
	not exceeding 300 mm wide								
012	stapling to timber with galvanised staples	10.37	20.21	22.45	22.20	23.97	23.63	4.93	12.02
013	spot welding to metal	22.54	31.42	34.36	34.11	-	-	-	-
014	wiring to metal with 2 mm annealed iron wire	15.20	25.27	27.07	26.82	28.59	28.26	9.36	23.41
015	Raking cutting	2.63	6.15	8.42	8.35	8.82	8.73	3.98	9.14
016	Curved cutting	4.44	9.78	12.64	12.50	13.44	13.27	6.28	15.77
017	Bending at edge	2.51	4.19	6.69	8.37	6.69	8.37	4.69	9.21
	Square Metre								
	Panel: any size								
018	stapling to timber with galvanised staples	-	-	44.19	43.30	49.52	48.37	-	-
019	spot welding to metal	-	-	63.25	62.35	-	-	-	-

26: METALWORK

GALVANISED HEXAGONAL STEEL WIRE NETTING

Specification

Galvanised hexagonal steel wire netting:
to BS EN 10223-2.

Item						
		1	2	3	4	5
		Mesh size and wire designation				
		13 mm	25 mm	25 mm	38 mm	50 mm
26	Square Metre	22	20	19	19	19
		£	£	£	£	£
	Covering: to partition or the like: stapling to timber with galvanised staples					
020	over 300 mm wide	11.55	11.30	11.37	11.18	10.97
	Metre					
021	not exceeding 300 mm wide	6.44	6.37	6.39	6.27	6.20
022	Raking cutting	3.48	3.46	3.46	3.01	2.99
023	Curved cutting	6.96	6.91	6.92	6.03	5.98
024	Bending at edge	1.68	1.51	1.59	1.43	1.33

GALVANISED IRON WIRE MESH

	Square Metre	£
	Panel: any size: outer frame of wire not less than twice gauge of mesh wire: fixing to timber with galvanised staples or special clips	
025	10 mm square mesh: 1.8 mm wire	92.32
026	13 mm square mesh: 2.0 mm wire	86.10
027	16 mm square mesh: 2.6 mm wire	83.35
028	25 mm long way diamond mesh: 2.0 mm wire	68.74
029	32 mm long way diamond mesh: 2.6 mm wire	66.33
030	38 mm long way diamond mesh: 2.6 mm wire	64.72

26: METALWORK

WOVEN WIRE

Item		
26	<i>Square Metre</i>	£
	Panel: any size: wire at 20 meshes per 25 mm both ways: fixing to timber	
031	0.38 mm aluminium wire: fixing with aluminium tacks or staples	38.63
032	0.38 mm tinned steel wire: fixing with galvanised tacks or staples	45.95
033	0.38 mm copper wire: fixing with copper tacks or staples	61.63
034	0.27 mm brass wire: fixing with copper tacks or staples	65.31

ALUMINIUM

Rates for the following include

Generally:
 For countersunk drilling and screwing with aluminium
 or cadmium screws at 200 mm centres.

 For fitted ends.

	<i>Metre</i>	£
	Fixing only: to timber	
035	trim strip: not exceeding 50 mm wide	5.06
036	trim angle: not exceeding 50 x 50 mm	5.90
	threshold	
037	not exceeding 50 mm wide	5.90
038	50 to 100 mm wide	7.60
039	100 to 200 mm wide	9.32
	ADD for plugging: trim or threshold	
040	not exceeding 50 mm wide or girth	5.38
041	50 to 100 mm wide or girth	6.57
042	100 to 200 mm wide or girth	7.75
	<i>Each</i>	
	Mitred angle on trim strip or angle	
043	not exceeding 50 mm wide or girth	4.19
044	50 to 100 mm wide or girth	5.58
045	100 to 200 mm wide or girth	7.53

26: METALWORK

MILLED LEAD

Specification

Milled lead: to BS EN 12588, Colour Code Blue (1.80 mm).

Item		
26	Square Metre	£
	Covering to door, bench top or the like	
046	exceeding 300 mm wide	81.54
	Metre	
047	not exceeding 300 mm wide - per 25 mm of width	2.27
	Copper nailing to timber at edge	
048	not exceeding 50 mm centres	7.12
049	exceeding 50 mm centres	3.54
050	Burned seam or angle	18.52
	Dressing over upstand or kerb	
051	not exceeding 150 mm girth	5.13
052	150 to 300 mm girth	9.23
053	Raking cutting	5.38
054	Curved cutting	9.52
	Each	
	Burned angle	
055	not exceeding 150 mm girth	6.19
056	150 to 300 mm girth	7.79
	Hole: for pipe or the like: dressing edge to sinking	
057	not exceeding 55 mm diameter	6.84
058	55 to 110 mm diameter	8.56
	WORK TO EXISTING LEAD	
	Square Metre	£
059	Re-dressing covering: re-forming angles	42.76
	Metre	
060	Re-bedding edge of covering in white lead: raking out or cutting out existing bedding	14.42
061	Cleaning out crack in covering: repairing with a burned seam	28.78
	Each	
062	Cleaning out hole in covering: not exceeding 500 mm ² : repairing with burned seams	10.64

26: METALWORK

ZINC

Specification

Zinc: to BS EN 988.

Rates for the following include

Nailing:
For galvanised clout nails.

For holes for nails.

Item			
		1	2
		Thickness 0.65 mm	0.80 mm
26	<i>Square Metre</i>	£	£
	Covering: to door, bench top or the like: nailing to timber		
063	exceeding 300 mm wide	96.23	103.33
	<i>Metre</i>		
064	not exceeding 300 mm wide - <i>per 25 mm of width</i>	2.56	2.75
065	Nailing to timber at edge: not exceeding 50 mm centres	7.61	7.61
066	Raking cutting	3.61	4.53
067	Curved cutting	7.21	9.06
068	Bending at edge	3.35	4.19

PERFORATED ZINC

	<i>Square Metre</i>	£
069	Panel: any size: fixing to timber with galvanised nails or tinned tacks: plain pattern: 0.43 mm thick	53.98

SEALING VERMIN HOLES

	<i>Each</i>	£
070	Sealing vermin hole in floor or skirting with sheet steel or zinc	8.63

26: METALWORK

DRILLING AND SCREWING METAL

Notes

Drilling and screwing metal:

Do not measure separately where included in the item descriptions.

Rates for the following include

Screwing:

For steel screws.

Item

26

Each

1	2	3
Thickness of metal		
not exceeding 5 mm	5 to 10 mm	10 to 15 mm
£	£	£

Drilling metal

071	screwing to timber	2.52	3.36	4.20
072	countersinking: screwing to timber	2.94	3.78	4.61
073	countersinking: tapping: screwing to metal	5.04	6.70	8.38

HOLES IN METAL

Notes

Holes in metal:

Do not measure separately where included in item descriptions.

1	2	3	4	5	6	7	8
Ferrous metal				Non-ferrous metal			
Depth of hole							
not exceeding 2 mm	2 to 10 mm	10 to 20 mm	20 to 30 mm	not exceeding 2 mm	2 to 10 mm	10 to 20 mm	20 to 30 mm
£	£	£	£	£	£	£	£

Each

Hole: countersinking if required: diameter

074	not exceeding 15 mm	3.09	3.85	5.69	7.71	2.60	3.43	4.85	6.69
075	15 to 25 mm	3.19	4.69	7.37	10.38	2.68	3.85	6.20	8.71

Tapped hole:
countersinking if required: diameter

076	not exceeding 15 mm	-	7.71	11.56	15.41	-	6.87	9.71	13.23
077	15 to 25 mm	-	9.37	14.57	20.60	-	7.71	12.39	17.58

26: METALWORK

HOLES IN METAL - *continued*

Item	<i>Each</i>	1	2	3	4	5	6	7	8
		Ferrous metal				Non-ferrous metal			
		Depth of hole							
		not exceeding 2 mm	2 to 10 mm	10 to 20 mm	20 to 30 mm	not exceeding 2 mm	2 to 10 mm	10 to 20 mm	20 to 30 mm
		£	£	£	£	£	£	£	£
	Hole: work executed in position: countersinking if required: diameter								
078	not exceeding 15 mm	4.60	5.69	8.63	11.56	3.85	5.19	7.37	9.88
079	15 to 25 mm	4.85	7.04	11.05	15.49	4.01	5.69	9.21	13.06
	Tapped hole: work executed in position: countersinking if required: diameter								
080	not exceeding 15 mm	-	12.05	17.25	23.10	-	10.29	14.57	19.76
081	15 to 25 mm	-	14.06	21.93	30.81	-	11.89	18.76	26.29

27: Glazing

GENERAL GLAZING

GENERALLY

Specification

Glass: to BS 952-1.

Low emissivity glass: to comply with the thermal insulation characteristics appropriate for the substantially improved U values for double and secondary glazing required by Part L of the Building Regulations.

Anti-bandit glass: to BS EN 356 and manufactured by a BSI Kitemark Licensee.

Putty for glazing:

- softwood windows: linseed oil putty from an approved manufacturer;
- metal windows and bedding hardwood beads in hardwood surrounds: proprietary manufacture and suitable for particular application.

Glazing compound: for glazing in:

- internal and external sheltered situations: one part non-setting compound suitable for particular application;
- external moderate and severely exposed situations: two part rubberising compound suitable for particular application.

Glazing sealants: for use for

- bedding: gun grade synthetic rubber or acrylic polymer, solvent release type;
- heel beading and capping:
 - one part polysulphide or acrylic gun grade sealant where slow curing in concealed situations is acceptable;
 - two part polysulphide gun grade sealant where speedy curing is required.

Glazing tapes: for bedding glass in

- internal situations: self adhesive velvet or cotton fibre tape;
- external situations: pre-formed butyl or polyisobutylene based mastic tape, load bearing grade.

Blocks and distance pieces: plasticised PVC to BS 2571 and

- setting blocks: softness number 30 to 50 and minimum length 12 mm;
- location blocks: length 25 mm, width to suit glass thickness and glazing channel width;

- distance pieces: length 25 mm, width to suit channel dimension, height to allow at least 3 mm depth of capping sealant.

Workmanship: comply with BS 6262 generally and to BS 8000-7 .

Method of measurement

Panes of irregular shape:

Measure the smallest rectangular area from which the pane can be obtained.

Rates for the following include

Generally:

For all preparation and/or priming rebates or grooves.

For bedding and back puttying glass in 20 to 30 mm glazing rebates.

For providing all necessary putty, mastic, sprigs, spring clips, cleats, distance pieces and setting and location blocks.

For panes of irregular shape.

For raking and curved cutting.

For panes where no dimension exceeds the manufacturer's normal maximum size.

Mastic:

For one or two part glazing compound or sealant.

Glazing with beads:

For taking off and refixing beads but not for the provision of beads.

For glazing with pinned, screwed, clip-on or set-screwed beads.

Toughened glass:

For araising.

27: GLAZING

PLAIN GLASS

Item		1	2	3
		Area of pane		
		not exceeding 0.15 m ²	0.15 to 4.00 m ²	exceeding 4.00 m ²
		£	£	£
27	Square Metre			
	Clear sheet glass: to wood with putty			
001	3 mm Ordinary Quality	64.68	45.98	40.81
002	4 mm Ordinary Quality	68.87	50.16	45.01
003	3 mm Selected Quality	68.47	49.77	44.61
004	4 mm Selected Quality	73.51	54.80	49.65
	Clear float glass: to wood with putty			
005	3 mm	73.07	54.37	49.21
006	4 mm	77.40	58.68	53.53
007	5 mm General Quality	87.48	68.78	63.62
008	6 mm General Quality	94.55	75.85	70.69
	White patterned glass: to wood with putty			
009	4 mm	89.90	71.19	66.03
010	6 mm	132.02	113.32	108.16
011	ADD to Items 27.009 and 27.010 for aligning pattern on adjacent panes (within the limits of manufacture)	6.45	6.45	6.45
	Rough cast glass: to wood with putty			
012	5 mm	85.40	66.70	61.54
013	6 mm	94.27	75.57	70.40
	Georgian wired glass: to wood with putty			
014	7 mm cast	98.41	79.71	74.54
015	6 mm polished	182.98	164.28	159.11
016	ADD to Items 27.014 and 27.015 for aligning wires on adjacent panes (within the limits of manufacture)	6.28	6.28	6.28
	Fixing only glass cut to size: to wood with putty: any of the above types			
017	3 mm	43.60	24.90	19.73
018	4 mm	46.12	27.40	22.25
019	5 mm	49.46	30.76	25.60
020	6 mm	52.81	34.11	28.95
021	7 mm	56.15	37.46	32.29
022	ADD for each additional 10 mm depth of glazing rebate	6.31	2.99	1.92
	ADD to Items 27.001 to 27.021 where			
023	to wood with mastic	3.59	1.58	0.95
024	to metal with putty	3.76	1.74	1.06
025	to metal with mastic	4.43	2.08	1.37
026	to wood or metal with beads	9.50	4.43	2.85

27: GLAZING

SPECIAL GLASS

Item		1	2	3
		Area of pane		
		not exceeding 0.15 m²	0.15 to 4.00 m²	exceeding 4.00 m²
		£	£	£
27	Square Metre			
	Toughened clear sheet glass: to wood with putty			
027	4 mm	77.38	67.90	62.73
028	6 mm	93.27	83.78	78.61
029	10 mm	140.76	130.77	126.11
	Low emissivity glass: to double or secondary glazing: to wood with putty			
030	4 mm	131.81	122.31	117.16
031	6 mm	163.77	154.28	149.12
032	6.4 mm: laminated	221.49	205.47	198.80
	Fixing only toughened or low emissivity glass cut to size: to wood with putty			
033	not exceeding 4 mm	41.09	31.59	26.44
034	4 to 6 mm	42.76	33.27	28.11
035	6 to 10 mm	57.83	47.84	43.18
	ADD to Items 27.027 to 27.035 where			
036	to wood with mastic	3.59	1.58	0.95
037	to metal with putty	3.76	1.74	1.06
038	to metal with mastic	4.43	2.08	1.37
039	to wood or metal with beads	9.50	4.43	2.85
	Laminated safety glass: to wood or metal with beads			
	3 ply			
040	5.4 mm	118.35	103.44	96.08
041	5.8 mm	122.07	107.09	100.05
042	6.4 mm	126.70	112.30	106.10
043	6.8 mm	145.33	132.61	125.40
044	7.5 mm	156.24	144.52	137.32
045	9.5 mm	187.68	179.31	172.62
046	11.5 mm	217.53	212.00	205.64
	5 ply			
047	11.3 mm	242.94	237.41	231.05

27: GLAZING

SPECIAL GLASS - *continued*

Item		1	2	3
		Area of pane		
		not exceeding 0.15 m²	0.15 to 4.00 m²	exceeding 4.00 m²
		£	£	£
27	Square Metre			
Fixing only laminated safety glass: to wood or metal with beads				
048	5.4 mm	49.39	34.49	27.13
049	5.8 mm	51.32	36.34	29.30
050	6.4 mm	53.25	38.85	32.65
051	6.8 mm	54.75	42.03	34.82
052	7.5 mm	57.43	45.71	38.51
053	9.5 mm	66.14	57.76	51.07
054	11.3 or 11.5 mm	73.84	68.31	61.95
Clear polycarbonate sheet: to wood or metal with beads				
055	3 mm	88.40	69.64	64.63
056	4 mm	104.93	86.50	81.48
057	5 mm	121.95	104.03	99.00
058	6 mm	138.98	121.39	116.54
059	9.5 mm	216.63	199.04	194.19
Fixing only clear polycarbonate sheet cut to size: to wood or metal with beads				
060	3 mm	44.87	26.12	21.10
061	4 mm	46.89	28.46	23.44
062	5 mm	49.39	31.48	26.45
063	6 mm	51.91	34.33	29.47
064	9.5 mm	60.11	42.53	37.67
Laminated anti-bandit clear float glass: to wood or metal with beads				
065	7.5 mm	233.51	221.79	214.59
066	9.5 mm	250.90	242.52	235.83
067	11.5 mm	289.59	284.06	277.70
Fixing only laminated anti-bandit clear float glass cut to size: to wood or metal with beads				
068	7.5 mm	57.43	45.71	38.51
069	9.5 mm	66.14	57.76	51.07
070	11.5 mm	73.84	68.31	61.95

27: GLAZING

SPECIAL GLASS - *continued*

Item		1	2	3
		Area of pane		
		not exceeding 0.15 m ²	0.15 to 4.00 m ²	exceeding 4.00 m ²
		£	£	£
27	<i>Square Metre</i>			
	Laminated solar control float glass cut to size: to wood or metal with beads: any colour			
071	4 mm	179.79	164.71	157.19
072	6 mm	190.92	174.02	165.31
073	10 mm	338.65	330.25	323.55
	Fixing only laminated solar control float glass cut to size: to wood or metal with beads: any colour			
074	4 mm	47.73	32.65	25.13
075	6 mm	53.25	36.34	27.63
076	10 mm	66.16	57.75	51.06
077	12 mm	73.84	68.32	61.95
078	ADD for each additional 10 mm depth of glazing rebate	6.31	2.99	1.92

DOUBLE GLAZING UNITS

Specification

Double glazing units: flush edge spacer type, from an approved manufacturer

Comply with the improved U values for double glazing required by Part L of the Building Regulations.

		1	2	3
		Area of pane		
		not exceeding 0.15 m ²	0.15 to 4.00 m ²	exceeding 4.00 m ²
		£	£	£
	<i>Square Metre</i>			
	Double glazing unit: 4 mm glass: low emissivity glass one side: to wood with putty: air space			
079	not exceeding 12 mm	268.23	175.89	134.19
080	12 to 16 mm	280.68	184.64	141.14
081	16 to 20 mm	293.64	193.74	148.34
	ADD to Items 27.079 to 27.081 where			
082	white patterned glass	42.24	27.74	20.63
083	toughened glass	156.27	102.63	76.36
084	white patterned and toughened glass	194.30	127.58	94.93

27: GLAZING

DOUBLE GLAZING UNITS - *continued*

Item		1	2	3
		Area of pane		
		not exceeding 0.15 m²	0.15 to 4.00 m²	exceeding 4.00 m²
		£	£	£
27	Square Metre			
	Fixing only double glazing unit: 4 mm glass: to wood with putty: air space			
085	not exceeding 12 mm	52.81	34.44	28.95
086	12 to 16 mm	54.49	36.12	30.62
087	16 to 20 mm	56.15	37.79	32.29
	Double glazing unit: 6 mm glass: low emissivity glass one side: to wood with putty: air space			
088	not exceeding 12 mm	298.31	208.82	167.08
089	12 to 16 mm	312.09	219.05	175.50
090	16 to 20 mm	326.46	229.70	184.25
	ADD to Items 27.088 to 27.090 where			
091	white patterned glass	47.47	33.53	26.44
092	toughened glass	175.66	124.07	97.80
093	white patterned and toughened glass	218.40	154.26	121.59
	Fixing only double glazing unit: 6 mm glass: to wood with putty: air space			
094	not exceeding 12 mm	56.15	37.79	32.29
095	12 to 16 mm	57.83	39.47	33.97
096	16 to 20 mm	59.50	41.14	35.65
097	ADD for each additional 10 mm depth of glazing rebate	7.15	3.83	2.75
	ADD to Items 27.079 to 27.096 where			
098	to wood or plastic with mastic	4.43	2.42	1.78
099	to metal with putty	4.60	2.58	1.90
100	to metal with mastic	5.27	2.91	2.21
101	to wood, plastic or metal with beads	10.34	5.27	3.69

27: GLAZING

MIRRORS

Rates for the following include

Generally:

For all labours to edgework.

Fixing with beads:

For taking off and refixing beads but not for the provision of beads.

Fixing to masonry or glazed tiling:

For plugging and screwing with chromium plated domed headed screws.

Item		1	2	3	4	5	6
		Supplying and fixing	Fixing only	Polished edges	Bevelled edges	Any type	
		not exceeding 0.10 m ²	ADD for each additional 0.05 m ²	not exceeding 0.10 m ²	ADD for each additional 0.05 m ²	not exceeding 0.10 m ²	ADD for each additional 0.05 m ²
		£	£	£	£	£	£
27	Each						
	6 mm thick glass mirror: silver backed						
102	to wood or metal with beads	48.63	5.01	49.24	5.30	15.07	1.51
103	to wood with chromium plated dome headed screws	51.49	5.73	52.10	6.01	17.92	2.22
104	to masonry	52.39	5.83	53.00	6.12	18.83	2.32
105	to glazed tiling	54.07	6.00	54.68	6.29	20.50	2.50

LOUVRES

Rates for the following include

Generally:

For fixing to wood or metal in prepared grooves with sealant.

		1	2	3	4	5	6
		Type of glass					
		5 or 6 mm clear float	7 mm Georgian wired cast	6 mm Georgian wired polished			
		100 mm wide	150 mm wide	100 mm wide	150 mm wide	100 mm wide	150 mm wide
		£	£	£	£	£	£
	Each						
	Glass louvre: long edges ground or smooth						
106	not exceeding 500 mm long	13.81	16.18	22.38	25.08	26.19	30.82
107	ADD for each additional 100 mm of length . . .	1.90	2.20	3.62	3.97	4.38	5.12
							£
108	Bevelled edge: not exceeding 500 mm long						9.21
109	ADD for each additional 100 mm of length						1.84

27: GLAZING

PROTECTIVE FILM

Specification

Protective film: to BS 6206 from an approved manufacturer. Apply to inside face of glass in accordance with the manufacturer's recommendations.

Notes

Broken or cracked panes:
Replace prior to installation (measure repairs separately).

Rates for the following include

Generally:
For washing down all glazed surfaces and cleaning rebates.

For applying to glazed surfaces in metal, wood or plastics.

For cutting to shape or profile.

		1	2	3
		Area of pane		
		not exceeding 0.15 m ²	0.15 to 4.00 m ²	exceeding 4.00 m ²
Item		£	£	£
27	Square Metre			
110	Solar reflective film: 30 micron: any colour	60.51	50.46	35.40
111	Light density film: 30 micron: any colour	61.65	51.60	36.54
	Opaque film: 50 micron			
112	bronze/matt	58.22	48.17	33.11
113	silver/matt	58.51	48.46	33.40
114	white/matt	57.94	47.89	32.82
	Security film: 100 micron			
115	clear	59.37	49.32	34.26
116	clear: scratch resistant	60.51	50.46	35.40
	Solar control combined security film: 100 micron			
117	silver	62.79	52.74	37.67

27: GLAZING

LABOURS ON GLASS

Rates for the following include

Edgework:

For external mitres.

Item		1	2	3	4	5
		Area of pane				
		not exceeding 4.00 m ²				exceeding 4.00 m ²
		Perimeter of pane				
		not exceeding 3.50 m	3.50 to 4.50 m	4.50 to 5.00 m	exceeding 5.00 m	
		£	£	£	£	£
27	Metre					
	Edgework: on glass not exceeding 6 mm thick: any type except wired glass					
118	ground flat	6.28	6.11	5.95	5.87	5.36
119	polished flat or round	7.96	7.79	7.61	7.53	7.04
	Each					
120	Extra for rounded corner	1.25	1.43	1.59	1.68	2.17
	Each					£
	Drilling glass: any type except toughened or laminated safety glass: for screw or the like: insulating sleeve: diameter					
121	not exceeding 3 mm					5.47
122	3 to 6 mm					7.21
	Drilling glass: any type except toughened or laminated safety glass: for ventilator or the like: diameter					
123	not exceeding 100 mm					8.37
124	100 to 200 mm					10.05
	Finger grip: ground smooth: in clear sheet or float glass exceeding 3 mm thick					
125	not exceeding 500 mm ²					11.72
126	500 to 1000 mm ²					16.74

27: GLAZING

SUNDRIES

Item		
27	Metre	£
	Glazing strip: to edge of glass or the like	
127	velvet or cotton fibre tape	2.24
128	pre-formed synthetic rubber based mastic tape	5.16
129	Non-ferrous tingle: not exceeding 25 x 150 mm girth: bending as required: twice countersunk drilling and screwing with brass screws to wood	1.93
130	ADD for each additional 50 mm of girth	0.36

WORK TO EXISTING GLASS

Notes	For removing and temporarily replacing beads.
<i>Reglazing:</i> Pay for as new work unless otherwise stated.	For cleaning out old putty and/or bedding materials.
Method of measurement	<i>Resecuring glass:</i> For any type of sash or other surround and any type of glass, except leaded lights and patent glazing.
<i>Hacking out glass and resecuring glass:</i> Measure the perimeter of the pane.	For removing decayed putty and painting one coat on edge of rebate.
Rates for the following include	For re-puttying.
<i>Hacking out glass:</i> For any type of sash or other surround and any type of glass, except leaded lights and patent glazing.	<i>Repairs to leaded lights:</i> For cleaning out comes, dressing back flanges of lead comes, necessary mastic and soldering.

	Metre (perimeter of pane)	£
131	Hacking out glass and preparing rebate	8.37
132	ADD where hacking out and reglazing behind guard bars in position	4.19
133	Hacking out double glazing unit	12.56
134	ADD where hacking out and reglazing behind guard bars in position	4.69
135	Resecuring pane of glass without taking out	9.33
136	Resecuring double glazing unit without taking out	12.67
	<i>Per pane</i>	
137	Extra where glass renewed to detention room doors or magazine lighting frames for unscrewing cover strips: refixing: drilling out and replacing brass or gunmetal screws if required	9.43

27: GLAZING

WORK TO EXISTING GLASS - *continued*

Item		1	2
		Clear	Obscured
		sheet	sheet
		glass	glass
27	<i>Each</i>	£	£
	Taking out pane of leaded light: reglazing with new 2 mm Selected Quality glass		
138	not exceeding 150 x 100 mm	3.65	3.65
139	150 x 100 mm to 200 x 150 mm	4.83	4.84
			£
140	Resecuring pane of leaded light without taking out: any size		1.56
		1	2
		Taking off	Taking off
		and	and
		refixing	renewing
	<i>Metre</i>	£	£
141	Lead glazing bar in patent glazing: any pattern: to wood bar: bedding in mastic	9.17	19.81
142	Lead clothed galvanised steel or aluminium alloy glazing bar in patent glazing: any pattern: integral or detachable capping: accessories: screwing to wood with galvanised screws or bolting to steel with galvanised bolts, nuts and washers (measure drilling steel separately)	10.29	18.52

28: Floor, Wall, Ceiling and Roof Finishings

CEMENT SAND AND CONCRETE SCREEDS AND TOPPINGS

GENERALLY

Specification

Cement: to BS EN 197-1 and manufactured by a BSI Registered Firm.

Water: clean and uncontaminated. Obtain approval for other than mains supply.

Sand: fine aggregate to BS EN 12620, Table 5, Column M.

Workmanship: comply with BS 8000-9 and the relevant sections of BS 8204.

Bonded screeds and toppings:

- a. prepare base by mechanically roughening to expose but not loosen coarse aggregate and removing all loose dust and debris;
- b. either:
 1. apply bonding agent strictly in accordance with manufacturer's instructions; or
 2. wet base several hours before laying screed, maintain in wet condition, removing surplus water 30 minutes before screed laying and brush in neat cement grout to surface and remove surplus;
- c. lay screed:
 1. less than 50 mm thick in one layer;
 2. greater than 50 mm thick in two layers of approximately equal thickness. Place upper layer immediately following compaction of lower layer.

Monolithic screeds and toppings:

- a. prepare surface of concrete while still plastic by brushing with a stiff broom to remove any foreign material, laitence or water;
- b. lay in one layer, total thickness not exceeding 20 mm, within 3 hours of laying base concrete.

Joints: form square and plain, abut closely and level and compact thoroughly at edges.

Bay sizes:

- a. cement-sand and fine concrete screeds: lay in areas as large as possible without forming defined strips or bays other than those determined by joints at the base;
- b. monolithic screeds and toppings: lay in bays coinciding with joints at the base;
- c. bonded cement-sand, fine concrete and granolithic toppings: lay in bays of not more than 15 m² in area, no side exceeding 4000 mm in length, laid chequer board pattern and allow 24 hours to elapse before placing adjacent bays.

Finishing concrete and granolithic toppings: in accordance with BS 8000-9, paragraph 3.4.2.

Finishing cement sand screeds: either:

- a. smooth and closed as left by steel trowel for thin sheet or tile flooring; or
- b. open textured as left by screed board for other types of flooring.

Curing: cure in accordance with BS 8000-9, subsection 3.7 and

- a. for dense screeds and toppings: do not heat the building artificially during first 4 to 6 weeks after laying; then raise temperature slowly;
- b. for proprietary screeds: cure in accordance with the manufacturer's instructions;
- c. do not use curing compounds on cement sand screeds.

Definition of terms

Screed: layer of material to form a smooth and regular base for finishes.

Topping: layer of material finished to form a smooth wearing surface.

GENERALLY - *continued*

Floor: includes landings.

Obstruction: includes metal sections, trunking, ducting, floor springs, ventilators, pipes and tubes.

Nail hole: any hole or the like not exceeding 0.001 m².

Width: the width of each face.

Notes

Forming key on base:

Pay for at the Rates in the relevant Section.

Temporary support work to face of risers or the like:

Pay for at the Rates in Section 11.

Method of measurement

Generally:

Measure area in contact with base. Make no deduction for voids not exceeding 1.00 m² or grounds.

Nail holes:

Measure making good nail holes to a maximum of 30 in the same room, passage or staircase area. Make no allowance where this number is exceeded.

Do not measure making good nail holes where in association with redecoration.

Rates for the following include

Generally:

For internal work unless otherwise stated.

For work in any location or at any height unless otherwise stated.

For preparing base other than forming key.

For working over and around conduits, junction boxes, switch boxes, socket outlets or the like fixed direct to the base.

Angle fillets:

For ends and angles.

Power floated work:

For all necessary hand floating to areas inaccessible to the power float.

Treads and risers:

For fair edges, internal and external angles and intersections not exceeding 10 mm radius.

Strings:

For ends, angles ramped and wreathed corners and intersections not exceeding 10 mm radius.

Linings to channels:

For arrises, coves, ends, angles, intersections and outlets.

Skirtings and kerbs:

For fair edges, rounded edges, beaded edges, ends, angles and ramps.

Coved strings or skirtings:

For any dubbing behind.

Jointing to existing:

For preparing edges of other finishings.

For fair flush joint.

Making good nail holes:

For removing plugs, nails or screws as necessary.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SCREED: CEMENT - SAND

Specification

Mix proportions: 1:4 cement/sand. Add minimum water to permit spreading and compaction.

Item					
		1	2	3	4
		Laid monolithically with concrete base: 15 mm thick: finished mechanically		Bonded to concrete base: 40 mm thick: finished	
		£	£	£	£
28	<i>Square Metre</i>				
	Floor: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide				
001	screeded finish	-	9.66	-	14.17
002	trowelled finish	10.72	11.42	15.21	15.93
003	ADD or DEDUCT for each 5 mm variation in thickness	1.09	1.16	1.09	1.16
	ADD where				
004	exceeding 50 mm thick in two layers	-	-	5.84	6.51
005	in staircase area	5.26	5.85	7.30	8.14
006	in plant room	3.80	4.23	4.38	4.89
007	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.59	1.76	1.59	1.76
008	externally to roof	0.89	0.98	0.89	0.98
009	not exceeding 600 mm wide	10.81	12.04	16.65	18.56
	ADD where in repairs				
010	not exceeding 1 m ²	10.81	12.04	16.65	18.56
011	1 to 5 m ²	5.41	6.03	8.33	9.28

		1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
	<i>Metre</i>	£	£	£
012	Tread: not exceeding 200 mm wide: concrete base: trowelled finish	4.26	1.09	1.96
013	ADD for each additional 25 mm of width	0.47	0.12	0.22
014	Riser or undercut riser: not exceeding 100 mm high: concrete base: trowelled finish	7.91	1.99	3.86
015	ADD for each additional 25 mm of height	1.59	0.39	0.77

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SCREED: CEMENT - SAND - *continued*

Item		
28	<i>Square Metre</i>	£
016	Roof: externally: not exceeding 15 mm thick: mechanically or manually screeded finish: to falls crossfalls and to slopes not exceeding 15 from horizontal: wood wool base: exceeding 600 mm wide	11.42
	<i>Metre</i>	
	Angle fillet	
017	50 x 50 mm extreme	5.05
018	75 x 75 mm extreme	7.73
019	Cutting out defective or cracked screed: not exceeding 50 mm wide: any depth: any surface finish: making good	4.82
	<i>Each</i>	
020	Making good nail hole: any depth: any surface finish	1.31

SCREED: FINE CONCRETE

Specification

Coarse Aggregate: to BS EN 12620, 10 mm single sized aggregate.

Mix proportions: 1:1½:3 cement / sand / coarse aggregate. Add minimum water to permit spreading and compaction.

		1	2
		Bonded to concrete base:	
		40 mm thick: finished	
		mechanically	manually
	<i>Square Metre</i>	£	£
	Floor: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide		
021	screeded finish	11.72	12.73
022	trowelled finish	13.49	14.49
023	ADD or DEDUCT for each 5 mm variation in thickness	1.10	1.17
	ADD where		
024	exceeding 50 mm thick in two layers	5.26	5.85
025	in plant room	3.94	4.39
026	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.59	1.76
027	not exceeding 600 mm wide	13.67	15.25
	ADD where in repairs		
028	not exceeding 1 m²	15.00	16.71
029	1 to 5 m²	7.49	8.35

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SCREED: LIGHTWEIGHT CONCRETE EXTERNALLY

Specification

Lightweight concrete screeds: composed of cement and approved lightweight aggregate, medium grade, mix 1:8, finished with 15 mm cement and sand (1:4) trowelled bed.

Rates for the following include

Generally:

For the provision of a waterproof overlay to roof screeds until the roof covering has been completed.

Item		
28	<i>Square Metre</i>	£
030	Roof: 75 mm average thick: level or to falls only not exceeding 15 from horizontal: exceeding 600 mm wide	22.40
031	ADD or DEDUCT <i>for each 5 mm variation in thickness</i>	1.13
	ADD where	
032	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.40
	ADD where in repairs	
033	not exceeding 1 m ²	16.65
034	1 to 5 m ²	8.33
	<i>Metre</i>	
035	Extra for forming channel: not exceeding 300 mm girth	10.24
036	ADD <i>for each additional 100 mm of girth</i>	2.33
037	ADD where laid to falls	0.89
038	Cutting out defective or cracked screed: not exceeding 50 mm wide: any depth: making good	6.59
	<i>Each</i>	
039	Making good nail hole: any depth	2.56

TOPPING: CEMENT AND SAND

Specification

Mix proportions: 1:4 cement/sand.

		1	2	3	4
		Laid monolithically with concrete base: 15 mm thick: finished mechanically	Bonded to concrete base: 40 mm thick: finished manually		
	<i>Square Metre</i>	£	£	£	£
040	Floor: level or to falls only not exceeding 15° from horizontal: in alternate bays not exceeding 15 m ² : exceeding 600 mm wide	11.01	11.72	15.50	16.23
041	ADD or DEDUCT <i>for each 5 mm variation in thickness</i>	1.09	1.16	1.09	1.16

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: CEMENT AND SAND - *continued*

Item 28	Square Metre	1	2	3	4
		Laid monolithically with concrete base:		Bonded to concrete base: 40 mm thick:	
		15 mm thick: finished		finished	
		mechanically	manually	mechanically	manually
		£	£	£	£
ADD where					
042	exceeding 50 mm thick in two layers	-	-	6.14	6.81
043	in staircase area	5.55	6.15	7.60	8.44
044	in plant room	4.09	4.53	4.68	5.19
045	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.74	1.91	1.74	1.91
046	not exceeding 600 mm wide	11.11	12.34	15.25	16.99
ADD where in repairs					
047	not exceeding 1 m ²	11.11	12.34	16.95	18.86
048	1 to 5 m ²	5.70	6.33	8.63	9.58

	Metre	1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
		£	£	£
049	Tread: not exceeding 200 mm wide: concrete base	5.30	1.09	1.96
050	ADD for each additional 25 mm of width	0.60	0.12	0.22
051	Riser: not exceeding 100 mm high: concrete base	8.65	2.17	4.24
052	ADD for each additional 25 mm of height	1.74	0.44	0.84
053	Undercut riser: not exceeding 100 mm high: concrete base	9.51	2.39	4.66
054	ADD for each additional 25 mm of height	1.91	0.47	0.93
055	Wall string: not exceeding 150 mm average width: any background	20.93	5.26	10.34
056	ADD for each additional 25 mm of width	2.99	0.75	1.48
057	ADD where coved: not exceeding 30 mm girth: next treads and risers	10.34	-	-
058	Open string: not exceeding 200 mm average width: concrete base	20.18	4.82	9.41
059	ADD for each additional 25 mm of width	2.25	0.53	1.05
060	Lining to channel: not exceeding 100 mm girth on face: to falls: concrete base	11.04	2.77	5.44
061	ADD for each additional 25 mm of girth	2.21	0.55	1.09

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: CEMENT AND SAND - *continued*

Item		1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
28	Metre	£	£	£
062	Skirting: not exceeding 75 mm high: any background	4.72	1.18	2.30
063	ADD for each additional 25 mm of girth	1.18	0.30	0.58
064	ADD where coved: not exceeding 30 mm girth	4.60	-	-
065	Kerb: not exceeding 100 mm girth: concrete base	9.58	2.42	4.70
066	ADD for each additional 25 mm of girth	1.92	0.48	0.94
067	Raking kerb string: not exceeding 300 mm girth: concrete base	21.77	5.46	10.76
068	ADD for each additional 25 mm of girth	1.69	0.43	0.83
069	ADD where coved: not exceeding 30 mm girth: next treads and risers	10.76	-	-
				£
070	Cutting out defective or cracked topping: not exceeding 50 mm wide: any depth any surface finish: making good			5.66
Each				
071	Making good nail hole: any depth: any surface finish			1.74

TOPPING: FINE CONCRETE

Specification

Coarse Aggregate: to BS EN 12620, 10 mm single sized aggregate.

Mix proportions: 1:1½:3 cement / sand / coarse aggregate. Add minimum water to permit spreading and compaction.

		1	2
		Bonded to concrete base: 40 mm thick: finished mechanically	manually
	Square Metre	£	£
072	Floor: level or to falls only not exceeding 15° from horizontal: in alternate bays not exceeding 15 m²: exceeding 600 mm wide	14.08	14.79
073	ADD or DEDUCT for each 5 mm variation in thickness	1.10	1.17
ADD where			
074	exceeding 50 mm thick in two layers	5.26	5.85
075	in staircase area	7.30	8.14

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: FINE CONCRETE - *continued*

Item 28	Square Metre	1	2	
		Bonded to concrete base: 40 mm thick: finished		
		mechanically	manually	
		£	£	
ADD where				
076	in plant room	3.94	4.39	
077	to falls and crossfalls and to slopes not exceeding 15° from horizontal	2.40	2.70	
078	not exceeding 600 mm wide	13.81	15.32	
ADD where in repairs				
079	not exceeding 1 m²	15.58	17.01	
080	1 to 5 m²	8.07	8.65	
		1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
Metre		£	£	£
081	Tread: not exceeding 200 mm wide: concrete base	4.32	0.83	1.46
082	ADD for each additional 25 mm of width	0.49	0.09	0.16
083	Riser: not exceeding 100 mm high: concrete base	5.14	1.30	2.48
084	ADD for each additional 25 mm of height	1.05	0.25	0.49
085	Undercut riser: not exceeding 100 mm high: concrete base	5.64	1.43	2.73
086	ADD for each additional 25 mm of height	1.14	0.29	0.54
087	Wall string: not exceeding 150 mm average width: any background	15.93	4.00	7.83
088	ADD for each additional 25 mm of width	2.29	0.56	1.12
089	ADD where coved: not exceeding 30 mm girth: next treads and risers	7.83	-	-
090	Open string: not exceeding 200 mm average width: concrete base	15.19	3.54	6.90
091	ADD for each additional 25 mm of width	1.70	0.39	0.77
092	Lining to channel: not exceeding 100 mm girth on face: to falls: concrete base	7.69	1.93	3.76
093	ADD for each additional 25 mm of girth	1.54	0.39	0.76
094	Skirting: not exceeding 75 mm high: any background	3.90	0.99	1.87
095	ADD for each additional 25 mm of height	0.99	0.25	0.47
096	ADD where coved: not exceeding 30 mm girth	3.76	-	-
097	Kerb: not exceeding 100 mm girth: concrete base	7.07	1.78	3.44
098	ADD for each additional 25 mm of girth	1.43	0.36	0.69

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: FINE CONCRETE - *continued*

Item		1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
28	Metre	£	£	£
099	Raking kerb string: not exceeding 300 mm girth: concrete base	16.76	4.22	8.25
100	ADD for each additional 25 mm of girth	1.32	0.32	0.63
101	ADD where coved: not exceeding 30 mm girth: next treads and risers	8.25	-	-
				£
102	Cutting out defective or cracked topping: not exceeding 50 mm wide: any depth: any surface finish: making good			3.98
	Each			
103	Making good nail hole: any depth: any surface finish			1.31

TOPPING: GRANOLITHIC

Specification

Coarse Aggregate: granite chippings to BS EN 12620, 10 mm single-sized aggregate.

Mix proportions: 1:1:2 cement / sand / granite chippings. Add minimum water to permit spreading and compaction.

		1	2	3	4
		Laid monolithically with concrete base: 15 mm thick: finished mechanically	Bonded to concrete base: 40 mm thick: finished manually		
	Square Metre	£	£	£	£
104	Floor: level or to falls only not exceeding 15° from horizontal: in alternate bays not exceeding 15 m²: exceeding 600 mm wide	14.43	15.64	20.47	21.68
105	ADD or DEDUCT for each 5 mm variation in thickness	1.46	1.55	1.46	1.55
	ADD where				
106	exceeding 50 mm thick in two layers	-	-	6.28	6.95
107	in staircase area	5.69	6.29	7.74	8.58
108	in plant room	4.23	4.67	4.82	5.32
109	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.74	1.91	1.74	1.91
110	not exceeding 600 mm wide	11.25	12.48	15.27	17.03
	ADD where in repairs				
111	not exceeding 1 m²	11.25	12.48	17.09	19.00
112	1 to 5 m²	5.84	6.46	8.76	9.72

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: GRANOLITHIC - *continued*

Item		1	2	3
		Not exceeding 15 mm thick	ADD for each additional 5 mm of thickness	ADD where in patch repair: any thickness
28	Metre	£	£	£
113	Tread: not exceeding 200 mm wide: concrete base	5.43	1.13	1.96
114	ADD for each additional 25 mm of width	0.62	0.13	0.22
115	Riser: not exceeding 100 mm high: concrete base	8.71	2.20	4.24
116	ADD for each additional 25 mm of height	1.76	0.45	0.84
117	Undercut riser: not exceeding 100 mm high: concrete base	9.57	2.42	4.66
118	ADD for each additional 25 mm of height	1.93	0.48	0.93
119	Wall string: not exceeding 150 mm average width: any background	21.02	5.29	10.34
120	ADD for each additional 25 mm of width	3.01	0.76	1.48
121	ADD where coved: not exceeding 30 mm girth: next treads and risers	10.34	-	-
122	Open string: not exceeding 200 mm average width: concrete base	20.31	4.85	9.41
123	ADD for each additional 25 mm of width	2.28	0.54	1.05
124	Lining to channel: not exceeding 100 mm girth on face: to falls: concrete base	11.10	2.79	5.44
125	ADD for each additional 25 mm of girth	2.23	0.56	1.09
126	Skirting: not exceeding 75 mm high: any background	4.77	1.21	2.30
127	ADD for each additional 25 mm of height	1.21	0.31	0.58
128	ADD where coved: not exceeding 30 mm girth	4.60	-	-
129	Kerb: not exceeding 100 mm girth: concrete base	9.64	2.44	4.70
130	ADD for each additional 25 mm of girth	1.94	0.49	0.94
131	Raking kerb string: not exceeding 300 mm girth: concrete base	21.86	5.50	10.76
132	ADD for each additional 25 mm of girth	1.71	0.44	0.83
133	ADD where coved: not exceeding 30 mm of girth: next treads and risers	10.76	-	-
				£
134	Cutting out defective or cracked topping: not exceeding 50 mm wide: any depth: any surface finish: making good			5.74
				Each
135	Making good nail hole: any depth: any surface finish			1.90

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

TOPPING: GRANOLITHIC - *continued*

Item		
28	<i>Square Metre</i>	£
	Repairing concrete or stonework with granolithic: cutting out to a depth of at least 20 mm over a rectangular area embracing the whole of the worn portion: roughing worn portions which exceed 20 mm depth: finishing fair and flush with original surfaces: forming arrises	
136	to landing	68.68
137	to tread	82.48

TOPPINGS: SUNDRIES AND LABOURS

	<i>Metre</i>	£
Dividing strip: bedding in screed or topping		
galvanised mild steel		
138	3 x 32 mm	5.55
139	6 x 32 mm	7.92
brass		
140	3 x 32 mm	11.66
141	6 x 32 mm	21.33
142	Non-slip insert 25 mm wide	21.42
ADD where curved		
143	not exceeding 15 m radius	8.20
144	exceeding 15 m radius	4.11
145	Jointing to existing	2.51
<i>Each</i>		
Mortice: not exceeding 50 x 50 x 100 mm		
146	new work	1.25
147	old work	1.68
Making good around obstruction		
148	not exceeding 0.30 m girth	2.09
149	0.30 to 1.00 m girth	2.93
150	1.00 to 2.00 m girth	3.77
<i>Metre</i>		
151	exceeding 2.00 m girth	2.51
152	Working into recessed cover or the like: not exceeding 100 mm wide	3.35
153	ADD for each additional 100 mm of width	0.84
<i>Each</i>		
154	Outlet or dishing to gulley	8.37

SURFACE TREATMENTS

Specification

Surface hardener: sodium silicate to BS 3984 grade P84.

Anti-slip material: aluminium oxide graded between BS 410-1 sieves 1.7 mm and 500 microns.

Surface hardening: clean surface and apply two coats of sodium silicate solution as follows:

- a. first coat: apply immediately after curing is completed, 1 part sodium silicate to 6 parts water by volume sprayed over floor and spread evenly, with mop or soft brush. Wipe off excess and allow to dry for at least 24 hours;

- b. second coat: apply 1 part sodium silicate to 4 parts water by volume. Allow to dry for 24 hours, then wash with clean water.

Non-slip treatment: evenly sprinkle anti-slip material at the rate of not less than 1 kg/m² into plastic topping, just before surface stiffens and lightly trowel in before final trowelling.

Rates for the following include

Generally:

For work to any surface.

Item
28

Square Metre

155

Treating surface

1	2	3
Surface hardener		Non-slip
First coat	ADD for each additional coat	treatment
£	£	£
1.20	1.12	5.85

MASTIC ASPHALT FLOORING

ASPHALT FLOORING

Specification

Approved firms: employ an approved specialist firm for laying asphalt. Removal of old work and sundry repairs may be carried out by the Contractor where permitted by the PM.

Maintenance period: the work shall be subject to a maintenance period of 18 months from the day after that on which the work as ordered is certified as complete by the PM.

Mastic asphalt (limestone aggregate): to BS 6925 and Kitemark certified:

- a. grade: as ordered;
- b. asphaltic cement: Type F1076

Acid-resisting mastic asphalt: with silica flour and finely graded coarse siliceous aggregate incorporated with a binder to BS 6925 Type F1076. To be resistant to:

- a. acid: sulphuric;
- b. temperature of acid: not exceeding 21° C;
- c. concentration: not exceeding 10%.

Coloured mastic asphalt (limestone aggregate): to BS 6925 and Kitemark certified:

- a. grade and colour: as ordered;
- b. asphaltic cement: Type F1451.

Isolating membrane:

- a. resin coated glass fibre tissue; or
 - b. black sheathing felt to BS 8747 Type 4A(i).
- Lay loose with 50 mm laps.

Primer: for concrete, other cementitious and metal surfaces: bitumen with 60% by weight volatile solvent and viscosity Redwood No. 2 at 25° C, 25 sec maximum.

Workmanship: comply with the recommendations of BS 8204-5 unless otherwise ordered.

Temperature: do not lay asphalt when the ambient temperature is below 10°C.

Maintain ambient temperature above 10°C for not less than three days after laying.

Joints: lay each coat in bays with junctions staggered not less than 150 mm.

Cooling joints: provide a gap of at least 50 mm between horizontal asphalt coat and abutting surfaces. When cooling shrinkage has taken place and within 12 hours fill the gap with flooring asphalt.

Skirtings:

- a. form in two coats with 25 mm radius coved fillet;
- b. ensure good adhesion to base;
- c. tuck top edge into chase with splayed edge;
- d. maintain full thickness of material at external angles.

Surface finish: float surface to a smooth finish without sanding using a steel float.

Definition of terms

Floor: includes landings.

Notes

Grooves and pointing in mortar:

Pay for at the Rates in Section 14.

Method of measurement

Generally:

Measure area in contact with base. Make no deduction for voids not exceeding 1.00 m².

Skirting:

Measure girth on face.

Rates for the following include

Generally:

For internal work.

For cutting to line.

Flooring:

For work horizontal or to falls, crossfalls or slopes not exceeding 10° from horizontal.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

ASPHALT FLOORING - *continued*

<i>Isolating membrane:</i> For cutting, holing, notching and bending.	For stopped and fair ends and angles.
For extra material for laps.	For jointing to existing.
<i>Arris:</i> For rounded and chamfered angles.	<i>Collar:</i> For working to any thickness or number of coats.
<i>Skirting:</i> For arris.	For arrises and internal angle fillets.
For internal angle fillet.	For binding wire mesh.
For turning nib into groove and extra material.	<i>Jointing to existing:</i> For all preparatory work and making good.

Work executed in small quantities

Item	
28	Where the combined total area of asphalt flooring executed in one building at the same time under one or more orders falls within the categories shown, multiply Rates 28.159 to 28.186 by the following factors:
156	not exceeding 10 m ² multiply by 3.00
157	10 to 25 m ² multiply by 1.30

Work executed overhead or in confined situations

158	Work and labours carried out overhead or in confined situations (where at least 0.60 m of working space cannot be provided): Rates 28.159 to 28.186 multiplied by 1.20.

		1	2	3	4	5	6	7	8	9
		Type F1076			Type F1451					
		Black			Brown			Red		
		Thickness								
		15 mm	20 mm	25 mm	15 mm	20 mm	25 mm	15 mm	20 mm	25 mm
Square Metre		£	£	£	£	£	£	£	£	£
Flooring: one coat: concrete										
base: exceeding 600 mm wide										
159	glass fibre isolating membrane	18.71	21.75	25.85	20.42	23.78	28.52	21.90	25.52	30.81
160	felt isolating membrane	18.96	22.00	26.11	20.68	24.04	28.77	22.15	25.77	31.06
ADD where										
161	in plant room	3.61	4.16	4.44	3.61	4.16	4.44	3.61	4.16	4.44
162	not exceeding 150 mm wide	18.31	24.04	27.59	18.39	24.13	27.69	18.46	24.21	27.80
163	150 to 225 mm wide	11.09	12.93	14.11	11.17	13.02	14.21	11.24	13.10	14.32
164	225 to 300 mm wide	8.73	10.14	10.93	8.81	10.24	11.03	8.88	10.32	11.13
165	300 to 600 mm wide	6.89	7.98	8.48	6.97	8.07	8.58	7.04	8.15	8.68

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

ASPHALT FLOORING - *continued*

Item		1	2	3
		Thickness		
		15 mm	20 mm	25 mm
28	Square Metre	£	£	£
	Flooring: acid resisting: black: one coat: concrete base: exceeding 600 mm wide			
166	glass fibre isolating membrane	20.17	23.48	28.13
167	felt isolating membrane	20.42	23.74	28.38
	ADD where			
168	in plant room	3.61	4.16	4.44
169	not exceeding 150 mm wide	18.38	24.12	27.68
170	150 to 225 mm wide	11.16	13.01	14.20
171	225 to 300 mm wide	8.80	10.22	11.02
172	300 to 600 mm wide	6.96	8.06	8.57

		1	2	3	4
		Type F1076	Type F1451	Acid	
		Black	Brown	Red	resisting
<i>Metre</i>		£	£	£	£
Skirting: 15 mm thick: two coats: concrete or brickwork base					
173	not exceeding 150 mm girth	13.32	13.60	13.86	13.57
174	150 to 225 mm girth	16.19	16.59	16.95	16.54
175	225 to 300 mm girth	19.11	19.64	20.10	19.56
176	ADD for each additional 75 mm girth	2.65	2.77	2.89	2.76

	<i>Metre</i>					£
177	Fair edge					0.98
178	Rounded edge					0.98
179	Arris					1.20
180	Working into recessed cover or the like: not exceeding 100 mm wide					3.89
181	ADD for each additional 100 mm of width					0.86
182	Jointing to existing					2.36

	<i>Each</i>					
183	Outlet or dishing to gully					9.72
	Collar: around pipe, standard or the like: not exceeding 150 mm high: external diameter					
184	not exceeding 55 mm					3.47
185	55 to 110 mm					5.14
186	exceeding 110 mm					9.44

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SUNDRY REPAIRS

Rates for the following include

Generally:

For any thickness of covering.

Item		
28	<i>Metre</i>	£
	Cutting out crack in old asphalt flooring: making good with	
187	new material to match existing	14.62
188	mastic of an approved proprietary brand	11.37
	<i>Each</i>	
	Cutting out detached blister in old asphalt flooring: not exceeding 0.50 m ² : making good with	
189	new material to match existing	18.99
190	mastic of an approved proprietary brand	15.81

TROWELLED RUBBER LATEX FLOORING

Specification

Workmanship: comply with the recommendations of BS 8204-6 unless otherwise ordered.

Latex screeds:

- from an approved manufacturer;
- mix and lay in accordance with the manufacturer's instructions.

	<i>Square Metre</i>	£
	Floor: level: to concrete or cement-sand based screed: trowelled finish; exceeding 600 mm wide	
191	3 mm thick: one coat	6.49
192	5 mm thick: two coats	9.05
193	ADD where in plant room	1.46
	ADD where in repairs	
194	not exceeding 1 m ²	5.12
195	1 to 5 m ²	2.19

PLASTERED, RENDERED AND ROUGHCAST COATINGS

GENERALLY

Reference to other Sections: the Preambles to Section 28 apply equally to this Section unless otherwise stated.

Specification

Cement: to BS EN 197-1 and manufactured by a BSI Registered Firm.

Sulphate-resisting cement: to BS EN 197-1, manufactured by a BSI Registered Firm.

Sand: to BS EN 13139, grading 0/2 or 0/4 (CP or MP); Category 2 fines.

Water: clean and uncontaminated. Obtain approval for other than mains supply.

Metal scrim: metal lathing 150 mm wide: galvanised. Fix with rust-proofed nails or staples.

Workmanship: comply with BS 8000-10 and the relevant sections of BS EN 13914-1 and -2.

Preparation of masonry background: prepare surface by:

- a. hacking off any local projections and concrete fins;
- b. cleaning off concrete release agents, oil, grease etc with weak detergent solution and rinsing with clean water;
- c. cleaning off any spillages, paint etc which may interfere with adhesion of finishes or bleed through;
- d. removing any surface salts by dry brushing and repeating treatment at 48 hour intervals where salts continue to appear. Obtain PM's instruction where salts repeatedly reappear;
- e. brushing down to remove dust and loose particles.

Dubbing: same mix as first coat. Allow to set but not to dry before first coat is applied.

Definition of terms

Isolated beam: where the work is different from the abutting ceiling.

Isolated column: where the work is different from the abutting wall.

Method of measurement

Generally:

Measure area in contact with base. Make no deduction for voids not exceeding 1.00 m².

Work to sides and soffits of attached beams and openings and to sides of attached columns: Measure as to work to the abutting walls or ceilings.

Curved work:

Measure on face.

Coves, mouldings, cornices, architraves, ceiling ribs and bands:

Measure the length in contact with the base.

Rounded internal and external angles exceeding 100 mm radius:

Measure as curved work.

Rates for the following include

Generally:

For any additional thickness necessary to finish work to a true line due to the surface variations in differing bases which adjoin (e.g. a concrete column set flush in a brick wall face).

For undercoats applied by manual or mechanical means.

For internal and external angles and intersections not exceeding 10 mm radius.

Work in repairs:

For dubbing out.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

GYPSUM PLASTER

Specification

Gypsum plastering: to BS EN 13279-1:

1. Plaster of Paris Class A;
2. Retarded hemihydrate Class B, type b1;
3. Anhydrous Class C.

Lime putty: kept damp before use and either:

- a. ready prepared to BS EN 459-1; or

- b. prepared by adding hydrated lime powder to water until a mixture with a consistency of thick cream is obtained. Leave undisturbed for not less than 16 hours before use.

Single coat work: one finishing coat of neat gypsum plaster, Class B or C, 5 mm thick.

Two and three coat work: as the following table:

Gypsum plaster: all mixes by volume

Background	Undercoat type: Class B plaster	Finishing coat type: Class B or C plaster: approximately 3 mm thick	Total finished thickness
Clay brickwork, blockwork, calcium silicate brickwork, dense concrete blockwork	1 plaster: 3 sand	Neat plaster	13 mm
Concrete walls and engineering bricks	1 plaster (special metal lathing type): 1½ sand	Neat plaster	13 mm
Concrete ceilings and soffits (including hollow tile construction)	1 plaster (special metal lathing type): 1½ sand	Neat plaster	10 mm
Gypsum baseboard	1 plaster (low expansion type); 1½ sand	Neat plaster	10 mm
Metal lathing	1 plaster (special metal lathing type): 1½ sand (2 coats)	Neat plaster	10 mm
Wood wool slabs	1 plaster: 2 sand	Neat plaster	10 mm

Cornices and mouldings: as the following Table:

Gypsum plaster: all mixes by volume

Undercoat	Finishing coat
1 Class A plaster 2 Sand	1 Class A plaster 3 Lime putty

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

GYPSUM PLASTER - *continued*

Rates for the following include

Generally:

For undercoats as described.

For Class B or Class C finishing coats.

Item		1	2	3	4	5	6	7
		1 Coat: on rendering	plaster-board	2 Coats: on brickwork or blockwork	concrete or engineering bricks	plaster-board	wood wool: metal scrimming joints	3 Coats: on metal lathing (measure lathing separately)
28	Square Metre	£	£	£	£	£	£	£
196	Wall: exceeding 600 mm wide	8.65	8.50	14.61	17.89	16.72	22.52	23.74
197	Ceiling: exceeding 600 mm wide	9.37	9.17	15.34	18.62	17.45	23.98	25.20
198	Isolated beam: exceeding 600 mm wide	10.12	9.84	16.08	19.35	18.18	25.44	26.66
199	Isolated column: exceeding 600 mm wide	9.67	9.46	15.63	18.91	17.73	24.70	25.92
	ADD where							
200	in staircase area	3.71	3.71	8.15	8.25	7.71	9.32	12.25
201	in plant room	0.89	0.89	1.75	1.78	1.69	2.63	2.63
	ADD where in repairs							
202	not exceeding 1 m ²	19.99	19.87	38.40	41.34	38.02	55.37	60.43
203	1 to 5 m ²	9.99	9.94	19.21	20.65	19.02	27.70	30.25
204	Dubbing: exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	-	-	6.84	7.68	-	-	-
205	ADD for each additional 5 mm of thickness	-	-	1.74	2.58	-	-	-

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

GYPSUM PLASTER - *continued*

Item		1	2	3	4	5	6	7
		1 Coat: on	2 Coats: on				3 Coats: on	
		rendering	plaster-board	brickwork or blockwork	concrete or engineering bricks	plaster-board	wood wool: metal scrimming joints	metal lathing (measure lathing separately)
28	<i>Metre</i>	£	£	£	£	£	£	£
206	Wall: not exceeding 600 mm wide	6.62	6.61	12.04	13.96	13.08	16.69	19.02
207	Ceiling: not exceeding 600 mm wide . . .	7.11	7.10	12.57	14.48	13.64	17.65	20.13
208	Isolated beam: not exceeding 600 mm wide	7.61	7.60	12.98	17.61	14.31	19.11	21.29
209	Isolated column: not exceeding 600 mm wide	7.21	7.20	12.87	14.74	13.90	18.29	20.39
210	Dubbing: not exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	-	-	4.11	4.61	-	-	-
211	ADD for each additional 5 mm of thickness	-	-	0.66	1.16	-	-	-

		1	2	3	4	5	6
		Moulding	Cornice		Cornice including bracketing		
		not exceeding 100 mm girth	ADD for each additional 50 mm of girth	not exceeding 100 mm girth	ADD for each additional 50 mm of girth	not exceeding 100 mm girth	ADD for each additional 50 mm of girth
	<i>Metre</i>	£	£	£	£	£	£
212	Moulding, cornice or the like	4.72	1.20	11.14	2.81	22.40	3.14
213	ADD where in repairs	9.86	2.86	24.81	6.05	50.90	8.71
	<i>Each</i>						
	Extra for						
214	stopped end	0.62	0.21	1.55	0.40	3.22	0.60
215	fair end	1.23	0.40	3.09	0.76	6.30	1.13
216	returned end	1.46	0.38	3.59	0.91	7.06	1.31
217	internal angle	1.23	0.40	3.09	0.76	6.30	1.13
218	irregular internal angle	1.46	0.38	3.59	0.91	7.06	1.31
219	external angle	1.23	0.40	3.09	0.76	6.30	1.13
220	irregular external angle	1.46	0.38	3.59	0.91	7.06	1.31
221	jointing to existing	0.62	0.21	1.55	0.40	3.22	0.60

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

LIGHTWEIGHT GYPSUM PLASTER

Specification

Premixed lightweight retarded hemihydrate gypsum plaster: to BS EN 13279-1, suitable for the backgrounds on which it is used, comprising a mixture of retarded hemihydrate gypsum plaster and lightweight aggregate of exfoliated vermiculite

or expanded perlite to BS EN 13055-1 as appropriate for undercoats type a1, a2, and a3 or finishing coat type b.

Bonding agent: proprietary manufacture, compatible with background and finishing materials.

Two and three coat work: as the following table:

Lightweight Gypsum Plaster					
Background	Method of providing key	Undercoat type:	Finishing coat type:	Total finished thickness	
Clay brickwork, blockwork, calcium silicate brickwork, dense concrete blockwork	Recessed joints	a1	b	13 mm	
Open textured lightweight aggregate concrete blockwork	No special method required	a1	b	13 mm	
Close textured lightweight aggregate concrete blockwork	Bonding agent where recommended by block manufacturer	a3	b	13 mm	
In situ dense concrete and other backgrounds treated with a bonding agent	No special method required	a3	b	10 mm	
Gypsum baseboard	No special method required	a3	b	10 mm	
Metal lathing	Provided by lathing	a2 (2 coats)	b	13 mm	
Wood wool slabs	No special method required	a3	b	10 mm	
Aerated concrete blockwork	Bonding agent where recommended by block manufacturer	a1 (a3 if bonding agent is used as key)	b	13 mm	

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

LIGHTWEIGHT GYPSUM PLASTER - *continued*

Rates for the following include

Generally:

For undercoats and finishing coats as described.

		1	2	3	4	5
		2 Coats: on		3 Coats: on		
		brickwork or blockwork	concrete or engineering bricks	plaster- board	wood wool: metal scrimming joints	metal lathing (measure lathing separately)
Item	Square Metre	£	£	£	£	£
222	Wall: exceeding 600 mm wide	16.33	20.90	17.97	23.81	26.23
223	Ceiling: exceeding 600 mm wide	16.71	21.23	18.68	25.22	27.65
224	Isolated beam: exceeding 600 mm wide	17.43	21.95	19.40	26.65	29.07
225	Isolated column: exceeding 600 mm wide	17.01	21.52	18.96	25.93	28.36
ADD where						
226	in staircase area	7.95	8.03	7.52	9.09	11.94
227	in plant room	1.70	1.75	1.64	2.56	2.56
228	applying bonding agent	1.38	1.38	-	-	-
ADD where in repairs						
229	not exceeding 1 m²	37.43	40.32	37.06	53.99	58.93
230	1 to 5 m²	18.72	20.15	18.55	27.01	29.49
231	Dubbing: exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	14.95	17.77	-	-	-
232	ADD for each additional 5 mm of thickness	4.98	7.80	-	-	-
Metre						
233	Wall: not exceeding 600 mm wide	12.95	15.64	13.75	17.39	20.37
234	Ceiling: not exceeding 600 mm wide	13.31	16.02	14.28	18.32	21.48
235	Isolated beam: not exceeding 600 mm wide	13.97	16.63	14.93	19.76	22.62
236	Isolated column: not exceeding 600 mm wide	13.71	16.38	14.69	19.31	22.09
237	Dubbing: not exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	4.49	5.32	-	-	-
238	ADD for additional 5 mm of thickness	1.50	2.33	-	-	-

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

RENDER

Specification

Hydrated lime powder: to BS EN 459-1.

Lime and sand mix (coarse stuff): either:

- ready mixed to BS EN 998-1 and -2; or
- prepared by mixing lime putty thoroughly with sand; or
- prepared by mixing hydrated lime powder thoroughly with sand, first in a dry state and then with water. Leave undisturbed for not less than 16 hours before use.

Aggregate for dry dash: fine shingle, limestone chippings or other approved local material free from sand and dust and screened through a 12 mm mesh screen.

Aggregate for roughcast: shingle or other similar approved material graded 10 mm to 1.5 mm.

Waterproofing compound: from an approved manufacturer.

Oil-resisting compound: from an approved manufacturer.

Plain finish: apply render to a uniform thickness with laying trowel and:

- finish with wood or other suitably faced float to give an even texture;
- do not overwork surface, use steel trowel to finish, apply water to final coat while working up, or draw excessive laitence to surface.

Dry dash finish: apply top coat of rendering to uniform thickness and:

- while coating is plastic, throw on aggregate to cover the surface;
- press particles lightly into mortar to ensure adhesion.

Roughcast (harling) finish: throw on while render base is wet with trowel or scoop to an even texture and leave as cast.

Rendering work: as the following Table:

Render finishes: all mixes by volume

Finish	Undercoat	Finishing coat	Surface finish	Total finished thickness
Base coat for plaster	1 cement: 6 sand Plasticiser in accordance with manufacturer's instructions	-	Well scratched to receive plaster finish	12 mm
Internal render	1 cement: ½ lime: 3 or 4 sand	1 cement: ½ lime: 3 or 4 sand	Wood float	15 mm
Float finish external render	1 cement: 1 lime: 6 sand	1 coloured cement: 1 lime 6 sand	Wood float	15 mm
Dry dash external render	1 cement: 3 sand	1 cement: 3 sand	Stone/ pebbledash	15 mm
Roughcast external render (three coat)	1 cement: 4 sand Second under-coat as first	1 coloured cement: 3 mixture shingle and sand (1:1½): (16% water)	-	22 mm

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

RENDER - *continued*

Item		1	2	3	4	5
		One coat	Two coats		Three coats	
		base coat for plaster	internal render	float finish external render	dry dash external render	roughcast external render
		£	£	£	£	£
28	<i>Square Metre</i>					
239	Wall: exceeding 600 mm wide	10.21	17.28	19.44	26.44	29.11
240	Ceiling: exceeding 600 mm wide	12.85	19.92	22.06	30.53	33.20
241	Isolated beam: exceeding 600 mm wide	13.14	20.21	22.34	34.93	37.59
242	Isolated column: exceeding 600 mm wide	13.00	20.06	22.21	31.99	34.66
	ADD where					
243	in staircase area	5.84	8.97	10.13	13.03	14.29
244	in plant room	1.23	2.13	2.33	3.21	3.39
	ADD where in repairs					
245	not exceeding 1 m ²	29.95	45.44	51.87	70.43	77.88
246	1 to 5 m ²	15.02	22.64	25.86	35.20	38.95
247	Dubbing: exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	12.65	13.28	13.12	12.89	12.78
248	ADD for each additional 5 mm of thickness	3.30	3.93	3.77	3.54	3.43
	ADD where					
249	finishing coat lined to imitate plain stone in blocks average 0.10 m ²	-	2.19	2.19	-	-
250	waterproofing compound incorporated in first coat	0.30	0.30	0.30	0.30	0.30
251	waterproofing compound incorporated in all coats	0.52	0.52	0.52	0.52	0.52
252	oil-resisting compound incorporated in all coats	1.09	1.09	1.09	-	-
253	sulphate-resisting cement in all coats	0.15	0.25	0.17	0.28	0.40
	<i>Metre</i>					
254	Wall: not exceeding 600 mm wide	7.94	13.36	14.88	20.01	22.20
255	Ceiling: not exceeding 600 mm wide	10.04	15.47	16.99	23.30	25.48
256	Isolated beam: not exceeding 600 mm wide	10.28	15.70	17.22	26.80	28.98
257	Isolated column: not exceeding 600 mm wide	10.17	15.58	17.14	24.46	26.65
258	Dubbing: not exceeding 600 mm wide: on existing background: not exceeding 5 mm average thick	7.30	7.49	7.44	7.36	7.33
259	ADD for each additional 5 mm of thickness	1.00	1.18	1.14	1.06	1.02

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

RENDER - *continued*

Item			
28	<i>Metre</i>		£
260	Extra for raised band: not exceeding 75 x 50 mm projecting dubbing: splay sunk underside: weathered top		17.91
	<i>Each</i>		
261	Fair end or angle		2.93
	<i>Metre</i>		
262	Extra for bellcast drip: not exceeding 50 mm projection: dubbing		10.10
	<i>Each</i>		
263	Fair end or angle		2.93
LABOURS ON PLASTER AND RENDER			
	<i>Metre</i>		£
264	Fair, rounded or splayed edge		4.19
265	Rounded internal or external angle or coved internal angle: 10 to 100 mm radius		6.28
266	Jointing to existing		4.19
	<i>Each</i>		
	Making good around obstruction		
267	not exceeding 0.30 m girth		3.08
268	0.30 to 1.00 m girth		5.51
269	1.00 to 2.00 m girth		9.48
	<i>Metre</i>		
270	exceeding 2.00 m girth		6.11
PLASTER SUNDRIES			
	<i>Metre</i>		£
271	Cutting out defective or cracked plaster: not exceeding 50 mm wide: making good with plaster or approved filler		6.01
	<i>Each</i>		
272	Making good nail hole with plaster or approved filler		1.21
		1	2
		225 x	225 x
		150 mm	225 mm
		£	£
273	Louvre ventilator: fibrous plaster: set in plaster	3.59	4.52
274	ADD for perforated zinc back	1.48	1.86

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

ADJUSTMENTS TO THE FOREGOING RATES FOR PLASTER AND RENDER

Item		
28	Square Metre	£
	ADD for plaster and render to ceiling or isolated beam (except in staircase area) where ceiling level	
275	3.50 to 5.00 m above floor	1.75
276	5.00 to 6.50 m above floor	3.47
	Curved work: price at the foregoing Rates multiplied by the following factors:	
277	not exceeding 1 m radius	multiply by 1.30
278	1 to 5 m radius	multiply by 1.20
279	5 to 10 m radius	multiply by 1.10
280	exceeding 10 m radius	no adjustment

LATHING AND BASEBOARDING

Specification

Plasterboard: gypsum baseboard or lath to BS EN 520, Type P.

Nails for plasterboard: galvanised steel with smooth shanks, 2.65 mm diameter with 7.5 mm clout heads, 30 mm long for 9.5 mm plasterboard and 40 mm long 12.5 mm plasterboard.

Joints:

- a. fill all joints flush to board finish plaster where single coat work is ordered and undercoat plaster for two coat work;

- b. reinforce all joints of square edged boards, joints of rounded edge boards used for ceilings, internal and external angles with 90 mm wide jute scrim embedded in plaster or with angle beads at external corners.

Rates for the following include

Generally:

For all joint reinforcing scrim.

For all cutting and notching.

		1	2	3	4
		Gypsum plasterboard: fixing with nails to timber			
		Baseboard: scrimming joints and angles		Lath: scrimming angles	
		Thickness			
		9.5 mm	12.5 mm	9.5 mm	12.5 mm
Square Metre		£	£	£	£
281	Wall: exceeding 600 mm wide	8.56	9.42	8.52	9.80
282	Ceiling: exceeding 600 mm wide	9.14	10.02	9.11	10.37
283	Isolated beam: exceeding 600 mm wide	10.30	11.19	10.28	11.56
284	Isolated column: exceeding 600 mm wide	9.72	10.60	9.68	10.97
ADD where					
285	in staircase area	4.59	5.31	4.00	4.74
286	in plant room	1.48	1.75	1.32	1.59

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

LATHING AND BASEBOARDING - *continued*

		1	2	3	4
		Gypsum plasterboard: fixing with nails to timber			
		Baseboard: scrimming joints and angles		Lath: scrimming angles	
		Thickness			
Item		9.5 mm	12.5 mm	9.5 mm	12.5 mm
28	Square Metre	£	£	£	£
	ADD where to ceiling or isolated beam (except in staircase area) where ceiling level				
287	3.50 to 5.00 m above floor	1.75	1.75	1.75	1.75
288	5.00 to 6.50 m above floor	3.47	3.47	3.47	3.47
	ADD where in repairs				
289	not exceeding 1 m²	23.64	27.28	24.29	28.03
290	1 to 5 m²	11.83	13.57	12.22	14.00
	Metre				
291	Wall: not exceeding 600 mm wide	6.54	7.13	6.26	7.14
292	Ceiling: not exceeding 600 mm wide	7.02	7.59	6.73	7.61
293	Isolated beam: not exceeding 600 mm wide	7.94	8.50	7.66	8.54
294	Isolated column: not exceeding 600 mm wide	7.48	8.05	7.20	8.07

GALVANISED STEEL BEADS

Specification

Beads and stops for internal plastering: galvanised steel to BS EN 13658-1 with profile appropriate to location and thickness of finish.

Rates for the following include

Generally:
For fixing to concrete, brickwork or blockwork.

For working finishings thereto.

	<i>Metre</i>	£
295	Angle bead	1.87
	Stop bead for finishing	
296	not exceeding 15 mm thick	2.16
297	15 to 25 mm thick	2.42
	Architrave bead: for finishing	
298	10 mm thick	2.16
299	13 mm thick	2.42
300	External render stop	2.10
301	Movement bead	6.31

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

METAL MESH LATHING FOR PLASTERED COATINGS

GENERALLY

Specification

Metal mesh lathing for solid backgrounds: plain expanded galvanised steel lathing to BS EN 13658-1.

Workmanship: comply with BS 8000-10.

Laps: lap side edges of lathing not less than 25 mm and secure with tying wire at about 400 mm centres. Lap ends of lathing 40 mm at supports and 50 mm between supports, and secure with tying wire not exceeding 100 mm centres.

Timber supports: fix lathing with wire staples not exceeding 100 mm centres driven at an angle to tauten the mesh.

Metal supports: fix lathing with hair-pin shaped tying wire ties not exceeding 100 mm centres, passed over the support with both ends through mesh. Twist ties tight, cut off ends and bend flat.

Method of measurement

Generally:
Measure the area between boundaries. Make no deduction for voids not exceeding 0.50 m².

Lathing to sides and soffits of attached beams and openings to sides of attached columns:
Measure as work to the abutting walls or ceilings.

Curved work:
Measure on face.

Rounded internal and external angles exceeding 100 mm radius:
Measure as curved work.

Rates for the following include

Generally:
For all cutting and notching.

For internal and external angles not exceeding 100 mm radius.

Ceiling:
For work to level or sloping ceilings.

METAL LATHING

Item	Square Metre	1	2
		Metal lathing: fixing with	
		staples to timber	wire to metal
28		£	£
302	Wall: exceeding 600 mm wide	13.95	18.89
303	Ceiling: exceeding 600 mm wide	14.42	19.86
304	Isolated beam: exceeding 600 mm wide	17.46	22.95
305	Isolated column: exceeding 600 mm wide	16.62	20.80
	ADD where		
306	in staircase area	3.63	3.74
307	in plant room	1.14	1.27
	ADD where to ceiling or isolated beam (except in staircase area) where ceiling level		
308	3.50 to 5.00 m above floor	1.75	1.75
309	5.00 to 6.50 m above floor	3.47	3.47

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

METAL LATHING - *continued*

Item 28		Square Metre	1	2
			Metal lathing: fixing with	
			staples to timber	wire to metal
			£	£
	ADD where in repairs			
310	not exceeding 1 m ²		24.69	28.52
311	1 to 5 m ²		12.36	14.26
	<i>Metre</i>			
312	Wall: not exceeding 600 mm wide		9.75	12.88
313	Ceiling: not exceeding 600 mm wide		10.04	13.49
314	Isolated beam: not exceeding 600 mm wide		12.01	15.50
315	Isolated column: not exceeding 600 mm wide		11.42	14.10
	Curved work: price at the foregoing Rates multiplied by the following factors:			
316	not exceeding 1 m radius		multiply by 1.30	
317	1 to 5 m radius		multiply by 1.20	
318	5 to 10 m radius		multiply by 1.10	
319	exceeding 10 m radius		no adjustment	

QUARRY AND CERAMIC TILING

GENERALLY

Definition of terms

Thickness: excludes keys, grooves or the like.

Notes

Walls, isolated columns and floors:
Plain unless otherwise stated.

Repairs to screeds and coatings:
Pay for at the Rates in this Section (pages 329 - 351).

Method of measurement

Generally:
Measure on the exposed face. Make no deduction for voids not exceeding 1.00 m².

Rates for the following include

Generally:
For using stock pattern units unless otherwise stated.

For any extra dubbing to screeds behind coves and angles.

For setting out symmetrically from the centre of areas generally.

For provision of bedding mortars and adhesives.

For laying to pattern where required.

GENERALLY - *continued***Rates for the following include - *continued***

For cutting unless otherwise stated.

For drainage holes.

For grouting.

Sill:

For laying level or weathered.

For all necessary cutting where sill not tile width.

For ends.

QUARRY AND CERAMIC FLOOR TILING

Specification

Quarry and ceramic tiles and fittings: plain to BS 14411 as ordered and Kitemark certified.

Separating layers: polythene sheet 500 gauge (0.125 mm thick).

Bedding mortar: cement-sand in proportions 1:4 of the following:

- a. cement: to BS EN 197-1 type CEM I/42.5 manufactured by a BSI Registered Firm;
- b. sand for floors: to BS EN 13139.

Grout: cement to BS EN 197-1 type CEM I/42.5 and sand to BS 1199, table 1, Type B.

Movement joints:

- a. filler: foamed polythene preformed strip;
- b. sealant: one-part silicone-based sealant to BS EN ISO 11600.

Workmanship: comply with BS 8000-11, Section 11.1 and the relevant sections of BS 5385-3.

Bedding:

- a. lay separating layer over base and lap all joints by 100 mm minimum;
- b. lay, spread and compact cement-sand mortar bed 25 mm thick. Spread only the amount of bed that can be compacted and tiled in one continuous operation and either:
 1. immediately after mortar has been compacted dust surface with layer of cement and trowel in lightly until damp; or
 2. apply a slurry of neat cement and water or cement based adhesive to backs of tiles;
- c. set and bed tiles with 6 mm wide joints regular and straight;
- d. tamp tiles as work proceeds to form a level surface.

Movement joints: form 10 mm wide joints to full depth of tiles and bedding:

- a. at perimeter of room, around stanchion bases and columns;
- b. at intervals not exceeding 4500 mm across the floor area;
- c. fill joints with filling strip, ensuring correct depth is left for sealant;
- d. apply sealant in accordance with manufacturer's instruction and finish flush with surface of tiles.

Accuracy: fix tiles so that the finished surface is within ± 3 mm under a 3000 mm straight edge.

Oil-resisting flooring:

- a. bed tiles in cement and sand (1:3), 25 mm thick, on a separating layer;
- b. leave joints 6 mm wide and rake out to the full depth of the tile and grout with cement and sand (1:1);
- c. bed and joint skirting tiles to match floor tiles;
- d. form movement joints 13 mm wide with an approved joint filler to within 13 mm of the finished tile level and seal off flush with approved oil-resisting sealant in accordance with the manufacturer's recommendations. Obtain filler and sealant from the same supplier;
- e. ensure that the whole of the finished floor surface is level and even with neat flush joints, tile faces free from staining, marking or other imperfection.

Rates for the following include***Generally:***

For separating layer of polythene.

For cleaning and polishing at completion.

Movement joint:

For filler and sealant.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

QUARRY FLOOR TILING

Item		1	2	3	4	5	6
		Supplying and fixing		Fixing only			
		150 x 150 x 15 mm	150 x 150 x 22 mm	225 x 225 x 32 mm	150 x 150 x 15 mm	150 x 150 x 22 mm	225 x 225 x 32 mm
		£	£	£	£	£	£
28	<i>Square Metre</i>						
320	Floor: red or buff tiles: level or to falls only: not exceeding 15° from horizontal: exceeding 600 mm wide	51.21	52.77	58.34	28.88	30.44	24.39
	ADD where						
321	in staircase area	9.50	9.88	7.35	9.50	9.88	7.35
322	in plant room	8.03	8.35	6.22	8.03	8.35	6.22
323	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.68	1.74	1.30	1.68	1.74	1.30
324	in oil-resisting flooring	2.61	2.71	2.13	2.61	2.71	2.13
325	not exceeding 600 mm wide	29.22	30.87	23.78	29.22	30.87	23.78
	Sill: red or buff tiles						
326	exceeding 600 mm wide	63.09	-	68.45	40.76	-	34.50
	<i>Metre</i>						
327	not exceeding 600 mm wide	41.80	-	44.44	28.41	-	24.07
	<i>Square Metre</i>						
	ADD for						
328	brown tiles	6.96	5.51	-	-	-	-
329	non-slip tiles	12.73	9.55	12.79	-	-	-
	ADD where in repairs						
330	not exceeding 1 m ²	85.24	88.64	66.00	85.24	88.64	66.00
331	1 to 5 m ²	42.62	44.32	33.01	42.62	44.32	33.01
	<i>Metre</i>						
332	Fair or rounded edge tile: any colour	3.52	3.27	2.77	-	-	-
333	Movement joint	4.04	4.45	4.86	4.04	4.45	4.86
334	ADD where in oil-resisting flooring	0.99	0.99	0.99	0.99	0.99	0.99
335	Jointing to existing	4.92	5.09	5.21	4.38	4.55	3.39

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

QUARRY FLOOR TILING - *continued*

		1	2	3	4
		Supplying and fixing		Fixing only	
		Nominal height			
Item		90 mm	150 mm	90 mm	150 mm
28	Metre	£	£	£	£
336	Skirting: red, buff or brown tiles: fair or rounded edge: coved internal angle	18.32	19.17	14.10	14.25
337	ADD where in oil-resisting flooring	0.32	0.37	0.32	0.37
338	ADD where in repairs	38.84	40.18	38.84	40.18
	Each				
	Extra for				
339	internal angle tile	3.28	3.40	0.84	0.84
340	external angle tile	3.28	3.40	0.84	0.84

CERAMIC FLOOR TILING

		1	2	3	4
		Supplying and fixing		Fixing only	
		150 x 150 x 9.5 mm	150 x 150 x 12.5 mm	150 x 150 x 9.5 mm	150 x 150 x 12.5 mm
		£	£	£	£
341	Floor: red tiles: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide	47.44	50.47	27.31	28.41
	ADD where				
342	in staircase area	9.35	9.66	9.35	9.66
343	in plant room	7.89	8.15	7.89	8.15
344	to falls and crossfalls and to slopes not exceeding 15° from horizontal	2.93	3.01	2.93	3.01
345	not exceeding 600 mm wide	20.75	21.68	20.75	21.68
	Sill: red tiles				
346	exceeding 600 mm wide	59.41	62.57	39.28	40.50
	<i>Metre</i>				
347	not exceeding 600 mm wide	39.45	41.48	27.37	28.24
	<i>Square Metre</i>				
	ADD for				
348	black tiles	6.08	5.49	-	-
349	buff tiles	1.91	1.08	-	-
350	non-slip tiles	3.47	2.74	-	-

[illegible]

	1	2
	Supplying and fixing	Fixing only
<i>Each</i>	£	£
Cutting and fitting into recessed cover - <i>per 0.25 m² of surface area</i>	28.98	28.44
Mortice: not exceeding 50 x 50 x 100 mm		£
new work		4.97
old work		6.34

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

LABOURS ON QUARRY OR CERAMIC FLOOR TILING - *continued*

Item		
28	<i>Each</i>	£
	Cutting and fitting around obstruction	
363	not exceeding 0.30 m girth	8.77
364	0.30 to 1.00 m girth	13.14
365	1.00 to 2.00 m girth	16.48
	<i>Metre</i>	
366	exceeding 2.00 m girth	8.63

CERAMIC WALL TILING

Specification

Glazed ceramic tiles and fittings for internal use: to BS EN 14411, size as ordered, and Kitemark certified. Tiles other than plain white to be from manufacturer's standard range.

Adhesive: Agrément certified or to BS EN 12004.

Grout: proprietary water resistant cement based for site mixing.

Movement joint sealant: one-part silicone based to BS EN ISO 11600.

Workmanship: comply with BS 8000-11, Section 11.1 and the relevant sections of BS 5385-1.

Fixing: apply adhesive in accordance with the manufacturer's instructions.

Movement joints: form not less than 6 mm wide to full depth of tiling and bedding:

- over structural movement joints;
- at internal wall to wall angles;
- at angles with structural walls and ceilings;
- at junctions between different background materials;
- to give bays not greater than 3000 x 4500 mm on brick and block walling backgrounds;
- allow joints to dry out thoroughly before applying sealant;
- apply sealant and any primer required in accordance with the manufacturer's instructions;
- finish flush with tile surface.

Accuracy: fix tiles so that the finished surface is within ± 3 mm under a 2000 mm straight edge.

Definition of terms

Isolated column:

Where the work is different from abutting walls.

Method of measurement

Work to sides and soffits of openings and to sides of attached beams and columns:
Measure as work to the abutting walls.

Rates for the following include

Generally:

For all internal and external angles and intersections not exceeding 10 mm radius.

For setting tiles with straight joints.

For cleaning down and polishing at completion.

For adhesive and grouting

Movement joint:

For joint sealant.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

CERAMIC WALL TILING - *continued*

Item		1	2	3	4
		Supplying and fixing		Fixing only	
		108 x 108 x 4 mm	152 x 152 x 5.5 mm	108 x 108 x 4 mm	152 x 152 x 5.5 mm
		£	£	£	£
28	<i>Square Metre</i>				
367	Wall: white tiles: exceeding 600 mm wide	54.05	42.06	33.71	27.85
368	Isolated column: white tiles: exceeding 600 mm wide	55.75	44.00	34.44	29.12
	ADD where				
369	in staircase area	10.75	9.20	10.75	9.20
370	in plant room	9.07	7.76	9.07	7.76
371	in coloured or patterned tiles	7.43	3.54	-	-
372	not exceeding 600 mm wide	22.74	18.88	22.74	18.88
	ADD where in repairs				
373	not exceeding 1 m ²	91.74	100.12	91.74	100.12
374	1 to 5 m ²	45.86	50.05	45.86	50.05
	<i>Metre</i>				
375	Isolated column: white tiles: not exceeding 600 mm wide	37.80	30.51	28.29	24.61
376	ADD where in coloured or patterned tiles	2.23	1.07	-	-
377	Fair edge tile: any colour	3.07	3.50	-	-
378	Movement joint	2.42	2.74	2.42	2.74
379	Jointing to existing	6.52	7.03	6.28	6.69
	<i>Each</i>				£
	Cutting and fitting around obstruction				
380	not exceeding 0.30 m girth				4.97
381	0.30 to 1.00 m girth				7.89
382	1.00 to 2.00 m girth				9.05
	<i>Metre</i>				
383	exceeding 2.00 m girth				4.68

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

WOOD BLOCK FLOORING

GENERALLY

Specification

Hardwood blocks: not exceeding 25 mm thick to BS 1187;
Workmanship: comply with BS 8201.

For movement joints at edges, 12 to 25 mm wide filled with approved filler.

For machining off.

Rates for the following include

Generally:
For blocks of any size and thickness

For priming screeds.

For herringbone pattern including cutting.

Notes

Oiling and polishing:
Pay for at the Rates in Section 29.

Method of measurement

Generally:
Measure area in contact with base. Make no deduction for voids not exceeding 1.00 m².

WOOD BLOCKS

Item		1	2	3
		Supply and lay		Lay only
		Maple	Oak	Any Type
28	Square Metre	£	£	£
384	Floor: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide	71.93	71.33	30.15
	ADD where			
385	in staircase area	9.61	9.61	9.61
386	in plant room	6.34	6.34	6.34
387	to falls and crossfalls and to slopes not exceeding 15° from horizontal	5.84	5.84	5.84
388	not exceeding 600 mm wide	27.80	27.77	25.81
	ADD where in repairs			
389	not exceeding 1 m ²	116.75	116.67	110.78
390	1 to 5 m ²	59.39	59.33	55.41
	Each			£
391	Cutting and fitting into recessed cover - <i>per 0.25 m² of surface area</i>			9.50
	Mortice: not exceeding 50 x 50 x 100 mm			
392	new work			1.59
393	old work			2.39
	Cutting and fitting around obstruction			
394	not exceeding 0.30 m girth			3.80
395	0.30 to 1.00 m girth			5.70
396	1.00 to 2.00 m girth			7.16
	Metre			
397	exceeding 2.00 m girth			4.53
398	Jointing to existing			13.52

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

PLASTICS AND LINO TILING AND SHEETING

GENERALLY

Specification

Workmanship: comply with BS 8203 for the laying of PVC and thermoplastic sheet and tiles.

Notes

Repairs to screeds:

Pay for at the Rates in this Section (page 329 - 337).

Rates for the following include

Generally:

For tiling or sheeting of any size or thickness.

For provision of adhesive.

For cutting unless otherwise stated.

For working into shallow channels without necessity for cutting.

Method of measurement

Generally:

Measure area in contact with base. Make deduction for voids not exceeding 1.00 m².

THERMOPLASTIC AND PVC TILING

Specification

Semi-flexible PVC tiles: to BS EN ISO 10595.

Classification: to BS EN ISO 10874:

- a. general: class 21 and 22;
- b. heavy: class 23.

Rates for the following include

Generally:

For setting tiles square with straight joints.

For treating as recommended by the flooring manufacturer as suited to the purpose.

Item
28

Square Metre

1	2	3	4	5	6
PVC Floor tiles 300 x 300 mm					
Class:			Laying Only		
General		Heavy	Any Type		
Thickness					
2 mm	2.5 mm	2 mm	2.5 mm	2 mm	2.5 mm
£	£	£	£	£	£

399	Floor: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide	18.35	21.47	18.35	21.47	7.97	8.43
	ADD where						
400	in staircase area	2.93	2.93	2.93	2.93	2.93	2.93
401	in plant room	1.46	1.46	1.46	1.46	1.46	1.46
402	to falls and crossfalls and to slopes not exceeding 15° from horizontal	0.84	0.84	0.84	0.84	0.84	0.84
403	not exceeding 600 mm wide	3.04	3.29	3.04	3.29	2.05	2.05
	ADD where in repairs						
404	not exceeding 1 m ²	25.91	26.29	25.91	26.29	24.43	24.43
405	1 to 5 m ²	13.23	13.48	13.23	13.48	12.24	12.24

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

THERMOPLASTIC AND PVC TILING - *continued*

		1	2	3	4	5	6
		PVC Floor tiles 300 x 300 mm					
		Class:			Laying Only		
		General		Heavy	Any Type		
		Thickness					
Item		2 mm	2.5 mm	2 mm	2.5 mm	2 mm	2.5 mm
28	Metre	£	£	£	£	£	£
406	Vinyl tile top-set skirting: not exceeding 150 mm high	5.80	5.80	5.80	5.80	3.12	3.12
407	ADD where in repairs	2.93	2.93	2.93	2.93	2.93	2.93
		Each					
		£					
408	Cutting and fitting into recessed cover - <i>per 0.25 m²</i> of surface area						3.77
		Cutting and fitting around obstruction					
409	not exceeding 0.30 m girth						0.92
410	0.30 to 1.00 m girth						1.43
411	1.00 to 2.00 m girth						1.92
		Metre					
412	exceeding 2.00 m girth						1.00
413	Jointing to existing						1.51

LINO AND FLEXIBLE PVC SHEETING

Specification

Flexible PVC sheeting: to BS EN 650 or 651.

Slip resistance: to BS EN 13845.

Classification: to BS EN ISO 10874:

- a. general: class 21 and 22;
- b. heavy: class 23.

Rates for the following include

Generally:

For treating as recommended by the flooring manufacturer as suited to the purpose.

		1	2	3	4	5	6
		PVC sheeting					
		Class:				Laying Only	
		General	Non-slip	Heavy	Any Type		
		Thickness					
		2 mm	2 mm	2 mm	2.5 mm	2 mm	2.5 mm
		£	£	£	£	£	£
Square Metre							
414	Floor: level or to falls only not exceeding 15° from horizontal: exceeding 600 mm wide	22.64	23.15	21.60	24.45	7.25	7.75
ADD where							
415	in staircase area	2.05	2.05	2.05	2.05	2.05	2.05
416	in plant room	1.46	1.46	1.46	1.46	1.46	1.46

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

LINO AND FLEXIBLE PVC SHEETING - *continued*

Item		1	2	3	4	5	6
		PVC sheeting					
		Class:			Laying Only		
		General	Non-slip	Heavy	Any Type		
		Thickness					
		2 mm	2 mm	2 mm	2.5 mm	2 mm	2.5 mm
		£	£	£	£	£	£
28	Square Metre						
	ADD where - continued						
417	to falls and crossfalls and to slopes not exceeding 15° from horizontal	1.68	1.68	1.68	1.68	1.68	1.68
418	not exceeding 600 mm wide	6.75	7.00	6.65	7.28	5.28	5.69
	ADD where in repairs						
419	not exceeding 1 m²	22.39	22.39	22.24	24.17	20.19	21.79
420	1 to 5 m²	11.55	11.55	11.44	12.49	10.07	10.90
	Each						£
421	Cutting and fitting into recessed cover - per 0.25 m² of surface area						2.51
	Cutting and fitting around obstruction						
422	not exceeding 0.30 m girth						1.25
423	0.30 to 1.00 m girth						1.92
424	1.00 to 2.00 m girth						2.51
	Metre						
425	exceeding 2.00 m girth						1.33
426	Jointing to existing						1.59
FIXING ONLY NON-SLIP STAIR TREADS							
	Metre						£
427	Fixing only non-slip stair tread with or without nosings and additional strips: not exceeding 250 mm total width or girth: to old worn steps: sinking and scoring or punching deeply worn portions for key: filling in with cement and sand (1:1) including formwork: cutting mortices for dowel blocks and running and bedding in cement and sand (1:1) where necessary						65.48
428	Fixing only in replacement of old non-slip treads: taking out: sinking, roughening and preparing surfaces to receive new treads: filling in worn portions of steps with cement and sand (1:1) existing dowel blocks left in for securing new treads						60.11
429	ADD where cutting out and renewing dowel blocks						20.19

GREEN ROOFS

GENERALLY

Method of measurement

Generally:

Measure area in contact with the base. Make no deduction for voids not exceeding 1.00 m².

Notes

Insulation:

Pay for at the Rates in Section 31.

SEDUM ROOFS

Specification

Root barrier:

- a. material: polyester reinforced bitumen sheet with root inhibitor;
- b. thickness: 1.0 mm;
- c. installation:
 1. minimise joints;
 2. extend upstands to top of growing medium.

Drainage layer:

- a. material: high density polyethylene;
- b. installation:
 1. extent: continuous over entire roof area;
 2. butt joints;
 3. fit upstands closely around penetrations and outlets.

Filter mat/fleece:

- a. non-woven heat and pressure bonded polyester sheet; or
- b. polypropylene mesh fabric;
- c. installation:
 1. minimise joints;
 2. overlaps: manufacturer's recommendation;
 3. fitting: manufacturer's recommendation;
 4. extend upstands to top of growing medium.

Sedum extensive growing medium:

- a. material: 40% subsoil, 40% secondary 20% coarse sand;
- b. depth: 75 mm;
- c. parameters: to BS 3882, table 1;
- d. installation:
 1. minimise handling;
 2. handle in the driest condition possible. Do not handle or install when wet or frozen;
 3. depth (maximum): 150 mm;
 4. gently firm each layer before spreading the next.

Sedum vegetation blanket:

- a. planting mix: Sedum and wildflower mix ;
- b. thickness: 40 mm;
- c. vegetation coverage (minimum): 75%;
- d. installation:
 1. lay within 36 hours of lifting from growing position;
 2. do not permit excessive stacking;
 3. do not lay dry, damaged, frosty or waterlogged blankets;
 4. joints: stagger and butt together or slightly overlap to prevent gaps. Do not stretch blankets. Finish edges with whole blankets;
 5. consolidate as laying proceeds to ensure full contact with the growing medium;
 6. water thoroughly immediately after laying dressing.

Edge retaining profile:

- a. material: aluminium;
- b. height: 55 mm;
- c. installation:
 1. cutting: neat, accurate and without spalling;
 2. junctions: vertical, secured using proprietary connectors;
 3. position: true to line and level with smooth continuous lines;
 4. fixing: manufacturer's standard.

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SEDUM ROOFS - *continued*

Rates for the following include

For jointing to existing except where otherwise stated.

Generally:

For holing, notching and bending.

Jointing to existing:

For all preparatory work, bonding in as necessary and making good.

For extra material for laps.

For working to metal flashings or the like and for sealing.

Collars:

For all extra material and labours required including cutting and fitting around pipes, standards or the like passing through new roofing and sealing.

Linear items:

For fair edges.

For dressing over tilting fillets.

Linings to cesspools and similar enumerated items:

For ends and angles except where otherwise stated.

For dressing over fillets and similar labours excluding cutting and fitting to outlets.

Item
28

Square Metre

Roof covering horizontal or to falls, crossfalls or slopes: any width not exceeding

		1	2	3	4	5	6
		Root barrier	Drainage layer	Filter mat/ fleece	Growing medium	Sedum vegetation layer	
		£	£	£	£	£	£
430	10° pitch	6.87	12.13	4.16	12.93	21.24	39.49
431	sloping 10° to 45° pitch	7.30	13.88	5.05	14.24	24.31	42.56
432	vertical or sloping exceeding 45° pitch	8.17	17.40	6.80	16.87	30.44	48.69

ADD where in repairs

433	not exceeding 1 m ²	16.16	16.84	15.24	17.26	18.50	23.20
434	1 to 5 m ²	9.80	10.26	9.19	10.53	11.36	14.49
435	5 to 10 m ²	3.45	3.62	3.14	3.82	4.23	5.80

Metre

436	Fair edge	0.84	0.84	0.84	0.84	0.84	0.84
437	Raking cutting	1.31	1.35	1.28	1.36	1.41	1.60
438	Curved cutting	1.76	1.81	1.71	1.83	1.90	2.15
439	Jointing to existing	1.39	1.39	1.39	1.39	1.39	1.39

28: FLOOR, WALL, CEILING AND ROOF FINISHINGS

SEDUM ROOFS - *continued*

Item		1	2	3	4	5	6
		Root barrier	Drainage layer	Filter mat/ fleece	Growing medium	Sedum vegetation layer	
						Plug plants	Blanket
28	Metre	£	£	£	£	£	£
440	Gutter, lining to channel or covering to kerb not exceeding 200 mm girth	3.05	3.06	2.96	4.40	3.15	3.89
441	ADD for each additional 200 mm girth	2.10	2.12	2.01	3.46	2.21	2.94
	<i>Each</i>						
	Extra over gutter, lining to channel or covering to kerb: any girth for						
442	stopped end	1.16	1.16	1.16	1.16	1.16	1.16
443	returned end	6.05	6.20	5.96	6.20	6.34	6.52
444	angle	2.33	2.33	2.33	2.33	2.33	2.33
445	intersection	2.63	2.63	2.63	2.63	2.63	2.63
446	jointing to existing	0.78	0.78	0.78	0.78	0.78	0.78
	Lining to cesspool or outlet through parapet wall: total surface area						
447	not exceeding 0.20 m ²	6.37	6.41	6.31	6.44	6.51	6.79
448	0.20 to 0.40 m ²	8.54	8.63	8.44	8.67	8.82	9.36
449	0.40 to 0.60 m ²	10.73	10.84	10.57	10.91	11.13	11.93
	Collar: around pipe, standard or the like: not exceeding 150 mm high: overall diameter						
450	not exceeding 55 mm	4.27	4.31	4.22	4.34	4.40	4.66
451	55 to 110 mm	5.68	5.74	5.62	5.76	5.85	6.18
452	exceeding 110 mm	6.43	6.50	6.34	6.53	6.66	7.11
453	Outlet or dishing to gully	5.20	5.23	5.16	5.32	5.46	5.98

29: Decoration

PAINTING AND CLEAR FINISHING

SPECIFICATION

Materials generally

Obtain materials from approved suppliers and inform PM of selected supplier.

Container sizes: obtain coating materials other than spray, bituminous and textured masonry paints in containers with a maximum capacity of 5 litres.

Finishing systems: obtain all coats of each system from the same supplier.

Primers and sealers

Select primers and sealers appropriate to the surface to be decorated in accordance with the following Tables.

Table of primers

Surface	Primer	Notes	Reference
Softwood generally	Water / organic solvent based primer for wood		BS 7956
Hardwood, resinous softwood and copper naphthenate treated softwood.	Aluminium primer for wood		BS 4756
Iron and steel generally	Red lead primer	(1)	An approved proprietary type
	Zinc phosphate primer	(2)	An approved proprietary type
	Red oxide of iron/zinc chrome primer	(3)	An approved proprietary type
	Metallic zinc rich primer	(4)	BS 4652
Zinc and galvanised surfaces generally	One pack primer for galvanised steel	(5)	An approved proprietary type
	Etching primer plus zinc chrome primer	(6)	An approved proprietary type
	Etching primer plus zinc phosphate primer	(7)	An approved proprietary type
Aluminium and sprayed aluminium coatings	Zinc chrome primer		An approved proprietary type
Smooth and polished aluminium	Etching primer plus zinc chrome primer		An approved proprietary type
Smooth and polished copper Smooth lead	Etching primer	(8)	An approved proprietary type

SPECIFICATION - *continued*

Notes to Table of primers;

- (1) For site application but slow drying. Not to be used in areas of domestic use and/or where public has access. Do not use when a lower lead primer is equally suitable.
- (2) General purpose primer for new and maintenance priming of blast or manually cleaned steel. Has an equivalent performance to lead based primers. Should be used on steel in preference to lead primers in locations where lead paint may be a health hazard. On galvanised surfaces, etch prime first.
- (3) For interior or sheltered exterior use. Dries overnight. May be used in domestic buildings.
- (4) Epoxy resin-based two pack product. For factory priming blast-cleaned structural steelwork or for touching-in damaged areas of galvanised or zinc-sprayed coatings. Frequent stirring is necessary and applications should be by brush or spray as appropriate.
- (5) Preferred primer for galvanised steel where oil-based finishing paints are specified. Replaces calcium plumbate primer.
- (6) On galvanised surfaces, etch prime first.
- (7) Equivalent to (6).
- (8) For non-ferrous metal pre-treatment/priming.

Table of sealers

Surface	Finish	Sealer	Reference
Dry plaster Dry concrete Dry asbestos cement Dry fibre-cement	Oil paint Water based eggshell	Alkali-resisting primer-sealer	An approved proprietary type
Standard hardboard	Oil paint Water based eggshell	Approved proprietary hardboard sealer	-
Tempered hardboard	Oil paint	Emulsion paint	BS 7719
	Water based eggshell	Approved proprietary hardboard sealer	-
Concrete or plaster not fully dried out Porous wall surfaces generally	Emulsion paint	Emulsion paint (thinned)	BS 7719
Plasterboard Proprietary gypsum wallboard	Oil paint Water based eggshell	Alkali-resisting primer-sealer	An approved proprietary type
Fibre insulation board	Oil paint Water based eggshell	Approved proprietary sealer	-
Asbestos-free fibre reinforced boards	Oil paint Water based eggshell	Alkali-resisting primer-sealer	An approved proprietary type
Bituminous paint Old creosote	Oil paint Water based eggshell	Aluminium primer	An approved proprietary type
Cementitious surfaces	Textured masonry paint (oil base and water based eggshell)	Alkali-resisting primer-sealer	An approved proprietary type

Ancillary materials

White spirit: to BS 245: Type A.

Knotting: to BS 1336.

Stopping for woodwork: ready mixed emulsion polymer or oil based type, suitable for internal or external use as appropriate.

Stopping and filler for woodwork to receive clear finishes: ready mixed and tinted to match timber species.

Filler for plasterwork: water mixed powder type.

Rust remover: phosphoric acid type.

Paint remover: to BS 3761 Type 1.

Fungicidal solution: proprietary product from an approved manufacturer.

Detergents: approved proprietary types.

Workmanship generally

British Standards: comply with BS 6150 Code of practice for painting of buildings and BS 8000-12 Code of practice for decorative wallcoverings and painting.

Lead at work regulations: comply with the Control of Lead at Work Regulations 2002 where applicable.

Pipework and services components: finish in with surface to which pipes are fixed unless otherwise ordered. Do not paint radiator valves, heads of sprinkler systems or fusible links.

Samples: permit authorised sampling of materials on site. Set aside unopened sealed containers of materials for testing when directed.

Approval of sample areas: obtain approval of representative sample areas of each type of coating before carrying out the remainder of the work.

Preparation of new surfaces

Preparing new masonry, plaster, render and fibre reinforced cement surfaces:

- remove mortar and plaster splashes, nibs, loose and flaking material;
- remove surface salts with a stiff fibre brush, repeating after 48 hours if necessary;
- fill all holes and surface imperfections with a suitable non-shrink filler;
- remove release agents with weak detergent solution, rinsing afterwards.

Preparing new timber and plywood: rub down with medium glasspaper to a smooth surface and:

- remove resinous exudations and apply two coats of knotting to resinous timber, bluish sapwood and all knots, extending cover 25 mm beyond affected areas;
- wipe down hardwoods with an excess of natural oil with white spirit, immediately before priming;
- after priming, stop nail holes and similar depressions, finishing flush and priming all stopping.

Filling timber surfaces: after priming and stopping fill pore and grain irregularities with filler, brush or knife applied. Remove surplus when dry and rub down to leave a smooth, even surface.

Pre-primed timber surfaces: remove any areas of defective primer and patch prime. Wipe down primed surfaces with white spirit to remove dirt and grease.

Stopping timber surfaces for clear finishes: stop nail holes and similar depressions with stopping to match the colour of the timber, finishing flush.

Preparing new iron and steel surfaces: mechanically clean or blast clean to remove contamination.

Preparing new non-ferrous metal surfaces:

- copper surfaces: clean with white spirit to remove dirt and grease. For small areas only, rub down with abrasive paper in lieu of etch priming. Remove all copper dust before priming;

Preparation of new surfaces - *continued*

- b. zinc and galvanised surfaces: clean with white spirit to remove dirt and grease and wash with detergent solution to remove corrosion products; if zinc coating is defective obtain instructions before painting.

Preparing new wood fibre, particle and plasterboard surfaces:

- a. clean down loose materials with a stiff fibre brush;
- b. after priming, stop nail holes and similar depressions, finishing flush and priming all stopping.

Preparation of existing decorated surfaces*Preparing decorated masonry, plaster and render surfaces:*

- a. scrape back loose and defective material to a firm edge;
- b. cut imperfections by filling and rubbing smooth;
- c. remove dirt with detergent and warm water;
- d. brush down masonry with a stiff fibre brush and areas of organic growth with a stainless steel brush. Apply fungicidal solution, when specifically ordered, in accordance with the manufacturer's instructions/recommendations;
- e. prepare bared surfaces as specified for new work, and bring forward with undercoating.

Asbestos cement surfaces: do not dry scrape, dry abrade, or wire brush asbestos cement surfaces. Use wet methods of surface preparation only. Collect residues before they dry out and remove from site.

Removal of existing paint from timber:

- a. burn off existing coating. Scrape, abrade or plane any scorched areas and rub down smooth; or
- b. solvent strip existing coating. Swab off residue of stripper with water, allow to dry and rub down smooth.

Preparing painted timber:

- a. rub down sound paintwork with abrasive paper or block used wet;
- b. scrape back or rub down loose or defective material to a firm edge;
- c. rinse down and allow to dry;
- d. prime bared surfaces as new work and bring forward with undercoating;

- e. inform the PM of the presence of any rotten or infested timber and await instructions.

Preparing painted iron and steel:

- a. wash down sound paintwork with detergent and warm water to remove dirt. Rinse with clean water;
- b. chip, scrape or wire brush rusted areas back to bare metal;
- c. rub down all surfaces with abrasive paper or block used wet and rinse with clean water;
- d. prime bared areas as for new work and bring forward with undercoating.

Preparing painted non-ferrous metals:

- a. wash down with detergent and warm water to remove dirt. Rinse with clean water;
- b. remove loose and defective material and corrosion products with fine abrasive paper; Do not damage protective coatings;
- c. wipe down with white spirit;
- d. prime bared areas as for new work and bring forward with undercoating.

Preparing painted wood fibre, particle and plasterboard surfaces:

- a. wash down with detergent and warm water to remove dirt;
- b. make good cracks and imperfections by stopping and rubbing smooth. Prepare and prime bared areas as for new work and bring forward with undercoating;
- c. scrape back loose and defective oil or emulsion paint to a firm edge without damaging surface.

Preparing clear finished surfaces:

- a. wash down intact varnished finishes, not requiring removal, with detergent and warm water to remove dirt;
- b. solvent strip existing defective varnished surfaces, swabbing off residues with water. Allow to dry and rub down;
- c. wipe down oiled surfaces with a cloth moistened with warm detergent solution, followed by clean water, then leather off and prepare for new work;
- d. brush down exterior wood stained surfaces with a stiff fibre brush and wash down to remove any remaining dirt;
- e. wash down wax polished surfaces with white spirit to completely remove polish, dry off, then rub down with abrasive paper to remove stain (if any) and prepare as for new work;
- f. inform the PM of the presence of rotten or infested timber and await instructions.

Preparation of paint and clear wood finishes*Stirring:*

- a. stir before use to an even consistency throughout the container unless otherwise recommended by the manufacturer;
- b. stir at intervals during use where recommended by the manufacturer.

Thinning: do not thin any paints or varnishes unless recommended by the manufacturer and/or permitted by the PM and:

- a. do not thin oil paints in excess of 5% by volume of thinner;
- b. thin emulsion paint in accordance with the manufacturer's recommendations for the method of application and the porosity of the background to which it is to be applied. Do not exceed 10% by volume of water without approval.

Mixing:

- a. do not mix different materials or like materials of different manufacture;
- b. mix etching primer in sufficient quantity for use within eight hours;
- c. mix two-pack materials in accordance with manufacturer's recommendations.

Paint application

Sealing: consult PM where the adequacy of specified sealer to suit porosity of surface is doubted, or if one full coat of sealer or emulsion paint is insufficient to satisfy the porosity of the surface, or surfaces may be harmful to subsequently applied paint systems.

Priming generally: apply priming coats by brush unless other methods are specifically permitted and:

- a. work primer into surface, joints, angles and end grain;
- b. prime surfaces of joinery that will be hidden from view before joinery is fixed in position;
- c. ensure that priming coats are of adequate thickness especially on sharp edges. Thin slightly if necessary to suit surface porosity;
- d. ensure that any primed surfaces which have deteriorated on site or in transit are cleaned and touched up or rubbed down and reprimed.

Priming iron and steel: allow minimum drying times of:

- a. seven days for priming paint before applying undercoating;
- b. two days between successive coats of priming paint;
- c. 24 hours for zinc phosphate priming paint.

Surface preparation between coats:

- a. lightly rub down priming and undercoats with abrasive paper to remove surface nibs;
- b. dust off before applying next coat;
- c. do not rub down lead based primers;
- d. avoid reducing film thickness.

External timber doors: paint bottom edges before fixing with paint system ordered for external timber.

Brush application: apply in a wet, even film over all surfaces, avoiding brush marks, sags, runs, "orange-peel" and other defects. Ensure adequate edge protection.

Metallic paint coverage rate: avoid excessive brushing out. Coverage must not exceed 18 m² per litre.

Roller application: use rollers with coverings of type recommended by the roller or paint manufacturer. Use brushes for cutting-in.

Do not apply with rollers:

- a. priming coats;
- b. work not of a plain character.

Spray painting generally: use approved equipment. Mask all adjoining surfaces and take all necessary precautions to prevent contamination of adjoining areas by spray mist and accumulation of vapour. Do not apply by spray:

- a. priming paints for wood;
- b. lead paints within the meaning of the Control of Lead at Work Regulations 2002.

Painting acoustic surfaces: spray coating material thinly at an angle of 30° to the surface.

SPECIFICATION - *continued***Application of clear wood finishes**

Oil staining: apply stain to give an even colour and penetration over entire surface.

Exterior wood staining: brush apply the coating system in accordance with the manufacturer's recommendations. Allow the correct drying interval between each coat.

Varnishing:

- apply first coat by brush avoiding uneven thicknesses at edges and angles;
- brush well into the surfaces;
- apply subsequent coats by brush in full even coats free of sags and other defects;
- ensure good even protection of edges, etc.

Wax polishing: apply pre-polishing oil with a circular rubbing motion at a rate of 22 m² per litre, and wipe dry. Allow at least 48 hours to elapse, then wax polish to approved finish.

Oiling: apply oil as ordered with a flannel, well rubbed in.

Proprietary finishes: apply first coats in joinery shop where practicable. Do not allow deterioration of first coats before application of subsequent coats.

Fire precaution: carefully dispose of rags, swabs, etc. soaked in flammable solvents or varnishes, to avoid fire risk.

GENERALLY**Definitions**

General surfaces: All surfaces not otherwise described.

Floors: Includes landings.

Wood: Includes softwood, plywood, hardwood or the like.

Soft building board: Includes fibreboard, particle board, hardboard or the like where there is a high rate of initial absorption or a sealant is required.

Hard building board: Includes plasterboard, laminboard or the like where there is a minimal rate of absorption.

Irregular: Corrugated, fluted, carved or ornamental.

Plain open railing, fence or gate: Includes plain post and wire, post and rail, cleft pale, palisade and metal bar.

Close railing, fence or gate: Includes close boarded and corrugated.

Services: Includes pipes, lagged pipes, conduits, cables, ducting, trunking, straps, standards, bars or the like and isolated units including ventilating gratings, soot doors, flushing cisterns, rainwater heads, strap hinges or the like.

Method of measurement

Generally:

Measure the area or girth covered and make allowance for the extra girth of edges, mouldings, panels, sinkings, corrugations, flutings, carvings, enrichments or the like unless otherwise stated. Make no deduction for voids not exceeding 0.50 m².

Glazed window, screen or door:

Measure each side flat plus edges of glazed doors.

When divided into panes of more than one size, average the sizes.

Measure the work to associated linings and sills as general surfaces.

Frame (including linings, architraves and the like):

Measure the girth separately each side irrespective of whether the same treatment is to be applied to both sides.

Radiator:

Measure the area painted. Where applicable, measure columns of column radiators in metres as isolated areas not exceeding 300 mm girth.

Plain open railing, fence or gate:

Measure individual members.

GENERALLY - *continued*

Method of measurement - *continued*

Close railing, fence or gate:
Measure each side overall.

Structural metalwork:
Measure over all fittings, plates and the like.

Dado lines and skirtings over 300 mm wide:
Measure as general surfaces. Measure cutting in edge separately.

Cutting in edge on flush surface:
Measure to flush surfaces only. Do *not* measure where walls meet ceilings, frames or skirtings and the like.

Rates for the following include

Generally:
For any areas or girth unless otherwise stated.

For work in any location or at any height unless otherwise stated.

For schemes of decoration involving any number of colours unless otherwise stated.

For moving and replacing and/or protecting blinds, curtains, racks, furniture and pictures, unless otherwise stated in the Contract Documents.

For the use of dust sheets necessary for the protection of fixtures, fittings, furniture, carpets and the like where redecoration or painting and decorating to work of repairs and/or renewal is carried out.

For all necessary preparatory work described for the respective surfaces, except additional preparatory work under Items 29.004 to 29.023 which will be paid separately where specifically ordered.

For filling cracks not exceeding 4 mm wide.

For application by brush, roller or spray.

For carrying out work on members before fixing either on or off site when required.

For work to flagstaffs when lowered. (*Pay for lowering or painting in position at agreed Rates*).

For taking off any ironmongery or the like necessary for the proper execution of the work and for cleaning and refixing.

For decorating surface conduit or the like in with the surface to which it is attached and for any additional area so resulting.

Isolated areas:
For work of any girth.

General surfaces:
For work on butts and fastenings attached to doors, frames and linings.

Glazed windows, screens or doors:
For cutting in next glass.

For work on glazed beads, butts and fastenings attached thereto.

For renewing defective glazing putty to old metal or wood sashes, casements and glazed doors including priming rebates and resprigging glass.

For work to edges of opening lights and portions uncovered by sliding sashes in double hung sash windows and additional work to surrounding frame caused by opening lights.

Structural metalwork:
For work to attached hookbolts, clips, connecting plates, end plates, fittings and the like.

Radiators:
For work to brackets and stays.

Gutters:
For work to gutter brackets.

Services:
For work to saddles, pipehooks, holderbats, conduit boxes and other components for fixing.

Cutting in edge:
For marking line with chalk or pencil.

For masking tapes and the like.

29: DECORATION

ADJUSTMENT OF RATES FOR WORK IN STAIRCASE AREAS, PLANT ROOMS AND EXTERNALLY

Item	
29	
001	Work carried out in staircase areas: price at the Rates in this Section multiplied by 1.075
002	Work carried out in plant rooms: price at the Rates in this Section multiplied by 1.025
003	Work carried out externally: price at the Rates for internal work of the same specification, <i>except where Rates are specifically shown for external work</i> multiplied by 1.075

ADDITIONAL CLEANING: INTERNALLY OR EXTERNALLY

Notes	Specification
<i>Generally:</i> Pay for only where specifically ordered.	<i>Blast cleaning:</i> to BS EN ISO 8501-1, preparation grade Sa2.

	<i>Square Metre</i>	<i>£</i>
004	Degreasing old painted work with an approved solution prior to repainting: general surfaces	2.02
005	Steam stripping old decorated work: general surfaces	13.69
006	Drying out patches with blowlamp: painting two coats of primer-sealer: general surfaces	22.16

		<i>1</i>	<i>2</i>	<i>3</i>
		Cleaning with mechanical wire brush	Cleaning with mechanical chisels	Blast cleaning to BS EN ISO 8501-1
	<i>Square Metre</i>	<i>£</i>	<i>£</i>	<i>£</i>
007	General surfaces: metal	5.51	6.88	44.85
	Structural metalwork			
008	general surfaces	6.13	7.81	46.52
009	members of roof trusses, lattice girders, purlins or the like	7.19	9.19	53.18

	<i>Metre</i>	<i>£</i>
010	Cleaning out old gutters prior to repainting: staunching joints with mastic or bituminous composition: externally	3.46

29: DECORATION

TREATING MOULD GROWTH: INTERNALLY OR EXTERNALLY

Item		
29	<i>Square Metre</i>	<i>£</i>
011	Removing mould growth: painting one coat fungicidal solution: general surfaces: any base, new or old	3.77
	ADD where to ceilings or beams (except in staircase areas)	
012	3.50 to 5.00 m above floor	0.18
013	5.00 to 6.50 m above floor	0.49
014	exceeding 6.50 m above floor	0.74

REMOVING PAINT: FROM METAL OR WOOD

Notes Where removing paint is measured, pay for repainting at the Rates for new work.

Generally:
Pay for only where specifically ordered.

		1	2	3
		Burning off	Solvent stripping	Hot air blowers
	<i>Square Metre</i>	<i>£</i>	<i>£</i>	<i>£</i>
015	General surfaces: exceeding 300 mm girth	11.09	17.23	21.98
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes			
016	exceeding 1.00 m ²	22.34	33.09	42.44
017	0.50 to 1.00 m ²	24.43	36.19	46.51
018	0.10 to 0.50 m ²	33.43	49.34	63.65
019	not exceeding 0.10 m ²	44.79	66.06	84.81
020	ADD where behind guard bars or the like	15.41	23.44	30.98
	<i>Metre</i>			
	General surfaces			
021	isolated surfaces not exceeding 300 mm girth	5.54	8.61	10.98
	<i>Each</i>			
022	isolated areas not exceeding 0.50 m ²	10.74	16.05	21.30

29: DECORATION

REMOVING PAINT: FROM PLASTERED SURFACES: INTERNALLY

Notes

Generally:
Pay for only where specifically ordered.

Method of Measurement

Measure over loose and flaking paint and include the total area ordered to be exposed to the original surface.

Rates for the following include

Generally:
For exposing original surface, irrespective of whether required for a firm edge.

Item		Square Metre	£
29			
023	Scraping old firm and adhering emulsion or oil paint from plastered surface: expose original surface and leave ready to receive new decoration: general surfaces		15.07

EMULSION PAINTING

Specification

Matt finish emulsion paint, interior quality:
an approved proprietary type.

Vinyl silk finish emulsion paint, interior quality:
an approved proprietary type.

Mould resistant matt finish emulsion paint, interior quality: an approved proprietary type.

Mould resistant vinyl silk finish emulsion paint, interior quality: an approved proprietary type.

		1	2	3
		Painting one coat matt emulsion paint on		ADD for each
		new or old untreated work	old emulsion painted work	additional coat
	Square Metre	£	£	£
	General surfaces			
024	concrete, brickwork or render	2.97	2.36	1.75
025	blockwork or soft building board	3.76	2.83	1.90
026	plaster	2.44	2.06	1.67
027	hard building board	2.52	2.09	1.67
	ADD for			
028	vinyl silk finish	0.45	0.22	0.17
029	mould resistant additive	1.08	0.85	0.81
030	work on textured surfaces	0.87	0.64	0.60

29: DECORATION

EMULSION PAINTING - *continued*

Item		1	2	3
		Painting one coat matt emulsion paint on new or old untreated work	old emulsion painted work	ADD for each additional coat
29	<i>Square Metre</i>	£	£	£
	ADD where to ceilings or beams (except in staircase areas)			
031	3.50 to 5.00 m above floor	0.22	0.22	0.17
032	5.00 to 6.50 m above floor	0.55	0.55	0.41
033	exceeding 6.50 m above floor	0.84	0.84	0.63
	<i>Metre</i>			£
034	Extra for dado line in contrasting colour: any number of coats: cutting in edges			3.52
035	Extra for skirting (any height) in contrasting colour: any number of coats: cutting in edge			2.43
036	Cutting in edge on flush surface			1.25

EMULSION PAINTING: EXTERNALLY

Specification

Eggshell finish emulsion paint, oil based, exterior quality:
an approved proprietary type.

		1	2	3
		Painting one coat emulsion paint on new or old untreated work	old emulsion painted work	ADD for each additional coat
	<i>Square Metre</i>	£	£	£
	General surfaces			
037	concrete, brickwork or render	4.08	3.43	2.77
038	blockwork	5.21	4.22	3.22
039	roughcast render	7.72	5.91	4.12
040	hard building board	3.42	2.97	2.51
041	hard building board: irregular	4.30	3.76	3.22
	ADD where to ceilings or beams (except in staircase areas)			
042	3.50 to 5.00 m above floor	0.22	0.22	0.17
043	5.00 to 6.50 m above floor	0.55	0.55	0.41
044	exceeding 6.50 m above floor	0.84	0.84	0.63

29: DECORATION

EMULSION PAINTING: EXTERNALLY - *continued*

Specification

Eggshell finish emulsion paint, water based, exterior quality:
an approved proprietary type.

Item		123		
		1	2	3
		Painting one coat emulsion paint on		ADD for each
		new or old untreated work	old emulsion painted work	additional coat
29	Square Metre	£	£	£
General surfaces				
045	concrete, brickwork or render	3.39	2.74	2.08
046	blockwork	4.29	3.30	2.30
047	roughcast render	6.34	4.53	2.74
048	hard building board	2.86	2.42	1.96
049	hard building board: irregular	3.38	2.84	2.30
ADD where to ceilings or beams (except in staircase areas)				
050	3.50 to 5.00 m above floor	0.22	0.22	0.17
051	5.00 to 6.50 m above floor	0.55	0.55	0.41
052	exceeding 6.50 m above floor	0.84	0.84	0.63

FINE TEXTURED MASONRY PAINTING: EXTERNALLY

Specification

Fine textured masonry paint: an approved proprietary water or solvent thinned type.

		1234			
		Painting one coat fine textured masonry paint on old painted work	Painting one coat primer-sealer and one coat fine textured masonry paint on new or old untreated work	old painted work	ADD for each additional coat of fine textured masonry paint
Square Metre		£	£	£	£
General surfaces					
053	concrete, brickwork or render	5.30	10.53	9.69	4.46
054	blockwork	6.15	12.08	11.20	4.98
055	roughcast render	6.97	12.89	12.01	5.62
056	hard building board	5.00	9.88	9.06	4.32
057	hard building board: irregular	5.67	11.18	10.32	4.66

29: DECORATION

FINE TEXTURED MASONRY PAINTING: EXTERNALLY - *continued*

Item		1	2	3	4
		Painting one coat fine textured masonry paint on old painted work	Painting one coat primer-sealer and one coat fine textured masonry paint on new or old untreated work	old painted work	ADD for each additional coat of fine textured masonry paint
29	<i>Square Metre</i>	£	£	£	£
	ADD where to ceilings or beams (except in staircase areas)				
058	3.50 to 5.00 m above floor	0.22	0.38	0.38	0.17
059	5.00 to 6.50 m above floor	0.55	0.97	0.97	0.41
060	exceeding 6.50 m above floor	0.84	1.47	1.47	0.63

MULTI-COLOURED FINISHING PAINT

Specification

Multi-colour finish: an approved proprietary spray applied type.

Rates for the following include

Multi-colour finish:
For base colour coat and fleck coat.

		1	2	3	4
		Painting multicolour finish on old painted work	Painting one coat primer-sealer and multicolour finish on new or old untreated work	old painted work	ADD for glaze coat to multicolour finish
	<i>Square Metre</i>	£	£	£	£
	General surfaces				
061	concrete, brickwork or render	13.62	17.12	14.28	3.22
062	blockwork	14.72	18.61	15.77	3.22
063	plaster	12.89	16.01	13.17	3.22
	ADD where to ceilings or beams (except in staircase area)				
064	3.50 to 5.00 m above floor	0.22	0.38	0.38	0.17
065	5.00 to 6.50 m above floor	0.55	0.97	0.97	0.41
066	exceeding 6.50 m above floor	0.84	1.47	1.47	0.63
	<i>Metre</i>				£
067	Extra for dado line in contrasting colour: any number of coats: cutting in edges				8.44
068	Extra for skirting (any height) in contrasting colour: any number of coats: cutting in edge				5.83
069	Cutting in edge on flush surface				3.01

29: DECORATION

TEXTURED COATING

Specification

Textured coating: an approved proprietary plastic textured coating.

Rates for the following include

Generally:
For any type of pattern or textured finish.

Item	Square Metre	1	2	3	4
		Applying one coat textured coating on new or old untreated work	old painted work	ADD for one coat primer-sealer to receive textured coating	ADD for glaze coat on textured coating
29		£	£	£	£
	General surfaces				
070	concrete, brickwork, blockwork or render	6.99	5.99	4.46	3.22
071	plaster	6.43	5.43	3.82	3.22
072	hard building board	6.70	5.69	4.12	3.22
	ADD to where ceilings or beams (except in staircase areas)				
073	3.50 to 5.00 m above floor	0.22	0.22	0.17	0.17
074	5.00 to 6.50 m above floor	0.55	0.55	0.41	0.41
075	exceeding 6.50 m above floor	0.84	0.84	0.63	0.63

CHEMICAL RESISTANT PAINTING

Specification

Chemical resistant paint: an approved proprietary product recommended by the manufacturer as suitable for the intended purpose.

	Square Metre	1	2	3	4
		Painting one coat chemical resistant paint on old painted work	Painting one coat primer and one coat chemical resistant paint on new or old untreated work	old painted work	ADD for each additional coat of chemical resistant paint
		£	£	£	£
076	General surfaces: concrete or hard building board	6.51	12.65	11.97	5.67
	ADD to where ceilings or beams (except in staircase areas)				
077	3.50 to 5.00 m above floor	0.22	0.38	0.38	0.17
078	5.00 to 6.00 m above floor	0.55	0.97	0.97	0.41
079	exceeding 6.50 m above floor	0.84	1.47	1.47	0.63

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: MASONRY, RENDER, ETC.

Specification

General use paint: undercoat and finish: to BS 7664.

Item	Square Metre	1	2	3
		Painting one coat primer-sealer, one undercoat and one finishing coat on new or old untreated work	ADD for each additional undercoat	DEDUCT where no finishing coat
29		£	£	£
General surfaces				
080	concrete, brickwork or render	13.57	3.11	3.60
081	blockwork or soft building board	17.20	3.28	3.74
082	plaster	11.14	2.96	3.46
083	hard building board	11.55	2.96	3.46
ADD where to ceilings or beams (except in staircase area)				
084	3.50 to 5.00 m above floor	0.54	0.17	0.17
085	5.00 to 6.50 m above floor	1.15	0.41	0.41
086	exceeding 6.50 m above floor	1.92	0.70	0.70

	Square Metre	1	2	3	4
		Painting one finishing coat on old oil painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat primer-sealer on old oil painted work
		£	£	£	£
General surfaces					
087	concrete, brickwork, blockwork or render	5.03	3.11	3.63	3.80
088	plaster, soft building board or hard building board	4.27	3.13	3.65	3.88
ADD where to ceilings or beams (except in staircase areas)					
089	3.50 to 5.00 m above floor	0.22	0.17	0.17	0.17
090	5.00 to 6.00 m above floor	0.55	0.41	0.41	0.41
091	exceeding 6.50 m above floor	0.84	0.63	0.63	0.63
					£
092	ADD where finishing coat stippled.				2.38

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: MASONRY, RENDER, ETC. - *continued*

Item 29	Metre	£
093	Extra for dado line in contrasting colour: any number of coats: cutting in edges	4.47
094	Extra for skirting (any height) in contrasting colour: any number of coats: cutting in edge	3.06
095	Cutting in edge on flush surface	1.25

WATER BASED EGGSHELL FINISH PAINTING: MASONRY, RENDER, ETC.

Specification

General use paint: undercoat and finish: to BS 7664.

		1	2	3
		Painting one coat primer-sealer, one undercoat and one finishing coat on new or old untreated work	ADD for each additional undercoat	DEDUCT where no finishing coat
	<i>Square Metre</i>	£	£	£
General surfaces				
096	concrete, brickwork or render	13.57	3.11	3.60
097	blockwork or soft building board	17.20	3.28	3.74
098	plaster	11.14	2.96	3.46
099	hard building board	11.55	2.96	3.46
ADD where to ceilings or beams (except in staircase area)				
100	3.50 to 5.00 m above floor	0.54	0.17	0.17
101	5.00 to 6.50 m above floor	1.15	0.41	0.41
102	exceeding 6.50 m above floor	1.92	0.70	0.70

29: DECORATION

WATER BASED EGGSHELL FINISH PAINTING: MASONRY, RENDER, ETC. - *continued*

Item		1	2	3	4
		Painting one finishing coat on old oil painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat primer-sealer on old oil painted work
29	<i>Square Metre</i>	£	£	£	£
	General surfaces				
103	concrete, brickwork, blockwork or render	5.03	3.11	3.63	3.80
104	plaster, soft building board or hard building board	4.27	3.13	3.65	3.88
	ADD where to ceilings or beams (except in staircase areas)				
105	3.50 to 5.00 m above floor	0.22	0.17	0.17	0.17
106	5.00 to 6.00 m above floor	0.55	0.41	0.41	0.41
107	exceeding 6.50 m above floor	0.84	0.63	0.63	0.63
					£
108	ADD where finishing coat stippled.				2.38
	<i>Metre</i>				
109	Extra for dado line in contrasting colour: any number of coats: cutting in edges				4.47
110	Extra for skirting (any height) in contrasting colour: any number of coats: cutting in edge				3.06
111	Cutting in edge on flush surface				1.25

ANTI-GRAFFITI PAINTING: MASONRY, RENDER, ETC.

		1	2	3
		Painting one coat sealer, one coat primer, one finishing coat on new work	Painting one coat primer, one finishing coat on old work	ADD for each additional finishing coat
	<i>Square Metre</i>	£	£	£
	General surfaces			
112	concrete, brickwork, blockwork or render	12.74	8.82	4.47
	ADD where to ceilings or beams (except in staircase areas)			
113	3.50 to 5.00 m above floor	0.22	0.17	0.17
114	5.00 to 6.00 m above floor	0.55	0.41	0.41
115	exceeding 6.50 m above floor	0.84	0.63	0.63

29: DECORATION

BITUMINOUS EMULSION PAINTING: INTERNALLY OR EXTERNALLY

Specification

Bituminous finish emulsion paint: an approved proprietary type.

Item		1	2
29	<i>Square Metre</i>	Painting one coat bituminous emulsion paint	ADD for each additional coat
		£	£
116	General surfaces: concrete, brickwork or blockwork: new or old	3.88	3.06

FLOOR PAINTING

Specification

Floor paint: semi-gloss non-slip: an approved proprietary type.

		1	2	3	4
	<i>Square Metre</i>	Painting one coat floor paint on old painted work	Painting one coat primer-sealer and one coat floor paint on new or old untreated work	old painted work	ADD for each additional coat of floor paint
		£	£	£	£
117	Floors: concrete	2.90	5.37	5.12	2.90

WATER REPELLENT PAINTING: EXTERNALLY

Specification

Water repellent coating: an approved proprietary type.

	<i>Square Metre</i>	£
118	Painting one coat water repellent coating: general surfaces: brickwork: new or old	3.11
119	ADD for additional coat	1.99

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: METAL

Specification

General use paint: undercoat and finish: to BS 7664.

1	2	3	4	5	6	7
Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat etching primer	ADD for one coat rust inhibitor
£	£	£	£	£	£	£

Item	Square Metre	1	2	3	4	5	6	7
29		£	£	£	£	£	£	£
	General surfaces							
120	exceeding 300 mm girth	6.97	11.43	5.81	2.97	3.43	3.23	2.83
	ADD where to							
121	perforated floor - <i>per side</i>	2.16	3.51	1.77	0.92	1.05	0.97	0.71
122	lathing or mesh: any type: grid not exceeding 25 x 50 mm - <i>per side</i>	2.58	4.20	1.96	1.15	1.23	1.32	1.02
123	exceeding 300 mm girth: irregular . .	7.25	11.98	5.95	3.11	3.52	3.37	2.97
	ADD where to ceilings or beams (except in staircase areas)							
124	3.50 to 5.00 m above floor	0.38	0.54	0.20	0.17	0.17	0.17	0.17
125	5.00 to 6.00 m above floor	1.00	1.15	0.55	0.41	0.41	0.41	0.41
126	exceeding 6.50 m above floor . . .	1.47	1.92	0.84	0.63	0.63	0.63	0.63
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes							
127	exceeding 1.00 m ²	8.76	14.20	7.25	3.69	4.30	3.94	3.61
128	0.50 to 1.00 m ²	9.57	15.55	7.94	4.03	4.70	4.37	3.98
129	0.10 to 0.50 m ²	13.08	21.30	10.86	5.51	6.42	5.80	5.27
130	not exceeding 0.10 m ²	17.56	28.60	14.56	7.37	8.61	7.77	7.10
	ADD where							
131	casements and/or beads are ordered to be painted in a colour differing from frames, sills, linings, mullions and transoms	3.28	3.28	1.69	1.58	1.69	1.55	1.62
132	behind guard bars or the like	3.75	5.54	1.92	1.81	1.92	1.79	1.86
	Radiators: exceeding 300 mm girth							
133	panel type	7.81	12.97	6.47	3.29	3.78	3.52	3.12
134	column type	8.36	13.87	6.97	3.52	4.07	3.76	3.36
135	Services: exceeding 300 mm girth	7.65	12.80	6.39	3.22	3.63	3.40	3.00

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: METAL - *continued*

Item		1	2	3	4	5	6	7
		Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat etching primer	ADD for one coat rust inhibitor
29	<i>Metre</i>	£	£	£	£	£	£	£
136	Cutting into weather stripping	2.38	3.82	1.96	0.99	1.17	0.99	0.99
	General surfaces, radiators or services							
137	isolated surfaces not exceeding 300 mm girth	2.79	4.70	2.37	1.16	1.40	1.30	1.16
	<i>Each</i>							
138	isolated areas not exceeding 0.50 m ²	4.76	7.89	3.96	2.01	2.32	2.16	1.92
	<i>Square Metre</i>							
	Structural work							
	exceeding 300 mm girth							
139	general surfaces	7.25	11.98	5.98	3.07	3.52	3.30	2.90
140	members of roof trusses, lattice girders, purlins or the like	8.79	14.46	7.37	3.70	4.29	3.93	3.53
	<i>Metre</i>							
	isolated surfaces not exceeding 300 mm girth							
141	general surfaces	2.60	4.30	2.15	1.10	1.27	1.18	1.05
142	members of roof trusses, lattice girders, purlins or the like	3.20	5.24	2.69	1.33	1.56	1.44	1.30
	<i>Each</i>							
	isolated areas not exceeding 0.50 m ²							
143	general surfaces	4.42	7.21	3.61	1.87	2.14	1.99	1.76
144	members of roof trusses, lattice girders, purlins or the like	5.26	8.68	4.42	2.20	2.58	2.35	2.12
145	Work carried out 5.00 to 8.50 m above floor: where applicable, price at the foregoing Rates multiplied by 1.10.							

29: DECORATION

WATER BASED EGGSHELL FINISH PAINTING: METAL

Specification

General use paint: undercoat and finish: to BS 7664.

1	2	3	4	5	6	7
Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat etching primer	ADD for one coat rust inhibitor
£	£	£	£	£	£	£

Item	Square Metre	1	2	3	4	5	6	7
29		£	£	£	£	£	£	£
	General surfaces							
146	exceeding 300 mm girth	7.61	12.34	6.08	3.34	3.70	3.23	2.83
	ADD where to							
147	perforated floor - <i>per side</i>	2.32	3.73	1.84	1.01	1.12	0.97	0.71
148	lathing or mesh: any type: grid not exceeding 25 x 50 mm - <i>per side</i>	3.06	4.86	2.16	1.43	1.44	1.32	1.02
149	exceeding 300 mm girth: irregular . .	7.89	12.89	6.22	3.47	3.80	3.37	2.97
	ADD where to ceilings or beams (except in staircase areas)							
150	3.50 to 5.00 m above floor	0.38	0.54	0.20	0.17	0.17	0.17	0.17
151	5.00 to 6.00 m above floor	1.00	1.15	0.55	0.41	0.41	0.41	0.41
152	exceeding 6.50 m above floor . . .	1.47	1.92	0.84	0.63	0.63	0.63	0.63
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes							
153	exceeding 1.00 m ²	9.29	14.94	7.48	3.99	4.53	3.94	3.61
154	0.50 to 1.00 m ²	10.19	16.41	8.21	4.37	4.98	4.37	3.98
155	0.10 to 0.50 m ²	13.92	22.47	11.22	5.98	6.79	5.80	5.27
156	not exceeding 0.10 m ²	18.65	30.12	15.03	7.99	9.09	7.77	7.10
	ADD where							
157	casements and/or beads are ordered to be painted in a colour differing from frames, sills, linings, mullions and transoms	3.28	3.28	1.69	1.58	1.69	1.55	1.62
158	behind guard bars or the like	3.75	5.54	1.92	1.81	1.92	1.79	1.86
	Radiators: exceeding 300 mm girth							
159	panel type	8.45	13.88	6.75	3.66	4.06	3.52	3.12
160	column type	9.00	14.78	7.25	3.89	4.35	3.76	3.36
161	Services: exceeding 300 mm girth	8.29	13.71	6.67	3.59	3.91	3.40	3.00

29: DECORATION

WATER BASED EGGSHELL FINISH PAINTING: METAL - *continued*

Item		1	2	3	4	5	6	7
		Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat	ADD for one coat etching primer	ADD for one coat rust inhibitor
29	Metre	£	£	£	£	£	£	£
162	Cutting into weather stripping	2.38	3.82	1.96	0.99	1.17	0.99	0.99
	General surfaces, radiators or services							
163	isolated surfaces not exceeding 300 mm girth	3.02	5.03	2.47	1.29	1.51	1.30	1.16
	Each							
164	isolated areas not exceeding 0.50 m ²	5.15	8.44	4.13	2.23	2.50	2.16	1.92
	Square Metre							
	Structural work							
	exceeding 300 mm girth							
165	general surfaces	7.89	12.89	6.26	3.44	3.80	3.30	2.90
166	members of roof trusses, lattice girders, purlins or the like	9.43	15.36	7.65	4.07	4.57	3.93	3.53
	Metre							
	isolated surfaces not exceeding 300 mm girth							
167	general surfaces	2.83	4.62	2.25	1.23	1.37	1.18	1.05
168	members of roof trusses, lattice girders, purlins or the like	3.43	5.57	2.79	1.46	1.67	1.44	1.30
	Each							
	isolated areas not exceeding 0.50 m ²							
169	general surfaces	4.77	7.72	3.77	2.07	2.30	1.99	1.76
170	members of roof trusses, lattice girders, purlins or the like	5.61	9.19	4.58	2.39	2.74	2.35	2.12
171	Work carried out 5.00 to 8.50 m above floor: where applicable, price at the foregoing Rates multiplied by 1.10.							

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: METAL: EXTERNALLY

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3	4	5	6
		Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	ADD for one coat etching primer	ADD for one coat rust inhibitor
29	<i>Square Metre</i>	£	£	£	£	£	£
	Plain open railings, fences or gates						
172	exceeding 300 mm girth	8.50	14.01	7.02	3.43	3.69	3.29
	<i>Metre</i>						
173	isolated surfaces not exceeding 300 mm girth	3.04	5.03	2.52	1.23	1.32	1.18
	<i>Each</i>						
174	isolated areas not exceeding 0.50 m ²	5.18	8.46	4.23	2.06	2.21	1.98
	<i>Square Metre</i>						
175	Close railings, fences or gates	7.95	13.10	6.54	3.17	3.44	3.04
176	Gutter: valley, parapet or eaves: exceeding 300 mm girth	9.49	15.66	7.87	3.81	4.07	3.67
	<i>Metre</i>						
	Gutter, valley, parapet or eaves						
177	isolated surfaces not exceeding 300 mm girth	3.44	5.66	2.84	1.35	1.44	1.30
	<i>Each</i>						
178	isolated areas not exceeding 0.50 m ²	6.03	9.37	4.74	2.28	2.43	2.20

29: DECORATION

WATER BASED EGGSHELL FINISH PAINTING: METAL: EXTERNALLY

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3	4	5	6
		Painting one undercoat and one finishing coat on new work delivered primed	Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	ADD for one coat etching primer	ADD for one coat rust inhibitor
29	<i>Square Metre</i>	£	£	£	£	£	£
	Plain open railings, fences or gates						
179	exceeding 300 mm girth	9.14	14.92	7.29	3.80	3.69	3.29
	<i>Metre</i>						
180	isolated surfaces not exceeding 300 mm girth	3.27	5.35	2.62	1.36	1.32	1.18
	<i>Each</i>						
181	isolated areas not exceeding 0.50 m ²	5.53	8.97	4.39	2.25	2.21	1.98
	<i>Square Metre</i>						
182	Close railings, fences or gates	8.59	14.01	6.82	3.54	3.44	3.04
183	Gutter: valley, parapet or eaves: exceeding 300 mm girth	10.13	16.57	8.14	4.17	4.07	3.67
	<i>Metre</i>						
	Gutter, valley, parapet or eaves						
184	isolated surfaces not exceeding 300 mm girth	3.67	5.98	2.94	1.47	1.44	1.30
	<i>Each</i>						
185	isolated areas not exceeding 0.50 m ²	6.38	9.88	4.90	2.47	2.43	2.20

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: BITUMEN COATED METAL

Specification

General use paint: undercoat and finish: to BS 7664.

Item		
29	<i>Square Metre</i>	<i>£</i>
	Painting one coat aluminium primer, one undercoat and one finishing coat: services	
186	exceeding 300 mm girth	12.86
	<i>Metre</i>	
187	isolated surfaces not exceeding 300 mm girth	4.62
	<i>Each</i>	
188	isolated areas not exceeding 0.50 m ²	7.77

WATER BASED EGGSHELL FINISH PAINTING: BITUMEN COATED METAL

Specification

General use paint: undercoat and finish: to BS 7664.

	<i>Square Metre</i>	<i>£</i>
	Painting one coat aluminium primer, one undercoat and one finishing coat: services	
189	exceeding 300 mm girth	13.50
	<i>Metre</i>	
190	isolated surfaces not exceeding 300 mm girth	4.85
	<i>Each</i>	
191	isolated areas not exceeding 0.50 m ²	8.13

29: DECORATION

ALKYD GLOSS AND EGGSHELL FINISH PAINTING: METAL: INTERNALLY OR EXTERNALLY

Specification	Rates for the following include
<i>Identification of services:</i>	<i>Generally:</i>
a. Colour-code pipes in accordance with BS 1710;	For work on new or old, painted or unpainted work.
b. Use colours from the BS 4800 range, or to approval;	
c. Indicate direction of flow by arrows if ordered.	

Item		
29	<i>Metre</i>	£
	Painting one undercoat and one finishing coat	
	coloured band for coding: 50 mm wide: around services	
192	exceeding 300 mm girth	7.25
	<i>Each</i>	
193	not exceeding 300 mm girth	2.82
194	arrow: 100 mm long	2.25

WATER BASED EGGSHELL FINISH PAINTING: METAL: INTERNALLY OR EXTERNALLY

Specification	Rates for the following include
<i>Identification of services:</i>	<i>Generally:</i>
a. Colour-code pipes in accordance with BS 1710;	For work on new or old, painted or unpainted work.
b. Use colours from the BS 4800 range, or to approval;	
c. Indicate direction of flow by arrows if ordered.	

	<i>Metre</i>	£
	Painting one undercoat and one finishing coat	
	coloured band for coding: 50 mm wide: around services	
195	exceeding 300 mm girth	7.28
	<i>Each</i>	
196	not exceeding 300 mm girth	2.82
197	arrow: 100 mm long	2.25

29: DECORATION

PRIMER PAINTING: ENAMELLED METAL: INTERNALLY OR EXTERNALLY

Item		
29	<i>Metre</i>	£
198	Painting one coat aluminium primer: services: isolated surfaces not exceeding 300 mm girth	2.06
199	ADD for each additional coat of primer	1.51

HEAT RESISTING PAINTING: METAL

Specification

Heat resisting paint: hard gloss paint of an proprietary type for steam pipes and radiators above 100°C.

		1	2	3	4
		Painting one coat heat resisting paint on new or old untreated work	old painted work	Painting one coat primer and one coat heat resisting paint on new or old untreated work	ADD for each additional coat of heat resisting paint
	<i>Square Metre</i>	£	£	£	£
200	General surfaces: exceeding 300 mm girth	4.15	5.83	7.99	3.45
	Radiators: exceeding 300 mm girth				
201	panel type	4.54	6.41	8.76	3.74
202	column type	4.84	6.83	9.35	3.97
203	Services: exceeding 300 mm girth	4.34	6.19	8.51	3.57
	<i>Metre</i>				
	General surfaces, radiators or services				
204	isolated surfaces not exceeding 300 mm girth	1.63	2.32	3.17	1.37
	<i>Each</i>				
205	isolated areas not exceeding 0.50 m ²	2.83	4.09	5.59	2.31

29: DECORATION

BITUMINOUS PAINTING: METAL

Specification

Bituminous paint: black bitumen solution for cold application to BS 6949 Type 1. Not suitable for contact with potable water.

Item			1	2	3
			Painting one coat bituminous paint on old bitumen painted work	Painting one coat primer and one coat bituminous paint on new or old untreated work	ADD for each additional coat of bituminous paint
29		Square Metre	£	£	£
	General surfaces				
206	exceeding 300 mm girth		4.34	6.15	2.67
	ADD where to				
207	perforated floor - <i>per side</i>		1.33	2.06	0.84
208	lathing or mesh: any type: grid not exceeding 25 x 50 mm - <i>per side</i>		1.67	2.31	1.09
209	exceeding 300 mm girth: irregular		4.52	6.23	2.77
	ADD where to ceilings or beams (except in staircase areas)				
210	3.50 to 5.00 m above floor		0.22	0.38	0.17
211	5.00 to 6.50 m above floor		0.55	0.97	0.41
212	exceeding 6.50 m above floor		0.84	1.47	0.63
213	Services: exceeding 300 mm girth		4.78	6.68	2.93
		Metre			
	General surfaces or services				
214	isolated services not exceeding 300 mm girth		1.64	2.35	1.00
		Each			
215	isolated areas not exceeding 0.50 m ²		2.78	4.06	1.71

29: DECORATION

BITUMINOUS PAINTING: METAL - *continued*

Item		1	2	3
		Painting one coat bituminous paint on old bitumen painted work	Painting one coat primer and one coat bituminous paint on new or old untreated work	ADD for each additional coat of bituminous paint
29	Square Metre	£	£	£
	Structural work			
	exceeding 300 mm girth			
216	general surfaces	4.49	6.28	2.77
217	members of roof trusses, lattice girders, purlins or the like	5.47	7.65	3.34
	<i>Metre</i>			
	isolated surfaces not exceeding 300 mm girth			
218	general surfaces	1.59	2.27	0.97
219	members of roof trusses, lattice girders, purlins or the like	1.94	2.58	1.21
	<i>Each</i>			
	isolated areas not exceeding 0.50 m ²			
220	general surfaces	2.69	3.74	1.61
221	members of roof trusses, lattice girders, purlins or the like	3.29	4.63	2.00
222	Work carried out 5.00 to 8.50 m above floor: where applicable, price at the foregoing Rates multiplied by 1.10.			

BITUMINOUS PAINTING: METAL CISTERNS

Specification

Bituminous paint: black bitumen solution for cold application to BS 6949 Type 1.

New galvanised steel cisterns and covers: apply protection against corrosion before the cisterns are fixed and after all holes have been cut, as follows:

- clean off scale and dirt;
- degrease with white spirit to BS 245 Type A prior to assembly and immediately before coating and wash with detergent to remove all traces of zinc salts. Thoroughly dry;
- using clean brushes, apply two full coats of black bitumen solution to the interior surfaces. Apply the second coat after the first is dry and lay off at right angles to the first;

- similarly treat all internal bolt heads, rivet heads and flanges and the underside of covers;
- after fixing, touch up any damage to the coatings, whether accidental or caused by the jointing process.

Do not fill cisterns without approval and for at least 24 hours after the bitumen coatings are dry.

Notes

Draining and refilling:
Not included in Rates.

29: DECORATION

BITUMINOUS PAINTING: METAL CISTERNS - *continued*

Item		1	2	3	4
		Painting two coats bituminous paint on		Touching up and painting one coat bituminous paint on	
		new galvanised work	old bituminous coated work	new bituminous coated work	ADD for each additional coat
		£	£	£	£
29	<i>Square Metre</i>				
	Tanks or cisterns: interior surfaces				
223	exceeding 300 mm girth	8.97	7.58	5.18	4.07
	<i>Metre</i>				
224	isolated surfaces not exceeding 300 mm girth	3.37	2.84	1.87	1.47
	<i>Each</i>				
225	isolated areas not exceeding 0.50 m ²	5.55	4.72	3.21	2.55

BITUMINOUS PAINTING: METAL: EXTERNALLY

Specification

Bituminous paint: black bitumen solution for application to BS 6949 Type 1. Not suitable for use in contact with potable water.

		1	2	3
		Painting one coat bituminous paint on old painted work	Painting one coat primer and one coat bituminous paint on new or old untreated work	ADD for each additional coat of bituminous paint
		£	£	£
	<i>Square Metre</i>			
	Plain open railings, fences or gates			
226	exceeding 300 mm girth	5.22	7.38	3.17
	<i>Metre</i>			
227	isolated surfaces not exceeding 300 mm girth	1.86	2.67	1.14
	<i>Each</i>			
228	isolated areas not exceeding 0.50 m ²	3.07	4.36	1.89
	<i>Square Metre</i>			
229	Close railings, fences or gates	4.96	6.95	3.01

29: DECORATION

BITUMINOUS PAINTING: METAL: EXTERNALLY - *continued*

Item		1	2	3
		Painting one coat bituminous paint on old painted work	Painting one coat primer and one coat bituminous paint on new or old untreated work	ADD for each additional coat of bituminous paint
29	<i>Square Metre</i>	£	£	£
	Gutters: valley, parapet or eaves			
230	exceeding 300 mm girth	5.84	8.33	3.58
	<i>Metre</i>			
231	isolated surfaces not exceeding 300 mm girth	2.09	3.00	1.28
	<i>Each</i>			
232	isolated areas not exceeding 0.50 m ²	3.46	4.86	2.08

ALUMINIUM PAINTING: METAL

Specification

Aluminium paint: an approved proprietary type.

		1	2	3
		Painting one coat aluminium paint on old painted work	Painting one coat primer and one coat aluminium paint on new or old untreated work	ADD for each additional coat of aluminium paint
	<i>Square Metre</i>	£	£	£
	General surfaces			
233	exceeding 300 mm girth	5.50	7.35	3.40
	ADD where to			
234	perforated floor - <i>per side</i>	1.66	2.25	1.04
235	lathing or mesh: any type: grid not exceeding 25 x 50 mm - <i>per side</i>	2.15	2.74	1.40
236	exceeding 300 mm girth: irregular	5.76	7.77	3.57

29: DECORATION

ALUMINIUM PAINTING: METAL - *continued*

Item		1	2	3
		Painting one coat aluminium paint on old painted work	Painting one coat primer and one coat aluminium paint on new or old untreated work	ADD for each additional coat of aluminium paint
29	Square Metre	£	£	£
	General surfaces			
	ADD where to ceilings or beams (except in staircase areas)			
237	3.50 to 5.00 m above floor	0.20	0.37	0.17
238	5.00 to 6.50 m above floor	0.55	0.97	0.41
239	exceeding 6.50 m above floor	0.84	1.47	0.63
240	Services: exceeding 300 mm girth	6.03	8.06	3.71
	Metre			
	General surfaces or services			
241	isolated surfaces not exceeding 300 mm girth	2.07	2.82	1.27
	Each			
242	isolated areas not exceeding 0.50 m ²	3.29	4.31	2.00
	Square Metre			
	Structural work			
	exceeding 300 mm girth			
243	general surfaces	5.65	7.61	3.51
244	members of roof trusses, lattice girders, purlins or the like	6.83	9.05	4.19
	Metre			
	isolated surfaces not exceeding 300 mm girth			
245	general surfaces	1.99	2.74	1.23
246	members of roof trusses, lattice girders, purlins or the like	2.43	3.28	1.48
	Each			
	isolated areas not exceeding 0.50 m ²			
247	general surfaces	3.27	4.22	1.99
248	members of roof trusses, lattice girders, purlins or the like	3.97	5.22	2.44
249	Work carried out 5.00 to 8.50 m above floor: where applicable, price at the foregoing Rates multiplied by 1.10.			

29: DECORATION

ALUMINIUM PAINTING: METAL: EXTERNALLY

Item		1	2	3
		Painting one coat aluminium paint on old painted work	Painting one coat primer and one coat aluminium paint on new or old untreated work	ADD for each additional coat of aluminium paint
29	<i>Square Metre</i>	£	£	£
	Plain open railings, fences or gates			
250	exceeding 300 mm girth	6.54	8.80	4.06
	<i>Metre</i>			
251	isolated surfaces not exceeding 300 mm girth	2.36	3.12	1.40
	<i>Each</i>			
252	isolated areas not exceeding 0.50 m ²	3.93	5.27	2.43
	<i>Square Metre</i>			
253	Close railings, fences or gates	6.12	8.17	3.77
	Gutters: valley, parapet or eaves			
254	exceeding 300 mm girth	7.30	9.84	4.49
	<i>Metre</i>			
255	isolated surfaces not exceeding 300 mm girth	2.65	3.54	1.60
	<i>Each</i>			
256	isolated areas not exceeding 0.50 m ²	4.38	5.92	2.70

MICACEOUS IRON OXIDE PAINTING: METAL

Specification

Micaceous iron oxide: an approved proprietary type.

		1	2	3
		Painting one coat micaceous iron oxide on old painted work	Painting one coat primer and one coat micaceous iron oxide on new or old untreated work	ADD for each additional coat of micaceous iron oxide
	<i>Square Metre</i>	£	£	£
	General surfaces			
257	exceeding 300 mm girth	7.67	10.48	4.88
	ADD where to			
258	perforated floor - <i>per side</i>	2.33	3.25	1.52
259	lathing or mesh: any type: grid not exceeding 25 x 50 mm - <i>per side</i>	2.99	4.19	1.93
260	exceeding 300 mm girth: irregular	7.94	10.81	5.03

29: DECORATION

MICACEOUS IRON OXIDE PAINTING: METAL - *continued*

Item		1	2	3
		Painting one coat micaceous iron oxide on old painted work	Painting one coat primer and one coat micaceous iron oxide on new or old untreated work	ADD for each additional coat of micaceous iron oxide
29	Square Metre	£	£	£
	General surfaces - <i>continued</i>			
	ADD where to ceilings or beams (except in staircase areas)			
261	3.50 to 5.00 m above floor	0.20	0.38	0.17
262	5.00 to 6.50 m above floor	0.55	0.99	0.41
263	exceeding 6.50 m above floor	0.84	1.47	0.63
264	Services: exceeding 300 mm girth	8.49	11.59	5.41
	Metre			
	General surfaces or services			
265	isolated surfaces not exceeding 300 mm girth	2.81	3.82	1.78
	Each			
266	isolated areas not exceeding 0.50 m ²	4.62	6.34	2.92
	Square Metre			
	Structural work			
	exceeding 300 mm girth			
267	general surfaces	7.72	10.82	5.06
268	members of roof trusses, lattices girders, purlins or the like	9.51	12.83	5.98
	Metre			
	isolated surfaces not exceeding 300 mm girth			
269	general surfaces	2.85	3.92	1.81
270	members of roof trusses, lattice girders, purlins or the like	3.50	4.77	2.19
	Each			
	isolated areas not exceeding 0.50 m ²			
271	general surfaces	4.72	6.44	3.01
272	members of roof trusses, lattice girders, purlins or the like	5.69	7.65	3.55
273	Work carried out 5.00 to 8.50 m above floor: where applicable, price at the foregoing Rates multiplied by 1.10.			

29: DECORATION**MICACEOUS IRON OXIDE PAINTING: METAL: EXTERNALLY****Specification***Micaceous iron oxide:* an approved proprietary type.

Item		1	2	3
		Painting one coat micaceous iron oxide on old painted work	Painting one coat primer and one coat micaceous iron oxide on new or old untreated work	ADD for each additional coat of micaceous iron oxide
29	<i>Square Metre</i>	£	£	£
	Plain open railings, fences or gates			
274	exceeding 300 mm girth	9.19	12.51	5.84
	<i>Metre</i>			
275	isolated surfaces not exceeding 300 mm girth	3.31	4.54	2.10
	<i>Each</i>			
276	isolated areas not exceeding 0.50 m ²	5.49	7.46	3.48
	<i>Square Metre</i>			
277	Close railings, fences or gates	8.60	11.71	5.49
	Gutters: valley, parapet or eaves			
278	exceeding 300 mm girth	10.28	13.94	6.54
	<i>Metre</i>			
279	isolated surfaces not exceeding 300 mm girth	3.68	4.96	2.32
	<i>Each</i>			
280	isolated areas not exceeding 0.50 m ²	6.10	8.23	3.88

PRIMING: WOOD: INTERNALLY OR EXTERNALLY

	<i>Square Metre</i>	£
281	Painting one coat primer: back of joinery or the like: before fixing	2.24

FILLING: WOOD**Specification***Filler:* an approved leadless proprietary type.**Rates for the following include***Generally:*
For rubbing down.**Notes***Generally:*
Pay for only where specifically ordered.

	<i>Square Metre</i>	£
282	Filling pore and grain irregularities with filler	7.69

29: DECORATION

ALKYD GLOSS AND EGGSHELL PAINTING: WOOD

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3	4
		Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat
29	<i>Square Metre</i>	£	£	£	£
283	General surfaces: exceeding 300 mm girth	10.41	4.68	2.50	3.22
	ADD where to ceilings or beams (except in staircase areas)				
284	3.50 to 5.00 m above floor	0.55	0.22	0.17	0.17
285	5.00 to 6.50 m above floor	0.84	0.55	0.41	0.41
286	exceeding 6.50 m above floor	1.47	0.84	0.63	0.63
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes				
287	exceeding 1.00 m ²	12.96	5.93	3.09	3.96
288	0.50 to 1.00 m ²	14.31	6.52	3.40	4.36
289	0.10 to 0.50 m ²	19.48	8.89	4.63	5.92
290	not exceeding 0.10 m ²	26.08	11.93	6.19	7.94
	ADD where				
291	casement and/or beads are ordered to be painted in a colour differing from frames, sills, linings, mullions and transoms	5.44	2.79	2.65	2.79
292	behind guard bars or the like	9.25	3.20	3.01	3.22
	<i>Metre</i>				
293	Cutting into weather stripping	3.82	1.96	0.99	1.17
	General surfaces				
294	isolated surfaces not exceeding 300 mm girth	3.83	1.70	0.90	1.12
	<i>Each</i>				
295	isolated areas not exceeding 0.50 m ²	6.26	2.85	1.46	1.92

29: DECORATION

WATER BASED EGGSHELL PAINTING: WOOD

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3	4
		Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat	DEDUCT where no finishing coat
29	<i>Square Metre</i>	£	£	£	£
296	General surfaces: exceeding 300 mm girth	11.18	4.97	2.85	3.51
	ADD where to ceilings or beams (except in staircase areas)				
297	3.50 to 5.00 m above floor	0.55	0.22	0.17	0.17
298	5.00 to 6.50 m above floor	0.84	0.55	0.41	0.41
299	exceeding 6.50 m above floor	1.47	0.84	0.63	0.63
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes				
300	exceeding 1.00 m ²	13.60	6.16	3.39	4.19
301	0.50 to 1.00 m ²	15.05	6.80	3.75	4.63
302	0.10 to 0.50 m ²	20.49	9.27	5.09	6.30
303	not exceeding 0.10 m ²	27.40	12.41	6.80	8.42
	ADD where				
304	casement and/or beads are ordered to be painted in a colour differing from frames, sills, linings, mullions and transoms	5.44	2.79	2.65	2.79
305	behind guard bars or the like	9.25	3.20	3.01	3.22
	<i>Metre</i>				
306	Cutting into weather stripping	3.82	1.96	0.99	1.17
	General surfaces				
307	isolated surfaces not exceeding 300 mm girth	4.11	1.81	1.02	1.22
	<i>Each</i>				
308	isolated areas not exceeding 0.50 m ²	6.69	3.01	1.67	2.08

29: DECORATION

ALKYD GLOSS AND EGGSHELL PAINTING: WOOD: EXTERNALLY

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3
		Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat
29	Square Metre	£	£	£
	Plain open railings, fences or gates			
309	exceeding 300 mm girth	12.79	5.81	3.06
	Metre			
310	isolated surfaces not exceeding 300 mm girth	4.66	2.10	1.13
	Each			
311	isolated areas not exceeding 0.50 m ²	7.68	3.48	1.83
	Square Metre			
312	Close railings fences or gates	11.72	5.37	2.81

29: DECORATION

WATER BASED EGGSHELL PAINTING: WOOD: EXTERNALLY

Specification

General use paint: undercoat and finish: to BS 7664.

Item		1	2	3
		Painting one coat primer, one undercoat and one finishing coat on new work	Painting one finishing coat on old painted work	ADD for each additional undercoat
29	Square Metre	£	£	£
	Plain open railings, fences or gates			
313	exceeding 300 mm girth	13.64	6.12	3.45
	Metre			
314	isolated surfaces not exceeding 300 mm girth	4.93	2.21	1.25
	Each			
315	isolated areas not exceeding 0.50 m ²	8.12	3.65	2.04
	Square Metre			
316	Close railings fences or gates	12.57	5.68	3.20

PRESERVATIVE PAINTING: WOOD

Specification

Creosote for brush application: to BS 144.

		1	2	3
		Painting one coat creosote externally on new or old untreated work	old treated work	ADD for each additional coat of creosote
	Square Metre	£	£	£
317	General surfaces: exceeding 300 mm girth	3.16	2.89	2.63
318	Plain open railings, fences or gates: exceeding 300 mm girth	3.96	3.71	3.28
319	Close railings, fences or gates	3.63	3.44	3.08

29: DECORATION

PRESERVATIVE PAINTING: WOOD - *continued*

Item		1	2	3
		Painting one coat creosote externally on new or old untreated work	old treated work	ADD for each additional coat of creosote
29	<i>Metre</i>	£	£	£
	General surfaces or plain open railings, fences or gates			
320	isolated surfaces not exceeding 300 mm girth	1.48	1.39	1.22
	<i>Each</i>			
321	isolated areas not exceeding 0.50 m ²	2.33	2.20	1.92

OILING: WOOD

Specification

Raw, refined and boiled linseed oil for paints and varnishes: to BS EN ISO 150.

Mineral oil for teak: an approved proprietary type.

		1	2
		Twice oiling new work	Washing down and twice oiling old work
	<i>Square Metre</i>	£	£
322	General surfaces: exceeding 300 mm girth	5.27	4.57
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes		
323	exceeding 1.00 m ²	6.64	5.73
324	0.50 to 1.00 m ²	7.35	6.34
325	0.10 to 0.50 m ²	9.87	8.60
326	not exceeding 0.10 m ²	13.12	11.36
327	ADD where behind guard bars or the like	6.21	6.21
	<i>Metre</i>		
328	Cutting into weather stripping	1.96	1.96
	General surfaces		
329	isolated surfaces not exceeding 300 mm girth	1.71	1.53
	<i>Each</i>		
330	isolated areas not exceeding 0.50 m ²	2.96	2.63

29: DECORATION

STAINING AND VARNISHING: WOOD

Specification

Oil stain: an approved proprietary type.

Polyurethane varnish: one-pack interior quality polyurethane varnish, matt or gloss: an approved proprietary type.

Item		1	2	3	4
		Varnishing with one coat of polyurethane varnish on		ADD for each additional coat of polyurethane varnish	ADD for staining (any colour) before varnishing
		new or old untreated work	old varnished work		
		£	£	£	£
29	Square Metre				
331	General surfaces: exceeding 300 mm girth	4.11	4.66	3.40	3.38
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes				
332	exceeding 1.00 m²	4.98	5.66	4.08	4.17
333	0.50 to 1.00 m²	5.49	6.23	4.51	4.54
334	0.10 to 0.50 m²	7.46	8.51	6.14	6.21
335	not exceeding 0.10 m²	9.91	11.29	8.11	8.26
336	ADD where behind guard bars or the like	1.15	1.15	1.09	1.15
	Metre				
337	Cutting into weather stripping	1.96	1.96	1.17	1.17
	General surfaces				
338	isolated surfaces not exceeding 300 mm girth	1.45	1.67	1.18	1.27
	Each				
339	isolated areas not exceeding 0.50 m²	2.43	2.76	1.99	2.05

29: DECORATION

STAINING: WOOD: EXTERNALLY

Specification

Exterior wood stain: an approved proprietary type.

Item		1	2	3
		Staining with one coat of exterior wood stain on old stained work	Staining with two coats of exterior wood stain on new or old untreated work	ADD for each additional coat
29	<i>Square Metre</i>	£	£	£
340	General surfaces: exceeding 300 mm girth	3.29	5.44	2.15
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes			
341	exceeding 1.00 m ²	3.93	6.30	2.51
342	0.50 to 1.00 m ²	4.30	6.97	2.71
343	0.10 to 0.50 m ²	5.95	9.58	3.82
344	not exceeding 0.10 m ²	7.97	12.81	5.06
345	ADD where behind guard bars or the like	3.22	5.52	3.04
	<i>Metre</i>			
346	Cutting into weather stripping	1.96	2.94	1.17
	General surfaces			
347	isolated surfaces not exceeding 300 mm girth	1.20	1.91	0.72
	<i>Each</i>			
348	isolated areas not exceeding 0.50 m ²	1.99	3.31	1.35

29: DECORATION

SEALER VARNISHING: WOOD

Specification

Sealer varnish: oleo-resinous sealer of an approved proprietary type.

Item			1	2
			Varnishing with one coat sealer varnish on new or old untreated work	ADD for each additional coat
29		<i>Square Metre</i>	£	£
	General surfaces			
349	exceeding 300 mm girth		3.70	2.88
		<i>Metre</i>		
350	isolated surfaces not exceeding 300 mm girth		1.32	1.09
		<i>Each</i>		
351	isolated areas not exceeding 0.50 m ²		2.23	1.87

POLISHING: WOOD

Specification

Wax polish: bleached beeswax and genuine turpentine, or an approved proprietary type.

		1	2	3	4
		Sealing and polishing new work	Cleaning and reviving old work	Stripping and repolishing old work	ADD for staining or bleaching old work
	<i>Square Metre</i>	£	£	£	£
352	General surfaces: exceeding 300 mm girth	10.82	8.14	22.05	3.13
	Glazed windows, screens or doors: exceeding 300 mm girth: in panes				
353	exceeding 1.00 m ²	13.64	10.09	28.54	3.93
354	0.50 to 1.00 m ²	14.88	11.02	31.04	4.29
355	0.10 to 0.50 m ²	20.57	15.24	42.93	5.92
356	not exceeding 0.10 m ²	27.72	20.48	57.99	7.99
357	ADD where behind guard bars or the like	5.52	5.52	5.52	3.01

29: DECORATION

POLISHING: WOOD - *continued*

Item		1	2	3	4
		Sealing and polishing new work	Cleaning and reviving old work	Stripping and repolishing old work	ADD for staining or bleaching old work
		£	£	£	£
29	<i>Metre</i>				
358	Cutting into weather stripping	2.94	2.94	2.94	1.17
	General surfaces				
359	isolated surfaces not exceeding 300 mm girth	3.98	2.99	8.14	1.15
	<i>Each</i>				
360	isolated areas not exceeding 0.50 m ²	6.62	4.96	13.62	1.92

OILING AND POLISHING: WOOD

Specification

Oil for use before wax polishing: two parts refined or raw linseed oil to BS EN ISO 150, one part white spirit and one sixteenth part gold size, by volume.

	<i>Square Metre</i>	£
	Oiling: general surfaces	
361	newly sanded	15.65
362	old work including cleaning	26.86

29: DECORATION

CLEANING DOWN: OLD SURFACES

Specification

Detergents and paint cleaners: approved proprietary types.

Cleaning down:

- a. glazed brick or tile surfaces internally:
 1. scrub with solution of detergent;
 2. rinse with clean water;
- b. glazed brick or tile surfaces externally:
 1. scrub with solution of detergent or common soda (if approved);
 2. rinse with clean water.
- c. painted or varnished surfaces (except emulsion painted);
 1. dry brush;
 2. wash with detergent or paint cleaner and water;
 3. rinse with clean water;
 4. leather dry.
- d. emulsion painted surfaces:
 1. dry brush;
 2. wet down;
 3. wash with paint cleaner and warm water;
 4. rinse with clean water;
 5. leather dry.

Do not cause damage or marks to the surfaces by using cleaning solutions that are too strong or by allowing them to remain on the surfaces.

Start wetting and washing from the bottom and work upwards in a continuous operation to produce uniformly clean surfaces free from streaks, spots or runs.

Notes

Cleaning down:

The Rates for cleaning down are for carrying out work when incidental to other painting work. Do not use for cleaning down surfaces prior to redecoration nor for Industrial Buildings which need to be wholly cleaned or washed down to conform to the Factories Acts.

Rates for the following include

Generally:

For any base unless otherwise stated.

Glazed window, screen or door:

For panes of any size

For cleaning down all components and edges.

For leaving glass clean.

Item
29

Square Metre

	1	2
	Internally	Externally
	£	£
Cleaning down		
general surfaces		
363 glazed brick or tile	1.25	1.52
364 painted or varnished	2.51	3.06
365 emulsion painted	3.90	4.32
366 glazed windows, screens or doors: painted or varnished	3.06	3.20

29: DECORATION

POWER WASHING AND WATER JET CLEANING: OLD SURFACES

Specification	Rates for the following include
<i>Power washing and water jet cleaning:</i> wash or jet clean to the PM's satisfaction.	<i>Generally:</i> For power washing or water jet cleaning.
<i>Generally:</i> Pay for only where specifically ordered.	For any base.

Item			
		1	2
		Internally	Externally
		£	£
29	<i>Square Metre</i>		
367	General surfaces	0.93	1.01
	ADD where		
368	irregular	1.06	1.13
369	to perforated floor	1.06	1.13
	Structural work		
370	general surfaces	0.93	1.01
371	members of roof trusses, lattice girders, purlins or the like	1.06	1.13

WASHING OR HOSING DOWN: EXPLOSIVES BUILDINGS

Specification	Rates for the following include
<i>Explosives buildings:</i> wash or hose down to the PM's satisfaction.	<i>Generally:</i> For any base.
Dry the work adequately before decorating.	

Notes

Generally:
Pay for only where specifically ordered.

	<i>Square Metre</i>	£
372	Washing or hosing down: general surfaces	0.55

DECORATIVE PAPERS AND FABRICS

GENERALLY

Specification

Lining paper: of weight to suit finishing paper and the surface being covered.

Mould resistant adhesive for wallpapers: to BS 3046 and containing fungicide, type appropriate to type of paper.

Size: type recommended by the adhesive manufacturer.

Gypsum wall board primer/sealer: as specified in this work section (pages 369 - 372).

Stoppers and fillers for plasterwork: plaster or water mixed powder filler.

Fungicidal solution: an approved proprietary type.

Plaster surfaces:

- a. surface defects: fill any irregularities, cracks and blow holes, and when dry, glass paper to a level surface, removing all nibs, efflorescence and other loose material and dust;
- b. size: apply one coat to surfaces and allow to dry. Apply further coats as necessary to reduce porosity and allow to dry.

Plasterboard surfaces:

- a. surface defects: stop all fixing holes, joints and irregularities, and when dry, glass paper to a level surface, removing all nibs, loose material and dust;
- b. priming/sealing: as specified in this work section (pages 370 - 372) and in accordance with the manufacturer's instructions;
- c. size: apply one coat to surfaces which are not to be primed and to other surfaces when recommended by adhesive manufacturer.

Old decorated surfaces:

- a. strip paper and wash down with detergent and warm water solution to remove old paste and size;
- b. prepare painted surfaces as specified for repainting in this work section (pages 369 - 372).

Mould infected surfaces: apply fungicidal solution as recommended by manufacturer.

Workmanship: comply with BS 8000-12 unless otherwise stated.

Hanging generally:

- a. uneven surfaces: where the specified lining and finishing paper will allow blemishes in the surface to show, obtain instructions before starting hanging;
- b. surfaces affected by mould: use mould resistant adhesives for hanging linings, papers and fabrics on surfaces previously affected by mould.

Hanging linings:

- a. joints: butt joint or leave slightly open, do not overlap;
- b. direction: hang linings transversely to direction of final paper.

Hanging papers:

- a. shade numbers: in any area use only rolls with the same shade number. Check piece for colour match before hanging;
- b. pattern: ensure correct alignment and accurate matching of all patterned papers;
- c. joints: butt vertical joints accurately. Do not cross joint papers;
- d. edges: trim neatly to a true line at all junctions with other finishes;
- e. finishing: finish so that papers and fabrics are free of air bubbles, wrinkles, gaps, tears, adhesive marks and stains and are secure and smooth.

Note*Fungicidal treatment:*

Pay for under Items 29.011 to 29.014 where specifically ordered.

29: DECORATION

GENERALLY - *continued*

Method of measurement

For coating surface to be papered with size.

Generally:

Measure the area of lengths covered and make allowance for the extra lengths of edges, mouldings, panels, sinkings, corrugations, flutings, carvings, enrichments or the like. Make no deduction for voids not exceeding 1.00 m².

For trimming and hanging paper with butt joints and for matching patterns in adjacent pieces.

For hanging decorative paper, sheet plastic and fabric covering vertically.

For all raking or curved cutting.

Rates for the following include

For cutting and fitting around obstructions, intrusions or projections.

Hanging only:

For preparatory materials and adhesive.

Border strip:

For mitres and intersections.

For stopping surface defects.

For hanging on any type of base.

STRIPPING

Item		
29	Square Metre	£
373	Stripping plastic or fabric surfaced decorative wall or ceiling covering excluding any firmly adhered lining	5.87
374	Stripping wall or ceiling paper: any number of layers	7.96
375	ADD where paper is varnished, glazed or painted	2.93

29: DECORATION

HANGING ONLY

Definition of terms

Heavy duty wallcoverings: to BS EN 259-1 and -2.

Finished wallpapers, wall vinyls and plastics wallcoverings: to BS EN 233.

Textile wallcoverings: to BS EN 266.

Wallcoverings for subsequent decoration: to BS EN 234.

Item	Square Metre	1	2	3	4	5	6	7	8
		Lining paper		Decorative paper		Wall vinyl and plastics wallcovering		Textile wallcovering	
		New surface	Old surface	New surface	Old surface	New surface	Old surface	New surface	Old surface
		£	£	£	£	£	£	£	£
376	Walls or columns: exceeding 0.50 m ²	7.96	9.80	11.65	13.49	15.33	16.33	18.85	20.77
377	Ceilings or beams: exceeding 0.50 m ²	10.13	11.98	13.98	15.84	17.68	19.52	21.36	23.45
	ADD where								
378	in staircase area	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
379	pieces 600 to 1000 mm wide	0.67	0.67	1.00	1.00	1.51	1.51	1.92	1.92
380	pieces exceeding 1000 mm wide	1.00	1.00	1.68	1.68	2.17	2.17	2.76	2.76
381	ADD for primer/sealer instead of size	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
	ADD where to ceilings or beams (except in staircase areas)								
382	3.50 to 5.00 m above floor	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
383	5.00 to 6.50 m above floor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Metre								
384	Border strip: cutting to profile if necessary	-	-	2.17	2.17	2.17	2.17	-	-
	Each								
385	Walls or columns: not exceeding 0.50 m ²	4.39	5.73	6.90	8.25	9.42	10.26	11.26	12.77
386	Ceilings or beams: not exceeding 0.50 m ²	6.07	7.25	8.58	9.75	11.09	12.43	13.27	14.44

30: Suspended Ceilings

DEMOUNTABLE SUSPENDED CEILINGS

GENERALLY

Specification

Suspended ceiling: to BS EN 13964 and installed by a firm approved by the suspended ceiling manufacturer.

Suspension system: self supporting lay-in grid; direct from hangers.

Workmanship: to BS EN 13964.

Definition of terms

Integral fittings: those designed and incorporated into the ceiling structure.

Isolated strips: those which are narrower than the module size.

Edge trim: those not forming part of the suspension grid.

Notes

Battens:
Pay for at the Rates in Section 16.

Method of measurement

Generally:
Measure the exposed face. Make no deduction for voids not exceeding 0.50 m².

Measure the depth of suspension from the main structural soffit to the lining. Measure the average depth where the soffit is sloping.

Do not measure isolated strip between the boundary of the lining and the first line of integral fittings.

Rates for the following include

Generally:
For internal work.

30: SUSPENDED CEILINGS

SUSPENSION SYSTEM

Specification

Grid members: proprietary mild steel system, galvanised to BS EN ISO 1461 with white pre-finished galvanised steel capping to exposed members.

Hangers: 2 mm annealed mild steel wire.

Rates for the following include

Generally:

For fixing to any background.

For adjusting layout of hangers around services.

Item 30	Square Metre	600 mm	1200 mm	600 mm
		£	£	£
	Ceiling: depth of suspension			
001	not exceeding 150 mm	18.10	15.80	19.87
002	150 to 500 mm	17.18	14.49	18.95
003	ADD for each additional 500 mm of depth	0.83	0.60	0.83
	Beam: depth of suspension			
004	not exceeding 150 mm	22.36	20.18	24.13
005	150 to 500 mm.	20.94	18.25	22.71
006	ADD for each additional 500 mm of depth	0.83	0.60	0.83
	Bulkhead: depth of suspension			
007	not exceeding 150 mm	21.59	19.00	23.36
008	150 to 500 mm	20.41	17.33	22.18
009	ADD for each additional 500 mm of depth	0.83	0.60	0.83
	ADD where			
010	sloping	4.88	3.89	4.88
011	in staircase area	4.59	4.59	4.59
012	in plant room	1.46	1.46	1.46
	ADD to ceiling, beam or bulkhead (except in staircase area) where ceiling level			
013	3.50 to 5.00 m above floor	1.97	1.97	1.97
014	5.00 to 6.50 m above floor	3.42	3.42	3.42
	Metre			
	Isolated strip			
015	not exceeding 600 mm wide	17.80	15.09	18.92
016	ADD for each additional 300 mm of width	7.94	6.57	8.49
017	ADD where sloping	1.46	1.16	1.46
	Upstand: height			
018	not exceeding 600 mm wide	22.24	19.55	23.36
019	ADD for each additional 300 mm of height	10.15	8.90	10.71
020	Bridging: additional hangers: not exceeding 3 m span	3.20	3.20	3.20

30: SUSPENDED CEILINGS

LAYING ONLY TILES

Rates for the following include

For fixing to old or new work.

Generally:

For tiles of any thickness and weight.

For fixing with spring steel holding down clip per tile side.

Item 30		Square Metre	1	2	3
			Lay only tiles: Grid type		
			Exposed T		Concealed
			Module size		
			600 x 600 mm	600 x 1200 mm	600 x 600 mm
			£	£	£
021	Ceiling		2.51	1.68	4.19
022	Beam		3.68	2.68	5.19
023	Bulkhead		3.16	2.10	4.69
	ADD where				
024	patterned: any layout		3.35	2.09	5.03
025	sloping		1.17	0.67	1.68
026	in staircase area		4.38	4.38	4.38
027	in plant room		1.46	1.46	1.46
	ADD where to ceiling, beam or bulkhead (except in staircase area) where ceiling level				
028	3.50 to 5.00 m above floor		1.97	1.97	1.97
029	5.00 to 6.50 m above floor		3.42	3.42	3.42
	ADD where in repairs				
030	not exceeding 1 m ²		3.89	2.93	5.84
031	1 to 5 m ²		2.93	1.97	4.38
		Metre			
	Isolated strip				
032	not exceeding 600 mm wide		5.84	3.91	8.77
033	ADD for each additional 300 mm of width		1.02	0.53	1.46
034	ADD where sloping		1.46	1.02	2.19
	Upstand: height				
035	not exceeding 600 mm wide		5.84	3.91	8.77
036	ADD for each additional 300 mm of height		1.02	0.53	1.46
					£
037	Raking cutting				2.79
038	Curved cutting				7.53
039	Cutting rebate in tegular tile				5.44
040	Jointing to existing: tiles and grid				4.19
		Each			
041	Hole: for pipe or the like				3.35
042	Notching - per 25 mm of girth				0.41

30: SUSPENDED CEILINGS

CAVITY FIRE BARRIERS

Specification

Cavity fire barrier:

- 50 mm metal mesh faced mineral wool mat to BS 3958-3;
- butt joint and stitch together with 1.2 mm soft iron wire at 100 mm centres.

For proprietary fixing angles and clamps.

For notching over and wiring to suspension system at bottom.

Collar to service through fire barrier:
For cutting around pipe or trunking.

Rates for the following include

Cavity fire barrier:

For 150 mm laps at top and bottom.

For covering pipe or trunking 150 mm beyond barrier.

For tightly wiring to pipe or trunking.

Item
30

Metre

1	2	3	4
One 50 mm layer		Two 50 mm layers	
Not exceeding 300 mm high	ADD for <i>each additional 300 mm of height</i>	Not exceeding 300 mm high	ADD for <i>each additional 300 mm of height</i>
£	£	£	£

Cavity fire barrier: fixing top and bottom with proprietary angle

043	without foil face	18.75	3.80	30.26	7.42
044	foil face one side	22.47	5.66	37.71	11.14
045	foil face both sides	22.54	5.69	37.85	11.21

Each

£

Collar to service through fire barrier

046	pipe - <i>per 25 mm of girth</i>				1.58
047	trunking - <i>per 100 mm of girth</i>				1.86

TRIMS

Specification

Trims: white pre-finished mild steel angle galvanised to BS EN ISO 1461.

Rates for the following include

Generally:
For fixing to any background.

For mitred, regular and irregular angles and ends.

Metre

£

Edge and angle trim

048	19 x 19 mm				3.53
049	19 x 24 mm				3.67
050	19 x 32 mm				3.81

31: Insulation, Fire Stopping and Fire Protection

GENERALLY

Specification

Fire performance of insulants: where applicable ensure that insulants have been tested in accordance with BS 476-4, 6 or 7.

Definition of terms

Horizontal: includes upper surface of any sloping structure not exceeding 45° from horizontal.

Vertical: includes upper surface of any sloping structure exceeding 45° from horizontal.

Soffit: includes underside of any horizontal or sloping structure.

Method of measurement

Generally:
Measure the area covered. Make no deduction for voids not exceeding 1.00 m².

Rates for the following include

Generally:
For cutting unless otherwise stated.

Across members or between members:
For laying or fixing across or between members at centres varying between 400 to 600 mm.

BUILDING PAPERS

Specification

Polythene sheet: 0.3 mm thick.

Waterproof building paper: to BS 1521, Class 1.

Breather type building paper: from an approved manufacturer.

Fixing polythene and paper:

- a. lap sides and ends of sheets 150 mm and seal with adhesive tapes;
- b. staple sheets to framing at 150 mm centres;
- c. seal edges with adhesive tape.

Item		1	2
		Polythene sheet	Building paper
31	<i>Square Metre</i>	£	£
	Plain area or across members		
001	horizontal	3.34	4.14
002	vertical	3.78	4.59
	<i>Metre</i>		
003	Raking cutting	0.41	0.47
004	Curved cutting	0.55	0.66

31: INSULATION, FIRE STOPPING AND FIRE PROTECTION

MINERAL WOOL MAT OR QUILT INSULATION: GENERAL

Specification

Mat or quilt insulant: mineral wool to BS EN 13162, Factory made mineral wool (MW) products from an approved manufacturer.

Fire classification: A1 as defined in BS EN 13501-1.

Joints: butt.

Laying between members: lay insulant between members supported on ceiling lining. Tuck tightly to members. Ensure any eaves ventilation openings are not obstructed.

Laying across members: lay insulant over members with overlapping joints. Tuck tightly to wall plates at eaves but ensure any eaves ventilation openings are not obstructed.

Notes

Battens:
Measure separately.

Item 31	Square Metre	1	2	3	4	5	6	7	8	9	10
		Supplying and fixing					Fixing only				
		Thickness									
		60 mm	80 mm	100 mm	150 mm	200 mm	60 mm	80 mm	100 mm	150 mm	200 mm
		£	£	£	£	£	£	£		£	£
	Plain area										
005	horizontal	4.57	5.69	6.67	9.56	12.57	1.52	1.71	1.92	2.30	2.76
	vertical										
006	fixing in conjunction with battening	4.98	6.16	7.18	10.19	13.32	1.93	2.19	2.43	2.93	3.51
007	nailing with rust proofed clout nails	6.23	7.60	8.81	11.90	15.04	3.19	3.62	4.06	4.65	5.23
	Across members										
008	horizontal	5.46	6.47	7.31	10.01	12.74	2.33	2.39	2.45	2.56	2.69
	vertical										
009	fixing in conjunction with battening	5.23	6.75	8.11	11.67	15.17	2.19	2.77	3.36	4.23	5.12
010	nailing with rust proofed clout nails	6.52	7.89	9.10	12.19	15.33	3.47	3.91	4.35	4.93	5.52
	Between members (measure net)										
011	horizontal	6.79	8.35	9.74	13.28	16.86	3.66	4.27	4.88	5.84	6.81
	vertical										
012	fixing in conjunction with battening	5.46	6.85	8.07	11.24	14.43	2.33	2.77	3.21	3.80	4.38
013	nailing with rust proofed clout nails	6.75	8.14	9.36	12.52	15.72	3.62	4.06	4.50	5.08	5.67
014	ADD for waterproof membrane facing - <i>per face</i>	0.38	0.38	0.38	0.38	0.38	-	-	-	-	-
	Metre										
015	Raking cutting	1.59	1.94	2.27	3.08	3.90	0.84	0.97	1.10	1.31	1.51
016	Curved cutting	2.37	2.92	3.39	4.61	5.85	1.25	1.46	1.66	1.96	2.27

31: INSULATION, FIRE STOPPING AND FIRE PROTECTION

MINERAL WOOL MAT OR QUILT INSULATION: LOFT

Specification

Joints: butt.

Mat or quilt insulant: mineral wool to BS EN 13162, Factory made mineral wool (MW) products from an approved manufacturer.

Laying between members: lay insulant between members supported on ceiling lining. Tuck tightly to members. Ensure any eaves ventilation openings are not obstructed.

Fire classification: A1 as defined in BS EN 13501-1.

Item
31

Square Metre

1	2	3	4	5	6	7	8
Supplying and fixing				Fixing only			
Thickness							
100 mm	150 mm	170 mm	200 mm	100 mm	150 mm	170 mm	200 mm
£	£	£	£	£	£	£	£

Plain area

017	horizontal	4.13	5.58	6.26	7.25	1.92	2.30	2.53	2.76

Across members

018	horizontal	4.70	5.92	6.45	7.28	2.45	2.56	2.63	2.69

Between members
(measure net)

019	horizontal	7.13	9.20	10.12	11.40	4.88	5.84	6.30	6.81

Metre

020	Raking cutting	1.64	2.12	2.31	2.60	1.10	1.31	1.40	1.51

021	Curved cutting	2.46	3.15	3.47	3.91	1.66	1.96	2.10	2.27

MINERAL WOOL SLAB INSULATION

Specification

Fire classification: A1 as defined in BS EN 13501-1.

Slab insulant: mineral wool to BS EN 13162, Factory made mineral wool (MW) products from an approved manufacturer.

Fixing: fix insulant with adhesive in accordance with the slab manufacturer's instructions.

31: INSULATION, FIRE STOPPING AND FIRE PROTECTION

MINERAL WOOL SLAB INSULATION - *continued*

Item		1	2	3	4	5	6	7
		Supplying and fixing						
		Thickness						
		25 mm	30 mm	40 mm	50 mm	60 mm	75 mm	100 mm
31	<i>Square Metre</i>	£	£	£	£	£	£	
	Plain area or across members							
	not exceeding 45 kg/m ³							
022	horizontal	4.44	4.90	5.76	6.59	7.57	8.76	9.29
023	vertical	5.07	5.52	6.44	7.29	8.27	9.46	9.99
024	to soffit	5.93	6.39	7.31	8.17	9.14	10.34	10.86
	45 to 60 kg/m ³							
025	horizontal	4.92	5.44	6.46	7.41	8.59	9.98	12.62
026	vertical	5.55	6.06	7.14	8.11	9.29	10.68	13.32
027	to soffit	6.42	6.93	8.02	8.98	10.17	11.56	14.18
	60 to 100 kg/m ³							
028	horizontal	5.84	6.47	7.91	9.18	10.74	12.60	16.05
029	vertical	6.47	7.10	8.59	9.88	11.44	13.31	16.76
030	to soffit	7.34	7.97	9.46	10.75	12.32	14.18	17.62
031	ADD where between members (measure net)	1.20	1.32	1.60	1.85	2.15	2.54	3.21
	<i>Metre</i>							
032	Raking cutting	0.89	1.04	1.37	1.67	2.05	2.48	3.30
033	Curved cutting	1.43	1.67	2.21	2.69	3.29	3.99	5.29
		1	2	3	4	5	6	7
		Fixing only						
		Thickness						
		25 mm	30 mm	40 mm	50 mm	60 mm	75 mm	100 mm
	<i>Square Metre</i>	£	£	£	£	£	£	£
	Plain area or across members							
034	horizontal	2.97	3.12	3.40	3.70	3.99	4.43	5.16
035	vertical	3.60	3.74	4.08	4.40	4.69	5.13	5.87
036	to soffit	4.46	4.61	4.96	5.28	5.57	6.00	6.73
037	ADD where between members (measure net)	0.92	1.00	1.17	1.33	1.51	1.76	2.17
	<i>Metre</i>							
038	Raking cutting	0.20	0.23	0.30	0.37	0.44	0.54	0.70
039	Curved cutting	0.40	0.47	0.60	0.74	0.87	1.07	1.40

31: INSULATION, FIRE STOPPING AND FIRE PROTECTION

EXPANDED POLYSTYRENE BOARD INSULATION

Specification

Fixing: fix insulant with adhesive in accordance with the board manufacturer's instructions.

Board insulant: expanded polystyrene to BS 13163, Factory made products of expanded polystyrene (EPS), standard duty Euroclass F.

Item		1	2	3	4	5	6	7	8	9
		Supplying and fixing								
		Thickness								
		20 mm	25 mm	30 mm	35 mm	40 mm	50 mm	60 mm	75 mm	100 mm
31	<i>Square Metre</i>	£	£	£	£	£	£	£	£	£
	Plain area or across members									
040	horizontal	4.16	4.58	4.99	5.28	5.55	6.91	7.79	9.26	11.60
041	vertical	4.78	5.21	5.61	5.95	6.23	7.61	8.49	9.96	12.31
042	to soffit	5.67	6.07	6.49	6.83	7.11	8.49	9.36	10.83	13.17
043	ADD where between members (measure net)	0.97	1.07	1.18	1.29	1.38	1.64	1.86	2.22	2.78
	<i>Metre</i>									
044	Raking cutting	0.49	0.58	0.68	0.75	0.82	1.14	1.35	1.69	2.23
045	Curved cutting	0.82	0.98	1.14	1.27	1.37	1.89	2.23	2.79	3.70
		1	2	3	4	5	6	7	8	9
		Fixing only								
		Thickness								
		20 mm	25 mm	30 mm	35 mm	40 mm	50 mm	60 mm	75 mm	100 mm
	<i>Square Metre</i>	£	£	£	£	£	£	£	£	£
	Plain area or across members									
046	horizontal	2.82	2.97	3.12	3.27	3.40	3.70	3.99	4.43	5.16
047	vertical	3.44	3.60	3.74	3.93	4.08	4.40	4.69	5.13	5.87
048	to soffit	4.32	4.46	4.61	4.82	4.96	5.28	5.57	6.00	6.73
049	ADD where between members (measure net)	0.84	0.92	1.00	1.09	1.17	1.33	1.51	1.76	2.17
	<i>Metre</i>									
050	Raking cutting	0.17	0.20	0.23	0.26	0.30	0.37	0.44	0.54	0.70
051	Curved cutting	0.33	0.40	0.47	0.54	0.60	0.74	0.87	1.07	1.40

31: INSULATION, FIRE STOPPING AND FIRE PROTECTION

RIGID POLYURETHANE FOAM SLAB INSULATION

Specification

Fixing: fix insulant with adhesive in accordance with the board manufacturer's instructions.

Board insulant: rigid polyurethane foam to BS EN 13165, Factory made products of rigid polyurethane foam (PUR).

Item		1	2	3	4	5	6	7	8
		Supplying and fixing				Fixing only			
		Thickness							
		Not exceeding 30 to 30 mm	50 to 50 mm	50 to 75 mm	75 to 100 mm	Not exceeding 30 to 30 mm	50 to 50 mm	50 to 75 mm	75 to 100 mm
		£	£	£		£	£	£	
31	Square Metre								
052	Plain area or across members: horizontal	7.26	9.51	13.17	16.55	2.30	2.76	3.22	3.68
	Metre								
053	Raking cutting	3.28	3.99	5.16	6.42	2.09	2.38	2.79	3.35
054	Curved cutting	4.90	5.98	7.74	9.20	3.13	3.57	4.19	4.60

LOOSE FILL INSULATION

Specification

Loose fill insulant: mineral wool or vermiculite from an approved manufacturer.

		1	2	3	4
		Mineral wool		Vermiculite	
		Supplying and fixing	Fixing only	Supplying and fixing	Fixing only
		£	£	£	£
	Square Metre - per 25 mm of thickness				
055	Between members: horizontal (measure net)	2.93	1.68	3.36	0.84

INTUMESCENT MASTIC

Specification

Apply by gun:

Ensure proper adhesion with components to be jointed.

Sealant: one-part intumescent mastic tested to BS 476-20 for up to 4 hours fire resistance with a minimum depth of 10 mm.

Rates for the following include

For internal or external use.

	Metre	£
	Seal joint: around fire doors, window frames, ducts and pipes and the like: not exceeding 25 mm wide	
056	flat	3.77
057	at internal angle	3.28

32: Furniture, Fittings and Equipment

GENERAL FIXTURES AND EQUIPMENT

FITTINGS: GENERALLY

Specification

Timber: to BS EN 942.

Timber quality:

- a. to receive paint finish: class 2;
- b. to receive clear finish: class CSH.

Preservative treatment: re-treat all timber surfaces, previously treated, exposed by site works subsequent to preservative treatment with two liberal applications of the preservative used in the initial treatment of the timber.

Workmanship: to BS 8000-5.

Trims:

Pay for at the Rates in Section 22.

Preservative treatment:

Pay for at the Rates in Section 16 unless otherwise stated.

Method of measurement

Timber sizes:

Measure the finished size.

Sectional areas:

Multiply the width by the depth without deduction.

Notes

Screwing, pelleting and plugging:

Pay for at the Rates in Section 22.

Rates for the following include

Generally:

For nailing and gluing.

For pencil rounded arrises.

Item
32

Clear finished timber

- 001 Where timber is ordered to be selected and kept clean for clear finishing, price at the Rates for timber in this section multiplied by 1.05.

Hardwoods

- 002 Where specific hardwoods are ordered price at the Rates for hardwood in this Section multiplied by the factors given in Section 22 (Items 22.058 to 22.063)

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS: WROUGHT TIMBER

Item		1	2	3	4	5	6
		Softwood			Hardwood		
		Thickness					
		19 mm	25 mm	32 mm	19 mm	25 mm	32 mm
32	<i>Square Metre</i>	£	£	£	£	£	£
	Shelf, top, bottom, front, side, back or division						
	tongued and grooved and V-jointed						
	one side						
003	exceeding 300 mm wide	65.67	74.72	81.31	111.19	137.53	162.62
004	not exceeding 300 mm wide	71.02	80.07	86.66	119.57	145.90	170.99
	Shelf, top, bottom, front, side, back or division						
	crosstongued joints including grooves:						
	hardwood tongues						
005	exceeding 300 mm wide	74.29	82.51	89.10	121.50	147.83	172.93
006	not exceeding 300 mm wide	79.98	88.37	95.46	129.03	155.71	181.14
	<i>Metre</i>						
007	Raking cutting	4.27	5.11	5.52	7.20	7.87	8.42
008	Curved cutting	6.36	7.61	8.37	11.22	12.14	13.06
009	Shiplap joint	6.20	6.20	6.20	8.96	8.96	8.96
	Housing including groove						
010	to softwood	5.03	5.03	5.03	8.37	8.37	8.37
011	to hardwood	6.69	6.69	6.69	10.05	10.05	10.05
	<i>Each - per 25 mm of girth</i>						
012	Notching	1.43	1.43	1.43	2.01	2.01	2.01
013	Rounded corner	1.43	1.43	1.43	2.01	2.01	2.01

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS: WROUGHT TIMBER - *continued*

Item		1	2	3	4	5	6
		Softwood			Hardwood		
		Thickness					
		19 mm	25 mm	32 mm	19 mm	25 mm	32 mm
32	Square Metre	£	£	£	£	£	
	Panelled front or side: exceeding 300 mm wide						
014	square both sides	74.64	79.90	85.49	115.08	125.28	136.34
015	square one side: moulded other side	83.51	90.01	96.98	131.84	144.97	159.37
	Each						
	Extra for						
016	door: not exceeding 600 x 1800 mm: in two panels: rebated or with applied fillets to form stops	33.49	33.49	33.49	63.63	63.63	63.63
017	pair of doors: not exceeding 1000 x 1800 mm: each in two panels: rebated and rounded or beaded meeting stiles	66.98	66.98	66.98	127.26	-	-
	Metre						
018	Tongued and mitred angle	9.37	9.37	9.37	18.25	18.25	18.25
	Square Metre						
019	Slatted shelf: slats 50 mm wide at 75 mm centres	40.12	44.68	46.86	64.41	74.87	85.32
	Metre						
020	Raking cutting	5.03	5.87	6.69	7.53	8.37	9.21

		1	2	3	4
		Softwood	Hardwood		
		Sectional area			
		not exceeding 500 mm ²	ADD for each additional 100 mm ²	not exceeding 500 mm ²	ADD for each additional 100 mm ²
		£	£	£	£
021	Leg, rail, bearer or studding	2.93	0.59	4.70	0.85
022	ADD where framed	0.84	0.17	1.25	0.25

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS: WROUGHT TIMBER - *continued*

		1	2	3	4	5	6
		Softwood			Hardwood		
		Diameter					
		19 mm	25 mm	32 mm	19 mm	25 mm	32 mm
Item 32	<i>Metre</i>	£	£	£	£	£	£
023	Rail: round	2.90	4.86	7.20	3.81	6.21	8.48
	<i>Each</i>						
	Housed end including mortice						
024	to softwood	0.76	0.84	0.92	1.17	1.25	1.33
025	to hardwood	1.17	1.25	1.33	1.59	1.68	1.76
						1	2
						Softwood	Hardwood
						£	£
026	Each throat, groove, flute, rebate, splay rebate, rounding, chamfer, splay, moulding or beading					0.84	1.51
027	ADD where crossgrain					0.84	1.51
028	ADD for each additional 25 mm of girth of moulding in excess of 100 mm					0.17	0.30
	<i>Each</i>						
029	Stop on labour: plain, splayed or shaped					0.51	0.76

FITTINGS: HARDBOARD, CHIPBOARD AND BLOCKBOARD

Specification

Hardboard: to BS EN 622-2, standard Type HB manufactured by a BSI Kitemark Licensee.

Particleboard: to BS EN 312, Type P1 and manufactured by a BSI Kitemark Licensee.

Blockboard:

- a. bond type: MR;
- b. appearance grade: II both sides.

Decorative laminated plastics sheet veneered boards: to BS 4965.

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS: HARDBOARD, CHIPBOARD AND BLOCKBOARD - <i>continued</i>								
	1	2	3	4	5	6	7	8
	Hardboard	Particleboard		Blockboard			ADD for plastics veneer	
	Thickness							
	3.2 mm	6.4 mm	12 mm	19 mm	12 mm	19 mm	25 mm	- <i>per side</i>
<i>Square Metre</i>	£	£	£	£	£	£	£	£
Shelf, top, bottom, front, side, back or division								
exceeding 300 mm wide	48.68	52.49	59.26	63.26	62.01	72.88	95.98	5.22
not exceeding 300 mm wide	67.44	71.24	81.03	86.37	80.51	94.65	124.78	5.22
<i>Each</i>								
Extra for								
door: not exceeding 600 x 1800 mm	19.25	19.25	21.77	21.77	25.12	25.12	25.12	-
pair of doors: not exceeding 1000 x 1800 mm	35.17	35.17	39.35	39.35	45.21	-	-	-
<i>Metre</i>								
Raking cutting	2.35	2.68	3.52	4.11	4.69	5.69	7.04	0.84
Curved cutting	3.35	3.85	5.28	6.03	6.87	8.20	10.88	1.25
Groove	-	-	1.18	1.18	1.18	1.18	1.18	-
Rounding	1.39	1.39	2.09	2.09	2.51	2.51	2.51	-
Scribing	6.28	6.69	10.05	11.47	11.72	14.40	18.25	-
Housing including groove								
to softwood	3.35	3.35	4.19	5.52	4.19	5.52	6.69	-
to hardwood	3.68	3.68	4.60	6.08	4.60	6.08	7.37	-
<i>Each - per 25 mm of girth</i>								
Notching	0.33	0.33	0.37	0.37	0.40	0.40	0.40	-
Rounded corner	0.51	0.51	0.84	0.84	1.00	1.00	1.00	-

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS, LAMINBOARD AND PLYWOOD

Specification

Plywood: to BS EN 636.

a. bonding quality: to BS EN 314-2, Class 1.

b. appearance class: III both sides; to BS EN 635.

Item		1	2	3	4	5	6	7	8	9	
		Laminboard			Plywood						
		Thickness									
		12 mm	18 mm	25 mm	4 mm	6 mm	9 mm	12 mm	15 mm	18 mm	
32	Square Metre	£	£	£	£	£	£	£	£	£	
	Shelf, top, bottom, front, side, back or division										
043	exceeding 300 mm wide . . .	69.54	84.12	97.60	59.73	64.58	62.15	67.11	77.35	89.69	
044	not exceeding 300 mm wide . . .	74.22	89.15	102.96	64.41	69.26	66.83	71.79	82.37	95.05	
	Each										
	Extra for										
045	door: not exceeding 600 x 1800 mm .	29.30	29.30	29.30	19.25	19.25	19.25	25.12	25.12	25.12	
046	pair of doors: not exceeding 1000 x 1800 mm	52.74	52.74	52.74	34.66	34.66	34.66	45.21	45.21	45.21	
	Metre										
047	Raking cutting	5.36	6.45	7.71	3.68	3.77	4.01	4.60	5.19	5.52	
048	Curved cutting	7.96	9.71	11.47	5.36	5.52	6.03	6.87	7.87	8.37	
049	Groove	1.17	1.17	1.17	-	-	1.17	1.17	1.17	1.17	
050	Rounding	2.51	2.51	2.51	1.43	1.43	1.43	2.51	2.51	2.51	
051	Scribing	6.69	7.53	8.37	5.87	5.87	6.36	6.69	7.12	7.53	
	Housing including groove										
052	to softwood	4.19	5.58	6.69	4.19	4.19	4.19	4.19	5.03	5.58	
053	to hardwood	4.52	5.87	7.04	4.52	4.52	4.52	4.52	5.36	5.87	
	Each - per 25 mm of girth										
054	Notching	0.41	0.41	0.41	0.30	0.30	0.30	0.41	0.41	0.41	
055	Rounded corner . . .	1.00	1.00	1.00	0.59	0.59	0.59	1.00	1.00	1.00	

32: FURNITURE, FITTINGS AND EQUIPMENT

FITTINGS: DECORATIVE LAMINATED SHEET

Specification

Decorative laminated sheet: to BS EN 438-1
Class 1, classification HGS.

Rates for the following include

Generally:
For fixing with approved adhesive to board or sheet.

For balancing veneer.

Item			
32		<i>Square Metre</i>	£
	Covering		
056	exceeding 300 mm wide		84.43
		<i>Metre</i>	
057	not exceeding 300 mm wide - <i>per 25 mm of width</i>		2.31
058	Raking cutting		5.19
059	Curved cutting		7.79
		<i>Each - per 25 mm of girth</i>	
060	Notching		0.55
061	Rounded corner		1.33

FIREPLACES, SURROUNDS AND HEARTHES

Notes

Pipe connections:
Measure separately.

Rates for the following include

Fireplaces:
For work to fireplace openings not exceeding
450 mm wide.

For fires with or without gas ignition.

Mortar:
For any mix.

Surrounds and trims:
For fixing to any background by any means.

Taking out:
For removing mortar bedding, haunching and
rubble backing.

32: FURNITURE, FITTINGS AND EQUIPMENT

FIREPLACES, SURROUNDS AND HEARTHES - *continued*

Item 32	<i>Each</i>	1	2	3
		Fixing only	ADD where with back boiler	Taking out
		£	£	£
062	Loose bottom grate and fret	8.37	-	6.24
063	Continuous burning inset open fire: plugging and screwing to masonry	29.22	-	14.97
064	Fireclay back and cheeks: backing up with brick rubble in mortar: haunching up to flue in mortar: pointing in fireclay	113.01	20.46	29.33
065	Fireclay back hearth	19.15	-	8.74
066	Continuous burning inset cast iron fire unit complete: sealing to opening and to flue with fireclay and fire resisting cement (1:1)	107.17	-	41.55
067	ADD where filled around with brick rubble in mortar and flaunched	18.80	-	3.75
068	Cast iron surround loose bottom grate and fret	-	-	13.73
		1	2	
		Fixing only	Taking out	
		£	£	
Precast tile, brick, stone or terrazzo fireplace surround: bedding and pointing in mortar: overall face area				
069	not exceeding 1.00 m ²		96.23	31.20
070	1.00 to 1.50 m ²		108.51	40.55
071	1.50 to 2.00 m ²		118.58	49.91
072	Wood or metal mantelpiece with shelf, frieze and jambs or surround: any size		34.03	26.21
073	Stone, marble or slate mantelpiece with shelf, frieze and jambs or surround: any size: bedding and pointing in mortar		59.28	39.93
Precast tile, brick, stone or terrazzo raised hearth: bedding and pointing in mortar: overall face area				
074	not exceeding 1.00 m ²		30.06	18.72
075	1.00 to 1.50 m ²		39.26	23.08
076	1.50 to 2.00 m ²		48.45	29.33
Free standing solid fuel heating stove: room heating capacity				
077	not exceeding 50 m ³		21.92	10.91
078	50 to 100 m ³		32.88	15.59
079	100 to 150 m ³		40.91	19.34

32: FURNITURE, FITTINGS AND EQUIPMENT

WORK TO EXISTING FIREPLACES, SURROUNDS AND HEARTHES

Rates for the following include

Generally:

For taking off loose grates, frets or access panels or the like as necessary and replacing.

Item		
32	Each set	£
080	Removing burnt out set of firelumps, firebacks, fire tiles or bricks: fixing only new set	74.87
081	ADD where inner frame to fireplace surround taken out and re-fixed	31.19
082	Cleaning surfaces and making good in position partially burnt firelumps with fireclay and fire resisting cement (1:1): washing over adjacent sound parts with a grout of the same mixture	42.93

SUNDRY ITEMS

Rates for the following include

Generally:

For any type size, thickness or material unless otherwise stated.

For supports.

Fixing only:

For fixing items and supports to any background by any means *except* cutting and pinning.

Taking down:

For taking out fixings and supports except built-in supports.

For making good background *except* decorations and applied finishings.

		1	2
		Fixing only	Taking down
		£	£
	<i>Square Metre</i>		
083	Counter, bench or worktop (measure top surface only)	37.23	27.45
084	Wardrobe, dresser, cupboard or cabinet (measure front face only)	29.92	23.71
085	Storage rack (measure front face only)	18.24	11.24
086	Shelf (measure top surface only)	17.45	9.98
	<i>Metre</i>		
087	Curtain rail including end stops and runners	5.15	1.56
088	ADD for valence rail	2.89	0.62

32: FURNITURE, FITTINGS AND EQUIPMENT

SUNDRY ITEMS - *continued*

Item 32		<i>Each</i>	1	2	
			Fixing only	Taking	
			down		
			£	£	
	Locker				
089	single		17.79	12.48	
090	double		26.69	18.72	
091	Splash back: vitrolite or the like		8.37	3.12	
092	Shelf: glass or the like: guard rail		8.37	3.12	
093	Fire extinguisher		5.22	1.50	
094	Fire blanket container		7.66	2.50	
				£	
095	Easing drawer: resecuring parts and runners as necessary			12.75	
		<i>Square Metre</i>			
096	Planing bench top or the like: scraping to an even surface			19.54	
			1	2	3
			Supplying	Fixing only	Taking
			and fixing	down	
		<i>Metre</i>	£	£	£
	Seamless hanging rail: 16 mm external diameter				
097	aluminium: satin anodised finish		9.59	4.19	2.24
098	steel: chromium plated finish		8.82	4.19	2.24
		<i>Each</i>			
	End socket: flanged				
099	aluminium: satin anodised finish		-	4.28	1.00
100	steel: chromium plated finish		7.79	4.28	1.00
		<i>Kilogramme</i>			
101	Mat frame: steel: any size or section shape: mitred and welded angles left as laid		9.32	1.75	0.44

32: FURNITURE, FITTINGS AND EQUIPMENT

KITCHEN FITTINGS

PROPRIETARY FLAT PACKED KITCHEN UNITS

Rates for the following include

For notching around obstructions, cutting holes and scribing as necessary.

Fixing only:

For unpacking, sorting and checking all components are included in the packs.

Taking down:

For taking out fixings and supports except built-in supports.

For assembling using fixing devices supplied.

For making good background except decorations and applied finishings.

For fixing fitting and supports to any background by any means *except* cutting and pinning.

Item			
		1	2
		Fixing only	Taking down
32	Each	£	£
	Base unit: 500 or 600 mm deep		
102	500 mm long: single door	20.46	6.24
103	500 mm long: single door: drawer	25.05	7.80
104	1000 mm long: double doors	34.04	10.29
105	1000 mm long: double doors: drawers	41.55	12.79
106	1000 mm long: corner type: single door	31.11	9.36
107	1000 mm long: corner type: single door: drawer	35.71	10.91
108	Larder or broom cupboard unit	45.93	14.04
	Wall unit: any height		
109	500 mm long: single door	27.36	8.42
110	1000 mm long: double doors	47.60	14.66
111	600 x 600 mm: corner unit: single door	45.31	13.92
	<i>Metre</i>		
112	Trim: pelmet, cornice or the like	5.62	1.62
	<i>Each</i>		
	Worktop: 500 or 600 mm wide		
113	500 mm long	10.75	3.12
114	1000 mm long	14.19	4.15
115	1500 mm long	16.97	4.99
116	2000 mm long	19.62	5.87
117	3000 mm long	22.85	6.87

32: FURNITURE, FITTINGS AND EQUIPMENT

SUNDRY ITEMS

Notes

Pipes and electrical connections:
Measure separately.

Holes for tumble-drier venting kit:
Pay for at the Rates in Section 41.

Taking out:

For plugging or blanking off service connections where required.

For disconnecting at appropriate points.

Rates for the following include

Fixing only:

For placing in position and setting level as necessary.

Item			
		1	2
		Fixing only	Taking out
		£	£
32	<i>Each</i>		
118	Domestic cooker: gas or electric	17.00	5.74
119	Domestic refrigerator or deep freezer	11.48	3.83
120	Domestic dish washer	14.46	4.89
121	Domestic washing machine	14.46	4.89
122	Domestic tumble-drier	11.48	3.83
123	ADD where with external venting kit	17.00	5.74
	Free standing solid fuel cooker: single or double oven		
124	not exceeding 1.00 m wide	19.49	6.49
125	1.00 to 1.50 m wide	24.35	8.19
126	1.50 to 2.00 m wide	29.22	9.73
127	Register plate and short flue pipe: to cooker: jointing to flue with fire cement	19.50	5.84
	Range, kitchener or combination inset grate: single or double oven: boiler firelumps and firebrick linings		
128	not exceeding 1.50 m wide	31.19	9.73
129	1.50 to 3.00 m wide	39.48	12.28
	Free standing wash boiler or boiling pan		
130	not exceeding 45 litres capacity	17.54	5.84
131	45 to 90 litres capacity	21.92	7.30

32: FURNITURE, FITTINGS AND EQUIPMENT

SANITARY APPLIANCES AND FITTINGS

GENERALLY

Specification

Waste fittings for sanitary appliances: to BS EN 274-1, -2 and -3.

Bedding and jointing materials: types recommended by the manufacturer.

Assembling and fixing: assemble and fix sanitary appliances in accordance with:

- manufacturer's instructions;
- BS 8000-13.

Notes

Joints to pipes:

Measure separately unless otherwise stated.

Rates for the following include

Generally:

For turning off water, venting and draining as required.

For white glazed ware or a colour not involving any change in cost over white unless otherwise stated.

For fixing appliance and supports to any background by any means except cutting and pinning.

For bedding and jointing.

For any disconnecting, setting aside and refixing required by other trades.

Concealed bracket fixings:

For rustproofed or painted brackets.

Metalwork included within descriptions of sanitary appliances:

For chromium plated finish where exposed unless otherwise stated.

Fixing only sanitary appliances:

For cleaning and for easing and adjusting all working parts of fittings previously set aside for re-use as necessary.

Taking out sanitary appliances:

For disconnecting service and waste pipes.

TAPS

Specification

Draw-off taps and stopvalves for water services (screw-down pattern): to BS 1010.

Single taps and combination tap assemblies: to BS EN 200.

Tops: any type: marked for hot or cold.

Finish: chromium plated unless otherwise stated.

Notes

Taking off:

Pay for only where tap to be renewed.

Rates for the following include

Taking off:

For disconnecting service pipe.

	1	2	3	4
	Supplying and fixing	Fixing only	Taking off	
	Nominal size	Any size		
	13 mm	19 mm		
	£	£	£	£
<i>Each</i>				
Bib tap				
unplated	14.15	19.31	11.63	8.56
easy-clean type	17.35	24.52	11.63	8.56
for drinking water point: 13 mm nominal size bottle filling with extension socket: wall fixing flange: fixing to any background	61.04	-	11.63	8.56
ADD for				
anti-splash device	6.31	-	-	-
threaded nose for hose union	7.99	8.42	-	-
straight extension piece: 150 mm long	15.28	29.20	3.42	1.13
sink column: 150 mm long	30.37	33.97	3.42	1.13

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32: FURNITURE, FITTINGS AND EQUIPMENT

TAPS - continued

Item		Nominal size	
		1	2
		13 mm	19 mm
32	<i>Each</i>	£	£
152	Compression joint to plastics pipe	5.95	7.59
153	Screwed joint to steel pipe	6.38	6.65
154	Compression or capillary joint to copper pipe	3.71	6.74
155	Soldered joint to lead pipe	17.09	22.25
			£
	Rewashing: any size: any type of washer		
156	screw-down tap		8.76
157	push tap: new spring		9.74
158	"Drinking Water" label: aluminium or plastics: plugging and screwing to masonry		7.83

BATHS

Specification

Bath: two tap holes and overflow: two chromium plated copper alloy handgrips;
Material:
1. vitreous enamelled steel: to BS 1390, type 1;
2. acrylic sheet, 5 mm thick before forming, fully reinforced with glass reinforced polyester: to BS EN 198.

Waste assembly: chromium plated copper alloy to BS EN 274-1, -2 and -3 with unslotted waste body, tapered flange with sunken grating, plug, chain and stay, securing nut, and chromium plated copper alloy overflow fitting.

Bath panel:
1. 4.8 mm enamelled tempered hardboard bath panel fixed with chromium plated dome headed screws;
2. Acrylic bath panels to match including proprietary fixings.

		1	2	3
		Supplying and fixing	Fixing only	Taking out
		£	£	£
	<i>Each</i>			
	Bath: 1700 x 725 mm overall: 38 mm waste fitting: plug and chain: overflow			
159	white vitreous enamelled steel: adjustable feet	265.31	94.40	34.20
160	white reinforced acrylic: adjustable cradle	337.42	94.40	34.20
161	ADD for anti-slip surface	25.46	-	-
162	ADD for hand grips	12.72	-	-

32: FURNITURE, FITTINGS AND EQUIPMENT

BATHS - continued

Item 32	Each	1	2	3
		Supplying and fixing	Fixing only	Taking out
		£	£	£
	Bath panel			
	acrylic			
163	front panel	47.71	8.56	3.42
164	end panel	27.16	6.84	2.74
	enamelled tempered hardboard:			
165	front panel	17.77	8.58	3.42
166	end panel	11.41	6.87	2.74
167	angle strip	7.74	5.15	2.05

SHOWER TRAYS

Specification

Shower trays:

1. glazed ceramic tray: to BS EN 251.
2. acrylic tray: to BS EN 251.

Waste assembly: chromium plated copper alloy to BS EN 274-1, -2 and -3 with unslotted waste body, flush grating and backnut.

	Each	1	2	3
		Supplying and fixing	Fixing only	Taking out
		£	£	£
	Shower tray: 38 mm waste fitting			
168	white glazed ceramic: 760 x 760 mm	322.77	39.62	17.10
	white reinforced acrylic			
169	760 x 760 mm	157.79	39.62	17.10
170	800 x 800 mm	174.04	43.11	18.81
171	900 x 900 mm	256.99	46.76	20.52

32: FURNITURE, FITTINGS AND EQUIPMENT

DRINKING FOUNTAINS

Specification

Drinking fountains:

1. basin: white vitreous china: to BS 3402;
2. hooded or protected jet nozzle: above the spill-over level of the bowl;

3. 32 mm waste fitting with grid or fixed strainer;
4. self closing chromium plated brass valve;
5. brackets for fixing.

Item

32

Each

1	2	3
Supplying and fixing	Fixing only	Taking out
£	£	£

172	Drinking fountain: hooded or protected jet nozzle: waste fitting: self closing valve	457.32	57.71	27.36

WASH BASINS

Specification

Wash basin:

1. vitreous china: with two tapholes and overflow:
to BS 1188: without pedestal:
a. plastics coated cast iron support brackets;
2. vitreous china: with two tapholes and overflow:
to BS 3402: without pedestal:
a. concealed, non-corroding fixing brackets or
bolts;
3. waste assembly to BS EN 274-1, -2 and -3:
chromium plated copper alloy; with slotted
body, tapered flange with sunken grating,
plug, chain and stay and securing nut.

Hand rinse basin:

1. white vitreous china: with single tap hole
without overflow plug or chain: to BS 3402;
2. waste assembly to BS EN 274-1, -2 and -3:
unslotted waste body, flush grating and backnu
3. concealed, non-corroding fixing brackets or
bolts;
4. chromium plated copper alloy spray tap to BS
5779.

Dimensions:

1. pedestal wash basins: to BS EN 31;
2. wall hung wash basins: to BS EN 31;
3. wall hung hand rinse wash basins: to BS
EN 31.

1	2	3
Supplying and fixing	Fixing only	Taking out
£	£	£

Each

Basin: white vitreous china: 32 mm waste fitting: plug and chain
general purpose

173	635 x 455 mm overall	135.45	48.06	16.08
174	560 x 405 mm overall	108.33	48.06	16.08

32: FURNITURE, FITTINGS AND EQUIPMENT

WASH BASINS - *continued*

Item	32	<i>Each</i>	1	2	3
			Supplying	Fixing only	Taking out
			and fixing		
			£	£	£
Basin: white vitreous china: 32 mm waste fitting: plug and chain - <i>continued</i>					
		wall hung			
175		400 mm overall	124.80	48.06	16.08
176		500 mm overall	155.85	48.06	16.08
177		600 mm overall	209.98	48.06	16.08
		wheelchair basin			
178		500 mm overall	338.69	48.06	16.08
179		600 mm overall	357.09	48.06	16.08
Basin support brackets (pair): white plastics coated					
180		screw type	25.45	7.03	3.42
181		build-in type	33.19	6.84	8.56
Hand rinse basin: white vitreous china: 32 mm waste fitting: concealed fixing					
182		370 mm overall	127.42	48.23	16.08
183		corner: 480 mm overall	123.73	48.23	16.08
184		compact: 360 mm overall	99.90	48.23	16.08
185		Range of two basins: any size: any size waste fitting with plug and chain	-	89.62	30.79
186		ADD for each additional basin in the range	-	44.80	15.39
187		Pedestal: any size	-	17.32	5.72
188		Cantilever bracket	-	3.63	1.71
189		Combined leg and bearer	-	21.87	3.42

SINKS

Specification

Sinks:

1. fireclay sinks: to BS 1206;
2. kitchen sinks: to BS EN 13310.
3. stainless steel sinks: with two tap holes: single drainer and rear upstand.

Waste assembly: to BS EN 274-1, -2 and -3 chromium plated copper alloy: with slotted waste body, tapered flange with sunken grating, plug, chain and stay and securing nut.

32: FURNITURE, FITTINGS AND EQUIPMENT

SINKS - *continued*

Item 32	<i>Each</i>	1	2	3
		Supplying and fixing	Fixing only	Taking out
		£	£	£
	Belfast sink: white glazed fireclay: without shelves: 38 mm waste fitting: plug and chain			
190	455 x 380 x 205 mm	198.89	43.27	18.81
191	610 x 455 x 255 mm	255.71	43.27	18.81
192	760 x 455 x 255 mm	366.99	43.27	18.81
193	915 x 610 x 305 mm	786.45	43.27	18.81
194	ADD for hardwood pad - <i>per 25 mm of length</i>	2.81	-	-
	Sink: stainless steel: single drainer: holed for pillar taps: 32 mm waste fitting: plug and chain			
195	1000 x 500 mm: square edge	141.25	43.27	18.81
196	1000 x 600 mm: square edge	157.27	43.27	18.81
197	1000 x 500 mm: roll front	147.69	43.27	18.81
198	1000 x 600 mm: roll front	160.36	43.27	18.81
	Bracket: for single fitting			
199	cantilever: painted cast iron	13.31	3.66	1.71
200	strap and flanged tubular leg bearer: painted steel	36.00	14.09	6.84
201	wall fixing: painted cast iron	18.45	8.96	4.28
	Cleaners sink with back skirting: white glazed fireclay: hardwood pad: 38 mm waste fittings: stainless steel hinged bucket grating			
202	455 x 380 x 205 mm	417.85	43.27	18.81
203	510 x 380 x 230 mm	545.08	43.27	18.81
204	Sink support brackets (pair): white plastics coated: built-in type	35.60	8.56	4.28
205	Legs and bearers (pair): galvanised steel: flanged floor fixing	31.22	13.69	6.84
	Stainless steel sink			
206	any size: any size waste fitting with plug and chain	-	34.72	17.10
207	single drainer combined: any size: any size waste fitting with plug and chain	-	38.13	18.81
208	double drainer combined: any size: any size waste fitting with plug and chain	-	41.56	20.52

WC PANS AND CISTERNS

Specification*Pedestal pans:*

- a. close coupled pans: to BS EN 33 and BS EN 997;
- b. pans with independent water supply: to BS EN 33 and BS EN 997.

Wall hung pans:

- a. close coupled pans: to BS EN 33 and BS EN 997;
- b. pans with independent water supply: to BS EN 33 and BS EN 997.

Flushing cistern and cover: vitreous china or plastic to BS 1125.

Diaphragm type float operated valve and siphon:

- a. brass body valve to BS 1212-2 and float to BS 2456;
- b. plastics body valve to BS 1212-3 and float to BS 2456.

Seat and cover: to BS 1254, type 1: closed front with buffers: hinging device chromium plated alloy or stainless steel, complete with washers and locking nuts.

Pedestal w.c. pans: set pan correctly in relation to finished floor level and fix with stainless steel or brass screws. Bed on mortar or mastic compound where necessary.

Bedding w.c. pans: where permitted by the PM and where fixed to solid floors, bed on mortar not exceeding 20 mm thick.

High and low level flushing cisterns: fix cisterns at heights recommended by the pan manufacturer on brackets screwed to wall.

Close coupled flushing cisterns: fix to WC pan with bracket and bolts supplied by the manufacturer and to wall with stainless steel or brass screws and plastics plugs.

Workmanship: comply with BS 8000-13, unless specified otherwise, in respect of:

- a. materials handling and preparation (section 2);
- b. installation of sanitary appliances (subsection 3.2);
- c. protection (subsection 3.3);
- d. inspection and testing (section 4).

Item
32

Each

1	2	3
Supplying and fixing	Fixing only	Taking out
£	£	£

WC pan: white vitreous china: horizontal outlet: joint to drain or soil pipe with approved WC jointing compound or connector

pedestal pan

209	general purpose	155.83	65.37	27.36
	back to wall type			
210	general purpose	272.26	68.79	30.79
211	low height: schools and general commercial use	322.33	68.79	30.79
212	raised height: commercial and domestic use	316.10	68.79	30.79
213	rimless 400 mm	232.73	68.79	30.79
214	rimless 450 mm	250.94	68.79	30.79
215	close coupled	289.42	65.37	27.36
216	low height: schools and general commercial use	129.81	58.52	23.94
	wall hung pan			
217	back to wall	496.06	75.62	34.20

32: FURNITURE, FITTINGS AND EQUIPMENT

WC PANS AND CISTERNS - *continued*

Item 32	<i>Each</i>	1	2	3
		Supplying and fixing £	Fixing only £	Taking out £
	Flushing cistern: 9 litre capacity: float operated valve: plastics body: approved plastics valveless syphon: flushpipe and pan connector: actuating arm: link: chromium plated lever: spindle: concealed screw brackets			
218	concealed fixing: low level for duct fixing: plastics shell and cover exposed fixing: white vitreous china shell and cover	92.18	38.01	20.52
219	low level	90.53	38.01	20.52
220	high level cistern: support brackets: chain and pull	245.35	41.42	23.94
221	close coupled	193.90	34.59	13.69
222	ADD for float operated valve: brass body	6.18	-	-
223	ADD for cistern support brackets (pair): white porcelain enamelled: built-in type	21.18	-	-
224	Flush pipe to high level cistern: any size	-	11.28	5.72
225	Seat: solid plastics: without cover: any colour	26.70	5.98	3.42
226	ADD for cover: any colour	3.66	-	-

URINALS AND CISTERNS

Specification

Bowl urinal:

- a. white vitreous china bowl: to BS 5520 with:
 1. top inlet for exposed fixing or back inlet for concealed fixing;
 2. non-corroding concealed screw fixed brackets;
- b. plastics waste outlet, 38 mm nominal size with backnut and plastics or stainless steel domed outlet grating;
- c. stainless steel flush pipe and fixing clips;
- d. stainless steel spreader: face connected for exposed cistern, back connected for concealed cistern;

- e. white vitreous china division: to BS 3402 with non-corroding concealed screw fixed brackets or holed for direct fixing;

Slab urinal:

- a. stainless steel to BS 4880-1 with:
 1. stainless steel spreaders, flush pipes and brackets;
 2. copper alloy outlet, 63 mm nominal size with backnut and hinged domed outlet grating.

Automatic flushing cistern: to BS 1876 with non-corroding screw to the wall metal fixings.

32: FURNITURE, FITTINGS AND EQUIPMENT

URINALS AND CISTERNS - *continued*

Item		1	2	3
		Supplying and fixing	Fixing only	Taking out
32	<i>Each</i>	£	£	£
	Basin: white vitreous china: top inlet for exposed fixing or back inlet for duct fixing: 38 mm waste fitting: concealed screw-to wall hangers			
227	not exceeding 450 mm	143.45	36.48	25.66
228	450 to 500 mm	239.95	36.48	25.66
229	exceeding 500 mm	347.99	36.48	25.66
230	Isolated division: white vitreous china: concealed screw-to-wall hanger or direct fixing	117.93	35.20	12.82
231	Slab or stall urinal with channel: two position: one division: two returned ends: tread: channel outlet: brass hinged domical grating	-	208.45	94.06
232	ADD for each additional position in the range including division	-	78.58	34.20
233	Urinal connector to slab or stall urinal: any size	-	12.22	5.72
	Cistern: white vitreous china: to BS 1876: automatic syphon: drip tap: nominal capacity			
234	4.5 litre	157.71	26.48	8.56
235	9.0 litre	187.35	28.19	9.13
236	13.5 litre	217.04	29.90	9.68
237	ADD for cistern support brackets (pair): white porcelain enamelled	12.63	-	-
	Flush pipes and fittings with spreaders: polished stainless steel: set for			
238	one basin or stall	57.53	24.67	7.98
239	two basins or stalls	97.77	32.05	10.26
240	three basins or stalls	138.10	39.50	12.55
241	ADD for flush pipe and spreader to each additional position in the range	40.42	7.46	3.42

32: FURNITURE, FITTINGS AND EQUIPMENT

WASTE PIPEWORK AND FITTINGS

Rates for the following include

For all traps, fittings, clips and the like.

For making all necessary connections to stack, gulley or hopperhead.

For all necessary adjustments to existing pipework.

For cutting or forming all necessary holes and making good.

Item
32

Each

1	2	3
Supplying and fixing	Fixing only	Taking out
£	£	£

Waste fitting: backnut: washer: screwed joint to existing

brass: chromium plated

32 mm for

242	drinking fountain or lavatory basin	16.92	-	5.13

38 mm for

243	bath, shower or urinal	20.73	-	5.98

244	sink	19.02	-	5.13

plastics

32 mm for

245	drinking fountain or lavatory basin	12.80	-	3.42

38 mm for

246	bath, shower or urinal	16.62	-	4.28

247	sink	14.90	-	3.42

248	ADD where with captive plug	3.51	-	-

Overflow: round pattern: bent and shouldered tailpiece: screwed joint to existing: 32 mm

brass: chromium plated: for

249	bath	23.06	-	5.72

250	lavatory basin or sink	19.64	-	4.55

plastics: for

251	bath	22.36	-	5.72

252	lavatory basin or sink	18.94	-	4.55

32: FURNITURE, FITTINGS AND EQUIPMENT

WASTE PIPEWORK AND FITTINGS - *continued*

Item		1	2	3
		Supplying and fixing	Fixing only	Taking out
32	<i>Each</i>	£	£	£
253	Cistern, syphon and cover: rejoining to flush pipe	-	26.00	12.82
254	Plastic syphon to cistern: rejoining to flush pipe	-	19.16	5.98
255	Chain and pull	-	2.56	1.37
256	Cistern bracket	-	9.23	3.93
257	Flush pipe: rejoining to cistern and pan	-	10.60	3.42
258	Rubber buffer to underside of seat	2.90	2.39	1.20
259	Rubber cone to nozzle of WC pan	10.55	6.84	3.42
260	Remaking joint of flush pipe to rim socket of pan	-	7.19	-
	<i>Per stall</i>			
	Stall pattern urinal			
261	tread	-	17.95	8.89
262	channel	-	23.08	10.95
263	channel with metal grating	-	25.66	11.97
	<i>Each</i>			
264	Domical urinal grating: rejoining to waste pipe	-	6.84	3.42
265	Urinal basin: any pattern: rejoining to flush and waste pipes	-	53.02	25.66
266	Rejoining urinal flush pipe to cistern	-	25.66	-
	Sundries			
267	Vulcanised rubber or plastics washer plug with ring	1.08	-	0.35
	<i>Metre</i>			
268	Chain: brass: oval link: 15 SMG (1.83 mm) wire: chromium plated: fixing to plug and stud	7.46	-	1.71
	<i>Each</i>			
269	Stud for chain and fixing: brass: chromium plated	4.22	-	1.71

32: FURNITURE, FITTINGS AND EQUIPMENT

DOC. M EQUIPMENT

Specification

Reference to other Sections: the Preambles to other Sub-Sections apply equally to this Sub-unless otherwise stated.

Doc. M packaged equipment: to Building Regulations Approved Document M 'Access to and use of buildings'.

TMV3 thermostatic mixing valves: manufactured to meet the specification required by the NHS Estates DO8 Standard for mixer valves for use within health care premises.

Item				
		1	2	3
		Supplying	Fixing only	Taking out
		and fixing		
		£	£	£
32	<i>Each</i>			
270	Doc.M basic comprising pan; cistern with spatula lever and cover clips; seat ring; centre tap hole handrinse basin; spray lever mixer tap; TMV3 mixing valve; 600mm rail x 5; hinged rail including toilet roll holder; waste	1372.97	388.38	155.35
271	Doc.M back-to-wall comprising pan; concealed lever cistern; spacer box; seat ring; centre tap hole handrinse basin; spray lever mixer tap; TMV3 mixing valve; 600mm rail x 5, hinged rail including toilet roll holder; waste	1453.35	391.81	156.72
272	Doc.M ambulant comprising pan; cistern with lever and cover clips; seat ring; 600mm rail x 3; 450mm rail x 1	789.72	220.79	88.32
273	Doc.M shower pack comprising shower rail 1200 x 1200mm; shower curtain; 1800 x 2000mm x 2, concealed shower valve TMV3; shower rail, hose and head; shower vandal resistant fixed head; shower diverter; 600mm support rail x 3; hinged support rail x 2; folding shower seat and back support	3411.58	259.59	103.84

32: FURNITURE, FITTINGS AND EQUIPMENT

GRAB AND SUPPORT RAILS

Rates for the following include

For sizes 25 to 35 mm diameter.

For purpose made support fittings to provide disabled users with physical support.

For appropriate contoured or high friction surfaces to enhance grip.

Item		Each	1	2	3	4
			Supplying and fixing	Fixing only	Taking out	
			White or colour coated	Stainless steel		
			£	£	£	£
	Grab rail: 2 flange					
274	straight: not exceeding 305 mm long		49.15	52.39	23.94	8.38
275	straight: 305 to 610 mm long		60.41	67.23	27.36	9.58
276	angled: 305 x 305 mm		71.13	77.96	34.20	11.97
277	angled: 203 x 813 mm		92.07	103.53	41.04	14.36
	Grab rail: 3 flange					
278	straight: not exceeding 1219 mm long		94.24	107.41	41.04	14.36
279	angled: 406 x 813 mm		107.86	121.58	47.89	16.76
280	angled: 508 x 1016 mm		120.30	137.55	51.30	17.95
281	Grab rail: freestanding: 2 or 3 flange: 762 x 838 mm		137.92	137.92	47.89	16.76
	Bath support rail: 3 flange					
282	914 x 305 x 813 mm high		135.80	146.12	51.30	17.95
283	1219 x 305 x 813 mm high		163.05	176.78	54.72	19.15
	Bath support rail: 4 flange					
284	914 x 305 x 305 mm high		154.15	182.87	51.30	17.95
285	914 x 305 x 813 mm high		182.92	218.57	58.14	20.36
286	WC support rail: 4 flange: 610 x 610 x 508 mm high		184.36	223.48	54.72	19.15
	Shower support rail: 4 flange					
287	610 x 610 x 813 mm high		147.35	170.34	58.14	20.36
288	508 x 1016 x 813 mm high		161.15	187.60	61.56	21.55
289	610 x 1219 x 813 mm high		172.71	202.57	64.99	22.75
290	Shower support rail: 5 flange: 914 x 914 x 813 mm high		184.33	214.20	71.82	25.14
	WC hinged support rail					
291	swing aside: not exceeding 750 x 965 mm		258.20	286.22	82.09	28.73
292	swing up: not exceeding 965 mm long		142.84	154.97	82.09	28.73

32: FURNITURE, FITTINGS AND EQUIPMENT

MACERATORS

Notes

Electrical connections:
Measure separately.

Item			
		1	2
		Fixing only	Taking out
32	Each	£	£
293	Sanitary macerator: electric: wall mounting	17.10	8.56

MISCELLANEOUS FITTINGS

	Each	1	2
		Fixing only	Taking out
		£	£
294	Toilet roll holder	4.96	2.22
295	Towel rail	8.56	3.42

SEALANTS

Specification

Apply by gun:
a. ensure proper adhesion with components to be jointed;
b. finish to a slightly concave surface.

Sealant: one-part silicone based to BS EN ISO 11600

	Metre	£
Seal joint: between appliance and adjacent surface		
296 flat		6.06
297 at internal angle		5.04

NOTICES AND SIGNS

WALL OR FLOOR MARKING

Specification

For preparatory work.

For setting out.

For painting to new or old surfaces of any kind.

For straight or curved work.

For clean cut edges.

Line marking paint: an approved proprietary type.

Rates for the following include

Generally:
For internal work.

32: FURNITURE, FITTINGS AND EQUIPMENT

WALL OR FLOOR MARKING - *continued*

Item		1	2
		Painting one coat line marking paint	ADD for each additional coat
32	<i>Metre - per 25 mm of width</i>	£	£
298	Line	2.36	1.69
299	Letter, numeral or symbol	4.70	3.36
	Repainting existing		
300	line	2.02	1.35
301	letter, numeral or symbol	4.03	2.86
302	Work carried out externally: price at the foregoing Rates multiplied by 1.075.		

CARVING STONEWORK

Rates for the following include

Generally:

For plain sunk work executed in position.

		1	2	3	4
		Bath	Portland	York	Granite
	<i>Each</i>	£	£	£	£
303	Letter, numeral or symbol - <i>per 25 mm of height</i>	4.76	6.87	10.05	15.90
304	Stop, hyphen or comma	3.52	4.52	6.20	9.21

SIGNS OR THE LIKE

Rates for the following include

Fixing only:

For fixing to any background by any means.

Taking down:

For making good background *except* decorations and applied finishings.

		1	2
		Fixing only	Taking down
	<i>Each</i>	£	£
	Sign, name plate or the like		
305	not exceeding 0.25 m ²	5.03	3.35
306	ADD for each additional 0.25 m ²	0.84	0.56
307	Letter, numeral or symbol: any size	2.93	1.25
	Notice board		
308	not exceeding 1 m ²	11.72	5.87
309	1 to 2 m ²	13.40	6.69
310	2 to 3 m ²	15.07	7.53
311	3 to 4 m ²	16.74	8.37

33: Drainage Above Ground

RAINWATER INSTALLATIONS

GENERALLY

Specification

Workmanship: comply with BS 8000-13.

Fixing rainwater pipes: assemble, joint and fix:

- with support centres not exceeding one per length on pipes up to 2 m long and with an intermediate support on pipes longer than 2 m;
- ensuring provision is made for thermal movement.

Fixing gutters and outlets: fix gutters:

- with a 1 in 350 fall;
- with support brackets at 900 mm maximum centres;
- ensuring provision is made for thermal movement.

Pipes passing through structure: sleeve as ordered.

Testing internal systems: air test with ends of pipework sealed to a pressure of 38 mm water gauge (50 mm in Scotland) maintained for three minutes minimum (five minutes in Scotland) without introduction of additional air.

Testing external systems: test with water to satisfy the PM that pipes and gutters are unobstructed and gutters drain effectively.

Definition of terms

Connector: includes thimbles, ferrules, caulking bushes, caps and linings or other fittings or adaptors, whether equal or reducing, or a combination of any of the above necessary to achieve the connection.

Reducer: includes diminishing pieces, reducing sets or socket reducers but excludes tapers.

Pipe bracket or clip: pipe support screwed to background.

Holderbat: pipe support built in or cut and pinned to background.

Notes

Cutting and pinning:

Pay for at the rates in Section 41.

Method of measurement

Pipe and gutter:

Measure over all fittings and branches.

Reduced fittings:

Measure extra over the largest pipe or gutter in which they occur.

Rates for the following include

Generally:

For testing.

Pipe and gutter:

For joints in the running length.

For fixing without supports where no background or supports are stated.

For fixing in ducts or chases or embedding in concrete.

For cutting and jointing to fittings and ancillaries.

For marking out for holes, mortices, chases or the like.

Fixing to stated background:

For providing supports and fixing by whatever means are necessary to uphold the item, including any plugging, shot firing or drilling and tapping necessary and the provision of fixing materials including matching screws where appropriate, but *excluding* cutting and pinning.

Jointing pipe or gutter to existing:

For cleaning and preparing to receive new.

For connector if necessary.

Fixing only:

For providing supports and fixing materials.

Resecuring:

For providing new supports and fixing materials as necessary.

33: DRAINAGE ABOVE GROUND

FIBRE CEMENT PIPEWORK AND ANCILLARIES

Specification

Pipes and fittings:

- from an approved manufacturer;
- joint type: cement-mortar (1:2).

Supports: galvanised mild steel brackets.

Item		1	2	3	4	5	6
		Supplying and fixing			Fixing only		
		Nominal size					
		75 mm	100 mm	150 mm	75 mm	100 mm	150 mm
33	Metre	£	£	£	£	£	£
001	Pipe	24.25	32.59	60.06	9.45	11.70	13.70
002	ADD for drive type brackets: to masonry	5.78	6.00	6.12	5.09	5.27	5.34
	ADD for screw type brackets						
003	to timber	3.69	3.81	4.08	2.96	3.06	3.23
004	to masonry	4.83	4.95	5.26	4.09	4.20	4.40
005	to metal	4.16	4.28	4.55	3.43	3.53	3.70
	Each						
	Extra for						
006	connection to pipe socket: connector or cement joint	3.84	4.49	5.59	3.84	4.49	5.59
007	shoe	14.16	18.40	43.11	3.53	4.49	6.68
008	bend	16.41	23.54	45.67	4.12	5.20	7.71
	offset bend: projection						
009	150 mm	22.46	26.20	51.20	4.12	5.20	7.71
010	225 mm	23.01	30.29	55.19	4.67	5.64	8.07
011	300 mm	28.89	34.95	67.10	5.21	6.07	8.44
012	450 mm	35.85	47.28	88.79	5.76	6.50	8.81
013	oblique branch: any size	27.66	34.45	69.86	9.32	9.80	11.20
014	Jointing pipe to existing fibre cement pipe	5.31	5.96	7.20	5.31	5.96	7.20
	Rainwater head: galvanised pipe nails: to masonry						
015	hexagonal type	30.60	39.72	77.29	7.75	9.52	12.48
016	rectangular type	37.96	47.48	85.02	7.75	9.52	12.48

33: DRAINAGE ABOVE GROUND

FIBRE CEMENT PIPEWORK AND ANCILLARIES - *continued*

Item		Metre	£
33			
		Resecuring pipe and fittings: nominal size	
017	75 mm		4.00
018	100 mm		5.13
019	150 mm		5.72

PLASTICS PIPEWORK AND ANCILLARIES

Specification

UPVC pipes, fittings and accessories: to the relevant parts of BS EN 12200-1, BS EN 1462 BS EN 607 and:

- manufactured by a BSI Kitemark Licensee;
- joined in accordance with the manufacturer's recommendations;
- any colour.

		1	2	3	4	5	6	7	8
		Supplying and fixing				Fixing only			
		Nominal size							
		63 mm	68 mm	75 mm	110 mm	63 mm	68 mm	75 mm	110 mm
<i>Metre</i>		£	£	£	£	£	£	£	£
020	Pipe	7.35	8.10	9.09	15.96	3.22	3.97	4.75	5.72
	ADD for injection moulded screw type brackets: PVC ring								
021	to timber	4.49	4.86	5.34	6.66	3.70	4.08	4.46	4.93
022	to masonry	5.83	6.31	6.89	8.49	5.05	5.53	6.01	6.76
023	to metal	5.00	5.42	5.95	7.56	4.22	4.63	5.07	5.83
	ADD for PVC coated mild steel clips								
024	to timber	-	-	-	5.60	-	-	-	4.86
025	to masonry	-	-	-	7.39	-	-	-	6.66
026	to metal	-	-	-	6.50	-	-	-	5.76
027	ADD for galvanised mild steel drive type brackets: PVC ring: to masonry	5.16	5.30	5.51	-	4.38	4.52	4.66	-
<i>Each</i>									
Extra for									
028	connection to pipe socket: connector or cement joint	2.40	2.58	2.81	3.27	2.40	2.58	2.81	3.27
029	shoe	7.36	7.52	7.90	18.31	3.25	3.42	3.59	3.93
030	bend	9.12	9.29	9.75	18.26	3.42	3.59	3.76	4.11

33: DRAINAGE ABOVE GROUND

PLASTICS PIPEWORK AND ANCILLARIES - *continued*

Item									
		1	2	3	4	5	6	7	8
		Supplying and fixing				Fixing only			
		Nominal size							
33	Each	63 mm	68 mm	75 mm	110 mm	63 mm	68 mm	75 mm	110 mm
		£	£	£	£	£	£	£	£
	Extra for								
	offset bend: projection								
031	150 mm	-	6.90	7.22	16.30	-	3.83	4.00	4.52
032	225 mm	-	7.39	7.73	17.42	-	4.17	4.34	4.84
033	300 mm	-	7.92	8.44	19.00	-	4.55	4.90	5.59
034	337 mm	-	8.66	9.18	20.54	-	5.13	5.47	6.33
035	450 mm	-	9.05	9.90	22.09	-	5.37	6.04	7.07
036	branch	15.11	15.46	-	-	5.13	5.47	-	-
037	access pipe	18.83	19.17	20.21	40.85	5.13	5.47	5.82	6.84
038	Jointing pipe to existing plastics pipe	3.42	3.69	4.00	4.55	3.42	3.69	4.00	4.55
039	Flat roof outlet	42.16	45.36	49.43	66.25	17.10	18.23	19.39	21.65
040	Hopper head: galvanised pipe nails: to masonry	17.58	18.45	26.30	45.21	5.00	5.87	6.72	8.43
041	Rainwater diverter: pvc-u flexible pipe	22.31	23.17	24.02	-	5.00	5.87	6.72	-
	Metre								£
	Resecuring pipe and fittings: any type of supports: nominal size								
042	63 mm								2.05
043	68 mm								2.50
044	75 mm								2.98
045	110 mm								4.00

CAST IRON PIPEWORK AND ANCILLARIES

Specification

Roof outlets: to BS 416-1 and BS EN 877.

Spigot and socket pipes and fittings: to BS 460 and:

Rainwater heads: to BS 460 Table 9.

- joints: gaskin and mastic;
- socket type: A, either without ears or with projecting or flat ears cast on;
- coating: as BS 460 Clause 7.

Hopper heads: to BS 460 Table 8.

Supports:

- pipes without ears: cast iron holderbats with cadmium plated mild steel bolts;
- pipes with ears: galvanised pipe nails. Fix pipes with flat ears with 19 mm diameter galvanised steel barrel distance pieces.

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK AND ANCILLARIES - *continued*

Item			1	2	3	4	5
			Supplying and fixing				
			Nominal size				
			50 mm	65 mm	75 mm	100 mm	150 mm
33		<i>Metre</i>	£	£	£	£	£
	Pipe						
046	without ears		33.30	33.91	34.42	44.06	56.05
047	ADD for holderbats		9.25	10.28	11.11	12.64	15.36
048	with ears: to masonry		35.11	35.72	36.23	45.89	58.44
		<i>Each</i>					
	Extra for: without ears						
049	connection to pipe socket: connector or cement joint		3.53	4.26	4.97	5.72	6.51
050	fitting with one end		30.19	-	-	-	-
051	fitting with two ends		24.25	-	-	-	-
052	fitting with three ends		41.73	-	-	-	-
053	shoe		-	30.85	31.71	42.07	-
054	bend		-	19.69	23.28	42.47	-
	offset bend: projection						
055	75 mm		-	29.83	30.69	51.89	75.47
056	115 mm		-	29.46	30.33	52.98	77.10
057	150 mm		-	29.10	29.96	51.73	75.47
058	225 mm		-	31.88	32.74	59.06	85.97
059	300 mm		-	35.50	37.81	59.42	90.98
060	375 mm		-	64.03	64.89	88.39	138.26
061	450 mm		-	73.38	74.24	106.79	169.15
062	oblique branch		-	45.37	50.14	56.40	75.98
063	ADD to Items 33.049 to 33.062 where with ears: to masonry		3.58	3.61	3.65	4.26	7.96
064	Jointing pipe to existing cast iron pipe		13.95	15.81	17.50	19.69	22.68
065	Rainwater head: galvanised pipe nails: to masonry		81.17	82.88	83.90	112.94	114.99
066	Hopper head: galvanised pipe nails: to masonry		59.55	61.25	62.27	77.53	-
067	Rainwater diverter: tank connector, nozzle, collector pipe		-	37.59	38.62	-	-
	Roof outlet: casting into concrete						
068	circular grating as BS Table 21		122.77	126.32	134.91	156.77	-
069	square grating as BS Table 20		163.25	168.06	179.66	233.47	-
070	domical grating as BS Table 21		148.02	155.05	165.89	173.75	-

	1	2	3	4	5
	Fixing only				
	Nominal size				
	50 mm	65 mm	75 mm	100 mm	150 mm
	£	£	£	£	£
<i>Metre</i>					
Pipe					
without ears	11.16	12.44	13.65	15.12	17.04
ADD for holderbats	1.71	2.05	2.39	2.74	3.08
with ears: to masonry	11.30	12.59	13.80	15.27	17.19
<i>Each</i>					
Extra for: without ears					
fitting with one end	9.41	-	-	-	-
fitting with two ends	15.39	-	-	-	-
fitting with three ends	20.52	-	-	-	-
shoe	-	11.12	11.97	17.10	22.23
bend	-	11.97	12.82	17.95	23.08
offset bend: projection	-	12.82	13.69	18.81	23.94
oblique branch	-	22.23	23.94	29.07	34.20
double oblique branch	-	32.49	33.35	38.48	43.61
ADD to Items 33.074 to 33.081 where with ears:					
to masonry	2.20	2.54	2.89	3.23	3.57
Rainwater or hopper head: galvanised pipe nails:					
to masonry	10.26	11.97	13.00	15.05	17.10
Rainwater diverter: tank connector, nozzle, collector pipe	-	10.26	11.28	-	-

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33: DRAINAGE ABOVE GROUND

ALUMINIUM PIPEWORK AND ANCILLARIES

Specification

Pipes and fittings: Agrément certified and:

- a. minimum thickness 1 mm;
- b. joint type: mastic sealed.

Supports: approved pipe fixings.

Item		1	2	3	4	5	6	7	8
		Supplying and fixing				Fixing only			
		Nominal size							
		50 mm	63 mm	76 mm	102 mm	50 mm	63 mm	76 mm	102 mm
33	Metre	£	£	£	£	£	£	£	£
	Pipe: with ears								
090	to timber	13.65	21.46	23.92	35.02	3.43	3.67	3.88	4.16
091	to masonry	14.51	22.32	24.79	35.89	4.29	4.53	4.75	5.04
092	to metal	14.50	22.31	24.78	35.88	3.76	4.00	4.22	4.51
	Each								
	Extra for								
093	connection to pipe socket: connector or cement joint	3.20	3.57	3.94	4.35	3.20	3.57	3.94	4.35
094	fitting with one end	11.96	-	-	-	3.93	-	-	-
095	fitting with two ends	15.73	-	-	-	4.61	-	-	-
096	fitting with three ends	32.05	-	-	-	5.30	-	-	-
097	shoe	-	13.97	18.40	22.74	-	3.93	4.11	4.28
098	bend: 92° or 112½°	-	19.54	24.18	28.49	-	4.28	4.45	4.61
099	bend: 135°	-	27.63	42.86	51.47	-	4.78	4.96	5.13
	offset bend: projection								
100	76 mm	-	33.86	43.00	48.24	-	5.30	5.47	5.65
101	114 mm	-	36.69	44.87	52.73	-	5.65	5.82	5.98
102	152 mm	-	41.01	49.27	56.79	-	5.98	6.15	6.33
103	229 mm	-	43.71	53.74	60.78	-	6.33	6.50	6.67
104	305 mm	-	48.32	58.25	65.35	-	6.67	6.84	7.02
105	381 mm	-	49.44	59.73	72.46	-	7.02	7.19	7.35
106	457 mm	-	50.63	61.28	79.72	-	7.35	7.52	7.69
107	533 mm	-	52.87	65.14	85.78	-	7.69	7.87	8.04
108	610 mm	-	55.00	69.00	92.01	-	8.04	8.21	8.38

33: DRAINAGE ABOVE GROUND

ALUMINIUM PIPEWORK AND ANCILLARIES - continued

Item	Each	1	2	3	4	5	6	7	8
		Supplying and fixing				Fixing only			
		Nominal size							
		50 mm	63 mm	76 mm	102 mm	50 mm	63 mm	76 mm	102 mm
33		£	£	£	£	£	£	£	£
	Extra for								
109	branch: 92° or 112½°	-	37.61	44.34	57.42	-	5.65	5.82	5.98
110	branch: 135°	-	80.42	95.78	106.02	-	5.65	5.82	5.98
111	Joining pipe to existing aluminium pipe	14.44	16.28	18.08	22.72	14.44	16.28	18.08	22.72
112	Rainwater head: to masonry	-	26.90	28.61	41.49	-	3.93	5.65	8.38
113	Hopper head: to masonry	-	36.75	39.96	60.73	-	3.93	5.65	8.38
114	Rainwater diverter: pvc-u flexible pipe	-	41.65	47.54	-	-	3.93	5.65	-
		<i>Metre</i>							
	Resecuring pipe and fittings: nominal size								
115	51 mm	2.07							
116	63 mm	2.31							
117	76 mm	2.52							
118	102 mm	2.81							

PIPEWORK SUNDRIES

Specification

Plastics: UPVC or polypropylene from an approved manufacturer.

Galvanised and copper wire balloon gratings:
to BS 416-1 Table 22 and BS EN 877.

		1	2	3	4
		Nominal size of outlet or pipe			
		50 mm	65 mm	75 mm	100 mm
		£	£	£	£
	<i>Each</i>				
	Balloon grating				
119	galvanised wire	3.62	3.62	3.67	3.81
120	copper wire	4.13	4.23	4.53	4.90
121	plastics	-	2.27	2.42	2.54

33: DRAINAGE ABOVE GROUND

WORK TO EXISTING PIPEWORK

Item		Each	£
33			
122	Cleaning out rainwater stack and fittings - <i>per storey height</i>		11.97
123	Remaking joint to existing pipe: any material: any size: removing old and providing new jointing materials		17.10
124	Connecting rainwater pipe into socket of existing drain pipe: any material: any size: connector or cement joint		7.25

FIBRE CEMENT GUTTERS

Specification

Gutters and fittings:

- from an approved manufacturer;
- brackets: galvanised mild steel, fascia or rafter type;
- joints: mastic sealed and bolted together with galvanised mild steel gutter bolts, nuts and washers.

		1	2	3	4	5	6
		Supplying and fixing			Fixing only		
		Nominal size					
		125 mm	150 mm	200 mm	125 mm	150 mm	200 mm
<i>Metre</i>		£	£	£	£	£	£
125	Half round gutter: to timber	31.84	36.29	43.59	16.01	17.27	21.14
<i>Each</i>							
	Extra for						
126	stopped end	8.28	9.82	11.65	4.39	5.32	6.23
127	angle: 90°, 120° or 135°	22.29	26.01	31.79	10.29	12.22	14.36
128	outlet: any diameter	20.13	26.14	30.07	10.29	12.22	14.36
129	stopped end outlet: any diameter	20.13	26.14	30.07	10.29	12.22	14.36
130	Jointing gutter to existing fibre cement gutter	6.11	6.76	7.36	6.11	6.76	7.36

	<i>Metre</i>	£
	Resecuring gutter and fittings: nominal size	
131	125 mm	9.52
132	150 mm	10.11
133	200 mm	11.19

33: DRAINAGE ABOVE GROUND

PLASTICS GUTTERS

Specification

UPVC gutters and fittings: to the relevant parts
BS EN 12200-1, BS EN 607 and BS EN 1462, and:
a. Kitemark certified;
b. brackets: as recommended by the manufacturer;
c. joints: in accordance with the manufacturer's recommendations.

Supplying and fixing

Item					
		1	2	3	4
		Nominal size			
		100 mm	112 mm	125 mm	150 mm
		£	£	£	£
33	<i>Metre</i>				
134	Half round gutter: to timber	16.03	15.61	19.24	32.79
	<i>Each</i>				
	Extra for				
135	stopped end	4.92	4.91	6.39	11.47
136	angle: 90° or 135°	11.41	11.12	13.47	28.00
137	outlet: any diameter	11.70	11.49	13.97	26.43
138	stopped end outlet: any diameter	11.97	12.44	7.89	11.37
139	Jointing gutter to existing plastics gutter	9.05	8.02	9.78	17.79

Fixing only

		1	2	3	4
		Nominal size			
		100 mm	112 mm	125 mm	150 mm
		£	£	£	£
	<i>Metre</i>				
140	Half round gutter: to timber	10.60	11.17	12.62	18.06
	<i>Each</i>				
	Extra for				
141	stopped end	2.84	3.14	3.42	4.00
142	angle: 90° or 135°	5.13	5.42	5.72	6.84
143	outlet: any diameter	7.04	7.07	7.90	11.37
144	stopped end outlet: any diameter	7.04	7.07	7.90	11.37
145	Jointing gutter to existing plastics gutter	9.04	8.02	9.79	17.79
	<i>Metre</i>				
146	Resecuring gutter and fittings: nominal size	5.70	6.27	6.84	8.56

33: DRAINAGE ABOVE GROUND

CAST IRON GUTTERS

Specification

Gutters and fittings: to BS 460 and:

- a. brackets:
 1. half round gutters: galvanised mild steel brackets, fascia or rafter type, or cast iron fascia brackets;
 2. ogee gutters: fix direct to fascia with screws and large washers or on cast iron fascia brackets;

- b. joints: mastic sealed and bolted together with galvanised mild steel gutter bolts, nuts and washers;
- c. coating: as BS 460 Clause 7.

Supplying and fixing

Item			1	2	3	4	5
			Nominal size				
			75 mm	100 mm	115 mm	125 mm	150 mm
33		Metre	£	£	£	£	£
147	Gutter: half round: to timber		28.54	30.11	31.84	34.79	48.88
		Each					
	Extra for						
148	stopped end		7.36	7.74	8.79	9.20	11.33
149	angle: 90°, 120° or 135°		20.04	21.00	21.14	26.57	35.19
150	outlet: any diameter		18.78	20.53	21.48	23.41	33.58
151	stopped end outlet: any diameter		21.18	22.25	23.70	25.91	37.12
		Metre					
152	Gutter: ogee: to timber		-	32.51	35.13	37.00	-
		Each					
	Extra for						
153	stopped end		-	7.82	8.90	9.32	-
154	angle: 90°, 120° or 135°		-	21.83	22.83	27.76	-
155	outlet: any diameter		-	21.63	22.37	24.58	-
156	stopped end outlet: any diameter		-	19.04	18.96	21.63	-
157	Jointing gutter to existing cast iron gutter: half round or ogee		4.82	5.47	6.11	6.76	-
		Metre					
	Gutter: to timber						
158	half round		15.66	16.82	18.01	18.60	21.19
159	ogee		-	17.70	18.85	19.91	-

Fixing only

Metre

Gutter: to timber

33: DRAINAGE ABOVE GROUND

CAST IRON GUTTERS - *continued*

		1	2	3	4	5
		Nominal size				
		75 mm	100 mm	115 mm	125 mm	150 mm
Item		£	£	£	£	£
33	Fixing only - <i>continued</i>					
	<i>Each</i>					
	Extra for: half round or ogee					
160	stopped end	4.27	4.34	4.39	4.81	5.21
161	angle	10.59	10.66	10.72	11.13	12.29
162	outlet	10.59	10.66	10.72	11.13	12.29
163	stopped end outlet	10.59	10.66	10.72	11.13	12.29
	Resecuring					
	<i>Metre</i>					
	Gutters and fittings					
164	half round	7.98	8.53	9.06	9.61	10.17
165	ogee	-	9.56	10.10	10.64	-

GALVANISED PRESSED STEEL GUTTERS

Specification

Gutters and fittings:

- brackets: galvanised mild steel straps: bent and drilled:
 - 44 x 6 mm for gutters not exceeding 500 mm girth;
 - 51 x 10 mm for gutters exceeding 500 mm girth;

- joint: mastic sealed and bolted together with galvanised mild steel gutter bolts, nuts and washers.
- treatment: hot dip galvanized to BS EN ISO 146: after manufacture.

		1	2	3	4	5	6
		Girth					
		381 mm	457 mm	533 mm	762 mm	914 mm	1067 mm
		£	£	£	£	£	£
	Supplying and fixing						
	<i>Metre</i>						
	Box, boundary wall or valley gutter						
166	bedding in cement-sand (1:3)	123.40	144.34	162.85	218.04	248.03	273.78
	on gutter straps						
167	to timber	129.42	151.49	178.07	239.61	273.84	303.83
168	to masonry	131.13	153.20	179.81	241.33	275.55	305.53
169	to metal	130.27	152.35	178.92	240.47	274.70	304.68

33: DRAINAGE ABOVE GROUND

GALVANISED PRESSED STEEL GUTTERS - *continued*

Item		1	2	3	4	5	6
		Girth					
		381 mm	457 mm	533 mm	762 mm	914 mm	1067 mm
33	<i>Each</i>	£	£	£	£	£	£
	Extra for						
170	stopped end	31.07	35.47	38.82	50.31	55.69	59.78
171	angle	42.85	48.25	58.42	74.70	81.86	86.84
	outlet: nominal size						
172	76 or 102 mm	36.17	36.17	36.17	36.17	36.17	36.17
173	127 or 152 mm	44.16	44.16	44.16	44.16	44.16	44.16
174	Jointing gutter to existing pressed steel gutter	12.31	17.48	22.46	27.83	33.01	38.18
	Fixing only						
	<i>Metre</i>						
	Box, boundary wall or valley gutter						
175	bedding in cement-sand (1:3) on gutter straps	11.13	16.41	21.52	27.20	32.59	38.00
176	to timber	10.98	16.16	21.15	26.51	31.68	36.87
177	to masonry	12.70	17.87	22.90	28.22	33.40	38.57
178	to metal	11.83	17.02	22.00	27.36	32.55	37.72
	<i>Each</i>						
	Extra for						
179	stopped end	5.81	7.19	8.20	9.90	11.26	12.63
180	angle	9.23	11.29	13.00	15.38	17.42	19.47
181	outlet	10.34	10.34	10.34	10.34	10.34	10.34
	Resecuring						
	<i>Metre</i>						
182	Gutter: on gutter straps	7.81	11.42	15.04	19.03	22.84	26.66

33: DRAINAGE ABOVE GROUND

ALUMINIUM GUTTERS

Specification

Gutters and fittings: Agrément certified and:

- minimum thickness 1.5 mm;
- brackets: cast aluminium alloy, fascia or rafter type;
- joints: mastic sealed and bolted together with aluminium gutter bolts, nuts and washers.

Supplying and fixing

1	2	3	4	5	6
Half round			Ogee		
Nominal size					
102 mm	114 mm	127 mm	102 mm	114 mm	127 mm
£	£	£	£	£	£

Item							
33	<i>Metre</i>						
183	Gutter: to timber	28.39	31.22	35.77	45.59	57.59	61.73
	<i>Each</i>						
	Extra for						
184	stopped end	7.59	7.96	9.43	9.32	11.14	14.21
185	angle: 90°	15.99	17.49	19.56	18.06	23.93	26.21
186	angle: 135°	30.43	31.95	34.94	18.06	23.93	44.79
187	outlet: any diameter	22.01	20.77	21.82	25.37	25.61	32.27
188	stopped end outlet: any diameter	19.42	18.99	19.68	20.32	21.80	28.58
189	Jointing gutter to existing aluminium gutter	5.28	5.92	6.57	5.41	6.10	6.74
	Fixing only						
	<i>Metre</i>						
190	Gutter: to timber	13.41	14.64	17.65	19.98	23.36	25.46
	<i>Each</i>						
	Extra for						
191	stopped end	3.46	3.70	3.93	3.63	3.88	4.11
192	angle outlet or stopped end outlet	7.39	7.64	7.87	7.57	7.81	8.04
	Resecuring						
	<i>Metre</i>						
193	Gutter and fittings	7.80	8.42	9.06	8.94	9.58	10.76

33: DRAINAGE ABOVE GROUND

WORK TO EXISTING GUTTERS

Item		1	2
		Not	Exceeding
		exceeding	300 mm
		300 mm	girth
		girth	
33		Metre	Square
			Metre
		£	£
194	Cleaning out roof gutter, outlet or the like: removing rubbish (where executed separately from painters' work)	3.42	10.27
	<i>Each</i>		£
195	Remaking joint to existing gutter: any material: any size: removing old and providing new jointing materials		20.85

FOUL DRAINAGE INSTALLATIONS

GENERALLY

Specification

Workmanship: comply with BS 8000-13 and the relevant parts of BS EN 12056-2.

Fixing pipes: assemble, joint and fix ensuring provision is made for thermal movement.

Pipes passing through structure: sleeve as ordered.

Dissimilar pipe types: when jointing pipes of dissimilar materials ensure that:

- a. pipe materials are compatible; or
- b. a suitable adaptor is used.

Air test: carry out in accordance with BS EN 12056-2 with ends of pipework sealed to a pressure of 38 mm water gauge (50 mm in Scotland) maintained for three minutes (five minutes in Scotland) without introduction of additional air.

Performance test: carry out in accordance with BS EN 12056-2 ensuring:

- a. retention of 25 mm water seal in traps after test;
- b. back pressure does not blow through trap seals.

Definition of terms

Connector: includes thimbles, ferrules, caulking bushes, caps and linings or other fittings or adaptors, whether equal or reducing, or a combination of any of the above necessary to achieve the connection.

Reducer: includes diminishing pieces, reducing sets or socket reducers but excludes tapers.

Pipe bracket or clip: pipe support screwed to background.

Holderbat: pipe support built in or cut and pinned to background.

Notes

Cutting and pinning:

Pay for at the Rates in Section 41.

Method of measurement

Pipe:

Measure over all fittings and branches.

Reducing fittings:

Measure extra over the largest pipe in which they occur.

Rates for the following include

Generally:

For testing.

Pipe:

For joints in the running length.

For fixing without supports where no background or supports are stated.

For fixing in ducts or chases or embedding in floor screeds or in situ concrete.

For cutting and jointing to fittings.

For marking out for holes, mortices, chases or the like.

Fixing to stated background:

For providing supports and fixing by whatever means are necessary to uphold the item, including any plugging, shot firing or drilling and tapping necessary and the provision of fixing materials including matching screws where appropriate, but excluding cutting and pinning.

Jointing pipe to existing:

For cleaning and preparing to receive new.

For connector if necessary.

Fixing only:

For providing supports and fixing materials.

Resecuring pipe and fittings:

For providing new supports and fixing materials as necessary.

33: DRAINAGE ABOVE GROUND

PLASTICS PIPEWORK: UPVC

Specification

Ring seal jointed pipes and fittings: to BS 4514 for 82 mm nominal size and BS EN 1329-1 for other sizes, Kitemark certified.

Solvent cement jointed pipes and fittings: to BS 4514 for 82 mm nominal size and BS EN 1329-1 for other sizes, Kitemark certified, and fitted with additional ring seal expansion/contraction connectors.

Rates for the following include

Generally:
For ring seal or solvent cement joints.

		1	2	3	4	5	6
		Supplying and fixing			Fixing only		
		Nominal size					
Item		82 mm	110 mm	160 mm	82 mm	110 mm	160 mm
33	Metre	£	£	£	£	£	£
196	Pipe	16.94	19.03	37.75	7.75	9.67	12.03
	ADD for PVC clips						
197	to timber	4.98	4.63	-	4.98	4.63	-
198	to masonry	7.27	6.92	-	7.27	6.92	-
199	to metal	7.54	7.20	-	7.54	7.20	-
200	to glazed tiles	8.60	8.26	-	8.60	8.26	-
	ADD for PVC coated or galvanised mild steel clips						
201	to timber	8.99	9.10	15.61	8.99	9.10	15.61
202	to masonry	11.56	11.66	18.17	11.56	11.66	18.17
203	to metal	11.89	11.99	18.50	11.89	11.99	18.50
204	to glazed tiles	13.12	13.23	19.73	13.12	13.23	19.73
205	ADD for PVC coated or galvanised mild steel holderbats	-	14.19	22.84	-	14.19	22.84
	Each						
	Extra for						
206	connection to pipe socket: connector or cement joint	15.82	16.87	34.75	7.91	8.26	8.60
207	large socket for glazed ware	-	20.37	-	-	8.26	-
208	large socket for glazed ware: 300 mm long	17.11	19.98	-	7.91	8.26	-
209	loose socket	14.21	16.01	31.86	7.91	8.26	8.60
210	socket plug	-	14.02	-	-	8.26	-
211	spigot cap	20.69	23.51	-	7.91	8.26	-
212	reducer	17.79	17.50	31.68	7.91	8.26	8.60

33: DRAINAGE ABOVE GROUND

PLASTICS PIPEWORK: UPVC - *continued*

Item 33	Each	1	2	3	4	5	6
		Supplying and fixing			Fixing only		
		Nominal size					
		82 mm	110 mm	160 mm	82 mm	110 mm	160 mm
		£	£	£	£	£	£
	Extra for						
213	bend	17.46	19.54	49.29	7.91	8.26	8.60
214	adjustable bend: circular access door screwed and sealed	47.21	-	105.06	7.91	-	8.60
	offset bend						
215	socket end	19.87	22.99	54.18	7.91	8.26	8.60
216	spigot end	17.91	18.73	49.88	7.91	8.26	8.60
217	WC outlet bend	22.69	25.23	-	7.91	8.26	-
218	waste branch	-	54.96	-	-	9.97	-
219	swept tee branch	27.42	26.32	84.59	9.63	9.97	10.30
220	swept tee branch: circular access door screwed and sealed	-	48.17	-	9.63	9.97	-
221	double swept tee branch	-	57.18	-	-	9.97	-
222	circular access door screwed and sealed	27.67	28.07	64.06	7.91	8.26	8.60
223	Jointing pipe to existing plastics pipe	9.46	12.24	15.46	9.46	12.24	15.46
	Metre						£
	Resecuring pipe and fittings: any type of supports: nominal size						
224	82 mm						10.30
225	110 mm						10.99
226	160 mm						11.67

33: DRAINAGE ABOVE GROUND

PLASTICS PIPEWORK: MODIFIED UPVC

Specification

Supports: approved clips.

Ring seal jointed pipes and fittings: to BS 5255, Kitemark certified.

Rates for the following include

Solvent cement jointed pipes and fittings: to BS 5255, Kitemark certified, and fitted with additional ring seal expansion/contraction connectors.

Generally:
For ring seal or solvent cement joints.

1	2	3	4	5	6
Supplying and fixing			Fixing only		
Nominal size					
32 mm	40 mm	50 mm	32 mm	40 mm	50 mm
£	£	£	£	£	£

Item							
33	<i>Metre</i>						
227	Pipe	10.36	11.42	13.41	8.75	9.48	10.55
	ADD for clips						
228	to timber	2.65	3.00	3.97	2.65	3.00	3.97
229	to masonry	5.12	5.47	6.31	5.12	5.47	6.31
230	to metal	6.20	6.54	7.56	6.20	6.54	7.56
231	to glazed tiles	7.60	8.29	9.64	7.60	8.29	9.64
	<i>Each</i>						
	Extra for						
	connection to pipe end						
232	straight connector: screwed joint to steel	11.17	12.01	13.69	8.80	9.52	10.59
233	straight connector: compression joint to copper	10.56	11.66	14.01	8.11	8.84	9.91
234	connection to pipe socket: connector or cement joint	8.41	8.91	11.25	6.74	7.13	7.85
	connection to appliance or equipment						
235	straight	10.90	11.90	-	8.11	8.84	-
236	bent	11.78	12.63	-	8.11	8.84	-
237	fitting with one end	8.00	8.49	10.09	6.74	7.13	7.85
238	fitting with two ends	10.19	11.05	13.93	8.11	8.84	9.91
239	fitting with three ends	12.74	14.32	17.47	9.48	10.55	11.96
240	Jointing pipe to existing plastics pipe	12.21	13.28	14.70	12.21	13.28	14.70
	<i>Metre</i>						£
	Resecuring pipe and fittings: nominal size.						
241	32 mm						6.84
242	40 mm						8.56
243	50 mm						10.26

33: DRAINAGE ABOVE GROUND

PLASTICS PIPEWORK: POLYPROPYLENE

Specification

Supports: approved clips.

Pipes and fittings: to BS 5255 or BS EN 1451-1 and:

- a. Kitemark certified;
- b joints: ring seal.

Item		1	2	3	4	5	6
		Supplying and fixing			Fixing only		
		Nominal size					
		32 mm	40 mm	50 mm	32 mm	40 mm	50 mm
33	Metre	£	£	£	£	£	£
244	Pipe	11.96	12.95	14.63	10.61	11.28	12.49
	ADD for clips						
245	to timber	2.54	2.90	3.83	2.54	2.90	3.83
246	to masonry	5.07	5.43	6.23	5.07	5.43	6.23
247	to metal	6.15	6.50	7.48	6.15	6.50	7.48
248	to glazed tiles	7.56	8.25	9.56	7.56	8.25	9.56
	Each						
	Extra for						
	connection to pipe end						
249	straight connector: screwed joint to steel	12.35	13.11	15.46	9.97	10.59	12.33
250	straight connector: compression joint to copper	12.12	13.03	15.81	9.28	9.91	11.65
251	connection to pipe socket: connector or cement joint	8.77	9.09	11.35	7.91	8.20	9.59
	connection to appliance or equipment						
252	straight	12.12	13.03	-	9.28	9.91	-
253	bent	11.83	13.05	-	9.28	9.91	-
254	fitting with one end	8.88	9.19	11.34	7.91	8.20	9.59
255	fitting with two ends	10.42	11.26	13.77	9.28	9.91	11.65
256	fitting with three ends	12.90	14.36	17.71	10.65	11.62	13.70
257	Joining pipe to existing plastics pipe	13.39	14.35	16.43	13.39	14.35	16.43
	Metre						£
	Resecuring pipe and fittings: nominal size						
258	32 mm						6.84
259	40 mm						8.56
260	50 mm						10.26

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK

Specification

Spigot and socket pipes and fittings: to BS 416-1 and:

- joints: hempen yarn with run lead or with lead wool where approved;
- socket type: A, either without ears or with projecting or flat ears cast on;
- coating: as in BS 416-1 Clause 3 d) and BS EN 877.

Spigot ended pipes and fittings: to BS EN 877 with flexible joint couplings to BS EN 877. Pipes, fittings and couplings to be Kitemark certified and:

- joints: pipe manufacturer's approved joint;
- with joints provided with a means of ensuring electrical continuity;
- coating: as BS 416-1 Clause 3 d) and BS EN 877.

Supports:

- pipes without ears: cast iron holderbats with cadmium plated mild steel bolts;
- pipes with ears: galvanised pipe nails. Fix pipes with flat ears with 19 mm diameter galvanised steel barrel distance pieces.

		1	2	3	4	5	6	7	8
		Supplying and fixing							
		Spigot and socket pipes				Spigot ended pipes			
		Nominal size							
Item		50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm
33	Metre	£	£	£	£	£	£	£	£
261	Pipe: without ears	49.96	52.69	68.03	115.85	41.88	48.17	57.95	97.64
262	ADD for holderbats	9.25	11.11	12.64	15.36	9.07	10.94	12.47	15.19
263	Pipe: with ears: to masonry	55.38	58.05	73.27	122.96	-	-	-	-
	Each								
	Extra for								
264	connection to pipe socket: connector or cement joint	3.53	4.97	5.72	6.51	3.53	4.97	5.72	6.51
265	fitting with one end	23.79	30.39	36.24	-	31.37	37.15	43.32	61.65
266	fitting with two ends	47.56	-	-	-	49.59	-	-	-
267	fitting with three ends	69.17	-	-	-	67.02	-	-	-
	large socket for glazed ware								
268	300 mm long	-	-	64.69	-	-	-	84.30	148.72
269	450 mm long	-	-	73.17	-	-	-	94.15	-
270	600 mm long	-	-	82.01	-	-	-	104.42	-
	large socket for glazed ware with parallel anti- syphonage branch								
271	300 mm long	-	-	96.49	-	-	-	-	-
272	450 mm long	-	-	125.51	-	-	-	-	-

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK - *continued*

Item									
		1	2	3	4	5	6	7	8
		Supplying and fixing							
		Spigot and socket pipes				Spigot ended pipes			
		Nominal size							
50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm		
33	Each	£	£	£	£	£	£	£	
	Extra for								
273	socket plug	-	46.09	49.99	57.10	-	41.66	48.40	67.06
274	socket ferrule	-	84.02	87.92	94.81	-	59.40	66.09	85.49
275	piece: screwed boss	-	98.23	110.66	146.02	-	75.23	90.18	133.12
276	piece: two screwed bosses	-	118.22	129.63	165.04	-	88.01	102.97	142.51
277	piece: four screwed bosses	-	158.16	167.57	202.99	-	-	-	-
278	socket reducer	-	39.02	47.28	66.59	-	59.64	72.34	115.67
279	taper	-	81.42	85.22	144.72	-	61.96	76.12	119.35
280	bend	-	53.71	70.36	99.89	-	57.66	69.76	103.01
281	long radius bend	-	85.22	98.05	-	-	70.99	84.88	145.57
282	long tail bend	-	-	96.52	-	-	-	76.87	-
	offset bend: projection								
283	75 mm	-	61.00	82.72	-	-	66.30	73.59	108.00
284	115 mm	-	61.00	82.72	-	-	68.89	79.99	119.49
285	150 mm	-	61.00	82.72	-	-	73.88	81.52	122.22
286	225 mm	-	64.57	88.93	-	-	83.79	84.65	127.83
287	300 mm	-	69.52	96.86	-	-	89.84	87.45	132.83
288	375 mm	-	85.50	129.88	-	-	-	-	-
289	450 mm	-	-	148.48	-	-	-	-	-
290	oblique branch	-	79.49	107.21	164.96	-	89.03	109.48	195.37
291	oblique long branch	-	-	179.92	-	-	-	176.24	-
292	double oblique branch	-	-	139.98	-	-	113.86	130.38	246.93
293	oblique branch: two screwed bosses: 450 mm long arm: large socket for glazed ware	-	-	107.12	-	-	-	-	-
	oblique branch: large socket for glazed ware								
294	300 mm long arm	-	-	96.50	-	-	-	-	-
295	450 mm long arm	-	-	152.84	-	-	-	-	-
296	600 mm long arm	-	-	199.92	-	-	-	-	-

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK - <i>continued</i>									
	1	2	3	4	5	6	7	8	
<i>Each</i>	Supplying and fixing								
	Spigot and socket pipes				Spigot ended pipes				
	Nominal size								
	50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm	
	£	£	£	£	£	£	£	£	£
Extra for									
oblique branch: large socket for glazed ware with anti-syphonage branch									
300 mm long arm	-	-	119.19	-	-	-	-	-	-
450 mm long arm	-	-	166.41	-	-	-	-	-	-
600 mm long arm	-	-	212.32	-	-	-	-	-	-
inverted oblique branch . . .	-	85.02	112.75	170.48	-	-	-	-	-
parallel branch	-	96.85	115.68	-	-	91.44	111.29	-	-
inverted parallel branch . . .	-	85.02	112.75	-	-	-	-	-	-
inverted double oblique branch	-	146.45	165.28	258.95	-	-	-	-	-
ADD for									
rectangular access door bolted and sealed	-	90.75	95.71	128.25	94.82	96.36	104.31	138.40	
oval or round access door screwed and sealed	80.55	82.60	88.86	122.62	-	59.82	63.54	85.91	
Jointing pipe to existing cast iron pipe	22.17	28.14	34.11	42.60	20.25	24.74	31.53	49.30	
Remaking joint to existing pipe: removing old and providing new jointing material	18.76	23.00	27.27	34.05	16.84	21.31	28.12	45.89	

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK - *continued*

		1	2	3	4	5	6	7	8
Fixing Only		Fixing only							
		Spigot and socket pipes				Spigot ended pipes			
		Nominal size							
		50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm
Item	Metre	£	£	£	£	£	£	£	£
33									
308	Pipe: without ears	18.03	21.92	25.82	30.16	17.10	20.52	23.94	27.36
309	ADD for holderbats	0.35	1.02	1.37	1.71	0.17	0.85	1.20	1.54
310	Pipe: with ears: to masonry . .	21.45	25.35	29.23	33.59	-	-	-	-
Each									
Extra for									
311	fitting with one end	18.76	-	-	-	17.10	-	-	-
312	fitting with two ends	28.98	-	-	-	25.66	-	-	-
313	fitting with three ends	39.18	-	-	-	34.20	-	-	-
314	bend	-	35.66	42.42	50.82	-	30.79	35.91	41.04
315	offset bend: any projection	-	38.23	44.99	53.38	-	33.35	38.48	43.61
316	oblique branch	-	48.31	57.59	69.28	-	41.04	47.89	54.72
317	double oblique branch	-	60.97	72.75	87.75	-	51.30	59.86	68.40

		1	2
		With ears	With holderbats
Metre		£	£
Resecuring pipe and fittings: nominal size			
318	50 mm	8.56	8.38
319	75 mm	11.97	11.80
320	100 mm	13.69	13.51
321	150 mm	19.49	19.15

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK: LIGHTWEIGHT

Specification

Spigot ended pipes and fittings: to BS EN 877.
Pipes, fittings and couplings to be manufactured by a BSI Kitemark Licensee and:

- joints: pipe manufacturer's approved joint;
- with joints provided with a means of ensuring electrical continuity;
- coating: as BS 416-1 Clause 9 and BS EN 877.

Supports:

- pipes without ears: cast iron holderbats with cadmium plated mild steel bolts;
- pipes with ears: galvanised pipe nails. Fix pipes with flat ears with 19 mm diameter galvanised steel barrel distance pieces.

		1	2	3	4	5	6	7	8
		Spigot ended pipes: lightweight							
		Supplying and fixing				Fixing only			
		Nominal size							
Item		50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm
33	Metre	£	£	£	£	£	£	£	£
322	Pipe: without ears	33.80	39.64	58.26	73.35	17.10	20.52	23.94	27.36
323	ADD for holderbats	9.07	10.94	12.47	15.19	0.17	0.85	1.20	1.54
Each									
Extra for									
324	connection to pipe socket: connector or cement joint	3.53	4.97	5.72	6.51	3.53	4.97	5.72	6.51
325	fitting with one end	26.05	30.10	-	-	17.10	20.52	-	-
326	fitting with two ends	39.56	46.20	-	-	25.66	30.79	-	-
327	fitting with three ends	54.38	66.22	-	-	34.20	41.04	-	-
328	piece: screwed boss	-	58.66	69.00	99.91	-	30.79	35.91	41.04
329	piece: two screwed bosses	-	-	77.40	124.89	-	-	35.91	41.04
330	taper	-	50.49	57.76	87.56	-	30.79	35.91	41.04
331	bend	-	46.20	52.81	76.31	-	30.79	35.91	41.04
332	long radius bend	-	-	74.21	152.55	-	-	35.91	41.04
333	long tail bend	-	-	63.26	-	-	-	35.91	-

33: DRAINAGE ABOVE GROUND

CAST IRON PIPEWORK: LIGHTWEIGHT - *continued*

Item		1	2	3	4	5	6	7	8
		Spigot ended pipes: lightweight							
		Supplying and fixing				Fixing only			
		Nominal size							
		50 mm	75 mm	100 mm	150 mm	50 mm	75 mm	100 mm	150 mm
33	Each	£	£	£	£	£	£	£	£
	Extra for								
	offset bend: projection								
334	75 mm	-	53.28	62.82	-	-	33.35	38.48	-
335	150 mm	-	63.83	76.67	-	-	33.35	38.48	-
336	oblique branch	-	72.85	85.20	168.34	-	41.04	47.89	54.72
337	oblique long branch	-	-	138.69	-	-	-	47.89	-
338	double oblique branch	-	-	105.06	221.93	-	-	59.86	68.40
	ADD for								
339	rectangular access door bolted and sealed	-	-	77.95	109.45	-	-	23.94	27.36
340	oval or round access door screwed and sealed	-	47.68	50.60	75.36	-	20.52	23.94	27.36
341	Jointing pipe to existing cast iron pipe	16.28	20.31	25.74	37.81	10.26	13.69	17.10	20.52
342	Remaking joint to existing pipe: removing old and providing new jointing material	12.87	16.88	22.32	34.40	6.84	10.26	13.69	17.10
								1	2
								With ears	With holderbats
								£	£
Metre									
Resecuring pipe and fittings: nominal size									
343	50 mm							6.84	6.70
344	75 mm							9.58	9.44
345	100 mm							10.95	10.81
346	150 mm							15.59	15.32

33: DRAINAGE ABOVE GROUND

COPPER PIPEWORK

Specification

Supports: brass brackets or holderbats.

Pipes and fittings: to BS EN 1057, half hard to Table X or hard drawn to Table Z, and manufactured by a BSI Kitemark Licensee with:

- compression fittings: to BS EN 1254-2, Kitemark certified;
- capillary fittings: to BS EN 1254-1, Kitemark certified, with integral lead free solder rings.

Rates for the following include

Generally:

For compression or capillary fittings.

Supplying and fixing

	1	2	3	4	5	6
Nominal size						
28 mm	35 mm	42 mm	54 mm	67 mm	76.1 mm	
£	£	£	£	£	£	£

Item
33

Metre

Pipe

347	Table X	13.43	22.45	27.38	38.81	80.32	116.06
348	Table Z	11.70	19.53	24.20	34.63	73.77	106.52

ADD for brackets

349	to timber	8.27	9.21	10.42	12.11	16.04	17.54
350	to masonry	9.03	9.97	11.18	12.87	16.81	18.31
351	to metal	9.64	10.58	11.79	13.48	17.41	18.91
352	to glazed tiles	10.40	11.34	12.55	14.24	18.18	19.68
353	ADD for holderbats	7.71	8.61	9.57	10.95	14.13	17.55

Each

Extra for: any pipe type

354	made bend	6.84	9.03	11.28	14.64	16.42	20.52
355	connection to pipe end: straight connector: soldered joint to lead	43.63	56.29	68.61	91.97	-	-
	connection to pipe socket						
356	straight connector: cement joint to clay . . .	24.27	31.66	38.39	47.67	106.65	190.74
357	straight connector: caulked lead joint to metal	29.97	37.36	44.09	53.37	112.36	205.22
358	connection to appliance or equipment: straight connector: screwed joint to steel . .	21.91	34.27	48.59	62.30	-	-
359	fitting with one end	10.41	15.07	23.39	31.20	-	-
360	fitting with two ends	15.48	27.31	36.12	56.49	-	-
361	fitting with three ends	24.02	37.17	54.45	80.75	-	-

33: DRAINAGE ABOVE GROUND

COPPER PIPEWORK - *continued*

		1	2	3	4	5	6
		Nominal size					
		28 mm	35 mm	42 mm	54 mm	67 mm	76.1 mm
		£	£	£	£	£	£
Supplying and fixing - <i>continued</i>							
Item	<i>Each</i>						
33							
Extra for: any pipe type							
362	blank cap	-	-	-	-	90.40	-
363	reducer	-	-	-	-	93.38	-
364	bend	-	-	-	-	164.58	312.03
365	tee	-	-	-	-	240.88	465.45
366	Jointing pipe to existing copper pipe	14.56	25.44	32.29	44.93	118.08	170.28
Fixing only							
<i>Metre</i>							
367	Pipes and fittings	8.56	9.75	11.28	17.95	23.94	30.79
ADD for brackets							
368	to timber	8.27	9.21	10.42	12.11	16.04	17.54
369	to masonry	9.03	9.97	11.18	12.87	16.81	18.31
370	to metal	9.64	10.58	11.79	13.48	17.41	18.91
371	to glazed tiles	10.40	11.34	12.55	14.24	18.18	19.68
372	ADD for holderbats	7.71	8.61	9.57	10.95	14.13	17.55
Resecuring							
373	Pipe and fittings	5.29	6.08	7.34	9.17	-	-

LEAD PIPEWORK

Specification

Pipes: lead and lead alloy with wiped soldered joints.

Supports:

- a. cut lead tacks from lead to BS EN 12588 Colour Code Orange or from the pipe to be fixed;
- b. solder tacks to pipe and fix to background with two No. 12 brass screws.

Connectors: brass of approved quality.

Notes

Cast lead tacks:
Pay for at Rates to be agreed where specifically ordered.

Rates for the following include

Lead tacks:
For soldered single face lead tacks.

33: DRAINAGE ABOVE GROUND

WORK TO EXISTING PIPEWORK

Notes

New pipe or fitting:

Pay for separately, together with connections

Item		Each	£
33			
	Cutting into and taking out pipe: not exceeding 1 m in length: for insertion of new pipe or fitting		
	plastics: nominal size		
389	25 to 50 mm		23.25
390	50 to 100 mm		27.36
391	100 to 175 mm		31.12
	cast iron: nominal size		
392	50 to 100 mm		40.02
393	100 to 150 mm		49.93
	copper: nominal size		
394	25 to 50 mm		33.52
395	50 to 75 mm		37.62
396	75 to 100 mm		41.72

PLASTICS ANCILLARIES: POLYPROPYLENE

Specification

Traps: to BS EN 274-1, 2 and 3 and Kitemark certified.

		1	2	3	4	5
		Nominal size				
		32 mm		40mm		50mm
		Outlet type				
		P	S	P	S	P
		£	£	£	£	£
Each						
Two piece trap: 75 mm seal: joint to waste outlet						
397	push fit joint to plastics	9.81	10.74	10.40	13.29	18.43
398	push fit joint to copper	11.86	12.79	12.44	15.34	20.48
399	capillary or compression joint to copper	26.50	27.43	27.36	30.26	36.44
Three piece running trap: 75 mm seal: push fit joint to plastics one end						
400	push fit joint to plastics other end	13.64	14.42	14.33	15.19	20.72
401	push fit joint to copper other end	15.69	16.47	16.38	17.24	22.77
402	compression joint to copper other end	30.33	31.11	31.29	32.15	38.73

33: DRAINAGE ABOVE GROUND

PLASTICS ANCILLARIES: POLYPROPYLENE - *continued*

		1	2	3	4
		Nominal size			
		32 mm		40mm	
		Outlet type			
Item		P	S	P	S
33	Each	£	£	£	£
	Two piece bath trap: 75 mm seal: joint to waste outlet				
403	push fit joint to plastics	-	-	12.94	15.57
404	push fit joint to copper	-	-	14.98	17.62
405	compression joint to copper	-	-	29.90	32.53
	Two piece bath trap: 75 mm seal: overflow connection: joint to waste outlet: joint to overflow				
406	push fit joint to plastics	-	-	24.00	26.93
407	push fit joint to copper	-	-	26.05	28.98
408	compression joint to copper	-	-	40.96	43.90

1	2	3	4	5	6
Nominal size					
32 mm			40 mm		
Seal					
38 mm	75 mm	75 mm	38 mm	75 mm	75 mm
anti-syphon			anti-syphon		
£	£	£	£	£	£

	Bottle trap: joint to waste outlet					
409	push fit joint to plastics	10.19	11.29	13.17	11.67	12.57
410	push fit joint to copper	12.24	13.34	15.21	13.72	14.62
411	compression joint to copper	26.88	27.98	29.85	28.64	29.53

CAST IRON ANCILLARIES

Specification

Cast iron traps: to BS 416-1 Table 13 and BS EN 877.

		Cast iron traps: to BS 410 1 Table 10 and BS EN 677.			
		1	2	3	4
		Nominal size			
		75 mm		100 mm	
		Outlet type			
<i>Each</i>		P	S	P	S
		£	£	£	£
412	Trap: ordinary seal: two lead joints to iron	73.46	81.67	86.71	92.17
413	ADD for oval access door screwed and sealed	46.28	52.07	46.28	52.07

33: DRAINAGE ABOVE GROUND

COPPER ANCILLARIES

Specification

Traps: from an approved manufacturer:

- a. tubular: solid drawn;
- b. cast: copper alloy.

Item	Each	1	2	3	4	5	6	7	8
		Nominal size							
		32 mm		38 mm		32 mm		38 mm	
		38 mm seal				76 mm seal			
		Outlet type							
		P	S	P	S	P	S	P	S
33		£	£	£	£	£	£	£	£
	Tubular trap: cleaning eye and plug: joint to waste outlet								
414	capillary or compression joint to copper	58.43	60.11	64.73	67.51	61.79	63.51	68.95	72.66
415	soldered joint to lead	73.43	75.11	78.87	81.64	76.79	78.51	83.09	86.79
	Two piece tubular trap: joint to waste outlet								
416	capillary or compression joint to copper	60.35	62.39	66.98	70.23	62.63	64.68	70.05	73.31
417	soldered joint to lead	75.35	77.38	81.11	84.36	77.63	79.67	84.18	87.45
	Cast trap: cleaning eye and plug: joint to waste outlet								
418	capillary or compression joint to copper	67.79	75.24	81.21	94.85	77.14	92.87	96.30	103.57
419	soldered joint to lead	82.79	90.24	95.35	108.99	92.14	107.87	110.43	117.70
	Cast running trap: 76 mm seal: cleaning eye and plug: capillary or compression joints to copper: nominal size								
420	32 mm								
421	38 mm								
422	48 mm								

£

33: DRAINAGE ABOVE GROUND

COPPER ANCILLARIES - *continued*

Item		1	2	3	4
		38 mm seal		76 mm seal	
		Outlet type			
		P	S	P	S
33	<i>Each</i>	£	£	£	£
	Cast bath trap: 38 mm nominal size: cleaning eye and plug: joint to waste outlet				
423	capillary or compression joint to copper	77.14	80.91	81.04	84.96
424	soldered joint to lead	91.28	95.05	95.17	99.10
	Cast bath trap: 38 mm nominal size: cleaning eye and plug: overflow connection: joint to waste outlet: joint to overflow				
425	capillary or compression joint to copper	86.04	90.51	89.19	93.74
426	soldered joint to lead	100.18	104.64	103.33	107.87

CHANNELWORK

Specification

Clay floor channels and fittings:

- a. from an approved manufacturer;
- b. bed and joint type: cement-sand mortar (1:2).

		1	2	3	4	5
		Salt glazed		White glazed		
		Nominal size				
		100 mm	150 mm	225 mm	100 mm	150 mm
Metre		£	£	£	£	£
427	Half round section	39.01	57.76	82.85	111.47	156.01
Each						
Extra for						
428	double socket	33.13	56.24	-	-	-
429	stopped end	21.06	39.85	-	67.40	94.12
430	bend	22.44	33.52	44.36	91.32	130.87
431	junction: any type	25.59	44.75	63.20	-	-
432	double junction: any type	34.07	65.34	87.37	-	-
433	ADD for outlet	21.87	30.38	44.62	62.51	78.80
		£				
Brass hinged and locking domical grating and frame: 65 mm nominal size: bedding frame in cement-sand mortar (1:2)						
434	flanged backnut joint to clay					36.40
435	screwed joint to cast iron					39.47

33: DRAINAGE ABOVE GROUND

CLEARING OBSTRUCTIONS

Item		
33	<i>Each</i>	£
436	Clearing obstructions in WC pan and trap or hospital sluice sink: by use of plunger, drain ferret or the like	13.69
437	Taking down, cleaning and refixing waste pipe: to sink (excluding any cutting through walls)	17.10
438	Clearing trap, waste pipe and overflow pipe (if any): of wash basin, bath, sink, ablution range or the like: removing offensive matter	13.69

34: Drainage Below Ground

STORM WATER AND FOUL DRAIN SYSTEMS

GENERALLY

Reference to other Sections: the Preambles to Sections 5, 11 and 14 apply equally to this Section unless otherwise stated.

Specification

Below ground drainage system: comply with BS EN 752-1, 2, 3 and 4, BS EN 1295-1 and BS EN 1610.

Jointing pipes of dissimilar materials: ensure that

- pipe materials are compatible ; or
- a suitable adaptor is used.

Connection to Local Authority's and Water Company's sewers: make arrangements with the Local Authority / Water Company for connections to be made.

Interim and final pipeline tests: either water or air test:

- water test as follows:
 - effectively temporarily plug drain under test;
 - connect standpipe to head of drain under test;
 - fill pipes with water approximately one hour before starting test;
 - apply a test pressure of not less than 1200 mm head of water above crown of the pipes at the high end of the section being tested but not more than 6000 mm above the low end;
 - non-absorbent pipes: make good after 10 minutes loss of water indicated by a fall in level. After 30 minutes, no further measurable loss to be evident;
 - absorbent pipes: make good loss of water indicated by a fall in level and measure over a period of 30 minutes by adding water from a measuring vessel at regular intervals of 10 minutes. Record the quantity required to maintain the original water level. In interim test the average quantity added must not exceed one litre per hour per metre diameter of pipe. eg:
 - 0.05 litre per metre of 100 mm diameter pipe in 30 minutes;
 - 0.08 litre per metre of 150 mm diameter pipe in 30 minutes;
 - 0.12 litre per metre of 225 mm diameter pipe in 30 minutes;

- 0.15 litre per metre of 300 mm diameter pipe in 30 minutes;
- 0.19 litre per metre of 375 mm diameter pipe in 30 minutes;
- 0.22 litre per metre of 450 mm diameter pipe in 30 minutes;

In final tests pipelines will be considered satisfactory if, after stabilisation, water level shows no appreciable fall after 30 minutes.

- air test as follows:
 - effectively temporarily plug drain under test;
 - connect glass 'U' tube gauge to drain plug in length of drain under test at a convenient position;
 - pump or blow air into test section until pressure equivalent to 100 mm head of water is indicated;
 - where gullies and ground floor appliances are connected, pump or blow air into test section until pressure equivalent to 50 mm head of water only is indicated;
 - without further air being added, the pressure must not fall below 75 mm after a period of 5 minutes. Where gullies and ground floor appliances are connected, pressure must not fall below 38 mm after a period of 5 minutes.

If pipeline fails this test, apply water test as (a).

Interim test of underground chambers: apply interim test for watertightness before backfilling and before surrounding precast manholes with concrete as follows:

- keep external faces of chambers clear of backfill for inspection until approved;
- temporarily seal all pipe openings in chambers;
- fill chambers less than 1.5 m in depth to invert to the underside of the cover and deeper chambers to a minimum depth of 1.5 m with clean water and allow up to 8 hours for initial absorption. Top up before starting test;
- the water level should not drop over a period of 30 minutes in excess of figures in the following table:

34: DRAINAGE BELOW GROUND

GENERALLY - *continued*

Age of chamber construction up to Water Test Level	Method of Construction		
	Brickwork	Concrete sections	Clayware, plastics or any "One Piece" Chambers
Maximum permissible drop in water level (mm)			
3 to 7 days only	40	10	5
over 31 days	5	5	5

Where the drop in level during a water test on a brick manhole or inspection chamber exceeds 40 mm but does not exceed 60 mm, the test may be repeated at 31 days, when the criteria of acceptance for that period shall apply.

Final test of underground chambers: apply final test as specified for interim test except that external faces will not be exposed for inspection.

Definition of terms

Manhole: includes manholes, catchpits, soakaways and petrol / mud / oil interceptors.

Notes

Generally:
Rates in other Sections apply to drainage below ground where Rates are not given in this Section.

Method of measurement

Pipework:
Measure over all fittings and branches.

Reducing fittings:
Measure extra over the largest pipe in which they occur.

Rates for the following include

Generally:
For testing new drainage work.

Pipe:

For horizontal or vertical pipe in trench.

For joints in the running length.

For work in runs of any length unless otherwise stated.

Pipe fitting:

For cutting and jointing pipes to fitting.

Taper or the like:

For socket at small end.

Screwed or bolted access door:

For all bolts, screws, washers and drilling and tapping required.

Accessory:

For jointing to drain.

For jointing as pipework unless otherwise stated.

For setting on and surrounding with 150 mm concrete grade 20 N/mm²: 20 mm aggregate including formwork.

For extra excavation, disposal and earthwork support.

Work to existing pipework and manholes:

For removing and replacing gratings, manhole covers or the like.

For temporarily stopping drains.

34: DRAINAGE BELOW GROUND

EXCAVATING TRENCHES

Specification

Excavation: excavate to required levels with accurate and even gradients restricting trench widths to either 450 mm or 1.5 times external diameter of pipe to be laid plus 250 mm, whichever is the greater.

Selected backfill: backfill and compact by hand in 100 mm layers to 300 mm above pipes not requiring a surround with approved selected fill readily compacted, free from roots, vegetable matter, building rubbish, frozen soil, clay lumps retained on a 75 mm sieve and stones retained on a 25 mm sieve.

Main backfill: backfill with previously excavated material excluding boulders, timber, vegetable matter and waste material in layers not exceeding 300 mm thick and compact each layer.

Method of measurement

Excavating trench:

Measure uninterrupted line of excavating between manholes or between an accessory and a manhole or between accessories.

Rates for the following include

Generally:

For earthwork support.

For consolidating trench bottom.

For trimming excavations.

For forming handholes.

For backfilling and compacting.

For setting aside and replacing topsoil.

For disposing of surplus excavated materials off site.

Item		Nominal size of pipe				
		1	2	3	4	5
34	Metre	not exceeding				
		200 mm	225 mm	300 mm	375 mm	450 mm
		£	£	£	£	£
	Excavating trench: for pipe: average depth					
001	not exceeding 0.25 m	4.85	-	-	-	-
002	0.25 to 0.50 m	10.55	10.91	12.05	-	-
003	0.50 to 0.75 m	16.24	16.95	19.12	21.06	23.29
004	0.75 to 1.00 m	21.92	23.00	26.20	29.18	32.44
005	1.00 to 1.25 m	27.63	29.04	33.28	37.29	41.61
006	1.25 to 1.50 m	33.32	35.08	40.35	45.43	50.76
007	1.50 to 1.75 m	39.01	41.11	47.44	53.52	59.93
008	1.75 to 2.00 m	44.71	47.15	54.52	61.65	69.09
009	2.00 to 2.25 m	50.40	53.20	61.59	69.78	78.26
010	2.25 to 2.50 m	56.10	59.25	68.68	77.90	87.40
011	2.50 to 2.75 m	61.81	65.27	75.76	86.01	96.58
012	2.75 to 3.00 m	67.51	71.32	82.85	94.13	105.72
013	3.00 to 3.25 m	73.19	77.37	89.92	102.26	114.87
014	3.25 to 3.50 m	78.89	83.41	97.00	110.38	124.04

34: DRAINAGE BELOW GROUND

EXCAVATING TRENCHES - *continued*

Item		Metre	1	2	3	4	5
			Nominal size of pipe				
			not exceeding				
			200 mm	225 mm	300 mm	375 mm	450 mm
34			£	£	£	£	£
	Excavating trench: for pipe: average depth						
015	3.50 to 3.75 m		84.59	89.44	104.08	118.48	133.20
016	3.75 to 4.00 m		90.26	95.48	111.17	126.62	142.36
017	4.00 to 4.25 m		95.97	101.53	118.24	134.73	151.52
018	4.25 to 4.50 m		101.67	107.56	125.34	142.85	160.68
019	Where hand excavation is specifically ordered, price at the foregoing Rates multiplied by 2.00.						

GRANULAR MATERIAL

Specification

Granular material: coarse aggregate to BS EN 12620, single size or graded.

Lay granular material and compact in 100 mm layers. Do not lay granular material within 24 hours of the completion of concrete beds.

Beds: full width of trench: 100 mm thick.

Haunching: side fill half way up the pipe.

Surrounds: thickness above pipe equal to nominal pipe size.

		1	2	3
		Bed	Bed and haunching	Bed and surround
<i>Metre</i>		£	£	£
For pipe: nominal size				
020	not exceeding 200 mm	6.70	10.63	19.52
021	225 mm	7.07	11.50	22.45
022	300 mm	7.96	14.43	32.45
023	375 mm	8.71	18.20	47.28
024	450 mm	9.46	23.87	64.53
<i>Cubic Metre</i>		£		
025	Thickening to bed or surround	91.37		

34: DRAINAGE BELOW GROUND

PLAIN IN SITU CONCRETE

Specification

Concrete mix: grade 20 N/mm²: 20 mm aggregate.

Beds: 300 mm wider than external diameter of pipe:
150 mm thick.

Haunching: side fill half way up the pipe and
slope off to the crown.

Surrounds: 150 mm thick above pipe.

Vertical casing: 150 mm thick.

Compressible joint filler: bitumen impregnated
softboard to BS EN 622-4, 18 mm minimum
thick, cut to finished profile of concrete and pipe.

Construction joints: form at intervals not
exceeding 5 000 mm coinciding with pipe joints.

Rates for the following include

Generally:
For formwork.

Pipes with flexible joints:
For construction joints through concrete.

1	2	3	4	5	6
Pipes with rigid joints			Pipes with flexible joints		
Bed and haunching	Bed and surround	Vertical casing	Bed and haunching	Bed and surround	Vertical casing
£	£	£	£	£	£

Item
34

Metre

For pipe: nominal size

026	80 mm	16.15	25.90	32.87	17.89	28.52	36.36
027	100 mm	18.25	28.95	36.64	20.00	31.57	40.14
028	150 mm	21.56	33.87	42.44	23.31	36.49	45.93
029	200 mm	24.92	38.87	48.32	26.67	41.49	51.82
030	225mm	27.21	42.37	53.03	28.96	44.99	56.52
031	300 mm	31.60	49.21	60.88	33.35	51.83	64.38
032	375 mm	36.01	56.30	69.44	37.75	58.93	72.93
033	450 mm	40.41	63.58	77.73	42.16	66.21	81.22

Cubic Metre

034	Thickening to bed or surround	166.05	200.18	242.58	173.04	210.66	256.55

CONCRETE PIPEWORK

Specification

Pipes and fittings: to BS 5911-1, -3 to -6,
BS EN 1916 and BS EN 1917, and manufactured
by a BSI Kitemark Licensee:

- pipe class: M;
- cement type: Ordinary Portland;
- ogee rigid joint type: cement-sand mortar (1:2);
- spigot and socket joint type: in accordance
with the pipe manufacturer's recommendations.

34: DRAINAGE BELOW GROUND

CONCRETE PIPEWORK - *continued*

Item							
		1	2	3	4	5	6
		Ogee joints			Spigot and socket flexible joints		
		Nominal size					
34	Metre	300 mm	375 mm	450 mm	300 mm	375 mm	450 mm
		£	£	£	£	£	£
035	Pipe	33.01	42.73	50.24	38.04	46.58	59.25
	Each						
	Extra for						
036	taper: any size socket	-	-	-	144.12	237.36	235.42
037	bend	123.97	186.50	216.88	208.89	283.03	305.64
	junction: any type						
038	100 mm branch	56.49	56.49	56.49	56.49	56.49	56.49
039	150 mm branch	82.39	82.39	82.39	82.39	82.39	82.39
040	225 mm branch	115.76	115.76	115.76	115.76	115.76	115.76
041	300 mm branch	158.09	158.09	158.09	158.09	158.09	158.09

VITRIFIED CLAY PIPEWORK: RIGID JOINTS

Specification

Pipes and fittings for surface water drains and sewers: to BS 65, Kitemark certified:
a. type: normal or surface water;
b. joint type: spigot and socket with cement-sand mortar (1:2).

		1	2	3	4
		100 mm	150 mm	225 mm	300 mm
		£	£	£	£
	<i>Metre</i>				
042	Pipe	16.96	23.78	41.35	65.58
	<i>Each</i>				
	Extra for				
043	pipe stopper: setting in mortar	8.11	14.12	23.06	-
044	taper	-	42.11	60.95	-
045	level invert taper	-	39.15	56.24	-
046	bend	13.50	19.01	50.77	-
047	rest bend	20.61	32.71	-	-
048	junction: any type: any size branch	22.75	35.59	-	-
049	double junction: any type: any size branches	42.91	57.05	155.27	-

34: DRAINAGE BELOW GROUND

VITRIFIED CLAY PIPEWORK: FLEXIBLE JOINTS

Specification

Pipes and fittings: to BS EN 295-1, Kitemark certified:

a. type: normal;

b. joint type: in accordance with the pipe manufacturer's recommendations;
c. strength class: super strength.

Item			1	2	3	4	5	6
			Plain ended pipes			Spigot and socket pipes		
			Nominal size					
			100 mm	150 mm	225 mm	100 mm	150 mm	225 mm
34		Metre	£	£	£	£	£	£
050	Pipe		11.73	20.47	37.17	17.47	22.18	41.65
		Each						
	Extra for							
051	adaptor to plastics soil pipe		10.51	16.47	-	12.52	15.09	27.15
052	pipe stopper: setting in mortar		12.19	15.57	-	11.78	15.57	23.13
053	taper		-	22.99	49.37	-	18.24	48.44
054	bend		10.11	16.26	66.72	22.87	34.44	72.93
055	rest bend		15.35	20.26	73.43	13.37	18.88	90.38
056	junction: any type: any size branch		18.01	22.84	122.30	30.80	44.76	134.03
057	double junction: any type: any size branches .		-	-	-	41.04	90.67	204.25

PLASTICS PIPEWORK

Specification

UPVC pipes and fittings: to BS EN 1401-1, Kitemark certified:

a. joint type: ring seal.

			1	2
			Nominal size	
			110 mm	160 mm
			£	£
		Metre		
058	Pipe		10.72	21.85
		Each		
	Extra for			
059	taper		-	44.75
060	bend		27.50	62.46
061	junction: any type: any size branch		36.24	106.03
062	double junction: any type: any size branches		75.13	185.29

34: DRAINAGE BELOW GROUND

CAST IRON PIPEWORK: SPIGOT ENDED

Specification

Pipes and fittings: to BS 437 with joint couplings to BS EN 877:

- a. joint type: in accordance with the pipe manufacturer's recommendations;
- b. coating: as BS 437 Clause 9;
- c. pipes, fittings and couplings Kitemark certified.

Item			1	2	3
			Nominal size		
			75 mm	100 mm	150 mm
34		<i>Metre</i>	£	£	£
	Pipe				
063	in run exceeding 3 m long		78.21	87.19	139.30
064	in run not exceeding 3 m long		94.63	107.71	170.09
	ADD where				
065	on piers		3.29	4.11	6.15
066	suspended (measure supports separately)		4.92	6.15	9.23
		<i>Each</i>			
	Extra for				
067	cement joint to clay		-	62.25	-
068	piece: rectangular access door bolted and sealed		-	157.63	260.79
069	level invert taper		-	100.72	138.05
070	bend		77.90	97.39	170.27
071	bend: rectangular access door bolted and sealed		-	144.62	291.41
072	long radius bend		-	124.11	202.24
073	rest bend		-	103.42	191.25
	oblique junction				
074	100 mm branch		109.68	134.15	-
075	150 mm branch		-	199.77	240.90

CAST IRON PIPEWORK: SPIGOT AND SOCKET

Specification

Pipes and fittings: to BS 437, Kitemark certified:

- a. joint type: hempen yarn with run lead and/or with lead wool where approved;
- b. coating: as BS 437 Clause 9.

34: DRAINAGE BELOW GROUND

CAST IRON PIPEWORK: SPIGOT AND SOCKET - *continued*

Item		1	2	3	4
		Nominal size			
		75 mm	100 mm	150 mm	225 mm
34	<i>Metre</i>	£	£	£	£
	Pipe				
076	in run exceeding 3 m long	78.34	104.65	148.43	452.70
077	in run not exceeding 3 m long	98.85	130.31	182.63	504.00
	ADD where				
078	on piers	5.13	6.39	10.26	15.39
079	suspended (measure supports separately)	8.99	11.18	15.39	30.79
	<i>Each</i>				
	Extra for				
080	large socket for clay	-	75.54	108.04	281.74
081	loose collar	82.08	118.71	183.70	333.89
082	socket plug	43.62	59.39	94.69	155.20
083	blank cap	44.39	60.02	96.86	-
084	piece: rectangular access door bolted and sealed	130.33	165.21	299.69	503.06
085	socket reducer	56.79	85.81	115.05	223.16
086	socket ferrule with brass screw cap	88.03	112.46	176.89	443.51
087	level invert taper	86.97	118.74	163.62	190.57
088	bend	70.17	100.20	204.54	544.03
089	bend: rectangular access door bolted and sealed	-	176.38	346.76	-
090	long radius bend	74.97	121.11	168.98	-
091	rest bend	-	121.03	248.15	-
092	long radius rest bend	-	149.35	-	-
	oblique junction				
093	75 mm branch	111.56	134.90	-	-
094	100 mm branch	-	117.59	206.26	374.15
095	150 mm branch	-	-	253.68	423.26
096	225 mm branch	-	-	-	578.27
	oblique junction: rectangular access door bolted and sealed				
097	100 mm branch	-	222.11	414.25	-
098	150 mm branch	-	-	439.81	-

34: DRAINAGE BELOW GROUND

DUCTILE IRON PIPEWORK

Specification

Spigot ended pipes and fittings: to dimensions of BS 437 with joint couplings to BS EN 877. Joint type: in accordance with the pipe manufacturer's recommendations.

Spigot and socket pipes and fittings: to BS EN 598, Kitemark certified, and:

a. pipe strength class: K9;

- b. fittings strength class: K12 for fittings other than branches, K14 for branches.
c. joint type: in accordance with the pipe manufacturer's recommendations.

Rates for the following include

Generally:

For spigot ended or spigot and socket pipes and fittings.

Item			1	2	3	4
			Nominal size			
			80 mm	100 mm	150 mm	200 mm
34		<i>Metre</i>	£	£	£	£
	Pipe					
099	in run exceeding 3 m long		70.31	86.81	108.74	142.55
100	in run not exceeding 3 m long		86.73	107.33	146.37	193.86
	ADD where					
101	on piers		3.29	4.11	5.47	7.19
102	suspended (measure supports separately)		4.92	6.15	9.23	12.32
		<i>Each</i>				
	Extra for					
103	piece: large socket for clay or cast iron		-	92.28	-	-
	level invert taper					
104	80 mm		-	143.42	-	-
105	100 mm		-	-	223.45	-
106	150 mm		-	-	-	250.52
107	bend		102.38	127.66	186.75	301.43
	tee					
108	80 mm branch		141.85	164.83	248.52	345.06
109	100 mm branch		-	168.75	248.52	373.67
110	150 mm branch		-	-	288.74	472.90
111	200 mm branch		-	-	-	529.58

34: DRAINAGE BELOW GROUND

DUCTILE IRON PIPEWORK - *continued*

Item					
		1	2	3	4
		Nominal size			
		80 mm	100 mm	150 mm	200 mm
		£	£	£	£
34	<i>Each</i>				
	Extra for ductile iron change fitting to cast iron pipework				
	change collar				
112	to 100 mm pipe	-	122.50	-	-
113	to 150 mm pipe	-	-	172.33	-
	change piece				
114	to 100 mm pipe	-	105.86	-	-
115	to 150 mm pipe	-	-	133.96	-

WORK TO EXISTING PIPEWORK: CONCRETE

		1	2	3
		Nominal size		
		300 mm	375 mm	450 mm
		£	£	£
	<i>Each</i>			
116	Connecting new pipe to existing pipe end: cement joint	36.86	53.49	77.56

		1	2	3	4
		Nominal size			
		100 mm	150 mm	225 mm	300 mm
		£	£	£	£
117	Connecting new pipe to existing pipe: cutting away concrete bed and haunching: cutting aperture: saddle connector: cement joints: making good concrete bed and haunching	78.94	105.67	162.92	265.13

WORK TO EXISTING PIPEWORK: CLAY

		1	2	3	4
		Nominal size			
		100 mm	150 mm	225 mm	300 mm
		£	£	£	£
	<i>Each</i>				
	Connecting new pipe to existing pipe end				
118	cement joint	10.19	13.97	20.95	30.54
119	double socket: cement joints	25.55	38.32	57.49	84.42
120	Cutting out short length of existing pipe and concrete bed and haunching: inserting new oblique branch: loose collar cement joints: making good concrete bed and haunching	61.11	87.98	147.78	262.13
121	Connecting new pipe to existing pipe: cutting away concrete bed and haunching: cutting aperture: saddle connector: cement joints: making good concrete bed and haunching	89.17	115.93	179.79	281.12

34: DRAINAGE BELOW GROUND

WORK TO EXISTING PIPEWORK: CAST IRON

Item					
		1	2	3	4
		Nominal size			
		75 mm	100 mm	150 mm	225 mm
		£	£	£	£
34	<i>Each</i>				
122	Cutting out and remaking caulked lead joint: providing new lead	43.53	54.63	73.37	110.01
	Connecting new pipe to existing pipe end				
123	caulked lead joints	51.74	64.88	87.06	130.53
124	change fitting: flexible joints	86.33	105.36	145.41	244.62
125	change fitting: flexible joint: caulked lead joint	70.28	86.79	113.59	191.28
126	Cutting out short length of existing pipe: inserting new oblique branch with loose collar: caulked lead joints	175.33	261.99	422.38	1176.50

CONCRETE ACCESSORIES

Specification

Street gullies: to BS 5911-6 and Kitemark certified,
or Agrément certified.

		1	2
		Untrapped	Trapped
		£	£
	<i>Each</i>		
	Gully: outlet 100 or 150 mm nominal size		
127	375 mm diameter x 750 mm deep	155.03	159.33
128	375 mm diameter x 900 mm deep	168.53	172.65
129	450 mm diameter x 750 mm deep	178.27	184.83
130	450 mm diameter x 900 mm deep	194.22	198.58
131	450 mm diameter x 1050 mm deep	208.52	-
132	450 mm diameter x 1200 mm deep	227.79	-
133	ADD for rodding eye, stopper and chain	13.02	13.02
	<i>Metre</i>		£
134	Linear drain channel: heavy duty: with or without built in fall: ductile iron edge rail		62.87
	<i>Each</i>		
	Extra for		
135	sump unit assembly: bucket		106.70
136	plain end cap		28.91

34: DRAINAGE BELOW GROUND

CONCRETE ACCESSORIES - *continued*

Item		Metre	£
34	Extra for		
	ductile iron gratings		
137	slotted: heavy duty: locking bolts		26.45
138	narrow slotted: heavy duty: locking bolts		29.82
139	Linear drain channel: medium duty: with or without built in fall: galvanised mild steel edge rail		45.79
		Each	
	Extra for		
140	sump unit assembly		110.39
141	plain end cap		26.39
		Metre	
	ductile iron gratings		
142	slotted: medium duty: locking mechanism		23.20
143	narrow slotted: medium duty: locking mechanism		24.23

CLAY ACCESSORIES

Specification

Terminal fittings: to BS EN 295-1 and Kitemark certified, or Agrément certified.

		Each	£
	Gully: outlet 100 mm nominal size		
144	225 mm diameter		103.81
145	150 x 150 mm		84.01
146	230 x 230 mm		100.96
	ADD to Items 34.145 and 34.146 for		
147	horizontal inlet		21.85
148	vertical inlet		30.83
149	Trap: for use with raising piece: 100 mm diameter: outlet 100 mm nominal size		45.68

		1	2
		Nominal diameter	
		225 mm	300 mm
		£	£
	Yard gully: 610 mm deep		
150	outlet 100 mm nominal size	150.44	179.19
151	back inlet and outlet 100 mm nominal size	216.53	245.30
152	outlet 150 mm nominal size	154.40	183.03
153	back inlet and outlet 150 mm nominal size	220.49	249.14

34: DRAINAGE BELOW GROUND

CLAY ACCESSORIES - *continued*

Item		£
34	<i>Each</i>	
154	Raising piece: 225 mm diameter: 150, 230 or 305 mm high	45.95
155	Trapless yard gully: 225 mm diameter x 380 mm deep: outlet 100 mm nominal size	137.06
156	Hopper: 225 to 100 mm diameter: 230 mm high	69.71
	ADD to Items 34.154 to 34.156 for	
157	horizontal inlet	31.05
158	vertical inlet	31.05
159	Rainwater shoe: horizontal or vertical inlet: 100 mm nominal size	63.28
160	ADD for horizontal side inlet	3.65
161	Raising piece: rectangular: for use with rainwater shoe: 255 x 150 x 150 mm high	45.95
	Road gully: trapped: outlet 100 or 150 mm nominal size	
162	300 mm diameter x 610 mm deep	187.15
163	300 mm diameter x 760 mm deep	192.20
164	375 mm diameter x 760 mm deep	219.85
165	375 mm diameter x 915 mm deep	230.33
166	450 mm diameter x 915 mm deep	281.14
167	ADD for rodding eye and stopper	12.94
	Grease or mud intercepting gully: outlet 100 nominal size	
168	225 mm diameter x 550 mm deep	133.80
169	225 mm diameter x 610 mm deep: galvanised perforated bucket	182.40
170	300 mm diameter x 610 mm deep: galvanised perforated bucket	233.21
171	ADD for horizontal inlet	25.74
172	ADD for rodding eye and stopper	35.64

PLASTICS ACCESSORIES

Specification

Plastics terminal fittings: to BS 4660 and Kitemark certified, or Agrément certified.

	<i>Each</i>	£
	Gully: plastics grating: outlet 110 mm nominal size	
173	180 mm diameter: roddable	75.05
174	180 mm diameter: roddable: 110 mm diameter back inlet	81.80
175	ADD for back inlet bend	41.76
176	Trap: for use with raising piece: 110 mm diameter: outlet 110 mm nominal size	50.61

34: DRAINAGE BELOW GROUND

CAST IRON ACCESSORIES - *continued*

Item	Each	1	2
		Cement joint	Caulked lead joint
		£	£
34	Raising piece: for rainwater shoe: rectangular		
212	75 mm high	99.60	136.83
213	150 mm high	136.67	175.86
214	225 mm high	173.74	214.92
215	300 mm high	210.83	253.95
216	Urinal connector: 75 mm nominal size: 300 mm long: screwed inlet	36.21	51.85

1	2	3	4
Coated		Galvanised	
Joint to frame			
Cement	Caulked lead	Cement	Caulked lead
£	£	£	£

	Sealing plate and frame: cover plain or recessed: brass screws: sealing cover in grease				
217	to suit 225 mm diameter gully or raising piece	66.86	109.99	70.93	114.06
218	to suit 300 mm diameter gully or raising piece	84.90	130.58	91.47	137.15
219	240 x 140 mm: for rainwater shoe	156.79	199.92	102.27	145.39
220	Sealing plate and frame: to suit 225 mm diameter gully or raising piece: washer: brass screws	71.84	114.97	100.33	143.45

1	2
Coated	Galvanised
£	£

	Grating		
221	40 mm thick: to suit 225 mm diameter gully or raising piece	16.02	19.11
222	55 mm thick: to suit 300 mm diameter gully or raising piece	26.11	31.88
223	150 x 150 mm	5.16	7.34
224	230 x 230 mm	13.24	19.22
225	240 x 140 mm	10.53	14.48

1	2	3
Diameter of sleeve		
100 mm	150 mm	225 mm
£	£	£

226	Uncoated socketed sleeve with puddle flange: 3 mm mild steel ring: not exceeding 600 mm long: caulked lead joint at socket end: pointing with bituminous compound at other end: (measure building in separately)	173.70	260.28	584.48

34: DRAINAGE BELOW GROUND**CAST IRON ACCESSORIES - *continued***

Item		Each	£
34			
	Road gully grating and frame: bedding and launching in cement-sand mortar (1:3)		
	Group 3: minimum class C250		
227	hinged: 75 mm deep: minimum waterway area 650 cm ²		139.24
228	hinged: 75 mm deep: minimum waterway area 900 cm ²		149.78
229	hinged: non-rock type: 75 mm deep: minimum waterway area 900 cm ²		148.33
230	double triangular: non-rock type: 75 mm deep: minimum waterway area 900 cm ²		156.76
231	hinged: 100 mm deep: minimum waterway area 650 cm ²		169.17
232	hinged: 100 mm deep: minimum waterway area 900 cm ²		171.14
	Group 4: minimum class D400		
233	hinged: non-rock type: 100 mm deep: minimum waterway area 900 cm ²		170.28
234	double triangular: non-rock type: 100 mm deep: minimum waterway area 900 cm ²		179.03

ACCESSORIES: SUNDRIES**Specification**

Engineering bricks: imperforate clay bricks to BS EN 771-1.

		1	2
		100 x	100 x
		100 mm	150 mm
	<i>Metre</i>	£	£
235	Plain concrete: grade 20 N/mm ² : 20 mm aggregate: kerb to gully top: trowelled finish: rounded top: angles: dishing to grating: formwork	22.43	23.01
			£
236	Brick seating to frame of road gully: engineering bricks in cement-sand (1:3): half brick thick: two courses high: facework one side: (including the cost of bricks)		28.87

WORK TO EXISTING ACCESSORIES**Rates for the following include**

Raising or lowering gully grating and frame:
For taking off and resetting grating and frame.

For any excavation, etc. in lowering level.

For any materials, etc. in raising level.

34: DRAINAGE BELOW GROUND

WORK TO EXISTING ACCESSORIES - *continued*

Item		Each	£
34			
237	Raising or lowering gully grating and frame: any size - <i>per 75 mm of level difference</i>		33.86
238	Taking up and replacing grating: not exceeding 350 mm diameter or 250 x 250 mm		3.97
239	ADD where fixed with screws		2.30
240	Taking up grating: cutting away bedding mortar and taking up frame: not exceeding 350 mm diameter or 250 x 250 mm		6.68
241	Fixing only frame: bedding in cement-sand mortar (1:3): replacing grating: not exceeding 350 mm diameter or 250 x 250 mm		12.74
242	Taking up grating: burning or cutting out joint and removing frame: not exceeding 350 mm diameter or 250 x 250 mm		15.89
243	Fixing only frame: caulked lead joint: replacing grating: not exceeding 350 mm diameter or 250 x 250 mm		42.34
	Taking up road gully grating and frame: cutting away mortar: overall area		
244	not exceeding 0.10 m ²		15.47
245	0.10 to 0.25 m ²		24.23
246	0.25 to 0.50 m ²		38.85
	Fixing only road gully grating and frame: bedding and flaunching in approved quickset resin mortar: overall area		
247	not exceeding 0.10 m ²		14.36
248	0.10 to 0.25 m ²		23.97
249	0.25 to 0.50 m ²		39.99

MANHOLES: EXCAVATING

Rates for the following include

Generally:

For forming sides curved on plan if ordered.

For setting aside and replacing topsoil.

For backfilling with and compacting selected excavated material in layers not exceeding 150 mm thick.

For disposing of surplus excavated materials off site.

		1	2	3
		Maximum depth not exceeding		
		1.00 m	2.00 m	4.00 m
		£	£	£
	<i>Cubic Metre</i>			
250	Pit	53.16	64.06	76.31
	<i>Square Metre</i>			
				£
251	Levelling bottom of excavation: compacting			1.25

34: DRAINAGE BELOW GROUND

MANHOLES: EARTHWORK SUPPORT

Item		1	2	3
		Maximum depth not exceeding		
		1.00 m	2.00 m	4.00 m
34	<i>Square Metre</i>	£	£	£
	To face of excavation: distance between opposing faces			
252	not exceeding 2.00 m	5.77	6.68	7.81
253	2.00 to 4.00 m	6.13	7.39	9.68
254	exceeding 4.00 m	10.78	13.94	18.34
255	ADD where curved	3.29	3.71	4.29

MANHOLES: HARDCORE

Specification

Hardcore for soakaways: broken brick, stone or crushed concrete 150 to 75 mm gauge, containing no fines.

	<i>Cubic Metre</i>	£
256	Filling to or around soakaway: exceeding 0.25 m average thick	48.42

MANHOLES: IN SITU CONCRETE: PLAIN: GRADE 20 N/mm²: 20 mm AGGREGATE

	<i>Cubic Metre</i>	£
257	Backfilling around manhole or the like	180.46

MANHOLES: IN SITU CONCRETE: PLAIN: GRADE 20 N/mm²: 14 mm AGGREGATE

	<i>Square Metre</i>	£
	Benching in bottom: trowelled finish: average thickness	
258	225 mm	72.29
259	300 mm	95.75
260	375 mm	119.26

34: DRAINAGE BELOW GROUND

MANHOLES: IN SITU CONCRETE: SULPHATE RESISTING: PLAIN: GRADE 30 N/mm²: 20 mm AGGREGATE

Item		
34	<i>Cubic Metre</i>	£
	Bed	
261	not exceeding 150 mm thick	157.53
262	150 to 450 mm thick	151.29

MANHOLES: IN SITU CONCRETE: SULPHATE RESISTING: REINFORCED: GRADE 30 N/mm²: 20 mm AGGREGATE

	<i>Cubic Metre</i>	£
	Suspended slab: tamped finish (measure reinforcement separately)	
263	not exceeding 150 mm thick	182.48
264	150 to 450 mm thick	176.25
265	exceeding 450 mm thick	170.00

MANHOLES: FORMWORK

	<i>Square Metre</i>	£
266	Soffit of slab: any height: basic finish: not exceeding 200 mm thick	47.47
267	ADD for each additional 100 mm of thickness	3.98

	<i>Metre</i>	
	Edge of suspended slab: basic finish	
268	not exceeding 250 mm high	15.65
269	250 to 500 mm high	25.73
270	Extra for rebate: basic finish - <i>per 25 mm of girth</i>	1.69

		1	2	3
		Diameter		
		300 mm	375 mm	450 mm
		£	£	£
271	Half-round channel: fine finish: to falls	18.38	29.64	40.76
272	ADD where curved on plan	6.69	10.05	13.40
	<i>Each</i>			
273	Extra for junction between branch channel and main channel	5.87	7.12	8.37

34: DRAINAGE BELOW GROUND

MANHOLES: PRECAST CONCRETE: SULPHATE RESISTING

Item			1	2
			20 N/mm ² : 20 mm aggregate	30 N/mm ² : 20 mm aggregate
			£	£
34	<i>Square Metre</i>			
274	Cover slab: 100 mm thick (measure reinforcement separately)		54.02	56.67
275	ADD for each additional 25 mm of thickness		10.71	11.37
	<i>Each</i>			£
276	Extra for rebated opening for manhole cover and frame: any size: any thickness			29.84

MANHOLES: PRECAST CONCRETE UNITS

Specification

Manholes: to BS 5911-3 and BS EN 1917 and Kitemark certified; joints for watertight construction accordance with manufacturer's recommendations.

Step irons: to BS EN 13101, fixed in manhole components before delivery.

Soakaways: perforated concrete to BS 5911-3 and Kitemark certified; joints for watertight construction accordance with manufacturer's recommendations.

Rates for the following include

Generally:
For bedding and pointing in cement-sand mortar (1:3).

For manhole or soakaway units (measure soakaway perforations separately).

Cover slab:
For reinforcement.

Shaft, chamber and taper rings:
For un-reinforced units not exceeding 1200 mm.

For reinforcement in units 1350 mm diameter.

			1	2	3	4	5
			Internal diameter				
			675 mm	900 mm	1050 mm	1200 mm	1350 mm
			£	£	£	£	£
	<i>Each</i>						
277	Cover slab: opening 525 mm minimum diameter		54.30	85.03	119.73	149.60	222.94
	Shaft ring						
278	250 mm high		43.63	-	-	-	-
279	500 mm high		50.77	-	-	-	-
	Chamber ring						
280	250 mm high		-	70.86	96.05	115.53	-
281	500 mm high		-	107.65	147.88	173.73	227.75
282	750 mm high		-	118.44	172.98	201.53	258.23
283	1000 mm high		-	149.82	222.09	259.91	334.85
	Taper ring: 675 mm minimum diameter						
284	500 mm high		-	86.92	114.32	136.64	-
285	750 mm high		-	-	-	-	263.18

34: DRAINAGE BELOW GROUND

MANHOLES: PRECAST CONCRETE UNITS - *continued*

Item	Each	1	2	3	4					
		Rectangular section			Cover slab					
		Height			with					
		150 mm	230 mm	300 mm	opening					
34		£	£	£	£					
Inspection chamber: internal size										
286	600 x 450 mm	57.44	71.20	83.61	63.50					
287	750 x 600 mm	83.79	94.63	106.59	69.45					
288	1000 x 675 mm	111.88	124.84	134.54	101.86					
289	1200 x 750 mm	152.18	-	-	195.25					
					£					
Reducing unit: internal size										
290	750 x 600 mm reducing to 600 x 450 mm				170.92					
291	1000 x 675 mm reducing to 750 x 600 mm				228.86					
292	1200 x 750 mm reducing to 1000 x 675 mm				317.95					
		1	2	3	4	5	6	7	8	9
		Diameter								
		60 mm	80 mm	100 mm	150 mm	200 mm	225 mm	300 mm	375 mm	450 mm
		£	£	£	£	£	£	£	£	£
293	Perforation through shaft, chamber ring or the like: for pipe or as soakaway perforation	4.12	6.59	8.23	12.35	16.47	18.53	24.70	30.88	37.05
										£
294	Step iron: cast into concrete during manufacture.									10.68

MANHOLES: PLASTICS UNITS

Specification

Access points: to BS 4660 and Kitemark certified, to BS EN 13598-1, or Agrément certified.

Inspection chambers: to BS EN 13598-1 and -2 , Agrément certified.

For fixing blanking plugs.

For setting on and surrounding with 150 mm concrete grade 20 N/mm²: 20 mm aggregate including formwork.

For extra excavation, disposal and earthwork support.

Rates for the following include

Generally:
For jointing to drains.

34: DRAINAGE BELOW GROUND

MANHOLES: PLASTICS UNITS - *continued*

Item		1		2	
		Nominal diameter			
		300 mm	450 mm		
34	Each	£	£		
	Inspection chamber: 110 mm nominal size channels and side inlets: blanking plugs: cast iron cover Grade C light duty single seal type and plastics frame: depth to invert				
295	230 mm	134.35	241.27		
296	600 mm	194.32	298.01		
297	1000 mm	-	355.58		

MANHOLE: LAYING ONLY BRICKWORK

Specification

Clay common bricks: solid bricks to BS EN 771-1, durability designation FL.

Engineering bricks: imperforate clay bricks to BS EN 771-1 Class B and Kitemark certified.

Mortar: cement-sand (1:3)

Rates for the following include

Building in end of pipe:
For cutting pipe.

For turning single half-brick ring arch over pipes 225 to 300 mm nominal size.

For turning double half-brick ring arch over pipes 375 to 450 mm nominal size.

Notes

Number of bricks:
Calculate from the Tables in Section 14.

		1		2	
		Common bricks	Engineering bricks		
		£	£		
	<i>Square Metre</i>				
	Wall: bedding in mortar with open vertical joints				
298	half-brick thick	40.11	-		
299	one-brick thick	73.55	-		
	Wall				
300	half-brick thick	40.96	52.87		
301	one-brick thick	75.65	93.32		
302	one-and-a-half-brick thick	93.43	131.30		
303	one-brick thick: curved on plan not exceeding 2 m radius	120.60	137.84		
304	one-brick thick: curved on plan not exceeding 2 m radius: 35 mm open vertical joints in alternate courses	105.88	-		
	Extra for facework				
305	exceeding half-brick wide	9.21	10.05		
306	exceeding half-brick wide: curved on plan not exceeding 2 m radius	14.00	14.84		

34: DRAINAGE BELOW GROUND

MANHOLE: BRICKWORK SUNDRIES

Item		1	2	3	4	5	6	7	8
		Nominal size							
		80 mm	100 mm	150 mm	200 mm	225 mm	300 mm	375 mm	450 mm
34	<i>Each</i>	£	£	£	£	£	£	£	£
	Building in end of pipe: common brickwork: making good facework one side								
307	half-brick thick	3.76	4.70	7.07	9.42	15.76	21.01	35.33	42.40
308	one-brick thick	5.75	7.18	10.79	14.35	21.32	28.43	45.25	54.30
309	one-and-a-half-brick thick	7.73	9.65	14.47	19.30	26.88	35.82	55.14	66.16
310	Building into engineering brickwork: price at the foregoing Rates for common brickwork multiplied by 2.00.								
		<i>Metre</i>							
									£
	Brick seating to frame of manhole cover: in cement-sand mortar (1:3): facework one side (including the cost of bricks)								
	half-brick thick: two courses high								
311	common bricks								19.29
312	engineering bricks								25.25
	one-brick thick: one course high								
313	common bricks								28.54
314	engineering bricks								33.86

MANHOLES: CHANNELWORK

Specification

Vitrified clay channels and bends: to BS 65 and Kitemark certified:
a. type: normal;
b. bed and joint type: cement-sand mortar (1:2).

UPVC channels and bends: to BS EN 13598-1 and Kitemark certified:
a. joint type: ring seal;
b. bed: cement-sand mortar (1:2).

34: DRAINAGE BELOW GROUND

MANHOLES: CHANNELWORK - *continued*

Item		1	2	3	4	5
		Clay		UPVC		
		Nominal size				
		100 mm	150 mm	225 mm	110 mm	160 mm
34	<i>Each</i>	£	£	£	£	£
	Half-round section: not exceeding 600 mm effective length					
315	straight	11.47	16.43	33.99	49.46	82.44
316	<i>ADD for each additional 150 mm of effective length</i>	2.58	4.39	3.90	17.69	20.53
317	curved	13.89	20.14	51.39	64.79	116.78
318	<i>ADD for each additional 150 mm of effective length</i>	2.65	3.08	7.21	17.69	20.53
	tapering to smaller size					
319	straight	36.16	74.44	141.27	-	-
320	curved	51.49	136.90	272.11	-	-
321	Half section branch bend	21.26	32.63	91.08	24.64	62.58
322	Three quarter section branch bend	22.74	35.68	109.91	-	-

MANHOLES: CAST IRON PIPEWORK

Specification

Petrol trapping bends and inspection chambers:
to BS 437.

Rates for the following include

Generally:
For coated fittings.

For caulked lead joints.

Inspection chamber:
For bedding in cement-sand mortar (1:2).

	<i>Each</i>	1	2
		Depth	
		100 mm	150 mm
		£	£
323	Petrol trapping bend: 380 x 760 mm nominal size	284.37	427.12
324	ADD where cut to length - <i>per cut</i>	17.10	20.52

34: DRAINAGE BELOW GROUND

MANHOLES: CAST IRON PIPEWORK - *continued*

Item		Each	1	2	3	4	5
			Nominal size				
			100 x	150 x	150 x	225 x	225 x
			100 mm	100 mm	150 mm	100 mm	150 mm
			£	£	£	£	£
Inspection chamber with bolted cover							
325	no branches		214.84	-	322.07	-	-
326	one branch one side		278.08	346.79	454.22	1119.15	1219.12
327	one branch each side		357.25	454.09	564.58	1350.31	1468.65
328	two branches one side		529.81	658.65	901.59	1942.19	1997.23
329	two branches each side		648.45	840.21	1049.46	1976.39	2048.53
330	three branches one side		638.69	901.13	1062.27	-	-
331	three branches each side		873.08	1011.93	1216.10	-	-
332	four branches one side		768.27	1028.69	1179.12	-	-
333	four branches each side		1082.01	1183.66	1382.73	-	-

MANHOLES: CAST IRON

Specification

Covers and frames: to BS EN 124 and Kitemark certified.

Step irons for brick manholes: to BS EN 13101 and Kitemark certified.

Rates for the following include

Access covers and frames:
For coated units.

For rectangular overall shape to medium and heavy duty frames.

Each

£

Access cover and frame: bedding frame in cement-sand mortar (1:3): bedding cover in grease and sand

Group 1: minimum class A15: clear opening

334	450 x 450 x 40 mm	94.66
335	600 x 450 x 40 mm	90.71
336	600 x 600 x 40 mm	120.27

Group 2: minimum class B125: clear opening

337	600 x 450 x 40 mm	162.59
338	600 x 600 x 40 mm	185.17
339	600 x 450 x 60 mm	185.43
340	600 x 600 x 60 mm	217.13

Group 3: minimum class C250: clear opening

341	600 x 450 x 75 mm	239.41
342	600 x 600 x 75 mm	271.11
343	600 x 600 x 100 mm	294.45

34: DRAINAGE BELOW GROUND

MANHOLES: CAST IRON - *continued*

Item			
		1	2
		Depth	
		100 mm	150 mm
		£	£
34	<i>Each</i>		
	Group 4: minimum class D400: clear opening		
344	600 mm diameter	262.53	-
345	600 x 600 mm	262.53	315.25
346	675 x 675 mm	330.53	374.98
347	750 x 600 mm	373.93	426.91
348	900 x 600 mm	487.82	561.68
349	1250 x 675 mm	584.05	633.78
			£
350	ADD to Items 34.334 to 34.349 for ventilated cover		21.16
	Set of malleable lifting keys		
351	for light duty covers		10.37
352	for heavy or medium duty covers		16.24
	Step iron: building into joints of brickwork		
	general purpose pattern		
353	115 mm tail		14.21
354	230 mm tail		16.58
355	corner pattern: 25 mm diameter: 595 mm long		15.08
356	plastic encapsulated double rung		24.18

MANHOLES: STEEL

Specification

Covers and frames: zinc coated steel, suitable for wheel loadings stated.

Rates for the following include

Concrete filling to skeleton type manhole covers:
For all necessary formwork.

		1	2	3	4	5
		Clear opening		600 x 600 mm		
		Tonnes				
		not exceeding 5	5 to 10	10 to 20	not exceeding 5	5 to 10
		£	£	£	£	£
	<i>Each</i>					
	Access cover and frame: bedding frame in cement-sand mortar (1:3): bedding cover in grease and sand					
	floor plate type					
357	single seal	48.71	57.63	65.24	64.40	75.16
358	double seal	66.95	76.99	-	84.84	94.89

34: DRAINAGE BELOW GROUND

MANHOLES: STEEL - *continued*

Item		Clear opening	
		1	2
		450 x	600 x
		600 mm	600 mm
34	<i>Each</i>	£	£
	Access cover and frame: bedding frame in cement-sand mortar (1:3): bedding cover in grease and sand		
359	recessed skeleton, non-locking type	81.14	104.79
	ADD where		
360	locking type	13.48	20.22
361	locking type with rubber seals	18.01	27.04
362	ADD for filling with 25 N/mm ² concrete trowelled smooth	14.25	18.81

MANHOLES: CLAY ACCESSORIES

Specification

Intercepting traps: to BS 65 and Kitemark certified.

	<i>Each</i>	£
	Intercepting trap or reverse action intercepting trap: with or without fresh air inlet socket: clearing arm with stopper: nominal size	
363	100 mm	94.62
364	150 mm	136.87
365	225 mm	377.86
366	ADD to 100 mm nominal size trap for lever locking stopper, chain and staple: cutting and pinning staple to masonry	48.35

MANHOLES: CAST IRON ACCESSORIES

Specification

Disconnecting traps: to BS 437.

	<i>Each</i>	£
	Disconnecting trap: inlet for cast iron pipe: clearing arm with bridle plate and screw	
367	100 mm nominal size	265.42
368	ADD where reverse action	69.91
369	150 mm nominal size	407.00
370	ADD where reverse action	106.04
	ADD for lever locking stopper, chain and staple: cutting and pinning staple to masonry	
371	for 100 mm nominal size trap	31.41
372	for 150 mm nominal size trap	44.57

34: DRAINAGE BELOW GROUND

WORK TO EXISTING MANHOLES

Rates for the following include

Raising or lowering cover and frame:

For any excavation etc in lowering level.

For any materials etc in raising level.

Item		Metre	£
34			
	Preparing top of existing brick wall for raising		
373	half-brick thick		3.35
374	one-brick thick		5.87
375	one-and-a-half-brick thick		8.37

		1	2	3	4	5	6	7	8
		Nominal size							
		100 mm	110 mm	150 mm	160 mm	225 mm	300 mm	375 mm	450 mm
	Each	£	£	£	£	£	£	£	£
	Cutting out short length of existing pipe and concrete bed and haunching or surround: providing and inserting connector to receive half-round section channel (measure channel separately): jointing to pipe in cement-sand mortar (1:2)								
376	concrete pipe	98.15	-	121.84	-	151.97	214.03	277.51	352.03
377	plastics pipe	-	92.83	-	113.54	-	-	-	-
378	clay pipe	94.71	-	112.27	-	178.60	260.50	-	-
379	iron pipe	102.58	-	137.98	-	227.49	365.95	-	-

		1	2	3	4
		Nominal size			
		100 mm	150 mm	225 mm	300 mm
	Each	£	£	£	£
380	Cutting out existing branch drain and branch channel from existing manhole: making good brickwork, rendering and benching	60.57	69.83	82.27	107.15
381	Connecting new branch drain to existing manhole: cutting hole in wall one-brick thick: cutting away existing benching as necessary: inserting new clay branch bend: bedding and jointing in cement-sand mortar (1:2): making good all work disturbed	102.57	124.14	174.11	283.83

34: DRAINAGE BELOW GROUND

WORK TO EXISTING MANHOLES - *continued*

Item		1	2
		Cover and frame: any type: any size: total weight not exceeding 150 kg	150 to 230 kg
34	<i>Each</i>	£	£
382	Taking up and replacing cover: sealing cover in grease	8.57	10.87
383	Taking up cover: cutting away bedding mortar and taking up frame	15.47	21.74
384	Fixing only cover and frame: bedding frame in approved quickset resin mortar: bedding cover in grease and sand	22.78	39.82
385	Raising or lowering cover and frame: any size - <i>per 75 mm of level difference</i>		£ 45.97

TESTING EXISTING DRAINS

Rates for the following include

Generally:
For taking up and replacing in position gratings,
manhole covers or the like.

For carrying out final test in accordance with the
requirements for new work.

	<i>Metre</i>	£
Testing with water or air: existing drain: diameter		
386	not exceeding 200 mm	3.13
387	200 to 350 mm	4.70
388	300 to 500 mm	6.28
	<i>Each</i>	
389	Testing with air: existing soil, waste or ventilating pipe: any height: any diameter: together with length of drain connecting soil pipe with nearest manhole	18.81

34: DRAINAGE BELOW GROUND

CLEARING EXISTING DRAINS

Rates for the following include

For inserting and withdrawing rods per manhole.

For rodding in either direction at each manhole.

Item			
		1	2
		Distance between access points	
		not exceeding	
		30 m	30 to 50 m
		£	£
34	<i>Each - per manhole</i>		
	Rodding drain from manhole or clearing eye: cleaning out and removing all matter: flushing with water and leaving clear: removing and replacing in position manhole covers or the like: diameter		
390	not exceeding 200 mm	43.84	58.44
391	200 to 350 mm	51.14	73.06
	<i>Each</i>		£
	Cleaning out and removing all mud and rubbish		
392	from gully: any type		8.74
393	from catchpit		11.24
394	ADD to Items 34.392 and 34.393 where mud bucket taken out and cleaned and replaced in position		3.75

LAND DRAINAGE

GENERALLY

Reference to other Sections: the Preambles to Sections 5 and 34: Storm water and foul drain systems apply equally to this Section unless otherwise stated.

Notes

Generally:
Rates in other Sections apply to land drainage where Rates are not given in this Section.

EXCAVATING TRENCHES

Rates for the following include

Generally:
For backfilling with hard rubble, gravel, broken stone or clinker graded 75 to 40 mm wide to within 150 mm of ground level and covering with selected topsoil.

34: DRAINAGE BELOW GROUND

EXCAVATING TRENCHES - *continued*

Item		Metre	1	2	3
			Nominal size of pipe		
			not exceeding 200 mm	225 mm	300 mm
			£	£	£
34	Excavating trench: for pipe: average depth				
395	0.25 to 0.50 m	22.85	23.94	25.96	
396	0.50 to 0.75 m	35.91	37.56	40.55	
397	0.75 to 1.00 m	48.96	51.16	55.17	
398	1.00 to 1.25 m	60.71	64.12	69.76	
399	1.25 to 1.50 m	72.46	77.07	84.36	

CONCRETE PIPEWORK

Specification

Pipes: from an approved manufacturer: plain ended, unjointed.

		1	2	3
		Nominal size		
		100 mm	150 mm	225 mm
<i>Metre</i>		£	£	£
Pipe				
400	non-porous inverts	7.27	10.68	16.85
401	porous inverts	8.02	11.51	18.39

CLAY PIPEWORK

Specification

Pipes: to BS 1196: plain ended, unjointed.

	Metre	1	2	3	4
		Nominal size			
		75 mm	100 mm	150 mm	225 mm
		£	£	£	£
402	Pipe	7.38	10.55	18.24	40.74

34: DRAINAGE BELOW GROUND

PLASTICS PIPEWORK

Specification

Pipes: to BS 4962, Kitemark certified, and smooth, perforated, plain ended and unjointed.

Item			1	2
			Nominal size	
			110 mm	160 mm
34		<i>Metre</i>	£	£
403	Pipe		15.25	28.92

CLEARING EXISTING DITCHES AND CHANNELS

		<i>Metre</i>	£
404	Trimming sides and bottom of ditch: not exceeding 3 m girth: clearing out and removing all mud, vegetation and rubbish: leaving clear: clearing away arisings		6.24
405	Clearing channel: not exceeding 610 mm girth: clearing out and removing all silt: leaving clear: clearing away arisings		1.87

35: Site Works

ROAD, PATH PAVINGS AND HARD LANDSCAPING

PRECAST CONCRETE AND GRANITE

Specification

Precast concrete: to BS EN 1340:

- Kerbs, channels and edgings: any finish: natural colour;
- Quadrants: to match adjacent kerbs.

Granite: to BS EN 1343:

- Kerbs: standard finish: fine picked, fair picked, single axed or nided, or rough punched as ordered;
- Quadrants: type X or Y as ordered: finish to match adjacent kerbs;
- Setts: hand hewn finish.

Cement: ordinary or rapid-hardening Portland cement to BS EN 197-1 and manufactured by a BSI Registered Firm.

Sand: to BS EN 13139.

Mortar: cement and sand (1:3).

Reinforcement dowels: 12 mm diameter mild steel bar (Grade 250) to BS 4449, 100 mm long.

Laying kerbs on foundation:

- lay on a 10 to 15 mm mortar bed, aligned vertically and horizontally;
- haunch with concrete;
- lay with movement joint coinciding with those in concrete road slab and extending through foundation and haunching;
- fill movement joints with expansion joint filler and sealant.

Laying kerbs on concrete road slabs:

- roughen surface of concrete slab to form key;
- drive dowels into green concrete to a depth of 50 mm;
- lay on a 10 to 15 mm mortar bed, aligned vertically and horizontally;
- haunch with concrete;
- form movement joints coinciding with those in slab;
- fill movement joints with expansion joint filler and sealant.

Jointing kerbs dry: lay with dry vertical joints not exceeding 3 mm wide.

Jointing kerbs with mortar: joint with mortar 6 mm wide as the work proceeds. Neatly flush point.

Laying edgings: bed on concrete base, haunch with concrete and:

- with vertical joints close fitting, unpointed, not exceeding 3 mm in width;
- to line and levels vertically and horizontally aligned within a tolerance of 3 mm.

Laying channels: lay on a 10 to 15 mm mortar bed on concrete base and:

- lay with vertical joints close fitting in mortar;
- to line and levels vertically and horizontally aligned within a tolerance of 3 mm;
- separated from raised kerbs with 10 to 15 mm layer of mortar.

Laying setts: bed on concrete base and grout in mortar. Finish flush with adjoining surfaces or as ordered.

Notes

Excavation work:

Pay for at the Rates in Section 5.

Rates for the following include

Generally:

For laying on new or old base.

For preparing base.

For cut angles.

For ends.

For cutting to length.

Setting to curve:

For curved units.

	1	2	3	4	5	6	7
	Precast concrete			Granite			
	125 x 150 mm	125 x 255 mm	150 x 305 mm	Fixing only: not exceeding 150 x 305 mm	Edge kerb: 150 x 300 mm	Flat kerb: 300 x 200 mm	Fixing only: not exceeding 300 x 200 mm

Each

Metre

1	2
Precast concrete	
255 x 125 mm	Fixing only: not exceeding 255 x 125 mm
£	£

35: SITE WORKS

PRECAST CONCRETE AND GRANITE - *continued*

Item		Metre	1	2	3
			Granite		
			100 x 100 x 100 mm long	100 x 125 x 200 mm long	laying only: not exceeding 100 x 125 x 200 mm long
			£	£	£
35	Sett string course				
013	single row		18.81	18.48	12.04
014	double row		36.36	35.70	22.82

IN SITU CONCRETE AND FORMWORK

Reference to other Sections: the Preambles to Section 11 apply equally to this Sub-Section.

Specification

Concrete: 20 N/mm²: 20 mm aggregate.

Formwork: basic finish.

		Cubic Metre	£
015	Concrete foundation and haunching: formwork		202.98

MOVEMENT JOINTS

Specification

Movement joint filler and sealant:

- knot-free softwood or waterproof, compressible non-extruding, premoulded filler with high recovery factor after compression at temperatures below 50°.
- sealant to BS EN 14188.

		Each	£
	Movement joint: 25 mm thick filler: sealant: formwork		
016	through kerb and haunching: any size		12.10
017	through kerb, haunching and foundation: any size		19.79

35: SITE WORKS

HARDCORE AND GRANULAR SUB-BASES

Specification

Hardcore:

- Hard stone, concrete, coarse gravel, sound slag or hard broken brick, free from rubbish or other deleterious matter, capable of passing in every direction, a ring of diameter not greater than two thirds thickness of bed, subject to a maximum diameter of 150 mm and graded so that when compacted, filling is dense and without voids; or
- Gravel and stone: to BS EN 12620 for 20 mm nominal size.

Granular sub-base:

- Type 1: crushed rock, crushed slag, crushed concrete or well-burnt, non-plastic shale;
- Type 2: natural sands, gravels, crushed rock, crushed slag, crushed concrete or well-burnt, non-plastic shale.

Blinding: sand to BS EN 12620.

Laying and compacting:

Hardcore:

- spread hardcore evenly and blind top surface with sand or other approved material;
- compact in layers until movement ceases;
- fully compact around road gullies, manholes or the like.

Granular sub-base Type 1:

spread sub-base evenly, without damaging formation. Compact with:

- minimum of drying out or segregation;
- equipment to achieve required compaction without disturbing subgrade.

Traffic: do not allow traffic on sub-base unless authorised by PM.

Permissible deviations: deviations from required levels not to exceed:

Hardcore:

- sub-base: +10 to -30 mm;
- any point under a 3000 mm straightedge: 15 mm.

Granular sub-base Type 1:

- sub-base under concrete block surfacing: +20 to -20 mm;
- sub-base other than above: +10 to -30 mm.

Method of measurement

Filling generally:

Measure as equal to the void filled.

Measure the average thickness after compaction.

Rates for the following include

Filling generally:

For compacting in layers not exceeding 150 mm thick.

Hardcore obtained from the excavations or demolitions:

For selecting for re-use and breaking to required sizes.

Item
35

Cubic Metre

Filling to make up levels

018	not exceeding 0.25 m average thick	25.30	50.20	66.62	63.00
019	exceeding 0.25 m average thick	21.98	46.87	63.30	59.67

1	2	3	4
Hardcore	Granular		
Obtained from excavations or demolitions	Imported to site	Type 1	Type 2
£	£	£	£

35: SITE WORKS

HARDCORE AND GRANULAR SUB-BASES - *continued*

Item		
35	<i>Square Metre</i>	£
020	Grading surface to falls, crossfalls or cambers: compacting	2.60
021	Blinding surface	3.39

CONCRETE

Reference to other Sections: the Preambles and Rates to Section 11 apply equally to this Sub-Section unless otherwise stated.

Specification

Aggregate for lean concrete bases: coarse and fine aggregates, batched separated, or an all-in aggregate, to BS EN 12620, of nominal size 20 to 40 mm.

Lean concrete bases: cement content to be not less than 4 per cent by weight of dry aggregate.

Laying pavings: place and compact concrete continuously to prescribed joints and:

- spread and strike off with surcharge sufficient to obtain required compacted thickness;
- compact with mechanical beam pattern compactors using poker vibrators at edges and ends of slabs. Obtain full slab depth compaction, uniform density, strength with appropriate number of passes of compaction equipment. Avoid contact between poker vibrators and fabric reinforcement;
- finish concrete stopped between joints as a construction joint;
- check surface with 3000 mm straight edge, immediately make good irregularities exceeding 6 mm;
- complete compaction and finish to produce a surface free from laitence or excessive water.

1	2	3	4	5	6
Lean		Plain		Reinforced	
10 N/mm²:		30 N/mm²:		30 N/mm²:	
20 to 40 mm agg		20 mm agg		20 mm agg	
Thickness					
not exceeding 150 mm	150 to 450 mm	not exceeding 150 mm	150 to 450 mm	not exceeding 150 mm	150 to 450 mm
£	£	£	£	£	£
135.13	132.01	144.53	135.17	150.77	147.65

ADD where

023	sloping not exceeding 15° from horizontal	6.24
024	laid in bays not exceeding 10 m ²	3.50

35: SITE WORKS

FORMWORK

Reference to other Sections: the Preambles and Rates to Section 11 apply equally to this Sub-Section unless otherwise stated.

Item			
35		<i>Metre</i>	£
	Edge of bed: basic finish		
025	not exceeding 250 mm high		10.11
026	250 to 500 mm high		15.85
		<i>Each</i>	
	Mortice for road reflecting stud: basic finish		
027	225 x 175 x 50 mm		4.83
028	300 x 175 x 50 mm		5.65
	Sump: rebated all round: fine finish: extra concrete any grade		
029	225 x 225 x 150 mm		13.20
030	300 x 300 x 225 mm		20.57

REINFORCEMENT: STEEL FABRIC

Reference to other Sections: the Preambles and Rates to Section 11 apply equally to this Sub-Section unless otherwise stated.

- c. Lap mesh sheets transversely; no longitudinal lap;
- d. Stop reinforcement short of movement joints:
 - 1. for slabs 150 mm or more thick: 60 mm;
 - 2. for slabs less than 150 mm thick: 50 mm.

Specification

Laying mesh reinforcement:

- a. Lay sheets flat and straight;
- b. Lay main reinforcement in mesh parallel to longitudinal axis of slab;

Rates for the following include

Generally:
For 450 mm transverse laps.

		<i>Square Metre</i>	£
031	Fabric to BS 4483: any type: nominal mass not exceeding 1 kg per m ²		3.80
032	ADD for each additional 1 kg per m ²		0.89

35: SITE WORKS

MOVEMENT JOINTS

Specification

Movement joint filler: knot-free softwood or waterproof compressible, non-extruding, pre-moulded filler with high recovery factor after compression at temperatures below 50°C.

Joint sealant: to BS EN 14188.

Preforming movement joints: prior to concreting, set rigidly in position and support to prevent displacement of joint filler, sealing groove fillet and:

- a. maintain support until adjacent concrete has set before placing concrete for next slab;

- b. keep sealing groove fillet in position until concrete on both sides of joint is fully cured;
- c. remove fillet immediately prior to sealing joint.

Rounding on upper edges at joints: round upper edges of slabs at joints to 10 mm radius using bullnose arris trowel. Do not overwork concrete.

Placing softwood filler: immerse softwood filler in water for 48 hours before placing in joint and keep damp prior to concreting.

Sealing grooves: remove sealing groove fillet, clean out groove and fill with sealing compound.

Item		
35	<i>Metre</i>	<i>£</i>
	Movement joint: 25 mm thick filler: groove formwork	
033	not exceeding 150 mm deep	4.23
034	150 to 300 mm deep	6.81
035	300 to 450 mm deep	10.32
036	Sealant: 25 x 25 mm	11.25

WORKED FINISHES TO INSITU CONCRETE

	<i>Square Metre</i>	<i>£</i>
037	Tamped ribbed finish.	1.25
038	Rolled pattern finish	2.08
039	Power floated finish to smooth, even surface	1.93
040	Even textured finish achieved with scraping straight edge and medium coarse fibre broom	4.99
	ADD to the foregoing Rates where	
041	sloping	1.25
042	to falls or crossfalls	0.82

35: SITE WORKS

REPAIRS TO CONCRETE

Specification

For re-filling groove with joint sealant.

Joint sealant: to BS EN 14188.

Repairing crack:

For removing all dust and debris by scraping or brushing.

Rates for the following include

Re-sealing movement joint groove:

For removing hardened joint material.

For filling crack with latex rubber bitumen emulsion.

For removing all dust and debris by scraping or brushing.

For dusting surface with cement or fine sand.

For priming sides and bottoms of all joints with an approved solution as recommended by the manufacturer of the joint sealant.

Item		Metre	£
35			
043	Re-sealing movement joint groove: not exceeding 30 x 30 mm.		17.07
044	Repairing crack: not exceeding 10 mm wide		4.42

COATED MACADAM ROADS AND PAVINGS

GENERALLY

Method of measurement

Rates for the following include

Area:

Measure the area in contact with base. Make no deduction for voids not exceeding 0.50 m² or grounds.

Generally:

For laying to falls, crossfalls, cambers or slopes not exceeding 15° from horizontal.

Thickness:

Measure the compacted thickness exclusive of surface dressing.

For forming or working into shallow channels and associated labours.

For laying on any new or existing base.

Where laid over existing uneven paving, agree the average thickness with the PM before laying.

For preparing the base except forming key.

Work executed in small quantities

Where the total area of coated macadam surfacing executed in one location at the same time under one or more orders falls within the categories shown, multiply Rates 35.047 to 35.061 by the following factors:

045	not exceeding 10 m ²	multiply by 3.00
046	10 to 25 m ²	multiply by 1.30

35: SITE WORKS

TACK COATS

Specification

Tack coat: to BS EN 13808.

Note

Use tack coat only where ordered.

Workmanship: comply with BS 434-2 and BS 594987.

Item
35

Square Metre

£

047

Generally

1.24

COATED MACADAM

Specification

Coated macadam: manufacture, transport and lay in accordance with BS EN 13108-1 and -7, and BS 594987.

Bitumen binder: penetration grade bitumen.

Coarse aggregate: crushed rock or slag.

1	2
60 mm thick	ADD or DEDUCT for each 5 mm variation in thickness
£	£

Square Metre

Base course: bitumen binder; exceeding 300 mm wide

048

20 mm size open graded base course

13.11

1.08

049

40 mm size single course

13.11

1.08

050

28 mm size dense base course

14.03

1.15

051

20 mm size dense base course

14.03

1.15

Metre

Base course: bitumen binder; not exceeding 300 mm wide

052

20 mm size open graded base course

4.59

0.44

053

40 mm size single course

4.59

0.44

054

28 mm size dense base course

5.03

0.49

055

20 mm size dense base course

5.03

0.49

35: SITE WORKS

COATED MACADAM - *continued*

Item		1	2
		20 mm thick	ADD or DEDUCT for each 5 mm variation in thickness
35	<i>Square Metre</i>	£	£
	Wearing course; exceeding 300 mm wide		
056	10 mm size close graded wearing course: bitumen binder	5.32	1.29
057	6 mm medium graded wearing course: bitumen binder	5.60	1.36
	<i>Metre</i>		
	Wearing course; not exceeding 300 mm wide		
058	10 mm size close graded wearing course: bitumen binder	2.15	0.77
059	6 mm medium graded wearing course: bitumen binder	2.20	0.84
	<i>Square Metre</i>		£
060	Blinding wearing course with coated grit; exceeding 300 mm wide.		1.22
	<i>Metre</i>		
061	Blinding wearing course with coated grit; not exceeding 300 mm wide.		0.66

LABOURS ON COATED MACADAM

Rates for the following include For surfacing of any description and any thickness.

Generally:
For surfacing in any number of courses unless otherwise stated.

	<i>Metre</i>	£
	Jointing to existing: cutting to line: coating with hot penetration grade bitumen	
062	single course	1.40
063	two course: trimming back wearing course to break joint: extra material	3.13
	<i>Each</i>	
064	Working into recessed cover and around frame: any size	6.95
065	Working around obstruction: not exceeding 0.30 m girth	2.08
066	ADD for each additional 0.30 m of girth	0.92

35: SITE WORKS

REPAIRS TO COATED MACADAM

Specification

Repairing crack:

- Remove all dust and debris by scraping and brushing;
- Fill crack with latex rubber bitumen emulsion;
- Dust surface with cement or fine sand.

Filling pot hole:

- Cut out to full depth of original layer and trim back wearing course to break joint;
- Remove all dust and debris by scraping and brushing;
- Score surfaces and apply tack coat to bottom and sides;

- Fill with new material to match existing;
- Compact thoroughly so that patch conforms to existing surface and will not be further compacted by traffic;
- Blind with coated grit where required to match existing surface.

Note

Filling pot holes exceeding 1 m²:
Pay for at the Rates for new work.

Saw cut:
Pay for only where specifically ordered.

Item
35

Metre

		1	2	3
		Repairing crack: not exceeding 10 mm wide	Single saw cut 25 mm deep	ADD for each additional 5 mm depth
		£	£	£
067	Labour on existing coated macadam	4.42	2.55	0.22

Each

Filling pot hole: any thickness

		1	2	3	4
		Not exceeding 0.10 m ²	0.10 to 0.25 m ²	0.25 to 0.50 m ²	0.50 to 1.00 m ²
		£	£	£	£
068	base course	4.53	8.27	13.47	22.34
069	wearing course	4.05	6.46	9.26	13.01

35: SITE WORKS

GRAVEL AND HOGGIN PAVINGS

GENERALLY

Specification

Hard binding gravel: 20 mm maximum size, containing a preponderance of angular material free from an excess of clay and sufficient grit to enable adequate compaction by rolling.

Clinker: approved, well-graded clinker, 40 mm maximum size, free from deleterious substances and excess dust.

Fine hoggin: a combination of naturally occurring gravel, sand and clay with a minimum of 85 per cent by weight passing a 10 mm BS sieve.

Spreading and compacting paving: evenly spread and compact by a 1.5 tonne minimum weight roller to required compacted thickness and levels.

Edging and pegs: sawn softwood, preservative treated with creosote. Nail edging to driven pegs with galvanised nails.

Method of measurement

Generally:

Measure area in contact with base. Make no deduction for voids not exceeding 0.50 m².

Measure the compacted thickness.

Rates for the following include

Generally:

For working over and around obstructions.

Item		1	2	3
		Gravel	Clinker	Hoggin
35	Square Metre	£	£	£
	Paving: 50 mm thick; over 300 mm wide			
070	level and to falls only	5.74	4.61	6.96
071	to falls and crossfalls and to slopes not exceeding 15° from horizontal	6.31	5.19	7.53
072	ADD where not exceeding 300 mm wide	1.75	1.75	1.75
073	ADD for each additional 25 mm of thickness	1.94	1.38	2.55
	Metre			£
	Edging: pegs 50 x 50 x 300 mm with pointed ends: at 1000 mm centres			
074	25 x 100 mm			7.76
075	25 x 150 mm			9.87

35: SITE WORKS

INTERLOCKING BRICK AND BLOCK PAVINGS

GENERALLY

Specification

Interlocking brick and concrete block paving: manufactured in accordance with the appropriate standard: chamfered on top edges: manufacturer's standard colours:

- brick paving: to BS EN 1344: Clay pavers;
- concrete block paving: to BS EN 1338: Concrete paving blocks;
- size:
 - paviors: size 200 x 100 mm;
 - mitre blocks: triangular: size 200 x 191 mm overall.

Workmanship: to BS 7533-3: Pavements constructed with clay, natural stone or concrete pavers. Code of practice for laying precast concrete paving blocks and clay pavers for flexible pavements.

Bed paviors and mitre blocks on sand minimum 50 mm thick.

Pattern: lay to a regular stretcher bond pattern aligned with main margins or to a regular herringbone pattern with mitre block margins.

Joints: close fitting with sand well brushed in.

Method of measurement

Generally:

Measure area of exposed face. Make no deduction for voids not exceeding 0.50 m².

Rates for the following include

Generally:

For cutting.

For margins.

Fair joint to flush edge of existing paving:
For preparing edge of existing.

BRICK PAVING

Item		1	2
		Supplying and laying	Laying only
		Thickness: 60 mm	
35	Square Metre	£	£
	Paving: colour natural: level and to falls only; exceeding 300 mm wide		
076	stretcher bond pattern	60.70	35.82
077	herringbone pattern	66.54	41.66
078	ADD where not exceeding 300 mm wide	18.99	18.99
079	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	5.75	5.75
	ADD where in repairs		
080	not exceeding 1 m ²	32.18	32.18
081	1 to 5 m ²	18.39	18.39
	Metre		
082	Jointing to existing	7.08	4.60
	Each		
083	Cutting and fitting around obstruction: not exceeding 0.30 m girth	5.03	5.03
084	ADD for each additional 0.30 m of girth	2.93	2.93

35: SITE WORKS

CONCRETE BLOCK PAVING						
	1	2	3	4	5	6
	Supplying and laying		Laying only			
	Thickness					
	60 mm	80 mm	100 mm	60 mm	80 mm	100 mm
<i>Square Metre</i>	£	£	£	£	£	£
Paving: colour grey: level and to falls only; exceeding 300 mm wide						
stretcher bond pattern	54.12	59.59	65.12	35.82	40.22	44.60
herringbone pattern	59.96	65.44	70.97	41.66	46.06	50.44
ADD where not exceeding 300 mm wide	18.99	21.19	23.38	18.99	21.19	23.38
ADD for any colour	2.36	4.47	7.00	-	-	-
ADD for permeable paving	17.33	18.35	19.50	-	-	-
ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal						
	5.75	5.75	5.75	5.75	5.75	5.75
ADD where in repairs						
not exceeding 1 m ²	32.18	35.32	38.44	32.18	35.32	38.44
1 to 5 m ²	18.39	20.68	22.99	18.39	20.68	22.99
<i>Metre</i>						
Jointing to existing	6.43	7.38	8.34	4.60	5.44	6.28
				1	2	3
				Thickness		
				65 mm	80 mm	100 mm
<i>Each</i>				£	£	£
Cutting and fitting around obstruction: not exceeding 0.30 m girth				5.03	5.87	6.69
ADD for each additional 0.30 m of girth				2.93	3.77	4.60

35: SITE WORKS

SLAB, BRICK, SETT AND COBBLE PAVING

GENERALLY

Specification

Cement: to BS EN 197-1 and manufactured by a BSI Registered Firm.

Sand for mortar: to BS EN 13139.

Mortar mix: cement and sand, 1:3 by volume.

Grout: ready mixed lime and sand, 1:3 by volume: to BS EN 998-2.

Sand for bedding: clean, sharp, natural silica sand containing not more than 3 per cent by weight passing a 63 micron BS sieve and not more than 10 per cent by weight retained on a 5 mm BS sieve.

Method of measurement

Generally:
Measure area of exposed face. Make no deduction for voids not exceeding 0.50 m².

Rates for the following include

Generally:
For cutting.

Fair joint to flush edge of existing paving:
For preparing edge of existing.

PRECAST CONCRETE AND STONE FLAGS

Specification

Concrete paving flags: hydraulically pressed concrete to BS EN 1339, natural colour. Standard sizes as ordered.

Natural stone paving flags: to BS EN 1341.

- a. Stone: hard sound Yorkshire or Caithness or suitable local stone of equal quality. Prepare stone for laying on natural bed with surfaces out of winding;
- b. Sizes as ordered;
- c. Finish:
 1. Yorkshire and similar stones: sawn with sawn edges;
 2. Caithness and similar stones: self-faced with all irregularities dressed off: edges carefully squared.

Mortar bed: not less than 25 mm thick.

Sand bed: not less than 40 mm thick.

Lay flags generally in accordance with BS 7533-4 and to an even surface, well pressed into bed in parallel courses to break joints by minimum of 150 mm.

Joints and jointing:

- a. joints to be even and approximately 10 mm wide;
- b. work grout well into joints;
- c. clean off surplus grout from surface of slabs.

Course and match flags with existing pavings.

35: SITE WORKS

PEDESTRIAN DETERENT PAVING

Specification

Mortar bed: not less than 25 mm thick.

Paviors: precast concrete:

Sand bed: not less than 40 mm thick.

- a. Pyramid pattern with smooth grey finish: size 600 x 600 x 75 mm thick; or
- b. patterned to give appearance of natural quarried granite setts: colour black: size 600 x 600 x 65 mm thick.

Joints and jointing:

- a. joints to be even and approximately 3 to 4 mm wide;
- b. work grout well into joints;
- c. clean off surplus grout from surface of slabs.

Item					
		1	2	3	4
35	Square Metre	Pyramid pattern		Granite sett pattern	
		Supplying and laying	Laying only	Supplying and laying	Laying only
		£	£	£	£
	Paving: level and to falls only: grouting joints				
110	bedding on sand	89.60	22.11	80.55	19.19
111	bedding on mortar	92.01	24.53	82.96	19.49
112	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	14.65	14.65	14.65	14.65
	ADD where in repairs				
113	not exceeding 1 m ²	15.49	15.49	15.49	15.49
114	1 to 5 m ²	7.75	7.75	7.75	7.75
	Metre				
115	Jointing to existing	11.81	9.50	11.60	9.50
	Each				
116	Cutting and fitting around obstruction: not exceeding 0.30 m girth			6.69	6.69
117	ADD for each additional 0.30 m of girth			5.03	5.03

35: SITE WORKS

TACTILE PAVING

Specification

Tactile paving: precast concrete to DD CEN/TS 15209: colour red: top finished with 25 mm diameter domes, 6 mm high.

Mortar bed: not less than 25 mm thick.

Sand bed: not less than 40 mm thick.

Lay slabs to an even surface, and to a set pattern as ordered, well pressed into bed in parallel courses.

Joints and jointing:

- joints to be even and close fitting;
- work grout well into joints;
- clean off surplus grout from surface of slabs.

Course and match flags with existing pavings.

Item

35

Square Metre

Paving: 50 mm thick: level and to falls only: grouting joints

118	bedding on sand	58.87	17.73	55.78	17.73

119	bedding on mortar	61.28	20.15	58.19	20.15

120	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	8.77	8.77	8.77	8.77

ADD where in repairs

121	not exceeding 1 m ²	13.14	13.14	13.14	13.14

122	1 to 5 m ²	6.58	6.58	6.58	6.58

Metre

123	Jointing to existing	9.76	5.84	9.91	5.84

Each

£

124	Cutting and fitting around obstruction: not exceeding 0.30 m girth				5.55

125	ADD for each additional 0.30 m of girth				4.97

1	2	3	4
Slab size			
400 x 400 mm		450 x 450 mm	
Supplying and laying	Laying only	Supplying and laying	Laying only
£	£	£	£

35: SITE WORKS

GRANITE SETTS

Specification

Setts: to BS EN 1342:

- a. size: any width: any length;
- b. finish: square hammer dressed.

Lay setts to BS 7533-7 on 50 mm bed of mortar with 12 mm joints and grout.

Rates for the following include

Granite sett paving in fan-shaped pattern in concentric arcs:
For all half setts to achieve pattern.

Item
35

Square Metre

1	2	3	4
Supplying and laying		Laying only	
Thickness			
100 mm	125 mm	100 mm	125 mm
£	£	£	£

Paving: level and to falls only; exceeding 300 mm wide

126	in parallel courses with joints alternately broken and touching	84.56	112.60	32.83	37.42
127	in fan-shaped pattern in concentric arcs	102.95	130.99	51.22	55.81
128	ADD where not exceeding 300 mm wide	4.38	4.97	4.38	4.97
129	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	5.26	5.84	5.26	5.84

COBBLESTONES

Specification

Cobbles: selected hard water-smoothed stones free from deleterious substances and in the size range 50 to 75 mm.

Hoggin base: compacted and levelled fine hoggin not less than 75 mm thick.

Lean concrete base: as specified in this Section (page 528) not less than 75 mm thick.

Bedding cobbles: bed endwise shoulder to shoulder on base.

Laying cobbles: lay to pattern ordered. Hammer cobbles in by hand to a depth of 60 per cent of their length so that tops are level and to a uniform finish.

Joints and jointing: sprinkle a dry mix of mortar over cobbles to form a 5 mm skin over exposed base. Brush with soft brush to expose tops of cobbles to required amount and sprinkle water to set.

Square Metre

1	2
Supplying and laying	Laying only
£	£

Paving: level and to falls only; exceeding 300 mm wide

130	hoggin base	99.03	74.64
131	lean concrete base	100.72	76.33
132	ADD where not exceeding 300 mm wide	4.97	4.97
133	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	5.84	5.84

35: SITE WORKS

LAYING ONLY BRICK PAVING

Specification

Bed: bricks on mortar not less than 20 mm thick.

Pattern: lay to a regular stretcher bond pattern aligned with main margins or to a regular herringbone pattern, neatly splay cut at margins.

Joints: make joints approximately 10 mm wide and fill with bedding mortar to a flush surface.

Notes

Calculate the number of bricks from the following Table:

Number of bricks per square metre including waste			
Laid	Thickness		
	35 or 50 mm	65 or 67 mm	73 mm
Flat	40	40	40
On edge	-	62	56

Rates for the following include

Generally:

For everything except the cost of bricks.

For laying new or old bricks of any of the following types:

- Clay facing bricks or engineering bricks Class A or B to BS EN 771-1; standard format work size 215 x 102.5 x 65 mm;
- Calcium silicate facing bricks to BS EN 771-2; work size 215 x 102.5 x 65 mm;
- Approved facing or engineering bricks as ordered; nominal size 219 x 105 x 67 or 73 mm
- Clay pavior bricks to BS EN 1344; standard format work size 215 x 105 x 35 or 50 mm.

For plain border, one brick wide.

Item
35

Square Metre

Paving: level and to falls only; exceeding 300 mm wide

laid flat

134	stretcher bond pattern	40.47	40.77
135	herringbone pattern	45.07	45.37

laid on edge

136	stretcher bond pattern	-	60.66
137	herringbone pattern	-	67.56

138	ADD where not exceeding 300 mm wide	9.19	9.19

139	ADD where to falls and crossfalls and to slopes not exceeding 15° from horizontal	5.84	5.84

ADD where in repairs

140	not exceeding 1 m ²	33.60	35.06
141	1 to 5 m ²	16.80	17.54

1	2
Clay pavior bricks	Facing or engineering bricks
£	£

35: SITE WORKS

LAYING ONLY BRICK PAVING - *continued*

Item			1	2
			Clay paving bricks	Facing or engineering bricks
			£	£
35		<i>Metre</i>		
142	Jointing to existing		3.21	3.80
		<i>Each</i>		
143	Cutting and fitting around obstruction: not exceeding 0.30 m girth		5.84	7.30
144	ADD for each additional 0.30 m of girth		2.93	3.66

WORK TO OLD BRICK PAVING

		<i>Square Metre</i>	£
	Raking out decayed joints not less than 10 mm deep: repointing with a neat flush joint in mortar		
145	bricks laid flat		11.91
146	bricks laid on edge		16.69
		<i>Metre</i>	
147	Raking out detached joint: 10 mm deep: repointing with a neat flush joint in mortar		1.47

35: SITE WORKS

SPECIAL SURFACINGS

GENERALLY

Method of Measurement

Intermittent lines:
Measure net.

Double lines:
Measure as two single lines.

Letters, numerals or symbols or the like:
Measure the girth along the centre line.

Rates for the following include

Generally:
For straight or curved work.

For work on new or old surfacing or paving of any description.

For tack coat where required.

THERMOPLASTIC MATERIAL

Specification

Thermoplastic road marking material: to BS 3262-3 and manufactured by a BSI Kitemark Licensee.

Glass beads: to BS EN 1436, Class R2.

Application of thermoplastic road markings:
apply in following thicknesses:

- a. synthetic hydrocarbon resin bound materials:
 1. screed lines: 2 to 5 mm;
 2. sprayed lines other than yellow: 1.5 mm;
 3. sprayed yellow edge lines: 0.8 mm.

- b. gum or wood resin bound materials:

1. screed lines: 3 to 5 mm;
2. sprayed lines other than yellow: 2 mm;
3. sprayed yellow edge lines: 2 to 3 mm.

Rates for the following include

Generally:
For white, yellow or red colour.

Item					
		1	2	3	4
		New	Previously painted	Removing or obliterating existing markings	
				removing by approved method: making good road surface	painting over with black chlorinated rubber paint
		£	£	£	£
35	Square Metre				
148	Thermoplastic marking: exceeding 300 mm wide	37.94	36.26	11.82	14.04
	Metre				
	Thermoplastic line marking: 100 mm wide				
149	continuous line	4.67	4.42	1.60	1.81
150	intermittent line	5.93	5.55	2.25	2.39
151	letter, numeral or symbol	7.21	6.72	2.91	2.98
152	ADD or DEDUCT for each 25 mm variation in width	1.16	1.09	0.43	0.45
153	ADD for incorporating glass beads as 20% of the total mass - per 100 mm of width	0.24	0.24	-	-

35: SITE WORKS

ROAD AND PAVING MARKING PAINT

Specification

Chlorinated rubber paint: an approved proprietary type.

Epoxy resin paint: an approved proprietary type.

Glass beads: to BS EN 1436, Class R2.

Rates for the following include

Generally:
For any standard manufacturer's colour.

Item		1	2	3	4	5
		Chlorinated rubber	Epoxy resin		Painting	
		New	Previously painted	New	Previously painted	over existing marking with black chlorinated rubber paint
35	Square Metre	£	£	£	£	£
154	Marking: exceeding 300 mm wide	14.72	14.04	9.53	8.86	13.37
	<i>Metre</i>					
	Line marking: 100 mm wide					
155	continuous line	1.84	1.74	1.32	1.22	1.64
156	intermittent line	2.46	2.31	1.90	1.75	2.16
157	letter, numeral or symbol	3.09	2.90	2.47	2.28	2.69
158	ADD or DEDUCT for each 25 mm variation in width	0.48	0.45	0.36	0.32	0.43
159	ADD for applying glass beads at a rate of 500 g/m ² - per 100 mm of width	0.32	0.32	0.32	0.32	-

35: SITE WORKS

SITE FURNITURE

GENERALLY

Specification

Straight and ornamental bollards:

- fully galvanised and corrosion protected;
- factory painted, plastic coated or powder finish.

Retractable bollards:

- galvanised steel tube and section to BS 10210-1;
- ground socket 120 x 120 mm rectangular section;
- steel flap flush with surface.

Notes

Ground-fixed and floor mounted items:

Heights stated are the overall heights above ground.

Rates for the following include

Generally:

For moving items from delivery point or location and re-siting as ordered within the site.

For assembling (where appropriate) and fixing in accordance with manufacturer's instructions.

Ground-fixed items:

For excavating holes for supports, bases, etc. and disposing of arisings.

For breaking through existing hard surfacings.

For setting into ground at depth recommended by the manufacturer or as ordered.

For filling holes for supports, bases, etc. with concrete (10 N/mm²: 40 mm maximum size aggregate) to the full depth.

POSTS: SUPPLYING AND FIXING

Item		Each	£
35	Parking post: hinged: 750 mm above ground: lockable in the up and down positions: internally spring assisted: galvanised steel tube: base plate of cast SG iron: weather cap of black polypropylene: overall base dimension 203 x 102 mm		
160	exposed post		112.62
161	exposed post: with extended hinge pin for fire brigade padlock		143.80
162	concealed post: overall box dimensions: 220 x 835 x 105 mm		302.13
163	Boundary post: 750 mm above ground: sprung: bollard returns to position after light impact: ragged for casting in or flanged for bolting down: weather cap of black polypropylene		110.45
	Fixed post: 750 mm above ground: ragged for casting in or flanged for bolting down: weather cap of black polypropylene		
164	48 mm		71.32
165	60 mm		77.51
166	76 mm		65.22

35: SITE WORKS

BOLLARDS: SUPPLYING AND FIXING

Item		
35	<i>Each</i>	£
	Bollard: ornamental type: 1000 mm above ground: straight or tapered	
	ground fixed	
167	76 mm diameter	112.62
168	114 mm diameter	160.10
169	165 mm diameter	232.58
	removable: with cast in socket	
170	76 mm diameter	202.11
171	114 mm diameter	245.24
172	165 mm diameter	317.71
	Bollard: self coloured MDPE casing sleeve: 900 mm above ground: straight or tapered: safety reflector	
173	170 mm diameter: ground fixed	144.72
174	170 mm removable: with retractable bollard	365.69
	ADD for	
175	sliding bolt padlock	37.79
176	high security padlock	63.15

BOLLARDS: FIXING ONLY

		1	2
		Maximum diameter	
		200 to 300 mm	300 to 400 mm
	<i>Each</i>	£	£
	Bollard: straight or tapered: ground fixed		
	precast concrete: any finish: height		
177	not exceeding 500 mm	25.68	33.74
178	500 to 750 mm	28.60	38.12
179	750 to 1000 mm	31.52	42.52
	ductile or cast iron: any finish: height		
180	not exceeding 500 mm	22.76	30.82
181	500 to 750 mm	25.68	35.21
182	750 to 1000 mm	28.60	39.58

36: Fencing

GENERALLY

Specification

Approved firms: employ an approved specialist firm for fencing. Removal of old fencing and sundry repairs may be carried out by the Contractor where permitted by the PM.

Concrete post hole filling and fence sills: 10 N/mm² 40 mm maximum aggregate, as specified in Section 11.

Preservative treatment for softwood: treatment to carried out and certified by an approved licensed processor.

Cutting treated timber: re-treat all surfaces to treated timber exposed by cutting, boring etc with matching preservatives applied in two coats by brush.

Holes for supports:

- excavate and support earth as necessary;
- surround fence support with concrete for half the depth of the hole unless otherwise stated;
- backfill to ground level after concrete has hardened with selected excavated material well compacted unless otherwise stated;
- dispose of surplus materials.

Definition of terms

Supports: posts, struts or the like.

Straining posts: include end posts and angle posts.

Notes

Components of fences:

Sizes and materials are stated only where the BS gives alternatives.

Existing holes for supports:

Where existing holes are used no adjustment is to be made to the Rates.

Method of measurement

Height of fence:

Measure vertically from surface of ground to top of infilling or to top wire if higher.

Length of fence:

Measure over supports.

Rates for the following include

Generally:

For excavating and filling holes for supports.

For supports.

For all cutting including cutting to profile necessary to follow contour of ground.

Setting out to curve:

For setting out to curve straight between posts.

For curve of any radius.

Softwood fencing components and softwood gates:

For preservative treatment.

Taking off, resecuring and fixing only generally:

For component parts of fence of any size or description.

Taking down fence complete:

For excavating.

For removing concrete surround to posts and struts and concrete sill.

For reinstating ground with selected excavated material.

Work to old fencing and gates generally:

For taking down supports including excavating, breaking out concrete surround and reinstating ground with selected excavated material.

For excavating and filling holes for supports.

For component parts of fence of any size or description unless otherwise stated.

For removing fixings and fittings.

For providing and fixing nails, staples, stirrups, ties or the like.

For fixing fittings and bolts.

For straining or re-straining.

For cutting, shaping, housing or the like of timber components.

36: FENCING

CHAIN LINK FENCING

Specification

Line wire: mild steel.

Standard chain link fencing: to BS 1722-1.

Steel supports: rolled steel angle: galvanised.

Length of side of mesh: 50 mm.

Erection: comply with BS 1722-1.

Item	Metre	1	2	3	4	5	6	7	8
		Concrete supports				Steel supports			
		Height							
		900 mm	1200 mm	1400 mm	1800 mm	900 mm	1200 mm	1400 mm	1800 mm
36		£	£	£	£	£	£	£	£
001	Fence: wire diameter of mesh 3.00 mm: mesh and all wire galvanised	20.36	23.32	25.36	29.92	19.35	22.15	23.89	27.92
002	ADD where wire diameter of mesh 3.55 mm	1.53	2.04	2.33	2.99	1.53	2.04	2.33	2.99
003	Fence: wire diameter of mesh 3.55 mm overall: mesh and all wire galvanised and plastics coated Grade A	20.55	23.59	25.67	30.33	19.55	22.41	24.20	28.32
004	ADD where wire diameter of mesh 4.00 mm overall	1.81	2.38	2.74	3.48	1.81	2.38	2.74	3.48
	ADD to Items 36.001 and 36.003 where								
005	setting out to curve	1.16	1.27	1.32	1.46	1.16	1.27	1.32	1.46
006	ground sloping exceeding 15° from horizontal	1.16	1.27	1.32	1.46	1.16	1.27	1.32	1.46
007	length not exceeding 3 m	1.16	1.27	1.32	1.46	1.16	1.27	1.32	1.46
	Each								
	Extra for straining post								
008	one strut	38.76	47.38	50.54	58.02	51.78	62.86	66.09	82.72
009	two struts	63.89	77.15	82.56	94.02	84.34	103.17	108.76	131.95

36: FENCING

CHAIN LINK FENCING - *continued*

Item 36		<i>Each</i>	1	2	3	4
			Height			
			900 mm	1200 mm	1400 mm	1800 mm
			£	£	£	£
	Supplying only					
024	concrete intermediate post		7.60	9.02	10.35	13.75
025	concrete straining post		9.33	14.13	15.79	19.07
026	concrete strut		7.42	8.54	9.74	11.85
027	steel intermediate post		4.72	5.66	6.14	8.04
028	steel straining post		12.62	16.32	17.35	25.70
029	steel strut including brace as required		15.43	19.65	20.98	25.94

Per 10 metres

			1	2
			Galvanised	Plastics coated
			Grade A	
			£	£
	Line wire			
030	taking off		2.50	2.50
031	re-straining		4.37	4.37
032	fixing only		9.98	9.98
033	supplying only		4.26	5.18

STRAINED WIRE FENCING

Specification

Standard strained wire fencing: General Pattern to BS 1722-2.

Steel supports: rolled steel angle: galvanised.

Wood supports: sawn softwood: square section.

Line wire: 5 mm diameter galvanised mild steel.

Number of line wires:

- 3 for 900 mm high fence;
- 5 for 1050 mm high fence.

Oak gate post: 100 x 50 mm nominal wrought oak post and 40 x 20 mm nominal wrought oak stop. Countersunk bolt to end post with two black bolts 10 mm diameter with washers. Hole through fence end post and gate post.

Erection: comply with BS 1722-2.

36: FENCING

STRAINED WIRE FENCING - *continued*

Item		1	2	3	4	5	6
		Concrete supports		Steel supports		Wood supports	
		Height					
		900 mm	1050 mm	900 mm	1050 mm	900 mm	1050 mm
36	<i>Metre</i>	£	£	£	£	£	£
034	Fence	10.74	12.32	7.96	9.34	7.21	8.42
	ADD where						
035	setting out to curve	1.16	1.16	1.16	1.16	1.16	1.16
036	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	1.16	1.16
037	length not exceeding 3 m	1.16	1.16	1.16	1.16	1.16	1.16
	<i>Each</i>						
	Extra for						
038	straining post: one strut	34.24	42.92	44.42	53.53	28.97	32.66
039	straining post: two struts	55.15	67.64	72.04	87.52	45.66	52.45
040	oak gate post	26.23	27.98	26.23	27.98	26.23	27.98

Work to old fencing

	<i>Metre</i>	£
041	Taking down fence complete	3.61
042	Fixing only fence complete	9.06

		1	2	3	4
		Straining post		Strut	
		One strut		Two struts	
	<i>Each</i>	£	£	£	£
043	Taking down support	8.11	17.14	24.92	8.73
044	Fixing only support	12.91	30.08	47.68	15.11

		£
045	Taking down oak gate post	4.05
	Fixing only oak gate post and stop: providing bolts	
046	900 mm high	22.78
047	1050 mm high	24.23

36: FENCING**STRAINED WIRE FENCING - *continued*****Work to old fencing - *continued***

Item	Each	1	2	3	4	5	6	
		Concrete supports		Steel supports		Wood supports		
		Height						
		900 mm	1050 mm	900 mm	1050 mm	900 mm	1050 mm	
36		£	£	£	£	£	£	
	Supplying only							
048	intermediate post	6.35	7.20	5.59	6.54	3.11	3.50	
049	straining post	7.77	12.90	10.51	13.60	3.50	3.88	
050	strut	6.18	7.13	12.87	16.39	1.94	2.20	
051	oak gate post: oak stop	3.45	3.75	3.45	3.75	3.45	3.75	
		Per 10 metres						£
	Line wire							
052	taking off						1.87	
053	re-straining						1.75	
054	fixing only						4.68	
055	supplying only						2.07	
		Each						
056	Supplying only eye bolt: nuts and washers						1.14	

36: FENCING**CLEFT CHESTNUT PALE FENCING****Specification**

Standard cleft chestnut pale fencing: to BS 1722-4.

Spacing between pales:

- a. 75 mm for 1050 to 1350 mm high fences;
- b. 50 mm for 1500 mm high fence.

Erection: comply with BS 1722-4.

Item	Metre	1	2	3	4	5	6	7	8
		Concrete supports				Wood supports			
		Height							
		1050 mm	1200 mm	1350 mm	1500 mm	1050 mm	1200 mm	1350 mm	1500 mm
36		£	£	£	£	£	£	£	£
057	Fence: posts set in concrete	13.43	17.11	19.04	25.02	12.74	15.82	17.73	27.24
	ADD where								
058	setting out to curve	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
059	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
060	length not exceeding 3 m	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
061	DEDUCT where wood supports pointed and driven	-	-	-	-	3.51	4.40	4.83	5.45
	Each								
	Extra for								
062	straining post: one strut: pointed and driven	-	-	-	-	25.91	32.29	35.47	38.41
063	straining post: two struts: pointed and driven	-	-	-	-	41.15	51.39	56.22	61.40
064	straining post: one strut: set in concrete	31.48	36.73	38.34	38.90	29.85	32.14	34.41	36.43
065	straining post: two struts: set in concrete	51.39	59.05	61.56	63.65	46.75	50.86	54.40	58.12

36: FENCING

CLEFT CHESTNUT PALE FENCING - *continued*

Item	36	Metre	1	2
			Support set in concrete	Support driven
			£	£
	Work to old fencing			
	Taking down			
066	fence complete		5.39	3.68
067	chestnut paling		1.47	1.47

		1	2	3	4
		Concrete supports		Wood supports	
		Height			
		1050 and 1200 mm	1350 and 1500 mm	1050 and 1200 mm	1350 and 1500 mm
		£	£	£	£
Fixing only					
068	fence complete	7.04	9.50	8.64	10.88
069	DEDUCT where wood supports pointed and driven	-	-	4.40	5.45
070	chestnut paling	3.02	5.21	3.78	6.01

					£
Supplying only chestnut paling					
071	1050 mm high				4.66
072	1200 mm high				5.45
073	1350 mm high				6.13
074	1500 mm high				8.43

		1	2	3	4
		Inter- mediate post	Straining post		Strut
			One strut	Two struts	
<i>Each</i>		£	£	£	£
Taking down support					
075	set in concrete	13.10	25.25	37.42	11.22
076	driven	7.48	14.03	20.57	6.54
Fixing only support					
077	concrete: set in concrete	11.82	25.56	38.04	12.52
078	wood: pointed and driven	9.92	26.47	39.73	13.25
079	wood: set in concrete	11.82	25.56	38.04	12.52

36: FENCING

CLEFT CHESTNUT PALE FENCING - *continued*

Item			1	2	3	4
			Height			
			1050 mm	1200 mm	1350 mm	1500 mm
36		<i>Each</i>	£	£	£	£
	Work to old fencing - <i>continued</i>					
	Supplying only					
080	concrete intermediate post		9.29	11.95	13.29	15.02
081	concrete straining post		8.64	13.73	15.49	15.80
082	concrete strut		6.04	6.85	7.31	8.56
083	wood intermediate post		2.99	3.28	3.62	5.52
084	wood straining post		3.74	4.07	5.12	6.89
085	wood strut		3.01	3.25	4.08	5.50
						£
086	Supplying only eye bolt: nuts and washers					1.14

CLOSE BOARDED FENCING

Specification

Arris rails: two cut from minimum 75 x 75 mm section.

Standard close boarded fencing: to BS 1722-5.

Wood gravel boards: 32 x 150 mm.

Concrete posts: mortised for arris rails.

Erection: comply with BS 1722-5.

Timber posts: for 1800 mm high fence: 100 x 125 x 2550 mm long.

		1	2	3	4	5	6
		Softwood boards			Oak pales		
Height							
1200 mm		1650 mm	1800 mm	1200 mm	1650 mm	1800 mm	
Metre		£	£	£	£	£	£
Fence: oak posts: concrete gravel board							
087	softwood rails	52.65	63.14	71.16	-	-	-
088	oak rails	60.15	74.37	82.40	80.28	103.57	113.64
ADD where							
089	with capping and counter rail	4.77	4.77	4.84	9.75	9.75	9.75
090	setting out to curve	1.16	1.16	1.16	1.16	1.16	1.16
091	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	1.16	1.16

36: FENCING

CLOSE BOARDED FENCING - *continued*

Item		1	2	3	4	5	6
		Softwood boards			Oak pales		
		Height					
		1200 mm	1650 mm	1800 mm	1200 mm	1650 mm	1800 mm
36	Metre	£	£	£	£	£	£
	ADD where						
092	length not exceeding 3 m	1.16	1.16	1.16	1.16	1.16	1.16
093	DEDUCT where timber gravel board	3.22	3.22	3.22	1.44	1.44	1.44
	Fence: concrete posts and gravel board						
094	softwood rails	57.42	64.73	72.43	-	-	-
095	oak rails	64.92	78.90	83.70	85.05	108.10	114.94
	ADD where						
096	with capping and counter rail	4.77	4.77	4.84	9.75	9.75	9.75
097	setting out to curve	1.16	1.16	1.16	1.16	1.16	1.16
098	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	1.16	1.16
099	length not exceeding 3 m	1.16	1.16	1.16	1.16	1.16	1.16
100	DEDUCT where timber gravel board	3.22	3.22	3.22	1.44	1.44	1.44

		1	2
Work to old fencing		Taking down	Fixing only
<i>Metre</i>		£	£
	Fence complete		
101	1200 mm high	8.60	33.61
102	1650 mm high	10.53	38.01
103	1800 mm high	11.60	41.27
	Fence excluding posts		
104	1200 mm high	6.11	24.85
105	1650 mm high	7.79	28.87
106	1800 mm high	8.60	32.14
107	Arris rail: detaching or refixing pales	1.62	11.73
108	Capping	0.40	1.17
109	Counter rail	1.02	3.52
110	Gravel board	1.81	9.95

36: FENCING

WOODEN PALISADE FENCING

Specification

Standard wooden palisade fencing: to BS 1722-5.

Oak posts: 125 x 100 mm.

Arris rails: oak: two cut from minimum 75 x 75 mm section.

Oak palisades:

- a. for 1200 mm high fence: 65 x 20 mm rectangular: pointed tops;
- b. for 1650 and 1800 mm high fence: triangular: two cut from 50 x 50 mm section: weathered tops.

Erection: comply with BS 1722-5.

Item	Metre	1	2	3
		Height		
		1200 mm	1650 mm	1800 mm
36		£	£	£
Fence				
126	concrete posts	39.10	49.00	53.36
127	oak posts	35.49	44.13	51.64
ADD where				
128	setting out to curve	1.16	1.16	1.16
129	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16
130	length not exceeding 3 m	1.16	1.16	1.16
Work to old fencing			1	2
			Taking	Fixing only
			down	
			£	£
Metre				
Fence complete				
131	1200 mm high		6.39	24.56
132	1650 mm high		8.27	28.46
133	1800 mm high		10.14	31.38
Fence excluding posts				
134	1200 mm high		3.90	15.80
135	1650 mm high		4.83	18.45
136	1800 mm high		5.77	20.21
137	Arris rail: detaching or refixing palisades		1.37	9.42
Palisades: exceeding five palisades in groups (measure fence length)				
138	1200 mm high		1.71	11.81
139	1650 or 1800 mm high		2.58	16.85

36: FENCING

WOODEN POST AND RAIL FENCING - *continued*

Item		Metre	1	2	3	4
			Nailed type		Mortised type	
			Softwood	Oak	Softwood	Oak
			£	£	£	£
36	Fence: 1100 mm high: three rails					
149	main posts pointed and driven	13.21	20.57	12.94	20.00	
150	main posts set in concrete	16.40	23.36	14.66	22.26	
	ADD where					
151	with four rails	2.61	4.30	2.59	4.28	
152	setting out to curve	1.16	1.16	1.16	1.16	
153	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	
154	length not exceeding 3 m	1.16	1.16	1.16	1.16	

Work to old fencing

	Metre	1	2	3	4	5	6	7	8
		Taking down				Fixing only			
		Softwood		Oak		Softwood		Oak	
		Nailed	Mortised	Nailed	Mortised	Nailed	Mortised	Nailed	Mortised
		£	£	£	£	£	£	£	£
	Fence complete								
155	three rails	5.15	4.52	5.15	4.52	9.83	8.17	11.01	9.34
156	four rails	5.96	5.96	5.96	5.96	11.34	9.63	12.80	11.10
157	Rail	0.81	1.44	0.81	1.44	2.97	3.52	3.54	4.24
	<i>Each</i>								
158	Prick post: pointed and driven	-	1.44	-	1.44	-	3.58	-	4.30
	Main post								
159	pointed and driven	2.86	2.86	2.86	2.86	8.95	11.68	10.70	14.03
160	set in concrete	8.60	8.60	8.60	8.60	16.24	19.00	18.00	21.32

	Metre	1	2	3	4
		Supplying only			
		Softwood		Oak	
		Nailed	Mortised	Nailed	Mortised
		£	£	£	£
161	Rail	1.06	1.06	2.40	2.40
	<i>Each</i>				
162	Prick post: 1600 mm long: pointed for driving	-	1.99	-	4.49
163	Main post: 1800 mm long	5.68	6.81	8.41	10.42
164	ADD where pointed for driving	0.77	0.78	1.21	1.22

36: FENCING

ANTI - INTRUDER CHAIN LINK FENCING

Specification

Standard anti-intruder chain link fencing: to BS 1722-10.

Supports: concrete posts and struts. Straining and intermediate posts with cranked tops, 3700 mm high measured vertically.

Erection: comply with BS 1722-10.

Finished height: top of mesh 2400 mm above ground. Top line of barbed wire 2900 mm above ground measured vertically.

Fixing barbed wire to mesh:

- where mesh to be buried, locate one line of barbed wire to top of chain link mesh and secure with wire ties at 150 mm intervals;
- where concrete sill to be provided, locate one line of barbed wire to top and bottom of chain link mesh and secure with wire ties at 150 mm intervals.

Item
36

Metre

1	2	3
2900 mm high		ADD for steel extension arm and three additional lines of barbed wire
Galvanised	Plastics coated Grade A	
£	£	£

Fence

165	with mesh buried (measure burying mesh separately)	51.81	57.48	15.15
166	with mesh fixed to concrete sill (measure sill separately)	50.17	55.68	15.15

ADD to Items 36.165 and 36.166 where

167	setting out to curve	1.16	1.16	-
168	ground sloping exceeding 15° from horizontal	1.16	1.16	-
169	length not exceeding 3 m	1.16	1.16	-

£

170	Excavating for and burying chain link mesh: 300 mm deep: reinstating ground: (measure overall)			4.96
171	Concrete sill 125 x 225 mm deep: excavating: formwork: backfilling: disposal of surplus materials: reinstating ground: (measure overall)			12.95

Each

Extra for straining post

172	one strut			99.13
173	two struts			157.09

36: FENCING

ANTI - INTRUDER CHAIN LINK FENCING - *continued*

Work to old fencing

Item		Metre	£
36			
	Taking down chain link mesh and line wire		
174	buried mesh		4.86
175	mesh fixed to concrete sill (excluding sill)		4.23
	Taking down fence complete: making good		
176	buried mesh		13.71
177	mesh fixed to concrete sill (including sill)		19.11
	Fixing only		
	chain link mesh: providing line wire: with mesh		
178	buried (measure burying mesh separately)		11.01
179	fixed to concrete sill (measure sill separately)		12.35
	fence complete: with mesh		
180	buried (measure burying mesh separately)		22.11
181	fixed to concrete sill (measure sill separately)		24.78
182	Resecuring chain link mesh		7.38
	Supplying only chain link mesh		
	galvanised		
183	2400 mm wide roll		15.38
184	2700 mm wide roll: bottom 450 mm treated with bitumen solution		19.62
	plastics coated Grade A		
185	2400 mm wide roll		20.04
186	2700 mm wide roll		24.56
		Each	
	Supplying only		
187	stretched bar complete with bolts and cleats		15.30
188	dropper		1.14
189	eye bolt: nuts and washers		1.14

36: FENCING

ANTI - INTRUDER CHAIN LINK FENCING - *continued*

Item		1	2	3	4				
						Intermediate post	Straining post		Strut
							One strut	Two struts	
36	Each	£	£	£	£				
Taking down									
190	support	19.63	29.45	39.27	14.96				
191	steel extension arm	3.12	3.75	-	-				
Fixing only									
192	support	41.09	77.15	101.09	23.92				
193	steel extension arm	2.93	3.66	-	-				
					£				
Supplying only									
194	intermediate post				20.75				
195	straining post				42.45				
196	strut				19.44				
197	steel extension arm for intermediate post: bolts				9.06				
198	steel extension arm for straining post: bolts				11.75				
				1	2				
				Galvanised	Plastics coated				
					Grade A				
				£	£				
Per 10 metres									
Taking off									
199	line wire			2.75	2.75				
200	line of barbed wire including droppers in fence top			4.37	-				
201	steel extension arms and three lines of barbed wire including droppers			22.46	-				
202	line of barbed wire secured to chain link mesh			3.75	-				
Re-straining									
203	line wire			5.03	5.03				
204	line of barbed wire in fence top			7.53	-				
Fixing only									
205	line wire			10.88	10.88				
206	line of barbed wire including droppers in fence top			12.56	-				
207	steel extension arms and three lines of barbed wire with droppers			43.84	-				
208	line of barbed wire secured to chain link mesh			12.56	-				
Supplying only									
209	line wire			3.91	5.18				
210	line of barbed wire			2.53	-				

36: FENCING

WOVEN WOOD AND LAP BOARDED PANEL FENCING

Specification

Standard woven wood and lap boarded panel fencing: to BS 1722-11.

Lap boarded panels: any type.

Erection: comply with BS 1722-11, Section 3.

Item							
		1	2	3	4	5	6
		Woven wood panels			Lap boarded panels		
		Height					
36	Metre	1200 mm	1500 mm	1800 mm	1200 mm	1500 mm	1800 mm
		£	£	£	£	£	£
	Fence: softwood panels and capping						
211	softwood posts	28.36	31.05	33.18	27.09	29.49	32.18
212	oak posts	30.92	33.96	36.42	29.66	32.40	35.42
213	concrete posts: rectangular or slotted	32.13	35.42	38.17	30.87	33.86	37.17
	ADD where						
214	with cedar panels and capping	15.87	17.22	20.15	13.77	14.48	15.48
215	setting out to curve	1.16	1.16	1.16	1.16	1.16	1.16
	ADD where						
216	ground sloping exceeding 15° from horizontal	1.16	1.16	1.16	1.16	1.16	1.16
217	length not exceeding 3 m	1.16	1.16	1.16	1.16	1.16	1.16

Work to old fencing

		1	2
		Taking down	Fixing only: any height
		£	£
	Metre		
218	Fence complete	8.11	16.39
	Each		
219	Fence panel	4.05	14.71
220	Capping	0.81	2.36
221	Post	8.11	17.62
	Metre		£
	Supplying only capping		
222	softwood		1.85
223	cedar		4.00

36: FENCING

WOVEN WOOD AND LAP BOARDED PANEL FENCING - *continued*

Item		Each	1	2	3
			Height		
			1200 mm	1500 mm	1800 mm
36			£	£	£
	Work to old fencing - <i>continued</i>				
	Supplying only panel				
	softwood				
224	woven wood		18.34	21.54	23.14
225	lap boarded		16.05	18.70	21.33
	cedar				
226	woven wood		47.14	52.76	59.70
227	lap boarded		41.02	44.95	49.42
	Supplying only new post				
228	softwood		3.68	4.30	4.92
229	oak		7.94	9.19	10.42
230	concrete: rectangular or slotted		8.74	10.19	11.65
231	Supplying only bolt: nuts and washers		0.51	0.51	0.51

STEEL PALISADE SECURITY FENCING

Specification

Standard steel palisade security fencing: to BS 1722-12, galvanised to BS EN ISO 1461.

Erection: comply with BS 1722-12.

Rates for the following include

Generally:
For filling holes for posts with concrete to the full depth.

		Metre	1	2
			Height	
			2400 mm	3000 mm
			£	£
232	Fence: corrugated pales: pointed tops		128.10	157.75
	ADD where			
233	setting out to curve		1.91	1.91
234	ground sloping exceeding 15° from horizontal		1.91	1.91
235	length not exceeding 3 m		1.91	1.91

36: FENCING

STEEL PALISADE SECURITY FENCING - *continued*

Item		1	2
		Taking down	Fixing only
36	<i>Metre</i>	£	£
	Work to old fencing		
	Fence complete		
236	2400 mm high	9.66	51.58
237	3000 mm high	11.37	62.48
	Fence excluding posts		
238	2400 mm high	4.98	27.63
239	3000 mm high	6.11	31.28
240	Rail: detaching or fixing pales	2.15	9.32
	Pales: exceeding five pales in groups (measure fence length)		
241	2400 mm high	2.86	18.09
242	3000 mm high	3.68	21.01
	<i>Each</i>		
	Pale: isolated or in group not exceeding five palisades		
243	2400 mm high	1.31	4.21
244	3000 mm high	1.44	4.55
	<i>Metre</i>		£
	Supplying only		
245	rail: 45 x 45 mm		4.31
246	rail: 50 x 50 mm		4.83
247	pale		3.42
	<i>Each</i>		
248	Taking down post		19.95
249	Fixing only post		60.47
	Supplying only post		
250	2400 mm high		30.16
251	3000 mm high		39.18

36: FENCING

ISOLATED TIMBER POSTS TO PREVENT VEHICLE ACCESS

Rates for the following include

Generally:

For filling holes for posts with concrete to the full depth.

Item		Each	£
36			
252	Oak post: 150 x 100 mm: 1200 mm long overall: weathered top: setting 750 mm in ground		34.34

GATES AND POSTS FOR CHAIN LINK FENCING

Specification

Gates and posts generally: to BS 1722-1.

Steel gates:

- steel formed with rectangular hollow section outside frame members and braces, size 40 x 40 x 3 mm; galvanised to BS EN ISO 1461 after manufacture;
- chain link mesh infill to match fencing fixed with stretcher bars and bolts;
- complete with fittings for hanging and securing.

Steel gate posts: rectangular hollow section galvanised to BS EN ISO 1461 after manufacture, complete with fittings for hanging and securing.

Rates for the following include

Generally:

For filling holes for posts with concrete to the full depth.

		Each	1	2	3
			Width		
			1000 mm	1500 mm	2000 mm
			£	£	£
	Steel gate: any type of mesh: single or double				
253	900 mm high		223.54	266.63	299.54
254	1200 mm high		236.76	282.33	317.00
255	1400 mm high		268.63	294.37	328.83
256	1800 mm high		287.63	306.25	362.23

		1	2	3	4
		Concrete		Steel	
		125 x 125 mm	150 x 150 mm	80 x 80 x 3.6 mm	100 x 100 x 4 mm
		£	£	£	£
	Post: hanging or shutting: fence height				
257	900 mm	46.17	-	60.03	-
258	1200 mm	50.91	57.04	66.09	72.38
259	1400 mm	55.97	63.00	84.65	94.05
260	1800 mm	65.35	75.26	103.43	115.47

36: FENCING

CLOSE BOARDED GATES

Specification

Board/pale filling: size 90 x 13 mm tapered to 6 mm. Lap 13 mm and nail to rails and braces with rose-headed composition nails.

Timber: wrought softwood or sawn oak.

Stiles, rails and braces: size 65 x 65 mm. Gates exceeding 1200 mm high to have a centre rail.

Item			
		1	2
		Softwood	Oak
		£	£
36	Each		
261	Framed and braced gate: not exceeding 1.00 m ²	86.38	101.60
262	ADD for each additional 0.30 m ²	10.41	14.64

WOODEN PALISADE GATES

Specification

Timber: wrought softwood or sawn oak.

Nails: galvanised.

Nominal sizes of timber members:

Member	Width of gate	
	not exceeding 900 mm	exceeding 900 mm
Stile	50 x 75	65 x 75
Rail	32 x 75	45 x 75
Brace	32 x 83	45 x 83
Pale - pointed	20 x 90	20 x 90

Fix: pales to rails and braces with nails. Space pales 75 mm apart.

		1	2
		Softwood	Oak
		£	£
	Each		
263	Framed and braced gate: not exceeding 1.00 m ²	69.55	85.33
264	ADD for each additional 0.30 m ²	10.53	13.93

36: FENCING

GATES AND POSTS FOR ANTI-INTRUDER CHAIN LINK FENCING

Specification

Gates and posts generally: to BS 1722-10.

Steel gates:

- steel framed with rectangular hollow sections, galvanised to BS EN ISO 1461 after manufacture;
- welded mesh infill: maximum 50 x 50 mm square meshes, 4 mm thick fabric;
- three lines of barbed wire on extension arms.

Single gates:

- outside frame members: 40 x 40 x 4 mm;
- braces: 40 x 40 x 3.2 mm;
- fittings: pair hinges, 20 mm diameter drop bolt and base sleeve, locking bar for padlock.

Double gates:

- outside frame members: 50 x 50 x 4 mm.
- braces: 50 x 50 x 3.2 mm;
- fittings: two pairs hinges, 20 mm diameter drop bolts and security stop with loose sleeves, slam plate and locking bar for padlock.

Gate posts: steel rectangular hollow section, galvanised to BS EN ISO 1461 after manufacture. Hinge pins, top caps and brace plates to clear adjacent straining posts.

Hang gates: to give 50 mm ground clearance. Double gates to have 12 mm maximum gap between meeting stiles. Well grease all moving parts.

Rates for the following include

Generally:

For filling holes for posts with concrete to the full depth.

Gates:

For concreting in loose sleeves for drop bolts in ground.

Posts:

For filling gap between gate post and straining post with three layer coils of barbed wire and fixing with wire ties.

Item		Each	£
36			
	Single gate: 2860 mm high		
265	1000 mm wide		448.96
266	2000 mm wide		670.94
		<i>Pair</i>	
	Double gates: 2860 mm high		
267	3000 mm wide		1240.42
268	4000 mm wide		1402.78
269	5000 mm wide		1649.11
		<i>Each</i>	
	Post: hanging or shutting: 3650 mm long		
270	100 x 100 x 4 mm		183.52
271	150 x 150 x 5 mm		282.98

36: FENCING

FIELD GATES AND POSTS

Specification

Timber gates: framed, braced and bolted. Bolts, nuts and washers galvanised to BS EN ISO 1461.

Steel gates: framed, braced and welded, heavy duty. Galvanised to BS EN ISO 1461 after manufacture. Complete with fittings for hanging and securing.

Timber posts: weathered tops. Holes for ironmongery.

Steel posts: capped tops. Complete with fittings for hanging and securing.

Rates for the following include

Generally:

For filling holes for posts with concrete to the full depth.

Item
36

Each

Gate

		1 Wrought softwood £	2 Sawn oak £	3 Steel £
272	2400 x 1100 mm	147.79	200.25	95.94
273	3000 x 1100 mm	160.93	217.64	108.18
274	3600 x 1100 mm	174.33	235.44	118.85

Gate post

		1 Wrought softwood £	2 Sawn oak £	3 Concrete £	4 Circular hollow section steel £
275	175 x 175 x 2100 mm long	52.16	63.92	58.17	-
276	200 x 200 x 2100 mm long	63.70	79.05	74.39	-
277	89 mm diameter x 2100 long	-	-	-	64.14
278	114 mm diameter x 2100 long	-	-	-	79.50
279	Gate stop: 100 x 125 x 600 mm: mortice for bolt socket	11.18	14.24	-	-

36: FENCING

IRONMONGERY FOR GATES

Specification

Ironmongery: steel, galvanised to BS EN ISO 1461.

Notes

Ironmongery fixed partly to softwood and partly to hardwood:
Measure as fixed to hardwood.

Rates for the following include

Generally:
For providing ironmongery complete with screws, bolts, nuts and washers.

For holes and mortices in timber.

Item 36	<i>Each</i>	1	2
		Fixing to Softwood	Hardwood
		£	£
	Pair hook and band hinges		
280	300 mm: bolting hook through post	16.82	18.29
281	450 mm: building in hook to brickwork	22.05	23.51
282	450 mm: heavy pattern: building in hook to brickwork	26.65	28.11
283	Set of double strap hinges for field gate	46.15	50.53
284	Barrel bolt: 150 mm	6.43	7.16
285	Gate latch: 50 mm: automatic pattern	5.52	6.24
286	Gate spring catch and hook plate: 500 mm	25.73	28.66
287	Cabin hook and eye: 150 mm	8.26	8.99

WORK TO OLD GATES AND POSTS

	<i>Each</i>	£
	Taking down	
288	gate: not exceeding 1 m ²	3.59
289	ADD for each additional 1 m ²	2.15
290	gate post	8.11
	Fixing only	
291	gate: not exceeding 1 m ²	8.80
292	ADD for each additional 1 m ²	5.87
293	gate post: filling hole completely with concrete	26.94

36: FENCING

CLEARING FENCE LINE

Item		
36	<i>Metre</i>	£
294	Clearing areas not exceeding 1.00 m wide, to each side of fence line, of bushes, scrub or undergrowth: cutting long grass, weeds, brambles, saplings not exceeding 150 mm girth or the like: disposing of arisings	4.31

BREAKING THROUGH PAVINGS

	<i>Each</i>	£
	Extra over excavating for support for breaking through existing paving not exceeding 150 mm thick and reinstating	
295	concrete	8.57
296	reinforced concrete	13.70
297	brick, block or stone or concrete flag	3.59
298	coated macadam or asphalt	6.84

37: Soft Landscaping

TURFING

GENERALLY

Specification

Turf: to BS 3969 and treated with selective weedkiller not more than 3 months and not less than 4 weeks before lifting.

Surface preparation: prepare surface including raking until ground is broken to a fine tilth 25 mm deep and uniformly firmed to finish at the correct levels. Remove all stones exceeding 50 mm in any dimension.

Lay turfs:

- a. within 2 days of delivery;
- b. working off planks;

- c. in consecutive rows in stretcher bond to correct levels working over turf already laid;
- d. with closely butted joints and firm by lightly and evenly beating with wooden beaters.

Top dress turfs in each area as laying proceeds with finely sifted top soil, brush well in to fill the joints and water in.

Rates for the following include

Generally:

For working to any slope not exceeding 30° from horizontal.

Item		
37	<i>Square Metre</i>	<i>£</i>
001	Supplying and laying turf	6.88
002	Taking turf from stack: transporting not exceeding 50 m: laying only	3.31
003	Dressing turf with fertilizer: equal parts of nitrogen, phosphate and potash: 70 g/m2	0.69

38: Mechanical Services

GENERALLY

Specification

Water byelaws: comply with Water Company's regulations.

Emergency shut off: inform the PM immediately, in writing, of all alterations to live water systems and the provisions made for emergency shut off.

Pipes and fittings: support pipes and fittings securely prior to use:

- a. with supports and fastenings appropriate to the location and materials. Use cavity fixing devices when securing pipes to hollow partitions;
- b. at centres not exceeding those stated in BS 6700 Table 17;
- c. in accordance with pipe manufacturer's recommendations, where applicable;
- d. ensuring supports fitted to plastics pipes do not distort or damage the pipe when tightened;
- e. band marking pipes to BS 1710, for identification.

Provision for draining and venting: run all horizontal pipes with a slight rise or fall as required for the release of air to any cistern, tank or tap to enable the system to be drained.

Sleeving: sleeve all pipes passing through walls, floors and beams and seal as ordered. Obtain approval before cutting holes in walls, floors and beams.

Thermal movement: make adequate provisions for thermal movement in the length of pipes and provide anchor and expansion joints, in accordance with manufacturer's recommendations.

Pipes of dissimilar materials: do not allow contact between corrosion forming dissimilar materials in pipes, joints, and between these and other adjacent materials or components.

Compatibility: do not mix pipes or systems except where joints are compatible or a manufacturer's recommended adaptor is used.

Couplings and adaptors: use types recommended by the manufacturer of the pipes being jointed.

Insulation of pipes in buildings: insulate all water supply pipes laid below suspended floors, in roof spaces or other locations vulnerable to freezing and/or heat gain in accordance with BS 5422.

Laying underground pipes:

- a. cover: lay pipes at depth specified in Section 41;
- b. flexible pipes: lay pipes:
 1. slightly snaking;
 2. with a gooseneck bend near the point of connection to the mains;
- c. UPVC pipes: do not solvent weld joints;
- d. thrust blocks: provide concrete (20 N/mm²) for pipe anchorage at bends on pressure main, to depth of pipe over whole width of trench. Provide support to tees by concreting to the side of trench.

Notification of testing: inform the PM to give him adequate opportunity to observe the carrying out of interim and final testing.

GENERALLY - *continued*

Facilities and equipment: provide clean water and all assistance, equipment, appliances and materials for interim testing throughout the progress of the work and for final test. Fix teepieces, blanking flanges and plugs when and where required and seal off and remove as directed.

Timing of tests:

- a. interim tests: before refilling the excavations and with mains anchored as specified before tests commence;
- b. final tests: immediately prior to the Works or each phase of the Works being handed over to the Employer.

Washout connections: where washout connections are fitted to cisterns and tanks, the initial flushing must be made via these connections with the distribution pipework isolated.

Defects: locate and remedy all defects and satisfactorily re-test as ordered.

Records of tests: keep records of all tests and supply a copy of each to the PM.

Anchorage of pipes below ground for interim tests:

- a. partially refill trench with excavated material kept clear of joints and joint holes so that inspection is not impeded;
- b. concrete around bends to the depth of the pipe and to the full width of the trench. Similarly support the back of tees;
- c. place concrete in such a manner that the pipes and joints are not damaged nor the pipes displaced. The concrete to have a strength of not less than 15 N/mm² at the time of the test.

Interim and final tests:

- a. service and distribution pipes: slowly fill with clean water to exclude all air. Apply a test pressure:
 1. for service pipes: of 10 bar at the inlet;
 2. for distribution pipes: of 10 bar at the lowest draw-off point; and
 3. maintain test pressures for at least 15 minutes without further pumping;

- b. cisterns and tanks: fill with clean water. When all servicing valves are closed, the system must be absolutely watertight;
- c. existing installations:
 1. do not subject existing installations to test pressures;
 2. monitor connections to existing installations which cannot be tested, for at least 1 hour before leaving unattended.

Disinfection: disinfect new mains, mains extensions, communication, supply and distribution pipes and cisterns/tanks before bringing them into use as follows:

- a. clean and flush out to remove dirt and debris. No water is to be used for domestic purposes during this operation nor until disinfection is completed;
- b. prepare the necessary quantity of disinfecting chemical to give a chlorine concentration of 50 mg/l. Follow the manufacturer's instructions;
- c. empty the section of pipework, cistern or to be disinfected;
- d. disinfect new mains or mains extensions first, followed by communication pipes, and supply pipes in that order;
- e. add the prepared solution to the pipework, cistern/tank and fill with clean water;
- f. allow a contact time of 2 hours;
- g. take a sample at the end of the time and check for residual chlorine with a comparator. If less than 0.2 mg/l is indicated, repeat the process until a residual is obtained;
- h. thoroughly flush out to remove all traces of heavily chlorinated water;
- j. discharge disinfecting water, neutralising if necessary.

GENERALLY - *continued*

Sampling: when ordered take samples from draw-off points after testing and disinfection and:

- a. dispatch samples to an approved testing laboratory for analysis;
- b. pay all charges for sampling and analysis;
- c. submit analysis results to PM on receipt;
- d. rectify any defects revealed by sample analysis which impair the quality of water beyond the limits set in the EC Directive on the quality of drinking water and pay all charges for resampling.

Definition of terms

Connector: includes thimbles, ferrules, caulking bushes, caps and linings or other fittings or adaptors, whether equal or reducing, or a combination of any of the above necessary to achieve the connection.

Reducer: includes diminishing pieces, reducing sets or socket reducers but excludes tapers.

Pipe bracket or clip: pipe support screwed to background.

Holderbat: pipe support screwed to background.

Notes

Concreting for anchorage and tests:
Pay for at the Rates in Section 11.

Cutting and pinning:
Pay for at the Rates in Section 41.

Method of measurement

Pipe:
Measure over all fittings and branches.

Reducing fittings:
Measure extra over the largest pipe in which they occur.

Rates for the following include

Generally:

For turning off water, draining and re-filling and venting existing systems as required at times convenient to and in agreement with the users of the existing systems.

For testing, disinfecting and sampling.

Pipe:

For joints in the running length.

For fixing without supports where no background or supports are stated.

For fixing in ducts, trenches or chases or embedded in floor screeds or in situ concrete.

For cutting and jointing to fittings.

For marking out for holes, mortices chases or the like.

Pipe fitting or the like:

For testing and stamping where required by the Water Company's regulations.

Fixing to stated background:

For providing supports and fixing by whatever means are necessary to uphold the item, including any plugging, shot firing or drilling and tapping necessary and the provision of fixing materials including matching screws where appropriate but excluding cutting and pinning.

Jointing pipe to existing:

For cleaning and preparing to receive new.

For connector if necessary.

Fixing only:

For providing supports and fixing materials.

Resecuring:

For providing new supports and fixing materials as necessary.

38: MECHANICAL SERVICES

ADJUSTMENT OF RATES FOR WORK IN ROOFS, LOW OR HIGH LEVEL IN PLANTROOMS, RISERS OR SERVICE DUCTS AND LOW OR HIGH LEVEL ON FLOORS

Item

38

001	Work carried out in roofs: prices at the Rates in this Section multiplied by 1.085
002	Work carried out at low level in plantrooms: prices at the Rates in this Section multiplied by 1.025
003	Work carried out at high level in plantrooms: prices at the Rates in this Section multiplied by 1.075
004	Work carried out in risers or service ducts: prices at the Rates in this Section multiplied by 1.050
005	Work carried out at low level on floors: prices at the Rates in this Section multiplied by 1.025
006	Work carried out at high level on floors: prices at the Rates in this Section multiplied by 1.075

PRIMARY EQUIPMENT

CISTERNS AND TANKS: GENERALLY

Specification

Holes: cut holes in cisterns and tanks before final protective coatings are applied. Remove all particles and debris after cutting holes.

Definition of terms

Capacity:
Capacity to water line.

CISTERNS: PLASTICS

Specification

Polyolefin or olefin copolymer moulded cisterns and covers: to BS 4213 and manufactured by a BSI Kitemark Licensee.

Protected cisterns:

insulated cisterns and covers to BS 7181 with:

- air inlet fitted with 0.65 mm maximum gauge corrosion resistant screen;
- warning/overflow outlet fitted with 0.65 mm maximum gauge corrosion resistant screen;
- vent pipe sleeve.

38: MECHANICAL SERVICES

CISTERNS: PLASTICS - *continued*

Item 38				1	2	3
				Open top	Protected	
				Cistern	Cover	
			<i>Each</i>	£	£	£
Rectangular						
	<i>BS Ref.</i>	<i>Capacity</i>	<i>Maximum height</i>			
007	PC 4	18 litres	310 mm	23.54	8.81	39.50
008	PC 15	68 litres	430 mm	56.40	21.00	96.49
009	PC 20	91 litres	510 mm	68.53	21.61	104.10
010	PC 25	114 litres	560 mm	84.17	24.28	121.74
011	PC 40	182 litres	610 mm	132.80	37.77	188.13
012	PC 50	227 litres	660 mm	147.28	40.62	207.16
013	PC 60	273 litres	660 mm	175.58	52.12	247.62
Circular						
	<i>BS Ref.</i>	<i>Capacity</i>	<i>Maximum height</i>			
014	PC 15	68 litres	430 mm	46.43	18.83	73.54
015	PC 20	91 litres	510 mm	64.10	22.36	92.59
016	PC 25	114 litres	560 mm	69.84	26.28	100.50
017	PC 40	182 litres	610 mm	94.43	29.46	119.31
018	PC 50	227 litres	660 mm	99.74	30.12	155.35
019	PC 60	273 litres	660 mm	147.44	40.58	200.59
020	PC 100	455 litres	760 mm	223.86	58.73	286.07
Hole: nominal size						
						£
021	not exceeding 25 mm					5.13
022	25 to 50 mm					6.84

38: MECHANICAL SERVICES**CISTERNS: GLASS FIBRE REINFORCED PLASTICS****Specification**

Glass fibre reinforced cisterns: for the storage, above ground, of cold water to BS EN 13280.

Rates for the following include

For purpose made covers.

Notes

Internal bitumen coating:
Pay for at the Rates in Section 29.

Item 38	<i>Each</i>			£
	Cistern			
	<i>BS Ref.</i>	<i>Capacity</i>	<i>External Dimensions</i>	
023	SC10	18 litres	520 x 365 x 310 mm	117.48
024	SC15	36 litres	670 x 365 x 385 mm	143.39
025	SC20	55 litres	670 x 470 x 385 mm	162.58
026	SC25	68 litres	670 x 490 x 490 mm	171.81
027	SC30	86 litres	670 x 520 x 490 mm	182.57
028	SC40	114 litres	745 x 570 x 520 mm	222.23
029	SC50	159 litres	800 x 620 x 570 mm	249.64
030	SC60	191 litres	820 x 640 x 620 mm	281.16
031	SC70	227 litres	975 x 670 x 590 mm	312.42
032	SC80	264 litres	970 x 720 x 620 mm	352.94
033	SC100/1	327 litres	1280 x 670 x 620 mm	428.75
034	SC100/2	336 litres	1025 x 745 x 695 mm	495.55
035	SC125	423 litres	1065 x 860 x 805 mm	564.82
036	SC150	491 litres	1190 x 960 x 750 mm	625.43
037	SC200	70 litres	1270 x 990 x 905 mm	743.20
038	SC250	841 litres	1620 x 1010 x 825 mm	841.14
039	SC350	1250 litres	1670 x 1290 x 925 mm	1107.97
040	SC500	1727 litres	1980 x 1370 x 1035 mm	1188.79
041	SC600	2137 litres	1980 x 1370 x 1235 mm	1340.03
042	SC1000	3364 litres	2640 x 1720 x 1240 mm	1662.92
	Hole: nominal size			
043	not exceeding 25 mm			6.84
044	25 to 50 mm			9.23

38: MECHANICAL SERVICES

CISTERN SUNDRIES

Item		Each	£
38			
045	Identification label: aluminium or plastics: self adhesive		2.04

WORK TO EXISTING CISTERNS

Rates for the following include

Generally:
For taking off and refixing covers.

		Each	£
	Disconnecting and remaking joint of pipe to cistern: nominal size		
046	not exceeding 25 mm		10.48
047	25 to 50 mm		17.32
048	50 to 75 mm		24.25

		1	2	3	4	5	6
		Nominal capacity					
		not exceeding 250 litres	250 to 500 litres	500 to 1000 litres	1000 to 2000 litres	2000 to 3000 litres	3000 to 4000 litres
		£	£	£	£	£	£
049	Cleaning and removing all scale and dirt from cistern including mouths of pipes	96.39	122.68	151.93	237.16	347.86	459.20

38: MECHANICAL SERVICES

STORAGE CYLINDERS

Specification

Copper direct and indirect cylinders: to BS 1566-1: 2002, Grade 2.

Notes

Cylinder: Measure pipe connections and immersion heater separately.

Item
38

Each

1	2
Supplying and fixing	Fixing only
£	£

Direct cylinder: screwed connections for four 25 mm nominal size pipes:
screwed connection 57 mm nominal size for vertically mounted immersion
heater: factory applied insulation

	BS Ref	Capacity	Diameter	Height		
050	1	74 litres	350 mm	900 mm	246.05	23.94
051	2	98 litres	400 mm	900 mm	253.95	27.36
052	3	116 litres	400 mm	1050 mm	259.23	29.07
053	4	86 litres	450 mm	675 mm	241.41	25.66
054	5	98 litres	450 mm	750 mm	252.29	27.36
055	6	109 litres	450 mm	825 mm	269.53	29.07
056	7	120 litres	450 mm	900 mm	257.38	30.79
057	8	144 litres	450 mm	1050 mm	294.77	34.20
058	9	166 litres	450 mm	1200 mm	331.11	37.62

Indirect cylinder: screwed connections for four 25 mm nominal size pipes:
screwed connection 57 mm nominal size for vertically mounted immersion
heater: factory applied insulation

	BS Ref	Capacity	Diameter	Height		
059	1	72 litres	350 mm	900 mm	262.43	27.36
060	2	96 litres	400 mm	900 mm	252.39	30.79
061	3	114 litres	400 mm	1050 mm	258.43	32.83
062	4	84 litres	450 mm	675 mm	243.36	29.07
063	5	95 litres	450 mm	750 mm	254.41	32.49
064	6	106 litres	450 mm	825 mm	285.27	34.20
065	7	117 litres	450 mm	900 mm	255.69	35.91
066	8	144 litres	450 mm	1050 mm	288.01	41.04
067	9	162 litres	450 mm	1200 mm	330.86	49.59
068	10	190 litres	500 mm	1050 mm	684.37	58.14
069	11	245 litres	500 mm	1200 mm	808.14	75.24

070	Extra for hand hole with bolted cover: not less than 150 mm diameter: to direct or indirect cylinder					£
						5.90

38: MECHANICAL SERVICES

WORK TO EXISTING STORAGE CYLINDERS

Rates for the following include

Generally:
For new bolts to covers as necessary.

Item		
38	<i>Each</i>	<i>£</i>
071	Taking off and rebolting cover to cylinder	5.18
	Disconnecting and remaking joint of pipe cylinder: nominal size	
072	not exceeding 25 mm	10.48
073	25 to 50 mm	17.32
074	50 to 75 mm	24.27
075	Cleaning and removing all scale and dirt from cylinder including mouths of pipes: not exceeding 150 litres nominal capacity	83.57

TERMINAL EQUIPMENT AND FITTINGS

FIXING ONLY FIRE HOSE REELS

Notes	Rates for the following include
<i>Fire hose reel:</i> Measure pipe connection separately.	<i>Generally:</i> For fixing item and supports to any background by any means except cutting and pinning.

	<i>Each</i>	<i>£</i>
076	Fire hose reel	42.85

CAST IRON ANCILLARIES

Specification

Fire hydrants: to BS 750.

	<i>Each</i>	<i>£</i>
	Fire hydrant: 65 mm nominal size: frost valve: bolted flanged joint to iron	
077	wedge gate Type 1: hydrant bend	354.44
078	screw-down Type 2	219.52
079	Spindle key: not less than 1000 mm long	89.09

38: MECHANICAL SERVICES

PIPEWORK

PLASTICS PIPEWORK: UPVC

Specification

Supports: standard clips.

Pipes with compression or elastomeric ring fittings:

- pipes to BS EN ISO 1452-1 to -5, Kitemark certified;
- joints and fittings to BS EN ISO 1452-1 to -5, Kitemark certified.

Rates for the following include

Generally:

For compression, elastomeric ring or solvent cement welded joints.

Pipes with solvent cement welded fittings:

- pipes to BS EN ISO 1452-1 to -5, Kitemark certified;
- joints and fittings to BS EN ISO 1452-1 to -5, Kitemark certified.

1	2	3	4	5	6	7
Nominal size						
12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm
£	£	£	£	£	£	£

Item
38

Metre

Pipe; series S

080	S 6.3 (PN 16)	-	-	20.64	19.40	17.94	18.94	21.98
081	S 5 (PN 20)	15.78	17.68	16.50	16.88	13.28	15.24	19.44

ADD for clips: any series

082	to timber	4.06	4.12	4.19	4.45	4.55	4.72	4.96
083	to masonry	5.14	5.20	5.27	5.53	5.64	5.80	6.04
084	to metal	5.77	5.83	5.90	6.16	6.27	6.43	6.67
085	to glazed tiles	6.16	6.22	6.29	6.56	6.66	6.82	7.06

Each

Extra for: any series

086	made bend	6.84	9.41	11.97	14.54	17.10	20.52	22.23
	connection to pipe end							
087	UPVC straight connector: screwed joint to steel	9.14	9.07	10.12	12.34	15.88	18.25	23.12
088	metal straight connector: screwed joint to steel	13.65	14.96	18.24	21.32	27.24	35.28	50.47
089	metal straight connector: compression or capillary joint to copper	14.58	15.61	17.89	21.37	26.11	31.48	-
090	connection to appliance or equipment: metal straight connector: screwed joint to steel	7.25	7.41	8.44	10.13	12.04	13.87	18.22
091	fitting with one end	6.66	7.39	8.30	10.91	13.48	17.70	20.33
092	fitting with two ends	9.99	10.04	12.50	16.94	21.47	26.94	30.61
093	fitting with three ends	10.22	10.30	16.58	22.70	26.31	33.68	40.00

38: MECHANICAL SERVICES

PLASTICS PIPEWORK: UPVC - *continued*

Item		1	2	3	4	5	6	7
		Nominal size						
		12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm
38	<i>Each</i>	£	£	£	£	£	£	£
094	Jointing pipe: any type: to existing plastics pipe	9.98	9.99	11.94	15.58	20.88	26.84	34.11
	<i>Metre</i>							
095	Fixing only pipe and fittings	5.19	5.91	6.62	8.71	9.42	10.50	11.56
	ADD for clips							
096	to timber	4.06	4.12	4.19	4.45	4.55	4.72	4.96
097	to masonry	5.14	5.20	5.27	5.53	5.64	5.80	6.04
098	to metal	5.77	5.83	5.90	6.16	6.27	6.43	6.67
099	to glazed tiles	6.16	6.22	6.29	6.56	6.66	6.82	7.06
100	Resecuring pipe and fittings	2.44	2.46	3.80	4.26	4.65	5.75	7.57

PLASTICS PIPEWORK: POLYETHYLENE

Specification

Pipes for use above ground: black to BS EN 12201-1, -2 and -5 and with compression fittings as recommended by the manufacturer.

Pipes for use below ground: blue to BS EN 12201-1, -2 and -5 with gunmetal or plastics compression fittings or fusion joints and fittings.

Supports: standard clips.

		1	2	3	4	5
		Nominal size				
		20 mm	25 mm	32 mm	50 mm	63 mm
	<i>Metre</i>	£	£	£	£	£
	Pipe					
101	black	6.13	8.50	10.75	18.94	24.31
102	blue	6.82	9.18	11.47	19.75	25.15
	ADD for clips					
103	to timber	4.06	4.19	4.22	4.68	5.49
104	to masonry	5.14	5.27	5.30	5.76	6.57
105	to metal	5.82	5.95	5.98	6.44	7.25
106	to glazed tiles	6.16	6.29	6.33	6.79	7.59

38: MECHANICAL SERVICES

PLASTICS PIPEWORK: POLYETHYLENE - *continued*

Item		1	2	3	4	5
		Nominal size				
		20 mm	25 mm	32 mm	50 mm	63 mm
38	<i>Each</i>	£	£	£	£	£
	Extra for: any pipe type					
107	made bend	9.75	14.36	15.73	24.45	30.44
	connection to pipe end					
108	metal straight connector: screwed joint to steel	19.22	24.59	29.11	52.43	69.78
109	metal straight connector: compression or capillary joint to copper	10.83	14.00	19.80	34.26	39.95
110	connection to appliance or equipment: metal straight connector: screwed joint to steel	15.77	21.72	28.64	46.31	61.09
	Extra for plastics fitting: any pipe type					
111	fitting with one end	6.20	6.87	7.50	12.39	15.70
112	fitting with two ends	9.20	10.35	11.76	19.42	22.86
113	fitting with three ends	12.13	14.11	16.39	25.50	33.97
	Extra for gunmetal fitting: any pipe type					
114	fitting with one end	9.36	13.39	16.11	21.29	25.85
115	fitting with two ends	12.96	18.38	27.86	39.26	47.74
116	fitting with three ends	17.88	24.46	38.11	60.26	78.25
117	Jointing pipe: any type: to existing plastics pipe	13.04	16.17	21.68	43.56	57.37
	<i>Metre</i>					
118	Fixing only pipe and fittings	5.82	7.87	9.23	14.36	17.10
	ADD for clips					
119	to timber	4.06	4.19	4.22	4.68	5.49
120	to masonry	5.14	5.27	5.30	5.76	6.57
121	to metal	5.82	5.95	5.98	6.44	7.25
122	to glazed tiles	6.16	6.29	6.33	6.79	7.59
123	Resecuring pipe and fittings	3.76	4.17	4.53	7.50	9.61

38: MECHANICAL SERVICES

PLASTICS PIPEWORK: PEX/PEM JG SPEEDFIT SYSTEM

Specification

Supports: standard clips.

Pipes with push-fit fittings:

- pipes to BS 7291 Parts 1, 2 & 3 class S, Kitemark certified.
- joints and fittings to BS 7291 Parts 1, 2 & 3 class S, Kitemark certified.

Item		Metre	1	2	3	4
			Nominal size			
			10 mm	15 mm	22 mm	28 mm
38			£	£	£	£
	Pipe					
124	PEX barrier		9.53	10.26	13.65	17.79
125	Polybutylene barrier		-	10.63	11.16	-
	ADD for clips					
126	to timber		3.86	3.97	4.12	4.31
127	to masonry		4.95	5.05	5.20	5.39
128	to metal		5.62	5.73	5.88	6.07
129	to glazed tiles		5.97	6.07	6.22	6.42
		Each				
	Extra for					
	connection to pipe end					
130	straight tap connector		-	13.17	17.01	-
131	bent tap connector		-	14.10	-	-
132	tank connector		-	9.91	13.17	27.43
133	stop end		4.12	4.86	6.08	8.35
134	elbow		6.45	6.96	9.63	16.71
135	stem elbow		7.20	9.04	12.62	-
136	equal tee		8.64	9.99	13.92	24.32
137	reducing tee		-	12.11	14.50	25.55
138	reducing coupler or reducer		-	9.09	11.24	14.39
139	PE-copper coupler		-	11.91	14.49	-
140	speedfit x union nut flexi hose 500mm long		-	17.50	21.82	-

38: MECHANICAL SERVICES

DUCTILE IRON PIPEWORK: SPIGOT AND SOCKET JOINTS

Specification

Flexibly jointed spigot and socket pipes and fittings: to BS EN 545, Kitemark certified and:

- a. pipe class: K9
- b. joint type: pipe manufacturer's flexible joint.

Item		1	2	3	4	5
		Nominal size				
		80 mm	100 mm	150 mm	200 mm	250 mm
38	Metre	£	£	£	£	£
141	Pipe	40.48	47.56	59.18	83.75	111.96
	Each					
	Extra for					
142	socket end sealed with double spigot piece and cap	86.83	87.95	112.25	170.52	264.09
143	socket plug	179.11	196.37	225.03	314.80	502.30
144	blank cap	54.83	57.18	74.03	107.82	169.10
145	double collar	85.33	89.84	115.16	183.77	284.49
146	flanged spigot	74.77	79.94	94.89	192.08	321.23
147	flanged socket	78.63	85.55	124.83	197.57	309.12
148	taper	-	102.75	166.13	157.45	324.01
149	bend	80.85	97.60	137.93	243.03	383.93
150	rest bend	189.09	208.25	435.07	643.24	845.54
151	flanged hydrant bend	134.50	142.30	202.64	-	-
152	flanged hydrant square tee	168.59	133.63	230.59	486.92	646.98
153	square tee: 80 mm branch	134.87	144.95	212.36	282.31	581.99
154	square tee: 100 mm branch	-	148.64	219.44	302.04	599.94
155	Jointing pipe to existing ductile iron pipe	69.83	76.76	114.94	183.16	291.17

38: MECHANICAL SERVICES

DUCTILE IRON PIPEWORK: FLANGED JOINTS

Specification

Joints: use gasket to BS 6956-1 and -5, and BS EN 751-1 and -2 and bolt flanges together.

Flanged pipes and fittings: to BS EN 545, Kitemark certified and:

- a. pipe class: K12;
- b. flange type: PN 16.

Item			1	2	3	4	5
			Nominal size				
			80 mm	100 mm	150 mm	200 mm	250 mm
38		<i>Metre</i>	£	£	£	£	£
156	Pipe		74.83	91.23	130.65	156.69	204.09
		<i>Each</i>					
	Extra for						
157	bolted blank flange		45.87	48.65	75.69	122.98	219.62
158	flanged spigot		80.62	76.61	116.20	202.91	336.21
159	flanged socket		88.29	84.36	109.34	199.97	325.74
160	taper		-	89.21	131.15	178.09	348.52
161	bend		95.12	103.28	154.58	253.28	493.21
162	long radius bend		315.92	363.57	427.11	490.87	592.46
163	rest bend		171.60	197.50	300.60	388.06	610.80
164	square tee: 80 mm branch		136.32	145.26	228.40	372.74	606.28
165	square tee: 100 mm branch		-	148.26	233.65	380.56	615.85
166	Joining pipe to existing ductile iron pipe		88.41	83.94	122.23	208.91	342.69

38: MECHANICAL SERVICES

GALVANISED STEEL PIPEWORK

Specification

Pipes: to BS EN 10255.

Screwed fittings: galvanised wrought steel to BS EN 10241.

Joints: screw together as recommended by pipe manufacturer using pipe thread tape to BS 7786.

Supports: galvanised malleable iron brackets or holderbats.

Rates for the following include

Generally:

For heavy or medium pipes and fittings unless otherwise stated.

Item	Metre	1	2	3	4	5	6	7	8
		Nominal size							
		15 mm	20 mm	25 mm	32 mm	40 mm	50 mm	80 mm	100 mm
38		£	£	£	£	£	£	£	£
	Pipe								
167	heavy	7.77	8.59	11.02	13.43	16.39	23.01	33.81	44.09
168	medium	6.52	7.60	9.34	11.73	14.50	20.02	29.34	38.36
	ADD for brackets								
169	to timber	6.03	6.19	6.44	6.95	8.69	9.57	13.64	16.76
170	to masonry	7.45	7.61	7.87	8.37	10.12	10.99	15.07	18.18
171	to metal	8.08	8.25	8.50	9.00	10.74	11.62	15.69	18.80
172	to glazed tiles	10.19	10.35	10.60	11.11	12.85	13.72	17.11	20.23
173	ADD for holderbats	3.94	4.21	4.35	4.45	6.04	6.77	10.27	13.31
	Each								
	Extra for								
174	connection to appliance or equipment: screwed joint to steel	4.50	5.26	6.14	7.15	8.63	12.03	16.53	23.01
175	fitting with one end	5.83	7.07	9.87	13.05	15.48	22.38	-	-
176	fitting with two ends	12.11	15.48	20.61	28.96	34.88	56.03	-	-
177	fitting with three ends	15.08	17.89	22.68	34.49	39.82	58.43	-	-

38: MECHANICAL SERVICES

GALVANISED STEEL PIPEWORK - *continued*

Item		1	2	3	4	5	6	7	8
		Nominal size							
		15 mm	20 mm	25 mm	32 mm	40 mm	50 mm	80 mm	100 mm
38	<i>Each</i>	£	£	£	£	£	£	£	£
	Extra for								
178	bend	-	-	-	-	-	-	39.65	77.87
179	hexagon nipple	-	-	-	-	-	-	27.35	42.17
180	socket plug	-	-	-	-	-	-	37.69	75.61
181	blank cap	-	-	-	-	-	-	47.23	83.57
182	longscrew	-	-	-	-	-	-	63.51	90.49
183	reducer	-	-	-	-	-	-	54.75	91.53
184	elbow	-	-	-	-	-	-	133.88	233.75
185	tee	-	-	-	-	-	-	95.15	116.01
186	sweep tee	-	-	-	-	-	-	149.71	236.33
187	Jointing pipe to existing galvanised steel pipe	5.18	6.12	7.16	8.63	10.22	13.73	18.92	26.08
	<i>Metre</i>								
188	Fixing only pipe and fittings . . .	6.33	6.84	7.91	9.49	12.09	17.26	20.94	24.62
	ADD for brackets								
189	to timber	6.03	6.19	6.44	6.95	8.69	9.57	13.64	16.76
190	to masonry	7.45	7.61	7.87	8.37	10.12	10.99	15.07	18.18
191	to metal	8.08	8.25	8.50	9.00	10.74	11.62	15.69	18.80
192	to glazed tiles	10.19	10.35	10.60	11.11	12.85	13.72	17.11	20.23
193	ADD for holderbats	3.94	4.21	4.35	4.45	6.04	6.77	10.27	13.31
194	Resecuring pipe and fittings	3.01	3.09	3.21	3.45	4.31	4.73	6.68	8.17

38: MECHANICAL SERVICES

COPPER PIPEWORK

Specification

Pipes and fittings for use above ground: to BS EN 1057, half hard to Table X or hard drawn to Table Z, and manufactured by a BSI Kitemark Licensee with:

- compression fittings: to BS EN 1254-2, Kitemark certified;
- capillary fittings: to BS EN 1254-1, Kitemark certified, with integral lead free solder rings.

Pipes and fittings for use below ground: half hard or annealed to BS 1057, Table Y with compression fittings to BS EN 1254-2, Kitemark certified.

Supports: brass brackets or holderbats.

Rates for the following include

Generally:

For compression or capillary fittings.

Item							
		1	2	3	4	5	6
		Nominal size					
	Metre	15 mm	22 mm	28 mm	35 mm	42 mm	54 mm
		£	£	£	£	£	£
38	Pipe						
195	Table X	7.75	11.17	14.88	25.42	31.08	43.80
196	Table Y	10.14	14.72	19.67	28.53	34.26	54.86
197	Table Z	7.26	10.71	12.82	21.98	27.32	38.86
	ADD for brackets						
198	to timber	6.92	7.25	8.75	9.88	11.32	13.32
199	to masonry	7.67	7.99	9.49	10.61	12.05	14.05
200	to metal	8.29	8.61	10.12	11.25	12.68	14.69
201	to glazed tiles	9.04	9.36	10.86	11.98	13.42	15.42
202	ADD for holderbats	6.14	7.03	8.25	9.20	10.21	11.72
	Each						
	Extra for: any pipe type						
203	made bend	4.52	5.61	6.84	9.03	11.28	14.64
	connection to pipe end						
204	straight connector: screwed joint to steel . .	9.29	12.11	18.42	30.64	38.33	52.80
205	straight connector: soldered joint to lead . .	26.96	33.35	46.26	59.90	73.47	99.10
206	bent connector: screwed joint to steel	11.79	15.65	22.60	35.42	48.68	-
207	bent connector with back plate: to any background: screwed joint to steel	20.24	28.00	-	-	-	-

38: MECHANICAL SERVICES

COPPER PIPEWORK - *continued*

Item		1	2	3	4	5	6
		Nominal size					
		15 mm	22 mm	28 mm	35 mm	42 mm	54 mm
38	<i>Each</i>	£	£	£	£	£	£
	Extra for: any pipe type						
	connection to pipe end						
208	tee connector: screwed joint to steel one end	19.47	25.54	33.24	-	-	-
209	tee connector: screwed joint to steel two ends	22.14	-	-	-	-	-
210	connection to bossed or tapped fitting: straight connector: screwed to steel	10.32	12.96	20.13	32.34	40.03	56.22
	connection to appliance or equipment						
211	straight connector: screwed joint to steel	11.68	13.75	23.91	37.81	54.35	69.70
212	straight connector: backnut: screwed joint to steel	15.62	16.79	24.48	31.34	39.08	53.99
213	bent connector: screwed joint to steel	16.65	20.67	35.35	57.94	85.30	-
214	bent connector: backnut: screwed joint to steel	21.09	24.38	36.62	52.15	70.63	-
215	bent connector with backplate: to any background: screwed joint to steel	24.93	33.02	-	-	-	-
216	tee connector: screwed joint to steel one end	24.16	30.56	45.99	-	-	-
217	tee connector: screwed joint to steel two ends	26.83	-	-	-	-	-
218	fitting with one end	3.67	5.07	11.71	17.11	26.80	35.91
219	fitting with two ends	6.00	9.59	17.08	30.88	40.95	64.80
220	fitting with three ends	8.75	14.20	26.59	41.79	61.74	92.48
221	Jointing pipe: any type: to existing copper pipe	6.93	9.49	15.80	28.08	35.77	50.13
	<i>Metre</i>						
222	Fixing only pipe and fittings	6.84	7.69	8.56	9.75	11.28	17.95
	ADD for brackets						
223	to timber	6.92	7.25	8.75	9.88	11.32	13.32
224	to masonry	7.67	7.99	9.49	10.61	12.05	14.05
225	to metal	8.29	8.61	10.12	11.25	12.68	14.69
226	to glazed tiles	9.04	9.36	10.86	11.98	13.42	15.42
227	ADD for holderbats	6.14	7.03	8.25	9.20	10.21	11.72
228	Resecuring pipe and fittings	4.46	4.97	5.53	6.42	7.77	9.75

38: MECHANICAL SERVICES

STAINLESS STEEL PIPEWORK

Specification

Pipes and fittings: to BS EN 10312, Kitemark certified, and with:

- a. compression fittings: to BS EN 1254-2, Kitemark certified;
- b. capillary fittings: to BS EN 1254-1, Kitemark certified, with integral lead free solder rings. Use special flux to BS 5245. Wash flux from the interior and exterior of the pipe and fittings as soon as possible.

Supports: brass brackets or holderbats.

Notes

Fittings and connections and fixing only pipes: Pay for at the Rates for copper pipework.

Rates for the following include

Generally:

For compression or capillary fittings.

Item		1	2	3	4	5
		Nominal size				
		15 mm	22 mm	28 mm	35 mm	42 mm
38	<i>Metre</i>	£	£	£	£	£
229	Pipe	12.60	16.38	19.00	24.45	28.96
	ADD for brackets					
230	to timber	6.38	6.83	7.15	8.34	9.25
231	to masonry	7.13	7.58	7.89	9.07	9.99
232	to metal	7.75	8.20	8.52	9.71	10.04
233	to glazed tiles	8.50	8.95	9.26	10.44	11.36
234	ADD for holderbats	4.35	5.14	5.80	7.18	8.25
	<i>Each</i>					
235	Extra for made bend	8.56	10.26	13.69	17.10	20.52

38: MECHANICAL SERVICES

WORK TO EXISTING

Notes

New pipe or fitting:
Pay for separately together with connectors.

Item			
38	<i>Each</i>		£
	Cutting into and taking out pipe: not exceeding 1 m in length: for insertion of new pipe or fitting		
	plastics: nominal size		
236	not exceeding 25 mm		5.30
237	25 to 50 mm		10.60
	copper or stainless steel		
238	not exceeding 25 mm		6.22
239	25 to 50 mm		12.49
	galvanised steel: nominal size		
240	not exceeding 25 mm		4.28
241	25 to 50 mm		7.35
242	50 to 75 mm		12.42
243	75 to 100 mm		16.86

WORK TO EXISTING FIBRE CEMENT WATER MAINS

		1	2	3	4
		Nominal size			
		75 mm	100 mm	150 mm	200 mm
	<i>Each</i>	£	£	£	£
244	Cutting into and taking out water main: not exceeding 1 m in length: for insertion of new pipe or fitting	13.17	16.76	23.94	32.49
245	Disconnecting and remaking cast iron detachable joint: renewing joint gasket	23.18	28.65	43.23	57.76
246	Drilling water main: fix only malleable iron saddle connector	22.23	25.66	30.79	37.62

38: MECHANICAL SERVICES

WORK TO EXISTING FIBRE CEMENT WATER MAINS - *continued*

Item		1	2	3	4	5
		Nominal size				
		13 mm	20 mm	25 mm	30 mm	40 mm
38	<i>Each</i>	£	£	£	£	£
	Drilling and tapping boss of malleable iron saddle: inserting ferrule					
247	screwed joint to steel	23.58	29.11	30.51	39.63	44.38
248	compression joint to plastics	25.66	32.34	35.77	47.61	51.51
249	capillary or compression joint to copper	23.47	29.33	31.79	40.49	45.03
250	ADD where executed under pressure	13.69	18.81	25.66	27.36	30.79

WORK TO EXISTING CAST IRON OR DUCTILE IRON WATER MAINS

Note

New pipe or fitting:

Pay for separately together with connections.

	<i>Each</i>	1	2	3	4
		Nominal size			
		80 mm	100 mm	150 mm	200 mm
		£	£	£	£
251	Cutting into and taking out water main: not exceeding 1 m in length: for insertion of new pipe or fitting	15.39	18.81	25.66	37.62
252	Cutting out and remaking caulked lead joint: providing new lead	17.43	24.62	36.58	48.68
253	Disconnecting and remaking flanged joint: renewing joint gasket	26.61	28.65	44.94	62.89

		1	2	3	4	5
		Nominal size				
		13 mm	20 mm	25 mm	30 mm	40 mm
		£	£	£	£	£
	Drilling and tapping main: inserting ferrule					
254	screwed joint to steel	25.29	31.17	32.57	42.19	46.94
255	compression joint to plastics	27.37	34.40	37.82	50.17	54.07
256	capillary or compression joint to copper	25.19	31.38	33.84	43.06	47.60
257	ADD where executed under pressure	13.69	18.81	25.66	27.36	30.79

38: MECHANICAL SERVICES

PIPE ANCILLARIES

PLASTICS ANCILLARIES

Specification

Diaphragm type float operated valves: to BS 1212-3 and manufactured by a BSI Kitemark Licensee.

Manifolds and valves with push-fit fittings: to BS 7291 Parts 1, 2 and 3 class S and manufactured by a BSI Kitemark Licensee.

Floats:

- a. copper to BS 1968 class B; or
- b. plastics to BS 2456; and
- c. manufactured by a BSI Kitemark Licensee.

Item			
		1	2
		Copper float	Plastics float
		£	£
38	<i>Each</i>		
	Float operated valve: 13 mm nominal size: jointing to side of tank through perforation provided: low pressure		
258	screwed joint to steel	25.00	19.95
259	compression joint to plastics	23.63	18.58
260	capillary or compression joint to copper	23.29	18.24
261	DEDUCT for high pressure valve	3.22	3.22

		1	2	3
		Nominal size		
		10 mm	15 mm	22 mm
	<i>Each</i>	£	£	£
	Manifold; push-fit fittings			
262	22 x 10 4 Way	-	-	20.79
263	22 x 15 4 Port rail	-	-	25.51
264	22 x 15 4 Zone brass rail	-	-	218.97
265	Angle service valve with tap connector; push-fit fittings	-	17.85	-
266	Stop valve; push-fit fittings	-	11.70	16.46
267	Brass chrome plated service valve; push-fit fittings	12.91	16.05	30.73
268	Brass chrome plated ball valve; push-fit fittings	16.53	19.03	33.71

38: MECHANICAL SERVICES

CAST IRON ANCILLARIES

Specification

Wedge gate valves: to BS 5163-1 and -2, and BS EN 1074-1 and -2:
double flanged Type A with resilient seated trim and handwheel.

Item		1	2	3	4	5	6	7	8	9	
		Nominal pressure 10 bar					Nominal pressure 16 bar				
		Nominal size									
		80 mm	100 mm	150 mm	200 mm	250 mm	80 mm	100 mm	150 mm	250 mm	
38	Each	£	£	£	£	£	£	£	£	£	
	Wedge gate valve										
269	two bolted flanged joints . . .	296.17	383.09	615.78	1089.44	1621.10	320.19	416.12	699.86	1783.24	
270	two spigot and socket joints: two flanged spigot and socket adaptors	434.55	508.74	801.63	1417.52	2171.15	458.57	541.77	885.71	2333.29	

38: MECHANICAL SERVICES

COPPER ALLOY ANCILLARIES

Specification

Screw down pattern taps: to BS 2879 Type 1 or Type 2 and manufactured by a BSI Kitemark Licensee. With lockshield and hose union outlet.

Pet cocks: to Water Company's approval.

Screw down stop valves: to BS 1010 and manufactured by a BSI Kitemark Licensee.

Underground unplated stop valves: to BS 5433.

Servicing valves: to BS 6675.

Gate valves: to BS 5154 and manufactured by a BSI Kitemark Licensee. Nominal pressure 16 bar with solid wedge and non-rising spindle.

Anti-vacuum valves:

- a. terminal valves: to BS EN 14451.
- b. in-line valves: to BS EN 14451.

Piston type float operated valves: to BS 1212-1 and manufactured by a BSI Kitemark Licensee.

Diaphragm type float operated valve: to BS 1212-2 and manufactured by a BSI Kitemark Licensee.

Floats:

- a. copper to BS 1968 class B; or
- b. plastics to BS 2456; and
- c. manufactured by a BSI Kitemark Licensee.

Backflow prevention valves: check valves to BS EN 13959.

Urinal flush control devices: to Water Company's approval.

Air valves: of types capable of venting main and withstanding the test pressure of the main in which installed and approved by the PM and the Water Company.

Item			
		1	2
		Nominal size	
		15 mm	22 mm
		£	£
38	Each		
	Draining tap		
271	screwed joint to steel	16.05	18.22
272	compression joint to plastics	16.85	19.48
273	capillary or compression joint to copper	17.64	19.41
274	Extra for small loose key	5.08	5.47

		1	2	3
		Nominal size		
		6 mm	10 mm	13 mm
		£	£	£
	Pet cock and loose key			
275	screwed joint to steel	16.05	17.02	19.69
276	compression joint to plastics	-	17.85	20.48
277	capillary or compression joint to copper	20.41	21.38	24.01

	1	2	3	4	5	6
	Nominal size					
	15 mm	22 mm	28 mm	35 mm	42 mm	54 mm
<i>Each</i>	£	£	£	£	£	£

		1	2	3	4
		Nominal size			
		10 mm	12 mm	15 mm	22 mm
		£	£	£	£
Servicing valve: capillary or compression joints to copper					
285	spherical plug type	27.17	27.69	31.81	34.49
286	tapered plug type	27.97	28.54	32.90	35.85
287	screwdown type	28.37	28.96	33.44	36.52

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38: MECHANICAL SERVICES

COPPER ALLOY ANCILLARIES - *continued*

Item		1	2	3	4	5	6	7	8
		Copper float				Plastics float			
		Nominal size							
		13 mm	19 mm	25 mm	32 mm	38 mm	50 mm	13 mm	19 mm
38	Each	£	£	£	£	£	£	£	£
	Float operated valve: piston or diaphragm type: jointing to side of tank through perforation provided: high pressure								
297	screwed joint to steel	26.24	44.18	85.30	173.96	180.44	256.63	21.19	37.43
298	compression joint to plastics	27.04	45.38	86.72	175.82	182.61	260.28	21.99	38.63
299	capillary or compression joint to copper	29.70	47.89	95.44	191.64	210.58	299.26	24.66	41.14

		1	2	3	4	5	6
		Nominal size					
		13 mm	19 mm	25 mm	32 mm	38 mm	50 mm
		£	£	£	£	£	£
	Backflow prevention valve						
300	two screwed joints to steel	32.33	42.10	46.30	67.74	96.38	152.52
301	two compression joints to plastics	32.49	42.33	47.86	69.77	98.80	156.45
302	two capillary or compression joints to copper	35.33	44.67	56.93	87.12	128.97	191.99
	Backflow prevention valve: double check valve assembly with intervening test plug						
303	two screwed joints to steel	73.93	114.64	141.82	208.74	299.28	382.82
304	two compression joints to plastics	74.09	114.87	143.38	210.77	301.69	386.75
305	two capillary or compression joints to copper	76.94	117.21	152.44	228.13	331.87	422.29

£

Urinal flush control device: 15 mm nominal size: two capillary or compression joints
to copper: (electrical connection by others)

306	clock controlled solenoid valve	244.87
307	electronically operated solenoid valve	291.84
308	hydraulically operated valve	212.04

38: MECHANICAL SERVICES

COPPER ALLOY ANCILLARIES - continued

Item		Each	1	2	3	4
			Manual		Automatic	
			Nominal size			
			13 mm	19 mm	13 mm	19 mm
38			£	£	£	£
	Air valve					
309	screwed joint to steel		66.42	80.06	85.68	103.83
310	compression joint to plastics		67.22	81.33	86.47	105.10
311	capillary or compression joint to copper		70.75	84.69	90.00	108.46
						£
312	Washing machine valve: 15 mm nominal size inlet: capillary or compression joint to copper:					
	19 mm nominal size outlet: screwed connection to washing machine supply pipe					26.27

ANCILLARIES: SUNDRIES

		Each	£
313	Identification label: aluminium or plastics: tying to valve		2.04

WORK TO EXISTING ANCILLARIES

Rates for the following include

For taking off and refixing cistern covers.

Generally:
For supplying new parts.

Fixing only valves:
For easing and adjusting.

	Each	1	2
		Nominal size	
		not exceeding 25 mm	25 to 50 mm
		£	£
314	Rewashing stop valve or float operated valve	8.76	12.59
315	Repacking stuffing box of stop valve	6.84	10.26
	Fixing only valve: any type		
316	screwed joint to steel	11.97	16.25
317	compression joint to plastics	10.26	13.69
318	capillary or compression joint to copper	11.12	15.39
319	two screwed joints to steel	15.39	23.94
320	two compression joints to plastics	13.69	22.23
321	two capillary or compression joints to copper	14.54	23.08

WORK TO EXISTING ANCILLARIES *continued*

Item 38	Each	£
322	Easing and adjusting float operated valve: any type; any size: (applicable only when other repairs are not required)	10.26
323	Taking off copper float: soldering watertight: refixing and adjusting: any size	20.52

		1	2	3	4	5	6
		Nominal size of valve					
		13 mm	19 mm	25 mm	32 mm	38 mm	50 mm
		£	£	£	£	£	£
	Renewing float with screwed socket: adjusting						
324	plastics float	9.63	11.43	-	-	-	-
325	copper float	14.67	18.18	21.74	42.63	42.63	57.81
326	Renewing brass rod to float operated valve: adjusting	18.20	20.08	24.69	-	-	-

		1	2	3	4	5
		Nominal size of valve				
		80 mm	100 mm	150 mm	200 mm	250 mm
		£	£	£	£	£
327	Repacking stuffing box of wedge gate valve spindle: taking apart and reassembling	19.02	28.01	35.03	42.15	55.96
328	Taking out wedge gate valve: refacing: regrinding: refixing: taking to and from shop if necessary	82.09	111.16	153.90	179.56	205.21

SLEEVES AND COVER PLATES

		1	2
		Length of sleeve	
		not exceeding 300 mm	300 to 600 mm
<i>Each</i>		£	£
Sleeve: galvanised steel tubing: handing to others for fixing: nominal size			
329	50 mm	2.48	5.00
330	65 mm	3.27	6.58
331	80 mm	4.16	8.34
332	100 mm	5.92	11.87

38: MECHANICAL SERVICES

SLEEVES AND COVER PLATES - *continued*

Item			
		1	2
		Length of sleeve	
		not exceeding 300 mm	300 to 600 mm
38	<i>Each</i>	£	£
Sleeve: light gauge copper tubing: handing to others for fixing: nominal size			
333	54 mm	4.01	8.11
334	67 mm	5.28	10.65
335	76.1 mm	7.21	14.47
336	108 mm	10.19	20.40

		1	2	3	4	5	6
		Nominal size of pipe					
		13 mm	19 mm	25 mm	32 mm	38 mm	50 mm
		£	£	£	£	£	£
337	Split cover plate: chromium plated steel: clipping into position	2.51	2.65	2.78	2.90	3.30	4.16

FIXING ONLY WATER METERS

		1	2	3	4	5
		Nominal size				
		19 mm	25 mm	32 mm	38 mm	50 mm
		£	£	£	£	£
	<i>Each</i>					
Water meter: any type						
338	compression joints to plastics	20.85	23.62	27.76	32.12	36.48
339	capillary or compression joints to copper	30.06	47.54	70.25	101.37	125.71

		1	2	3	4
		Nominal size			
		76 mm	102 mm	127 mm	152 mm
		£	£	£	£
340	flanged joints to iron (bolts, nuts, washers and rubber flange rings supplied with meter)	35.91	42.76	49.59	56.43

38: MECHANICAL SERVICES

WORK TO EXISTING WATER METERS

Item		1	2	3	4	5	6	7	8	9
		Nominal size								
		19 mm	25 mm	32 mm	38 mm	50 mm	76 mm	102 mm	127 mm	152 mm
38	Each	£	£	£	£	£	£	£	£	£
	Taking out meter: leaving ready to receive new									
341	disconnecting unions to steel, copper or lead	8.56	10.26	11.97	13.69	15.39	-	-	-	-
342	disconnecting spigot and socket connecting piece: burning out lead joints	-	-	-	-	-	34.20	47.89	58.14	68.40
	Taking out meter for testing									
343	disconnecting unions to steel, copper or lead: stopping ends of pipe with screw plugs or inserting short length of pipe with screwed joints to maintain supply	17.10	19.67	23.08	28.22	32.49	-	-	-	-
344	unbolting flanged joints: stopping ends of pipe with blank flanges or inserting short length of pipe with flanged joints to maintain supply (new bolts, nuts, washers and rubber flange rings supplied)	-	-	-	-	-	47.89	58.14	68.40	78.66
	Fixing only meter									
345	connecting to unions	21.38	23.08	26.51	30.27	34.20	-	-	-	-
346	caulked lead joints to socket of pipe	-	-	-	-	-	35.55	42.50	51.91	64.17
347	removing plugs or short length of screwed pipe: connecting to unions	23.94	25.66	29.07	34.20	35.91	-	-	-	-
348	removing blank flanges or short length of flanged pipe: flanged joints (new bolts, nuts, washers and rubber flange rings supplied)	-	-	-	-	-	37.62	44.46	54.72	64.99

38: MECHANICAL SERVICES

INSULATION AND FIRE PROTECTION

THERMAL INSULATION

Specification

Pipe insulation: preformed self-extinguishing plastics or preformed mineral fibre.

Fastenings:

- a. foamed plastics: with adhesive bands;
- b. mineral fibre: with metal bands.

Cistern and tank insulation: to BS 3958-5: bonded man-made mineral fibre slabs.

Loose fill insulation: to BS 5422, density 112 to 114 kg/m³.

Method of measurement

Insulation to cistern or tank:
Measure on the surface of the insulation.

Rates for the following include

Generally:

For smoothing the materials and working around supports.

For working around fittings.

For fastenings.

Item
38

Metre

Pipeline: nominal size

349	15 mm	10.80	12.40	13.85	9.00	12.01	13.42
350	22 mm	11.20	12.79	14.24	10.13	14.61	21.86
351	28 mm	12.48	14.02	15.46	11.60	16.89	22.54
352	35 mm	14.10	15.92	17.32	12.80	18.62	25.21
353	42 mm	15.82	17.02	19.10	14.08	20.57	27.44
354	54 mm	20.73	22.03	24.24	18.37	24.52	35.19

Each

Extra for working around ancillary: nominal size

355	15 mm	5.47	6.84	7.69	7.19	10.78	16.08
356	22 mm	6.50	7.87	8.72	7.69	11.45	16.76
357	28 mm	7.19	8.89	9.91	8.56	12.14	17.78
358	35 mm	8.21	9.91	10.95	9.41	12.82	18.81
359	42 mm	9.23	11.28	12.49	9.75	13.69	19.49
360	54 mm	10.78	13.17	14.36	11.12	14.88	21.03

Square Metre

361	Mineral fibre slabs: to cistern or tank	16.96	19.69	23.61

Each

362	Extra for working around pipe: not exceeding 55 mm nominal size	1.71	1.89	2.05

Cubic metre

363	Loose fill insulation: in tank casing or the like	125.12

1	2	3
Thickness		
Not exceeding 50 mm	50 to 65 mm	65 to 85 mm
£	£	£

38: MECHANICAL SERVICES

PROTECTIVE WRAPPING

Specification

Protective bandage wrapping tape: self-adhesive for wrapping pipework, ferrous flanges and bolts.

Bitumen felt wrapping: single layer of felt, bound on with galvanised or copper wire.

Tubular polyethylene film: to BS 6076. Secure with plastics adhesive tape.

Rates for the following include

Generally:

For working around supports, fittings, flanges and ancillaries.

For applying before or after laying or fixing of pipes.

Item		1	2	3	4	5	6	
		Pipeline nominal size						
		13 mm	19 mm	25 mm	32 mm	38 mm	50 mm	
38	Metre	£	£	£	£	£	£	
364	Wrapping tape	3.06	3.66	4.42	5.19	5.95	7.13	
365	Bitumen felt wrapping	4.24	5.00	5.42	5.85	6.61	7.64	
366	Tubular polyethylene film	3.30	4.09	4.98	5.81	6.68	8.08	
367	ADD for cleaning and preparing existing pipeline	1.13	1.37	1.54	1.71	1.89	2.05	
							£	
368	Bitumen felt wrapping: insulated pipeline: not exceeding 200 mm girth							8.52
369	ADD for each additional 100 mm of girth							3.06

INSULATION

Specification

Insulating jackets: to BS 5615.

	Each	£
Segmental cylinder insulating jacket: 80 mm nominal thickness: glass fibre encased in flame-retardant PVC: secured with bands: fitting around pipes and immersion heaters: to suit cylinder size		
370	350 mm diameter x 900 mm high	19.01
371	400 mm diameter x 900 mm high	21.30
372	400 mm diameter x 1050 mm high	24.12
373	450 mm diameter x 675 mm high	18.58
374	450 mm diameter x 750 mm high	20.14
375	450 mm diameter x 825 mm high	21.29
376	450 mm diameter x 900 mm high	23.55

39: Electrical Services

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40: Transportation

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41: Builder's Work in Connection with Mechanical and Electrical Installations

WORK FOR SERVICES INSTALLATIONS

GENERALLY

Definition of terms

Duct: includes trays, trunking, gratings or the like.

Pipe: includes tubes, bars, cables, conduit or the like.

Rates for the following include

Mortar:

For mortar to match adjacent work unless otherwise stated.

Hole for duct:

For any profile.

Making good facework, facings and stonework:

For pointing to match existing.

HOLES

Rates for the following include

Hole through concrete:

For building in pipe sleeve (supplied).

Making good fair finish to concrete:

For making good to match adjacent finish.

Hole through brickwork and blockwork:

For building in pipe sleeve (supplied).

Hole for pipe exceeding 110 mm nominal size through brickwork:

For turning arch over.

For any centring required.

Cutting hole through roof covering and wall covering or cladding:

For cutting holes through any isolating membranes, underlays or vapour barriers.

Cutting hole through existing surface finishes:

For cutting holes through any associated membranes, underlays, beds or backings.

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

HOLES - *continued*

Item		1	2	3	4	5
		For duct	ADD for	For pipe		
		not exceeding 1.00 m girth	<i>each additional 0.50 m of girth</i>	not exceeding 55 mm nominal size	55 to 110 mm nominal size	exceeding 110 mm nominal size
41	<i>Each</i>	£	£	£	£	£
001	Cutting hole through set or existing concrete: not exceeding 100 mm thick	31.80	15.95	19.84	24.85	29.79
002	ADD for each additional 25 mm of thickness	7.15	3.65	4.46	5.60	6.69
003	ADD for cutting reinforcement where ordered	20.93	10.47	8.37	16.74	25.12
004	making good fair face finish - <i>per face</i>	5.58	2.79	1.68	2.51	5.03
	Cutting hole through new or existing common brickwork					
005	half-brick thick	10.97	5.54	6.04	8.08	12.03
006	one-brick thick	20.83	10.53	11.45	15.13	22.85
007	one-and-a-half-brick thick	30.71	15.51	16.88	22.63	33.67
008	ADD for making good facework - <i>per side</i>	5.03	2.51	1.68	2.09	2.93
009	ADD for making good facework to facing brickwork - <i>per side</i>	7.53	3.77	2.51	3.13	4.38
010	Cutting hole through new or existing blockwork not exceeding 100 mm thick	8.88	4.04	2.58	3.15	4.14
011	ADD for each additional 25 mm of thickness	2.00	0.91	0.58	0.71	0.94
012	ADD for making good facework - <i>per side</i>	2.51	1.17	1.25	1.68	2.51
013	ADD where opening through cavity wall for sealing cavity not exceeding 75 mm wide around opening with slates in mortar	8.17	3.80	-	-	-
014	ADD for rendering around internally in mortar - <i>per 25 mm of wall thickness</i>	2.96	1.27	-	-	-
015	Cutting holes through new or existing engineering brickwork: price at the Rates for common brickwork multiplied by 2.00.					

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

HOLES - continued

		1	2	3
		For pipe		
		not exceeding 55 mm nominal size	55 to 110 mm nominal size	exceeding 110 mm nominal size
Item		£	£	£
41	<i>Each - per 25 mm of thickness</i>			
	Cutting hole through new or existing stonework in position: making good			
016	Bath	1.73	2.30	3.45
017	Portland	3.43	4.62	6.91
018	York	5.66	7.61	11.40
019	Granite	10.29	13.85	20.71
	<i>Each</i>			
	Cutting hole through			
020	sheet steel decking: any thickness	6.69	7.71	9.04
021	aluminium sheet decking: any thickness	5.87	6.87	7.20
	wood wool cement slab decking			
022	50 mm thick	2.51	3.35	4.19
023	75 mm thick	3.68	4.69	5.69
024	fibre cement profiled sheet roof covering or wall cladding: natural colour or acrylic coated	3.68	4.85	5.87
025	fibre cement profiled insulated sandwich construction roof covering or wall cladding: natural colour or acrylic coated outer membrane	8.37	9.55	10.55
026	galvanised steel corrugated sheet roof covering or wall cladding: any thickness	7.04	7.87	8.88
027	profiled aluminium sheet roof covering or wall cladding: any thickness	6.45	7.56	7.94
028	plain tile roof or wall covering: concrete or clay	8.54	10.38	11.39
029	single lap tile roof or wall covering: concrete or clay	11.22	13.40	15.07
030	fibre cement slate roof or wall covering	8.20	9.71	10.72
	natural slate roof or wall covering			
031	slates of uniform size	12.89	15.24	17.08
032	slates of random sizes	14.73	17.58	19.60

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

HOLES - continued

Item		1	2	3	4	5
		For duct		For pipe		
		not exceeding 1.00 m girth	ADD for each additional 0.50 m of girth	not exceeding 55 mm nominal size	55 to 110 mm nominal size	exceeding 110 mm nominal size
		£	£	£	£	£
41	<i>Each - per 12 mm of thickness</i>					
	Cutting hole through					
033	softwood	6.20	2.85	2.51	3.19	3.68
034	hardwood	9.37	4.19	3.85	4.69	5.52
035	manufactured building board	8.54	3.85	3.19	3.52	4.69
036	ADD where faced with plastic veneer or the like or with exposed fair face	3.68	1.68	2.51	3.19	3.68

1	2	3
For pipe		
not exceeding 55 mm nominal size	55 to 110 mm nominal size	exceeding 110 mm nominal size
£	£	£

	<i>Each</i>			
	Cutting hole through existing: making good			
037	paving: cement-sand or granolithic: any thickness	4.69	5.87	7.20
038	lath and plaster or plasterboard and plaster	3.68	4.52	5.69
039	quarry or ceramic floor tiling	12.39	15.41	19.42
040	ceramic wall tiling	5.36	6.87	8.54
041	wood block flooring	1.25	1.59	1.92
042	thermoplastic or PVC floor tiling	1.25	1.59	1.92
043	lino or flexible PVC flooring	1.68	2.01	2.68

MORTICES

	<i>Metre run of pipe</i>	£
	Mortices: for supports for pipe or duct: not exceeding 55 mm nominal size: grouting with mortar (any mix): making good	
044	forming in unset concrete	3.63
045	cutting in set or existing concrete	8.66
	<i>Each</i>	
046	forming in unset concrete	4.63
047	cutting in set or existing concrete	10.83

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

CHASES

Rates for the following include

For trowelling over in mortar to receive plaster.

Generally:

For horizontal, raking or vertical chases.

Chase for electrical conduit:

For pockets for switch and junction boxes.

Item
41

Metre

1	2	3	4	5	6
Common brickwork	Engineering brickwork	Blockwork			
New	Existing	New	Existing	New	Existing
£	£	£	£	£	£
Cutting chase for					
048 electrical conduit: single: any size	5.08	7.12	10.28	13.67	5.08 7.12
049 electrical conduit: double: any size	7.57	10.73	15.03	19.78	7.57 10.73
050 pipe: not exceeding 55 mm nominal size	6.44	9.61	11.42	16.16	6.44 9.61

SUNDRIES

051

Cutting and pinning ends of supports for pipe or duct:
not exceeding 55 mm nominal size

Metre run of pipe

1	2	3	4
Common brickwork	Blockwork	ADD for making good facework	ADD for making good facework to facing brickwork
£	£	£	£

4.19 2.85 0.84 0.92

Each

052

Cutting and pinning end of support for pipe or duct:
exceeding 55 mm nominal size

7.37 5.52 1.51 1.68

1	2	3	4
Common brickwork	Blockwork	Not exceeding 75 mm deep	ADD for exceeding each additional 25 mm of depth
£	£	£	£

8.37 3.52 6.36 2.35
10.55 4.19 8.37 3.52
14.06 5.69 10.72 4.19

056

Items in engineering brickwork: price at the Rates for Items 41.051 to 41.055 (common brickwork) multiplied by 2.00.

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

MAKING GOOD HOLES

Item		1	2	3	4	5	6
		Common brickwork Not exceeding half-brick thick	ADD for each additional half-brick thickness	Blockwork Not exceeding 75 mm thick	ADD for each additional 25 mm of thickness	ADD for making good facework - per side	ADD for making good facework to facing brickwork - per side
41	Each	£	£	£	£	£	£
	Making good hole after removal of						
	duct: girth						
057	not exceeding 1.00 m	21.82	6.26	17.12	4.92	5.52	7.87
058	1.00 to 2.00 m	39.03	11.32	28.73	9.14	10.05	14.24
	pipe: nominal size						
059	not exceeding 55 mm	8.41	2.66	6.52	1.93	2.85	3.35
060	55 to 110 mm	13.25	3.83	10.66	3.08	4.19	5.69
061	exceeding 110 mm	19.92	5.68	14.64	4.42	5.03	6.87

PRECAST CONCRETE DUCT COVERS

Reference to other Sections: the Preambles to Section 13 apply equally to this Sub-Section.

		1	2	3	4
		20 N/mm ²	25 N/mm ²		
		Aggregate			
		20 mm	10 mm	20 mm	10 mm
Square Metre		£	£	£	£
Duct cover: fine finish exposed faces					
062	not exceeding 50 mm thick	57.18	57.89	57.89	58.59
063	not exceeding 50 mm thick: laying dry	47.66	48.37	48.37	49.07
064	not exceeding 50 mm thick: bedding in mastic	85.68	86.39	86.39	87.09
065	ADD for each additional 10 mm of thickness	1.99	2.14	2.14	2.29
Each					
Extra for					
066	hole: 25 mm wide: not exceeding 150 mm long - <i>per</i> 25 mm of thickness	1.17	1.17	1.17	1.17
067	hole: 25 mm wide: 150 to 300 mm long - <i>per 25 mm of</i> <i>thickness</i>	1.51	1.51	1.51	1.51
068	dished sinking for hand hole: short length of mild steel bar as lifting handle cast in	4.22	4.22	4.22	4.22

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

TAKING UP AND RESETTING PRECAST CONCRETE DUCT COVERS

Rates for the following include

Resetting duct cover:

For pointing in mortar (any mix) or inserting premoulded filler and filling upper 25 mm of joint with bituminous joint sealant.

Item
41

Square Metre

069	Duct cover	6.24	9.36	27.07	31.26

1	2	3	4
Taking up		Resetting	
not exceeding 75 mm thick	75 to 150 mm thick	not exceeding 75 mm thick	75 to 150 mm thick
£	£	£	£

STEEL DUCT COVERS AND FRAMES

Specification

Steel: to BS EN 10025-1 and -2.

Fastenings for metal: of the same material and finish as that being fastened:

Rivets: from an approved manufacturer.

Welding: comply with BS EN 1011-2 and in the fabrication workshop unless otherwise stated.

Notes

Mortices for lugs in concrete:
Pay for at the Rates in Sections 11.

Mortices for lugs in brickwork or blockwork:
Pay for at the Rates in Section 14.

Rates for the following include

Generally:

For any size or section shape except where otherwise stated.

Duct cover:

For notching for pipes and framing around as necessary.

For ends, angles and intersections.

Kilogramme

070	not exceeding 25 kg each	1.36	0.52
071	25 to 50 kg each	1.31	0.52
072	50 to 100 kg each	1.27	0.52
Duct cover: recessed composite not exceeding 50 mm deep: angle frame and plate bottom: welded or riveted: lengths not exceeding 1.00 m			
073	not exceeding 20 kg each	5.92	0.52
074	20 to 30 kg each	3.98	0.52

1	2
Supplying and fixing	Fixing only
£	£

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

STEEL DUCT COVERS AND FRAMES - *continued*

Item		1	2
		Supplying and fixing	Fixing only
41	<i>Each</i>	£	£
075	Lifting key: ring or crutch head: for plate duct cover	3.24	-
076	Forming keyslot to recessed cover	15.41	-
	<i>Kilogramme</i>		
	Duct frame or the like: lugs not exceeding 450 mm centres: mitred and welded angles		
077	not exceeding 5 kg/m	6.84	2.05
078	5 to 10 kg/m	4.67	1.16

WORK TO EXISTING METAL DUCT COVERS AND FRAMES

Definition of terms

Duct cover: duct covers, floor plates, floor gratings or the like.

Duct frame: frames for duct covers, floor plates, floor gratings or the like.

Isolated: not exceeding 0.50 m² in area.

Narrow: not exceeding 0.50 m in width but excluding isolated units.

Notes

Unscrewing or unbolting duct covers:
Pay for in addition.

Rates for the following include

Duct cover:
For flat, recessed or recessed and filled units of any description and in any material.

For loose units.

Duct frame:
For steel or cast iron angle frames of any section.

Taking up duct frame:
For cleaning rebates in concrete and the like.

		1	2	3
		Isolated <i>Each</i>	Narrow <i>Metre</i>	All other <i>Square Metre</i>
		£	£	£
Duct cover				
079	taking up	6.87	4.61	6.87
080	resetting	9.11	5.49	9.11

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

WORK TO EXISTING METAL DUCT COVERS AND FRAMES - *continued*

		1	2
		For pipe	
		not exceeding 55 mm nominal size	55 to 110 mm nominal size
Item		£	£
41	<i>Each</i>		
	Notching steel chequered plate		
081	not exceeding 5 mm thick	4.62	7.71
082	5 to 10 mm thick	7.71	15.41
083	Notching steel recessed duct cover with angle frame and plate bottom	11.55	23.12
084	ADD where angles framed around and welded	39.22	41.80
	Notching steel or iron floor grating		
085	not exceeding 20 mm thick	5.73	7.71
086	20 to 30 mm thick	10.13	15.41
	<i>Metre</i>		£
	Taking up duct frame fixed with		
087	screws		7.11
	lugs cast into concrete		
088	cutting out lugs		29.33
089	cutting off lugs		17.74
	<i>Each</i>		
	Forming and fitting duct frame to pipe: nominal size		
090	not exceeding 55 mm		5.16
091	55 to 110 mm		10.34

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

WORK FOR EXTERNAL SERVICES INSTALLATIONS

GENERALLY

Reference to other Sections: the Preambles to Sections 5, 11 and 34 apply equally to this Section where appropriate.

EXCAVATING TRENCHES

Specification

Excavating:

- excavate trenches at least 300 mm wider than external diameter of pipeline subject to a minimum width of 500 mm;
- ensure trench bottom provides a firm even pipe bed for full length of pipes.

Parallel ducts: allow 25 mm minimum clearance between ducts.

Backfilling: over services not requiring a structural surround, backfill and compact by hand in 100 mm layers to 300 mm above pipelines with approved selected fill, readily compacted, free from roots, vegetable matter, building rubbish, frozen soil, clay lumps retained on a 75 mm sieve and stones retained on a 25 mm sieve.

Warning tapes: lay above service at a depth of 300 mm except where road or pavement

construction exceeds 300 mm total thickness when tape should be laid immediately below base construction.

Method of measurement

Parallel services:

Add together the nominal sizes plus clearance between services and treat as one service.

Rates for the following include

Service trenches:

For earthwork support, consolidating trench bottom, trimming excavations, backfilling and compacting and disposing of surplus excavated material off site.

For sifting and backfill and where cable covers are used for backfilling in two stages.

Item
41

Metre

1	2	3
Nominal size of pipe, duct or cable		
not exceeding 200 mm	200 to 250 mm	250 to 300 mm
£	£	£

For service: average depth

092	not exceeding 0.50 m	13.58	14.48	15.40
093	0.50 to 1.00 m	19.76	21.13	22.47
094	1.00 to 1.50 m	25.91	27.73	29.54
095	1.50 to 2.00 m	34.16	36.44	38.69

096 Where hand excavation is specifically ordered, price at the foregoing Rates multiplied by 2.00.

Metre

£

097 Polythene warning tape with legend: 150 mm wide and 0.10 mm thick: laid in trench 0.43

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

UNDERGROUND DUCTWORK

Specification

Vitrified clay ducts and fittings: to BS 65 extra strength class with polyethylene sleeve joints and Kitemark certified.

UPVC ducts and fittings: to BS EN 13598-1 with ring seal joints and Kitemark certified.

Draw lines: nylon with a minimum breaking strength of 550 N.

Removable plugs: hardwood or plastics.

Alignment: provide alignment by drawing through a wooden mandrel 250 mm long and 7 mm less in diameter than the bore of the duct. Variations from alignment not to exceed 1 in 30 horizontally and 1 in 60 vertically.

Draw lines: thread nylon draw lines through each duct way during laying and leave 4000 mm longer than each respective duct.

Duct ends: plug duct ends immediately after laying to prevent entry of soil. Secure both ends of each draw line outside plugged ends of duct.

Rates for the following include

Generally:
For straight, horizontal or vertical ducts.

For proving alignment.

For draw lines.

Item
41

Metre

		1	2	3	4
		Vitrified clay		UPVC	
	Nominal size				
	100 mm	150 mm	110 mm	160 mm	
	£	£	£	£	
098	Duct	8.77	12.34	8.20	15.44
	Each				
	Extra for				
099	bend	15.73	24.17	17.23	35.36
100	bell mouth	17.23	29.88	16.51	32.23
101	split type conduit plug	3.47	5.41	3.47	5.41

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

COATED CAST IRON SURFACE BOXES AND COVERS

Specification		Rates for the following include	
Surface boxes: graded in accordance with BS 5834-2 Clause 7.1.		Surface box: For bedding in cement-sand mortar (1:3).	
Protective coating: to BS EN 10300.			
Item	Each		£
41	Surface box: to BS 5834-2: marked "SV"		
102	light grade: hinged lid: 152 x 127 mm overall top size: 76 mm deep		41.70
103	heavy grade: split lid: 229 x 229 mm overall top size: 152 mm deep		72.57
	Surface box for air valve		
104	medium grade: minimum clear opening 263 x 263 mm: minimum depth 125 mm		168.39
105	heavy grade: minimum clear opening 625 x 331 mm: minimum depth 150 mm		456.85
	Surface box: to BS 750: marked "FIRE HYDRANT"		
106	medium grade: minimum clear opening 230 x 380 mm: minimum depth 100 mm		143.58
107	medium grade: minimum clear opening 215 x 495 mm: minimum depth 100 mm		146.22
	Surface box: to BS 5834-2: marked "W" or "WATER"		
108	light grade: hinged cover: minimum clear opening 140 x 115 mm: minimum depth 75 mm		25.67
109	heavy grade: double triangular cover: minimum clear opening 300 x 300 mm: minimum depth 150 mm		98.01
110	Fixing only indicator plate: plugging and screwing to masonry		8.86

TAKING UP AND RESETTING SURFACE BOXES

		1	2
		Clear opening size	
		not exceeding 0.10 m ²	0.10 to 0.25 m ²
Each		£	£
111	Taking up cast iron surface box and cover: any pattern: cutting away bedding mortar	2.50	4.99
112	Resetting cast iron surface box and cover: any pattern: bedding in cement-sand mortar (1:3)	10.47	21.49

41: BUILDER'S WORK IN CONNECTION WITH MECHANICAL AND ELECTRICAL INSTALLATIONS

VALVE, METER AND HYDRANT CHAMBERS

Notes

Air valve, water meter, fire hydrant, sluice valve
and stop valve chambers:
Pay for at the Rates for manholes in Section 34
except for Items below.

Item		
41	Each	£
	Stop valve guard: 1.00 mm deep from ground level to valve: excavation, earthwork support, backfilling and disposal: surrounding in concrete (15 N/mm2: 20 mm aggregate) 150 mm thick: formwork (measure surface box separately)	
113	100 mm nominal size glazed clay pipe	63.55
114	225 mm nominal size cast iron pipe	241.72

50: General Items

FIXINGS

BOLTS

Specification

Bolts generally: from an approved manufacturer.

Black bolts and nuts: to BS 4190.

Washers: to BS 4320.

Stainless steel: to BS 1449-2.

Method of measurement

Bolts:
Measure the length overall the head.

Rates for the following include

Bolts generally:
For one nut and maximum two round washers per bolt.

	1	2	3	4	5	6	7
Diameter of bolt							
6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	24 mm	
£	£	£	£	£	£	£	£

Item
50

Each

001	Black bolt: any grade: any type of head: not exceeding 75 mm long	0.89	0.94	1.16	1.51	2.07	3.09	4.92
002	ADD for each additional 25 mm of length	0.14	0.17	0.25	0.29	0.40	0.49	0.67
003	Ragbolt or Lewis bolt: not exceeding 75 mm long	1.21	1.46	2.04	2.61	4.07	4.88	6.16
004	ADD for each additional 25 mm of length	0.20	0.26	0.38	0.48	0.76	1.08	1.60
Expanding bolt : any type								
005	zinc plated steel: not exceeding 75 mm long	2.17	2.46	3.00	5.39	9.96	14.88	24.01
006	ADD for each additional 25 mm of length	0.03	0.16	0.20	0.35	0.54	0.66	0.83
007	stainless steel: not exceeding 75 mm long	3.77	4.34	5.50	10.24	19.01	26.17	45.75
008	ADD for each additional 25 mm of length	0.24	0.32	0.38	0.72	1.08	1.17	1.61
009	aluminium bronze: not exceeding 75 mm long	7.92	9.25	11.96	22.82	43.36	60.12	105.92
010	ADD for each additional 25 mm of length	0.59	0.78	0.91	1.69	2.53	2.76	3.77

50: GENERAL ITEMS

BOLTS - *continued*

Item		1	2	3	4	5	6	7
		Diameter of bolt						
		6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	24 mm
50	<i>Each</i>	£	£	£	£	£	£	£
	Stud bolt: resin anchor capsule							
011	zinc plated steel: not exceeding 200 mm long	2.92	3.24	3.46	4.07	6.01	8.80	12.54
012	ADD for each additional 25 mm of length	-	-	-	-	0.24	0.53	0.70
013	stainless steel: not exceeding 200 mm long	4.71	5.15	6.06	8.08	13.84	21.12	40.55
014	ADD for each additional 25 mm of length	-	-	-	-	0.80	1.54	2.01
								£
	ADD to the Rates for bolts (any type or diameter) for plate washer not exceeding 50 x 50 mm: instead of round washer							
015	zinc plated steel							0.29
016	stainless steel							0.91

THREADING STEEL

	<i>Each</i>	1	2	3	4	5
		Diameter				
		not exceeding 15 mm	15 to 25 mm	25 to 40 mm	40 to 50 mm	50 to 75 mm
		£	£	£	£	£
017	Cutting off end of bolt for threading or re-threading	1.67	2.09	3.35	4.60	6.28
	Cutting screw thread on					
	round bar					
018	not exceeding 50 mm long	3.35	4.19	6.28	8.12	10.97
019	ADD for each additional 25 mm of length	1.00	1.42	2.43	3.35	4.69
	square bar: preparing end of bar					
020	not exceeding 50 mm long	6.36	8.37	13.40	18.42	25.12
021	ADD for each additional 25 mm of length	2.51	3.52	6.03	8.54	12.06

Appendix

STEEL REINFORCING BARS: BS 4449 OR BS 4461

Nominal diameter	Mass
mm	kg/m
6	0.222
8	0.395
10	0.616
12	0.888
16	1.579
20	2.466
25	3.854
32	6.313
40	9.864
50	15.413

WEIGHT OF METALS

Cast iron	Wrought iron	Steel	Zinc	Copper	Lead
kg/m3	kg/m3	kg/m3	kg/m3	kg/m3	kg/m3
7208	7689	7850	7144	8730	11 325

APPENDIX**STEEL JOISTS**

Nominal size	Mass	Thickness	
		Web	Flange
mm	kg/m	mm	mm
305 x 203	96.73	10.9	23.0
254 x 203	81.85	10.2	19.9
254 x 114	37.20	7.6	12.8
203 x 152	52.09	8.9	16.5
203 x 127	41.67	8.9	14.6
203 x 102	25.33	5.8	10.4
178 x 102	21.54	5.3	9.0
152 x 127	37.20	10.4	13.2
152 x 89	17.09	4.9	8.3
152 x 76	17.86	5.8	9.6
127 x 114	29.76	10.2	11.5
127 x 114	29.76	7.4	13.0
127 x 114	26.79	7.4	11.4
127 x 76	16.37	5.6	9.6
127 x 76	13.36	4.5	7.6
121 x 44	9.67	4.6	8.3
114 x 114	26.79	9.5	10.7
102 x 102	23.07	9.5	10.3
102 x 102	19.35	6.4	9.5
102 x 64	9.65	4.1	6.6
102 x 44	7.44	4.3	6.1
89 x 89	19.35	9.5	9.9
76 x 76	14.67	8.9	8.4
76 x 76	12.65	5.1	8.4

APPENDIX

STEEL UNIVERSAL BEAMS

Nominal size	Mass	Depth of section	Width of section	Thickness	
				Web	Flange
mm	kg/m	mm	mm	mm	mm
914 x 419	388	920.5	420.5	21.5	36.6
	343	911.4	418.5	19.4	32.0
914 x 305	289	926.6	307.8	19.6	32.0
	253	918.5	305.5	17.3	27.9
	224	910.3	304.1	15.9	23.9
	201	903.0	303.4	15.2	20.2
	176	895.7	301.9	14.5	18.8
838 x 292	226	850.9	293.8	16.1	26.8
	194	840.7	292.4	14.7	21.7
	176	834.9	291.6	14.0	18.8
762 x 267	197	769.6	268.0	15.6	25.4
	173	762.0	266.7	14.3	21.6
	147	753.9	265.3	12.9	17.5
686 x 254	170	692.9	255.8	14.5	23.7
	152	687.6	254.5	13.2	21.0
	140	683.5	253.7	12.4	19.0
	125	677.9	253.0	11.7	16.2
610 x 305	238	633.0	311.5	18.6	31.4
	179	617.5	307.0	14.1	23.6
	149	609.6	304.8	11.9	19.7
610 x 229	140	617.0	230.1	13.1	22.1
	125	611.9	229.0	11.9	19.6
	113	607.3	228.2	11.2	17.3
	101	602.2	227.6	10.6	14.8
610 x 178	91	602.5	178.4	10.6	15.0
	82	598.2	177.8	10.1	12.8

APPENDIX

STEEL UNIVERSAL BEAMS - *continued*

Nominal size	Mass	Depth of section	Width of section	Thickness	
				Web	Flange
mm	kg/m	mm	mm	mm	mm
533 x 210	122	544.6	211.9	12.8	21.3
	109	539.5	210.7	11.6	18.8
	101	536.7	210.1	10.9	17.4
	92	533.1	209.3	10.2	15.6
	82	528.3	208.7	9.6	13.2
533 x 165	73	528.8	165.6	9.3	13.5
	66	524.8	165.1	8.8	11.5
457 x 191	98	467.4	192.8	11.4	19.6
	89	463.6	192.0	10.6	17.7
	82	460.2	191.3	9.9	16.0
	74	457.2	190.5	9.1	14.5
	67	453.6	189.9	8.5	12.7
457 x 152	82	465.1	153.5	10.7	18.9
	74	461.3	152.7	9.9	17.0
	67	457.2	151.9	9.1	15.0
	60	454.7	152.9	8.0	13.3
	52	449.8	152.4	7.6	10.9
406 x 178	74	412.8	179.7	9.7	16.0
	67	409.4	178.8	8.8	14.3
	60	406.4	177.8	7.8	12.8
	54	402.6	177.6	7.6	10.9
406 x 152	74	416.3	153.7	10.1	18.1
	67	412.2	152.9	9.3	16.0
	60	407.9	152.2	8.6	13.9
406 x 140	46	402.3	142.4	6.9	11.2
	39	397.3	141.8	6.3	8.6

APPENDIX

STEEL UNIVERSAL BEAMS - *continued*

Nominal size	Mass	Depth of section	Width of section	Thickness	
				Web	Flange
mm	kg/m	mm	mm	mm	mm
381 x 152	67	388.6	154.3	9.7	16.3
	60	384.8	153.4	8.7	14.4
	52	381.0	152.4	7.8	12.4
356 x 171	67	364.0	173.2	9.1	15.7
	57	358.6	172.1	8.0	13.0
	51	355.6	171.5	7.3	11.5
	45	352.0	171.0	6.9	9.7
	39	352.8	126.0	6.5	10.7
	33	348.5	125.4	5.9	8.5
	30	344.8	125.0	5.5	8.0
305 x 165	54	310.9	166.8	7.7	13.7
	46	307.1	165.7	6.7	11.8
	40	303.8	165.1	6.1	10.2
305 x 127	48	310.4	125.2	8.9	14.0
	42	306.6	124.3	8.0	12.1
	37	303.8	123.5	7.2	10.7
305 x 102	33	312.7	102.4	6.6	10.8
	28	308.9	101.9	6.1	8.9
	25	304.8	101.6	5.8	6.8
254 x 146	43	259.6	147.3	7.3	12.7
	37	256.0	146.4	6.4	10.9
	31	251.5	146.1	6.1	8.6
254 x 102	28	260.4	102.1	6.4	10.0
	25	257.0	101.9	6.1	8.4
	22	254.0	101.6	5.8	6.8
203 x 133	30	206.8	133.8	6.3	9.6
	25	203.2	133.4	5.8	7.8

Castellated universal beam sections

Castellation increases the depth of the section by 50% but all other properties given above remain unchanged.

APPENDIX

STEEL ANGLES

EQUAL

Size	Thickness (mm)											
	3	4	5	6	8	10	12	15	16	18	20	24
mm	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m
25 x 25	1.11	1.45	1.77	-----	-----	-----	-----	-----	-----	-----	-----	-----
30 x 30	1.36	1.78	2.18	-----	-----	-----	-----	-----	-----	-----	-----	-----
40 x 40	-----	2.42	2.97	3.52	-----	-----	-----	-----	-----	-----	-----	-----
45 x 45	-----	2.74	3.38	4.00	-----	-----	-----	-----	-----	-----	-----	-----
50 x 50	-----	-----	3.77	4.47	5.82	-----	-----	-----	-----	-----	-----	-----
60 x 60	-----	-----	4.57	5.42	7.09	8.69	-----	-----	-----	-----	-----	-----
70 x 70	-----	-----	-----	6.38	8.36	10.30	-----	-----	-----	-----	-----	-----
80 x 80	-----	-----	-----	7.34	9.63	11.90	-----	-----	-----	-----	-----	-----
90 x 90	-----	-----	-----	8.30	10.90	13.40	15.90	-----	-----	-----	-----	-----
100 x 100	-----	-----	-----	-----	12.20	-----	17.80	21.90	-----	-----	-----	-----
120 x 120	-----	-----	-----	-----	14.70	18.20	21.60	26.60	-----	-----	-----	-----
150 x 150	-----	-----	-----	-----	-----	23.00	27.30	33.80	-----	40.10	-----	-----
200 x 200	-----	-----	-----	-----	-----	-----	-----	-----	48.50	54.20	59.90	71.10

APPENDIX

STEEL ANGLES - *continued*

UNEQUAL

Size	Thickness (mm)								
	4	5	6	7	8	10	12	15	18
mm	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m	kg/m
40 x 25	1.93	-----	-----	-----	-----	-----	-----	-----	-----
60 x 30	-----	3.37	3.99	-----	-----	-----	-----	-----	-----
65 x 50	-----	4.35	5.16	-----	6.75	-----	-----	-----	-----
75 x 50	-----	-----	5.65	-----	7.39	-----	-----	-----	-----
80 x 60	-----	-----	6.37	7.36	8.34	-----	-----	-----	-----
100 x 65	-----	-----	-----	8.77	9.94	12.30	-----	-----	-----
100 x 75	-----	-----	-----	-----	10.60	13.00	15.40	-----	-----
125 x 75	-----	-----	-----	-----	12.20	15.00	17.80	-----	-----
150 x 75	-----	-----	-----	-----	-----	17.00	20.20	24.80	-----
150 x 90	-----	-----	-----	-----	-----	18.20	21.60	26.60	-----
200 x 100	-----	-----	-----	-----	-----	23.00	27.30	33.70	-----
200 x 150	-----	-----	-----	-----	-----	-----	32.00	39.60	47.10

APPENDIX

STEEL CHANNELS

Depth	Width	Thickness		Mass
		Web	Flange	
mm	mm	mm	mm	kg/m
32	27	6.4	6.4	3.60
51	25	4.8	4.8	3.48
51	25	6.4	6.4	4.56
76	38	5.1	6.8	6.70
76	51	6.4	7.6	9.34
102	51	6.1	7.6	10.42
102	76	7.1	11.0	17.69
127	64	6.4	9.2	14.90
152	76	6.4	9.0	17.88
152	76	9.7	12.2	24.57
152	89	7.1	11.6	23.84
178	76	6.6	10.3	20.84
178	89	7.6	12.3	26.61
203	76	7.1	11.2	23.82
203	89	8.1	12.9	29.78
229	76	7.6	11.2	26.06
229	89	8.6	13.3	32.76
254	76	8.1	10.9	28.29
254	89	9.1	13.6	35.74
305	89	10.2	13.7	41.69
305	102	10.2	14.8	46.18
381	102	10.4	16.3	55.10
432	102	12.2	16.8	65.54

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Published by TSO (The Stationery Office), part of Williams Lea, and available from:

Online
www.tsoshop.co.uk

Mail, Telephone, Fax & E-mail
TSO
PO Box 29, Norwich, NR3 1GN
Telephone orders/General enquiries: 0870 600 5522
Fax orders: 0870 600 5533
E-mail: customer.services@tso.co.uk
Textphone 0870 240 3701

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