

**STATE OF QATAR**  
**MINISTRY OF PUBLIC WORKS**  
**ENGINEERING SERVICES DEPARTMENT**

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**STANDARD METHOD OF  
MEASUREMENT OF BUILDING WORKS**

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## I N T R O D U C T I O N

The Standard Method of Measurement provides a uniform basis for measuring building works and embodies the essentials of good practice but more detailed information than is demanded by this document should be given where necessary in order to define the precise nature and extent of the required work. The Standard Method shall apply equally to the measurement of proposed and of executed works.

S E C T I O N   A

GENERAL RULES

- Measurements            A1(a) Work shall be measured net as fixed in position and each measurement shall be taken to the nearest 10 millimetres, (i.e. 5 millimetres and over shall be regarded as 10 millimetres and less than 5 millimetres shall be disregarded). This rule shall not apply to any dimensions stated in descriptions.
- (b) Where minimum deductions of voids are dealt with in this document they shall refer only to openings or wants which are wholly within the boundaries of measured areas, openings or wants which are at the boundaries of measured areas shall always be the subject of deduction irrespective of size.
- Descriptions            A2(a) The order of stating dimensions in the descriptions shall be consistent and generally in the sequence of length, width and height. Where that sequence is not appropriate or where ambiguity could arise, the dimensions shall be specifically identified.
- (b) Unless otherwise specifically stated in the bill, or herein, the following shall be deemed to be included with all items:-
- (i) Labour and all costs in connection therewith.
- (ii) Materials, goods and all costs in connection therewith (e.g. conveyance; delivery; unloading; storing; returning packings; handling; hoisting; lowering).
- (iii) Fitting and fixing materials and goods in position.
- (iv) Use of plant.
- (v) Waste of materials.
- (vi) All straight, raking and circular cutting and notching.
- (vii) Establishment charges, overhead charges and profit.
- (c) Junctions between straight and curved and straight and raking works shall in all cases be deemed to be included with the work in which they occur.
- (d) Notwithstanding any provisions in this document for labours to be given as linear items, such labours may be given in the descriptions of any linear items of work on which they occur.
- Grouping of sizes        A3(a) The rules in this Clause apply only when specific reference is made in this document to the following paragraphs of this Clause.
- (b) Where the document requires the sizes of metal sections to be stated in accordance with this paragraph, they shall be grouped and described as follows:-



General Rules (Contd.)

Grouping of sizes (contd.)

- A3(b) (i) Small (i.e. not exceeding 250 millimetres in depth).  
(ii) Large (i.e. over 250 millimetres but not exceeding 500 millimetres in depth).  
(iii) Extra Large (i.e. over 500 millimetres in depth).
- (c) Where this document requires the sizes of pipes and tubes (measured internally) and of bars, cables, conduits, standards and the like (measured externally) to be stated in accordance with this paragraph, they shall be grouped and described as follows:-
- (i) Small (i.e. not exceeding 55 millimetres diameter).  
(ii) Large (i.e. over 55 millimetres but not exceeding 110 millimetres diameter).  
(iii) Extra Large (i.e. over 110 millimetres diameter).

Quantities

- A4(a) Where the unit of billing is the metre, quantities shall be billed to the nearest whole unit. Fractions of a unit less than half shall be disregarded and all other fractions shall be regarded as whole unit.
- (b) Where the unit of billing is the kilogramme, quantities shall be billed to the nearest whole unit. Fractions of a unit less than half shall be disregarded and all other fractions shall be regarded as whole units.
- (c) Where the application of this Clause would cause an entire item to be eliminated, such item shall be enumerated stating the size or weight as appropriate.

Preambles

- A5 The preambles given at the beginning of each section may be given at the beginning of the Bills of Quantities.

S E C T I O N   B

PRELIMINARIES

For General Rules see Section A

Preliminary Particulars

- |                         |  |
|-------------------------|--|
| Description<br>of site  | B1(a) The position of the site shall be described stating the mode of access. Attention shall be drawn to any limitations of working space and to any adjacent or abutting buildings.                          |
|                         | (b) Recommendations as to visiting the site and inspecting any trial holes shall be made stating where the keys may be obtained (if any required) and where the drawings and other documents may be inspected. |
|                         | (c) Where possession of the site will be given in sections, particulars shall be given.  |
| Description<br>of works | B2(a) A general description of the works shall be given.   |
|                         | (b) Where the works are required to be executed or completed in any specific order or in sections or phases, particulars shall be given.   |

Contract Particulars

- |          |  |
|----------|--|
| Contract | B3(a) Particulars of the form and type of contract shall be given.   |
|          | (b) Where the conditions of contract are standard (i.e. printed and published for general use), particulars of the edition to be used shall be given and a schedule of the clause headings shall be set out in the Bill. |
|          | (c) Where any other conditions of contract are used, a copy of the full conditions shall be supplied with the bill and a schedule of the clause headings shall be set out in the bill.                                   |
|          | (d) Where there is an appendix to the conditions of contract requiring insertions to be made, a schedule of the insertions shall be set out in the bill.   |

General Matters

- |  |  |
|--|--|
| Items for<br>convenience<br>in pricing | B4 For convenience in pricing, items for the following shall be given unless they are covered by the schedules given in accordance with Clause B3 hereof:-<br>(i) Plant, tools and vehicles.<br>(ii) Safety, health and welfare of workpeople.<br>(iii) Notices and fees to local authorities and public undertakings. |
|--|--|

General Matters (Contd.)

- |   |       |   |
|---|-------|---|
| Items for convenience in pricing (Contd.) | B4    | (iv) Setting out the works.<br>(v) Contractors Supervision.<br>(vi) Insurance for workpeople.<br>(vii) Transport for workpeople.<br>(viii) Safeguarding the works, materials and plant against damage and theft.<br>(ix) Maintenance of public and private roads.<br>(x) Police regulations.  |
| Obligations imposed by the employer       | B5    | Any obligation or restriction that may be imposed on the contractor by the employer in respect of any matter not covered by any clause in the conditions of contract shall be given as an item stating the relevant particulars.  |
| Water for the works                       | B6    | Water for the works and temporary arrangements for storing and distributing about the site shall be given as an item. Where water will be supplied free of cost to the contractor, particulars shall be given as to the available capacity, the source (e.g. public main; bore hole) and the location of the point of free supply.  |
| Lighting and power for works              | B7    | Lighting and power for the works and temporary arrangements for distribution about the site and for lighting to hoardings and the like shall be given as an item. Where electric current will be supplied free of cost to the contractor, particulars shall be given as to the available capacity, the voltage, the type of supply (e.g. alternating; direct) and the location of the point of free supply. |
| Contractor's liability                    | B8(a) | The contractor's liability for risk of injury to persons and property and of damage to the works shall be given as an item unless it is covered by the schedules given in accordance with Clause B3 hereof.   |
|   | (b)   | Where the employer requires the contractor to effect insurance in respect of the contractor's liability for any risk, the relevant particulars shall be given unless covered by the schedules given in accordance with Clause B3 hereof.  |
|   | (c)   | Where the employer intends to relieve the contractor of liability for any such risk, the relevant particulars shall be given unless covered by the schedules given in accordance with Clause B3 hereof.   |

Temporary Works

- |                           |    |  |
|---------------------------|----|--|
| Temporary works generally | B9 | Clearing away temporary works and making good after shall be deemed to be included with the items. |
|---------------------------|----|--|

### Temporary Works (Contd.)

- Temporary roads B10 Temporary roads, tracks, hard-standings, crossings and the like shall be given as an item stating all relevant particulars.
- Temporary buildings B11(a) Temporary sheds, offices, messrooms, sanitary accommodation, and other temporary buildings for the use of the contractor shall be given as an item. Air conditioning, lighting, furniture, equipment and attendance shall be deemed to be included with the item.  
(b) Temporary offices for the use of the Consultant or any other person acting on behalf of the employer shall be given as an item stating the floor area required. Air conditioning, furniture, equipment and attendance shall be given in the description.
- Temporary telephones B12 Temporary telephone facilities on the site shall be given as an item.
- Temporary screens B13 Temporary screens and the like shall be given as an item stating the area in square metres and any requirements regarding construction. Doors and windows in screens shall be given in the descriptions.
- Temporary hoardings and gantries B14(a) Temporary fencing, hoardings, fans, planked footways, guard-rails, gantries and the like as may be necessary for protecting the public, for the proper execution of the works and for meeting the requirements of any local or other authority shall be given as an item stating any conditions imposed by the employer regarding such matters as construction, access, decoration and advertising.  
(b) Such temporary works specifically required by the employer shall be given as items stating all relevant particulars.

### Works by Nominated Sub-Contractors

- Works by Nominated Sub-Contractor B15(a) Works which are required to be carried out by a nominated sub-contractor shall be given as a provisional or prime cost sum.  
(b) General attendance on nominated sub-contractors shall be given as an item in each case and shall be deemed to include only allowing use of standing scaffolding, messrooms, sanitary accommodation and welfare facilities, providing space for office accommodation and for storage of plant and materials, providing light and water for their work, clearing away rubbish.

Works by Nominated Sub-Contractors (Contd.)

Works by  
Nominated  
Sub-Contractor  
(Contd.)

- B15(c) Special attendance on nominated sub-contractors shall be given as an item in each case giving particulars (e.g. unloading, storing, hoisting, placing in position, providing power, providing special scaffolding).
- (d) Builders work in connection with works by nominated sub-contractors shall be given in accordance with the appropriate rules in this documents. It is desirable for such work to be grouped together under a heading in each appropriate Section of the bill.

Goods and materials from Nominated Suppliers

Goods from  
nominated  
suppliers

- B16(a) Goods and materials which are required to be obtained from a nominated supplier shall be given as a provisional or prime cost sum.
- (b) Fixing goods and materials shall be given in accordance with the appropriate rules in this document. Unloading, storing, hoisting the goods and materials and returning packing materials to the nominated suppliers carriage paid and obtaining credits therefor shall be deemed to be included with the items of fixing. Where the costs of conveying goods and materials to the site, any special packing or the like are required to be paid by the contractor, particulars shall be given.

Cleaning the Works

Removing  
rubbish and  
cleaning

- B17 Removing the rubbish and debris and cleaning the works internally and externally shall be given as an item.

S E C T I O N C

DEMOLITIONS AND ALTERATIONS

For General Rules see Section A

Generally to Section C

- Cl(a) The location of demolitions and alterations shall be given in the description of the items.
- (b) Shoring and scaffolding incidental to demolitions and alterations shall be given in the description of the items. Other shoring (e.g. to old buildings left standing) shall be given in accordance with Clause Cl0 hereof.
- (c) Old materials arising from demolitions and alterations shall become the property of the contractor unless otherwise stated. Clearing away such old materials shall be deemed to be included with the items. Provision shall be made in the bill for credits.
- (d) Old materials required to remain the property of the employer shall be so described. Setting aside and storing such old materials on site shall be given in the description of the items.
- (e) Old materials permitted to be re-used in work measured as new shall be so described. No adjustment shall be made to the measured quantities of new work in which such old materials are re-used.

Demolitions

- Demolitions
- C2(a) For rules relating to Section C generally see Clause Cl hereof.
  - (b) Demolishing individual structures (or parts thereof) shall be given as items, except that clearing the site of all structures may be given as an item. The lowest level of demolition shall be stated (e.g. down to the top of surface concrete at the lowest floor level).
  - (c) Leaving parts of old walls temporarily in position to act as buttresses shall be given in the description of demolition items.

Alterations

- Alterations generally
- C3(a) For rules relating to Section C generally see Clause Cl hereof.
  - (b) Alterations work which would be most conveniently priced on the site shall be grouped together and given under an appropriate heading.

### Alterations (Contd.)

Cutting openings	C4	Cutting openings in old structures shall be given as items stating the nominal finished size of the opening, the type and thickness of the old structure and the treatment around the opening (e.g. inserting trimmers, lintels, arches, sills and the like; quoining up jambs). Extending finishings and making good all work disturbed shall be given in the description. New doors, windows and the like shall be measured in detail in accordance with the appropriate rules.
Blocking up openings	C5	Blocking up openings in old structures shall be given as items stating the size of the opening and the nature and thickness of the new work. Taking out thresholds, lintels, arches, sills and the like, bonding or otherwise securing the new work to the old structure, extending finishings on the new work and making good all work disturbed shall be given in the description.
Pulling down parts of structure	C6	Pulling down walls, partitions, floors, roofs, staircases and other parts of old structures shall be given as items. Where practicable quantities and dimensions shall be given in the description.
Taking down fittings and fixtures	C7	Taking down fittings and fixtures (e.g. doors; windows; sanitary appliances; counters; cupboards) shall be given as items stating the size. Those required to be set aside for refixing shall be so described.
Refixing fittings and fixtures	C8	Repairing, adapting and refixing old fittings and fixtures shall be given as items stating the size.

### Sundries

Temporary screens and temporary roofs	C9	Temporary screens and temporary roofs shall each be given separately in square metres or enumerated as may be appropriate. Weatherproof screens and dustproof screens shall be so described. Temporary arrangements for dealing with rainwater, temporary doors, temporary windows and the like in screens shall be given in the description. Clearing away temporary work shall be deemed to be included with the items.
Shoring	C10	Timber shoring (other than that incidental to demolitions and alterations) shall be given in linear metres stating the nominal size, the position and type of shoring and the nature of the

Sundries (Contd.)

Shoring  
(Contd.)

C10

structure to be shored. Erecting, maintaining, clearing away, cutting holes in the structure, making good all work disturbed, obtaining licences and paying fees shall be given in the description. Providing all necessary nails, wedges and bolts shall be deemed to be included with the items.

Protection

Protection

C11

Protecting the work in this Section shall be given as an item.



S E C T I O N D

EXCAVATION AND EARTHWORK

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section D

- D1(a) An item shall be given stating that the rates for excavation are to include for excavating in any material including solid rock, keeping excavations free from water as maybe necessary, upholding sides of excavations and for levelling or grading and ramming where necessary, bulking of materials and all double or multiple handling.
- (b) Work in existing buildings shall be so described. Handling materials and getting them in or out of such buildings shall be deemed to be included with the items.
- (c) For work in underpinning see Section II hereof.
- (d) Details of the rules for measuring working space (Clause D2(c)) shall be given after the item required under Clause D1(a).

Excavation

Excavation  
Generally

- D2(a) For rules relating to Section D generally see Clause D1 hereof.
- (b) The quantities given for excavating and subsequent disposal of shall be deemed to be the bulk before excavating and no allowance shall be made for any subsequent variations in bulk or for any extra space required to accommodate planking and strutting.
- (c) Getting out excavated materials by any means necessary shall be deemed to be included with the items of excavation. Subsequent disposal of excavated material shall be given in accordance with Clause D10 hereof (except as otherwise provided in Clause D8).
- (d) Where the depths of excavations are required to be stated in accordance with this rule, they shall be grouped and given in successive stages of 1.50 metres (e.g. not exceeding 1.50 metres deep; over 1.50 metres but not exceeding 3 metres deep).
- (e) Allowances for working space (which shall not be subject to adjustment if more or less space is actually required) shall be made in the measurements of excavations as follows:-
  - (i) 0.60 metres from the face of any work which requires formwork over 1 metre deep below the starting level of excavation, or from the external face of any work which will be covered externally with a damp-proof

Excavation (Contd.)

Excavation Generally (Contd.)	D2(e)	(i) (Contd.) covering at any depth below the starting level of excavation, or from the external face of any work which requires workmen to operate from the outside at any depth below the starting level of excavation. (ii) 0.25 metre from the face of any work which requires formwork not exceeding 1 metre deep below the starting level of excavation. (iii) 1.50 metres extra length at each end of trenches which are to receive post-tensioned concrete ground-beams.
Surface excavation	D3	Excavating surfaces to reduce levels shall be given in cubic metres.
Cuttings	D4	Excavating cuttings shall be given in cubic metres.
Basements	D5	Excavating basements and the like (measured to the outside of the foundations subject to Clause D2(e) hereof shall be given in cubic metres stating the depth as Clause D2(d) hereof. Existing voids shall be deducted.
Foundation trenches	D6	Excavating trenches to receive foundations (measured the width of the foundations therein subject to Clause D2(e) hereof) shall be given in cubic metres stating the depth as Clause D2(d) hereof. Preliminary trenches for basement retaining walls which are constructed before the basements are excavated shall be so described. No distinction shall be made between surface trenches and basement trenches. For pipe trenches and the like see Clause D8 hereof.
Pits	D7	Excavating pits to receive bases of stanchions, isolated piers and the like (measured the size of the base therein subject to Clause D2(e) hereof and grouped together) shall be given in cubic metres stating the depth as Clause D2(d) hereof. No distinction shall be made between surface pits and basement pits.
Pipes trenches and the like	D8	Excavating trenches to receive service pipes, cables, kerbs and the like shall each be given separately in linear metres stating the starting level and the average depth to the nearest 250 millimetres. Grading bottoms, planking and strutting, filling in, compacting and disposing of surplus spoil shall be given in the description of such trenches.
Existing cesspits	D9	Clearing out and removing contents of cesspits shall be enumerated stating the method of disposal.

Excavation (Contd.)

- Disposal of excavated materials
- D10(a) All multiple-handling of excavated materials and transporting about the site shall be deemed to be included with the items of final disposal.
- (b) Filling using excavated material shall be measured as equal to the void to be filled.
- (c) Filling using excavated material in making up levels shall be given in cubic metres.
- (d) Backfilling shall be given in cubic metres except as otherwise provided in Clause D8 hereof.
- (e) Filling using excavated material required to be deposited and compacted in layers shall be so described.
- (f) Surplus spoil shall be given in cubic metres. Spoil deposited on site in permanent spoil heaps or spread on site shall be so described. Spoil removed from the site shall be so described and the provision of a shoot, dump or tip shall be deemed to be included with the items unless otherwise stated.
- Surface treatments
- D11 Treating the surface of filling (e.g. grading to falls, grading to cambers, blinding, compacting) shall each be given separately in square metres.
- Soiling seeding and turfing
- D12 Soiling, seeding and fertilizing to surfaces shall each be given separately in square metres stating the thickness of soil and the quantity per square metre of the seed or fertilizer.

Hardcore Filling

- Hardcore filling
- D13(a) For rules relating to Section D generally see Clause D1 hereof.
- (b) Hardcore filling shall be measured as equal to the void to be filled.
- (c) Hardcore filling in making up levels shall be given in cubic metres.
- (d) Hardcore filling required to be deposited and compacted in layers shall be so described.
- (e) Treating the surface of the hardcore shall be given in accordance with Clause D11 hereof.
- (f) Hand-packing hardcore to form vertical or battering face shall be given in square metres.
- (g) Hand-packing hardcore to form sinking shall be given in linear metres stating the size. No deduction of hardcore shall be made.

S E C T I O N E

PILING

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section E

- E1(a) An item shall be given stating that the rates for handling, pitching and driving piles are to include for moving piling frames about the site, raising or lowering frames and providing all staging or barges. Attention shall be drawn to any available records of bores on the site.
- (b) Providing and assembling the piling equipment on the site and its subsequent removal shall be given as an item. Moving the piling frames about the site, raising and lowering them and providing any necessary staging or barges to support them shall be deemed to be included with the item.
- (c) A general description of the piling operations shall be given as an item stating the approximate level or levels at which the piling frames will operate (e.g. ground level, reduced level, basement level).
- (d) Extra excavation (where necessary in order to place the hammer over any pile situated in an angle or similar position) together with any necessary filling and ramming afterwards, shall be given in detail or as provisional items.

Wood or Concrete Piles

Wood or  
concrete  
piles  
generally

- E2(a) For rules relating to Section E generally see Clause E1 hereof.
- (b) Designs for piles shall be deemed to be provided by the employer. Piles required to be designed by the Contractor shall be given in accordance with Clause E7 hereof.

Wood  
piles

- E3(a) Supplying wood piles shall be given in linear metres stating the cross-section. Those over 9 metres long shall be so described stating the length in further stages of 3 metres.
- (b) Pointed ends of piles shall be enumerated as extra over the piles on which they occur. Where shoes are fitted they shall be given in the description stating the weight.
- (c) Handling, transporting and pitching piles shall be enumerated stating the size, the length and whether single or in clusters.

Wood or Concrete Piles (Contd.)

Wood  
piles

- E3(d) Driving piles (measured from the shoe point in contact with the ground when pitched to the shoe point when driven) shall be given in linear metres. Driving piles on rake and driving piles in water shall each so be described.
- (e) Cutting off the tops of piles to required levels and ringing with steel bands shall be enumerated as extra over the piles concerned stating the size of the cross-section of the band. Cutting under water shall be so described.

Cast  
concrete  
piles

- E4(a) Supplying cast concrete piles shall be given in linear metres stating the size of the cross-section and the number. Moulds shall be deemed to be included with the items. Piles required to be cast away from the site and subsequently transported to the site shall be so described.
- (b) Bar reinforcement shall be given in accordance with the rules for reinforced concrete in Section F hereof.
- (c) Heads and shoes shall each be enumerated as extra over the piles to which they are fitted stating the weight. Rock-shoes shall be so described.
- (d) Handling, transporting and pitching the piles shall be enumerated stating the size, the length and whether single or in clusters.
- (e) Driving piles shall be given in accordance with Clause E3(d) hereof.
- (f) Cutting off the tops of piles to required levels and preparing the reinforcement shall be enumerated as extra over the piles concerned. Cutting under water shall be so described.
- (g) Lengthening piles in position shall be given in detail. Connections shall be enumerated. Redriving lengthened piles shall be given in linear metres stating the number.

Bored  
piles

- E5(a) Boring pile holes and filling bores with concrete (taken together) shall be given in linear metres stating the size and number of bores and the mix of concrete filling.
- (b) Where bored piles are required to finish below the formation level of the ground, an additional item of blind boring shall be given in linear metres stating the size of the bore.
- (c) Bar reinforcement shall be given in accordance with the rules for reinforced concrete in Section F hereof.
- (d) Disposal of spoil from the bores shall be given in accordance with the rules for disposal of excavated materials in Section D hereof.

Wood or Concrete Piles (Contd.)

Trial  
piles

- E6 Trial piles shall be enumerated stating the location, length and cross-section of the pile, the length of driving and the method of testing. Any necessary pointed ends, shoes, heads and reinforcement shall be given in the description.

Contractor-designed Concrete Piles

Contractor-  
designed  
concrete  
piles

- E7(a) For rules relating to Section E generally see Clause E1 hereof.
- (b) Contractor-designed concrete piles shall be enumerated stating the actual length, the superimposed load to be carried and the method of disposing of any spoil. Particulars shall be given of any restrictions regarding the type of pile or the method of driving. Any necessary reinforcement in piles shall be deemed to be included with the items.
- (c) Where the tops of piles are required to finish below the formation level of the ground, the piles shall be so described stating the depth of the top below such level.

Steel Sheet Piling

Steel  
sheet  
piling

- E8(a) For rules relating to Section E generally see Clause E1 hereof.
- (b) Steel sheet piling (measured the area as placed in position taken on the centre line of the piling) shall be given in square metres stating the size of the cross-section of each unit and the thickness or substance of the metal. Sheet piling over 12 metres long shall be so described stating the length in further stages of 3 metres. Handling, transporting, pitching, strutting and walling shall be given in the description.
- (c) Driving steel sheet piling (measured from the formation level of the ground to the bottom edge of the sheet piling when driven) not exceeding 6 metres deep shall be given in square metres. Driving over 6 metres deep shall be given in square metres stating the depth in further stages of 3 metres. Driving in water shall be so described. Withdrawing steel sheet piling shall be given in the description of driving.
- (d) Corner piles and junction piles shall each be given in linear metres as extra over the sheet piling in which they occur.

Steel Sheet Piling (Contd.)

Steel  
sheet  
piling  
(Contd.)

E8(e) Cutting or burning through steel sheet piling shall be given in linear metres as extra over the piling concerned. Cutting under water shall be so described.

S E C T I O N F

CONCRETE WORK

For General Rules see Section A

The Unit for Billing shall be the Metre  
Except where the Unit is required to be the Kilogramme

Generally to Section F

F1(a) An item shall be given stating that:-

- (i) The rates for concrete are to include for hoisting to any height, or lowering to any depth, compaction by vibrators if required, curing, hacking surfaces for key, cutting or forming holes for pipes and the like, building in pipe sleeves, forming and grouting mortices (other than those referred to in Clause F3(g) hereof), making good concrete in connection with holes and mortices and all surface treatment to unset concrete except trowelling.
- (ii) The rates for rod reinforcement are to include for hoisting to any height or lowering to any depth, straightening as necessary, cutting to lengths, bending to required shapes, tying wire, distance blocks and spacers.
- (iii) The rates for fabric reinforcement are to include for hoisting to any height, or lowering to any depth, all cutting, distance pieces, bending, holes, notching, tying wire, tying at laps and cost of material in laps.
- (iv) The rates for formwork shall include for all props, struts, stays, wedges, bolts, all cutting, labours at intersections, overlaps, passings at angles, cutting and fitting around projections and pipes, all stops, chamfers not exceeding 50 mm wide, splayed angles not exceeding 15 mm wide, mould oil, strutting and supporting formwork to a height not exceeding 3.50 metres and for easing striking and removal.
- (v) The rates for curved formwork shall include for formwork to curved, conical, spherical, elliptical and other surfaces curved to one or more radius of any radius or radii.
- (vi) The rates for forming channels, chases and kerbs shall include for ends, angles, intersections and outlets.
- (vii) The rates for precast concrete shall include for all moulds; finishing fair on all exposed faces; square, rounded and stooled ends to kerbs, etc., holes or notchings for pipes, etc., and hoisting, setting and bedding in position.
- (viii) The rates for hollow block suspended construction shall include for concrete ribs, hollow blocks, solid concrete work in hollow block construction, filling ends of hollow blocks, fixing slips, metal clips and the like.

F1(b) Particulars shall be given of composition and mix or strength requirements of the concrete.

(c) Concrete required to be placed by a particular method (e.g. poured at a stated speed) shall be so described.



Generally to Section F (Contd.)

- F1(d) Curved labours on concrete shall be so described irrespective of radius.
- (e) Labours on old concrete shall be so described.
- (f) Concrete shall be measured as executed (subject to the minimum stated in Clauses D6 and D7 hereof) but no deduction shall be made for the following:-
- (i) Volume of any steel embedded in the concrete.
  - (ii) Voids not exceeding 0.10 square metre in work given in square metres.
  - (iii) Voids not exceeding 0.05 cubic metre in work given in cubic metres.
- (g) For work in underpinning see Section H hereof.

Plain Concrete and Reinforced Concrete

- |   |  |
|---|--|
| Plain and reinforced concrete generally | F2(a) For rules relating to Section F generally see Clause F1 hereof.<br>(b) Plain in-situ concrete shall be given under an appropriate heading.<br>(c) Reinforced in-situ concrete shall be given under an appropriate heading.<br>(d) Designs for reinforced concrete work shall be deemed to be provided by the employer.   |
| Foundations and bases                   | F3(a) Foundations in trenches shall be given in cubic metres.<br>(b) Foundations to stanchions, columns and piers which are combined with foundations in trenches shall be classified as foundations in trenches.<br>(c) Foundations to stanchions, columns and piers which are isolated shall be grouped together and given in cubic metres.<br>(d) Ground-beams and casings to steel ground-beams shall each be grouped together and given in cubic metres.<br>(e) Casings to steel grillages shall be given in cubic metres.<br>(f) Grouting under steel stanchion-bases and under steel grillages shall each be given separately in square metres stating the mix of the grout and the number of bases or grillages.<br>(g) Building in and grouting anchor-bolts and the like shall be enumerated stating the length of the bolt and the mix of the grout. Temporary boxings or wedges to form holes or mortices for anchor-bolts shall be given in the description of building in. |

Plain Concrete and Reinforced Concrete (Contd.)

Machine bases	F4	Machine bases shall be given in cubic metres.
Beds	F5(a)	Beds shall be given in cubic metres.
	(b)	Blinding concrete shall be given in square metres stating the thickness.
	(c)	Beds laid to slopes not exceeding 15 degrees from horizontal and those laid to slopes over 15 degrees from horizontal shall each be so described.
	(d)	Beds laid in bays shall be so described stating the average size of bays. Formwork between the bays shall be given in the description.
	(e)	Beds intended to form a base for granolithic paving (or other similar paving) laid whilst the base is in an unset condition shall be so described.
Roads, footpaths and pavings	F6	Roads, footpaths and pavings shall each be so described and given in cubic metres.
Floors, roofs and the like	F7(a)	Suspended floors, roofs, landings and the like (measured over all bearings and grouped together) shall be given in cubic metres. Those laid around or between steel filler joists (measured over the fillers) shall be so described. Classification shall be as follows -
	(i)	Horizontal and not exceeding 15 degrees from horizontal.
	(ii)	Vertical and sloping over 15 degrees from horizontal.
	(b)	Curved roofs, conical roofs, spherical roofs and elliptical roofs shall each be so described irrespective of radius. Haunchings shall be given separately.
	(c)	Tops and cheeks of dormers (grouped together) shall be given in cubic metres.
Walls	F8(a)	Measurements of walls shall be taken between attached piers or pilasters. The thickness of attached piers or pilasters shall be taken as the combined thickness of the wall and the pier or pilaster. Attached or isolated piers, pilasters and the like (except where caused by openings) having a length on plan not exceeding four times the thickness shall be classified as columns. Those having a length over four times the thickness and those caused by openings in walls shall be classified as walls. Walls shall be given in cubic metres. Retaining walls shall be so described.

Plain Concrete and Reinforced Concrete (Contd.)

Walls (Contd.)	F8(b)	Attached piers, pilasters and the like shall be classified as walls.
	(c)	Projections on walls (measured beyond the face of the wall) to form cornices, bands and the like (grouped together) shall be given in cubic metres.
	(d)	Concrete filling to cavities between walls shall be given in square metres stating the thickness. Splaying the top edge shall be deemed to be included with the item.
	(e)	For concrete filling to hollow blockwork see Section G.
Casings to steelwork	F9	Casing to steel beams, lintels, stanchions and the like shall each be given separately in cubic metres. Floor beams and roof beams shall be measured below the slab. Voids in boxed/tubular steelwork shall not be deducted unless the sectional area of the void is over 0.05 square metre. Projections shall be added to the appropriate items. Horizontal members and sloping members not exceeding 15 degrees from horizontal (grouped together) shall be so described. Vertical members and sloping members over 15 degrees from horizontal shall be so described.
Beams and columns	F10	Beams, lintels, columns and the like shall each be given separately in cubic metres. Floor beams and roof beams shall be measured below the slab. Upstand beams shall be measured above the slab. Voids in boxed or tubular steelwork shall not be deducted unless the sectional area of the void is over 0.05 square metre. Projections shall be added to the appropriate items. Horizontal members and sloping members not exceeding 15 degrees from horizontal (grouped together) shall be so described. Vertical members and sloping members over 15 degrees from horizontal (grouped together) shall be so described.
Steps and staircases	F11(a)	Steps, staircases and strings (grouped together) shall be given in cubic metres.
	(b)	Solid balustrades shall be given in cubic metres.
	(c)	Landings shall be given in accordance with Clause F7(a) hereof.
Kerbs	F12	Kerbs shall be given in linear metres stating the size.
Finishes cast on to concrete	F13	Finishes (measured on the exposed face) which are cast on to the concrete by lining formwork with the required mix (e.g. granolithic, cast stone, terrazzo, mosaic) shall be given in square metres as extra over the concrete stating the mix and the thickness of finish.

Plain Concrete and Reinforced Concrete (Contd.)

- Labours on concrete
- F14(a) Trowelling the surface of unset concrete or rolling with a special roller to obtain a patterned finish shall be given in square metres.
- (b) Forming channels and chases in the surface of unset concrete shall be given in linear metres stating the shape, the width and the depth. Channels and chases requiring additional concrete shall be so described. Formwork shall be given in the description.

- Expansion joints in concrete
- F15(a) Expansion joints in concrete shall be given in square metres. Formwork shall be given in the description.
- (b) Pointing expansion joints shall be given in linear metres.
- (c) Dowel bars together with any expansion tubes shall be enumerated.

Reinforcement

- Bar reinforcement
- F16(a) Particulars of kind and quantity of steel shall be given.
- (b) Bar reinforcement (measured as executed) shall be given in Kilogrammes stating the size. Bars shall be grouped together by size irrespective of location. No allowance in calculating the weight of reinforcement shall be made for tying wire, ordinary spacers or rolling margin.
- (c) Twisted bars or bars of special section shall be so described.
- (d) High-tensile steel bars shall be so described.

- Fabric reinforcement
- F17(a) Fabric reinforcement shall be measured as the area covered but no allowance shall be made for laps and no deduction shall be made for voids not exceeding one square metre. Bends, tying wire and distance blocks shall be deemed to be included with the item.
- (b) Fabric reinforcement shall be given in square metres stating the mesh and the weight per square metre irrespective of location.
- (c) Self-centering fabric reinforcement shall be so described. Temporary strutting shall be given in the description and where over 3.50 metres high shall be so described stating the height in further stages of 1.50 metres.

- Labours on fabric reinforcement
- F18 Raking and curved cutting, holes and notchings on fabric or self centering reinforcement shall be deemed to be included with the items of reinforcement.

## Formwork

Formwork  
generally

F19(a) Formwork shall be measured as the actual surfaces of the finished structure which require to be supported during the deposition of the concrete, including the upper surfaces of the work sloping more than 15 degrees from horizontal. Where the face of the concrete is troughed or similarly shaped, the method of measuring the formwork shall be stated. No allowance shall be made for overlaps and passing at angles and no deductions shall be made for the following:-

- (i) Voids not exceeding one square metre.
- (ii) Intersections of main beams with walls or columns.
- (iii) Intersections of secondary beams with main beams.

(b) Formwork to curved, conical, spherical, elliptical and other surfaces curved to one radius or more shall be grouped together irrespective of radius or radii described as curved surfaces. Curved linear items of formwork shall be so described stating the radius.

(c) Formwork coated with a retarding agent shall be so described.

(d) Formwork left in shall be so described.

(e) Wrought formwork shall be so described.

Formwork to  
surfaces

F20(a) Formwork to surfaces (other than those mentioned in Clauses F21 to F23 hereof) shall be given in square metres. Formwork required to be lined with a particular material (e.g. wallboard, hardboard, plywood, paper) shall be so described. Lining material which is required to be left in position on the concrete shall be given separately in square metres stating the method of securing. Classification of formwork shall be as follows:-

(i) To horizontal soffits of floors, roofs, landings and the like (grouped together).

(ii) To sloping soffits of floors, roofs, staircases and the like (grouped together).

(iii) To sloping upper surfaces of floors, roofs and the like where more than 15 degrees from horizontal (grouped together).

(iv) To vertical or battering sides of foundations, ground-beams, large machine-bases and the like (grouped together).

(v) To vertical or battering side of stanchion-casings, columns, piers, pilasters and the like (grouped together).

Formwork (Contd.)

Formwork to  
surfaces  
(Contd.)

- F20(a) (vi) To vertical or battering sides of walls, solid balustrades and the like (grouped together).
- (vii) To sides and soffits of openings in walls, recesses in walls, projecting panels on walls and the like (grouped together).
- (viii) To sides and soffits of dormers, gables and the like (grouped together).
- (ix) To sides and soffits of horizontal beam casings, beams, lintels and the like (grouped together).
- (x) To sides and soffits of sloping beam-casings, staircase-strings and the like (grouped together).
- (xi) To sloping upper surfaces of beam-casings, beams, staircase-strings and the like where more than 15 degrees from horizontal (grouped together).
- (b) Formwork to soffits requiring strutting over 3.50 metres high shall be so described in further stages of 1.50 metres.

Formwork to  
edges and  
risers

- F21(a) Formwork to edges and risers shall be given in square metres. Classification shall be as follows:-
- (i) To edges of beds, roads, footpaths, pavings and the like (grouped together).
- (ii) To edges of suspended floors, landings and roofs (grouped together).
- (iii) To sides of kerbs and upstands (grouped together).
- (iv) To risers of steps and staircases (grouped together).
- (b) Formwork to edges and soffits of projecting eaves (grouped together) shall be given in linear metres stating the girth.

Formwork to  
bands and  
cornices

- F22 Formwork to projecting or sunk bands, cornices and the like (grouped together) shall be given in linear metres as extra over the formwork in which they occur stating the girth.

Formwork to  
grooves,  
chases,  
chamfers and  
mouldings

- F23(a) Formwork to throats, grooves, chases, rebates, chamfers over 50 millimetres wide, splayed internal angles over 15 millimetres wide, mouldings and the like shall each be given separately in linear metres stating the size. All stops shall be deemed to be included with the formwork.
- (b) Forming chamfers not exceeding 50 millimetres wide and forming angles not exceeding 15 millimetres wide shall be deemed to be included with the formwork items in which they occur.

Formwork (Contd.)

- Labours on formwork
- F24(a) Raking cutting and curved cutting shall be deemed to be included with the formwork items.
- (b) Splayed edges and notches shall be deemed to be included with the formwork items.
- (c) Cutting and fitting formwork around projecting members which will be cast in (e.g. pipes, continuity bars) shall be deemed to be included with the formwork items.

Precast Concrete Units

- Precast units generally
- F25(a) For rules relating to Section F generally see Clause F1 hereof.
- (b) Precast units shall be given under an appropriate heading.
- (c) Particulars of the following shall be given:-
- (i) Shape of cross-section of unit.
  - (ii) Nature of surface finish.
  - (iii) Composition and mix of jointing and bedding materials.
  - (iv) Method of fixing.
- (d) Reinforcement shall be measured separately in accordance with Clauses 16 to 18 hereof.
- (e) Formwork or moulds for precast units shall be deemed to be included with the items.
- Structural units
- F26 Structural units (e.g. stanchions; beams; purlins; trusses) shall each be enumerated separately stating the size.
- Steps and staircases
- F27(a) Steps (except winders) shall be given in linear metres stating the extreme size and the number of steps. Nosing, rebates and the like shall be given in the description. Spandril steps (i.e. steps with sloping soffits) shall be so described. Curved steps shall be so described stating the mean radius.
- (b) Winders, landings, solid balustrade panels and the like shall each be enumerated separately stating the extreme size. Members of irregular shape shall be so described.
- Shelves, seats and duct-covers
- F28 Shelves, divisions, seats, duct-covers and the like shall each be given separately in square metres stating the thickness. Members of irregular shape and curved members shall each be enumerated separately stating the extreme size.

Precast Concrete Units (Contd.)

Kerbs and edgings	F29	Kerbs, edgings and the like shall each be given separately in linear metres stating the size. Curved members shall be so described irrespective of radius.
Sills, lintels and copings	F30	Sills, lintels, copings and the like shall each be given separately in linear metres stating the size. Curved members shall be so described irrespective of radius.
Templates and bases	F31	Templates (or padstones), bases to posts and the like shall each be enumerated separately stating the size.
Pier-caps and chimney-caps	F32	Pier-caps and the like shall each be enumerated separately stating the size and the shape where other than square or rectangular. Openings in caps shall be given in the description.
Pavement lights and roof lights	F33	Pavement-lights and roof-lights and the like shall each be enumerated separately stating the size and the shape where other than rectangular. Glass blocks shall be given in the description.
Concrete tiles or slabs	F34	For precast concrete tile or slab finishings to floor and walls see Section U hereof.
Cast stone	F35	For cast stone see Section K hereof.

Hollow-block Suspended Construction

Hollow-block construction generally	F36(a)	For rules relating to Section F generally see Clause F1 hereof.
	(b)	Hollow-block suspended construction and its reinforcement and associated formwork shall be given under an appropriate heading.
	(c)	Designs for hollow-block suspended construction shall be deemed to be provided by the employer. Work required to be designed by the contractor shall be given in accordance with Clauses F52 to F56 hereof.
Floors, roofs and the like	F37(a)	Suspended floors, roofs and the like (measured over the ribs and bearings and grouped together) shall be given in square metres in accordance with Clause F7 hereof. Solid concrete work in hollow-block construction, filling ends of hollow-blocks, fixing slips, metal clips and the like shall be deemed to be included with the items. Particulars of the following shall be given:-



Hollow-block Suspended Construction (Contd.)

- Floors, roofs and the like (Contd.) F37(a) (i) Composition and mix of concrete for ribs and topping.  
(ii) Overall thickness of slab.  
(iii) Size and type of blocks.  
(iv) Distance between centres of rows of blocks.  
(v) Size and type of slip tiles to soffits of concrete ribs between blocks (if any).  
(vi) Finish to exposed soffit of blocks and slip tiles (e.g. plain, keyed).
- (b) Tops and cheeks of dormers (grouped together) shall be given in square metres stating the thickness.
- Beams and kerbs F38(a) Casings to steel supporting beams (measured below the slab) shall be given in accordance with Clause F9 hereof.  
(b) Concrete beams (measured below the slab) or concrete upstand beams (measured above the slab) shall be given in accordance with Clause F10 hereof.  
(c) Kerbs shall be given in linear metres stating the size.
- Reinforcement F39 Reinforcement shall be given in accordance with Clauses F16 to F18 hereof.
- Formwork F40 Formwork shall be given in accordance with Clauses F20 to F26 hereof.

Prestressed Concrete

- Prestressed concrete generally F41(a) For rules relating to Section F generally see Clause F1 hereof.  
(b) Prestressed concrete work (i.e. work where reinforcement is tensioned before or as the load is applied) and its reinforcement and associated formwork shall be given under an appropriate heading.  
(c) Designs for prestressed work shall be deemed to be provided by the employer. Work required to be designed by the contractor shall be given in accordance with Clauses F50 to F55 hereof.  
(d) A general description of the prestressed work and of the system and method of tensioning shall be given. Where special and complicated construction is involved drawings shall be provided.  
(e) Particulars of the following shall be given:-  
(i) Steel wires and any preparatory treatment.  
(ii) Type of jack to be used for tensioning.  
(iii) Types of cones, wedges, anchor-plates, spacers, distance-pieces and the like.

Prestressed Concrete (Contd.)

- |   |        |   |
|---|--------|---|
| Prestressed concrete generally (Contd.) | F41(e) | <ul style="list-style-type: none"><li>(iv) Amount of tension to be applied to wires.</li><li>(v) Number and diameter of wires to be simultaneously tensioned.</li><li>(vi) Whether wires to be pre-tensioned or post-tensioned or tensioned as the load is applied and whether from one or both ends.</li><li>(vii) Maturity of concrete before pre-tensioning is released or post-tensioning is applied.</li><li>(viii) Tests to be applied.</li><li>(ix) Cutting off, sealing and treating the ends of wires and cables.</li></ul>  |
| Structural in-situ members              | F42(a) | <ul style="list-style-type: none"><li>(a) Structural in-situ members (e.g. beams; columns) shall be given in accordance with Clause 10 hereof.</li><li>(b) Members cast in sections (i.e. not in one continuous operation) shall be so described.</li><li>(c) Construction joints between sections shall be enumerated.</li></ul>   |
| Cores, ducts and recesses               | F43(a) | <ul style="list-style-type: none"><li>(a) Forming and grouting or sealing the ducts or grooves shall be given in linear metres stating the number and size. Particulars of the following shall be given: -<ul style="list-style-type: none"><li>(i) Sleeves or sheathing.</li><li>(ii) Temporary supports required in the formation of the ducts.</li><li>(iii) Composition of the grout.</li></ul></li><li>(b) Curved sleeves and curved sheathing shall each be so described irrespective of radius.</li><li>(c) Forming and grouting the air-holes at ends or sides of ducts shall be deemed to be included with the items.</li><li>(d) Filling in the jacking or anchoring recesses shall be deemed to be included with the items.</li></ul>  |
| Wires and cables                        | F44(a) | <ul style="list-style-type: none"><li>(a) Supplying steel wires or cables (measured between anchorages) shall be given in kilogrammes stating the ultimate strength and the size of the wire or cable. Each size shall be given separately. No allowance shall be made for extra lengths in anchorage or elsewhere.</li><li>(b) Fixing each length of wire or cable shall be enumerated stating the length, the number of strands in each cable, the type of central core and the type of sheathing (if any) to the wires. Degreasing, straightening, cutting to lengths and assembling wires and cables shall be deemed to be included with the items.</li><li>(c) Cones, wedges, anchor-plates, spacers, distance-pieces and the like expendable items shall be deemed to be included with the items.</li></ul> |

Prestressed Concrete (Contd.)

- Wires and cables (Contd.) F44(d) Tensioning each length of wire or cable shall be enumerated stating the sequence cutting off ends of wires and cables shall be deemed to be included with the items.
- Reinforcement F45 Reinforcement shall be given in accordance with Clauses 16 to 18 hereof.
- Formwork F46(a) Formwork shall be given in accordance with Clauses F20 to F25 hereof subject to the following:-
- (i) Any special requirements as to strutting and supports to be stated.
  - (ii) Formwork to pre-tensioned and post-tensioned work shall each be so described.
  - (iii) Temporary restraints for tensioning and the like shall be given in the description of formwork.
- (b) Formwork to recesses for anchorages shall be deemed to be included with the items.
- (c) Formwork to temporary construction joints shall be deemed to be included with the items.

Precast prestressed units

- Precast prestressed units generally F47(a) For rules relating to Section F generally see Clause F1 hereof.
- (b) A general description of the precast prestressed units and of the system and method of tensioning shall be given.
- (c) Designs for precast prestressed units shall be deemed to be provided by the employer. Work required to be designed by the contractor shall be given in accordance with Clauses 50 to 55 hereof.
- (d) Particulars of the following shall be given:-
- (i) Steel wires and other requirements as appropriate in accordance with Clause F41(e) hereof.
  - (ii) Shape of cross section of unit.
  - (iii) Nature and extent of surface finish.
  - (iv) Composition and mix of jointing and bedding material.
- (e) Formwork or moulds for precast units and for forming anchorage pockets shall be deemed to be included with the items.

Precast prestressed units (Contd.)

Precast  
units

- F48(a) Precast units shall be enumerated stating the size, the length and the method of fixing and bedding. Units of identical section but of varying lengths not exceeding 3 metres may be grouped together and the lengths averaged. Those over 3 metres long may be similarly grouped in further stages of 1.50 metres and the lengths averaged in each case. Those of unusual shape or cross-section shall be so described and sketches provided. Classification shall be as follows:-
- (i) Pre-tensioned in the mould.
  - (ii) Post-tensioned on the ground after casting.
  - (iii) Cast in sections, assembled and post-tensioned before erection.
  - (iv) Cast in sections for assembly in-situ and post-tensioned after erection.
  - (v) Post-tensioned after hoisting but capable of self-support.
  - (vi) Post-tensioned after hoisting but requiring support until tensioning is completed.
- (b) Construction joints between adjacent units shall be enumerated.
- (c) Temporary supports required for post-tensioned units classified under (iv) and (vi) of paragraph (a) hereof shall be enumerated stating the size and span of the unit and the height of the support.

Cores, wires  
and  
reinforcement

- F49 Cores, ducts and recesses shall be given in accordance with Clause F43 hereof. Wires and cables shall be given in accordance with Clause F44 hereof. Reinforcement shall be given in accordance with Clauses F16 to F18 hereof.

Contractor-designed construction

Contractor-  
designed  
construction  
generally

- F50(a) Construction which is to be designed and executed by the contractor (or by a specialist firm chosen by the contractor) shall be given under an appropriate heading. Reinforcement and formwork shall be deemed to be included with the items except as otherwise provided in Clause F54 hereof.
- (b) Where the contractor's choice of design is limited to one or more specified types, particulars shall be given of the types (e.g. solid reinforced suspended construction; hollow-block suspended construction).
- (c) The type of soffit (e.g. flat; troughed) shall be deemed to be at the contractor's option unless the type required is specifically stated.

Contractor-designed construction (Contd.)

Contractor-  
designed  
construction  
generally  
(Contd.)

- F50(d) Particulars shall be given of any tests of the materials and of the finished work.
- (e) Work shall be measured as executed but no deduction shall be made for voids not exceeding 0.10 square metre.

Floors,  
roofs and  
the like

- F51(a) Suspended floors, roofs and the like (measured over all bearings and grouped together) shall be given in square metres stating the length of the span (measured in the clear between supports) in stages of 500 millimetres except that spans not exceeding 2 metres long may be grouped together and so described. In the case of cross-reinforced construction the length and width of the slab (measured in the clear between supports) shall be stated in stages of 500 millimetres. The superimposed load on slabs shall be given in the description in accordance with paragraph (b) of this Clause. Solid concrete in hollow-block construction and filling ends of hollow-blocks shall be deemed to be included with the items. Slabs shall be grouped and described as follows:-

- (i) Isolated slabs (i.e. slabs not connected to other slabs).
- (ii) End slabs (i.e. slabs connected at one end to other slabs).
- (iii) Intermediate slabs (i.e. slabs connected at both ends to other slabs).
- (iv) Cross-reinforced isolated slabs (i.e. slabs not connected to other slabs).
- (v) Cross-reinforced corner slabs (i.e. slabs connected on two adjacent edges to other slabs).
- (vi) Cross-reinforced side slabs (i.e. slabs connected on three edges to other slabs).
- (vii) Cross-reinforced middle slabs (i.e. slabs connected on four edges to other slabs).
- (b) The superimposed loads on slabs shall be given in the description as follows:-
- (i) Combined weights of floor finishings or roof coverings on surfaces and of ceiling finishings on soffits in kilogrammes per square metre, or sufficient information to enable such weights to be calculated.
- (ii) Weights of partitions and the like in kilogrammes per square metre of floor area, or sufficient information to enable such weights to be calculated.
- (iii) Working load under conditions of normal use in kilogrammes per square metre. In the

Contractor-designed construction (Contd.)

Floors,  
roofs and  
the like  
(Contd.)

- F51(b) (iii) (Contd.)  
case of exceptionally heavy live loads, heavy point loads and vibrating loads, the nature of the load shall be described in addition.
- (c) Classification of floor and roofs shall be as follows:-
- (i) Horizontal.
  - (ii) Sloping not exceeding 15 degrees from horizontal.
  - (iii) Sloping over 15 degrees from horizontal.
  - (iv) Vertical.
- (d) Cantilevered work shall be so described.
- (e) Curved roofs, conical roofs and spherical roofs shall each be so described stating the radius. Elliptical roofs and other roofs curved to more than one radius shall be so described stating the radii.
- (f) Haunchings shall be given in cubic metres.
- (g) Tops and cheeks of dormers (grouped together) shall be given in square metres stating the thickness.
- (h) Small turrets, small domes and the like shall each be enumerated separately.

Openings

- F52 Trimming floors, roofs and the like around openings where steel trimmers are not provided shall be enumerated as extra over the slabs in which they occur stating the size of the opening and its position relative to the span (i.e. whether the long or short side is across the line of the span).

Labours on  
contractor-  
designed  
construction

- F53(a) Raking cutting, curved cutting, forming hips and valleys and forming exposed edges shall each be deemed to be included with the items.
- (b) Working concrete around pipes or cables of panel-heating systems embedded in floors or roofs shall be deemed to be included with the items.
- (c) Forming channels and chases shall be given in linear metres stating the shape, the width and the depth. Ends, angles, intersections and outlets shall be deemed to be included with the items.

Beams and  
kerbs

- F54(a) Casings to steel supporting beams shall be given in accordance with Clause F9 hereof. Isolated casings (i.e. where not connected to slabs) shall be so described. Bar reinforcement, binding wire and stirrups shall be given in accordance with Clause F16 hereof. Formwork shall be given in accordance with Clauses F19 to F24 hereof.
- (b) Kerbs shall be given in linear metres stating the size. Formwork shall be given in accordance with Clause F21 hereof.

Contractor-designed construction (Contd.)

Fixing slips and metal clips	F55	Fixing-slips, metal clips and the like shall each be enumerated separately stating the method of securing to the slab.
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Sundries

Keying	F56	Hacking faces of concrete shall be deemed to be included in general concrete work.
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Grinding and sand-blasting	F57	Grinding, sand-blasting and the like treatments to the face of concrete shall be given separately in square metres. Such work to soffits shall be so described.
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Cutting, grooves, chases, chamfers and the like	F58	Cutting grooves, chases, rebates, chamfers and the like shall each be given separately in linear metres stating the size. For such details produced by formwork see Clause F23 hereof.
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Protection

Protection	F59	Protecting the work in this Section shall be given as an item.
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S E C T I O N   G

BRICKWORK AND BLOCKWORK

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section G

- G1(a) An item shall be given stating that the rates for brickwork and/or blockwork are to include for all cuttings; wedging and pinning up to soffites; building to any height off slabs or beams; raking out joints or hacking surfaces to form key; bedding and pointing plates, frames and corrugated sheeting; building in door and window frames and the like; building in or cutting and pinning in ends of lintels, bearing bars, steps, timbers, steel sections and the like; holes for pipes, mortices and making good in connection with building in, cutting and pinning in, holes and mortices.
- (b) Brickwork and blockwork shall be measured the mean length by the average height. Fair facework and facework shall be measured on the exposed face. No deduction shall be made for voids not exceeding 0.10 square metre.
- (c) Labours on different kinds of work shall be given separately.
- (d) Labours on old work shall be so described.
- (e) Curved work shall be so described. Curved fair face and curved facework shall be so described stating the radius on face. Rough cutting within the thickness (or the provision of curved bricks or curved blocks) shall be deemed to be included with the item.
- (f) For work in underpinning see Section H hereof.

Brickwork

Brickwork  
generally

- G2(a) For rules relating to Section G generally see Clause G1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind, type and sizes of bricks. Purpose made bricks shall be so described.
- (ii) Type of bond.
- (iii) Composition and mix of mortar.
- (c) Deductions of brickwork for string courses, sills, lintels, plates and the like shall be measured as regards height to the extent only of the full brick courses displaced and as regards depth to the extent only of the full half brick beds displaced.
- (d) For brickwork built fair both sides or built entirely of facing bricks see Clauses G14 to G16.



Brickwork (Contd.)

- |  |       |   |
|--|-------|---|
| Walls, piers<br>chimney-stacks<br>flue-linings<br>and vaulting | G3(a) | Brickwork shall be given in square metres.<br>Classification shall be as follows:- <ul style="list-style-type: none"><li>(i) Walls.</li><li>(ii) Filling old openings.</li><li>(iii) Skins of hollow walls.</li><li>(iv) Dwarf supports under fittings, tanks, pipes and the like (grouped together).</li><li>(v) Isolated piers and chimney-stacks (grouped together). Walls having a length on plan not exceeding four time their thickness (except where caused by openings) shall be classified as isolated piers.</li><li>(vi) Battering walls (i.e. walls of uniform thickness built battering).</li><li>(vii) Brickwork used as formwork. Temporary strutting shall be given in the description.</li></ul> |
| Cavities in<br>hollow walls                                    | G4(a) | Forming cavities in hollow walls shall be given in square metres stating the width of the cavity. Wall-ties shall be given in the description stating the type and spacing.   |
|  | (b)   | Closing cavities at ends of hollow walls or at jambs of openings shall be given in linear metres stating the width of the cavity and the method of closing.   |
| Eaves-<br>filling  | G5    | Brickwork in eaves-filling shall be added to the general brickwork. The labour in eaves-filling shall be given in linear metres (measured overall) stating the thickness of the wall.   |
| Rough<br>cutting   | G6    | Rough cutting shall be deemed to be included with the items of brickwork.   |
| Rough<br>chases  | G7    | Horizontal rough chases in new work for edges of floors, landings and roofs shall be deemed to be included with the brickwork. Other horizontal rough chases and all raking, vertical and curved rough chases shall each be given separately in linear metres stating the size. No deduction of brickwork shall be made for any rough chase.  |
| Rough<br>arches  | G8    | Rough arches (measured the mean length on face) shall be given in linear metres as extra over the brickwork in which they occur stating the thickness and the number of rings in the arches. Rough cutting on arches and walls shall be given in the description of the arches.   |

## Brick Facework

- Brick facework generally
- G9(a) For rules relating to Section G generally see Clause G1 hereof.
- (b) The rules relating to Facework shall apply equally to fair face on brickwork.
- (c) Particulars of the following shall be given:-
- (i) Kind and quality of facing bricks where different from those in the body of the work. Purpose-made bricks shall be so described.
  - (ii) Size of facing bricks where different from those in the body of the work, and the method of bonding such facings to the backing.
  - (iii) Type of bond except in the case of fair face.
  - (iv) Composition and mix of mortar for pointing where different from that in the body of the work.
  - (v) Method of pointing.
- (d) Facework shall be given as extra over the brickwork on which it occurs. Pointing shall be given in the description.
- (e) Deductions of facework for string courses, sills, lintels, plates and the like shall be measured as regards height to the extent only of the full brick courses displaced.
- (f) For half-brick and one brick walls built fair both sides or built entirely of facing bricks see Clauses G14 to G16 hereof.
- Facework to walls, piers, chimney-stacks and returns
- G10(a) Facework to walls, piers, returns and the like (grouped together) shall be given in square metres.
- (b) Facework built overhand shall be so described.
- (c) Facework sunk or projecting less than half-brick from the general face of the wall shall be so described stating the depth of the set-back or set-forward.
- Fair cutting
- G11 Fair cutting shall be deemed to be included with the items of brickwork.
- Fair chases
- G12 Fair chases shall be given in linear metres stating the size. Facework to back and sides shall be given in the description. Horizontal raking, vertical and curved chases shall each be so described. No deduction of brickwork or facework shall be made for any chase.
- Facework to arches
- G13 Facework to arches (measured the mean length on face) shall be given in linear metres stating the width on face, the width of the exposed soffit and the outline of the arch.

Brickwork Built Fair Both Sides  
or Entirely of Facing Bricks

Brickwork  
and facework  
generally

- G14(a) For rules relating to Section G generally see Clause G1 hereof.
- (b) Particulars in accordance with Clauses G2(b) and G9(c) hereof shall be given.
- (c) Deductions of brickwork shall be measured in accordance with Clause G2(c) hereof.
- (d) Pointing shall be given in the description of the work on which it occurs.

Walls

- G15(a) Half-brick walls and one-brick walls built fair both sides or entirely of facings shall each be given separately in square metres. Classification shall be as Clause G3(a) hereof.
- (b) Fair returns (e.g. ends of walls, reveals of openings) shall be given in linear metres stating the width in half-brick stages.
- (c) Fair cutting and fair chases shall be given in accordance with Clauses G11 and G12 hereof.

Sills,  
thresholds,  
copings and  
steps

- G16 Sills, thresholds, copings and steps built of fair-faced brickwork or entirely of facings shall each be given separately in linear metres stating the size and the method of forming (e.g. all headers on edge; all stretchers-on-end). Horizontal, raking, vertical and curved work and work set weathering shall each be so described.

Blockwork

Blockwork  
generally

- G17(a) For rules relating to Section G generally see Clause G1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind, type and size of blocks.
- (ii) Composition and mix of mortar for bedding, jointing and pointing.
- (iii) Method of pointing.
- (c) Deductions of blockwork for string courses, sills, lintels, plates and the like shall be measured as regards height to the extent only of the full block courses displaced.
- (d) Pointing shall be given in the description of the work on which it occurs.
- (e) Work constructed entirely of hollow blocks filled with concrete shall be given separately.

Blockwork (Contd.)

Walls,  
partitions,  
piers and  
chimney-stacks

G18(a) Blockwork shall be given in square metres stating the thickness. Classification shall be as follows:-

- (i) Walls and partitions (grouped together).
- (ii) Filling old openings.
- (iii) Skins of hollow walls.
- (iv) Dwarf supports under fittings, tanks, pipes and the like grouped together.
- (v) Blockwork used as formwork. Temporary strutting shall be given in the description.

(b) Blockwork finished with a fair face and blockwork finished with facing blocks different from those in the body of the work shall each be so described stating whether to one or both faces.

(c) Filling hollow blocks with concrete at jambs or bearings and the like shall be given separately in linear metres as extra over the work in which they occur.

Backing to  
masonry

G19 Blockwork in backing to masonry shall be given in square metres stating the average thickness. Cutting and bonding blockwork to masonry shall be given in the description.

Cavities in  
hollow walls

G20 Forming cavities in hollow walls shall be given in accordance with Clause G4 hereof.

Eaves  
filling

G21 Blockwork in eaves filling shall be added to the general blockwork. The labour in eaves filling shall be given in linear metres (measured overall) stating the thickness of the wall.

Cutting

G22 Rough and fair cutting shall be deemed to be included with the items of blockwork.

Rough  
chases

G23 Rough chases shall be given in accordance with Clause G7 hereof.

Damp-proof Courses

Damp-proof  
courses  
generally

G24 Particulars of the following shall be given:-

- (i) Kind and quality of damp-proof material.
- (ii) Gauge, thickness or substance of sheet material.
- (iii) Number of layers.

Damp-proof Courses (Contd.)

- |                                    |  |
|------------------------------------|--|
| Slate and sheet damp-proof courses | G25(a) Slate damp-proof courses and sheet damp-proof courses (e.g. bitumen-felt, sheet lead, sheet copper) shall be given separately in square metres. No allowance in measurement shall be made for laps. No deduction shall be made for voids not exceeding 0.50 square metres. Horizontal, raking, vertical and curved work shall each be so described. Cutting to curve shall be given in the description of work in curved walls. |
|                                    | (b) Damp-proof courses with cavity-gutters in hollow walls shall be so described.  |
|                                    | (c) Pointing exposed edges of damp-proof courses shall be deemed to be included with the damp-proof courses.   |
| Asphalt damp-proof courses         | G26 For asphalt damp-proof courses see Section L hereof.   |

Sundries

- |   |   |
|---|---|
| Reinforcement                                 | G27(a) Fabric reinforcement in walls shall be given in linear metres stating the width. No allowance in measurement shall be made for laps and this shall be stated in the description.   |
|   | (b) Rod reinforcement in walls shall be given in kilogrammes stating the size.  |
| Cement wash on steelwork                      | G28 Cement wash on steelwork shall be given in square metres.   |
| Weather-fillets and angle-fillets             | G29 Weather-fillets and angle-fillets shall each be given separately in linear metres stating the width. Curved fillets shall be so described irrespective of radius. Ends and angles to fillets shall be deemed to be included with the items. |
| Bedding                                       | G30 Bedding plates, corrugated sheets, plates and gills shall be deemed to be included in general brickwork and blockwork.  |
| Wedging and pinning up                        | G31 Wedging and pinning up new work to underside of old construction shall be deemed to be included in the general brickwork and blockwork.   |
| Preparing for flashings and asphalt skirtings | G32(a) Raking out joint or cutting groove for turned-in edge of flashings shall be given in linear metres. Horizontal, raking, stepped, vertical and curved work shall each be so described. Pointing shall be given in the description.        |

Sundries (Contd.)

Preparing for flashings and asphalt skirtings (Contd.)	G32(b)	Raking out and enlarging joint or cutting groove for nib of asphalt shall be given in linear metres. Horizontal, raking, vertical and curved work shall each be so described. Pointing shall be given in the description.
Building in or cutting and pinning	G33	Building in windows, doors and the like (complete with frames) and pointing shall be deemed to be included in general brickwork and blockwork

Centering

Centering generally	G34(a)	Particulars of the following items shall be given:- (i) Nature of the surface to be supported (e.g. brickwork; blockwork). (ii) Shape of surface (e.g. flat; segmental; semicircular; groined).  (b) Centering left in shall be so described. (c) Centering with supports over 3.50 metres high shall be so described stating the height in further stages of 1.50 metres. (d) Centering shall be measured as the actual surface to be supported. Strutting, shoring, bolting, wedging, easing, striking and removing shall be deemed to be included with the items.
Flat soffits	G35(a)	Centering for flat soffits shall be given in square metres.
	(b)	Centering for sloping soffits shall be so described.
Curved and vaulted soffits	G36	Centering for curved soffits and vaulted soffits shall each be given separately in square metres.
Arches	G37	Centering for segmental, semicircular, invert and other curved arches shall each be enumerated separately stating the span of the opening and the width of the soffit. The rise shall also be stated except in the case of semicircular arches.

Protection

Protection	G38	Protecting the work in this Section shall be given as an item.
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S E C T I O N   H

UNDERPINNING

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section H

- H1(a) An item shall be given stating that the remarks regarding prices in other Sections shall apply equally to this Section.
- (b) Any information available concerning the nature of the site shall be given in accordance with Clause D1(a) hereof.
- (c) A description of the existing structure (e.g. wall, pier) to be underpinned shall be given stating its location, its length or size on plan, the depth of the new work below the base of the existing foundation and the limit of length to be carried out in one operation. Underpinning which is curved on plan shall be so described.
- (d) Underpinning required to be executed from inside existing buildings shall be so described. Handling materials and getting them in or out of such buildings shall be deemed to be included with the items.

Work In All Trades

- |                |       |   |
|----------------|-------|---|
| Work generally | H2    | For rules relating to Section H generally see Clause H1 hereof.   |
| Excavation     | H3(a) | Temporary supports to work to be underpinned shall be given as an item. Particulars of such supports shall be given where practicable.  |
|                | (b)   | Allowance for working space (which shall not be subject to adjustment if more or less space is actually required) shall be made in the measurements of excavations. The width of the working space (measured horizontally from the face of the wall to be underpinned, or where projecting foundations are to be retained from the face of such projection) shall be related to the total depth of the excavation (measured from the top of the preliminary trench to the underside of the underpinning work). The allowances shall be as follows:- |
|                | (i)   | 1 metre from the wall or projecting foundation where the total depth of the excavation does not exceed 1.50 metres.   |
|                | (ii)  | 1.50 metres from the wall or projecting foundation where the total depth of the excavation is over 1.50 metres but does not exceed 3 metres.  |



Work in All Trades (Contd.)

Excavation  
(Contd.)

- H3(b) (iii) 2 metres from the wall or projecting foundation where the total depth of the excavation is over 3 metres.
- (c) Excavation shall be given in accordance with Clauses D2 to D12 hereof subject to the following:-
- (i) Excavating preliminary trenches down to the level of the base of the existing foundation shall be so described.
  - (ii) Excavating below the level of the base of the existing foundation shall be so described.
- (d) Cutting away projecting foundations shall be given in linear metres stating the number of courses of footings and the dimensions of concrete to be removed.

Concrete,  
brickwork  
or asphalt

- H4 Concrete work shall be given in accordance with Section F hereof. Brickwork, blockwork and damp-proof courses shall be given in accordance with Section G hereof. Asphalt work shall be given in accordance with Section L hereof.

S E C T I O N J

RUBBLE WALLING

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section J

- J1(a) An item shall be given at the beginning of this Section stating that the rates for Rubble Walling are to include for all rough and fair cuttings; wedging and pinning up to soffits; building at any height off slabs or beams; raking out joints or hacking surfaces to form key; bedding and pointing plates, frames and corrugated sheeting; levelling for damp-proof courses, cills, plates, copings and the like; building in door and window frames and the like; building in or cutting and pinning in ends of lintels, bearing bars, steps, timbers, steel sections and the like; holes for pipes; mortices and making good in connection with building in, cutting and pinning in, holes and mortices.
- (b) Templets and patterns shall be deemed to be included with the items.
- (c) Superficial items of Rubble work shall be measured the mean length by the average height as executed. No deduction shall be made for voids not exceeding 0.10 square metre.
- (d) Linear items of rubble work shall be measured the mean length as executed.
- (e) Dry rubble work shall be measured the mean length as executed.
- (f) Rubble work curved on plan shall be so described stating the mean radius.
- (g) Pointing shall be given in the description of the rubble work on which it occurs.
- (h) For dressed stonework see Section K hereof.

Stone Rubble Work

Stone rubble work generally

- J2(a) For rules relating to Section J generally see Clause J1 hereof.
- (b) Rubble work shall consist of natural stones either irregular in shape or roughly dressed and laid dry or in mortar with comparatively thick joints.
- (c) Particulars of the following shall be given:-
- (i) Kind of stone (e.g. sandstone; limestone; granite; flint).
- (ii) Any requirements as to the stone and the quarry.
- (iii) Type of walling stating whether of random or square stones and, where coursed, the average height of the courses or the maximum heights of diminishing courses.

Stone Rubble Work (Contd.)

Stone rubble work generally (Contd.)	J2(c)	(iv) Texture and finish to exposed faces of stones (e.g. natural; rough dressed; hammer-dressed). (v) Composition and mix of mortar for bedding, jointing and pointing. (vi) Method of pointing.
	(d)	Measurements of walls shall be taken between attached piers. The thickness of attached piers shall be taken as the combined thickness of the wall and the pier. Attached or isolated piers (except where caused by openings) having a length on plan not exceeding four times the thickness shall be classified as piers and those having a length over four times the thickness and those caused by openings shall be classified as walls.
Walls, piers and chimney stacks	J3	Rubble work in each of the following clauses shall be given separately in square metres stating the thickness. Classification shall be as follows -  (i) Walls. (ii) Filling old openings. (iii) Piers. (iv) Battering walls (i.e. walls of uniform thickness built battering).
Tapered walls	J4	Rubble work in tapered walls (i.e. walls of diminishing thickness from base to top) shall be given in square metres stating the average thickness, and whether battered on one or more faces.
Eaves filling	J5	Rubble work in eaves filling shall be added to the general walling. The labour in eaves filling (measured overall) shall be given in linear metres stating the thickness of the wall.
Bonding ends of walls	J6	Bonding ends of new walls to old work shall be given in linear metres stating the thickness of the new wall. Cutting pockets in old work and extra material for bonding shall be given in the description.
Rubble facework	J7(a)	Rubble facework bonded to a backing of other material shall be given in square metres stating the average thickness of the facework.
	(b)	Rubble facework built against a backing of other material shall be given in square metres stating the thickness of the facework. Wall-ties or anchors shall be given in the description stating the type and spacing thereof and the method of securing to the backing.

Stone Rubble Work (Contd.)

Rubble facework (Contd.)	J7(c)	Rubble facework used as formwork to concrete shall be so described. Temporary strutting shall be given in the description.
	(d)	Rubble facework built against a battered backing shall be so described stating the rate of batter.
	(e)	Rubble facework in panels not exceeding one square metre shall be so described stating the number.
	(f)	Rubble facework built overhead shall be so described.
Cuttings	J8	Rough cutting and fair cuttings shall be deemed to be included with the rubble work.
Fair returns	J9	Fair returns on rubble work (e.g. ends of walls and facework, sides of piers and chimney-stacks, reveals of openings) shall be given in linear metres stating the width of the return.
Fair angles	J10(a)	Fair vertical internal angles and fair vertical external angles shall be deemed to be included with the rubble work.
	(b)	Fair squint angles, fair birdsmouth angles, fair battered internal angles and fair battered external angles shall each be given separately in linear metres.
Dressed margins	J11	Dressed margins on rubble work shall be given in linear metres stating the width of the margin. Stops and angles shall be deemed to be included with the items.
Copings	J12	Copings formed of rough stones shall be given in linear metres stating the width and average height of the coping. No distinction shall be made between horizontal, raking, vertical and curved copings. Ends and angles shall be deemed to be included with the items.
Arches	J13	Arches (measured the mean length on face) shall be given in linear metres as extra over the rubble work in which they occur stating the width on face, the width of the exposed soffit and the outline of the arch. Cutting on arches and walling shall be deemed to be included with the items.

Sundries

Grooves for waterbars, flashings and skirtings	J14(a)	Grooves for water-bars and the like shall be given in linear metres.
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Sundries (Contd.)

Grooves for waterbars, flashings and skirtings (Contd.)	J14(b)	Grooves for turned-in edges of flashings and for ribs of skirtings shall each be given separately in linear metres. No distinction shall be made between horizontal, raking, vertical and curved grooves. Pointing the grooves and dressing the face of rubble work to receive flashings and skirtings shall be given in the description.
Chases	J15	Chases shall be given in linear metres stating the size, the kind of rubble walling and the finish to back and sides of chase. No distinction shall be made between horizontal raking, vertical and curved chases. No deduction of rubble work shall be made for any chase.
Building in or cutting and pinning	J16	Building in windows, doors and the like (complete with frames) and pointing shall be deemed to be included in the rubble work.

Centering

Centering	J17	Centering for rubble work shall be given in accordance with the rules in Clauses G35 to G39 hereof.
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Protection

Protection	J18	Protecting the work in this Section shall be given as an item.
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S E C T I O N   K

MASONRY

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section K

- K1(a) An item shall be given stating that:-
- (i) The rates for all stonework shall include for joggle, sunk, rebated and concealed joints; rough notchings and sinkings; rustications, supporting projecting stonework and holes for pipes and mortices.
  - (ii) The rates for mullions, transomes, enrichments, cornices, bands, architraves, steps, handrails, cappings, kerbs, cover stones, corbels and architraves shall include for all end mitres, wall holes, stoolings and all other sundry labours.
  - (iii) The rates for sinkings, grooves, throats, rebates, margins, flutes shall include for mitres, ends and all other sundry labours.
- (b) Stone dressings, to walls other than masonry-faced walls, shall be so described.
- (c) Templets and patterns shall be deemed to be included with the items.
- (d) Superficial items of work shall be measured the mean length by the average height as executed. The measurements shall be taken over all mortar joints.
- (e) Linear items of work shall be measured the mean length as executed. The measurements shall be taken over all mortar joints.
- (f) Enumerated items of work shall be measured as the smallest block from which each item could be obtained having regard in the case of natural stone to the plane in which the stone is required to be laid with relation to its quarry bed. The measurements shall be taken over one mortar bed and one mortar joint.
- (g) Plain work, sunk work, circular work and circular-circular work shall each be so described. Arrises shall be deemed to be included with the items on which they occur. For moulded work see Clause K12 hereof. Work curved on plan shall be so described and the extra stone required for curved work shall be so described irrespective of the radius.
- (h) Stones or blocks over 1.50 metres long shall be so described stating the length in stages of 0.50 metre.
- (j) Stones or blocks over 0.50 cubic metre shall be so described stating the cube in further stages of 0.25 cubic metre.
- (k) Labours on different kinds of stone, cast stone and clayware shall each be given separately.
- (l) Pointing shall be given in the description of the work on which it occurs.

Natural Stonework

Natural  
Stonework  
generally

- K2(a) For rules relating to Section K generally see Clause K1 hereof.
- (b) Stonework shall consist of dressed blocks of natural stone accurately worked to given dimensions and laid in mortar in courses with fine joints.
- (c) Particulars of the following shall be given:-
- (i) Kind of stone (e.g. sandstone; limestone; granite; slate; marble).
  - (ii) Any requirements as to the stone and the quarry.
  - (iii) Texture and finish to exposed faces of stones (e.g. sawn; rubbed; tooled; vermiculated; reticulated; polished).
  - (iv) Composition and mix of mortar for bedding, jointing and pointing.
  - (v) Method of pointing.
  - (vi) Any requirements as to coating the surface of the finished work and cleaning on completion.
- (d) Labours necessary to produce sawn stones of the required overall size shall be deemed to be included with the items.
- (e) Stones shall be deemed to be set on their natural beds unless otherwise described.

Walls, piers,  
chimney-stacks

- K3(a) Stonework in each of the following classes shall be given separately in square metres stating the thickness. Classification shall be as follows:-
- (i) Walls.
  - (ii) Filling old openings.
  - (iii) Dwarf supports under seats, table-tops and the like (grouped together).
  - (iv) Piers. Walls having a length on plan not exceeding four times their thickness (except where caused by openings) shall be classified as piers.
  - (v) Battering walls (i.e. walls of uniform thickness built battering).
- (b) Stonework in tapered walls (i.e. walls of diminishing thickness from base to top) shall be given in square metres stating the average thickness and whether one or both faces are battered. The extra stone required for battered faces shall be deemed to be included with the items.

Ends and  
angles of  
walls

- K4(a) Square ends, square reveals and square external angles of walls shall be given in linear metres stating the thickness of the wall.

Natural Stonework (Contd.)

- Ends and angles of walls (Contd.)
- K4(b) Splayed ends, battered ends, battered external angles and battered internal angles of walls shall each be given separate in linear metres stating the thickness of the wall.
- (c) The extra stone required for splayed or battered ends or angles of walls shall be deemed to be included with the items.
- (d) Squint angles to walls and any ends or angles to walls which involve the use of stones thicker than the wall in which they occur shall be dealt with in accordance with Clause K15 hereof.
- Bonding ends of walls
- K5 Bonding ends of new walls to old shall be given in linear metres stating the thickness of the new wall. Cutting pockets in old work and the extra stone for bonding shall be given in the description.
- Stone facework
- K6(a) Stone facework bonded to a backing of other material shall be given in square metres stating the average thickness of the facework.
- (b) Stone facework built against a backing of other material shall be given in square metres stating the thickness of the facework. Wall-ties or anchors shall be given in the description stating the type and spacing thereof and the method of securing to the backing.
- (c) Stone facework used as formwork to concrete shall be so described. Temporary strutting shall be given in the description.
- (d) Classification shall be in accordance with Clause K3 hereof.
- (e) Stone facework built overhand shall be so described.
- Stone slabbing or cladding to walls
- K7 For stone slabbing or cladding to walls see Clauses U14 to U22 hereof.
- Fair cutting
- K8(a) Fair raking cutting on superficial items of stonework shall be given in linear metres stating the thickness. The extra stone required for raking cutting shall be deemed to be included with the items.
- (b) Fair curved cutting on superficial items of stonework shall be given in linear metres stating the thickness and the radius. The extra stone required for curved cutting shall be deemed to be included with the items.
- Rustications
- K9 Rustications shall be given in the description of the stonework.



Natural Stonework (Contd.)

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|---|--------|--|
| Grooves,<br>rebates,<br>margins,<br>flutes,<br>sinkings<br>and angles | K10(a) | Grooves, throats, rebates, margins, flutes, sinkings, chamfered angles, rounded angles and the like labours on superficial items of stonework shall each be given separately in linear metres stating the width or girth. Stops and mitres shall be deemed to be included with the items.  |
|   | (b)    | Such labours on linear items of stonework shall be given in the description stating the width or girth. Stops and mitres shall be deemed to be included with the items.  |
|   | (c)    | Such labours on enumerated items of stonework shall be given in the description stating the width or girth. Stops and mitres shall be deemed to be included with the items.  |
| Mouldings   | K11(a) | Mouldings on superficial items of stonework shall be given in linear metres stating the girth. Undercut mouldings shall be so described. Stops, mitres, returned ends and the like shall be deemed to be included with the items.  |
|   | (b)    | Mouldings on linear items of stonework shall be given in the description stating the girth. Stops, mitres, returned ends and the like shall be deemed to be included with the items.   |
|   | (c)    | Mouldings on enumerated items of stonework shall be given in the description stating the girth, and stops and mitres shall be deemed to be included with the items.  |
|   | (d)    | The extra stone required for projecting mouldings shall be added to the thickness of the stonework on which they occur.  |
| Enrichments   | K12    | Enrichments (e.g. bead-and-reel; egg-and-dart; dentils) shall each be given separately in linear metres stating the size. The extra stone required for projecting enrichments shall be added to the thickness of the stonework on which they occur. Mouldings on or between dentils shall be given in the description stating the girth. Stops, mitres, returned ends and the like to enrichments shall be deemed to be included with the items. |
| Ornaments   | K13    | Ornaments (e.g. scrolls; rosettes; crockets) shall each be enumerated separately stating the size. The extra stone required for projecting ornaments shall be added to the thickness of the stonework on which they occur.   |
| Pilasters   | K14(a) | Stones forming pilasters shall be given in linear metres (measured vertically) stating the width on face, the total thickness and the projection beyond the face of the wall. Battered pilasters and those sunk to entasis shall each be so described.   |

Natural Stonework (Contd.)

Pilasters (Contd.)	K14(b)	Caps and bases to pilasters shall each be enumerated separately stating the size.
Pier-caps	K22	Pier-caps shall be enumerated stating the size.
Finials, brackets and corbels	K23	Finials, terminals, brackets, corbels and the like shall each be enumerated separately stating the size.
Tracery	K24	Stones forming tracery shall be enumerated stating the size.
Special features	K25	Special features composed of one or more stones (e.g. ornamental panels, oriel windows, bulls-eye openings, niches, small domes, fleches) shall each be enumerated separately stating the nature and design of the feature, the number of stones, the total volume of stone required and the dimensions of the exposed faces.
Steps, winders and landings	K26(a)	Steps (except winders) shall be given in linear metres stating the size and the number of steps. Spandril steps (i.e. steps with sloping soffits) shall be so described. Fair ends, returned ends, rounded ends, stooled ends, wall-holds and the like shall be deemed to be included with the item.
	(b)	Winders and landings shall each be enumerated separately stating the size and the number of stones. Landings of irregular shape shall be so described. Fair ends, stooled ends, wall-holds, fair edges, nosings, rebates, grooved and the like shall be given in the description.
Handrails, cappings and kerbs	K27	Handrails, cappings and the kerbs shall each be given separately in linear metres stating the size. Fully-moulded handrails shall be so described. Stopped ends, returned ends, mitres, stoolings, wall-holds and the like shall be deemed to be included with the item.
Balusters and newels	K28	Balusters, half-balusters, newels and newel-caps shall each be enumerated separately stating the size.
Balustrade panels	K29	Balustrade panels and the like shall be enumerated stating the size. Those of irregular shape and those worked both sides shall be so described. Fair edges, shaped edges, perforations, sinkings and the like shall be given in the description.
Cover-stones and corbel- courses	K30	Cover-stones, corbel-courses and the like shall each be given separately in linear metres stating the size. Fair edges shall be given in the description. Fair ends shall be deemed to be included with the item.

Natural Stonework (Contd.)

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|---|--------|---|
| Templates<br>bases and<br>hearths                                 | K31    | Templates, bases, thresholds, hearths and the like shall each be enumerated separately stating the size. Fair edges shall be given in the description stating the number.   |
| Shelves,<br>divisions,<br>table-tops,<br>seats and<br>bath-panels | K32(a) | Shelves, divisions, table-tops, work-tops, counter-tops, seats, bath-panels and the like over 300 millimetres wide shall each be given separately in square metres stating the thickness. Those not exceeding 300 millimetres wide shall be given in linear metres stating the thickness and the width. Members of irregular shape and curved members shall each be enumerated separately stating the thickness and the extreme size. |
|   | (b)    | Fair edges, rounded edges, moulded edges, jointed edges, grooves, rebates and the like shall each be given separately in linear metres. Stops to grooves and rebates, also internal angles and external angles to rounded edges and moulded edges shall be deemed to be included with the item.   |
| Pavings   | K33    | For pavings see Section U hereof.   |
| Carving and<br>sculpture  | K34(a) | Carving and sculpture shall each be enumerated separately stating the character of the work. Detailed drawings shall be provided but where such drawings are not available or where a special carver or sculpture is required the work shall be given as a provisional or prime cost sum as Clause A7 hereof. Providing models shall be given in the description.   |
|   | (b)    | Selecting blocks of stone for size and quality shall be given as an item. Boasting for carving shall be given in the description of the stone to be used for carving or sculpture.  |
|   | (c)    | Temporary work (e.g. special accommodation, special scaffolding, screens, shelters) required for the exclusive use of carvers or sculptors shall be given as an item stating the nature of the temporary work. Removing temporary work and making good after shall be deemed to be included with the item.  |
|   | (d)    | Attending upon and cleaning down after the carvers and sculptors shall be given as an item.   |
|   | (e)    | Working mouldings and similar members to carving and sculpture shall be enumerated stating the size of the moulding or member.  |

### Cast Stonework

Cast  
stonework  
generally

- K35(a) For rules relating to Section K generally see Clause K1 hereof.
- (b) Cast stonework shall consist of blocks of reconstructed or artificial stone accurately cast to given dimensions and used in a similar manner and for the same purpose as natural stone.
- (c) Particulars of the following shall be given:-
- (i) Kind and quality of cast stone.
  - (ii) Any requirements as to the reinforcement of blocks.
  - (iii) Any requirements as to the thickness, mix and colour of the facing material.
  - (iv) Texture and finish of exposed faces of blocks (e.g. rough, smooth, rubbed, vermiculated, reticulated, polished).
  - (v) Composition and mix of mortar for bedding, jointing and pointing.
  - (vi) Method of pointing.
  - (vii) Any requirements as to coating the surface of the finished work and cleaning on completion.
- (d) Moulds necessary to produce blocks of the required size and shape shall be deemed to be included with the items.

Work in  
cast stone

- K36 Work in cast stone shall be given in accordance with the rules for natural stonework in Clauses K3 to K34 hereof.

### Clayware Work

Clayware  
generally

- K37(a) For rules relating to Section K generally see Clause K1 hereof.
- (b) Clayware work shall consist of blocks of fired clayware cast to given dimensions and used in a similar manner and for the same purpose as natural stone.
- (c) Particulars of the following shall be given:-
- (i) Kind of clayware (e.g. natural clayware, terra cotta, faience).
  - (ii) Any requirements as to the colour.
  - (iii) Texture and finish of exposed faces of blocks (e.g. rough, smooth, glazed, double glazed).
  - (iv) Composition and mix of mortar for bedding, jointing and pointing.
  - (v) Method of pointing.
  - (vi) Any requirements as to cleaning the finished work on completion.

### Clayware Work (Contd.)

- Clayware generally (Contd.)
- K37(d) Moulds necessary to produce blocks of the required size and shape shall be deemed to be included with the items.
- (e) Blocks required to be cast hollow and filled with concrete shall be so described stating the composition and mix of the concrete. Formwork shall be deemed to be included with the items.
- Work in clayware
- K38 Work in clayware shall be given in accordance with the rules for natural stonework in Clauses K3 to K34 hereof.

### Sundries

- Grooves for flashings and skirtings
- K39 Grooves for turned-in edges of flashings and for ribs of skirtings shall each be given separately in linear metres stating the kind of masonry. No distinction shall be made between horizontal, raking, vertical and curved grooves. Pointing the grooves shall be given in the description.
- Chases
- K40 Chases shall be given in linear metres stating the size, the kind of masonry and the finish to back and sides of chase. No distinction shall be made between horizontal, raking and vertical chases. No deduction of stonework shall be made for any chase.
- Cramps
- K41 Metal cramps, slate dowels, metal dowels, lead plugs and the like shall each be enumerated separately stating the size. Mortices and running with lead or mortar shall be given in the description stating the kind of masonry.
- Coating backs of stones
- K42 Coating backs of stones or blocks with slurry shall be given in the description of the masonry on which it occurs. Coating with other material shall be given in square metres stating the kind of material.

### Centering

- Centering
- K43(a) Centering for masonry shall be given in accordance with the rules in Clauses G35 to G38 hereof.

### Protection

- Protection
- K44 Protecting the work in this Section shall be given as an item.

S E C T I O N L

ASPHALT WORK

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section L

- L1(a) Asphalt work shall be grouped as follows and each group with its associated skirtings, angle-filletts and labours shall be given under an appropriate heading:-
- (i) Damp-proofing and tanking.
  - (ii) Paving.
  - (iii) Roofing.
- (b) An item shall be given stating that:-
- (i) The rates for all asphalt work shall include for temporary rules, cutting, notching, bending and lapping underlay; cutting to line, fair and rounded edges, drips, arrises, working up to flashings and frames of metal or other material and for working into or dishing to gullies and the like.
  - (ii) The rates for skirtings, fascias, aprons, gutters, valleys, kerbs, channels and the like shall include for ends, angles, intersections, extra material for turning into grooves and all other sundry labours.
- (c) Particulars of the following shall be given:-
- (i) Kind and quality of asphalt.
  - (ii) Thickness and number of coats.
  - (iii) Nature of base on which asphalt is applied.
  - (iv) Surface treatment with chippings, gravel, tiles and the like.
- (d) Paper, felt, cork, fibreboard or other underlay in contact with asphalt, and any reinforcement to asphalt shall be given in the description of the asphalt work in which they occur. Cutting, notching, bending and lapping the underlay and the reinforcement shall be deemed to be included with the items.
- (e) Curved work, conical work, spherical work and elliptical work shall each be so described irrespective of the radius. No distinction shall be made between straight and curved labours.
- (f) For work in underpinning see Section H hereof.

## Mastic Asphalt

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|-------------------------------|-------|--|
| Mastic asphalt generally      | L2    | For rules relating to Section L generally see Clause L1 hereof.  |
| Coverings to surfaces         | L3(a) | Coverings shall be measured the area in contact with the base but no deduction shall be made for voids not exceeding 0.50 square metre.  |
|                               | (b)   | Coverings shall be given in square metres. Classification shall be as follows:- <ul style="list-style-type: none"><li>(i) Flat coverings, coverings to falls or cross falls and sloping coverings not exceeding 10 degrees from horizontal (grouped together). Intersections on work to cross falls shall be deemed to be included with the items.</li><li>(ii) Sloping coverings over 10 degrees but not exceeding 45 degrees from horizontal.</li><li>(iii) Sloping coverings over 45 degrees from horizontal and vertical coverings (grouped together).</li></ul> |
|                               | (c)   | Coverings to soffits shall be so described.  |
| Labours on coverings          | L4(a) | Fair edges, rounded edges, drip and arrises shall be deemed to be included with the items of coverings.  |
|                               | (b)   | Turning nibs of asphalt into grooves (e.g. at top or side edges) shall be given in linear metres.  |
|                               | (c)   | Jointing new to old asphalt shall be given in linear metres.   |
|                               | (d)   | Working asphalt into recessed duct-covers and the like shall be given in linear metres as extra over the coverings in which they occur, stating the width in stages of 100 millimetres. Working asphalt into shaped insets, recessed manhole-covers, mat-sinkings and the like shall each be enumerated separately as extra over the coverings in which they occur stating the size.   |
|                               | (e)   | Working asphalt into outlet pipes, dishing to gullies and the like shall be deemed to be included with the items of coverings.   |
| Skirtings, fascias and aprons | L5(a) | Skirtings, fascias and aprons shall each be given separately in linear metres stating the width on face. Stepped work and raking work shall each be so described. Fair edges, drips, arrises, internal angle-fillets, tilting-fillets (or dressing over tilting-fillets) and turning nibs into grooves shall be given in the description. Angles, fair ends, stopped ends and extra material for turning into grooves shall be deemed to be included with the items.   |

Mastic Asphalt (Contd.)

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|---|-------|---|
| Skirtings,<br>fascias and<br>aprons<br>(Contd.) | L5(b) | Skirtings on roof slopes (e.g. under eaves of slating) shall be so described.   |
| Gutter,<br>valleys<br>and kerbs                 | L6    | Linings to gutters, linings to valleys and coverings to kerbs shall each be given separately in linear metres stating the girth on face. Gutters to falls shall be so described. Arrises, internal angle-fillets, tilting-fillets (or dressing over tilting fillets) and turning nibs into grooves shall be given in the description. |
| Channels  | L7(a) | Working coverings into shallow channels shall be given in linear metres as extra over the coverings in which they occur stating the girth on face. Channels to falls shall be so described. Arrises shall be given in the description.  |
|   | (b)   | Linings to channels shall be given in accordance with the rules for linings to gutters in Clause L6 hereof.   |
| Cesspools<br>and collars                        | L8(a) | Linings to cesspools, sumps and the like shall each be enumerated separately stating the size. Arrises, internal angle-fillets and outlets shall be given in the description.   |
|   | (b)   | Linings to bonding pockets, coverings to bonding blocks and the like shall each be enumerated separately stating the size. Arrises and internal angle-fillets shall be given in the description.  |
|   | (c)   | Collars around pipes, standards and the like members (grouped together) shall be enumerated stating the size of the members as Clause A3(c) hereof. Arrises and internal angle-fillets shall be given in the description.   |

Asphalt Tiling

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| Asphalt<br>tiling | L9 | For asphalt tiling see Section U hereof. |
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Protection

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| Protection | L10 | Protecting all work in this Section shall be given as an item. |
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S E C T I O N M

ROOFING

For General Rules see Section A

The Unit of Billing shall be the Metre

Generally to Section M

M(a) An item shall be given at the beginning of the Section stating that:-

- (i) The rates for slate or tile roofing shall include for all cutting, holes for pipes, standards and the like, cut courses at eaves, all cuttings and bondings and eaves, verges, valleys, hips and ridges and fitted, filled or fair ends, angles and intersections to hips and ridges and forming small openings.
  - (ii) The rates for corrugated or troughed sheet roofing shall include for all cutting, holes for pipes, standards and the like, and fitted, filled or fair ends, angles and intersections to hips, ridges, angles, cappings or barge boards and forming small openings.
  - (iii) The rates for roof decking shall include for all cutting and for holes for pipes, standards and the like and forming small openings.
  - (iv) The rates for bitumen-felt, acrylic fibre or other similar sheet or roll type roofing shall include for cutting, notching, bending and lapping, holes for pipes, standards and the like, angles, ends, extra felt for laps and turning into grooves and forming outlets to flashings, skirtings, aprons, gutters, valleys, kerbs and channels and forming small openings.
  - (v) The rates for metal roofing shall include for all cutting, notching and bending; ends, angles and intersections to rolls, hollows, condensation channels and mouldings and for forming small openings.
  - (vi) The rates for all sheet metal flashings and gutters shall include for angles, intersections, ends, extra material in laps, seams, passings at ends, dressing to outlets and ends, angles and intersections to cappings, hollows, and channels and mouldings.
- (b) Work shall be grouped according to the kind of material and each group with its associated labours shall be given under an appropriate heading. For asphalt roofing see Section L hereof. For patent glazing see Section V hereof.
  - (c) Work to dormers and the like shall be so described.
  - (d) Work to curved, conical and spherical roofs shall each be so described. Work to elliptical roofs and other roofs curved to more than one radius shall be so described.
  - (e) Work to turrets shall be so described stating the type (e.g. octagonal, conical).

Generally to Section M (Contd.)

M1(f) Slate or tile roofing, corrugated or troughed roof and roof decking shall be measured as executed. Bitumen-felt, acrylic fibre or other similar sheet or roll type roofing shall be measured the area in contact with the base. Sheet metal roofing shall be measured the area of finished surface subject to the allowances in Clause M38 hereof. No deduction of any kind of roofing shall be made for voids not exceeding 0.50 square metres.

Slate or Tile Roofing

Slate or tile roofing	M2(a)	For rules relating to Section M generally see Clause M1 hereof.
	(b)	Particulars of the following shall be given:-
	(i)	Kind of slates or tiles (e.g. asbestos-cement slates, natural slates, stone slabs, clayware tiles, concrete tiles, shingles).
	(ii)	Size, type and quality of slates or tiles.
	(iii)	Extent of lap.
	(iv)	Method of fixing and the number and kind of nails or pegs per slate or tile.
	(v)	Size and type of laths or battens.
Roof coverings	M3	Roof coverings shall be given in square metres. Vertical coverings shall be so described.
Labours on roof coverings	M4(a)	Square cutting at abutments and top edges and all raking and curved cutting shall be deemed to be included with the items.
	(b)	Forming small openings (i.e. openings of all sizes not exceeding 0.50 square metres) shall be deemed to be included with the items of coverings.
Eaves	M5	Double course at eaves and extra undercourse at eaves shall each be given separately in linear metres. Raking eaves and curved eaves shall each be so described. Bedding shall be given in the description stating the nature of the bedding material. Cut courses at eaves shall be deemed to be included in the items.
Verges	M6	Verges shall be given in linear metres. Raking verges, curved verges and verges with purpose-made or special tiles shall each be so described. One-and-half-width slates or tiles shall each be so described, cutting at verges shall be deemed to be included with the items. Extra undercloak course, bedding, pointing and finishing with cement fillets shall be given in the description.

Slate or Tile Roofing (Contd.)

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|--------------------------|--------|---|
| Valleys                  | M7(a)  | Cutting to valleys (measured to both sides) shall be given in linear metres. One-and-half-width slates or tiles shall be deemed to be included with the items. Bedding and pointing shall be given in the description.  |
|                          | (b)    | Valley-tiles shall be given in linear metres as extra over the roof coverings in which they occur. Purpose-made valley tiles shall be so described. Cutting and bonding to both sides shall be deemed to be included with the items.  |
|                          | (c)    | Laced or swept valleys shall be given in linear metres as extra over the roof coverings in which they occur. Cutting and bonding to both sides shall be deemed to be included with the items.   |
| Hips and vertical angles | M8(a)  | Mitred hips and mitred vertical angles shall each be given separately in linear metres. Pointing shall be given in the description.   |
|                          | (b)    | Hip-tiles and vertical angle-tiles shall each be given separately in linear metres as extra over the roof coverings in which they occur. Purpose-made hip-tiles or angle-tiles shall be so described. Fitted ends, filled ends and intersections shall be deemed to be included with the items. |
| Ridge and hip cappings   | M9     | Ridge-cappings and hip-cappings shall each be given separately in linear metres. Bedding and pointing shall be given in the description. Filled ends, fitted ends, mitred angles, mitred intersections, purpose-made tiles, finials and the like shall be deemed to be included with the items. |
| Special fittings         | M10    | Tile slips and other fillings shall be deemed to be included with the items of coverings.   |
| Hip-irons                | M11    | Hip-irons shall be enumerated stating the method of fixing.   |
| Metal slates and soakers | M12    | Fixing metal slates and fixing metal soakers (provided by other trades) shall each be enumerated separately irrespective of size.   |
| Glass tiles              | M13    | Glass tiles and the like shall be enumerated as extra over the roof coverings in which they occur.  |
| Lathing or battening     | M14(a) | Lathing or battening shall be given in the description of roofing (see Clauses M2(b)(v) hereof).  |
|                          | (b)    | Counter-battening shall be given in square metres stating the size and spacing of the battens and the method of fixing.   |

Slate or Tile Roofing (Contd.)

- Underfelting M15(a) Underfelting shall be given in square metres stating the extent of the laps and the method of fixing.  
(b) All cuttings shall be deemed to be included with the items of coverings.

Corrugated or Troughed Sheet Roofing

- Corrugated or troughed roofing generally M16(a) For rules relating to section M generally see Clause M1 hereof.  
(b) Particulars of the following shall be given:-  
(i) Kind of sheeting (e.g. asbestos-cement, iron, steel, protected metal, aluminium).  
(ii) Quality of sheeting and type of corrugation or troughing.  
(iii) Extent of side and end laps.  
(iv) Nature of the structural supports (e.g. purlins).  
(v) Method of fixing the sheeting.  
(vi) Material for bedding joints of sheeting stating which joints are to be bedded (i.e. horizontal, vertical or both).
- Roof coverings M17(a) Roof coverings shall be given in square metres. Vertical coverings shall each be so described.  
(b) Roof coverings which are fixed through an underlining laid over purlins shall be so described.  
(c) Cranks and upstands shall each be given separately in linear metres as extra over the coverings in which they occur.
- Labours on roof coverings M18(a) Square cutting at abutments and top edges and raking and curved cutting shall be deemed to be included with the items.  
(b) Forming small openings (i.e. openings of all sizes not exceeding 0.50 square metre) shall be deemed to be included with the items of coverings.
- Filler-pieces M19 Filler-pieces at eaves and jambs, filler-pieces above roof glazing and over lintels, flashing-pieces under roof glazing and the like shall each be given separately in linear metres.
- Bedding and pointing M20 Bedding and pointing eaves filler-pieces, verges and the like (grouped together) shall be given in linear metres.
- Ridge, hip and angle cappings M21 Ridge-cappings, hip cappings and vertical angle-cappings shall each be given separately in linear metres. Capped ends, capped angles, capped inter-sections, finials and the like shall each be enumerated separately. Fitted ends shall be deemed to be included with the items.

Corrugated or Troughed Sheet Roofing (Contd.)

Barge-boards	M22	Barge-boards and corner-pieces shall each be given separately in linear metre stating the width. Mitred angles, mitred intersections, fair ends and fitted ends shall be deemed to be included with the items.
Flashings and expansion joints	M23	Flashings and expansion joints shall each be given separately in linear metres.
Louvres	M24	Louvre-blades shall be given in linear metres stating the number.
Roof-lights and special sheets	M25(a)	Dead roof-lights and opening roof-lights shall each be enumerated separately as extra over the roof coverings in which they occur stating the size.
	(b)	Transparent plastic sheets shall be enumerated as extra over the roof coverings in which they occur stating the size.
	(c)	Ventilator-sheets shall be enumerated as extra over the roof coverings in which they occur stating the size.
	(d)	Sheets with soaker-flanges for pipes shall be enumerated as extra over the roof coverings in which they occur stating the size of the pipe as Clause A3(c) hereof.
Roof-ventilators	M26	Roof-ventilators shall be enumerated stating the size and the type of base.

Roof Decking

Roof Decking generally	M27(a)	For rules relating to Section M generally see Clause M1 hereof.
	(b)	Particulars of the following shall be given:-
	(i)	Kind of decking (e.g. asbestos-cement, steel, aluminium, wood-wool).
	(ii)	Thickness and quality.
	(iii)	Method of fixing.
	(iv)	Nature and general spacing of the structural supports.
Roof coverings	M28	Roof coverings shall be given in square metres. Vertical coverings shall each be so described.
Labours on roof coverings	M29(a)	All cuttings shall be deemed to be included with the items of coverings.
	(b)	Forming small openings (i.e. openings of all sizes not exceeding 0.50 square metre) shall be deemed to be included with the items of coverings.

Roof Decking (Contd.)

Bearings, eaves, kerbs and flashings M30 Bearings, eaves, kerbs, flashings and abutments with nibs built into chases shall each be given separately in linear metres. Timber blocks or fillets inserted during fixing shall be given in the description but any other material required shall be deemed to be included with the items.

Bitumen-Felt Roofing, Acrylic Fibre Roofing and the like

Bitumen-felt roofing generally M31(a) For rules relating to Section M generally see Clause M1 hereof.  
(b) Particulars of the following shall be given:-  
(i) Type, quality and substance of felt, etc.  
(ii) Numbers of layers and extent of laps.  
(iii) Nature of base on which feltwork, etc. is laid.  
(iv) Method of bonding or securing to base.  
(v) Surface treatment with chippings, gravel tiles, macadam and the like.  
(c) Paper, cork, fibreboard or other underlay in contact with the feltwork, etc. shall be given in the description of the work in which it occurs. Cutting, notching, bending and lapping the underlay shall be deemed to be included with the items.

Roof coverings M32(a) Roof coverings shall be given in square metres. Classification shall be as follows:-  
(i) Flat coverings, coverings to falls or cross-falls and sloping coverings not exceeding 10 degrees from horizontal (grouped together). Intersections on work to cross-falls shall be deemed to be included with the items.  
(ii) Sloping coverings over 10 degrees but not exceeding 50 degrees from horizontal.  
(iii) Sloping coverings over 50 degrees from horizontal and vertical coverings (grouped together).

Labours on roof coverings M33(a) Fair edges, turning into grooves, wedging and the like labours shall each be given separately in linear metres.  
(b) All cuttings, notching, bending, extra felt for laps and turning into grooves, trimming and jointing feltwork to flashings and the like labours shall be deemed to be included with the items.

Bitumen-Felt Roofing, Acrylic Fibre Roofing  
and the like (Contd.)

- |   |   |
|---|---|
| Labours<br>on roof<br>coverings<br>(Contd.) | M33(c) Working feltwork etc., into outlet pipes, dishing to gullies and the like (grouped together) shall be enumerated irrespective of size.   |
| Flashings,<br>skirtings<br>and aprons       | M34(a) The turn-up or turn-down at eaves, verges, abutments and aprons, also skirtings and cover flashings shall each be given separately in linear metres stating the width or girth in contact with base. Stepped work and raking work shall each be so described. Raking cutting, curved cutting, fair edges, dressing over tilting-fillets, turning into grooves, wedging and the like labours shall be given in the description. Angles, ends and extra felt for laps and for turning into grooves shall be deemed to be included with the items.<br><br>(b) Skirtings on roof slopes (c.g. under eaves of slating) shall be so described. |
| Gutters,<br>valleys<br>and kerbs            | M35 Linings to gutters, linings to valleys and coverings to kerbs shall each be given separately in linear metres stating the girth in contact with base. Gutters to falls shall be so described. Raking cutting, curved cutting, fair edges, dressing over tilting-fillets, turning into grooves, wedging and the like labours shall be given in the description. Ends, outlets, angles, intersections and extra material for laps and for turning into grooves shall be deemed to be included with the items.   |
| Channels                                    | M36(a) Working coverings into shallow channels shall be given in linear metres as extra over the coverings in which they occur stating the girth in contact with the base. Channels to falls shall be so described. Ends, outlets, angles, intersections and extra felt for laps shall be deemed to be included with the items.<br><br>(b) Linings to channels shall be given in accordance with the rules for linings to gutters in Clause M35 hereof.   |
| Cesspools<br>and collars                    | M37(a) Linings to cesspools, sumps and the like (grouped together) shall be enumerated stating the size. Outlets shall be given in the description.<br><br>(b) Collars around pipes, standards and the like members (grouped together) shall be enumerated stating the size of the members as Clause A3(c) hereof.  |



Sheet Metal Roofing

Sheet metal  
roofing  
generally

- M38(a) For rules relating to Section M generally see Clause M1 hereof.
- (b) Particulars of the following shall be given -
- (i) Kind of metal (e.g. milled lead, cast lead, sheet zinc, sheet aluminium, sheet copper).
  - (ii) Quality of metal.
  - (iii) Gauge, thickness or substance both for the metal and the labours thereon.
- (c) Clips and tacks shall be given in the descriptions stating the material to be used and the method of fixing. No allowance for them shall be made in the area of the sheet metalwork.
- (d) In the absence of any directions to the contrary, allowances shall be made in calculating the area of the finished surface of sheet metalwork as follows -

Item	Lead	Zinc, aluminium and copper
(i) For drips not exceeding 50 millimetres high	0.18 metre	0.15 metre
(ii) For cross-welts	0.08 metre	0.08 metre
(iii) For wood-cored rolls not exceeding 50 millimetres high	0.25 metre	0.15 metre
(iv) For standing seams and weltd seams	0.10 metre	0.08 metre
(v) For edge-welts	0.03 metre	0.03 metre
(vi) For vertical upstands	0.15 metre	0.15 metre
(vii) For sloping upstands and for laps in pitched roofing	0.30 metre for 30°	0.30 metre for 30°
	0.35 metre for 25°	0.35 metre for 25°
	0.45 metre for 20°	0.45 metre for 20°
	0.60 metre for 15°	0.60 metre for 15°

Sheet Metal Roofing (Contd.)

- Roof coverings
- M39(a) Roof coverings shall be given in square metres. Classification shall be as follows:-
- (i) Flat roof coverings, roof coverings to falls and cross-falls and sloping roof coverings not exceeding 10 degrees from horizontal (grouped together).
  - (ii) Sloping roof coverings over 10 degrees but not exceeding 50 degrees from horizontal.
  - (iii) Sloping roof coverings over 50 degrees from horizontal and vertical roof coverings (grouped together).
  - (iv) Flat gutter coverings. (For sloping gutter linings see Clause M50 hereof).
- Labours on sheet metals
- M40(a) All cuttings, notching and bending shall be deemed to be included with the items.
- (b) Welled edges, beaded edges, wedging into grooves, burned or brazed angles, welled seams, burned or brazed seams and the like labours shall each be given separately in linear metres in addition to the allowances required by Clause M38(d) hereof.
  - (c) Dressing into hollows, into condensation channels and over mouldings shall each be given separately in linear metres stating the girth.
  - (d) Dressing over glass and glazing bars, over corrugated roofing, over Roman tiling, over pantiling and over similar materials (measured flat) shall each be given separately in linear metres stating whether along or across the bars or corrugations. Dressing over drips and rolls shall be deemed to be included with the items.
  - (e) Bossed, burned, brazed or capped ends, angles and intersections to rolls, hollows, condensation channels and mouldings shall be deemed to be included with the items.
  - (f) Dressing into outlet pipes, dishing to gullies and the like (grouped together) shall be enumerated irrespective of size.
- Copper nailing
- M41 Copper nailing shall be given in linear metres. Close copper nailing (i.e. where the spacing does not exceed 50 millimetres) shall be so described.
- Collars around pipes and standards
- M42 Collars around pipes, standards and the like members (grouped together) shall be enumerated stating the size of the members as Clause A3(c) hereof and kind of pipe or standard and the method of jointing thereto. Burned or brazed joints to sheet metalwork shall be given in the description.

Sheet Metal Roofing (Contd.)

Cesspools and sumps	M43	Linings to cesspools, sumps and the like (grouped together) shall be enumerated stating the size. Outlets and burned or brazed angles shall be given in the description.
Dots, ornaments and plugs	M44	Cast lead dots, soldered dots, cast lead ornaments, lead plugs and the like shall each be enumerated separately.
Underfelting	M45	Underfelting shall be given as Clause M15 hereof.

Sheet Metal Flashings and Gutters

Sheet metal flashings and gutters generally	M46(a)	For rules relating to Section M generally see Clause M1 hereof.
	(b)	Particulars as Clause M38(b) shall be given.
	(c)	Clips and tacks shall be given in the description stating the material to be used and the method of fixing.
	(d)	Intermediate laps and intermediate seams in linear items, passings at ends, angles and intersections of linear items shall be deemed to be included with the items.
Flashings	M47(a)	Flashings, stepped flashings, aprons, weatherings to cornices, cappings to hips, ridges, kerbs and the like shall each be given separately in linear metres stating the girth of the metal.
	(b)	Welted edges, beaded edges, scalloped or otherwise shaped edges, wedging into grooves, dressing over tilting fillets and the like labours shall be given in the description.
	(c)	Dressing into hollows, into condensation channels and over mouldings shall be given in the description stating the girth.
	(d)	Dressing over glass and glazing bars, over corrugated roofing, over Roman tiling, over pantiling and over similar materials (measured flat) shall be given in the description.
	(e)	Ends, angles and intersections to cappings, hollows, condensation channels and mouldings shall be deemed to be included with the items.
Preformed flashings	M48	Preformed flashings, aprons, cappings and the like shall each be given separately in linear metres stating the girth, the number of bends in the girth to form profile and the method of jointing. Angles, returned ends and stopped ends shall be deemed to be included with the items.

Sheet Metal Flashings and Gutters (Contd.)

- |                          |        |   |
|--------------------------|--------|---|
| Sloping gutters          | M49(a) | Linings to sloping gutters shall be given in linear metres stating the girth of the metal. Linings to secret gutters shall be so described.   |
|                          | (b)    | Dressing over tilting-fillets, wedging into grooves and the like labours shall be given in the description.   |
| Flat Gutters             | M50    | Linings to parapet gutters and to other flat gutters requiring drips and rolls shall be given in accordance with the rules for sheet metal roofing. (See Clause M47(a)(iv) hereof).   |
| Soakers and metal slates | M51    | Supplying soakers and metal slates (for fixing by slater or tiler) shall each be enumerated separately stating the size. Collars around pipes shall be given in the description of the metal slates stating the size of the pipe as Clause A3(c) hereof, the kind of pipe and the method of jointing thereto. |
| Saddles                  | M52    | Saddles over abutments and intersections of hips and ridges (grouped together) shall be enumerated stating the size of the metal. Dressing and bossing shall be given in the description.   |

Protection

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|------------|-----|--|
| Protection | M53 | Protecting the work in this Section shall be given as an item. |
|------------|-----|--|



S E C T I O N N

CARPENTRY

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section N

N1(a) An item shall be given stating that -

- (i) The rates for all carpentry work shall include for all raking and circular cutting joints in continuous lengths of timber or for providing timbers of any length; all joints; notching and fitting ends of timbers to metal sections, shoes and heads; mitres, ends and intersections on all members; holes for pipes, tubes, bars, cables, conduits, ducting, trunking and the like and for pads, slips and wedges built or wedged in.
- (ii) The rates for rebates, grooves, chamfers, rounded edges, moulded edges and the like labours shall include for all cross grain and stopped work and all stops, ends, angles and mitres.
- (iii) The rates for roof boarding shall include for all cutting at intersections on work to cross falls and all notches, rounded corners and the like.
- (iv) The rates for carpenter's metal work shall include for preparing timbers for metalwork (e.g. sinking, grooving, etc.).
- (v) The rates for bolts and connectors shall include for holes and countersunk holes and for pelling if required.

(b) Particulars of the following shall be given:-

- (i) Kind and quality of timber.
- (ii) Preliminary treatment of timber (e.g. impregnation).

(c) Timber shall be deemed to be sawn on all faces and edges unless otherwise stated. Wrought timber shall be so described and 3.2 millimetres or one-eighth of an inch shall be allowed from the nominal size for each wrought face.

(d) Timber shall be deemed to be fixed with nails. Particulars of any other method of fixing shall be given in the description of the item concerned. For plugging see Clause N23 hereof.

(e) Curved members, curved boarding, conical boarding, spherical boarding and groined boarding shall each be described. Curved labours shall be so described.

(f) Labours on hardwood shall be so described.

### Formwork and Centering

Formwork and centering

- N2(a) For formwork to concrete see Section F hereof.  
(b) For centering to brickwork see Section G hereof and for centering to masonry see Section K hereof.

### Structural Timbers

Structural timbers generally

- N3(a) For rules relating to Section N generally see Clause N1 hereof.  
(b) Structural timbers shall be measured the nominal size and the length as fixed in the work.  
(c) For carpenters metalwork see Clause N26 to N29 hereof.

Plates, joists, rafters, purlins and kerbs

- N4 All structural timbers shall be given in linear metres stating the nominal size. Classification shall be as follows:-
- (i) Plates, dragon ties, sleepers and lintels (grouped together).
  - (ii) Bearers, kerbs and the like (grouped together).
  - (iii) Floor joists and roof joists (grouped together).
  - (iv) Partitions.
  - (v) Trussed partitions.
  - (vi) Rafters.
  - (vii) Ceiling joists and collars (grouped together).
  - (viii) Purlins, ceiling beams and struts (grouped together).
  - (ix) Trussed purlins and trussed beams (grouped together).
  - (x) Members of roof trusses (grouped together).
  - (xi) Members of roof turrets and the like (grouped together).

Ridges, hips and valleys

- N5 Ridges, hips and valleys of any thickness shall each be given separately in linear metres stating the nominal size. Cutting and fitting ends of rafters against such members shall be given in the description.

Labours on structural timbers

- N6(a) Scribing, splaying, notching, halving to other items of timbers, morticing, tenoning, wedging, dovetailed joints and scarfed joints shall be deemed to be included with the items.  
(b) Wrought faces and adzed faces shall be given in the description.  
(c) Raking cutting and curved cutting shall be deemed to be included with the items.  
(d) Rebates, grooves, chamfers, rounded edges, moulded edges and the like labours shall each be given separately in linear metres. Stops, ends, angles, and mitres in all labours shall be deemed to be included with the items.

Structural Timbers (Contd.)

- |  |       |   |
|--|-------|---|
| Labours on structural timbers (Contd.) | N6(e) | The following additional labours on structural timbers shall each be enumerated separately: -<br><ul style="list-style-type: none"><li>(i) Shaped ends of timbers.</li><li>(ii) Turning, shaping or moulding posts, finials, ends of hammer beams and the like, stating the length.</li><li>(iii) Trimming floor joists, ceiling joists and rafters around openings for hearths, chimneys, trap-doors and the like.</li></ul> |
| Hoisting complete units                | N7    | Hoisting roof-trusses, roof-turrets and the like shall each be enumerated separately stating the overall size and the height above ground.  |
| Strutting and nogging                  | N8    | Herringbone strutting, solid strutting and the nogging between joists (measured over the joists) shall each be given separately in linear metres stating the thickness of the strutting or nogging and the depth of the joists.   |
| Cleats, sprockets and pins             | N9    | Cleats, sprockets, hardwood pins and the like shall each be enumerated separately stating the nominal size.   |

Boarding

- |                    |        |   |
|--------------------|--------|---|
| Boarding generally | N10(a) | For rules relating to Section N generally see Clause N1 hereof.   |
|                    | (b)    | Boarding shall be measured as executed. No allowance shall be made for tongues in tongued and grooved work or for laps in weather-boarding and no deduction shall be made for voids not exceeding 0.50 square metre. Particulars of the following shall be given:-<br><ul style="list-style-type: none"><li>(i) Nominal thickness.</li><li>(ii) Method of jointing.</li><li>(iii) Surface treatment after laying.</li></ul> |
|                    | (c)    | Boarding laid diagonally shall be so described.   |
| Roof boarding      | N11(a) | Roof-boarding shall be given in square metres. Classification shall be as follows:-<br><ul style="list-style-type: none"><li>(i) Flat roof-boarding.</li><li>(ii) Sloping roof-boarding not exceeding 50 degrees from horizontal.</li><li>(iii) Sloping roof-boarding over 50 degrees from horizontal and vertical roof-boarding (grouped together).</li></ul>  |



Boarding (Contd.)

- Roof-boarding  
(Contd.)
- N11(b) Work to falls and cross-falls shall each be so described. Cutting at intersections on work to cross-falls shall be deemed to be included with the items. Shallow firrings (i.e. not exceeding 50 millimetres average depth) shall be given in the description of roof-boarding. Firrings over 50 millimetres average depth shall be given in linear metres stating the thickness and the average depth.
- (c) Work to tops and cheeks of dormers shall each be so described.
- (d) Drips in flats shall be given in linear metres stating the size and the rise. Ends and mitres shall be deemed to be included with the items.
- Weather-boarding
- N12(a) Weather-boarding shall be given in square metres stating the extreme thickness and width of the boards and the extent of the laps. Wrought faces, rebated edges and other labours on boards shall be given in the description.
- (b) Forming mitred angles to weather-boarding shall be given in linear metres.
- Gangway-boarding
- N13 Gangway-boarding in roofs shall be given in square metres.
- Gutter-boarding
- N14(a) Gutter-boarding, gutter-sides and the lier-boarding shall each be given separately in square metres.
- (b) Bearers shall be given in the description of gutter-boarding.
- (c) Gusset ends, drips and cesspools shall each be enumerated separately irrespective of size.
- Labours on boardings
- N15(a) Raking cutting and curved cutting on boarding and boundary cutting on diagonally-laid boarding shall be deemed to be included with the items.
- (b) Splayed edges on boarding shall be deemed to be included with the items.
- (c) Rebates, grooves, chamfers, scribed edges and the like labours shall each be given separately in linear metres. Stops, ends and angles in all labours shall be deemed to be included with the items.
- (d) Notches, rounded corners and the like shall be deemed to be included with the item.

Fillets, Grounds, Battens and Bracketing

- Fillets, grounds battens and bracketing generally
- N16(a) For rules relating to Section N generally see Clause N1 hereof.
- (b) For roof-battening and counter-battening see Section M hereof.

Fillets, Grounds, Battens and Bracketing (Contd.)

- Angle-fillets, tilting-fillets and rolls
- N17(a) Angle-fillets shall be given in linear metres stating the extreme size. Ends and mitres shall be deemed to be included with the items.
- (b) Tilting-fillets and rolls shall each be given separately in linear metres stating the size. Ends, mitres and intersections shall be deemed to be included with the items.
- Corner-fillets
- N18 Corner-fillets to angles of weather-boarding shall be given in linear metres stating the size. Ends and mitres shall be deemed to be included with the items.
- Floor-fillets
- N19 Floor-fillets in or on concrete shall be given in linear metres stating the size. Clips for fillets shall be enumerated stating the method of fixing to concrete.
- Grounds and wall-battens
- N20(a) Open-spaced grounds (or battens) to walls (measured overall) shall be given in square metres stating the size and the spacing of the members, or they may be given in the description of the work concerned.
- (b) Individual grounds (or battens) shall be given in linear metres stating the size, or they may be given in the description of the work concerned. Ends and mitres shall be deemed to be included with the items.
- Skeleton framework
- N21(a) Skeleton framework shall be given in square metres.
- (b) Skeleton framework framed on rake and spandril-shaped framework (both measured net) shall each be so described. Skeleton framework of other irregular shapes shall be enumerated stating the size and shape of the framework and the size of the members.
- Bracketing and cradling
- N22(a) Bracketing to form shaped false ceilings shall be given in detail.
- (b) Bracketing and cradling (measured the extreme girth) around steelwork and to form false beams shall each be given separately in square metres stating the size of the members.
- (c) Bracketing for cornices shall be given in linear metres stating the extreme girth. Angle brackets shall be deemed to be included with the item.

Sundries

- Plugging
- N23 Plugging to any surface irrespective of any finish (excluding glass) to the surface, shall be given in square metres or in linear metres or enumerated (as may be appropriate), or plugging may be given in the description of the work concerned.

Sundries (Contd.)

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|--------------------------------|-----|--|
| Pads,<br>slips and<br>blocks . | N24 | Pads, slips and blocks built in or wedged into position shall each be deemed to be included with the items.  |
| Insulating<br>quilts           | N25 | Insulating quilts and similar flexible sheetings (measured the area covered shall be given in square metres stating the extent of the laps and the method of fixing. All cuttings shall be deemed to be included with the items. |

Carpenter's Metalwork

- |                                       |        |   |
|---------------------------------------|--------|---|
| Carpenter's<br>metalwork<br>generally | N26(a) | Metalwork shall be deemed to be fixed with steel screws unless otherwise stated. The nature of the surface to which metalwork is fixed (e.g. softwood, hardwood, metal, brickwork, concrete) shall be stated. Galvanised metalwork shall be so described. |
|                                       | (b)    | Preparing timbers for carpenter's metalwork (e.g. sinking, grooving, morticing) shall be deemed to be included with the items.  |
| Tie-rods                              | N27    | Tie-rods shall be given in linear metres stating the size. Connections, forgings, threaded ends, nuts and washers shall each be enumerated separately as extra over the rods in which they occur.   |
| Straps, shoes<br>gibs and<br>cotters  | N28    | Straps, shoes, heads and sets of gibs and cotters shall each be enumerated separately stating the size.   |
| Bolts and<br>connectors               | N29(a) | Bolts shall be enumerated stating the diameter and length. Nuts and washers shall be given in the description.  |
|                                       | (b)    | Metal connectors for structural timbers shall be enumerated stating the type of connector.  |

S E C T I O N P

JOINERY

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section F

P1(a) An item shall be given stating that:-

- (i) The rates for all joinery work shall include for all raking, curved or splayed cutting; mitres and ends to all members; for all joints in members over 200 millimetres wide or for obtaining timbers in one width; notchings; sinkings; rounded curves; splayed edges; extra timber in joints; horns, etc., all dowels and cramps and holes for pipes, tubes, bars, cables, conduits, ducting, trunking and the like.
- (ii) The rates for doors, skylights, sashes and casements are to include for fitting and hanging any type.
- (iii) The rates for handrails shall include for all heading joints, quadrants, ramps and wreaths.
- (iv) The rates for rebates, grooves, chamfers, scribed edges, rounded edges, moulded edges and the like labours shall include for all cross grain and stopped work and for all stops, ends, angles and mitres.
- (v) The rates for bolts and connectors shall include for holes and countersunk holes and for pelling if required.
- (vi) The rates for ironmongery shall include for fixing to any surface.

(b) Particulars of the following shall be given:-

- (i) Kind and quality of timber.
  - (ii) Preliminary treatment of timber (e.g. kiln drying, impregnation).
- (c) Timber shall be deemed to be wrought on all faces and edges and 3.2 millimetres or one-eighth of an inch shall be allowed from the nominal size for each wrought face or edge except where the work is described as being to finished sizes.
- (d) Timber shall be deemed to be fixed with nails. Particulars of any other method of fixing shall be given in the description of the item concerned. For plugging see Clause P48 hereof.
- (e) Curved members, curved boarding, conical boarding, spherical boarding and groined boarding shall each be so described. Elliptical work and other work curved to more than one radius shall be so described irrespective of the radius.
- (f) Labours on hardwood shall be so described.

## Flooring

- Flooring generally
- P2(a) For rules relating to Section P generally see Section P Clause P1 hereof.
- (b) Flooring shall be measured as executed. No allowance shall be made for tongues in tongued and grooved work and no deduction shall be made for voids not exceeding 0.50 square metre. Particulars of the following shall be given:-
- (i) Nominal thickness.
  - (ii) Method of jointing.
  - (iii) Surface treatment after laying.
- (c) Flooring laid diagonally shall be so described.
- Board flooring and strip flooring
- P3(a) Board flooring and strip flooring shall each be given separately in square metres. (Boards shall be deemed to be in nominal widths over 100 millimetres and strips shall be deemed to be nominal widths not exceeding 100 millimetres). Where boards or strips are required to be of a particular width, the width shall be stated.
- (b) Metal tongues shall be given in the description of the flooring in which they occur.
- (c) Flooring in mat sinkings shall be so described.
- (d) Flooring in openings shall be so described. Bearers shall be given in the description.
- Wood block flooring
- P4 For wood block flooring see Section U.
- Labours on flooring
- P5(a) All cutting shall be deemed to be included with the items.
- (b) Splayed edges on flooring shall be deemed to be included with the items.
- (c) Rebates, grooves, chamfers, scribed edges, rounded edges, moulded edges, and the like labours shall each be given separately in linear metres. Stops, ends, angles, and mitres in all labours shall be deemed to be included with the items.
- (d) Cutting and fitting flooring around obstructions (e.g. detached columns; shaped ends of steps) shall be deemed to be included with the items.
- Nosings and margins
- P6 Nosings, bed-moulds and margins shall each be given separately in linear metres as extra over the flooring in which they occur stating the size. Tongued edges, rounded edges and moulded edges, also grooves and cross-grain grooves in flooring shall be given in the description.
- Access traps
- P7 Access traps in floors shall be enumerated as extra over the flooring in which they occur stating the size. Bearers shall be given in the description.

### Eaves and Verge Boarding

- Boarding generally P8(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) Boarding shall be measured as executed. No allowance shall be made for tongues in tongued and grooved work and no deduction shall be made for voids not exceeding 0.50 square metre. Particulars of the following shall be given:-
- (i) Nominal thickness.
- (ii) Method of jointing.
- Eaves and verges P9(a) Boarding to eaves, verges and the like (grouped together) shall be given in square metres.
- (b) Bearers for boarding shall be given in linear metres stating the size.
- Labours on boarding P10(a) All cutting shall be deemed to be included with the items.
- (b) Splayed edges on boarding shall be deemed to be included with the items.
- (c) Rebates, grooves, chamfers, scribed edges, rounded edges, moulded edges, and the like labours shall each be given separately in linear metres. Stops, ends, angles and mitres in all labours shall be deemed to be included with the items.
- Fascia and barge boards P11 Fascia-boards and barge-boards shall each be given separately in linear metres stating the width. Chamfers, rounded edges, moulded edges, scalloped edges and the like labours shall be given in the description.

### Plywood Linings and Casings

- Plywood linings and casings P12 For plywood finishings to walls and ceilings see Clauses U23 to U26 hereof.
- Linings, casings and partitions generally P13(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) Plain work and matchboard work shall be measured as executed. No allowance shall be made for tongues in tongued and grooved work and no deduction shall be made for voids not exceeding 0.50 square metre. Particulars of the following shall be given:-
- (i) Nominal thickness.
- (ii) Method of jointing.
- (iii) Width of boards where required of a specific width.

Plain or Panelled Linings, Casings and Partitions (Contd.)

Linings,  
casings and  
partitions  
generally  
(Contd.)

- P13(c) Panelled work shall be measured as executed and no deduction shall be made for open panels of any size. Particulars of the following shall be given:-
- (i) Nominal thickness of the framing.
  - (ii) Nominal thickness of the panels and where other than rectangular the shape and arrangement thereof. Where panels are small (i.e. not exceeding 0.10 square metre each) they shall be so described.
- (d) Panelled work with mouldings or bolection mouldings shall be so described stating whether worked on the solid or planted on and whether on one or both sides. Enriched mouldings and undercut mouldings shall each be so described.
- (e) Panelled work with fielded panels, raised panels or raised and fielded panels shall each be so described.
- (f) Panelled work with diminishing stiles shall be so described.
- (g) Panelled work with curved heads (measured square) shall be so described stating the character of the curve (e.g. semi-circular; segmental; elliptical).

Wall and  
ceiling  
linings

- P14(a) Plain linings, matchboarded linings and panelled linings to walls and ceiling shall each be given separately in square metres.
- (b) Linings to ceilings over 3.50 metres above floor shall be so described stating the height in further stages of 1.50 metres.
- (c) Panelled linings framed on rake and spandril-shaped panelled linings (both measured net) shall each be so described. Panelled linings of other irregular shapes shall be enumerated stating the size and shape of the framework.
- (d) Doors in panelled wall-linings shall be enumerated as extra over the work in which they occur stating the size of the door and the number of panels. Rebates to form stops (or applied fillets to form stops) shall be given in the description.

Linings  
around  
openings

- P15(a) Plain linings, matchboarded linings and panelled linings around openings shall each be given separately in linear metres stating the width of the lining and the number of panels per set. Tongued angles shall be given in the description. Classification shall be as follows -
- (i) Around door openings, window openings and the like (grouped together).
  - (ii) Around skylight openings, lantern openings and the like (grouped together).

Plain or Panelled Linings, Casings and Partitions (Contd.)

- Linings around openings (Contd.)
- P15(b) Panelled linings framed on rake (measured net) shall be so described.
- (c) Alternatively, plain and matchboarded door linings and any stops may be fully described and included with the items for the door (see Clause P26 (f)).
- Beam and column casings
- P16(a) Plain casings, matchboard casings and panelled casings (measured on external face) around sides and soffits of beams, lintels, cantilevers, pilasters, columns and the like (grouped together) shall each be given separately in square metres except that casings with entasis shall be given in linear metres stating the maximum and the minimum girth and the number of casings.
- (b) Casings around beams over 3.50 metres above floor (measured from ceiling level) shall be so described stating the height in further stages of 1.50 metres.
- (c) Panelled casings framed on rake (measured net) shall be so described.
- Panelled partitions and cupboard-fronts
- P17(a) Panelled partitions and panelled cupboard-fronts shall each be given separately in square metres.
- (b) Panelled partitions with open panels for glass shall be so described. Open panels divided into panes shall be so described and where other than rectangular the shape and arrangement thereof. Glazing beads shall be given in accordance with Clause P34 hereof.
- Labours on linings, casings and partitions
- P18(a) All cutting shall be deemed to be included with the items.
- (b) Rebates, grooves, chamfers, scribed edges, rounded edges, moulded edges, tongued angles, flutings, reeding and the like labours shall each be given separately in linear metres. Stops, ends, angles, and mitres in all labours shall be deemed to be included with the items.
- Applied mouldings
- P19 Applied mouldings (other than panelled moulds), cappings, inlays and the like shall each be given separately in linear metres stating the size. Enriched mouldings and undercut mouldings shall each be so described.
- Caps and bases to columns and pilasters
- P20 Caps and bases to columns and pilasters shall each be enumerated separately stating the size. Chamfers mouldings and the like labours shall be given in the description.
- Linenfold panels
- P21 Linenfold panels shall be enumerated as extra over the work in which it occurs stating the size of the panel and whether worked on one or both sides.



Plain or Panelled Linings, Casings and Partitions (Contd.)

Tracery panels	P22	Tracery to panels shall be enumerated as extra over the work in which it occurs stating the size of the panel and whether tracery is open or applied to one or both sides of the panel.
Pipe casings	P23	Plain casings, matchboarded casings and panelled casings (measured on external face) around pipes shall each be given separately in linear metres stating the girth and the number of sides. Fitted ends shall be deemed to be included with items.
Access traps	P24	Access traps in linings and casings shall be enumerated as extra over the work in which they occur stating the size. Bearers shall be given in the description.

Doors, Windows, Skylights and Lanterns

Doors, windows, skylights and lanterns generally	P25(a)	For rules relating to Section P generally see Clause P1 hereof.
	(b)	For standard units see Clause P47 hereof.
	(c)	Doors and casements shall be measured the extreme dimensions (i.e. the dimensions of folding doors and folding casements shall be taken to the extreme edge of each leaf).
Doors	P26(a)	Doors shall be enumerated irrespective of type (i.e. no distinction being made between single, folding, swinging and sliding doors) stating the size and thickness (each leaf being counted as one door). Fitting and hanging doors shall be deemed to be included with the items.
	(b)	Doors of irregular shape shall be so described stating the extreme dimensions.
	(c)	Doors with curved heads shall be so described stating the extreme dimensions and the character of the curve (e.g. semi-circular, segmental, elliptical).
	(d)	Match-board doors shall be so described stating the thickness of the matchboarding, ledges, braces and framing and the method of jointing the matchboard covering or filling.
	(e)	Flush doors shall be so described stating the construction of the core, the finished thickness of the door, the kind, quality and thickness of the facing material (e.g. hardboard; plywood; laminated plastics) and the method of fixing the facing material to the core. Solid lipping (to one or both vertical edges or to all four edges) and applied mouldings shall be given in the description. Openings for glass shall be given in the description stating the number of panes and where other than rectangular the shape and arrangement thereof. Glazing beads and glazing fillets shall be given in the description.

Doors, Windows, Skylights and Lanterns (Contd.)

Doors  
(Contd.)

- P26(e) (Contd.)  
Door frames, plain and matchboarded door linings, door stops and door ironmongery may be included in the description of the door.
- (f) Panelled doors shall be so described stating the nominal thickness of the framing, the number and nominal thickness of the panels and where other than rectangular the shape and arrangement thereof.
  - (g) Panelled doors with mouldings or bolection mouldings shall be so described stating whether worked on the solid or planted on, and whether on one or both sides. Enriched mouldings and undercut mouldings shall each be so described.
  - (h) Panelled doors with open panels for glass shall be so described. Open panels divided into panes shall be so described and where other than rectangular the shape and arrangement thereof. Glazing beads and glazing fillets shall be given in the description.
  - (j) Panelled doors with diminishing stiles shall be so described.
  - (k) Linenfold panels and tracery-filled panels shall be given in accordance with Clauses P21 to P22 hereof.

Casements

- P27(a) Casements (except bullseye casements) shall be given in square metres stating the thickness and the number. Bullseye casements shall be enumerated stating the thickness and the overall diameter. Casements divided into panes shall be so described and where other than rectangular the shape and arrangement thereof. Glazing beads shall be given in accordance with Clause P34 hereof.
- (b) Casements of irregular shape (measured square) shall be so described.
  - (c) Casements with curved heads (measured square) shall be so described stating the character of the curve (e.g. semi-circular; segmental; elliptical).
  - (d) Fitting and hanging casements shall be deemed to be included with the item. Butts, hinges, tracks and the like shall be given in accordance with Clause P49 hereof.

Double-hung sash windows

- P28(a) Double-hung sash windows shall be measured over the frames and sills.
- (b) Double-hung sash windows (complete with sashes, frames and sills) shall be given in square metres stating the number of windows, the thickness of the sash and the sizes of the various parts of the frame and sill. Sashes divided into panes shall be so described, and where other than rectangular the shape and arrangement thereof. Glazing beads shall be given in accordance with Clause P34 hereof.
  - (c) Multiple-light double-hung sash windows shall be so described. Solid mullions and cased mullions shall be given in the description stating the size of the members.

Doors, Windows, Skylights and Lanterns (Contd.)

Double-hung sash windows (Contd.)

- P28(d) Windows of irregular shape (measured square) shall be so described.
- (e) Windows with curved heads (measured square) shall be so described stating the character of the curve (e.g. semi-circular; segmental; elliptical).
- (f) Extra deep bottom rails of sashes and draught-boards shall each be given in linear metres as extra over the windows in which they occur.
- (g) Labours on double-hung windows (e.g. moulded horns; splayed bottom edges; rebated edges; splayed or rebated meeting rails; grooves) shall be given in the description of the window.
- (h) Fitting and hanging sashes in double-hung windows shall be deemed to be included with the item. Pulleys, cords, chains and weights or spring-balances shall be given in the description. Where lead weights are required they shall be so described.

Skylights and lanterns

- P29(a) Skylights and lantern tops shall each be given separately in square metres stating the thickness and the number. Glazing bars shall be given in the description stating the spacing. Glazing beads shall be given in accordance with Clause P34 hereof.
- (b) Fitting and hanging skylights shall be deemed to be included with the item. Butts, hinges, tracks and the like shall be given in accordance with Clause P49 hereof.
- (c) Lantern-sides shall be given in accordance with the rules for casements in Clause P27 hereof.
- (d) Rolls to ridges and hips (grouped together) shall be given in linear metres stating the size. Ends, mitres and intersections shall be deemed to be included with the items.

Labours on doors, windows, skylights and lanterns

- P30 Grooves, throats, rebates, rounded heels and the like labours shall each be given separately in linear metres. Splayed bottom edges shall be deemed to be included with the items.

Window-boards and nosings

- P31 Window-boards, nosings and bed-moulds shall each be given separately in linear metres stating the size. Tongued edges, rounded edges, moulded edges and bearers shall be given in the description.

Frames, Sills and Kerbs

Frames, sills and kerbs

- P32(a) For rules relating to Section F generally see Clause P1 hereof.

Frames, Sills and Kerbs (Contd.)

Frames, sills  
and kerbs  
(Contd.)

- P32(b) Door-frames, window-frames (except frames to double-hung sash windows and to bullseye windows), lantern-frames, mullions, transoms, sills and kerbs shall each be given separately in linear metres stating the size. Frames to bullseye windows and the like shall be enumerated stating the size and overall diameter. Rebates, chamfers, moulds and the like labours shall be given in the description. Stops, ends, angles and mitres in all labours shall be deemed to be included with the items.
- (c) Heading-joints in curved frames and in curved transoms shall be given in the description of the member, keys, wedges, and handrail-screws shall be given in the description.
- (d) Alternatively, door frames may be fully described and included with the item for the door (See Clause P26(e)).

Fillets, Glazing Beads and Grounds

Fillets

- P33(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) Weather-fillets and condensation-fillets shall each be given separately in linear metres stating the size. Those which are tongued on shall be so described.
- (c) Stop-fillets around doors and casement shall be given in linear metres stating the size. Cut-and-mitred stop-fillets around centre-hung casements shall be so described. Ends and angles shall be deemed to be included with the items.
- (d) Alternatively door stops may be included with the item for the door (See Clause P26(e)).

Glazing  
beads and  
glazing  
fillets

- P34(a) Glazing beads and glazing fillets (grouped together) shall be given in linear metres stating the size. Labours shall be given in the description. Ends and angles shall be deemed to be included with the items.
- (b) For glazing beads and glazing fillets in doors and standard units see Clause P26(e) and (h) and P47 hereof.

Grounds  
and wall  
battens

- P35(a) Open-spaced grounds (or battens) to walls (measured overall) shall be given in square metres stating the size and the spacing of the members, or they may be given in the description of the work concerned.

Fillets, Glazing Beads and Grounds (Contd.)

Grounds  
and wall  
battens  
(Contd.)

- P35(b) Individual grounds (or battens) shall be given in linear metres stating the size, or they may be given in the description of the work concerned. Ends and mitres shall be deemed to be included with the items.

Skirtings, Architraves, Picture-Rails and Cornices

Skirtings,  
architraves,  
picture-rails  
and cornices

- P36(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) Skirtings, architraves, picture-rails, dado-rails, wall-mouldings, cornices, cappings, pelmets, cover-fillets and the like shall each be given separately in linear metres stating the size. Chamfers, moulds, rounded edges and the like labours shall be given in the description.
- (c) Built-up members shall be so described stating the size of each component. Bracketing shall be given in the description.
- (d) Plinth-blocks to architraves shall be enumerated stating the size.

Shelves, Table-Tops and Seats

Shelves,  
table-tops  
and seats

- P37(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) Shelves, divisions, table-tops, work-tops, counter-tops, seats and the like shall each be given separately in square metres stating the thickness.
- (c) Lugged and slatted shelves and seats shall each be given separately in square metres stating the size and spacing of the ledges and slats.
- (d) Bearers and legs (grouped together) shall be given in linear metres stating the size. Framed work shall be so described. Ends and angles shall be deemed to be included with the items.
- (e) Applied coverings (e.g. plastics; veneers) shall be given in the description of the work on which they occur stating whether on one or both sides and the method of securing. Splayed edges and chamfered edges to coverings shall be deemed to be included with the items.

Labours on  
shelves,  
table-tops  
and seats

- P38(a) All cutting shall be deemed to be included with the items.
- (b) Splayed edges shall be deemed to be included with the items.

Shelves, Table-Tops and Seats (Contd.)

Labours on  
shelves,  
table-tops  
and seats  
(Contd.)

- P38(c) Rebates, grooves, chamfers, scribed edges, rounded edges, moulded edges, housed edges, clamped edges, ship-lap joints and the like labours shall each be given separately in linear metres. Stops, ends, angles, and mitres in all labours shall be deemed to be included with the items.
- (d) Applied coverings on edges and ends shall be given in linear metres stating the width. Ends, angles, mitres, notches, rounded corners, splayed edges and chamfered edges shall be deemed to be included with the items.

Sinks, Draining-Boards and Backboards

Sinks,  
draining-  
boards and  
back-boards

- P39(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) For standard units see Clause P47 hereof.
- (c) Sinks shall be enumerated stating the overall dimensions, the thickness of the components and the method of jointing. Holes and other labours shall be given in the description.
- (d) Draining-boards shall be given in square metres stating the thickness and the number. Those which are fluted on the surface shall be so described. Clamped ends and labours to edges shall be given in linear metres and openings shall be enumerated. Alternatively, draining-boards may be enumerated in which case the thickness of them and the size shall be stated and all labours given in the description.
- (e) Backboards shall be enumerated stating the size. Labours to edges shall be given in the description.

Fittings and Fixtures

Fittings and  
fixtures

- P40(a) For rules relating to Section P generally see Clause P1 hereof.
- (b) For standard units see Clause P47 hereof.
- (c) Fittings and fixtures (e.g. cupboard; tables; work-benches; counters; dressers; bookcases) shall be given in detail in accordance with the relevant clauses hereof, each under an appropriate heading stating the overall size. Fittings and fixtures of a similar character may be grouped together. Alternatively they may be fully described and enumerated or reference made to detail drawing(s).

Fittings and Fixtures (Contd.)

Fittings and  
fixtures

- P40(d) Drawers shall be enumerated stating the overall dimensions, the thickness of the component parts and the method of jointing together.

Staircases

Staircases  
generally

- P41(a) For rules relating to Section P generally see Clause P1 hereof.  
(b) Work in staircases shall be given under an appropriate heading.

Landings

- P42(a) Landings shall be given in square metres stating the thickness and the method of jointing. Bearers shall be given in the description.  
(b) Raking cutting and curved cutting shall be deemed to be included with the items.

Treads and  
risers

- P43(a) Treads and risers (grouped together) shall be given in square metres stating the thickness and the method of jointing and blocking together. Winders (measured net) and their risers shall be so described. Carriages shall be given in the description stating the size.  
(b) Raking cutting and curved cutting shall be deemed to be included with the items.  
(c) Ends housed to strings shall be enumerated. Wide ends and narrow ends of winders shall each be so described.  
(d) Returned ends, rounded ends, quadrant ends and curtail ends shall each be enumerated separately.

Strings,  
apron-linings  
and mouldings

- P44 Strings, apron-linings, cappings and applied mouldings shall each be given separately in linear metres stating the size. Ramped members and wreathed members shall each be so described.

Handrails

- P45 Handrails shall be given in linear metres stating the size. Curved handrails, ramped handrails and wreathed handrails shall be each so described.

Balusters  
and newels

- P46(a) Balusters shall be enumerated stating the size and the length. Framed ends and housed ends shall be given in the description stating if on rake.  
(b) Newels shall be given in linear metres stating the size and where turned the length of the turned portion shall be stated. Storey-posts shall be enumerated and where turned the length of the turned portion shall be stated. Sunk panels in newels and mouldings planted on or housed in shall each be enumerated.

### Staircases (Contd.)

Balusters and newels (Contd.) P46(c) Newel-caps and pendants shall each be enumerated separately stating the size, the shape and the method of fixing.

### Standard Units

Standard units P47 Stock-pattern units and standard units (e.g. doors; casements windows; double-hung sash windows; cupboard) shall be enumerated stating the appropriate reference. Glazing beads, glazing fillets and ironmongery supplied with standard units shall be given in the description.

### Sundries

Plugging P48 Plugging to any surface irrespective of any finish (excluding glass) to the surface, shall be given in square metres or in linear metres or enumerated (as may be appropriate) or plugging may be given in the description of the work concerned.

### Ironmongery

Ironmongery P49(a) Particulars of the following shall be given -

- (i) Kind and quality of ironmongery.
- (ii) Surface finish.
- (iii) Method of fixing.

(b) Preparing timbers to receive ironmongery (e.g. sinking; boring; grooving; morticing) shall be deemed to be included with the items.

(c) Stock-pattern or standard units (or sets) of ironmongery shall be enumerated stating the appropriate reference. Fixing with screws to match shall be deemed to be included with the items. Alternatively, supplying some or all of the ironmongery may be given as a provisional or prime cost sum as Clause A7 hereof, (which shall be deemed to include supplying screws to match) in which case fixing the units (or sets) shall be enumerated.

(d) In the case of fan-light-openings and lantern-gearing the character of the gearing and the method of securing shall be so described.



Ironmongery (Contd.)

- |                         |        |  |
|-------------------------|--------|--|
| Ironmongery<br>(Contd.) | P49(e) | In the case of sliding-door gear, each component shall be itemised in detail and the method of securing described.                             |
|                         | (f)    | Alternatively, door ironmongery may be included with the item for the door (See Clause P26(f)).  |
| Water-bars              | P50    | Water-bars in sills and the like shall be given in linear metres stating the size. Those bedded in white lead or mortar shall be so described. |
| Bolts                   | P51    | Bolts shall be enumerated stating the diameter and length. Nuts and washers shall be given in the description.                                 |

Protection

- |            |        |  |
|------------|--------|--|
| Protection | P52(a) | Protecting floorings shall be given as individual items stating the area and kind of work to be protected. |
|            | (b)    | Protecting all other work in this Section shall be given as an item.                                       |

S E C T I O N Q

STRUCTURAL STEELWORK

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Not KA?

Generally to Section Q

- Q1(a) An item shall be given stating that the rates for structural steelwork are to include for cutting ends of members; cutting to dead lengths; all cutting on plates; welds; notchings; splay cutting; bevel cutting; cranks; splice plates; bolts (except anchor bolts); rivets; holes; counter sunk and tapped holes; and driving rivets and counter sinking heads.
- (b) Steelwork shall be grouped as follows and each group with its associated labours shall be given under an appropriate heading:-
- (i) Unframed steelwork (i.e. steel mainly or completely unframed).
  - (ii) Framed steelwork (i.e. steel in structures mainly or completely framed).
- (c) Particulars of the following shall be given:-
- (i) Kind and quality of steel.
  - (ii) Any tests of materials, workmanship and finished structure.
- (d) In the case of framed steelwork, particulars shall also be given of the method of fabrication and the type of site connections (e.g. riveted; bolted; turned-bolted; welded).
- (e) Steelwork shall be measured as executed but no deductions shall be made for splay cuts, notches, holes and slots and no allowances shall be made for rolling margin or the weight of weld-metal. Plates of irregular shape shall be measured net.
- (f) The weight given for compound or composite members (e.g. compound girders; roof trusses) shall be the aggregated weight of the component parts together with the weight of the bolts and rivet heads.
- (g) Where steel sections are required to be classified in accordance with this Clause, they shall be grouped and described as follows:-
- (i) Angles and tees (grouped together).
  - (ii) Joists and channels (grouped together).
  - (iii) Broad-flange joists and universal joists (grouped together).
  - (iv) Castellated joists.
- (h) Curved steel sections (except those forming part of compound or composite members) shall be so described.
- (j) Curved compound or composite members shall be so described.

## Grillages and Girders

- Grillages and girders generally Q2 For rules relating to Section Q generally see Clause Q1 hereof.
- Grillages Q3(a) Grillages shall be given in kilogrammes.  
(b) Plain grillages (i.e. those consisting of joists or channels) shall be so described and classified as Clause Q1(g) hereof.  
(c) Compound grillages shall be so described.
- Girders Q4(a) Girders shall be given in kilogrammes.  
(b) Plain girders (i.e. those consisting of joists or channels) shall be so described and classified as Clause Q1(g) hereof.  
(c) Compound girders shall be so described.  
(d) Plate girders shall be so described and classified as follows stating the composition:-  
(i) Plain plate (i.e. those consisting of one web-plate with angle-flanges).  
(ii) Compound plate (i.e. those consisting of one web-plate with angle-flanges and one or more flange-plates).  
(iii) Box plate (i.e. those consisting of two web-plates with angle-flanges and two or more flange-plates).  
(e) Shelf-angles and stiffener-angles shall be added to the weight of girders.  
(f) Latticed girders shall be so described.  
(g) Runway rails for travelling cranes on girders shall be given in the description of the girder work to which they are attached and the method of fixing. The weight of the runway rails together with the weight of the associated fastenings shall be aggregated with the weight of the girder.

## Stanchions, Columns and Portal Frames

- Stanchions, columns and portal frames generally Q5 For rules relating to Section Q generally see Clause Q1 hereof.
- Stanchions Q6(a) Stanchions shall be given in kilogrammes.  
(b) Plain stanchions (i.e. those consisting of joists or channels) shall be so described and classified as Clause Q1(g) hereof.  
(c) Compound stanchions shall be so described.  
(d) Latticed stanchions and battened stanchions shall each be so described.

Stanchions, Columns and Portal Frames (Contd.)

Stanchions (Contd.)	Q6(e)	Bloom-bases to stanchions shall be given in kilogrammes. The method of attachment and the extent of machining required shall be given.
Solid or tubular columns	Q7(a)	Solid steel columns shall be given in kilogrammes stating the diameter and the number of columns.
	(b)	Tubular steel columns shall be given in kilogrammes stating the thickness of the metal, the outside diameter and the number of columns.
Portal frames	Q8	Portal frames shall be given in kilogrammes stating the composition and the span.

Roof Members, Braces, Struts and Rails

Roof members braces, struts and rails generally	Q9	For rules relating to Section Q generally see Clause Q1 hereof.
Roof- trusses	Q10	Roof-trusses shall be given in kilogrammes.
Gables, hips and valleys	Q11	Gable-members, hip-members, valley-members and the like (grouped together) shall be given in kilogrammes and classified as Clause Q1(g) hereof.
Purlins and rails	Q12(a)	Purlins and rails shall be given in kilogrammes.
	(b)	Plain purlins and plain rails (grouped together) shall be so described and classified as Clause Q1(g) hereof.
	(c)	Compound purlins, compound rails, battened purlins and battened rails (grouped together) shall be so described.
Braces and struts	Q13	Braces, struts and the like (grouped together) shall be given in kilogrammes and classified as Clause Q1(g) hereof.

Sundries

Sundries generally	Q14	For rules relating to Section Q generally see Clause Q1 hereof.
Fittings	Q15	Fittings to steelwork shall be deemed to be included with the items and the weight of the fittings together with the weight of associated bolts and rivet-heads shall be aggregated with the weight of the member to which they are attached.

Sundries (Contd.)

- |                                   |     |  |
|-----------------------------------|-----|--|
| Wedging<br>bases and<br>grillages | Q16 | Wedging under stanchion-bases and under steel grillages shall each be enumerated separately irrespective of the number of wedges.  |
| Anchor-<br>bolts                  | Q17 | Anchor-bolts shall be given in kilogrammes stating the diameter. Nuts and washers shall be given in the description.   |
| Gutters                           | Q18 | Gutters in conjunction with structural steelwork shall be given in kilogrammes stating the shape of the cross-section, the thickness of the metal and the method of jointing and securing and shall be deemed to include fittings (ends, etc.).                    |
| Painting                          | Q19 | Painting by the steel fabricators or erectors shall be given in kilogrammes of steel to be treated stating the preparation of surfaces, the number of coats to be applied and whether executed at the steelworks or at the site before erection or after erection. |

S E C T I O N    R

METALWORK

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section R

R1(a) An item shall be given stating that:-

- (i) The rates for all metalwork shall include for ends, angles, intersections, ramps and wreaths on frames, handrails, core-rails, archbars, bearers, stays and the like; assembling and jointing together; all holes for pipes, tubes, bars, cables, conduit and the like and all other holes, counter sunk holes, tapped holes, slots and the like except where given in the description of items.
- (ii) The rates for metal skirtings and duct covers and the like shall include for all angles, intersections and ends.
- (iii) The rates for bolts and countersunk bolts shall include for holes and counter sunk holes.

(b) Particulars of the following shall be given:-

- (i) Kind of metal (e.g. steel; lead; zinc; aluminium; copper; brass; bronze).
- (ii) Quality of metal.
- (iii) Gauge, thickness or substance of metal and wire, both for the materials and the labours thereon.
- (iv) Method of fixing, stating the nature of the background or support to which the metalwork is fixed.

(c) Work shall be deemed to be purpose-made unless otherwise described.

(d) Work required to be welded shall be so described stating whether:-

- (i) Members shall be left as laid.
- (ii) Members shall be ground to smooth finish.

(e) Work required to be primed or painted before delivery to site shall be so described.

(f) Work required to be galvanized, chromium-plated, stove-enamelled, anodized or otherwise treated shall be appropriately described stating whether treated before or after manufacture or assembly.

(g) Curved work shall be so described stating the radius.

(h) Work shall be measured as executed but no deduction shall be made for notches, holes and slots and no allowance shall be made for rolling margin or weld-metal.

Work in Plates, Bars, Sections and Tubes

- Plates,  
bars,  
sections  
and tubes  
generally
- R2(a) For rules relating to Section R generally see Clause R1 hereof.
- (b) Metal plates, bars, sections and tubes shall be deemed to be formed by casting, rolling, drawing, extruding or other appropriate method at the contractor's option unless a particular method is specifically stated.
- Floor-plates  
and duct-  
covers
- R3(a) Floor-plates shall be given in square metres stating the average size. Chequer plates and perforated plates shall each be so described.
- (b) Duct-covers shall be given in linear metres stating the width. Chequer plates and perforated plates shall each be so described.
- (c) Frames for duct-covers shall be given in linear metres stating the size and the shape of the cross-section. Lugs shall be given in the description stating the spacing.
- (d) Ends, angles and intersections shall be deemed to be included with the items.
- (e) All cuttings on plates shall be deemed to be included with the items.
- Handrails  
and  
core-rails
- R4(a) Handrails and core-rails shall each be given separately in linear metres stating the size and the shape of the cross-section. Alternatively mild steel handrails, core-rails, balusters and newels may be grouped together and so described and given in kilogrammes. Fangs ends, rounded ends, scrolled ends, mitred angles, bends, ramps, wreaths and the like shall be deemed to be included with the items.
- (b) Handrail brackets shall be enumerated stating the size and the projection. Alternatively mild steel brackets may be given in kilogrammes.
- Balusters  
and newels
- R5 Balusters and newels shall each be enumerated separately stating the size, the shape and the approximate weight. Alternatively mild steel balusters and newels may be given in Kilogrammes in accordance with Clause R4(a).
- Arch-bars,  
bearers and  
stays
- R6 Arch-bars, bearers, stays and the like shall each be given separately in linear metres stating the size. Fangs ends, twists, bends and the like shall be deemed to be included with the item.
- Straps,  
collars and  
brackets
- R7 Straps, collars, hangers, cantilever-brackets, corbels and the like shall each be enumerated separately stating the size. Alternatively those formed out of mild steel may each be given in kilogrammes.
- Mat-frames
- R8 Mat-frames shall be enumerated stating the size of the members and the overall size of the frame. Lugs shall be given in the description stating the number.

Work in Sheet Metal

Sheet metal  
generally

R9 For rules relating to Section R generally see  
Clause R1 hereof.

Coverings  
and linings

- R10(a) Coverings to doors, bench-tops, counter-tops and  
the like shall each be given separately in  
square metres.
- (b) Linings to safes, cisterns, sinks and the like shall  
each be given separately in square metres.
- (c) Raking cutting and curved cutting shall be deemed to  
be included with the item.
- (d) Weltded or beaded edges, burned, brazed or welded  
angles, weltded seams and the like labours shall  
each be given separately in linear metres.
- (e) Bending at edges, dressing into hollows, dressing  
over curbs and the like labours shall each be  
given separately in linear metres. Bossed brazed  
or welded ends, angles and intersections shall be  
deemed to be included with the item.
- (f) Clout nailing, copper nailing and screwing at edges  
of coverings and lining shall each be given separately  
in linear metres. Close nailing and close screwing  
i.e. where spacing does not exceed 50 millimetres)  
shall be so described.

Ductwork

R11 Ductwork shall be given in accordance with Section S  
hereof.

Work in Wire Mesh or Expanded Metal

Wire mesh  
and expanded  
metal generally

R12 For rules relating to Section R generally see  
Clause R1 hereof.

Coverings to  
partitions

- R13(a) Wire mesh coverings and expanded metal coverings to  
partitions shall each be given separately in square  
metres stating the size of mesh.
- (b) Raking cutting and curved cutting shall be deemed to  
be included with the item.

Panels

- R14(a) Prefabricated wire mesh panels shall be enumerated  
stating the size of the mesh and the size of the  
panels. Where panels are other than rectangular  
the shape of the panels shall be stated.
- (b) Hand-woven wire mesh panels shall be so described  
stating the pattern.



Composite Units

Composite  
Units  
generally

- R15(a) For rules relating to Section R generally see Clause R1 hereof.
- (b) Composite units (other than standard units) shall be measured in detail in accordance with Clause R16 to R19 hereof and each unit with its associated labours shall be billed under an appropriate heading stating the character, the overall size and the number of units. Classification shall be as follows:-
- (i) Balustrades stating whether level or raking.
  - (ii) Railings stating whether level or raking.
  - (iii) Gates stating the shape where other than rectangular.
  - (iv) Grilles and gratings (grouped together) stating the shape where other than rectangular.
  - (v) Cloakroom fittings.
  - (vi) Cycle racks, storage racks and the like (grouped together).
  - (vii) Ladders.
  - (viii) Framework and other supports for partitions, false ceilings, lift enclosures and the like (grouped together).
  - (ix) Tubular roof trusses.
  - (x) Tubular purlins.
  - (xi) Tanks stating the shape where other than rectangular.
  - (xii) Staircases, landings and gangways (grouped together).
- (c) Alternatively composite units formed out of mild steel may be classified in accordance with Clause R15(b) and given in kilogrammes.

Members of  
composite  
units

- R16(a) Rolled plates shall be given in square metres.
- (b) Rolled or extruded bars, sections and tubes shall each be given separately in linear metres stating the size.
- (c) Cast members shall be enumerated stating the size, the shape and the character. Standard castings shall be so described. Lugs cast on shall be given in the description stating the number.

Labours on  
members of  
composite  
units

- R17(a) All cuttings, shall be deemed to be included with the item.
- (b) Notches, slots and rounded corners shall be deemed to be included with the members of composite units.
- (c) Fanged ends, pointed ends, rounded ends, scrolled ends, bends, ramps, wreaths, twists and the like shall be deemed to be included with the members of composite units.

Composite Units (Contd.)

- |  |        |  |
|--|--------|--|
| Opening portions of composite units            | R18    | Opening portions in balustrades, railings and the like shall each be enumerated separately as extra over the work in which they occur stating the overall size. Hinges and fastenings shall be given in the description stating the type.  |
| Connections between members of composite units | R19(a) | Cleated connections and plated connections shall each be enumerated separately stating the size of the cleat or plate and the thicknesses of the metals to be connected. Irregular connections shall be so described. Setscrews, bolts, nuts, washers, rivets, holes, countersunk holes, tapped holes, welds, spot-welds and the like shall be given in the description stating the size.                                      |
|  | (b)    | Bolted connections, screwed connections and welded connections shall each be enumerated separately stating the thicknesses of the metals to be connected. Irregular connections shall be so described. Setscrews bolts, nuts, washers, holes, countersunk holes, tapped holes, welds, spot-welds and the like shall be given in the description stating the size.  |
| Special metal windows and doors                | R20    | Special metal windows and special metal doors shall be enumerated separately stating the overall size, the nature of the construction, the shape where other than rectangular, the finish and the number of opening portions. Alternatively special metal windows and special metal doors when formed in mild steel may each be given separately in kilogrammes. (For standard metal windows and doors see Clause R22 hereof). |

Standard Units

- |                                  |        |   |
|----------------------------------|--------|---|
| Standard units generally         | R21(a) | For rules relating to Section R generally see Clause R1 hereof.   |
|                                  | (b)    | Assembling and jointing together the component parts of composite units and providing any necessary jointing compound shall be deemed to be included with the item concerned.   |
| Standard metal windows and doors | R22(a) | Standard metal windows and doors (complete with frames, mullions, transoms, hinges, fastenings and lugs) shall be each enumerated separately stating the type. Composite windows and composite doors shall each be so described. (For special metal windows and doors see Clause R20 hereof). |
|                                  | (b)    | Steel accessories (e.g. subframes, subsills, window-sills, window-boards and window-surrounds) shall each be enumerated separately stating the size and the type.   |

Standard Units (Contd.)

Steel door frames	R23	Steel door-frames (except those forming an integral part of a door unit) shall be enumerated stating the size and the type.
Fireproof doors and strongroom doors	R24	Fireproof doors and strongroom doors (complete with frames, hinges, fastenings and lugs) shall each be enumerated separately stating the size and the type.
Rooflights	R25	Lantern-lights, skylights, laylights and the like (complete with frames, mullions, ridges, hips, hinges, fastenings and lugs) shall each be enumerated separately stating the size and the type. Composite units shall be so described.
Pavement-lights and stallboard-lights	R26	Pavement-lights, and stallboard-lights (complete with frames, lugs and glass lenses) shall each be enumerated separately stating the size and the type.
Skirtings, picture-rails, purlins and the like	R27	Skirtings, picture-rails, purlins and the like shall each be given separately in linear metres stating the size and the type. Fitted ends, mitred angles, corner-pieces and the like shall be deemed to be included with the item.
Duct-covers	R28	Duct-covers (complete with frames and lugs) shall be given in linear metres stating the width and the type. Ends, angles and intersections shall each be deemed to be included with the item.
Balustrades and railings	R29(a)	Balustrades, railings and the like forming part of a building shall each be given separately in linear metres stating the height, the type and the nature of the posts or other supports. Opening portions shall each be enumerated separately. Hinges and fastenings shall be given in the description of the opening portions.
	(b)	For metal bar fencing not forming part of a building see Clauses in Section Y hereof.
Collapsible gates and revolving shutters	R30	Collapsible gates, revolving shutters and the like (complete with frames, guides, tracks, fastenings, lugs and the like) shall each be enumerated separately stating the size and the type.
Grilles and gratings	R31	Grilles and gratings (complete with frames and lugs) shall each be enumerated separately stating the size and the type.
Ladders	R32	Ladders (complete with brackets and lugs) shall be enumerated stating the size and the type.

Standard Units (Contd.)

Coal-plates, surface-boxes and mat-rims	R33	Coal-plates, surface-boxes inspection covers, mat-rims and the like (complete with frames and lugs) shall each be enumerated separately stating the size and the type.
Staircases	R34	Staircases shall be enumerated stating the size, the type and the number of risers and landings.
Sectional tanks	R35	Sectional tanks shall be enumerated stating the capacity, the size and the type.
Ductwork	R36	Ductwork shall be given in accordance with Section S hereof.
Wire mesh panels	R37	Wire mesh panels shall be enumerated stating the size and the type.

Sundries

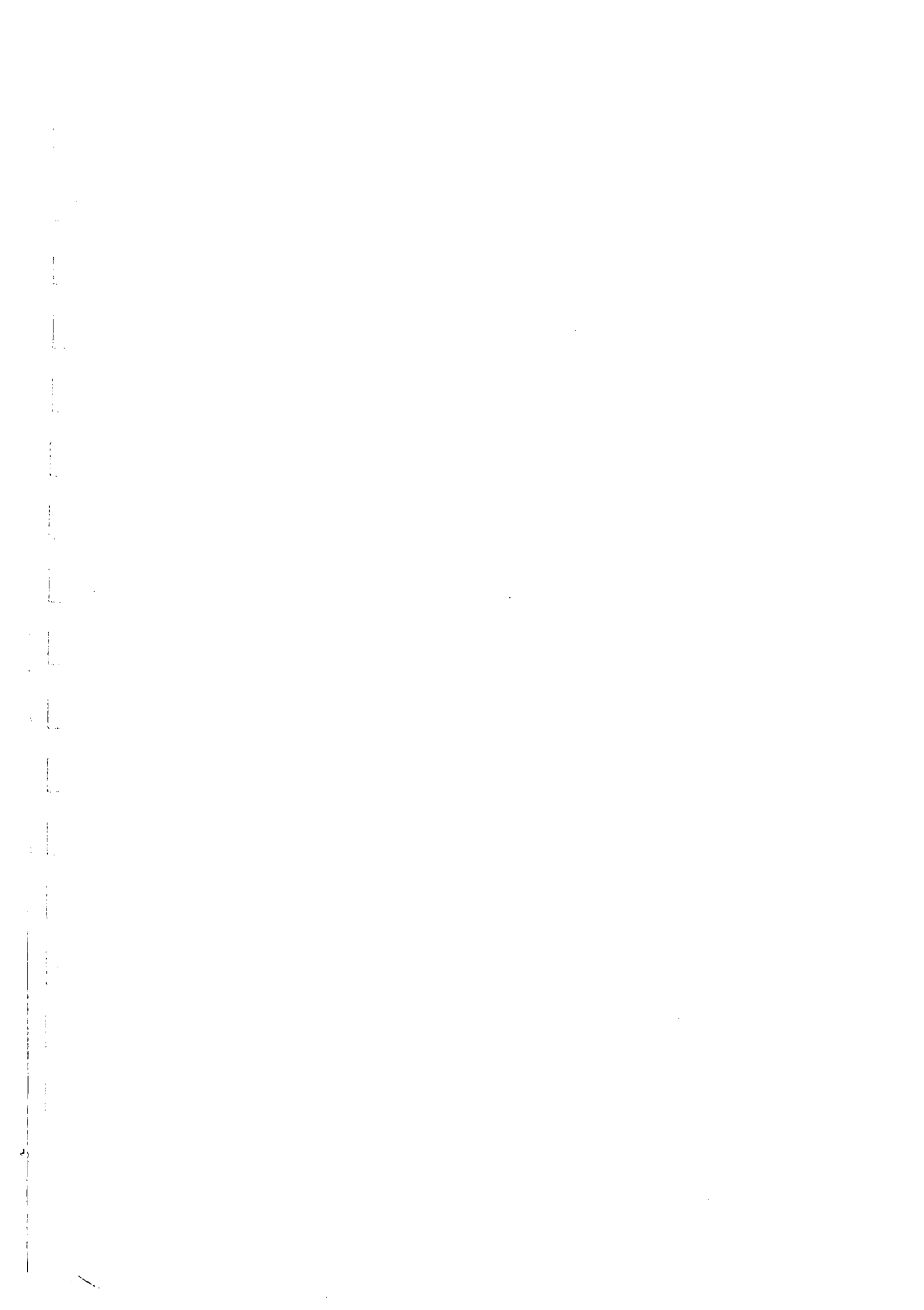
Sundries generally	R38	For rules relating to Section R generally see Clause R1 hereof.
Bolts	R39	Bolts, anchor-bolts, ragbolts and the like (except where deemed to be included or where given in the description of other items) shall each be enumerated separately stating the diameter and the length. Nuts and washers shall be given in the description.

Carpenter's Metalwork

Carpenter's metalwork	R40	For shoes, heads, straps and tie-rods for timber roof principals see Section N hereof.
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Protection

Protection	R41	Protecting the work in this Section shall be given as an item.
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SECTION S

PLUMBING AND ENGINEERING INSTALLATIONS

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section S

Sl(a) An item shall be given stating that:-

- (i) The rates for all plumber's and engineer's work are to include for assembling and jointing together including jointing material; cutting and pinning in or building in all pipe and duct supports and subsequent making good and all cutting away and making good and all pipe sleeves.
- (ii) The rates for all pipe work are to include for all joints and couplers in the running length and standard pipe supports (eg. clips, saddles, pipe hooks, holderbats and brackets).
- (iii) The rates for pipework to pipes not exceeding 55 millimetres diameter shall include for all joints; fittings (eg. bends, shoes, bushes, tees sockets); (eg. made bends, beaded or ornamental ends); plates and cleaning caps and plugs.
- (iv) The rates for ductwork are to include for all joints in the running length; brackets; hangers and other supports.
- (v) The rates for thermal insulation are to include for working around and over ancillaries, fittings, flanges and all other obstructions.
- (vi) The rates for all pipe and ductwork are to include for cutting and pinning in; building in; plugging and screwing or nailing of brackets, hangers or other supports; for all subsequent making good and for forming or cutting all holes; cutting away and making good.

(b) Work shall be grouped as follows and each group shall be given under an appropriate heading:-

- (i) Rainwater installation.
- (ii) Sanitary installation.
- (iii) Cold-water installation.
- (iv) Hot-water installation.
- (v) Ventilating and air conditioning installation stating the type.
- (vi) Compressed air installation.

(c) Particulars of the following shall be given:-

- (i) Kind of material (eg. iron; steel; asbestos-cement; lead; aluminium; zinc; copper; polythene; glazed stoneware; glazed fireclay).
- (ii) Quality of material.
- (iii) Gauge, thickness or substance of material.
- (iv) Any tests with which materials, plant and equipment are required to comply.

Generally to Section S (Contd.)

- Sl(d) Assembling and jointing together the component parts of composite units and providing any necessary mating flanges and jointing materials shall be deemed to be included with the items concerned. Where composite units are supplied by the employer, particulars of the assembly work involved shall be given.
- (e) Work required to be primed or painted before delivery to the site shall be so described.
- (f) Work required to be galvanised, chromium-plated, stove-enamelled, porcelain-enamelled, anodized or otherwise specially finished shall be appropriately described stating whether treated before or after manufacture or assembly.
- (g) The method of fixing and the provision of nails, bolts, nuts, holes, screws, plugs, shot-fired pins and the like shall be given in the description of the work. For bedding and pointing see Clause S72 hereof. Cutting and pinning shall be deemed to be included with the items.
- (h) The nature of the background to which work is fixed shall be given in the description of the work. Backgrounds shall be grouped and described as follows:-
- (i) Building-board (which shall be deemed to include hardboard, asbestos-cement sheet, plaster-boards, fibreboard and similar materials which do not grip a wood screw).
  - (ii) Timber (which shall be deemed to include softwood, hardwood, blockboard, plywood and similar materials which will grip a wood-screw when a lead-hole has been drilled).
  - (iii) Metal-faced or composition-faced timber (which shall be deemed to include faced blockboard, faced plywood and similar materials which will grip a wood-screw when a lead-hole and a shank-clearance hole have been drilled).
  - (iv) Blockwork, concrete or stonework (which shall be deemed to include reinforced concrete, brickwork and similar materials which require plugging) irrespective of any plaster, glazed tiles, composition or other finish (excluding glass) to the surface.
  - (v) Plain metal (which shall be deemed to include any metal which requires drilling).
  - (vi) Glass (which shall be deemed to include any material resembling glass).
- (j) Temporary work shall be so described. Removing temporary work and making good after shall be deemed to be included with the items.
- (k) For sheet metal roofing, flashings and linings to gutters see Section M hereof.
- (m) For sheet metal coverings to doors, bench-tops and counter-tops and linings to safes, cisterns and sinks see Section R hereof.
- (n) Where pipe-joints, labours on pipes, pipe fittings, pipe sleeves and plates, cleaning caps, and plugs are required by this document to be given in accordance with this Clause they shall each be enumerated separately except those in connection with pipes not exceeding 55 millimetres diameter which shall be deemed to be included with the pipes.

### Gutterwork

- Gutterwork generally S2(a) For rules relating to Section S generally see Clause S1 hereof.
- (b) For steel gutters in conjunction with structural steelwork see Section Q hereof.
- (c) Purpose-made gutters and purpose-made gutter-fittings shall be so described. Curved gutters shall be so described.
- Gutters S3 Rainwater gutters (measured over all gutter-fittings, short running lengths and branches) shall be given in linear metres stating the type and the size.
- Gutter-joints S4(a) Providing materials, bolts, nuts, washers and everything else necessary for jointing shall be deemed to be included with the items of gutterwork.
- (b) Joints in the running length shall be given in the description of the gutter stating the method of jointing.
- Gutter-fittings S5 Gutter-fittings (eg. bends; elbows; junctions; stopped ends) shall each be enumerated separately as extra over the gutter in which they occur. Cutting and jointing the gutters to gutter-fittings shall be deemed to be included with the gutters.
- Gutter-supports S6 Lugs cast on to gutters, brackets and straps shall be given in the description of the gutter.

### Pipework

- Pipework generally S7(a) For rules relating to Section S generally see Clause S1 hereof.
- (b) Purpose-made pipes and purpose-made pipe fittings shall each be so described. Purpose-made curved pipes shall be so described stating the mean radius.
- (c) Pipes and pipe-fittings which are wrapped, coated or lined by the manufacturer shall be so described stating the type of treatment.
- (d) Pipework required to be temporarily fixed in position, dismantled for chromium-plating or other special finishing and subsequently refixed shall be so described.
- Pipes S8(a) Pipes (measured over all pipe-fittings, short running lengths and branches) shall be given in linear metres stating the type and the nominal size. Classification shall be according to the purpose for which the pipes are installed (eg. rainwater; overflow; waste; soil and vent; cold-water services; hot-water services; high pressure cold water supply; water main; cooling-water; condense-water).
- (b) Flexible pipes and extensible pipes (measured as fully extended) shall each be so described.
- (c) Pipes laid or fixed in ducts, trenches and chases shall be so described in each case.



Pipework (Contd.)

- Pipes  
(Contd.)
- S8(d) Pipes embedded in floor screed shall be so described.
- Pipe-  
joints
- S9(a) Providing materials, heat, bolts, nuts, washers and everything else necessary for making joints in pipes shall be deemed to be included with the items.
- (b) Joints and couplers normally necessary in the running length shall be given in the description of the pipe stating the method of jointing.
- (c) Reducing joints between pipes of different sizes shall be enumerated as extra over the main pipe in which they occur in accordance with Clause S1(n) hereof.
- (d) Branch joints shall be enumerated as extra over the main pipe in which they occur in accordance with Clause S1(n) hereof.
- (e) Screwed sockets, tappings, bosses and welding-necks welded to pipes or flanges shall each be enumerated separately stating the size and kind of pipe or flange concerned in accordance with Clause S1(n) hereof. Perforating the pipe or flange shall be deemed to be included with the items.
- (f) Special connections and special joints in pipes in accordance with Clause S1(n) shall each be enumerated separately (except where given in the description of another enumerated item) stating the size and kind of pipe concerned and the method of jointing. Classification shall be as follows -
- (i) Connections between pipes of differing materials.
- (ii) Connections between pipes and appliances or equipment stating the nature of the appliance or equipment.
- (iii) Isolated joints which differ from those given in the description of the pipe (eg. flanged joints in pipes having welded joints generally).
- (iv) Expansion joints stating the type of joint (eg. bellows; sliding) and the amount of the expansion to be accommodated.
- Labours  
on pipes
- S10 Labours on pipes (eg. made bends; made springs; made offsets; beaded ends; ornamental ends) shall each be enumerated separately as extra over the pipe on which they occur in accordance with Clause S1(n) hereof.
- Pipe-  
fittings
- S11(a) Pipe-fittings (eg. bends; springs; swannecks; offsets; Y-junctions; double Y-junctions; shoes; blank flanges; puddle flanges; bushes; reducers; elbows; twin elbows; tees; crosses; unions) shall each be enumerated separately as extra over the pipes in which they occur in accordance with Clause S1(n) hereof. Cutting and jointing the pipes to such fittings shall be deemed to be included with the items.

Pipework (Contd.)

Pipe-fittings (Contd.)	S11(b)	Expansion loops shall be enumerated stating the limiting dimensions and the amount of the expansion to be accommodated.
Pipe Supports	S12(a)	Particulars of the method of fixing shall be given in the description of pipe-supports as Clause S1(g) hereof.
	(b)	Ears cast, soldered or welded on to pipes shall be given in the description of the pipe.
	(c)	Standard pipe-supports (eg. clips; saddles; pipehooks; holderbats) shall be given in the description of pipes.
	(d)	Components for supporting pipes (eg. rollers; chairs; and hangers; back-plates and girder-lugs; anchors; guides) shall each be enumerated separately stating the size of the component and the size and kind of pipe. Spring-compensated components shall be so described stating the loading and the movement to be accommodated.
	(e)	Pipe-stays and collars shall be enumerated stating the size and kind of pipe and the length of the stay.
	(f)	Pylons and other pipe-supports shall be given as Clause S74 hereof.
Pipe-sleeves and plates	S13(a)	Supplying pipe-sleeves (eg. short lengths of metal or stoneware pipe) for fixing by other trades through wall, floors, and ceilings shall be enumerated in accordance with Clause S1(n) hereof, stating the length thereof, the size and kind of pipe passing through, the type of packing required.
	(b)	Wall-plates, floor-plates and ceiling-plates shall each be enumerated separately in accordance with Clause S1(n) hereof, stating the size thereof and the size and kind of pipe passing through. Where plates are fitted to pipe-sleeves they shall be given in the description of the sleeves stating whether to one or both sides.
Cleaning caps and plugs	S14	Cleaning caps, plugs and the like shall each be enumerated, separately in accordance with Clause S1(n) hereof, stating the size of the item, the kind of pipe to which it is attached and the method of jointing thereto. Perforating the pipe shall be deemed to be included with the item.
Inspection doors	S15	Inspection doors in pipes shall be enumerated as extra over the pipe in which they occur stating the method of sealing the door. Where such doors occur in pipe-fittings they shall be given in the description of the fitting concerned.
Dampers	S16	Dampers in pipes shall be enumerated as extra over the pipe in which they occur stating the method of operation.

Pipework (Contd.)

Traps, thimbles, ferrules and cones	S17	Traps, thimbles, ferrules, cones and the like shall each be enumerated stating the size thereof, the kind of pipe and appliances to which it is attached and the method of jointing thereto.
Rainwater- heads and roof-outlets	S18	Rainwater-heads, roof-outlets and the like shall each be enumerated separately stating the type, the size and the method of jointing. Wire gratings and cast grating shall be given in the description.
Hopper-heads	S19	Hopper-heads and the like shall be enumerated stating the type and size thereof, the kind of pipe to which it is attached and the method of jointing thereto. Wire gratings shall be given in the description.
Balloon- gratings	S20	Balloon gratings shall be enumerated stating the size of pipe or outlet to which it is attached.
Cowls, terminals, flaps and cross-wires	S21(a)	Cowls, terminals, hinged flaps, cross-wired ends and the like shall each be enumerated separately stating the size and kind of pipe to which it is attached and the method of jointing thereto.
	(b)	Flashing-plates, weathering-aprons, cravats and the like shall each be enumerated separately stating the size thereof and the size and kind of pipe passing through.
Exhaust heads	S22	Exhaust heads shall be enumerated stating the number, type and size of the connections.
Drip-trays and tundishes	S23	Drip-trays and tundishes shall each be enumerated separately stating the number, type and size of the connections.
Independent chimneys	S24(a)	Independent vertical steel chimneys shall be enumerated stating the internal diameter and the method of jointing. Base-plates, linings, claddings, anchor-bolts, guy-ropes, ladders, guard-rails, painter's hooks, cleaning-doors, cowls, terminals and the like shall be given in the description stating the number, the type and the size.
	(b)	Connections to boilers and connections to brick chimneys shall each be enumerated separately stating the method of jointing and the type of packing required.
Connections to mains	S25	Connecting the ends of pipes to public mains (eg. water mains; gas mains; district-heating mains), making good public highways and any other work which may only be carried out by a public undertaking or local authority shall be given as a provisional or prime cost sum as Section A hereof.

Ductwork

- Ductwork generally S26 For rules relating to Section S generally see Clause S1 hereof.
- Ducting S27(a) Ducting (measured over all ducting-fittings, short running lengths and branches) shall be given in linear metres stating the size. Stiffeners shall be given in the description.
- (b) Flexible ducting and extensible ducting (measured as fully extended) shall each be so described.
- (c) Curved ducting shall be so described.
- (d) Lining ducting internally with acoustic or protective material shall be given in the description of the ducting.
- Ducting-joints S28(a) Providing materials, heat, bolts, nuts, washers and everything else necessary for making joints in ducting shall be deemed to be included with the items.
- (b) Joints in the running length shall be given in the description of the ducting stating the method of jointing.
- (c) Special connections and special joints in ducting shall each be enumerated separately (except where given in the description of another enumerated item) stating the size and kind of ducting concerned and the method of jointing. Classification shall be as follows:-
- (i) Connections between ducting of differing materials.
- (ii) Connections between ducting and equipment stating the nature of the equipment.
- (iii) Isolated joints which differ from those given in the description of the ducting (eg. flanged joints in ducts having spigot and socket joints generally).
- (iv) Flexible connections between ducting and plant.
- Ducting-fittings S29 Ducting-fittings (eg. stop-ends; bends; offsets; diminishing pieces; change-of-section pieces; junction pieces; nozzle outlets) shall each be enumerated separately as extra over the ducting in which they occur. Where there is a preponderance of fittings (eg. in plant rooms), they shall each be enumerated separately as individual items. Cutting and jointing ducting to the fittings and forming openings in ducting for branches shall be deemed to be included with the ducting.
- Ducting-supports S30 Particulars of the method of fixing shall be given in the description of ducting supports as Clause S1(g) hereof. Components for supporting ducting (eg. brackets; hangers) shall be deemed to be included with the item.

### Ductwork (Contd.)

Dampers, ducting-turns access-doors and openings	S31	Manually-operated regulating dampers and louvres in ducts, ducting-turns and mid feathers, test-holes and covers, access-doors and openings in ducting (other than for branches) shall each be enumerated separately as extra over the ducting in which they occur. Forming and stiffening openings in ducting shall be given in the description.
Shutters, grilles, diffusers and equalisers	S32	Louvre-and-butterfly back-draught shutters, grilles, diffusers, diffusers with special dampers, deflectors, equalisers and anti-smudge rings shall each be enumerated separately stating the method of jointing. Forming and stiffening openings in ducting shall be given in the description.
Cowls and terminals	S33(a)	Cowls, terminals and the like shall each be enumerated separately stating the size and type thereof, the size of ducting to which it is attached and the method of jointing thereto.
	(b)	Flashing-plates, weathering-aprons, cravats and the like shall each be enumerated separately stating the size thereof and the size of the ducting passing through.
Roof- ventilators	S34(a)	Roof-ventilators shall be enumerated stating the type, the rated output of air, the temperature, the minimum static resistance, the maximum outlet velocity, the minimum efficiency and the number, type and size of the connections for ducts. Prime movers, drives and guards shall be given in the description stating the number, the type and the size.
	(b)	Weathering-aprons, flashing-plates and the like where not forming an integral part of the unit shall be enumerated separately stating the type and the size.
Fire dampers	S35	Fire dampers shall be enumerated stating the type and size. Fusible links and integral operating-gear shall be given in the description.
Special dampers	S36	Damper units other than fire dampers shall be enumerated stating the type and the size. Operating-motors with linkage shall be given in the description.
Extract hoods	S37	Extract hoods shall be enumerated stating the type and the size.

### Appliances

Appliances generally	S38(a)	For rules relating to Section S generally see Clause S1 hereof.
	(b)	Providing mating flanges, couplings and everything necessary for jointing shall be deemed to be included with the appliance items

Appliances (Contd.)

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|-------------------------|-----|---|
| Sanitary appliances     | S39 | Baths, lavatory-basins, wash-tubs, showers, WC pans, WC suites, sinks, urinals, flushing cisterns, drinking fountains, and the like shall each be enumerated separately stating the type and the size. Cantilever brackets shall be given in the description. |
| Firefighting appliances | S40 | Fire-fighting appliances, foam-inlets, hydrants and the like shall each be enumerated separately stating the type and the size.   |

Ancillaries

- |                       |        |  |
|-----------------------|--------|--|
| Ancillaries generally | S41(a) | For rules relating to Section S generally see Clause S1 hereof.  |
|                       | (b)    | Providing mating flanges, couplings and everything necessary for jointing shall be deemed to be included with the ancillary items.   |
|                       | (c)    | Notwithstanding the following provisions for the enumeration of ancillaries, where such items form an integral part of the equipment to which they relate, or where they are required to be supplied by the manufacturer of the equipment to which they relate, they shall be given in the description of the equipment concerned.   |
| Valves and Cocks      | S42    | Valves and cocks shall each be enumerated separately stating the type and the size. Those with extended spindles shall be so described stating the length of the spindle and details of integral locking devices and remote operating gear. Those pipes and appliances shall be given in the description when the connecting ends of valves and cocks are present, stating the kind and type of pipework and appliance and the method of jointing thereto. Those with hose-unions shall be so described. Classification shall be as follows:-<br><br>(i) Draw-off taps.<br>(ii) Stop-valves.<br>(iii) Ball-valves.<br>(iv) Control valves.<br>(v) Regulating valves.<br>(vi) Convector valves.<br>(vii) Safety valves stating the type and the loading.<br>(viii) Reducing valves.<br>(ix) Automatic control valves and thermostats.<br>(x) Non-return valves.<br>(xi) Blow-down valves.<br>(xii) Drain cocks.<br>(xiii) Stopcocks.<br>(xix) Air cocks.<br>(xv) Automatic air-relief valves and air-bottles. |

Ancillaries (Contd.)

Mixing valves and blenders	S43	Mixing valves and blenders shall each be enumerated separately stating the size of inlet and outlet and the method of operation. Connecting the inlets and outlets to pipes shall be given in the description stating the kind and type of pipework and the method of jointing thereto.
Fire-valves and fusible links	S44(a) (b)	(a) Fire-valves shall be enumerated stating the type and the size. (b) Fusible link systems (complete with controlling wires, guiding pulleys and manually-operated emergency levers) shall be enumerated stating the length of the wires.
Reducing-valve sets	S45	Reducing-valve sets for steam, water or air systems shall each be enumerated separately stating the maximum and minimum rate of flow of steam, water or air, the inlet pressure, the outlet pressure and the number, type and size of the connections for pipes and mountings.
Steam traps	S46	Steam traps shall be enumerated stating the size or capacity, the type (eg. thermostatic; float; bucket) the pattern (eg. angle; straight) and the working pressure. Combined trap and strainer units shall be so described. Connections to pipes shall be given in the description stating the kind and type of pipework and the method of jointing thereto.
Strainers	S47	Strainers shall be enumerated stating the type and the size. Connections to pipes shall be given in the description stating the kind and type of pipework and the method of jointing thereto.
Gauges and thermometers	S48(a) (b) (c) (d) (e)	(a) Altitude gauges and pressure gauges shall each be enumerated separately stating the type and the size. (b) Liquid-level gauges and glasses shall each be enumerated separately stating the type and the size. (c) Thermometers shall be enumerated stating the type and the scale range. Those with pockets shall be so described. (d) Gauges and thermometers having remote-reading indicators shall each be so described stating the type and the length of the capillary or other tubing. (e) Hardwood boards and the like for gauges shall be enumerated stating the type and the size.
Automatic controls	S49(a) (b) (c)	(a) Automatic liquid-level control units and alarm units shall each be enumerated separately stating the type and the method of operation. (b) Automatic valve and control units shall be enumerated stating the type and the operational purpose. Those with direct-acting thermostats shall be so described stating the length of the capillary tubes. (c) Separate pockets for thermostats shall be enumerated.

Ancillaries (Contd.)

- Indicating, measuring and recording equipment
- S50(a) Indicating, measuring and recording instrument (eg. distance-thermometers; CO<sub>2</sub>-indicators or recorders, smoke-indicators) shall each be enumerated separately. Panel-mounted instruments shall be so described.
- (b) Compensating leads and connecting tubing shall each be given separately in linear metres. Clips for fixing shall be given in the description. Supporting trays shall be given in linear metres.
- (c) Panels for mounting the instruments and switchgear shall be enumerated stating the type and the size.
- (d) Panel and instrument assemblies (complete with internal wiring, tubing and terminal points) shall be enumerated stating the relevant particulars.

Thermal Insulation

- Thermal insulation generally
- S51(a) For rules relating to Section S generally see Clause S1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind of insulating material.
  - (ii) Thickness.
  - (iii) Finish.
  - (iv) Method of fixing.
- (c) Smoothing the insulation material and working around supports (eg. hangers; brackets) shall be deemed to be included with the insulation items.
- Insulation to plant
- S52(a) Insulation to plant (eg. boilers; calorifiers; cylinders; tanks; pumping equipment; fans; heating or cooling batteries; water and steam humidifiers; refrigerating apparatus) shall be enumerated stating the overall size of the unit. Particulars shall be given of any protection to the insulation. Where units of plant are contained in casings of specified dimensions, the insulation may alternatively be given in square metres (measured on the surface of the insulation).
- (b) Providing detachable mattresses and working insulation around test-hole covers, access-doors, gauges, thermostats, thermometers and the like shall each be enumerated separately as extra over the insulation in which they occur or they may be given in the description of enumerated items of insulation.
- Insulation to pipework and fittings
- S53 Insulation to pipework shall be given in linear metres stating the type and bore of the pipe and shall be deemed to include for working around ancillaries, flanges, fittings and all other obstructions. Insulation to flanged pipework, to traced oil pipework and to smoke or flue pipework shall each be so described. Particulars shall be given of any protection to the insulation and of any air space between flue pipes and their insulation.



Thermal Insulation (Contd.)

Insulation to ductwork	S54	Insulation to ductwork shall be given in linear metres stating the size of the ducting and shall be deemed to include for working around ancillaries, fittings, flanges and all other obstructions.
Loose insulation and cellular concrete	S55(a)	Loose insulation in trenches, ducts, tank casings and the like shall each be given separately in cubic metres stating the nature of the material (eg. slag wool).
	(b)	Cellular concrete insulation in trenches and ducts (grouped together) shall be given in cubic metres stating the mix of the concrete.
	(c)	Special protection of finish at openings through walls, valve chambers and the like shall each be enumerated separately stating the relevant particulars.

Sundries

Sundries generally	S56	For rules relating to Section S generally see Clause S1 hereof.
Marking positions	S57	Marking the position of holes, mortices, chases and the like structure shall be given as an item for each installation.
Draining and refilling	S58	Draining and refilling an existing system shall be given as a provisional or prime cost sum as Section A hereof.
Identification plates	S59	Plates, discs and labels for the identification of plant, equipment, appliances, pipes, valves and the like shall be given as an item. Charts giving the key thereto shall be enumerated.
Loose keys, tools and spares	S60	Loose keys, tools, spares (eg. parts; fittings; apparatus; chemicals other than for initial commissioning) and the like shall be given as an item enumerated separately stating the type and the quantity. Racks for holding tools and the like shall be given as an item.
Temporarily operating the installation	S61	Temporarily operating the installation (except for testing) shall be given as an item stating any required qualifications of the attendant, the duration of the operating period in hours, the purpose (eg. drying the lagging; drying the building; reducing the ambient humidity) and particulars of any special insurance cover required by the employer.
Disconnecting and refixing equipment	S62	Disconnecting, setting aside and refixing appliances (eg. radiators; convectors) for the convenience of other trades shall be given as an item stating the relevant particulars.

### Sundries (Contd.)

Refractory linings to flues	S63	Refractory linings and precast concrete linings to flues shall be given in accordance with the rules in Section G hereof.
Plans of the installations	S64	Preparing plans or diagrams of the installation as fitted shall be given as an item stating the kind of information required to be shown and the number of copies of each drawing required to be provided.
Testing to installations	S65	Testing each installation shall be given as an item stating the required qualifications of the attendant, the number of stage tests in addition to the final, the purpose of the tests (eg. water-pressure; weld-soundness; air tightness; performance) the instruments and appliances required to be provided and particulars of any special insurance cover required by the employer.

### Electrical Work

Electrical work	S66	Electrical work in connection with plumbing and engineering installations shall be given in accordance with Section T hereof and where required to be executed by the plumber or engineer it shall be so described and billed with the installation concerned.
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### Builder's Work

Builder's work generally	S67	Builder's work in connection with plumbing and engineering installations shall be in so far as is practical be grouped together under an appropriate heading and where required to be executed by the plumber or engineer it shall be so described and billed with the installation concerned.
General attendance	S68	For general attendance on nominated plumbing and engineering sub-contractors see Clause B15(c) hereof.
Special attendance	S69	For special attendance on nominated plumbing and engineering sub-contractors see Clause B15(c) hereof.
Pipe-trenches	S70	Excavating trenches for pipes not exceeding 55 millimetres bore shall be given as Clause D8 hereof. Excavating trenches for pipes over 55 millimetres bore shall be given in accordance with Clause X3 hereof.

Builder's Work (Contd.)

Inspection chambers	S71	Inspection chambers shall be given in accordance with the rules for drainage in Clause X7 hereof.
Bedding and pointing	S72	Bedding and pointing components or units of plant, sanitary appliances and the like shall be enumerated stating the size thereof and the composition and mix of the bedding materials.
Cutting away and making good	S73	Cutting away for and making good after the plumbers and engineers shall be deemed to be included with the plumbers or engineers work.
Pylons and poles	S74(a)	Pylons and poles, wall-brackets, pole-brackets, pole-stays and the like for supporting pipework shall each be enumerated separately stating the size, the method of fixing and the nature of the structure.
	(b)	Boring or excavating holes in ground for poles and stays shall be enumerated stating the depth, the nature of the filling (eg. excavated materials; concrete) and the treatment of surplus spoil.
	(c)	Excavating pits and forming concrete bases for pylons shall be given in accordance with the rules in Sections D and F hereof.
	(d)	Catenary cables shall be given in linear metres stating the type and the size. Eye-bolts, shackles and straining screws shall be given in the description stating the method of fixing.
Metalwork	S75	Metalwork in connection with plumbing and engineering installations (eg. frameworks for supporting plant, control-gear, equipment and the like; metal ladders and gantries for access to plant; metal duct-covers) shall be given in accordance with the rules in Section R hereof.
Painting	S76	Painting shall be given in accordance with the rules in Section W hereof.

Protection

Protection	S77	Protecting the work in this Section shall be given as an item.
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S E C T I O N T

ELECTRICAL INSTALLATION

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE NUMBER

Generally to Section T

- T1(a) An item shall be given stating that -
- (i) The rates for electrical work shall include for all cable, conduit and trunking; fixings and supports to cables, conduit and trunking; cable sleeves and for disconnecting and refixing equipment and fittings for other trades.
  - (ii) The rates for cutting away for and making good shall include for all holes, notches, mortices, sinkings and chases in both the structure and its coverings and for all making good to them.

Equipment and Control Gear

Equipment and Control Gear	T2	Equipment and control gear (eg. transformers, fuse and link disconnecting boxes, switch fuses, fused switches, distribution boards) shall each be enumerated separately stating the rated capacity and the type.
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Fittings and Accessories

Lighting Points	T3	Lighting points shall be enumerated stating the type (eg. pendant ceiling or wall) and giving details of bulbs, tubes or fittings if these are to be provided.
Socket outlets	T4	Socket outlets shall be enumerated stating the rated capacity and the type.
Switches	T5	Switches shall be enumerated stating the type (eg. wall or pendant) and if one or two way.
Water Heaters	T6	Water heaters, immersion heaters and the like shall be enumerated stating the type, rating and capacity.
Fans	T7(a)	Fan points shall be enumerated and where the fans are to be provided the diameter and type shall be stated.
	(b)	Fan regulators shall be enumerated.

Fittings and Accessories (Contd.)

Clocks, telephones, alarms etc.	T8	Points for clocks, telephones, fire alarms, bells, loudspeakers and the like shall be enumerated stating the capacity and the type where the fittings are to be provided.
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Sundries

Sundries generally	T9	For rules relating to Section T generally see Clause T1 hereof.
Marking positions	T10	Marking the positions of holes, mortices, chases and the like in the structure shall be given as an item for each installation.
Identification plates	T11	Plates, discs and labels for the identification of plant, equipment, cables, switches and the like shall be given as an item. Charts giving the key thereto shall be enumerated.
Loose-keys, tools and spares	T12	Loose keys, tools, spares and the like shall be given as an item. Racks for holding tools shall be enumerated stating the size.
Electric meters	T13	Electric meters shall be enumerated stating the capacity and the type.
Temporary operation of the installation	T14	Temporarily operating each electrical installation shall be given as an item stating any required qualifications of the operator, the duration of the operating period in hours, the purpose (eg. lighting; heating; drying the building; reducing the ambient humidity) and particulars of any special insurance cover required by the employer. Providing current shall be given as a provisional or prime cost sum as Section A hereof.
Plans of the installation	T15	Preparing plans or diagrams of the electrical installations as fitted shall be given as an item stating the kind of information required to be shown and the number of copies of each drawing required to be provided.
Testing the Installations	T16	Testing the installations shall be given as an item stating particulars of any special insurance cover required by the employer. Providing instruments, appliances, fuel, water, gas, electricity, lighting and attendance for the tests shall be deemed to be included with the item.

Builder's Work

Builder's work generally	T17	Builder's work in connection with the electrical installations shall be in as far as so practicable grouped together under an appropriate heading and where required to be executed by the electrician shall be so described and billed with the installations.
General attendance	T18	For general attendance on nominated sub-contractors see Clause B15(c) hereof.
Cable-trenches	T20(a)	Excavating cable-trenches shall be given in linear metres stating the average depth to the nearest 250 millimetres. Grading bottoms, planking and strutting, back-filling, compacting and disposing of surplus spoil shall be given in the description.
	(b)	Sand for bedding cables in trenches shall be given in linear metres stating the average width and depth of the sand.
	(c)	Cable-covers in trenches shall be given in linear metres stating the type and the size.
Cable-ducts and inspection chambers	T21	Duct-trenches, stoneware ducts and inspection chambers for underground cables shall be given in accordance with the rules for drainage in Section X hereof.
Bedding and pointing	T22	Bedding and pointing components of units of plant, appliances and the like shall be enumerated stating the size thereof and the composition and mix of the bedding material.
Cutting away and making good	T23	Cutting away for and making good after the electrician shall be enumerated as electrical points stating whether the conduits or cables are concealed or exposed. Notwithstanding any requirements to the contrary in this document, the enumerated electrical points shall include cutting or leaving all holes, notches, mortices, sinkings and chases in both the structure and its coverings, also for all making good to them. Classification of electrical points shall be as follows -  (i) Lighting points irrespective of size or type. Associated switch points shall be deemed to be included with the lighting points irrespective of number. (ii) Socket-outlet points irrespective of size or type. Associated switch points shall be deemed to be included with the socket-outlet points irrespective of number. (iii) Fitting-outlet points irrespective of size, type and kind. (For examples of fittings see Clause T20 hereof). (iv) Equipment points and control-gear points (grouped together) irrespective of size, type and kind.

*Water, Fan, clocks  
alarms, speakers*

*Transformers  
Dis Boxes  
Sw fuses  
Dis Bds*

7

Builder's Work (Contd.)

- |                  |        |   |
|------------------|--------|---|
| Pylons and poles | T24(a) | Pylons, poles, hut-posts, wall-brackets, pole-brackets, pole-stays and the like for supporting cables shall each be enumerated separately stating the size, the method of fixing and the nature of the structure.   |
|                  | (b)    | Boring or excavating holes in ground for poles or stays shall be enumerated stating the depth, the nature of the filling (eg. excavated material; concrete) and the treatment of the spoil.   |
|                  | (c)    | Excavating pits and forming concrete bases for pylons shall be given in accordance with the rules in Sections D and F hereof.   |
|                  | (d)    | Catenary cables shall be given in linear metres stating the type and the size. Eye-bolts, shackles and straining-screws shall be given in the description stating the method of fixing.   |
| Metalwork        | T25    | Metalwork in connection with the electrical installations (eg. frameworks for supporting plant, control-gear, equipment and the like; metal ladders and gantries for access to plant; metal duct-covers) shall be given in accordance with the rules in Section R hereof. |
| Painting         | T26    | Painting shall be given in accordance with the rules in Section W hereof.   |

Protection

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| Protection | T27 | Protecting the work in this Section shall be given as an item. |
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S E C T I O N U

PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHINGS

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section U

- U1(a) An item shall be given stating that:-
- (i) The rates for all finishings shall include for preparing surfaces for finishings or backings, for working at or up to any height and all narrow widths, small areas and all cuttings.
  - (ii) The rates for all finishings to soffits shall include for level, sloping and flewing soffits.
  - (iii) The rates for insitu, plain sheet, tile, slab or block finishings shall include for fair edges, rebated edges, splayed edges, rounded edges, grooves, flutes and the like; all ends and angles of risers and edges of landing; ends, angles, ramps and wreathed corners to strings and ends of steps; all fair joints or fair cutting; making good or cutting and fitting around pipes, bars, cables, conduits, ducting, trunking, sanitary fittings and the like; dishing to gullies and outlets; mortices and sinkings and ends, angles, ramps, outlets and intersections to skirtings, flush, raised or sunk bands, cills, dividing strips, channels, mouldings, flutes, cornices, kerbs and the like.
  - (iv) The rates for insitu finishings shall also include for all internal and external angles; fair, rounded, beaded, moulded and chamfered edges; quirks, arrises, chamfered external angles and coved internal angles.
  - (v) The rates for insitu, plain, sheet tile, slab or block finishings to ceilings shall include for work on flat sloping or flewing ceilings.
  - (vi) The rates for beds and backings, shall include for forming keys and all labours.
  - (vii) The rates for lathing, base-board, suspended plain sheet linings with supporting metal work, and fibrous plaster shall include for all labours and cutting.
  - (viii) The rates for suspended ceilings and the like shall include for all supporting systems.
- (b) Work shall be grouped according to the kind of material and each group with its associated labours shall be given under an appropriate heading. For mastic asphalt floor finishings see Section L hereof.
- (c) Work and labours in repairs shall be so described and the preparation of old surfaces to receive such work shall be given in the description.
- (d) Work on old surfaces shall be so described and the description shall include for all dubbing.
- (e) Work to a pattern or in more than one colour shall be so described stating the nature thereof.



Generally to Section U (Contd.)

- U1(f) Curved work, conical work and spherical work (grouped together) and shall be so described. Elliptical work and other work curved to more than one radius shall be so described. Curved labours shall be so described irrespective of the radius.
- (g) Temporary rules, temporary supports to risers and the like, temporary screeds and templates shall be deemed to be included with the items.

In-Situ Finishings

- In-situ finishings generally
- U2(a) For rules relating to Section U generally see Clause U1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind of material (eg. plaster; granolithic; terrazzo; mosaic; cement-rubber-latex; magnesium-oxychloride; pitch-mastic; cobbles; tarmacadam)
  - (ii) Composition and mix.
  - (iii) Thickness which shall be deemed to be exclusive of keys, grooves, open joints in brickwork and open spaces between laths.
  - (iv) Number of coats. (Where none stated the number shall be deemed to be at the contractor's option).
  - (v) Nature of surface treatment (eg. steel-trowelled; wood-floated; polished; sprinkled with carborundum).
  - (vi) Nature of base (eg. concrete; brickwork; blockwork; metal lathing; screeded bed; screeded backing). Work on concrete, brickwork and blockwork may be grouped together provided the composition and mix of the finishing is the same in each case.
  - (vii) Any special treatment of base (eg. grouting; applying bonding-agent). Preparatory work on base shall be deemed to be included.
  - (viii) Any special curing of finished work.
- (c) Work lined to imitate stone slabs or stone blocks shall be described stating the average size of the slabs or blocks, the surface finish (eg. plain; rough; reticulated; vermiculated) and the type of line required.
- (d) Work shall be measured the area in contact with the base but no deduction shall be made for the following:-
- (i) Voids not exceeding 0.50 square metre.
  - (ii) Angles finished in a different material not exceeding 100 millimetres girth.

In-Situ Finishings (Contd.)

- Floors and pavements U3(a) Work to floors and pavements shall be given in square metres. Classification shall be as follows:-
- (i) Level.
  - (ii) To falls, cross-falls and slopes not exceeding 15 degrees from horizontal (grouped together). Intersections on work to cross-falls shall be deemed to be included with the items.
  - (iii) To slopes over 15 degrees from horizontal.
- (c) Work to floors laid in one operation with the base concrete shall be so described.
- (d) For temporary protection of floor finishings and pavings see Clause U44(a) hereof.
- Walls and Ceilings U4(a) Works to walls and ceilings shall each be given separately in square metres. Work to sloping ceilings, to sloping soffits of stairs and to sloping soffits of stairs shall be grouped with flat ceilings.
- (b) Panelled work to pilasters or isolated columns shall each be so described. Panelled work in sides and soffits of beams (grouped together) shall be so described. Mouldings around panels shall be given in accordance with Clause U11 hereof.
- (c) Work behind wood skirtings and the like shall be dealt with as work to walls disregarding any grounds.
- (d) Work to sides and soffits of beams (grouped together) shall be so described.
- (e) Projecting quoins, projecting plinths and the like shall each be so described and given in square metres. Plinth-blocks shall be enumerated stating the size.
- (f) Plain rustications shall be given in linear metres. Ends and angles shall be deemed to be included with the items.
- Staircases U5(a) Work to quarter-space and half-space landings shall be classified as work to floors and shall be given in square metres.
- (b) Work to treads, risers and edges of landings (grouped together) shall be given in square metres. Arrises, nosings, moulds, ends and angles of risers and edges shall be deemed to be included with the item.
- (c) Work to returned ends of steps shall be added to the general work to steps. Arrises, nosings and moulds shall be deemed to be included with the items.
- (d) Non-slip inserts shall be given in linear metres as extra over the work in which they occur.
- (e) Flush-bands (or similar margins) of contrasting colour in finishings to treads and risers shall be enumerated as extra over the finishings in which they occur stating the size. Similar bands or margins around quarter-space and half-space landings shall be given in accordance with Clause U8(b) hereof.

In-Situ Finishings (Contd.)

- Staircases  
(Contd.)
- U5(f) Work to wall-strings and open-strings shall each be given separately in linear metres stating the width. Ends, angles, ramps and wreathed corners shall be deemed to be included with the item.
- (g) Work to kerb-strings shall be given in linear metres stating the girth. Raking kerb-strings shall be so described. Arrises shall be given in the description. Ends, angles, ramps and wreathed corners shall be deemed to be included with the items.
- Labours on  
finishings
- U6(a) Joints to abutments and boundaries shall be deemed to be included with the items except as otherwise provided in paragraph (b) of this Clause.
- (b) Working finishings into recessed duct-covers and the like shall be given in linear metres as extra over the finishings in which they occur stating the width in stages of 100 millimetres. Working finishings into shaped insets, recessed manhole-covers, mat-sinkings and the like shall each be enumerated separately as extra over the finishings in which they occur stating the size.
- (c) All other labours shall be deemed to be included.
- Dividing  
strips
- U7 Dividing strips in finishings shall be given in linear metres stating the size. Ends, angles and intersections shall be deemed to be included with the items.
- Skirtings,  
bands and  
margins
- U8(a) Skirtings shall be given in linear metres stating the width on face. Raking skirtings and vertical skirtings shall each be so described. Fair edges, rounded edges, beaded edges, moulded edges, and coved junctions with paving shall be given in the description. Ends, angles and ramps shall be deemed to be included with the items.
- (b) Flush, raised or sunk bands (or similar margins) of different materials in floor or wall finishings shall each be given separately in linear metres as extra over the finishings in which they occur stating the width in stages of 100 millimetres. Ends, angles, intersections and ramps shall be deemed to be included with the items.
- Kerbs
- U9(a) Work to kerbs shall be given in linear metres stating the girth on face. Raking kerbs and vertical kerbs shall each be so described. Arrises, rounded edges and coves shall be given in the description. Angles and intersections shall be deemed to be included with the items.
- (b) Work to ends of kerbs shall be enumerated stating the size. Arrises, rounded edges and coves shall be deemed to be included with the items.

In-Situ Finishings (Contd.)

- Channels U10(a) Working finishings into shallow channels shall be given in linear metres as extra over the finishings in which they occur stating the girth on face. Arrises shall be given in the description. Ends, angles, intersections and outlets shall be deemed to be included with the items.
- (b) Linings to channels shall be given in linear metres stating the girth on face. Channels to falls shall be so described. Arrises and coves shall be given in the description. Ends, angles, intersections and outlets shall be deemed to be included with the items.
- Mouldings and cornices U11(a) Architraves, mouldings, ceiling-ribs and cornices (measured on face of wall or beam) shall each be given separately in linear metres stating the girth of the visible contour. Undercut mouldings, shall be so described. Ends, angles and intersections shall be deemed to be included with the items.
- (b) Cornices with bracketing shall be so described.
- (c) Cornices with flat or weathered tops shall be so described. The width of the top shall be deemed to be part of the visible contour for the purpose of paragraph (a) of this Clause.
- (d) Enrichments (ie. regularly recurring features) shall be given in the description of mouldings. Ornaments (ie. irregularly occurring features applied where required) shall be enumerated stating the size and character. Undercut enrichments and undercut ornaments shall each be so described.
- Flush, raised or sunk panels U12 Flush, raised or sunk panels of different material in finishings shall each be enumerated separately as extra over the finishings in which they occur stating the size and shape.
- Metal-beads U13 Metal angle-beads, screed-beads and casing-beads in plasterwork shall each be given separately in linear metres stating the method of fixing. Working plasterwork to the beads shall be deemed to be included with the items.

Tile, Slab or Block Finishings

- Tile, slab or block finishings generally U14(a) For rules relating to Section U generally see Clause U 1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind of tile, slab or block units (eg. precast concrete; precast terrazzo; precast mosaic; precast asphalt; clayware; brick; natural stone; cast stone; slate; marble; glass; plastics; composition; wood-blocks; metal; linoleum; cork; rubber)

Tile, Slab or Block Finishings (Contd.)

- Tile, slab or block finishings generally (Contd.)
- U14(b) (ii) Thickness and size of tile, slab or block units.
- (iii) Shape of units where other than rectangular.
- (iv) Nature of surface finish (eg. glazed; rubbed; polished).
- (v) Bedding or other method of fixing units and any additional security safe-guards required (eg. screws; screws and rosettes; clips; anchors).
- (vi) Layout of joints (eg. breaking joint; draughtboard pattern; basket pattern; herringbone pattern).
- (vii) Grouting, pointing or other finish to joints.
- (viii) Nature of base (eg. softwood; hardwood; screeded bed; concrete; brickwork)
- (c) Temporary moulds for precast tiles, slab and block units shall be deemed to be included with the items.
- (d) Work shall be measured as executed and allowances shall be made for passings at angles but no deduction shall be made for voids not exceeding 0.50 square metres.
- Floors, pavements, wall, ceilings and staircases
- U15(a) Work to floors, pavements, walls, ceilings and staircases shall be given in accordance with the rules for in-situ finishings in Clause U3, U4 and U5 hereof.
- (b) Bent glass coverings shall be enumerated as units stating the size, the radius of girth of the bend and whether bent in the long or the short dimensions, or both.
- Labours on finishings
- U16(a) All cutting shall be deemed to be included with the items.
- (b) Plain block borders shall be given in the description of block finishings. Raking cutting and curved cutting on block finishings laid to a diagonal pattern within a plain border shall be deemed to be included with such finishings.
- (c) Fair edges, rebated edges, rounded edges, chamfered edges, splayed edges, bevelled edges and the like shall be deemed to be included with the items.
- (d) Moulded edges, grooves, flutes and the like shall be deemed to be included with the items.
- (e) Cutting and fitting into recessed duct-covers and the like shall each be given separately in linear metres as extra over the finishings in which they occur stating the width. Cutting and fitting into shaped insets, recessed manhole-covers, mat-sinkings and the like shall each be enumerated separately as extra over the finishings in which they occur stating the size.
- (f) Forming access panels shall be enumerated as extra over the finishings in which they occur stating the size and the method of securing.

Tile, Slab or Block Finishings (Contd.)

Labours on finishings (Contd.)	U16(g)	Any labours which are on glass coverings shall be given in the description of the glass units. The width of bevels shall be stated. Holes in glass units shall be given in the description and countersunk holes shall be so described.
	(h)	All other labours shall be deemed to be included.
Dividing strips	U17	Dividing strips in finishings shall be given in linear metres stating the size. Ends, angles and intersections shall be deemed to be included with the items.
Skirtings, bands, margins and sills	U18(a)	Skirtings shall be given in linear metres stating the extreme width and thickness. Raking skirtings and vertical skirtings shall each be so described. Rounded edges, moulded edges and coved junction with paving shall be given in the description. In the case of coved tile skirtings, the width stated shall be the nominal stock-pattern width unless they are described as purpose-made. In the case of stone, slate or marble coved skirtings the thickness stated shall include the projection of the cove. Ends, angles, intersections and ramps shall be deemed to be included with the item.
	(b)	Flush, raised or sunk bands (or similar margins) of different materials in floor or wall finishings shall each be given separately in linear metres stating the width. Ends, angles and intersections shall be deemed to be included with the item.
	(c)	Sills, and the like (grouped together) shall be given in linear metres stating the extreme width and thickness. Rounded edges and moulded edges shall be given in the description. Angles and intersections shall be deemed to be included with the items.
Kerbs	U19(a)	Work to kerbs shall be given in linear metres stating the girth on face. Raking kerbs and vertical kerbs shall each be so described. Rounded edges and coves shall be given in the description. Angles, ends and intersections shall be deemed to be included with the item.
Channels	U20	Block channels and linings to channels shall each be given separately in linear metres stating the width and the average depth. Rounded edges shall be given in the description. Ends, angles, intersections and outlets shall be deemed to be included with the items.
Coves and mouldings	U21	Special tiles and special slabs to form coved internal angles of any radius, rounded external angles of greater radius than the thickness of the finishings, architraves, mouldings, ceiling-ribs, cornices and the like shall each be given separately in linear metres stating the extreme size. Ends, angles and intersections shall be deemed to be included with the item.

Tile, Slab or Block Finishings (Contd.)

Flush, raised or sunk panels U22 Flush, raised or sunk panels of different material in finishings shall each be enumerated separately as extra over the finishings in which they occur stating the size and shape.

Plain Sheet Finishings

Plain sheet finishings generally U23(a) For rules relating to Section U generally see Clause U1 hereof.  
(b) Particulars of the following shall be given:-  
(i) Kind of sheeting (eg. plywood; chipboard; plasterboard; fibreboard; wallboard; asbestos-cement; plastics; linoleum; cork; rubber; steel; lead; zinc; aluminium; copper).  
(ii) Thickness and quality of sheeting.  
(iii) Method of fixing and treatment of joints.  
(iv) Nature of base.  
(c) Work shall be measured as executed but no deduction shall be made for voids not exceeding 0.50 square metre.  
(d) Laps and seams shall be given in the description stating the extent of lap and the type of seam. No allowance in measurement shall be made for these and this shall be stated.

Floor finishings U24 Finishings to floors shall be given in accordance with the rule for in-situ finishings in Clause U3 hereof.

Wall and ceiling finishings U25(a) Finishings to walls and ceilings shall each be given separately in accordance with the rules for in-situ finishings in Clause U4 hereof.  
(b) Cover-strips over joints of finishings shall be given in linear metres stating the size. Ends, angles and intersections shall be deemed to be included with the items.

Labours on finishings U26(a) All cutting shall be deemed to be included with the items.  
(b) Forming access panels shall be enumerated as extra over the finishings in which they occur stating the size and the method of securing.  
(c) All other labours shall be deemed to be included.

## Beds and Backings

Beds and  
backings  
generally

- U27(a) For rules relating to Section U generally see Clause U1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Composition and mix.
  - (ii) Thickness which shall be deemed to be exclusive of keys, grooves, open joints in brickwork and open spaces between laths.
  - (iii) Number of coats if more than one.
  - (iv) Nature of base as Clause U2(b)(vi) hereof.
  - (v) Any special treatment of base (eg. grouting; applying with bonding agent).
- (c) Beds and backings shall be measured the area in contact with the base but not deduction shall be made for voids not exceeding 0.50 square metre.
- (d) Reinforced beds and reinforced backings shall be so described. The reinforcement shall be given in accordance with the rules in Clause U32 hereof.

Beds for  
floor and  
roof  
finishings

- U28(a) Screeded beds (for in-situ floor finishings, eg. terrazzo; mosaic; cement-rubber-latex; magnesium-oxychloride; pitch-mastic; and for inflexible floor finishings laid in mortar, eg. quarry tiling; marble paving; and for mastic asphalt roofing) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U3 hereof. All labours shall be deemed to be included with the items.
- (b) Floated beds (for inflexible floor finishings laid in mastic, eg. wood-blocks flooring; and for bitumen-felt roofing) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U3 hereof. All labours shall be deemed to be included with the items.
- (c) Trowelled beds with a plain surface (for flexible floor finishings, eg. thermoplastic tiling, linoleum, rubber-flooring) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U3 hereof. All labours shall be deemed to be included with the items.
- (d) Forming shallow channels in beds shall be given in linear metres as extra over the beds in which they occur stating the girth on face. Arrisses, rounded edges, coves, ends, angles, intersections, outlets and the like shall be deemed to be included with the items..r
- (e) Linings to channels shall be given in linear metres stating the girth on face. Arrises, rounded edges, coves, ends, angles, intersections, outlets and the like shall be deemed to be included with the items.
- (f) Working beds around pipes or cable of panel-heating systems shall be given in square metres.



### Beds and Backings (Contd.)

- Backings for walls and ceiling finishings U29(a) Screeded backings with a keyed surface (for in-situ wall finishings, eg. terrazzo; mosaic; and for inflexible wall finishings laid in mortar, eg. ceramic wall-tiling, marble wall-linings) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U4 hereof. Such backings for ceiling and beam finishings shall be grouped together and similarly given. All labours shall be deemed to be included with the items.
- (b) Floated backings with a plain surface (for inflexible wall finishings laid in adhesive, eg. ceramic wall tiling) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U4 hereof. Such backings for ceiling and beam finishings shall be grouped together and similarly given. All labours shall be deemed to be included with the items.
- (c) Trowelled backings with a plain surface (for flexible wall finishings, eg. thermoplastic tiling, plastic sheeting) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U4 hereof. Such backing for ceilings and beam finishings shall be grouped together and similarly given. All labours shall be deemed to be included with the items.
- (d) Trowelled backings with a fine and true surface (for cement glaze and the like finishings) shall be grouped together and given in accordance with the rules for in-situ finishings in Clause U4 hereof. All labours shall be deemed to be included with the items.
- (e) Working backings around pipes or cables of panel-heating systems shall be given in square metres.

### Baseboarding and Lathing

- Baseboarding and lathing generally U30(a) For rules relating to Section U generally see Clause U1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Type and thickness of wood lathing.
  - (ii) Type and thickness of baseboarding and treatment of joints.
  - (iii) Type, gauge and mesh of metal lathing and extent of the laps.
  - (iv) Method of fixing.
- (c) Lathing and baseboarding shall be measured the area covered but no deduction shall be made for voids not exceeding 0.50 square metre.

Baseboarding and Lathing (Contd.)

- Wood lathing and baseboarding U31 Wood lathing and baseboarding (eg. plasterboarding; insulating fibreboarding) for wall and ceiling finishings shall be given in the description of the finishing applied to them. All cuttings and notching shall be deemed to be included with the items.
- Metal lathing U32(a) Metal lathing for floor wall and ceiling finishings shall each be given separately in square metres.
- (b) All cuttings shall be deemed to be included with the items.
- (c) Hot driving metal lathing around pilasters, columns, steel sections, pipes, tubes, conduits, bars, cables, standards, ducting, trunking, brackets, floor-springs, ventilators and the like shall be deemed to be included with the items.
- (d) Steel runners shall be given in linear metres stating the size and the method of fixing. Hangers shall be enumerated stating the size, the length and the method of fixing. Alternatively runners and hangers may be fully described and included with the lathing.
- (e) All other labours shall be deemed to be included.

Suspended Plain Sheet Linings with Supporting Metalwork

- Suspended plain sheet linings generally U33(a) For rules relating to Section U generally see Clause U1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind, thickness and quality of sheeting.
- (ii) Size and spacing of supporting metalwork (eg. metal sections; brackets; hangers).
- (iii) Length of hangers.
- (iv) Nature of structure to which the brackets and hangers are fixed and, where to steel framing, the size and spacing of the members of such framing.
- (v) Method of securing brackets and hangers to structure.
- (c) Linings shall be measured overall on the exposed faces and shall be deemed to include all necessary supporting metalwork and accessories for fixing but no deduction shall be made for voids not exceeding 0.50 square metre.
- Wall, ceiling and roof linings U34(a) Linings shall be given in square metres.
- (b) Linings to upstands or ventilators, roof-lights and the like shall each be so described.
- (c) Linings under roofs shall be so described stating whether over or under the purlins and the nature of the roof coverings.
- (d) All cuttings shall be deemed to be included with the items.

Suspended Plain Sheet Linings with Supporting Metalwork (Contd.)

- Wall, ceiling and roof linings (Contd.) U34(e) Forming access panels shall be enumerated as extra over the linings in which they occur stating the size and the methods of securing.
- (f) All other labours shall be deemed to be included.
- Metal trim U35 Metal trim at edges of linings shall be given in linear metres stating the size and method of fixing. Ends, angles and intersections shall be deemed to be included with the items.

Fibrous Plaster

- Fibrous plaster generally U36(a) For rules relating to Section U generally see Clause U1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Method of fixing and treatment of joints.
- (ii) Nature of background.
- (c) Backgrounds (eg. timber grounds; timber bracketing; metal hangers; metal bars) shall be measured in accordance with the appropriate rules in other sections.
- (d) Fibrous plasterwork shall be measured as executed but no deduction shall be made for voids not exceeding 0.50 square metre.
- Wall and ceiling coverings U37(a) Plain slab coverings and panelled slab coverings to walls and ceilings shall each be given separately in accordance with the rules for in-situ finishings in Clause U4 hereof stating the thickness.
- (b) Forming access panels shall be enumerated as extra over the finishings in which they occur stating the size and the method of securing.
- (c) All other labours shall be deemed to be included.
- Arches and domes U38 Arches, domes and groined soffits shall each be enumerated separately stating the overall size.
- Casings to beams, columns and pilasters U39(a) Plain casings to beams, columns, stanchions, pilasters and the like shall each be given separately in linear metres stating the overall girth.
- (b) Moulded and ornamental casings to beams, columns, stanchions, pilasters and the like shall each be enumerated separately stating the overall size. Shaft caps and bases shall be given in the description.

Fibrous Plaster (Contd.)

Coves and cornices (Contd.)	U40(b)	Enrichments (ie. regularly recurring features) shall be given in the description. Ornaments (ie. irregularly occurring features applied where required) shall be enumerated stating the size and character. Undercut enrichments and undercut ornaments shall be so described.
Consoles and canopies	U41	Consoles, overdoors, canopies and the like shall each be enumerated separately stating the size.
Models	U42	Specially-made models and full-size cartoons shall each be enumerated separately stating the size. Those which are required to be temporarily fixed in the building for inspection and those which are required to include modeller's grounds or boards shall each be so described.

Self-Finished Partitions

Self-finished partitions	U43	Self-finished partitions (eg. precast terrazzo; precast mosaic) shall be given in accordance with the rules for precast concrete units in Section F hereof.
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Protection

Protection	U44(a)	Protecting floor finishings and pavings shall be given as individual items stating the area and kind of work to be protected .
	(b)	Protecting all other work in this Section shall be given as an item.



## SECTION V

### GLAZING

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section V

- V1(a) An item shall be given stating that the rates for glazing shall include for all templates and all cuttings.
- (b) Work shall be grouped according to the kind and quality of glass and each group with its associated labours shall be described in accordance with the usual trade terms.
- {c} Templates shall be deemed to be included with the items.
- {d} Materials resembling glass shall be given in accordance with the rules for glass.

### Glass in Openings

- Panes  
Generally
- V2(a) For rules relating to Section V generally see Clause V1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind, type and thickness (or substance) of glass. Thickness shall be deemed to be nominal unless described as exact.
  - (ii) Kind and type of glazing compound.
  - (iii) Method of glazing (eg. with compound and sprigs; with wood beads or mouldings; with metal beads or mouldings; with metal clips or angle pieces).
  - (iv) Method of securing beads or mouldings (eg. with brads; with screws).
  - (v) Whether panes in beads or mouldings are bedded in compound. (See Clause V12 hereof).
  - (vi) Nature of sash or other surround (eg. wood; metal; stone).
- (c) Panes of irregular shape shall be measured as the smallest rectangular area from which such irregular shape can be obtained and shall be so described.
- (d) Panes in double-glazed lights not hermetically sealed (each pane measured separately) shall be so described.
- Sheet  
glass
- V3 Sheet glass and rolled or cast glass shall each be given separately in square metres.
- Plate glass  
and toughened  
glass
- V4 Polished plate glass and toughened glass shall each be given separately in square metres. Where exact thicknesses are required they shall be so described.

Glass in Openings (Contd.)

Labours on glass panes	V5(a)	Raking cutting and curved cutting shall be deemed to be included with the items.
	(b)	Blackened edges to panes shall be given in the description of the items.
	(c)	Polished edges and bevelled edges shall each be given separately in linear metres stating the width of the bevel and the size of the pane. Work on curved edges or on bent panes shall be so described. Mitres, scallops, and other shapings shall be deemed to be included with the items.
	(d)	Grinding, sandblasting and embossing (measured over the whole area of the pane) shall each be given separately in square metres stating whether the pane is wholly or partly obscured. For embossing, the type of acid work shall be stated. For design work, a full description of the design stating the type of acid work shall be given, even if in plain lines.
Drilled panes	V6	Drilled panes shall be enumerated stating the size of the pane, and the diameter and number of the holes. Countersunk holes shall be so described.
Bent panes	V7	Bent panes shall be enumerated stating the size of the pane, the radius or girth of the bend and whether bent in the long or the short dimension or both.
Brilliant cut panes	V8	Brilliant cut panes and panes with other decorative work shall each be enumerated separately stating the nature of the decoration and the size of the pane.
Silvered panes	V9	Silvered panes shall be enumerated stating the size of the pane. Coloured silvering and gold silvering shall each be so described. Venetian treatments and protective coatings shall be given in the description.
Hermetically-sealed units	V10	Double or multiple factory-made hermetically-sealed units shall be enumerated stating the size and the type.
Glass louvres	V11	Glass louvres shall be enumerated stating the size. Labours to edges shall be given in the description.
Bedding in strip material	V12	Bedding edges of pane in strips or channels shall be given in linear metres stating the kind of material.
Lead strips	V13	Lead glazing strips (for roof glazing in wood bars) shall be given in linear metres stating the method of fixing.
Hacking out	V14	Hacking out old glass and preparing rebates (measured the perimeter of the pane) shall be given in linear metres.

Leaded Lights and Copper Lights in Openings

- Lights generally V15(a) For rules relating to Section V generally see Clause VI hereof.
- (b) Particulars of the addition of the following shall be given in accordance with Clause V2(b) hereof:-
- (i) Type, section and width of comes stating whether nominal or finished width and whether reinforced.
- (ii) Shape of panes (eg. rectangular; diamond; ornamental).
- (iii) Average size of panes.
- (c) Opening lights ranging with fixed lights shall be measured the same size as the fixed lights. Lights of irregular shape shall be measured as the smallest rectangular area from which such irregular shape can be obtained and shall be so described.
- (d) Lights which are required to align one or both ways between adjacent lights shall be so described.
- (e) Fire-resisting copper lights shall be so described stating the Authority whose requirements are to be satisfied.
- Lights in openings V16(a) Leaded lights and copper lights shall each be given separately in square metres without distinction as to the size.
- (b) Lights with shaped heads, trefoils, quatrefoils and the like below the springing shall be included with those given in accordance with paragraph (a) of this Clause. The shaped heads above the springing shall be given in square metres stating the shape and the number.
- Labours on glass in lights V17 Raking cutting and curved cutting on glass in lights shall be deemed to be included with the items.
- Bent lights V18 Bent lights shall be enumerated stating the size of the light, the radius or girth of the bend and whether bent in the long or the short dimension or both.
- Saddle bars V19 Saddle bars shall be given in linear metres stating the material, the size of the bar and the method of securing to the light.

Mirrors

- Mirrors V20(a) For rules relating to Section V generally see Clause VI hereof.



Mirrors (Contd.)

Mirrors (Contd.) V20(b) Mirrors shall be enumerated stating the size and the method of fixing. Coloured mirrors shall be so described. Protective coatings, holes, countersunk holes, brilliant cutting, polished edges, bevelled edges, rounded corners and the like shall be given in the description.

Patent Glazing

Patent glazing V21(a) For rules relating to Section V generally see Clause VI hereof.  
(b) Patent glazing (measured over bars) shall be given in square metres stating the length and spacing of the glazing bars, the nature of the bearing (eg. timber; metal; concrete) and the span between bearings. Classification shall be as follows:-  
(i) To roofs.  
(ii) To skylights.  
(iii) To lantern lights stating the type (eg. lean-to; gable-ends; hipped; domed; barrel).  
(iv) To vertical surfaces.  
(c) Opening portions of patent glazing shall be enumerated as extra over the work in which they occur stating the size. Opening gear shall be given in the description stating the type and the method of fixing.

Labours on patent glazing V22 Raking cutting and curved cutting shall be deemed to be included with the items.

Dome-Lights

Dome-lights V23(a) For rules relating to Section V generally see Clause VI hereof.  
(b) Dome-lights shall be enumerated stating the overall size, the shape and the method of fixing.

Glass Wall-Linings

Glass wall-linings V24 For glass wall-linings see Section U hereof.

Glass Blockwork

Glass  
blockwork      V25      For glass blockwork see Section G hereof.

Protection

Protection      V26      Protecting the work in this Section shall be  
given as an item.

S E C T I O N W

PAINTING AND DECORATING

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section W

- W1(a) An item shall be given stating that:-
- (i) The rates for painting shall include for working to or at any height; internal or external work; rubbing down between coats; work in multi-colours; cutting to line; opening edges of windows and doors and work on additional surfaced exposed by such opening edges; hooks, bolts and clips to sheeting and pipe clips, saddles, holderbats and the like.
  - (ii) The rates for painting on wood shall include for work on hardwood or softwood and for knotting.
  - (iii) The rates for painting on manufactured boards and wood shall include for surface filling.
  - (iv) The rates for paper hanging and hanging of hessian, vinyl surfaced papers and the like shall include for all preparatory work and all cuttings, notchings and cutting and fitting around pipes, brackets, switches, ceiling voids and the like.
- (b) Work required to be executed on members before they are fixed shall be so described.
- (c) Material required to be applied by a particular method shall be so described stating the method.
- (d) Work shall be measured the area covered and appropriate allowances made (unless otherwise provided herein) for the extra girth of edges, mouldings, panels, sinkings, corrugations, flutings, carvings, enrichments and the like, but no deduction shall be made for voids not exceeding 0.50 square metre.

Painting and Similar Work

- Painting and similar work generally W2(a) For rules relating to Section W generally see Clause W1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind and quality of materials.
  - (ii) Nature of work (eg. limewhiting; distempering; painting; staining; graining; varnishing)
  - (iii) Nature of the base on which work is executed.
  - (iv) Preparatory work (eg. rubbing down; burning off; stripping old paper or other decorations; spot-priming; applying strips of scrim).
  - (v) Number of priming or sealing coats.

Painting and Similar Work (Contd.)

- Painting and similar work generally (Contd.)
- W2(b) (vi) Number of undercoats.  
(vii) Number of finishing coats stating the surface finish.
- (c) Rubbing down between coats with glasspaper shall be deemed to be included with the items. Particulars of any other abrasive required to be used shall be given.
- (d) Painting on wood shall be deemed to include for work on hardwood or softwood and for knotting.
- (e) Painting on manufactured boards and wood shall be deemed to include for surface filling and stopping.
- On general surfaces
- W3(a) Work shall be given in square metres. Classification of work shall be as follows:-
- (i) On walls.  
(ii) On ceilings.  
(iii) On skirtings, dado-rails, picture-rails, wall-mouldings; cappings and the like (grouped together).  
(iv) On floors.  
(v) On other general surfaces (grouped together) except those separately dealt with herein.
- (b) Work on friezes shall be added to similar work on abutting walls or ceilings. Work on piers and columns shall be added to similar work on walls. Work on beams shall be added to similar work on ceilings.
- (c) Work on corrugated surfaces, fluted surfaces and carved surfaces shall each be so described.
- On wood frames, wood windows and glazed wood doors
- W4(a) Work on wood sashes, wood casements and glazed wood doors (grouped together) and measured on each side over glass; shall be given in square metres.
- (b) Work on edges of opening casements and additional painting (caused by opening lights) on the surrounding frame shall be deemed to be included with the item.
- (c) Work on glazing beads, butts and fastenings shall be deemed to be included with the items to which they are attached.
- On metal windows and glazed metal doors
- W5(a) Work on metal windows and glazed metal doors (grouped together) and measured on each side over frames, mullions, transoms and glass; shall be given in square metres.
- (b) Work on edges of opening casements and additional painting (caused by opening lights) on the surrounding frame shall be deemed to be included with the item.
- (c) Work on metal sub-sills, hopper cheeks and the like shall be measured and added to similar work on metal windows.
- (d) Work on glazing beads, butts and fastenings shall be deemed to be included with the items to which they are attached.

Painting and Similar Work (Contd.)

- On structural W6  
steelwork Work on structural steelwork shall be given in square metres. Work on members of roof trusses, lattice steelwork and the like (grouped together) shall be so described. Work on hookbolts, clips and the like shall be deemed to be included with the purlins, rails and the like with which they are associated.
- On radiators W7 Work on radiators (measured the area of heating surface) shall be given in square metres. Work on brackets and stays shall be deemed to be included with the work on radiators.
- On railings, W8(a) Work on posts, rails, balusters and other fences and gates members of plain open-type fencing plain open-type gates and the like (grouped together) shall be given in square metres.
- (b) Work on close-type fencing, close-type gates and the like (grouped together and measured overall regardless of actual girth) shall be given in square metres. Each side shall be measured and this shall be stated.
- (c) Work on ornamental railings, ornamental gates and the like (grouped together and measured overall regardless of voids) shall be given in square metres. Each side shall be measured and this shall be stated.
- On gutters W9 Work on gutters shall be given in square metres.
- On pipes, W10 Work on pipes, bars, cables, conduits, standards, bars, cables, straps, ducting, trunking, trays and the like conduits, straps and ducting (grouped together) shall be given in square metres.
- On sundries W11(a) Work on standard saddles, standard pipehooks, standard holderbats and the like shall be deemed to be included with the work on pipes, tubes, and conduits, but work on other components for fixing shall be enumerated stating the size.
- (b) Work on ventilating gratings, soot-doors, flushing-cisterns, rainwater-heads, brackets, strap-hinges, and the like shall each be enumerated separately irrespective of size.

### Polishing

- Polishing W13(a) For rules relating to Section W generally see Clause W1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Kind and quality of materials.
  - (ii) Type of polish (eg. french polish; wax polish).
  - (iii) Nature of base on which work is executed.
  - (iv) Preparatory work on base (eg. staining; fuming; bodying in; stopping; rubbing down).
- (c) Polishing shall be given in accordance with the rules for painting.

### Signwriting

- Signwriting W14(a) For rules relating to Section W generally see Clause W1 hereof.
- (b) Letters or numerals, stops, direction-indicators and the like shall each be enumerated separately stating the style and height of the letters or numerals and the number of coats. Work finished with gold leaf shall be so described.

### Paperhanging

- Paperhanging generally W15(a) For rules relating to Section W generally see Clause W1 hereof.
- (b) Particulars of the following shall be given:-
- (i) Type of paper.
  - (ii) Price per piece or square metre or manufacturers number (except in the case of lining paper).
  - (iii) Price per linear metre of border-strips and stiling strips or manufacturers number.
  - (iv) Price per unit of corners and motifs or manufacturers number.
  - (v) Nature of base on which paper is applied.
  - (vi) Preparatory work on base (eg. rubbing down; stripping old paper or other decorations; cutting out and repairing cracks; stopping; sizing; applying strips of scrim).

Paperhanging (Contd.)

On general surfaces	W16	Papering on surfaces shall be given in square metres. Classification shall be as follows:-  (i) On walls. (ii) On ceilings and beams (grouped together).
Labours on papering	W17	Raking cutting, curved cutting, cutting and fitting around pipes, switches, ceiling roses, brackets and the like shall be deemed to be included with the items.
Borders, corners and motifs	W18(a)	Border-strips and stiling-strips shall each be given separately in linear metres. Cutting strips to profile shall be given in the description. Mitres and intersections shall be deemed to be included with the items.
	(b)	Corners and motifs shall each be enumerated separately. Cutting units to profile shall be given in the description.

Protection

Protection	W19	Protecting the work in this Section shall be given as an item.
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S E C T I O N X

DRAINAGE

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section X

- X1(a) An item shall be given stating that preambles to previous sections shall apply equally to work within this section.
- (b) Particulars of any trial holes or trial bores shall be given in accordance with Clause D1(a) hereof.
- (c) Work inside existing buildings shall be so described. Handling materials and getting them in or out of such buildings shall be deemed to be included with the items.

Work in all Trades

- Work generally X2 For rules relating to Section X generally see Clause X1 hereof.
- Pipe trenches X3(a) Excavating pipe trenches shall be given in linear metres stating the depth-range in successive stages of 1.50 metres (eg. not exceeding 1.50 metres total depth; between 1.50 metres and 3 metres total depth) and the average depth within the depth-range to the nearest 250 millimetres. Excavating curved trenches shall be so described. The internal diameter of the pipe to be received shall be stated in each case, except that trenches to receive pipes not exceeding 200 millimetres in diameter may be grouped together and so described. Grading bottoms, planking and strutting, filling in, compacting and disposing of surplus spoil shall each be given in the description of trenches.
- Beds, benchings and coverings X4 Concrete beds, benchings and coverings shall each be given separately in linear metres stating the mix and size of the concrete and the internal diameter of the pipe. Formwork shall be given in the description.
- Pipes X5(a) Pipes of any material (measured over all pipe fittings) shall be given in linear metres stating the kind of material, the quality of pipe, the internal diameter and the method of jointing.

Work in all Trades (Contd.)

- Pipes  
(Contd.)
- X5(b) Pipe-fittings (eg. bends; junctions; diminishing pipes) shall each be enumerated separately as extra over the pipes in which they occur. Cutting and jointing pipes to such fittings shall be deemed to be included with the items.
- (c) Suspended pipes shall be so described. Supports shall be included in the description.
- (d) Vertical pipes shall be so described.
- Accessories X6 Accessories (eg. gullies; traps; inspection shoes; fresh-air inlets; non-return flaps) shall each be enumerated separately stating the kind, quality and size of the accessory and the internal diameter of each inlet and outlet. Jointing pipes to such accessories; extra over excavation, backfilling and disposal of surplus excavated material; bedding in concrete and providing gratings; sealing plates and the like shall be given in the description of the accessories.
- Manholes,  
soakaways,  
cesspits,  
and septic  
tanks
- X7(a) Inspection chambers, manholes, soakaways and the like (grouped together) shall be given in detail under an appropriate heading stating the number of each type of unit.
- (b) Cesspits, septic tanks and the like for the treatment and disposal of sewage shall each be given in details under an appropriate heading stating the number of units.
- (c) Excavation, concrete work, blockwork and other work shall be given in accordance with the rules in the appropriate Section hereof.
- (d) Building in ends of pipes and cutting pipes shall be deemed to be included with the items.
- (e) Channels, concrete benchings, foot-irons, covers and intercepting traps shall each be enumerated separately stating the type, the quality, the size and the method of bedding and fixing.
- Testing  
drains
- X8 Testing the drainage system shall be given as an item stating the method of testing.

Protection

- Protection X9 Protecting the work in this Section shall be given as an item.

S E C T I O N Y

FENCING

For General Rules see Section A

THE UNIT OF BILLING SHALL BE THE METRE

Generally to Section Y

- Y1(a) An item shall be given stating that the preambles to previous sections shall apply equally to this Section of the work.
- (b) Particulars of the following shall be given:-
- (i) Kind of material (eg. softwood; hardwood; concrete; steel).
  - (ii) Preliminary treatment of material (eg. impregnating; galvanizing).
- (c) Fencing specially designed to suit sloping ground shall be so described.
- (d) Curved fencing (ie. curved between posts) shall be so described.
- (e) Posts, struts and other supports which occur at regular intervals in fencing shall be given in the description of the fencing stating the size, the spacing, the height above the surface of ground or base and the depth below such surface. For special posts see Clause Y16 hereof.
- (f) Pointing and driving posts, struts and other supports into the ground shall be given in the description of the fencing. For excavating holes in ground (for posts not driven in) see Clause Y17 hereof.
- (g) Gravel-boards with or without centre stumps shall be given in the description of the fencing stating the size and the method of fixing.
- (h) Reinforced tapes or wires shall be given in the description of the fencing stating the size or gauge, the number of lines and the method of fixing.
- (j) Fencing shall be measured overall (ie. over posts and other supports). The height of fencing shall be measured from the surface of the ground (or other base) to the top of the filling (or to the top wire) between the posts.

Open-Type Fencing

Open-type  
fencing  
generally

Y2

For rules relating to Section Y generally see  
Clause Y1 hereof.

### Open-type Fencing (Contd.)

Post-and-wire fencing	Y3	Post-and-wire fencing shall be given in linear metres stating the height of the fencing, the gauge and number of line-wire, the method of attaching the line-wire to the posts (eg. threaded through the posts; stapled to the posts) and the method of straining. Barbed wire shall be so described stating the spacing of the points.
Post-and-rail fencing	Y4	Post-and-rail fencing shall be given in linear metres stating the height of the fencing, the size and number of horizontal rails and the method of fixing the rails to the posts.
Chain-link and wire mesh fencing	Y5	Chain-link fencing and wire-mesh fencing shall each be given separately in linear metres stating the height of fencing, the gauge and number of line-wires, the method of attaching the line-wires to the posts, the size of mesh and gauge of wire in the fabric and the method of attaching the fabric to the line-wires.
Cleft-pale fencing	Y6	Cleft-pale fencing shall be given in linear metres stating the height of the fencing, the spacing of the pales, the number of lines of binding wire and the method of fixing the binding wires to the posts.
Pallisade fencing	Y7	Pallisade fencing shall be given in linear metres stating the height of the fencing, the size and number of horizontal rails, the method of fixing the rails to the posts, the size and spacing of the pale, the treatment of the tops (eg. pointed; shaped) and the method of fixing the pales to the rails.
Metal bar fencing	Y8(a)	Metal bar fencing shall be given in linear metres stating the height of the fencing, the size spacing and arrangement of the bars, the treatment of the tops of the bars (eg. pointed; shaped) the size and number of the rails, the method of assembling (eg. riveted; welded) and the method of fixing the rails to the posts. Side-stays back-stays and struts shall each be enumerated separately stating the size and the method of fixing.
	(b)	For railing forming part of a building see Section R hereof.

### Close-Type Fencing

Close-type fencing generally	Y9	For rules relating to Section Y generally see Clause Y1 hereof.
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Close-Type Fencing (Contd.)

Close-boarded fencing	Y10	Close-boarded fencing shall be given in linear metres stating the height of the fencing, the size and number of horizontal rails, the method of jointing the rails to the posts, the type of boarding (eg. sawn; cleft) the type of joint between boards (eg. flush; overlapping) and the method of fixing the boarding to the rails. Weathered cappings and supporting fillets shall be given in the description stating the size of the members and the method of fixing to the boarding.
Built-up concrete fencing	Y11	Built-up concrete fencing shall be given in linear metres stating the height of the fencing, the size and thickness of the infilling units between posts, the method and jointing the units to the posts, the size of the cappings and the method of fixing the cappings to the infilling units.
Corrugated fencing	Y12	Corrugated fencing shall be given in linear metres stating the height of the fencing, the size and number of horizontal rails, the method of fixing the rails to the posts, the kind and gauge or thickness of the corrugated sheeting, the extent of the laps in the sheeting, the treatment of the tops of the corrugations (eg. pointed; shaped) and the method of fixing the sheeting to the rails.

Gates

Gates	Y13(a)	For rules relating to Section Y generally see Clause Y1 hereof.
	(b)	Gates shall be enumerated stating the size and the method of construction. Hinges, locks, fastenings and the like shall be given in the description. Gate-posts (other than those forming part of the fencing) shall be enumerated stating the size. Holes for gate-posts shall be given as Clause Y17 hereof.
	(c)	Gate-stops, gate-catches and independent gate-stays shall each be enumerated separately stating the method of fixing. Excavating and bedding in concrete shall be given in the description stating the composition and mix of concrete.

Sundries

Sundries generally	Y14	For rules relating to Section Y generally see Clause Y1 hereof.
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Sundries (Contd.)

Concrete spurs	Y15	Concrete spurs for timber posts, shall be enumerated stating the size and the method of fixing. Bolts and holes shall be given in the description stating the size.
Special posts	Y16	End-posts, angle-posts, gate-posts, straining-posts and other posts which differ from those given in the description of the fencing shall each be enumerated separately as extra over the fencing in which they occur stating the size and the depth in the ground of other base. Struts shall be given in the description stating the size, the number and the method of fixing to the posts. Holes for posts and struts shall be given as Clause Y17 hereof.
Holes and mortices for posts	Y17	Excavating holes for posts, struts and other supports shall be enumerated stating the size, the depth, the nature of the filling (eg. excavated material; concrete) and the disposal of surplus spoil.