

Smm7

A Code of Procedure for Measurement of Building Works



Co-ordinated project information

Copyright The Royal Institution of Chartered Surveyors
© 1988 The Building Employers Confederation

ISBN 0 85406 361 7 (RICS)

ISBN 0 85263 005 1 (BEC)

All rights reserved. No part of this publication covered by the above copyright may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owners.

Designed and set by NBS Services Ltd., Newcastle upon Tyne.

Printed by Eyre & Spottiswoode, Margate, Kent.

Contents

Preface	1
---------	---

Part A General Principles

1 Background and objectives	4
2 SMM7 and the CCPI conventions	6
3 Bills of quantities	7
4 Drawn information at tender stage	8

Part B Commentary on particular rules

General rules	12
A Preliminaries/General conditions	14
C Demolition/Alteration/Renovation	17
D Groundwork	18
E In situ concrete/Large precast concrete	23
F Masonry	25
G Structural/Carcassing metal/timber	28
H Cladding/Covering	29
J Waterproofing	30
K Linings/Sheathing/Dry partitioning	31
L Windows/Doors/Stairs	32
M Surface finishes	33
N Furniture/Equipment	36
P Building fabric sundries	37
Q Paving/Planting/Fencing/Site furniture	38
R Disposal systems	39
S Piped supply systems	Y
T Mechanical heating/cooling/refrigeration systems	Y
U Ventilation/Air conditioning systems	Y
V Electrical supply/power/lighting systems	Y
W Communications/Security/Control systems	Y
X Transport systems	40
Y Mechanical and electrical services measurement	41

Appendices

1. Location drawings	46
2. Component drawings	52
3. Dimensioned diagrams	53
4. Example quantities co-ordinated with specification	54

Y: Rules and commentary for these work groups are given under Y Mechanical and electrical services measurement.

Abbreviations

ACE	Association of Consulting Engineers
BEC	Building Employers Confederation
CAWS	Common Arrangement of Work Sections for Building Works
CPI	Co-ordinated Project Information
CCPI	Co-ordinating Committee for Project Information
NCC	National Consultative Council
PIG	Projection Information Group of the NCC Standing Committee
RIBA	Royal Institute of British Architects
RICS	Royal Institution of Chartered Surveyors
SJC	Standing Joint Committee for the SMM
SMM	Standard Method of Measurement of Building Works
SMMDU	Standard Method of Measurement Development Unit

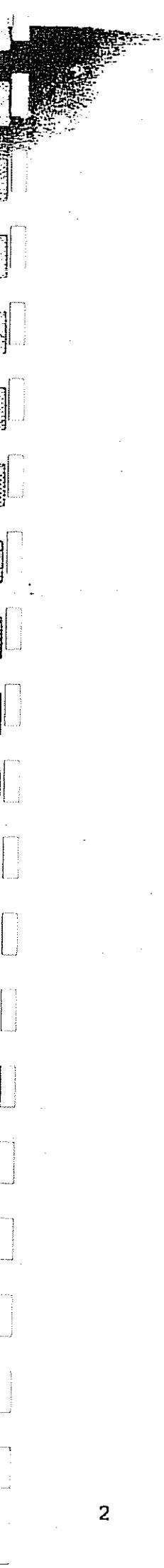
Preface

This Code of Procedure for Measurement of Building Works, which accompanies the seventh Edition of the Standard Method of Measurement, is a successor to the Practice Manual which accompanied SMM6. Like the former Practice Manual the Measurement Code is non-mandatory and is intended to be read in conjunction with SMM7. It has three main purposes; first and most importantly, to encourage good practice in the measurement of building works; second to give guidance on the communication of information relative to quantities of finished work where their value is modified by position, complexity, simplicity, repetition, eccentric distribution or other cost significant factors; third to give a brief explanation of a number of novel features introduced into SMM7, why they have been included and how they came about.

It may be thought that some of the content of the Measurement Code is of an elementary nature. It should be remembered however that the Code is directed towards the student or beginner as much as to the experienced practitioner and that which may seem elementary to the latter is not necessarily so to the former. For this reason certain elements of basic practice have been included.

The Measurement Code, like SMM7, is a document prepared in accordance with the precepts of Co-ordinated Project Information. The assistance given to the SJC by members of the CCPI Working Groups responsible for preparing the Common Arrangement and the Codes for Drawn and Specification Information is gratefully acknowledged.

CJW: 1 October 1987



Part A

General principles

1 Background and objectives

1.1 Introduction

The Standard Method of Measurement of Building Works has, since its first edition in 1922, evolved to meet the changing needs of the building industry. The responsibility for revising the SMM is vested in the joint RICS/BEC Standing Joint Committee for the SMM (SJC), and this responsibility has once again been discharged with the publication of the seventh edition (SMM7). SMM7 introduces a number of novel features and one of the objectives of this Code is to give a brief explanation of why they have been included and how they came about.

1.2 Background

In 1972 a Standard Method of Measurement Development Unit (SMMDU) was set up by the RICS and BEC to carry out a fundamental review of the measurement of building work. The SMMDU was adopted in 1979 by the CCPI as its working group responsible for developing the measurement convention as one of the proposed set of co-ordinated project information documents. At this time representatives from the RIBA and ACE joined the Unit to reflect the wider CCPI interests.

1.3 SMM Development Unit

The SMMDU, after the publication of SMM6 in 1978 and adoption by CCPI, was given revised terms of reference which included:

- To advance the preparation of co-ordinated conventions for documentation as envisaged in the NCC Project Information Group's report.
- To take account of the work and recommendations of CCPI and to plan the Unit's work accordingly.
- To prepare proposals for SMM7 which would provide simpler and less detailed bills of quantities for use where design has been fully prepared; to draw up a schedule of the design information which would satisfy this criterion; and to consider the arrangements, contractual or otherwise, appropriate to using such a method of measurement where design information is at a less complete stage.
- To make recommendations on the presentation of the rules of measurement.

In the course of its work the SMMDU consulted specialist contractors and other interested parties through the Advisory Panels set up by the SJC and published two discussion documents setting out its proposals for SMM7.

The first of these, published in 1981, contained measurement rules for two work sections to illustrate the intended format and the level of simplification proposed in these sections. The discussion document also set out the criteria used for drafting the rules of measurement, and made proposals on the format of bills of quantities.

The second discussion document, published in 1982, set out proposals to meet the situation where design information is not complete at tender stage and also proposals for Preliminaries and a Practice Manual (Code of Procedure for Measurement of Building Works). The SMMDU was wound up in 1984 and the drafting of SMM7 was then completed by the SJC.

1.4 The Code of Procedure for Measurement of Building Works

This Code, which is advisory and does not have the contractual status of SMM7, has the following objectives:

- To encourage good practice in the measurement of building works and preparation of bills of quantities.
- To encourage uniform interpretation and use of SMM7 by giving, where appropriate, illustrations and explanations of how particular rules are expected to be used.
- To provide a Code of Procedure for Measurement of a similar standard and function as the Codes of Procedure for Production Drawings and Project Specification with which it has been co-ordinated.
- To explain the relationship between SMM7 and the Codes for Production Drawings, Project Specification and the Common Arrangement of Work Sections.
- To provide examples of the application of any novel proposals.

2 SMM7 and the CCPI Conventions

2.1 The Common Arrangement of Work Sections

The Common Arrangement of Work Sections for Building Works (CAWS), which has been used to arrange SMM7, has been prepared by CCPI. Its purpose is to define an efficient and generally acceptable common arrangement for specifications and bills of quantities for building projects. It identifies natural groupings of work based upon extensive sampling of available documents and analysis of user patterns. A full explanation of the derivation of CAWS and definitions of the Work Sections can be found in the CCPI publication 'Common Arrangement of Work Sections for Building Works'.

2.2 The Code of Procedure for Project Specification

The Code of Procedure for Project Specification provides guidance on preparing the supplementary information contained in project specifications or specification preambles to bills of quantities.

It has three parts; part A contains guidance on the general principles of preparing specification information; part B gives check lists for specification content for most CAWS work sections; part C shows how libraries of specification clauses can be used to meet the recommendations of the Code.

2.3 The Code of Procedure for Production Drawings

The Code of Procedure for Production Drawings is primarily concerned with guidance on the arrangement and co-ordination of production drawings so that communication between the designer and the builder is more efficient.

The Code also sets out the SMM7 requirements for drawings to be provided at tender stage. This information is reproduced at Appendices 1 and 2 hereof.

3 Bills of quantities

3.1 Sub-contractors

The measurement rules in SMM7 have been prepared on the assumption that main contractors, when seeking tenders from sub-contractors, will issue information in accordance with the rules of SMM7. This means that any extracts from bills of quantities should be accompanied by the appropriate drawings, extracts from the specification, preliminary bill items and descriptions of work given in accordance with the General Rules.

3.2 Preliminaries/General conditions

The preliminaries section of a bill should contain two types of cost significant item:

1. Items which are not specific to work sections but which have an identifiable cost which is useful to consider separately in tendering e.g. contractual requirements for insurances, site facilities for the employer's representative and payments to the local authority.
2. Items for fixed and time-related costs which derive from the contractor's expected method of carrying out the work, e.g. bringing plant to and from site, providing temporary works and supervision.

The fixed and time-related subdivision given for a number of preliminaries items will enable tenderers to price the elements separately should they so desire. Tenderers also have the facility at their discretion to extend the list of fixed and time-related cost items to suit their particular methods of construction.

In addition to the cost significant items required by the method, other preliminaries items which are important from other points of view, e.g. quality control requirements, administrative procedures, may need to be included to complete the Preliminaries/General conditions as a comprehensive statement of the employer's requirements.

3.3 Supplementary information

The information generated by the measurement rules needs the addition of relevant supplementary information to complete the description of a particular item of work. Guidance on the preparation of specification preambles and project specifications is given in the Code for Project Specification.

3.4 Format of bills of quantities

The format of bills of quantities continues to be a matter for the discretion of the surveyor preparing bills of quantities for a particular project. However, with the introduction of co-ordinated project information it will be appropriate in future to prepare bills of quantities in accordance with CAWS if the greatest benefit and ease of use is to be derived. Since the SMM7 rules have been so arranged, and traditionally the majority of bills of quantities have followed SMM order, the adoption of this order in bills of quantities should not give rise to significant difficulties in practice. Project specifications and preambles should also be arranged in accordance with CAWS.

It is recommended that items for individual buildings should be kept separate. This can be achieved, for example, by providing separate bills for each block, or by providing a multi-column analysis on the page facing the items. The choice of presentation is a project decision largely based on the degree of difference in the form of construction in separate blocks.

4 Drawn information at tender stage

4.1 General

The rules of SMM7 require drawn information to be provided to tenderers to give:

- an overall picture of the project to allow assessment of the cost significance of the design and decisions to be made about methods of construction.
- detailed information about parts of the work where this information is more effectively communicated graphically rather than by a lengthy description in the bill of quantities.

The requirements for provision of this information are dealt with in detail below. Drawings selected from those normally available for construction of the project should satisfy the SMM7 requirements (except for dimensioned diagrams).

Apart from the specific requirements for provision of drawings, SMM7 allows descriptive and specification information to be given on drawings or in the specification provided a specific cross reference is given in the bill of quantities description of the item (SMM7 General Rule 4.2).

The following types of drawings are referred to in SMM7:

- Location drawings
- Component drawings
- Dimensioned diagrams.

4.2 Location drawings

The SMM7 rules for Preliminaries/General conditions require certain location drawings, as defined in General Rule 5.1, to accompany the bills of quantities. The architect's smaller scale location drawings will normally satisfy this requirement.

The majority of work sections in SMM7 commence with a statement of the information to be provided specifically for that type of work. The requirements will normally be met by the architect's location drawings referred to above. If not, other drawings produced by the architect, structural, mechanical and electrical engineers etc. should be provided. Appendix 1 is a checklist of all SMM7 requirements for provision of location drawings.

SMM7 applies equally to all with quantities projects. However, when deciding which drawings to include to comply with the rules, the type, size and relative complexity of the particular project will need to be considered. For example the scope and location of foul drainage above ground (R11) for a simple single storey building may be adequately defined by the general arrangement floor plan showing the sanitary appliances whereas more detailed drawn information will be required for this work in a more complex building.

In addition to the requirements concerning location drawings there are other SMM7 rules, which although not specifically referring to drawings, can often be complied with to best advantage by giving information on drawings referenced from the bills of quantities. An example is Section D20 Excavating and filling which requires details of:

- Ground water level
- Trial pits or bore hole details stating their location
- Features retained
- Live over or underground services indicating location.

4.3 Component drawings

Component drawings are required by General Rule 5.2 to show the information necessary for the manufacture and assembly of components. Appendix 2 is a checklist of all SMM7 requirements for provision of component drawings.

4.4 Dimensioned diagrams

Dimensioned diagrams are required by SMM7 General Rule 5.3 to show the shape and dimensions of the work covered by an item. They may be used at the discretion of the quantity surveyor as an alternative to a dimensioned description except in those cases where there is a specific requirement for a dimensioned diagram. Appendix 3 is a list of dimensioned diagrams required to be given in the bills of quantities.

Dimensioned diagrams may be prepared by the quantity surveyor or, on his behalf, by the architect. They can also be extracts from the architect's or engineer's drawings reproduced at a suitable size for incorporation in the bills of quantities.

Dimensioned diagrams should not appear in documentation other than the bills of quantities. However, there may be occasions where it is more appropriate to issue the architect's or engineer's drawings with the bills of quantities rather than produce dimensioned diagrams. In such instances it will be necessary to identify the drawings in the bill description.

4.5 Preparation of tender documents

The tender documentation will include the bills of quantities, the tender drawings, the project specification (as appropriate), the form of tender and the letter of invitation. The bills of quantities will list the drawings from which the bills have been prepared, and copies of these should be kept as a record. It is good practice to indicate which of the drawings listed accompany the tender documents.

As much of the information as possible should be contained within the bills of quantities to minimise the problem of expensive reproduction of drawings. The provision of copy negatives or similar methods rather than prints will also assist in keeping down tendering costs.

It will be of assistance to contractors if, when domestic sub-contractors are named in bills of quantities, the drawings and the specification relevant to their work are sent to them direct, obviating the need for all tendering contractors to do so when they can see from the bill that this has been done.

Part B

Commentary on particular rules

General rules

1. Introduction

In order to define the precise nature and extent of the proposed work it will be necessary to give, in descriptions or elsewhere, certain supplementary information including any limits on tolerances, method, sequence, etc. imposed by the designer.

2. Use of the tabulated rules

2.1-13

These rules describe how the tables are used to compile item descriptions, to divide work into separate items and to determine appropriate measurement units. Items cannot always be adequately described by restricting descriptions to words drawn from the various columns.

Section E30 can be taken as an example of compilation of item description. The first classification column shows that bar reinforcement must be identified as such and that it may not be grouped with spacers and chairs. The second classification column requires that the nominal size shall be stated. The third classification column provides that straight, bent and curved bars should each be given as separate items and identified in item descriptions. The next column establishes that the measurement unit is the tonne (t). The fourth classification column provides that horizontal bars of length greater than 12 metres and vertical bars of length greater than 6 metres must be measured separately and so described, stating the length in 3 metre stages.

Descriptions must contain a 'descriptive feature' as required by each of the first three classification columns but should only include 'descriptive features' from the fourth classification column if they are applicable. In this example, this means that a statement about the length of the bars is only necessary if the stated lengths are exceeded.

Similarly, for fabric reinforcement in the same table, the fourth classification column contains two 'descriptive features'. They are 'bent' and 'strips in one width, width stated'. Neither matter would be included in a description if neither was applicable, but if both were applicable both would be stated.

Returning to bar reinforcement, the right hand side of the table contains an example of each of the four types of supplementary rule. The measurement rule M1 provides for the weight to exclude rolling margins in measuring the tonnage of steel. The definition rules D1 and D2 widen the usual definitions of 'horizontal' and 'vertical'. This means that simple phrases can be used in bill item descriptions but carry additional precisely defined meanings. The coverage rule C1 states that bar reinforcement includes hooks, tying wire, spacers etc.

The supplementary information rules S1-3 refer to 'kind and quality of materials', 'details of tests' and 'bending restrictions'. This means that the item description must either give full details of these matters or give a reference to the clauses in the specification where this information will be found. It also means that separate items must be given if there are bars of different materials.

2.12-13

These two rules require separate items in the bill of quantities if the required supplementary information varies e.g. 'kind and quality of materials and mix details' in rule S1 of Section E10. If the accompanying specification information defines particular mixes then each of the respective bill items may give a cross-reference to the specification, e.g. 'mix E10/105'.

The supplementary information column does not set out what constitutes an adequate specification, but lists those items of specification the variation of which will generate additional measured items. The Code for Project Specification includes checklists for the content of project specification/ preambles.

10. Procedure where the drawn and specification information required is not available

10.1

Approximate quantities are appropriate where the work can be described in accordance with the rules but the quantity of work required cannot be accurately determined. The tenderer should make allowance for their effect when pricing the relevant preliminaries and programming the contract works. Work which is the subject of approximate quantities should be remeasured as executed and the appropriate adjustments effected in accordance with the Contract.

10.3-6

New rules have been introduced for two types of provisional sum (defined work and undefined work). These require that each sum for defined work should be accompanied in the bills of quantities by a description of the work sufficiently detailed for the tenderer to make allowance for its effect in the pricing of relevant preliminaries. The information should also enable the length of time required for execution of the work to be estimated and its position in the sequence of construction to be determined and incorporated into the programme.

11. Work not covered

11.1

This rule could also be used in the measurement of contractor designed work.

A Preliminaries/General conditions

A11 Drawings

The drawings to be listed are those from which the bills of quantities have been prepared which is not the same as those required by the rules to be provided with the bills. Similarly all the drawings listed need not in due course be the contract drawings.

A12 The Site/Existing Buildings

The reference to existing buildings relates only to those buildings which could have an influence on cost. This could arise from their close proximity making access difficult, their heights relative to the possible use of tower cranes or the fragility of, for example, an historic building, necessitating special care.

A13 Description of the work

The description of the work as a whole and the circumstances in which it is to be constructed is intended to convey to the estimator an initial impression of the types of work involved, including any particular or unusual features or conditions that are relevant. Bearing in mind that much of the information required to give this initial impression will be readily available from the drawings that accompany the tender documents, the description required under this rule can be relatively succinct. In addition, as the estimator proceeds through the bill, further general information will become apparent from the descriptions which precede individual sections.

The following example illustrates a description for a three storey reinforced concrete office block. Dimensions have been included because whilst they will be apparent from the drawings, it is considered helpful to the estimator to have them repeated here.

Description of the building

'Prior to the contract commencing all work up to ground floor slab will be carried out by others including reduced level excavation, reinforced concrete piles and pile caps, sub-base and concrete ground floor slab together with concrete walls and floor to basement plant room.'

'The work comprises the construction of the superstructure of a three storey office block, 65.00 x 14.00 m and 12.50 m high with part basement 15.00 x 14.00 m and 4.00 m high (a total area of 2940 m²). The construction is a reinforced concrete frame of flat slab floors and roofs with mushroom headed columns. The external walls are fair faced concrete block cavity construction with aluminium windows and doors in hardwood frames. The roof is asphalt covered.'

'The building is to be finished for tenant fitting out but includes low pressure hot water and heating, electrical installation, fire alarms, emergency lighting and a bank of two lifts. Ancillary work includes external services, drainage, roads, fences, car park and landscaping work.'

Protection and plant

The rules do not require items for protection or for plant to be given in each section as was the case with SMM6, these items being covered in the preliminaries, rules A34:1.6, A42:1.11 and A43. Contractors will need to bear this in mind when preparing sub-contract enquiries.

A34 Employer's requirements: Security/Safety/Protection

Examples of other requirements or limitations imposed by the employer which should, if applicable, be referred to are:

- Restriction on the use of radios by employees.
- Protection of trees.
- Car parking arrangements for employees.

A35 Employer's requirements: Specific limitations on method/sequence/timing

Examples of other requirements or limitations imposed by the employer which should, if applicable, be referred to are:

- Restrictions on the employment of labour.
- Restrictions on working area.

A36 Employer's requirements: Facilities/Temporary work/Services

Rule A36:1.6 relates only to those cases where specific requirements for temperature and humidity levels are imposed by the employer. The attainment and maintenance of suitable levels necessary for satisfactory completion of the work including the installation of joinery, suspended ceilings, lift machinery etc. is the responsibility of the contractor.

Examples of other requirements or limitations imposed by the employer which should, if applicable, be referred to are:

- Restrictions on the use by the contractor of the permanent heating system for drying and obtaining necessary temperature and humidity levels.
- Special lighting.

A42 Contractor's general cost items: Services and facilities

The services and facilities listed are examples only. Other similar items should be included if necessary including any changes or additions to statutory obligations or in the working rules of any industry. Whilst the details given in the bills of quantities under this rule constitute a check list for tenderers, the items generally are implicit in the contract and as such are at the discretion and risk of the contractor.

A42:1.3

This rule covers all fuel which the contractor requires to carry out the work. It does not cover fuel for testing and commissioning permanent installations which would come under Sections Y51 and Y81.

A42:1.10

This rule deals with drying out the works where the method is left to the contractor. If the employer wishes to make specific requirements, these should be stated in detail - see A36:1.

There is a possibility of a number of items appearing either under the heading of 'Employer's requirements' or as 'Contractor's costs'. This is because some work, such as providing temporary hoardings, may on occasions be fully defined by the tender documents and on other occasions be left to the contractor's discretion.

A42:1.16

It is intended that a single item should be provided in the preliminaries bill for general attendance on all nominated sub-contractors.

A51 Nominated sub-contractors

The rules in this section govern how nominated sub-contractors should be covered in the bills of quantities for main contracts. Bills of quantities used for inviting tenders from potential nominated sub-contractors should be drawn up in accordance with SMM7 as a whole as if the work was main contractor's work. This means, for example, that bills issued to potential nominated sub-contractors should include preliminaries and be accompanied by the drawings which the rules require.

As much information as possible should be given in respect of nominated sub-contractors' work in order that tenderers can make due allowance when assessing the overall programme and establishing the contract period if not already laid down. A simple list of the component elements of the work might not be sufficient, but a list describing in addition the extent and possible value of each element would be more helpful. The location of the main plant e.g. whether in the basement or on the roof would clearly have a bearing on tenderers' programmes. It would be good practice to seek programme information when obtaining estimates from sub-contractors so that this can be incorporated in the bills of quantities, for the benefit of tenderers.

A set of the items given in the classification table should be given for each nominated sub-contract.

A51:1.3

The rule for special attendance is included to enable proper provision to be made for costs beyond those envisaged in the definition of general attendance. Special scaffolding or scaffolding additional to the main contractor's standing scaffolding required for use by sub-contractors should be described, e.g. windows supplied and fixed by a nominated sub-contractor who requires scaffolding for fixing will require a bill item giving the dimensions for each elevation. It is inadequate merely to refer in general terms to the items listed in the third column as details of requirements should be stated. Where adequate information cannot be provided a provisional sum should be used. Items for positioning should state the expected weight, location and size of the components to be positioned.

C Demolition/Alteration/ Renovation

C10 Demolishing structures

C30 Shoring

Where the measurement unit is 'item', quantities may be given if considered more appropriate e.g. where a large number of identical openings are to be filled in it might be helpful to measure out the component items under a suitable heading.

1-3

The method of identifying the level or levels to which structures are to be demolished will vary with circumstances. A common reference level for demolition is the top of the lowest floor slab. Work below the lowest level could well be included with the excavation work.

1-3.**.6

With the advent of further legislation the disposal of toxic wastes and dangerous materials has become cost significant. It is therefore important to draw attention to the presence of such materials including asbestos, certain chemicals, fuel oils, tars, etc. Terminology used in the descriptions should be consistent with the current regulations for the control of pollution.

C1(b)

The Coverage Rule is intended to cover temporary support arising solely as a result of the particular item being described.

C20 Alterations - spot items

It will be helpful to set out spot items in a logical progression from location to location in the existing building.

The comments on Section C10 Demolishing structures, also apply to this section.

D Groundwork

D20 Excavating and filling

Q20 Hardcore/Granular/Cement bound bases/ sub-bases to roads/pavings

The rules for these sections have been drafted on the assumption that excavation and earthwork will be carried out by mechanical plant. The information provided in accompanying drawings or in descriptions should identify those circumstances where it may be difficult or impractical to carry out excavation by mechanical means.

The rules cannot cover every situation and where unusual conditions prevail the surveyor should exercise his judgement in selecting an appropriate method of measurement, stating the method used.

P1

It is not intended that several water levels, with only minor variations, be established for each site. However the water level could well differ substantially from one excavation to another (e.g. pits at opposite ends of the site) or from one part to another of an individual excavation (e.g. a very large basement) especially where springs are encountered. In most cases it should be possible to agree a common post-contract ground water level for the whole of the site.

The details provided will be the trial hole data that is available. Such information, if given in accordance with the relevant British Standard Code of Practice should ensure that a reasonable indication of what can be expected has been given. If such information is not available the assumed data should be so stated.

P1(e)

Features retained would include trees which are to be retained and protected stating any required method of protection.

2.1

Unless top soil is specified to be preserved it need not be given as a separate item.

2.7

A ground beam is defined as a reinforced concrete member normally spanning between pile caps, foundation pads, etc.

2.2-8.*

The principle of maximum depths to reflect the use of mechanical plant will require the surveyor to use his discretion. For example, when measuring excavation for a large housing site with foundations of varying depths, the site may be treated as a whole or each house individually when describing the excavation depth. The method selected should be stated.

2.8

This item covers the excavation of steps in the face of a slope to prevent the slippage of subsequent filling.

4-5.0.*.1

The reference to 'extra over' in the fourth column is to provide an option to measuring full value.

D3

Examples of 'special plant' in this context would include:

- Power operated hammers, drills and chisels.
- Special attachments to mechanical plant such as rock buckets, rippers, hammers and chisels.

6.

Because working space is no longer measured in detail this information is provided to enable the contractor to make his own allowance based on this and the other information provided.

7.

There is no requirement to keep separate earthwork support to different types of excavation. Earthwork support includes the use of timber planking and strutting, plywood trench sheeting and light steel trench sheeting and strutting. Interlocking driven sheet piling is not covered by the term 'earthwork support' and where this is required by the design or specification it should be measured in accordance with Section D32.

In the case of excavations designed with set-backs, each vertical face between set-backs should be considered separately. This would not apply where the contractor, at his discretion, decided to use set-backs, perhaps as an aid to earthwork support.

7.*.*.4-5

See Figures 1 and 2.

7.*.*.4

The term 'roadway' is used in the normal sense of a carriageway, whether public or private. It is not intended to apply to temporary roadways provided by the contractor at his discretion for his own use, nor to site roadways under his full control, either existing or constructed as part of the contract.

7.*.*.5

Earthwork support to faces of excavation which abut existing walls, piers or other structures does not include designed shoring measured under Section C30.

D8

The words 'and the like' have been included in the Definition Rule of unstable ground in an attempt to avoid the many arguments that have arisen by limiting the application of the rule quite literally to running silt or running sand when the same problems pertain with such materials as loose gravel, fly ash, etc. It is suggested, as a guideline, that strata could be said to fall within the intended category only when the newly excavated face will not remain unsupported sufficiently long to allow the necessary support to be inserted.

8.1

This is intended to deal solely with rainwater. Water arising from leaking reservoirs or flooding rivers are examples of accepted risks or matters which can be dealt with by insurance.

8.2

Where the pre-contract and the post-contract water levels as defined in these rules differ the item will fall to be adjusted. If the varied level brings about the need for such an item where none previously existed an item will need to be included in the final account.

8.3

Handling of excavated material is normally at the discretion of the contractor. Any design-imposed conditions should be given in the description of the disposal items e.g. requirements regarding the provision or location of temporary spoil heaps.

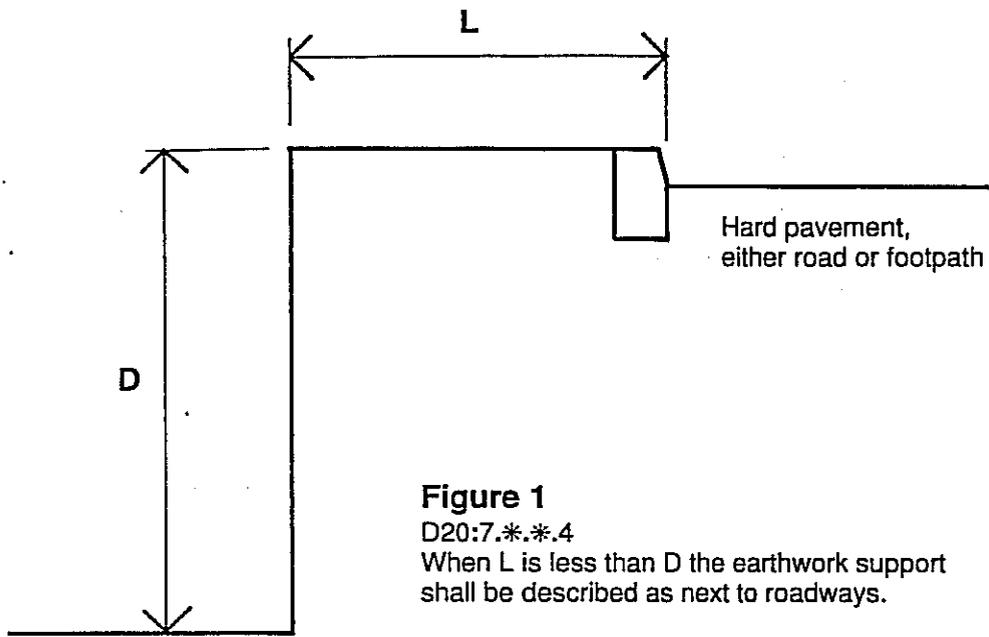


Figure 1
 D20:7.**.4
 When L is less than D the earthwork support shall be described as next to roadways.

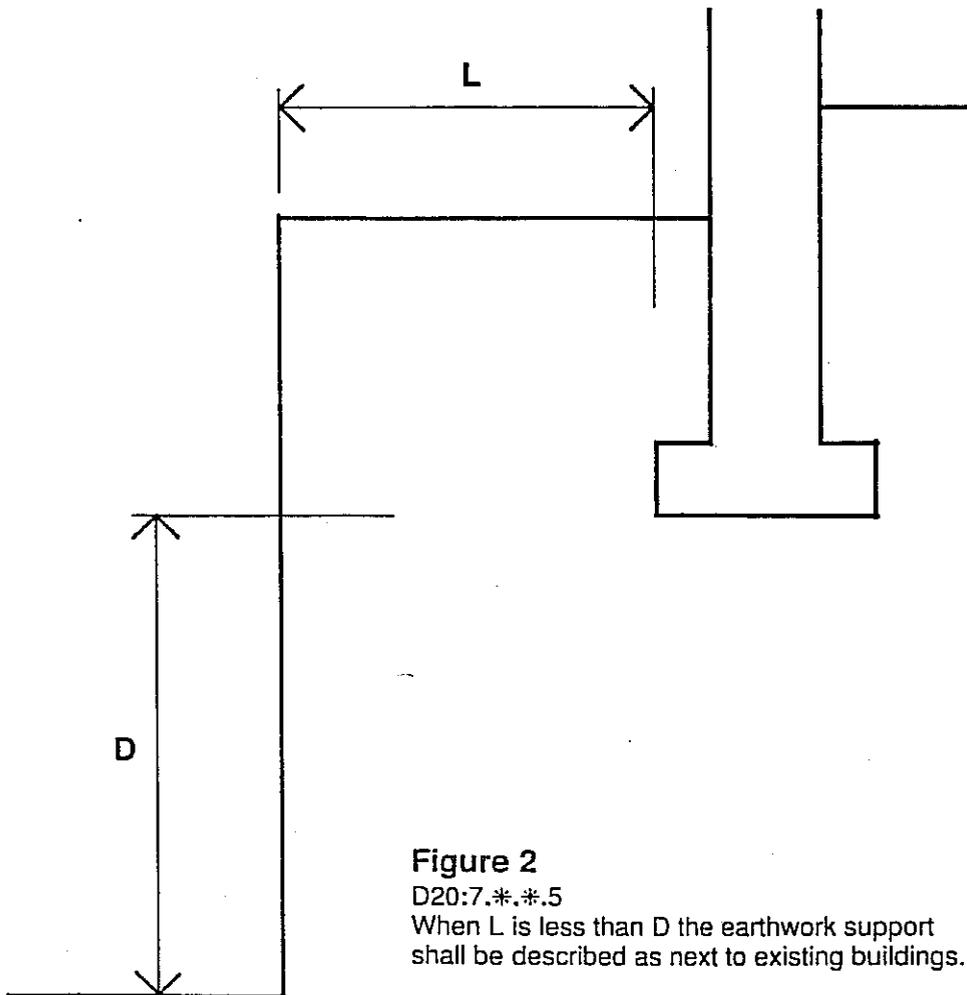


Figure 2
 D20:7.**.5
 When L is less than D the earthwork support shall be described as next to existing buildings.

Unless there are specific requirements for the handling of excavated material or imported filling (e.g. spoil heaps) the contractor will be entitled to assume that he may handle the distribution/disposal of such materials as he deems fit.

8.3.2

Where materials are disposed on site the information provided under the fourth column should state any specific requirements for the location of such deposits and the average distance from the excavation in metres.

13.2

Compacting would include the former traditional description 'level and ram'.

D30 Cast in place concrete piling

D31 Preformed concrete piling

D32 Steel piling

D30:1-2..3, D31:1-4.**.2 and D32:1.**.2**

These rules require the inclination of raking piles to be stated. Examples of common inclinations corresponding to the rake angle, stated as the ratio of horizontal displacement to vertical distance, are as follows:

Angle	Ratio
14°	1:4
9.5°	1:6
5.8°	1:10

D30:5.1

Obstructions, in this context, includes anything which amounts to an obstruction to boring e.g. certain items which might be buried in a tip.

D30:7, D31:10 and D32:6

The responsibility for cutting off pile heads and disposal of materials as between main contractor and any sub-contractor should be made clear in the bill of quantities and in any enquiries to specialist sub-contractors. Cutting off the tops of test piles should be given separately where required.

D40 Diaphragm walling

Diaphragm walls are concrete walls constructed using slurry or other fluids to support a trench which is then filled with concrete to form the wall, the concrete being placed through the support fluid which is thereby displaced.

S2

Excavated material which has been in contact with the support fluids may be contaminated and not fit to be used as filling material. The contractor's attention should be drawn to any restrictions imposed in this respect.

D50 Underpinning

P1

The location drawings should be sufficient to enable an appreciation of the location and extent of the work to be made. In the case of a complicated design, detailed drawings should be supplied.

P2

If ground conditions are difficult e.g. unstable ground, special precautions may be required in which case full particulars should be given.

4.1 and 2.

The measurement rules for excavating preliminary trenches and underpinning pits supersede any rules relating to working space contained in Section D20.

5.1.1.

The requirement for a statement of 'maximum width' is intended to cover stepped brick footings.

E In situ concrete/Large precast concrete

Generally

P1

The purpose of this information is to convey to the tenderer not only the specific sizes of members and thickness of slabs but also such information as the relative positions of precast floors and in situ beams.

Information regarding permissible loads in relation to casting times is to allow the tenderer to assess, in the absence of specific instructions in the bills of quantities, the degree of propping and re-propping down through successive floors that he may be required to provide to his formwork. Any limitations on live loads during construction should be stated.

E10 In situ concrete

1-14.*.*.2

The requirement to distinguish members having a reinforcement content in excess of 5% by volume is intended to indicate which members (slabs, columns, beams, etc) are very heavily reinforced resulting in problems in placing and compacting concrete. It is the total reinforcement in a complete member which has to be considered and not a small isolated part of a member which is particularly congested e.g. where the laps occur in the reinforcement. The selection of 5% is a deliberately high percentage so that it will only apply to exceptional cases. 5% by volume is roughly equivalent to a steel weight of 0.41 tonnes per cubic metre of the measured member.

1-8.*.*.5

This requirement in the case of a simple house foundations, for example, could be covered by a preamble clause. The requirement does not apply to concrete placed on a bed of concrete blinding or poured into formwork. Similarly it is not the intention that where a concreted bed is placed on concrete blinding and only the edges of the bed are in contact with the earth, that such work should be separately identified.

7

Retaining walls come under the classification of 'walls'.

14

Upstands include beams but not kickers for walls which are not measured (see Section E20:21-22 for formwork to same).

15.2

Monolithic finishes cast onto concrete would include cast stone, mosaic etc. Monolithic screeds/granolithic flooring are included in Section M10. Monolithic terrazzo is included in Section M14.

E20 Formwork for in situ concrete

11

'Top formwork' should be measured for surfaces sloping at an angle exceeding 15° whether it is provided or not. For example blinding concrete (measured as 'slabs') sloping at an angle exceeding 15° will require an item of formwork measured to the top.

12.*.*.3

Formwork to one side of a wall only would not include instances where there is a column or beam on the other side as formwork will be required to the column or beam.

13-14

Descriptions of formwork to edge beams should include the attached edge of slab.

13-16

These rules are intended to simplify the measurement of formwork and considerably reduce the number of items. Linear items will be restricted to other than regular shapes.

20

Where the basic finish is not at the contractor's discretion, the finish formed from the principal formwork specified may be regarded as the basic finish.

21-22

Suspended kickers occur where a concrete wall rises off a concrete slab, the kicker being cast integrally with the slab, i.e. at the time the kicker formwork is erected, there is nothing on which to rest its bottom edge.

Formwork to column kickers is not required to be measured. Tenderers are given sufficient information to allow for this by virtue of the fact that columns are measured linear stating the number.

E30 Reinforcement for in situ concrete

S3

Restrictions on bending may be given by a reference to an appropriate BS although it may be necessary to refer specifically to any temperature requirements.

1.1.3

This is intended to cover those bars which are specifically bent to curves to suit the shape of the member in which they are to be placed.

4.1.*.2

Strips of fabric reinforcement, in this context, would include those in foundations to walls, tension strips to floors and roofs, etc.

E40 Designed joints in in situ concrete

1

Plain joints as defined in Definition Rule D1 will normally occur at the perimeter of areas abutting walls.

E50 Precast concrete large units

F31 Precast concrete sills/lintels/copings/features

H40 Glass reinforced cement cladding/features

H50 Precast concrete slab cladding/features

K33 Concrete/Terrazzo partitions

1

The provision of three units of measurement permits selection of the most appropriate in each case e.g. enumerated chimney caps and lintels, lineal measurement for coping stones and kerbs and superficial measurement for floors.

F Masonry

Generally

The identification, in the bills of quantities, of work in foundations will usually be self evident from its differing specification. However it may be of assistance to identify such work where it is not self evident.

F10 Brick/Block walling

F11 Glass block walling

P1

Plans, elevations and sections required to be provided under this rule should show the locations of materials to be used in all walls and partitions. If only one kind of brick is to be used for walls and one kind of block for partitions the drawings probably need not show anything other than the thickness. In the case of several different kinds of bricks and blocks an appropriate annotation should be included on the drawings.

Sections may helpfully augment the descriptions of the work e.g. the fact that a wall or partition is of a different thickness or material at a higher level would not be revealed by study of a plan only.

S1-5

The brick or block being used and any imposed limitations on laying should be fully described. This is particularly so where the brick or block is the subject of a prime cost sum for nominated supply where it is possible for different types of identical purchasing cost to have widely differing laying costs. Where the supply is the subject of a PC Sum or PC rate per thousand the assumptions to be made by the tenderers should be clearly stated.

Where an order has been placed with a supplier for bricks or blocks the terms of the order should be given stating in particular the number reserved and supplier's terms regarding the initial and subsequent deliveries.

S7

Examples of the method of forming would include stretchers-on-end, etc.

D11

Examples of the type of moulded or splayed bricks would include stock-pattern, purpose-made, cut and rubbed etc.

F20 Natural stone rubble walling

F21 Natural stone masonry walling/dressings

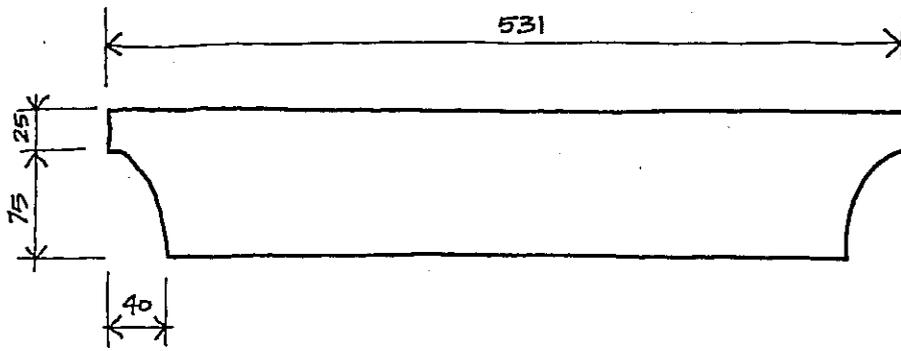
F22 Cast stone walling/dressings

D3

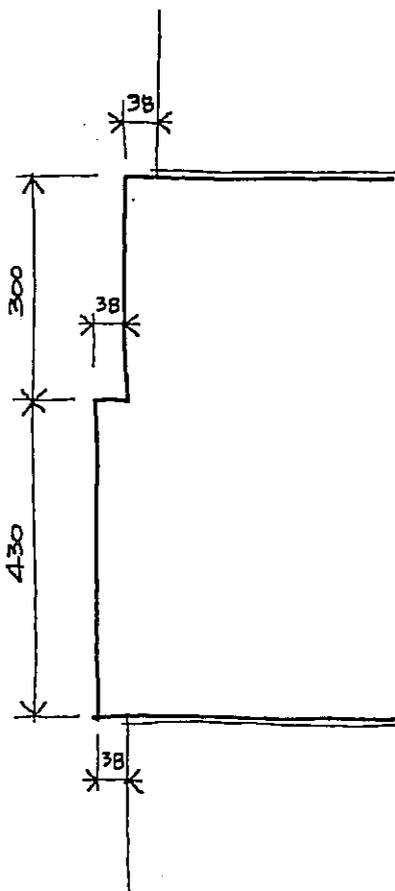
Examples of dimensioned diagrams are given in Figure 3.

S1

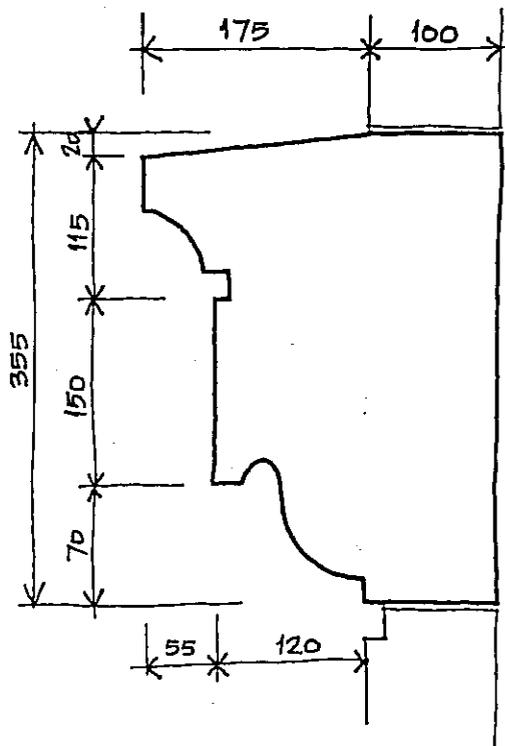
Examples of stone rubble materials would include the type e.g. sandstone, limestone, granite or flint and the texture and finish e.g. natural, rough dressed or hammer dressed.



Bill diagram A



Bill diagram B



Bill diagram C

Figure 3
Example bill diagrams

Examples of stone masonry materials would include the type e.g. limestone, granite, slate, marble etc. and the texture and finish e.g. sawn, rubbed, vermiculated, polished, etc. Examples of cast stone materials would include the texture and finish e.g. rough, smooth, rubbed, vermiculated and polished.

1-32.*.*.11

The description of 'sunk' stonework would need to state the number of times it is sunk.

33

Special purpose blocks include purpose made blocks within other measured items such as purpose made corner blocks to sills involving the use of stones larger than the sills. Special purpose blocks are also blocks which by their very nature are purpose made namely those comprising:

Ornaments

Small panels (defined as panels not exceeding 0.1 m²)

Caps and bases to columns

Kneeler-blocks, bonder-blocks, apex-blocks, angle-blocks and stooling-blocks to 'copings' and 'ornamental band courses'.

Plinth blocks, angle-blocks, key-blocks and the like to slab architraves and surrounds to openings

Springers, voussoirs and keystones of arches

Tumblings to buttresses

Pier-caps, chimney-caps and the like

Finials, terminals, brackets, corbels and the like

Stones forming tracery

Special features composed of one or more stones (special features would include ornamental panels, oriel windows, niches, etc.)

Stones forming balustrade panels and the like

Balusters, half balusters, newels and newel-caps

Templates, bases, thresholds, hearths and the like

Stones forming shelves, divisions, table tops, work tops and the like.

G Structural/Carcassing metal/timber

G10 Structural steel framing

G11 Structural aluminium framing

G12 Isolated structural metal members

P1

The drawings or the description should give details of the method of fabricating and type of site connections. Connections would include fittings used to form a joint and thus enable the members to be united by bolting, welding or riveting in the shop or on the site.

Details of fittings for other trades should be shown on the drawings, e.g. pipe brackets, supports for services and supports and stiffeners for mechanical, electrical and ventilating plant.

S2-S3

In describing any tests of materials or workmanship that may be required, an indication should also be given of where the tests are to be carried out. Requirements for destructive and non-destructive tests, procedure tests (welding and flame cutting), qualification and testing of welders, run-off production tests and inspections should be clearly stated.

8

This rule is limited to surface treatments carried out as part of the steelwork sub-contract. Decorative painting is covered by the rules given in Section M60. Since separate items are not required for touching-up, responsibility for such work should be made clear as between the main contractor and sub-contractor.

G20 Carpentry/Timber framing/First fixing

Generally

Dimensioned diagrams should be used unless a simple description is sufficient for full clarity. Diagrams and descriptions should show all labours other than those included in coverage rules in accordance with General Rule 4.7.

The rules for this section have been drafted on the assumption that the majority of woodworking and metalworking is now a shop process using machinery rather than a site craft process, hence the emphasis on machine labours. General Rule 9 concerning composite items is particularly relevant.

S5

Examples of surface treatments would include shop priming, staining, varnishing or polishing before delivery to the works. Such treatments after fixing should be measured in accordance with Section M60.

S6

Selection and protection for subsequent treatments would include timber to be 'left in the white' or to receive transparent finishes.

11-18.*.*.1

In order that machine settings can be assessed it is necessary to draw attention to different cross sections even if the cross sectional dimensions of the timber are the same; e.g. it will be possible to have two or more sections of rebated frames of the same dimensions, only the shape of the rebate differing.

H Cladding/Covering

H10 Patent glazing

H12 Plastics glazed vaulting/walling

H13 Structural glass assemblies

S3

Where the thickness of the bearings is not constant the maximum thickness is to be stated.

1.1

Single tier glazing is defined as being in one plane, either sloping or vertical, and can comprise one or more panes butt jointed with comes in a single length of glazing bar, only requiring flashing to top and bottom. Long lengths would require intermediate support.

1.2

Multi-tier glazing is defined as being in more than one length of glazing bar not in the same plane, usually lapped i.e. the upper plane of glazing oversailing the top of the glazing below and requiring intermediate supporting structure and flashing.

**H30 Fibre cement profiled sheet cladding/
covering/siding**

**H31 Metal profiled/flat sheet cladding/covering
siding**

**H32 Plastics profiled sheet cladding/covering/
siding**

**H33 Bitumen and fibre profiled sheet cladding/
covering.**

H41 Glass reinforced plastics cladding/features

18.1

Where translucent sheets are used in large areas, thus becoming the roofing material rather than an insertion therein, they should be classified as a main sheeting material and measured in Section H32. The sheets would not be measured extra over.

J Waterproofing

- J20 Mastic asphalt tanking/damp proof membranes**
- J21 Mastic asphalt roofing/insulation/finishes**
- J22 Proprietary roof decking with asphalt finish**
- J30 Liquid applied tanking/damp proof membranes**
- J31 Liquid applied waterproof roof coatings**
- M11 Mastic asphalt flooring**

S4

Surface treatments would include chippings, gravel, tiles, solar reflective paint, etc.

8-9

There is no limiting girth to differentiate between a gutter and a channel but it should be quite clear from the description whether the work has been measured in accordance with Classification 8 or 9.

8-11

To give the girth only may not be sufficient in describing asphalt to gutters, etc. because of the additional requirements of rule S2. As the thickness of asphalt with the same number of coats varies as between horizontal and vertical it will be necessary to indicate the extent of each. This may, in some instances, be best achieved by the use of dimensioned descriptions or bill diagrams.

K Linings/Sheathing/Dry partitioning

K10 Plasterboard dry lining

K31 Plasterboard fixed partitions/inner walls/linings

1

The description should give details of:

- head and sole plates, jointing battens, studs, metal stiffening sections, firrings, channels, metal resilient bars, treatment of joints
- services which are integrated with the lining including additional members and the like
- the size and spacing of supports and details of design module both for the building and the work in this section
- the method of fixing and where to steel structures, the size and spacing of the framing members.

S3

Examples of the layout of joints are random, symmetrical, whole units stating any pattern required, whole units with necessary cut margins or make up pieces stating any pattern required, and joints laid out to detail. Where the spacing of the joints is governed by the spacing of backings then details should be given.

K40 Suspended ceilings

1-4

The description should give details of:

- the framing and suspension system stating the size and spacing of supports
- the design module both for the building and the suspended ceiling
- the layout of the joints
- the treatments of the joints
- the method of securing the suspension system to the structure
- integrated services and resultant additional hangers, framing and the like
- insulation materials.

M5

Notwithstanding that the structure from which a flat ceiling is suspended is interrupted by downstand beams, the suspension height should still be measured to the main structural soffit. Where a downstand beam has different suspension heights on either side the measurement of ceiling areas should be taken to the centre line of such a downstand beam.

Where the structure from which the system is suspended is sloping the maximum and minimum depths of suspension should be stated.

L Windows/Doors/Stairs

Generally

The general description required by General Rule 4.5 should draw attention to any glazing covered by a prime cost or provisional sum or measured elsewhere in the bill of quantities which would highlight factory glazing or special glazing carried out by others.

Care should be taken when billing the work that no large discrepancies occur in measurement due to multiplications based on standard building types. An example is where a bill item is taken for a typical house type and the quantities are rounded up or down; the multiplication by say 500 houses may result in a grossly misleading final billed quantity.

L40 General glazing

S1

The nominal thickness of glass will normally be given but where the exact thickness is specified then it should be so stated in the description.

S3

Examples of methods of glazing include compound and sprigs, wood beads, metal beads and neoprene gaskets.

S4

Examples of methods of securing glass include beads or mouldings being bradded, screwed or clipped in position. In the case of gasket glazing it is important to make clear whether or not the gasket is to be supplied by the glazier. Where beads are the clip-on type then information regarding any screw fixing of the studs should be stated.

1.**.6 and 2-3.**.10

Panes required to align with adjacent panes typically refers to wired, patterned or decorated glass. The alignment is that within normal limits i.e. within the limits of distortion of wired glass as it cools.

1.**.4-5 and 2-3.**.2-3

The rebate dimension is the platform or width of the bed.

1.1.**.1

Repetition of large numbers of identical glass panes provides a significant cost saving, and the requirement to state any number equal to or exceeding fifty provides for this saving to be passed on.

3

The enumeration of special glass should indicate to the contractor exactly what is required. It could be helpful to give total area as well.

3

In describing the construction of sealed glazed units it is important that the full specification or the proprietary reference is given.

7-10

In ground, sand blasted, embossed and engraved work the provision of a drawing could be the most suitable way of indicating the nature of this expensive work.

M Surface finishes

Generally

Working around obstructions as stated in coverage rules refers to steel joists, angles, trunking, ducting, floor springs, ventilators, pipes, tubes and the like.

**M10 Sand cement/Concrete/Granolithic screeds/
flooring**

M12 Trowelled bitumen/resin/rubber-latex flooring

M20 Plastered/Rendered/Roughcast coatings

M23 Resin bound mineral coatings

J10 Specialist waterproof rendering

C2

Patterned work includes general patterned work, isolated panels within a general wall or other surface or work in more than one colour. Extra work referred to in the coverage rules is work to fair edges, flush joints, working to strips in work divided into panels and the like.

11

Margins include isolated linear surrounds to dissimilar finishes.

**M30 Metal mesh lathing/Anchored reinforcement
for plastered coatings**

S1

The descriptions of materials should identify the kind and quality of the lathing together with details of fixings such as screws, staples, clips, nails, wire ties, steel banding, etc.

M40 Stone/Concrete/Quarry/Ceramic tiling/Mosaic

**M42 Wood block/Composition block/Parquet
flooring**

C1

Cutting includes:

- cutting to angles, boundaries and junctions,
- cutting to enumerated items,
- cutting and fitting to recessed covers and the like, allowing for the lining up of joints with the general work,
- curved and radiused cutting for special edge tiles on work described as curved.

D9

Special tiles include all non standard tiles regardless of their location in the works.

M52 Decorative papers/fabrics

M1

The supply and delivery of papers, fabrics and wallcoverings, unless they can be fully described, should be included as a prime cost sum with the hanging and fixing measured in accordance with the rules. In these circumstances the kind of materials, the length and width of the roll should be stated to enable the contractor to assess the cost of hanging and fixing.

S1

The width of rolls and type of pattern would both need to be stated before wallpaper could be considered fully described. A 'roll' of paper refers to the roll traditionally manufactured and not to the separate lengths hung on a wall or ceiling. Papers, plastic and fabric coverings are manufactured in a variety of widths and lengths and accordingly the number of rolls can only be determined on the basis of what is specified.

S4

In describing the method of fixing and jointing it would be necessary to draw attention to rolls of paper hung horizontally on walls or other vertical surfaces.

M60 Painting/Clear finishing

Sealing and polishing wood block floors are dealt with under Section M42.

The general description of the work required by General Rule 4.5 should draw attention to any known variety of colour requirements and such specification items as whether or not the ironmongery, electrical or other fittings are to be removed before and refixed after decorating. The description should also highlight work in confined locations such as staircase areas and work which requires staging.

D1

Work is internal or external according to its position in the finished building.

S3

Examples of preparatory work would include rubbing down, burning off, stripping old paper or other decorations (specifying the number of layers or type if appropriate), cutting out and repairing cracks, knotting, stopping, staining, bodying in, etc.

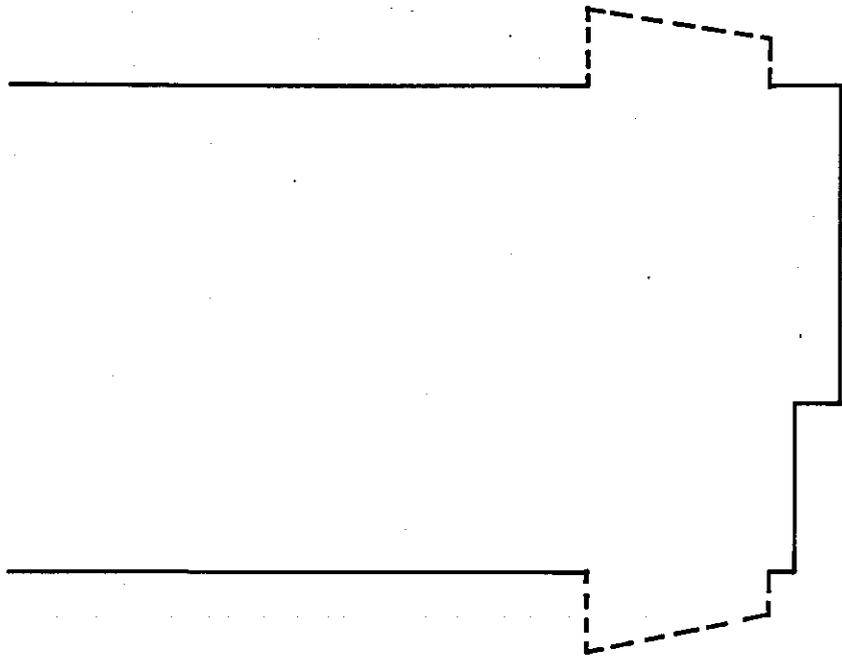
D2 - D3

For examples of multi-coloured work see Figure 4.

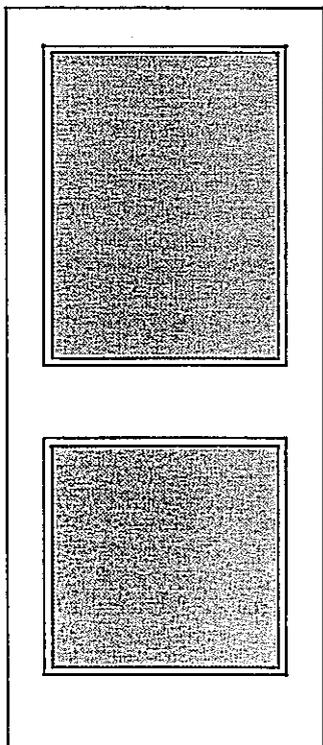
The requirement to separately identify work applied to members prior to fixing excludes off site priming of wood or metal which would be measured with the timber or metal components.

4.*.*.3

Work on partially glazed doors should be described as such giving the size of panes in accordance with this classification. Where windows have rubberised draught strips which must not be painted this should be stated in accordance with classification 4.*.*.2 (features unpainted).



Architraves in a different colour



Panels in a different colour

Figure 4

M60:D2

Multi-coloured work: more than one colour on an individual surface (except on walls and piers or on ceilings and beams)

N Furniture/Equipment

N11 Domestic kitchen fittings

N12 Catering equipment

N13 Sanitary appliances/fittings

N15 Signs/Notices

**N20, 21, 22, 23 Special purpose fixtures/
furnishings/equipment**

Q50 Site/Street furniture/equipment

4.*.*.1

Examples of ancillaries for fittings, equipment and appliances would include taps, waste fittings, waste disposal units, float operated valves, etc.

P Building fabric sundries

P20 Unframed isolated trims/skirtings/sundry items

This section includes trims etc. which are not specified as part of another Section.

P21 Ironmongery

This section excludes:

- Items supplied with a window or other component
- Items of furniture or equipment in their own right e.g. towel rails, toilet roll holders - see Section N13.

Q Paving/Planting/ Fencing/Site furniture

Q40 Fencing

S2

Construction details include:

- components and methods of jointing;
- supports and special supports and method of fixing.
- treatment of the tops of pales or bars including whether pointed, shaped, etc.
- methods of jointing which in the case of metal bar fencing and supports would include riveted, welded, etc.

S3

Examples of surface treatments include impregnating or galvanizing.

1.1

Examples of the type of fencing include chain link, woven wire, strained wire, wooden post and rail, metal continuous bar, concrete post and rail, close boarded, cleft chestnut pale, wooden palisade, metal vertical bar railings, metal palisade, concrete palisade, woven wood, concrete post and panel, profiled sheet, etc.

The type of close boarding would include sawn or cleft.

5.1

Examples of types of gates include field gates, bridle gates, kissing gates, etc.

R Disposal systems

R10 Rainwater pipework/gutters

R11 Foul drainage above ground

2.3.1-3

It is not necessary to state the type of fitting when measuring fittings ≤ 65 mm diameter.

2.4.5

Examples of pipe fittings would include bends, springs, offsets, swan necks, Y junctions, double Y junctions, shoes, blank flanges, puddle flanges, bushes, reducers, elbows, tees, crosses, etc.

11.2

Examples of gutter fittings would include bends, elbows, junctions, stopped ends, nozzle outlets, etc.

14.1.1

Examples of preparatory operations would include flushing out, sterilisation, etc.

14.1.2

Examples of stage tests would include sectional and final hydraulic and performance tests.

R12 Drainage below ground

R13 Land drainage

8.*.1.2

Pipes not laid in the bottom of the trench are usually those to be found in a multi-purpose trench. The requirement to give depths does not apply to those laid on a bed in the bottom of the trench.

9.1.1

Types of fittings should be clearly described and in cast iron work special consideration should be given to cost significant items e.g. long radius and short radius bends being kept separate. It could be considered good practice to identify items by reference to a manufacturer's catalogue number.

17.1.1

Examples of preparatory operations would include flushing out and clearing out rubbish.

17.1.2

Examples of stage tests would include sectional and final hydraulic and performance tests.

R14 - R33

Rules and commentary for these work sections are given under Y Mechanical and electrical services measurement.

X Transport systems

M2

Work is classified in accordance with the listed Work Section headings.

Y Mechanical and electrical services measurement

Generally

The rules for measurement of mechanical and electrical services are given in Work Group Y and billed under separate Work Sections as Appendix B of the method. It is unlikely, except in very complex projects, that more than a few of the Work Sections will occur. Where more than one services system occurs within a particular Work Section, e.g. separate low temperature hot water heating systems to different blocks of a project, it may be helpful to identify such systems separately.

Layout drawings are to include information regarding the extent of work internal and external to a building. Plant rooms include heating chambers, ventilation machinery rooms, tank roofs, etc. It should be borne in mind that work in existing buildings is required to be separated in accordance with the General Rule 7.1(a).

Y10 Pipelines

Y11 Pipeline ancillaries

1.*.*

Examples of supports would include clips, saddles, pipe hooks, holderbats, brackets, rollers, chairs and hangers or back-plates and girder lugs.

2.3

It is not necessary to state the type of fitting when measuring fittings ≤ 65 mm diameter.

2.4

Examples of pipe fittings would include bends, springs, offsets, swan necks, Y-junctions, double Y-junctions, blank flanges, puddle flanges, bushes, reducers, elbows, twin elbows, tees, crosses, unions, etc.

8.1

Examples of pipework ancillaries would include draw-off taps, stop valves, control valves, regulating valves, safety valves, reducing valves and valve sets, automatic control valves and thermostats, non-return valves, blow-down valves, drain cocks, stop cocks, air cocks, automatic air release valves and air bottles, mixing valves, steam traps, strainers, gauges and thermometers, automatic controls, indicating, measuring and recording equipment and connections between, etc.

Y20 - Y25 General pipeline equipment
Y40 - Y46 General air ductline equipment
Y52 Vibration isolation mountings
Y53 Control components - mechanical

1.1

Examples of equipment would include boilers, generators, water treatment and pressurisation plant, soot, fuel and ash handling units, stabilisers, tanks, cylinders, calorifiers, heaters, pumps, compressors, fans, filters, heating and cooling batteries, silencer units, humidifiers, package air handling units, refrigeration units, cooling towers, medical gas vacuum and compressed air plant, compactors, macerators, incinerators, prime movers, meters, panels, radiators, convectors, hose reels, hydrants, cold rooms, fume cupboards, etc.

2.1

Examples of ancillaries for equipment would include drain cocks, ball control and regulating valves, automatic control valves and thermostats, fire valves and flexible links, altitude and pressure gauges, thermometers, indicating and measuring instruments, radiator and convector valves, etc.

Y30 Air ductlines

Y31 Air ductline ancillaries

2.3.1

Examples of fittings would include stop ends, bends, offsets, diminishing pieces, change of section pieces, junction pieces, etc.

4.1

Examples of ancillaries would include grilles, diffusers, dampers, fire dampers, shutters, cowls, terminals, roof ventilators, shutters, attenuators, anti-vermin screens, etc.

Y51 Testing and commissioning mechanical services

Y54 Identification - mechanical

Y59 Sundry common mechanical items

4.1.1

Preparatory operations would include flushing out, purging, sterilisation, chlorination, etc.

4.1.2

Stages tests would include hydraulic tests, air leakage tests, noise tests, system balancing and final tests.

Y60 Conduit and cable trunking

Y63 Support components - cables

1

All references to the measurement of conduit apply equally to metal or similar capping to cables.

C3

The conduit fittings which are deemed to be included with the conduit items would include tees, elbows, bends, cover plates, bushes, locknuts, nipples, stopping-lugs and reducing bushes.

6.1 and 10.1

Examples of trunking, tray, ladder and rack fittings include stop-ends, bends, tees, crosses, offsets or reducers. Any fittings which are required by the specification to be site-fabricated should be so described.

Y61 HV/LV cables and wiring

Y62 Busbar trunking

Y80 Earthing and bonding components

P2

The distribution sheet should contain information relating to the location, number and type of lamps, the number of lighting, switch and socket points and the type of fittings, appliances and accessories, together with any other information relevant to the circuit arrangement for each distribution board and the like.

1.1.1

Where draw wires are left in for subsequent installations by other trades this should be given with the relevant conduit or ducting.

1.1.4

An example of cable wrapped around pipework is trace heating.

8.1

Examples of fittings would include stop ends, bends, tees, crosses, offsets, reducers, etc.

19

The enumeration on a points basis of work in final circuits is appropriate for the majority of small power and lighting installations of a domestic or simple nature and also to the more simple installations in final circuits in other sections.

The size of conduit is not required to be given because this will be at the discretion of the contractor.

The 'distribution boards and the like' from which such final circuits are measured include such control gear as control panels for boilers, fire alarms or master clocks and similar items.

The classification of points in the enumeration of final circuits relates to the terminations of the permanent wiring to switches and to outlet accessories and control gear for the connection of current using appliances or fittings.

Where final circuits are connected to multi-gang accessories, the number of points will normally be the same as the number of gangs. Where the gangs are electrically wholly interconnected within the accessory, such interconnected gangs should count as one point.

Flexible conduits, cables and the like between appliances or fittings and the associated terminal accessories or control gear on the permanent wiring of a final circuit, should be included in the description of the relevant appliance or fitting.

Cables and conductors for earthing not forming an integral part of the circuit, should be measured in detail.

Examples of final circuits of different types which should be identified include single outlet radial circuits, multiple outlet radial circuits, ring circuits, circuits wired in series, open circuits.

Y70 HV switchgear

Y71 LV switchgear and distribution boards

Y72 Contactors and starters

Y92 Motor drives - electric

Fuse links and miniature circuit breakers supplied with the switchgear, distribution boards and the like should be linked in the description of the control gear; those supplied independently should be measured separately.

Y73 Luminaires and lamps

Y74 Accessories for electrical services

1

Examples of particular specification items include clocks, telephones, alarm bells, loud speakers, battery chargers, convector heaters, storage heaters, telephone equipment, facsimile equipment, aerials, microphones, amplifiers, recording/playback equipment, central clock control equipment, computer control systems, alarm equipment, security alarm equipment, control indicator panel, etc.

5

Examples of accessories include lighting switches, socket outlets, connection units, thermostats, telephone cord outlet points, bell pushes and other similar units associated with final circuits.

5.1

The description of accessories should state the number of gangs comprised in the accessory. In the case of multi-unit accessory assemblies the description should identify the type and rating of all the units comprised in the assembly. Loose accessories such as plugs should be measured separately.

Appendices

Appendix 1

Location drawings required to accompany the bills of quantities

SMM7 Section

Drawn information to be provided

A Preliminaries/General conditions

Location drawings required to accompany the bills of quantities:

- Block plan
- Site plan
- Plans, sections and elevations

The full definition of these drawings is given in the text above.

The information required to be provided in connection with the following work sections is to be shown either on the above mentioned location drawings or on further drawings which accompany the bills of quantities. The exception to this is drawn information marked * where specific location drawings are to be provided.

C Demolition/Alteration/Renovation

C10	Demolishing structures	Location and extent of existing structures to be demolished.
C20	Alterations – spot items	Scope and location of the work relative to the existing layout indicating existing structure.
C30	Shoring	As C10
C40	Repairing/Renovating concrete/brick/block/stone	Scope and location of the work relative to the existing layout indicating existing structure.
C41	Chemical dpcs to existing walls	
C50	Repairing/Renovating metal	Scope and location of the work.
C51	Repairing/Renovating timber	
C52	Fungus/Beetle eradication	

D Groundwork

D20	Excavating and filling	Location drawing* showing pile sizes and layouts.
D30	Cast in place concrete piling	Location drawing* showing:
D31	Preformed concrete piling	- General piling layout.
D32	Steel piling	- Position of different types of piles.
		- Position of the work within the site and of existing services.
		- Relationship to adjacent buildings.
D40	Diaphragm walling	Location drawing* showing:
		- Arrangement of diaphragm walls and their relationship to surrounding buildings.
		- Depths, lengths and thicknesses of diaphragm walls.
D50	Underpinning	Location and extent of the work and details of the existing structure to be underpinned.

Appendix 1 (continued)

E In-situ concrete/Large precast concrete		
E10	In-situ concrete	Relative position of concrete members, the size of members, the thickness of slabs and the permissible loads in relation to casting times.
E11	Gun applied concrete	Relative position of gun applied concrete members and the permissible loads in relation to casting times.
E20	Formwork for in-situ concrete	As E10
E30	Reinforcement for in-situ concrete	
E31	Post-tensioned reinforcement for in-situ concrete	
E42	Accessories cast into in-situ concrete	
E50	Precast concrete large units	Details of precast members showing stressing arrangements and full details of anchorages, ducts, sheathing and vents. Relative positions of concrete members, the size of members, the thickness of slabs and the permissible loads.
E60	Precast/Composite concrete decking	Relative positions of concrete members, the thickness of slabs and the permissible loads. Details of purpose-made, prestressed concrete members showing stressing arrangements and full details of anchorages, ducts, sheathing and vents.
F Masonry		
F10	Brick/block walling	Plans of each floor level and principal sections showing the position of and the materials used in the walls.
F11	Glass block walling	
F20	Natural stone rubble walling	External elevations showing the materials used.
F21	Natural stone/ashlar walling/dressings	
F22	Cast stone walling/dressings	
F30	Accessories/Sundry items for brick/block/stone walling	
F31	Precast concrete sills/lintels/copings/features	
G Structural/Carcassing metal/timber		
G10	Structural steel framing	Position of work in relation to other parts of the work and of the proposed buildings. Types and sizes of structural members and their position in relation to each other. Details of connections or of the reactions, moments and axial loads at connection points.
G11	Structural aluminium framing	
G12	Isolated structural metal members	
G20	Carpentry/Timber framing/First fixing	Scope and location of the work.
G30	Metal profiled sheet decking	Extent of the work and its height above ground level. Size of units where not at the discretion of the Contractor.
G31	Prefabricated timber unit decking	
G32	Edge supported/Reinforced woodwool slab decking	

Appendix 1 (continued)

H	Cladding/Covering	
H10	Patent glazing	Scope and location of the work.
H11	Curtain walling	
H12	Plastics glazed vaulting/walling	
H13	Structural glass assemblies	
H30	Fibre cement profiled sheet cladding/covering/siding	Extent of the work and its height above ground level.
H31	Metal profiled/flat sheet cladding/covering/siding	
H32	Plastics profiled sheet cladding/covering/siding	
H33	Bitumen and fibre profiled sheet cladding/covering	
H40	Glass reinforced cement cladding/features	As E50
H41	Glass reinforced plastics cladding/features	As H30
H50	Precast concrete slab cladding/features	As E50
H51	Natural stone slab cladding/features	Scope and location of the work.
H52	Cast stone slab cladding/features	
H60	Clay/concrete roof tiling	Extent of roofing work and its height above ground level.
H61	Fibre cement slating	
H62	Natural slating	
H63	Reconstructed stone slating/tiling	
H64	Timber shingling	
H70	Malleable metal sheet prebonded coverings/cladding	Extent of roofing work and its height above ground level including the location and spacing of all laps, drips, welts, cross welts, beads, seams, rolls, upstands and downstands.
H71	Lead sheet coverings/flashings	
H72	Aluminium sheet coverings/flashings	
H73	Copper sheet coverings/flashings	
H74	Zinc sheet coverings/flashings	
H75	Stainless steel sheet coverings/flashings	
H76	Fibre bitumen thermoplastic sheet coverings/flashings	
H	Work to existing buildings	Scope and location of the work relative to: <ul style="list-style-type: none"> – The existing layout indicating the existing structure. – The proposed layout.

Appendix 1 (continued)

J Waterproofing		
J10	Specialist waterproof rendering	Scope and location of the work.
J20	Mastic asphalt tanking/damp proof membranes	Plan of each level indicating the extent of the work and its height above ground level together with restrictions on the siting of plant and materials. Section indicating the extent of the tanking work.
J21	Mastic asphalt roofing/insulation/finishes	
J22	Proprietary roof decking with asphalt finish	
J30	Liquid applied tanking/damp proof membranes	
J31	Liquid applied waterproof roof coatings	
J40	Flexible sheet tanking/damp proof membranes	Plan at each level indicating the extent of the work and its height above ground level together with restrictions on the siting of the plant and materials.
J41	Built up felt roof coverings	
J42	Single layer plastics roof coverings	
J43	Proprietary roof decking with felt finish	
J	Work to existing buildings	Scope and location of the work relative to: <ul style="list-style-type: none"> – The existing layout indicating the existing structure. – The proposed layout.
K Linings/Sheathing/Dry partitioning		
K10	Plasterboard dry lining	Scope and location of the work. Services located within the ceiling or partition where the work includes complex integral services.
K30	Demountable partitions	Scope and location of the work. Services located within the partition.
K31	Plasterboard fixed partitions/inner walls/linings	As K10
K32	Framed panel cubicle partitions	Scope and location of the work.
K33	Concrete/Terrazzo partitions	As E50
K40	Suspended ceilings	Scope and location of the work including integral fittings. Services located within the suspended ceiling void including any additional support for same.
K41	Raised access floors	Scope and location of the work.
K	Work to existing buildings	Scope and location of the work relative to: <ul style="list-style-type: none"> – The existing layout indicating the existing structure. – The proposed layout.
L Windows/Doors/Stairs		
L	Work to existing buildings	Scope and location of the work relative to: <ul style="list-style-type: none"> – The existing layout indicating the existing structure. – The proposed layout.

Appendix 1 (continued)

M Surface finishes		
M10	Sand cement/Concrete/Granolithic screeds/flooring	Scope and location of the work.
M11	Mastic asphalt flooring	As J20
M12	Trowelled bitumen/resin/rubber-latex flooring	Scope and location of the work.
M20	Plastered/Rendered/Roughcast coatings	
M21	Insulation with rendered finish	
M22	Sprayed mineral fibre coatings	
M23	Resin bound mineral coatings	
M30	Metal mesh lathing/Anchored reinforcement for plastered coatings	Scope and location of the work. Services located within the lathing, where the work includes complex integral services.
M31	Fibrous plaster	Scope and location of the work.
M40	Stone/Concrete/Quarry/Ceramic tiling/mosaic	
M41	Terrazzo tiling/In-situ terrazzo	
M42	Wood block/Composition block/Parquet flooring	
M50	Rubber/Plastics/Cork/Lino/Carpet tiling/sheeting	
M51	Edge fixed carpeting	
M	Work to existing buildings	Scope and location of the work relative to: – The existing layout indicating the existing structure. – The proposed layout.
P Building fabric sundries		
P22	Sealant Joints	Scope and location of the work.
P30	Trenches/Pipeways/Pits for buried engineering services	Layout of the services.
P31	Holes/Chases/Covers/Supports for services	
Q Paving/Planting/Fencing/Site furniture		
Q10	Stone/Concrete/Brick kerbs/edgings/channels	Scope and location of the work.
Q20	Hardcore/Granular/Cement bound bases/sub-bases to roads/pavings	As D20
Q21	In-situ concrete roads/pavings/bases	Scope and location of the work.
Q22	Coated macadam/Asphalt roads/pavings	
Q23	Gravel/Hoggin roads/pavings	
Q24	Interlocking brick/block roads/pavings	
Q25	Slab/Brick/Sett/Cobble paving	
Q26	Special surfacings/pavings for sport	
Q30	Seeding/Turfing	
Q31	Planting	
Q40	Fencing	Scope and location of the work. Location of fencing specially designed to suit sloping ground.

F MASONRY

F

F10 BRICK/BLOCK WALLING (continued)				
A	Extra for special 190 mm deep lintol blocks (concrete and reinforcement measured separately)	99 m		
<u>Common blockwork Spec 106</u>				
Walls				
B	200 mm thick	73 m ²		
<u>Common blockwork Spec 107</u>				
Walls				
C	100 mm thick	453 m ²		
D	150 mm thick	37 m ²		
Closing cavities				
E	50 mm wide; horizontal; blockwork 100 mm thick	26 m		
2/20		To collection		

F MASONRY

F

F30 ACCESSORIES/SUNDRY ITEMS FOR
BRICK/BLOCK WALLING

SUBSTRUCTURE

Forming cavities in hollow walls

A	50 mm wide; wall ties Spec 310	8 m ²
B	100 mm wide; wall ties Spec 310	117 m ²

SUPERSTRUCTURE

Forming cavities in hollow walls

C	50 mm wide; wall ties Spec 310; cavity insulation Spec 560, 30 mm thick	15 m ²
D	Extra for additional special ties Spec 315, 345 mm long at sides of openings	92 nr
E	100 mm wide; wall ties Spec 310; cavity insulation Spec 560, 30 mm thick	213 m ²
F	100 mm wide; wall ties Spec 310, cavity insulation Spec 560, 30 mm thick, curved on plan 1300 mm radius	33 m ²

Damp proof courses Spec 030-290

On surfaces

G	Not exceeding 225 mm wide; horizontal	69 m ²
H	Not exceeding 225 mm wide; horizontally; curved on plan	2 m ²
J	Not exceeding 225 mm wide; vertical	5 m ²
K	110 mm wide; vertical; to circular window opening, 1330 mm net diameter	5 nr

Cavity trays

L	Exceeding 225 mm wide; horizontal	3 m ²
---	-----------------------------------	------------------

2/20

To collection

Appendix 1 (continued)

R Disposal systems		
R10	Rainwater pipework/gutters	Scope and location of the work.
R11	Foul drainage above ground	
R12	Drainage below ground	Layout of the drainage.
R13	Land drainage	
X Transport systems		
	All sections	Scope and location of the works, including extent of work in motor, machinery or plant rooms.
Y Services		
Y10	Pipelines	Scope and location of the work including extent of work in plant rooms.
Y11	Pipeline ancillaries	
Y20–Y25	General pipeline equipment	
Y30	Air ductlines	
Y31	Air ductline ancillaries	
Y40–Y46	General air ductline equipment	
Y50	Thermal insulation	
Y52	Vibration isolation mountings	
Y53	Control components – mechanical	
Y60	Conduit and cable trunking	
Y61	HV/LV cables and wiring	Scope and location of the work.
Y62	Busbar trunking	For final circuits: – Distribution sheet* setting out the number and location of all fittings and accessories. – Location drawing* showing the layout of the points.
Y63	Support components – cables	Scope and location of the work.
Y70	HV switchgear	
Y71	LV switchgear and distribution boards	
Y72	Contactors and starters	
Y73	Luminaires and lamps	
Y74	Accessories for electrical services	
Y80	Earthing and bonding components	As Y61
Y92	Motor drives – electric	Scope and location of the work.

Appendix 2

Component drawings required to accompany the bills of quantities

SMM7 Section		Comment
F	Masonry	
F20	Natural stone rubble walling	Component drawings required for carvings and sculpture only.
F21	Natural stone/ashlar wallings/dressings	
F22	Cast stone walling/dressings	
H	Cladding/Covering	
H10	Patent glazing	
H11	Curtain walling	
H12	Plastics glazed vaulting/walling	
H13	Structural glass assemblies	
L	Windows/Doors/Stairs	
L30	Timber stairs/walkways/balustrades	A component drawing may be provided as an alternative to a dimensioned description.
L31	Metal stairs/walkways/balustrades	
N	Furniture/Equipment	
N10	General fixtures/furnishings/equipment	Applies only to fixtures, furnishings and equipment not associated with services. A component drawing may be provided as an alternative to a dimensioned diagram.
N11	Domestic kitchen fittings	
N12	Catering equipment	
N13	Sanitary appliances/fittings	
N15	Signs/notices	
N20-N23	Special purpose fixtures/furnishings/equipment	
Q	Paving/Planting/Fencing/Site furniture	
Q50	Site/Street furniture/equipment	As N
X	Transport systems	
	All sections	A component drawing may be provided as an alternative to a description of type, size, pattern, capacity, etc.

Appendix 3

Dimensioned diagrams to be given in the bills of quantities

Section and item	Diagram
E20:15	Irregular shaped beams or columns.
E20:25	Stairflights and strings.
E20:28	Complex shapes (alternative to a dimensioned description).
F20-22:6-9	Lintels, sills, mullions, transoms (alternative to a dimensioned description).
G20:20-28	Carpenters metalwork – straps, hangers, shoes, nail plates, metal connectors, bolts, rod bracing, wire bracing, others (alternative to a dimensioned description).
H70-76:10-19	Flashings, aprons, sills, weatherings, cappings, hips, kerbs, ridges, reveals, returns and jambs, gutters (alternative to a dimensioned description).
K32:1	Cubicle partitions: set.
L10-12	Windows/rooflights/screens/louvres.
L20-22:1-6	Doors/shutters/hatches.
M40:5	Floors with joints laid out to detail.
N1	Fixtures, furnishings and equipment not associated with services (alternative to a component drawing reference).

Appendix 4

Example quantities co-ordinated with specification

The example pages which follow show just one method by which co-ordination between bills of quantities and specifications can be achieved, i.e. by Work Section reference, e.g. F10, and Spec(ification) clause references in the secondary headings.

The references are to project specification information included elsewhere in the bills of quantities or in a separate contract document. Any specification information required by the method but not included in such separate project specification information must be included in the bills of quantities.

F10 BRICK/BLOCK WALLING

SUBSTRUCTURE

Facing brickwork Spec 102

Walls

A	Half brick thick; facework one side	24 m ²
B	Half brick thick; curved on plan 1350 mm radius; facework one side	1 m ²

Common blockwork Spec 105

Walls

C	100 mm thick	98 m ²
D	100 mm thick; curved on plan 1350 mm radius	2 m ²
E	100 mm thick; curved on plan 1150 mm radius	3 m ²
F	150 mm thick	28 m ²
G	200 mm thick	105 m ²
H	200 mm thick; curved on plan 1150 mm radius	3 m ²

SUPERSTRUCTURE

Facing brickwork Spec 101

Walls

J	Half brick thick; facework one side	253 m ²
K	Half brick thick; curved on plan 1350 mm radius; entirely of headers; facework one side	36 m ²

Plain band

L	75 mm wide; sunk 25 mm from face of wall; horizontal	32 m
---	--	------

F MASONRY

F

F10 BRICK/BLOCK WALLING (continued)

Plinth capping

A Half brick wide; flush;
horizontal; entirely of
stretchers 12 m

B Half brick wide; flush;
horizontal; entirely of headers 4 m

Circular opening in 300 mm cavity
wall, net size of opening 1350 mm
diameter lined with facing bricks
on edge with radiating tapered
joints, as drawing AA(2)15.

C Lining to half brick thick facing
brickwork (Spec 101); flush;
closing 50 mm cavity 5 nr

D Lining to 100 mm common blockwork
(Spec 107); projecting 13 mm. 5 nr

Facing blockwork Spec 103

Walls

E 200 mm thick; facework one side 28 m²

F 200 mm thick; facework both sides 119 m²

Facing blockwork Spec 104

Walls

G 100 mm thick; facework one side 438 m²

H 100 mm thick; curved on plan
1150 mm radius, facework one side 33 m²

J 100 mm thick; curved on plan
1150 mm radius; entirely of half
blocks; facework one side 36 m²

K Extra for special 90° closer
blocks 131 m

L Extra for special 90° dog leg
blocks 120 m

2/20

To collection

smm7

Standard Method of Measurement of Building Works

Authorised by agreement between the Royal Institution of Chartered Surveyors and the Building Employers Confederation



Co-ordinated project information

smm7

Standard Method of Measurement of Building Works

Authorised by agreement between the Royal Institution of Chartered Surveyors and the Building Employers Confederation



Co-ordinated project information

First Edition, 1922
Second Edition, 1927
Third Edition, 1935
Fourth Edition, 1948
Fifth Edition, 1963; amended 1964; metric 1968
Sixth Edition, 1979
Seventh Edition, 1988
Reprinted 1989
incorporating Amendment Sheets Nos 1 and 2
dated September 1988 and February 1989.

Copyright The Royal Institution of Chartered Surveyors
© 1988 The Building Employers Confederation

ISBN 0 85406 360 9 (RICS)
ISBN 0 85263 004 3 (BEC)

All rights reserved. No part of this publication covered by the above
copyright may be reproduced, stored in a retrieval system or
transmitted in any form or by any means without the prior permission
of the copyright owners.

Designed and set by NBS Services Ltd, Newcastle upon Tyne

Printed by Eyre & Spottiswoode, Margate, Kent.

Summary of contents

To find the relevant work section for any given topic refer to the detailed contents list overleaf or to the alphabetical index.

Page 1

Detailed contents

Preface

General rules

A Preliminaries/General conditions

C Demolition/Alteration/Renovation

D Groundwork

E In situ concrete/Large precast concrete

F Masonry

G Structural/Carcassing metal/timber

H Cladding/Covering

J Waterproofing

K Linings/Sheathing/Dry partitioning

L Windows/Doors/Stairs

M Surface finishes

N Furniture/Equipment

P Building fabric sundries

Q Paving/Planting/Fencing/Site furniture

R Disposal systems

S Piped supply systems

T Mechanical heating/cooling/refrigeration systems

U Ventilation/Air conditioning systems

V Electrical supply/power/lighting systems

W Communications/Security/Control systems

X Transport systems

Y Mechanical and electrical services measurement

Additional rules – work to existing buildings

Appendices

Alphabetical index

Page 183

Detailed contents

Preface to Seventh Edition 1987
Preface to First Edition 1922
General Rules

A Preliminaries/General conditions

A10	Project particulars	17
A11	Drawings	17
A12	The site/Existing buildings	17
A13	Description of the work	17
A20	The Contract/Sub-contract	18
A30	Employer's requirements: Tendering/Sub-letting/Supply	18
A31	Employer's requirements:	18
A32	Provision, content and use of documents	18
A33	Employer's requirements: Management of the Works	18
A34	Employer's requirements: Quality standards/control	18
A35	Employer's requirements: Security/Safety/Protection	19
A36	Employer's requirements: Specific limitations on method/sequence/timing	19
A37	Employer's requirements: Facilities/Temporary works/Services	19
A40	Operation/Maintenance of the finished building Contractor's general cost items:	20
A41	Management and staff Contractor's general cost items: Site accommodation	20
A42	Contractor's general cost items: Services and facilities	20
A43	Contractor's general cost items: Mechanical plant	21
A44	Contractor's general cost items: Temporary works	21
A50	Work/Materials by the Employer	21
A51	Nominated sub-contractors	22
A52	Nominated suppliers	22
A53	Work by statutory authorities	22
A54	Provisional work	22
A55	Dayworks	22

B Complete buildings

B10 Proprietary buildings

B10 *

C Demolition/Alteration/Renovation

C10 Demolishing structures
C20 Alterations – spot items
C30 Shoring
C40 Repairing/Renovating concrete/brick/block/stone
C41 Chemical dpcs to existing walls
C50 Repairing/Renovating metal
C51 Repairing/Renovating timber
C52 Fungus/Beetle eradication

C10 23
C20 25
C30 23
C40 26
C41 28
C50 28
C51 28
C52 28

D Groundwork

D10 Ground investigation
D11 Soil stabilization
D12 Site dewatering
D20 Excavating and filling
D30 Cast in place concrete piling
D31 Preformed concrete piling
D32 Steel piling
D40 Diaphragm walling
D50 Underpinning

D10 *
D11 *
D12 *
D20 29
D30 33
D31 35
D32 37
D40 39
D50 41

E In situ concrete/Large precast concrete

E10 In situ concrete
E11 Gun applied concrete
E20 Formwork for in situ concrete
E30 Reinforcement for in situ concrete
E31 Post tensioned reinforcement for in situ concrete
E40 Designed joints in situ concrete
E41 Worked finishes/Cutting to in situ concrete
E42 Accessories cast into in situ concrete
E50 Precast concrete large units
E60 Precast/Composite concrete decking

E10 43
E11 45
E20 46
E30 49
E31 50
E40 50
E41 51
E42 52
E50 53
E60 54

F Masonry

F10 Brick/Block walling
F11 Glass block walling
F20 Natural stone rubble walling
F21 Natural stone/ashlar walling/dressings
F22 Cast stone walling/dressings
F30 Accessories/Sundry items for brick/block/stone walling
F31 Precast concrete sills/lintels/copings/features

F10 55
F11 55
F20 58
F21 58
F22 58
F30 62
F31 53

G Structural/Carcassing metal/timber

G10 Structural steel framing
G11 Structural aluminium framing
G12 Isolated structural metal members
G20 Carpentry/Timber framing/First fixing
G30 Metal profiled sheet decking
G31 Prefabricated timber unit decking
G32 Edge supported/Reinforced woodwool slab decking

G10 65
G11 65
G12 65
G20 67
G30 69
G31 70
G32 70

* No specific rules included – see General rules clause 11.

H Cladding/Covering

H10	Patent glazing	H10	71
H11	Curtain walling	H11	72
H12	Plastics glazed vaulting/walling	H12	71
H13	Structural glass assemblies	H13	71
H14	Concrete rooflights/pavement lights	H14	73
H20	Rigid sheet cladding	H20	73
H21	Timber weatherboarding	H21	73
H30	Fibre cement profiled sheet cladding/covering/siding	H30	75
H31	Metal profiled/flat sheet cladding/covering/siding	H31	75
H32	Plastics profiled sheet cladding/covering/siding	H32	75
H33	Bitumen and fibre profiled sheet cladding/covering	H33	75
H40	Glass reinforced cement cladding/features	H40	53
H41	Glass reinforced plastics cladding/features	H41	75
H50	Precast concrete slab cladding/features	H50	53
H51	Natural stone slab cladding/features	H51	77
H52	Cast stone slab cladding/features	H52	77
H60	Clay/Concrete roof tiling	H60	79
H61	Fibre cement slating	H61	79
H62	Natural slating	H62	79
H63	Reconstructed stone slating/tiling	H63	79
H64	Timber shingling	H64	79
H70	Malleable metal sheet prebonded coverings/cladding	H70	80
H71	Lead sheet coverings/flashings	H71	80
H72	Aluminium sheet coverings/flashings	H72	80
H73	Copper sheet coverings/flashings	H73	80
H74	Zinc sheet coverings/flashings	H74	80
H75	Stainless steel sheet coverings/flashings	H75	80
H76	Fibre bitumen thermoplastic sheet coverings/flashings	H76	80

J Waterproofing

J10	Specialist waterproof rendering	J10	103
J20	Mastic asphalt tanking/damp proof membranes	J20	83
J21	Mastic asphalt roofing/insulation/finishes	J21	83
J22	Proprietary roof decking with asphalt finish	J22	83
J30	Liquid applied tanking/damp proof membranes	J30	83
J31	Liquid applied waterproof roof coatings	J31	83
J32	Sprayed vapour barriers	J32	*
J33	In situ glass reinforced plastics	J33	*
J40	Flexible sheet tanking/damp proof membranes	J40	85
J41	Built up felt roof coverings	J41	85
J42	Single layer plastics roof coverings	J42	85
J43	Proprietary roof decking with felt finish	J43	85

K Linings/Sheathing/Dry partitioning

K10	Plasterboard dry lining	K10	87
K11	Rigid sheet flooring/sheathing/linings/casings	K11	73
K12	Under purlin/inside rail panel linings	K12	73
K13	Rigid sheet fine linings/panelling	K13	73
K20	Timber board flooring/sheathing/linings/casings	K20	73
K21	Timber narrow strip flooring/linings	K21	73
K30	Demountable partitions	K30	90
K31	Plasterboard fixed partitions/inner walls/linings	K31	87
K32	Framed panel cubicle partitions	K32	91
K33	Concrete/Terrazzo partitions	K33	53
K40	Suspended ceilings	K40	92
K41	Raised access floors	K41	94

* No specific rules included -- see General rules clause 11.

L Windows/Doors/Stairs

L10	Timber windows/rooftlights/screens/louvres	L10	95
L11	Metal windows/rooftlights/screens/louvres	L11	95
L12	Plastics windows/rooftlights/screens/louvres	L12	95
L20	Timber doors/shutters/hatches	L20	96
L21	Metal doors/shutters/hatches	L21	96
L22	Plastics/Rubber doors/shutters/hatches	L22	96
L30	Timber stairs/walkways/balustrades	L30	97
L31	Metal stairs/walkways/balustrades	L31	97
L40	General glazing	L40	98
L41	Lead light glazing	L41	101
L42	Infill panels/sheets	L42	102

M Surface finishes

M10	Sand cement/Concrete/Granolithic screeds/flooring	M10	103
M11	Mastic asphalt flooring	M11	83
M12	Trowelled bitumen/resin/rubber-latex flooring	M12	103
M20	Plastered/Rendered/Roughcast coatings	M20	103
M21	Insulation with rendered finish	M21	106
M22	Sprayed mineral fibre coatings	M22	107
M23	Resin bound mineral coatings	M23	103
M30	Metal mesh lathing/Anchored reinforcement for plastered coatings	M30	108
M31	Fibrous plaster	M31	109
M40	Stone/Concrete/Quarry/Ceramic tiling/Mosaic	M40	111
M41	Terrazzo tiling/In situ terrazzo	M41	113
M42	Wood block/Composition block/Parquet flooring	M42	111
M50	Rubber/Plastics/Cork/Lino/Carpet tiling/sheeting	M50	113
M51	Edge fixed carpeting	M51	113
M52	Decorative papers/fabrics	M52	115
M60	Painting/Clear finishing	M60	116

N Furniture/Equipment

N10	General fixtures/furnishings/equipment	N10	119
N11	Domestic kitchen fittings	N11	119
N12	Catering equipment	N12	119
N13	Sanitary appliances/fittings	N13	119
N14	Interior landscape	N14	*
N15	Signs/Notices	N15	119
N20		N20	119
N21	} Appropriate section titles for each project	N21	119
N22		N22	119
N23		N23	119

P Building fabric sundries

P10	Sundry insulation/proofing work/fire stops	P10	121
P11	Foamed/Fibre/Bead cavity wall insulation	P11	122
P20	Unframed isolated trims/skirtings/sundry items	P20	123
P21	Ironmongery	P21	124
P22	Sealant joints	P22	125
P30	Trenches/Pipeways/Pits for buried engineering services	P30	126
P31	Holes/Chases/Covers/Supports for services	P31	126

Q Paving/Planting/Fencing/Site furniture

Q10	Stone/Concrete/Brick kerbs/edgings/channels	Q10	131
Q20	Hardcore/Granular/Cement bound bases/sub-bases to roads/pavings	Q20	29
Q21	In situ concrete roads/pavings/bases	Q21	132
Q22	Coated macadam/Asphalt roads/pavings	Q22	133
Q23	Gravel/Hoggin roads/pavings	Q23	134
Q24	Interlocking brick/block roads/pavings	Q24	135
Q25	Slab/Brick/Sett/Cobble paving	Q25	135
Q26	Special surfacings/pavings for sport	Q26	136
Q30	Seeding/Turfing	Q30	137
Q31	Planting	Q31	137
Q40	Fencing	Q40	139
Q50	Site/Street furniture/equipment	Q50	119

* No specific rules included — see General rules clause 11.

R Disposal systems

- R10 Rainwater pipework/gutters
- R11 Foul drainage above ground
- R12 Drainage below ground
- R13 Land drainage
- R14 Laboratory/Industrial waste drainage
- R20 Sewage pumping
- R21 Sewage treatment/sterilisation
- R30 Centralised vacuum cleaning
- R31 Refuse chutes
- R32 Compactors/Macelerators
- R33 Incineration plant

R10 141
 R11 141
 R12 145
 R13 145
 R14 Y
 R20 Y
 R21 Y
 R30 Y
 R31 Y
 R32 Y
 R33 Y

S Piped supply systems

- S10 Cold water
- S11 Hot water
- S12 Hot and cold water (small scale)
- S13 Pressurised water
- S14 Irrigation
- S15 Fountains/Water features
- S20 Treated/Deionised/Distilled water
- S21 Swimming pool water treatment
- S30 Compressed air
- S31 Instrument air
- S32 Natural gas
- S33 Liquid petroleum gas
- S34 Medical/Laboratory gas
- S40 Petrol/Oil - lubrication
- S41 Fuel oil storage/distribution
- S50 Vacuum
- S51 Steam
- S60 Fire hose reels
- S61 Dry risers
- S62 Wet risers
- S63 Sprinklers
- S64 Deluge
- S65 Fire hydrants
- S70 Gas fire fighting
- S71 Foam fire fighting

S10 Y
 S11 Y
 S12 Y
 S13 Y
 S14 Y
 S15 Y
 S20 Y
 S21 Y
 S30 Y
 S31 Y
 S32 Y
 S33 Y
 S34 Y
 S40 Y
 S41 Y
 S50 Y
 S51 Y
 S60 Y
 S61 Y
 S62 Y
 S63 Y
 S64 Y
 S65 Y
 S70 Y
 S71 Y

T Mechanical heating/Cooling/Refrigeration systems

- T10 Gas/Oil fired boilers
- T11 Coal fired boilers
- T12 Electrode/Direct electric boilers
- T13 Packaged steam generators
- T14 Heat pumps
- T15 Solar collectors
- T16 Alternative fuel boilers
- T20 Primary heat distribution
- T30 Medium temperature hot water heating
- T31 Low temperature hot water heating
- T32 Low temperature hot water heating (small scale)
- T33 Steam heating
- T40 Warm air heating
- T41 Warm air heating (small scale)
- T42 Local heating units
- T50 Heat recovery
- T60 Central refrigeration plant
- T61 Primary/Secondary cooling distribution
- T70 Local cooling units
- T71 Cold rooms
- T72 Ice pads

T10 Y
 T11 Y
 T12 Y
 T13 Y
 T14 Y
 T15 Y
 T16 Y
 T20 Y
 T30 Y
 T31 Y
 T32 Y
 T33 Y
 T40 Y
 T41 Y
 T42 Y
 T50 Y
 T60 Y
 T61 Y
 T70 Y
 T71 Y
 T72 Y

Y: See Y Mechanical and electrical services measurement

U Ventilation/Air conditioning systems

U10	General supply/extract	Y	U10
U11	Toilet extract	Y	U11
U12	Kitchen extract	Y	U12
U13	Car parking extract	Y	U13
U14	Smoke extract/Smoke control	Y	U14
U15	Safety cabinet/Fume cupboard extract	Y	U15
U16	Fume extract	Y	U16
U17	Anaesthetic gas extract	Y	U17
U20	Dust collection	Y	U20
U30	Low velocity air conditioning	Y	U30
U31	VAV air conditioning	Y	U31
U32	Dual-duct air conditioning	Y	U32
U33	Multi-zone air conditioning	Y	U33
U40	Induction air conditioning	Y	U40
U41	Fan-coil air conditioning	Y	U41
U42	Terminal re-heat air conditioning	Y	U42
U43	Terminal heat pump air conditioning	Y	U43
U50	Hybrid system air conditioning	Y	U50
U60	Free standing air conditioning units	Y	U60
U61	Window/Wall air conditioning units	Y	U61
U70	Air curtains	Y	U70

W Communications/Security/Control systems

W10	Telecommunications	Y	W10
W11	Staff paging/location	Y	W11
W12	Public address/Sound amplification	Y	W12
W13	Centralized dictation	Y	W13
W20	Radio/TV/CCTV	Y	W20
W21	Projection	Y	W21
W22	Advertising display	Y	W22
W23	Clocks	Y	W23
W30	Data transmission	Y	W30
W40	Access control	Y	W40
W41	Security detection and alarm	Y	W41
W50	Fire detection and alarm	Y	W50
W51	Earthing and bonding	Y	W51
W52	Lightning protection	Y	W52
W53	Electromagnetic screening	Y	W53
W60	Monitoring	Y	W60
W61	Central control	Y	W61
W62	Building automation	Y	W62

V Electrical supply/power lighting systems

V10	Electricity generation plant	Y	V10
V11	HV supply/distribution/public utility supply	Y	V11
V12	LV supply/public utility supply	Y	V12
V20	LV distribution	Y	V20
V21	General lighting	Y	V21
V22	General LV power	Y	V22
V30	Extra low voltage supply	Y	V30
V31	DC supply	Y	V31
V32	Uninterrupted power supply	Y	V32
V40	Emergency lighting	Y	V40
V41	Street/Area/Flood lighting	Y	V41
V42	Studio/Auditorium/Arena lighting	Y	V42
V50	Electric underfloor heating	Y	V50
V51	Local electric heating units	Y	V51
V90	General lighting and power (small scale)	Y	V90

X Transport systems

X10	Lifts	Y	X10	149
X11	Escalators	Y	X11	149
X12	Moving pavements	Y	X12	149
X20	Hoists	Y	X20	149
X21	Cranes	Y	X21	149
X22	Travelling cradles	Y	X22	149
X23	Goods distribution/Mechanised warehousing	Y	X23	149
X30	Mechanical document conveying	Y	X30	149
X31	Pneumatic document conveying	Y	X31	149
X32	Automatic document filling and retrieval	Y	X32	149

Y: See Y Mechanical and electrical services measurement

Y Mechanical and electrical services measurement

Y10	Pipelines	151
Y11	Pipeline ancillaries	151
Y20	Pumps	154
Y21	Water tanks/cisterns	154
Y22	Heat exchangers	154
Y23	Storage cylinders/calorifiers	154
Y24	Trace heating	154
Y25	Cleaning and chemical treatment	154
Y30	Air ductlines	156
Y31	Air ductline ancillaries	156
Y40	Air handling units	154
Y41	Fans	154
Y42	Air filtration	154
Y43	Heating/Cooling coils	154
Y44	Humidifiers	154
Y45	Silencers/Acoustic treatment	154
Y46	Grilles/Diffusers/Louvres	154
Y50	Thermal insulation	158
Y51	Testing and commissioning of mechanical services	159
Y52	Vibration isolation mountings	154
Y53	Control components – mechanical	154
Y54	Identification – mechanical	159
Y59	Sundry common mechanical items	159
Y60	Conduit and cable trunking	161
Y61	HV/LV cables and wiring	163
Y62	Busbar trunking	163
Y63	Support components – cables	161
Y70	HV switchgear	166
Y71	LV switchgear and distribution boards	166
Y72	Contactors and starters	166
Y73	Luminaires and lamps	167
Y74	Accessories for electrical services	167
Y80	Earthing and bonding components	163
Y81	Testing and commissioning of electrical services	169
Y82	Identification – electrical	169
Y89	Sundry common electrical items	169
Y92	Motor drives – electric	166

Additional rules – work to existing buildings

Work Groups H, J, K, L and M	171
R10 – R13 Drainage	173
Mechanical Services	173
Electrical Services	175

Appendices

A	Fixtures, furnishings, equipment, fittings and appliances	177
B	Classification of mechanical and electrical services	181

Alphabetical index

183

Preface to Seventh Edition 1988

The Joint Working Party on Measurement Conventions set up by The Royal Institution of Chartered Surveyors and the then National Federation of Building Trades Employers reported in December 1971. Out of this report a Development Unit was set up and quickly came to the conclusion that far reaching changes were required. As an interim measure the Sixth Edition of the Standard Method of Measurement was published in March 1979. Now, with the publication of this Seventh Edition, the work envisaged by that working party has been completed.

The Co-ordinating Committee for Project Information has produced a Common Arrangement of Work Sections for Building Works. In support of the principles of CCPI and in accordance with the wishes of the sponsoring bodies, this Edition has been structured in common arrangement order rather than in traditional work sections. This means that the Standard Method of Measurement is now compatible with other CCPI publications and with all standard documentation where these criteria have been adopted. The other major change from previous editions is that the measurement rules have been translated from prose into classification tables. This change makes the use of the rules a quicker and more systematic task than interpretation of a prose version and readily lends itself to the use of standard phraseology and computerisation. The change however does not inhibit the use of traditional prose in the writing of bills of quantities if so desired. In addition to these two major changes, the rules have generally been simplified and the document brought up to date to equate with modern practice.

The Committee expresses its thanks to the professional and trade associations for their co-operation and advice in the detailed consultations that have taken place and to the surveyors and builders who have assisted in testing the new rules, to Geoffrey E. Beard who chaired the Committee from June 1975 to September 1984 and especially to the editors who have had the task of bringing together all the various drafts and presenting them in a uniform manner in a relatively short space of time.

This Seventh Edition will become operative on 1 July 1988 and is post dated accordingly.

The Joint Committee responsible for this edition at the date of issue was composed as follows:

Appointed by the Royal Institution of Chartered Surveyors: Christopher J. Willis (Chairman), Ronald C. Allan, Keith W. Bailey, John Bennett, Eric J. Bowman, N. Malcolm S. Boyd, Michael A. Rainbird, Eric H. Urquhart and Michael J.T. Webb.

Appointed by the Building Employers Confederation: Andrew J. Costelloe (Vice-Chairman), John M. Allen, Bernard Ball, Kenneth G. Ellis, James E. Fisher, Colin M. Ford, Richard J. Hooker, Robert H. Inglis, Terence J. Parkinson and Donald J. Rimmer.

Co-opted from the Development Unit: Tony Allott, Stuart Hendy, Peter E. Holden, Peter G. Jordan and Rex H. Sharman.

Consultant Members of the Committee: Geoffrey E. Beard and Ian M.C. Hill.

Joint Honorary Secretaries: Norman R. Wheatley (General) and Michael B. Smith (Queries).

Others who have served on the Committee or the Development Unit during the preparation of this edition: Dr Martin Barnes, Robert A. Barrow, Ian T. Brown, Peter Graham, Alan M. Harrison, Patrick Kelly, Anthony R. Miller and Paul D. Morrell.

Consultant Editors appointed by the Committee: Paul J. Gilkes and Richard E.N. McGill

CJW: 1 October 1987

Preface to First Edition 1922

For many years the Surveyors' Institution and the Quantity Surveyors' Association (which bodies are now amalgamated) were accepted as the recognised authorities for deciding disputed points in connection with the measurement of building works. The frequency of the demands upon their services for this purpose directed attention to the diversity of practice, varying with local custom, and even the idiosyncracies of individual surveyors, which obtained. This lack of uniformity afforded a just ground of complaint on the part of contractors that the estimator was frequently left in doubt as to the true meaning of items in the bills of quantities which he was called upon to price, a circumstance which militated against scientific and accurate tendering.

In the absence of any statutory qualifications for surveyors practising in the United Kingdom, any person, up to the present, has been at liberty to describe himself as a quantity surveyor, and the public have no guarantee that he is qualified for that office. This fact resulted in the issue of a considerable amount of unskilled work under the designation of bills of quantities.

Both the Surveyors' Institution and the Quantity Surveyors' Association were impressed with the necessity of securing greater accuracy of work and uniformity of method. The latter body, in July 1909, with this object in view appointed a Committee who prepared and published pamphlets setting out the method of measurement recommended by the Association in respect of three trades. The Surveyors' Institution also issued to its members circulars giving an authoritative opinion as to the correct method of measurement in the case of items in connection with which disputes had occurred. The

desirability of co-operation between the two societies thus became evident, and a Joint Committee was set up in June 1912, upon which was imposed the task of drawing up a comprehensive set of Standard Rules of Measurement of Building Works. In 1918 representatives of the building trades were added to this Committee, four contractors being nominated by the National Federation of Building Trades Employers and the Institute of Builders. The Joint Committee were assisted in their deliberations by interviews with the representatives of certain trades.

The Standard Method of Measurement of Building Works drawn up and set forth in the following pages is founded upon the practice of the leading London quantity surveyors with certain modifications by way of alternatives, and not involving matters of principle, to suit the practice obtaining in other parts of the Kingdom.

The Joint Committee was composed as follows: six surveyors nominated by the Surveyors' Institution and the Quantity Surveyors' Association, and four contractors nominated by the National Federation of Building Trades Employers and the Institute of Builders, viz. Surveyors: Messrs. F.A., H. Hardcastle (Chairman), Thomas E. Bare (Hon. Sec.), R.C. Gleed, Arnold E. Harris, Walter Lawrence, and Morgan H. Young, Contractors: Messrs. R. Friend (Rugby) (Vice-Chairman), W. Lacey (London), Stanley Miller (Newcastle-on-Tyne) and Frank Woods (Bolton, Lancashire).

Other gentlemen who have served on the Committee for a time are: Surveyors: Messrs. Arthur G. Cross, W.E. Davis, J.E. Drower, and Henry Riley. Contractor: Mr. Walter Lawrence (London).

General rules

1. Introduction

1.1 This Standard Method of Measurement provides a uniform basis for measuring building works and embodies the essentials of good practice. Bills of quantities shall fully describe and accurately represent the quantity and quality of the works to be carried out. More detailed information than is required by these rules shall be given where necessary in order to define the precise nature and extent of the required work.

1.2 The rules apply to measurement of proposed work and executed work.

2. Use of the tabulated rules

Generally

2.1 The rules in this document are set out in tables. Each section of the rules comprises information (to be) provided, classification tables and supplementary rules. The tabulated rules are written in the present tense.

2.2 Horizontal lines divide the classification table and supplementary rules into zones to which different rules apply.

Classification tables

2.3 Within the classification table where a broken line is shown, the rules given above and below the broken line may be used as alternatives.

2.4 In referring to columns in classification tables the measurement unit column has been disregarded.

2.5 The left hand column of the classification table lists descriptive features commonly encountered in building works. The next column lists further sub-groups into which each main group of items shall be divided and similarly the third column provides for further division. The lists in these columns are not intended to be exhaustive.

2.6 Each item description shall identify the work with respect to one descriptive feature drawn from each of the first three columns in the classification table and as many of the descriptive features in the fourth column as are applicable to the item. The general principle does not apply to Preliminaries in that it will be necessary to select as many descriptive features as appropriate from each column.

2.7 Where the abbreviation (nr) is given in the classification table the quantity shall be stated in the item description.

Supplementary rules

2.8 Within the supplementary rules everything above the horizontal line, which is immediately below the classification table heading, is applicable throughout that table.

2.9 Measurement rules set out when work shall be measured and the method by which quantities shall be computed.

2.10 Definition rules define the extent and limits of the work represented by a word or expression used in the rules and in a bill of quantities prepared in accordance with the rules.

Coverage rules draw attention to particular incidental work which shall be deemed to be included in the appropriate items in a bill of quantities to the extent that such work is included in the tender documents. Where the coverage rules include materials they shall be mentioned in the item descriptions.

2.12

The column headed Supplementary Information contains rules governing the information which shall be given in addition to the information given as a result of the application of rule 2.6.

2.13

A separate item shall be given for any work which differs from other work with respect to any matter listed as supplementary information.

3. Quantities

3.1

Work shall be measured net as fixed in position except where otherwise stated in a measurement rule applicable to the work.

3.2

Dimensions used in calculating quantities shall be taken to the nearest 10mm (i.e. 5mm and over shall be regarded as 10mm and less than 5mm shall be disregarded).

3.3

Quantities measured in tonnes shall be given to two places of decimals. Other quantities shall be given to the nearest whole unit except that any quantity less than one unit shall be given as one unit.

3.4

Unless otherwise stated, where minimum deductions for voids are dealt with in this document they shall refer only to openings or wants which are 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.

3.5

The requirement to measure separate items for widths not exceeding a stated limit shall not apply where these widths are caused by voids.

4. Descriptions

4.1

Dimensions shall be stated in descriptions generally in the sequence length, width, height. Where ambiguity could arise, the dimensions shall be identified.

4.2

Information required by the application of rules 2.6 and 2.12 may be given in documents (e.g. drawings or specification) separate from the bills of quantities if a precise and unique cross reference is given in its place in the description of the item concerned. This rule does not allow the aggregation of a number of measured items which are otherwise required to be measured separately by these rules, except as provided by rule 9.1.

4.3

Headings to groups of items in a bill of quantities shall be read as part of the descriptions of the items to which the headings apply.

4.4

The use of a hyphen between two dimensions in this document or in a bill of quantities shall mean a range of dimensions exceeding the first dimension stated but not exceeding the second.

4.5

Each work section of a bill of quantities shall begin with a description stating the nature and location of the work unless evident from the drawn or other information required to be provided by these rules.

4.6

Unless otherwise specifically stated in a bill of quantities or herein, the following shall be deemed to be included with all items:

- (a) Labour and all costs in connection therewith.
- (b) Materials, goods and all costs in connection therewith.
- (c) Assembling, fitting and fixing materials and goods in position.
- (d) Plant and all costs in connection therewith.
- (e) Waste of materials.
- (f) Square cutting.
- (g) Establishment charges, overhead charges and profit.

4.7

A dimensioned description for an item in the bill of quantities shall define the item and state all the dimensions necessary to identify the shape and size of the item or its components.

5. Drawn information

5.1

Location drawings:

- (a) Block Plan: shall identify the site and locate the outlines of the building works in relation to a town plan or other context.
- (b) Site Plan: shall locate the position of the building works in relation to setting out points, means of access and general layout of the site.
- (c) Plans, Sections and Elevations: shall show the position occupied by the various spaces in a building and the general construction and location of the principal elements.

5.2

Component drawings: shall show the information necessary for manufacture and assembly of a component.

5.3

Dimensioned diagrams: shall show the shape and dimensions of the work covered by an item and may be used in a bill of quantities in place of a dimensioned description, but not in place of an item otherwise required to be measured.

5.4

Schedules which provide the required information shall be deemed to be drawings as required under these rules.

6. Catalogued or standard components

6.1

A precise and unique cross-reference to a catalogue or to a standard specification may be given in an item description instead of the description required by rules 2.6 and 2.12 or instead of a component drawing.

7. Work of special types

7.1

Work of each of the following special types shall be separately identified:

- (a) Work on or in existing building – see general rule 13.
- (b) Work to be carried out and subsequently removed (other than temporary works).
- (c) Work outside the curtilage of the site.

(d) Work carried out in or under water shall be so described stating whether canal, river or sea water and (where applicable) the mean Spring levels of high and low water.

(e) Work carried out in compressed air shall be so described stating the pressure and the method of entry and exit.

8. Fixing, base and background

8.1

Method of fixing shall only be measured and described where required by the rules in each Work Section. Where fixing through vulnerable materials is required to be identified, such materials are deemed to include those listed in rule 8.3 (e).

8.2

Where the nature of the base is required to be identified each type of base shall be identified separately.

8.3

Where the nature of the background is required to be identified the item description shall state one of the following:

- (a) Timber, which shall be deemed to include manufactured building boards.
- (b) Masonry, which shall be deemed to include concrete, brick, block and stone.
- (c) Metal.
- (d) Metal faced materials.
- (e) Vulnerable materials, which shall be deemed to include glass, marble, mosaic, tiled finishes and the like.

9. Composite items

9.1

Notwithstanding the requirement of clause 4.2, work to be manufactured off site may be combined into one item even though the rules require items to be measured separately, provided the items in question are all incorporated into the composite item off site. The item description shall identify the resulting composite item and the item shall be deemed to include breaking down for transport and installation and subsequent re-assembly.

1. Procedure where the drawn a. J specification information required by these rules is not available

- 10.1 Where work can be described and given in items in accordance with these rules but the quantity of work required cannot be accurately determined, an estimate of the quantity shall be given and identified as an approximate quantity.
- 10.2 Where work cannot be described and given in items in accordance with these rules it shall be given as a Provisional Sum and identified as for either defined or undefined work as appropriate.
- 10.3 A Provisional Sum for defined work is a sum provided for work which is not completely designed but for which the following information shall be provided:
- (a) The nature and construction of the work.
 - (b) A statement of how and where the work is fixed to the building and what other work is to be fixed thereto.
 - (c) A quantity or quantities which indicate the scope and extent of the work.
 - (d) Any specific limitations and the like identified in Section A35.
- 10.4 Where Provisional Sums are given for defined work the Contractor will be deemed to have made due allowance in programming, planning and pricing Preliminaries. Any such allowance will only be subject to adjustment in those circumstances where a variation in respect of other work measured in detail in accordance with the rules would give rise to adjustment.
- 10.5 A Provisional Sum for undefined work is a sum provided for work where the information required in accordance with rule 10.3 cannot be given.

- 10.6 Where Provisional Sums are given for undefined work the Contractor will be deemed not to have made any allowance in programming, planning and pricing Preliminaries.

11. Work not covered

11.1

Rules of measurement adopted for work not covered by these rules shall be stated in a bill of quantities. Such rules shall, as far as possible, conform with those given in this document for similar work.

12. Symbols and abbreviations

12.1

The following symbols and abbreviations are used in this method of measurement:

m	=	metre
m ²	=	square metre
m ³	=	cubic metre
mm	=	millimetre
nr	=	number
kg	=	kilogramme
t	=	tonne
h	=	hour
p.c sum	=	Prime Cost Sum
prov sum	=	Provisional Sum
>	=	exceeding
≥	=	equal to or exceeding
≤	=	not exceeding
<	=	less than
%	=	percentage
-	=	hyphen (see rule 4.4)

12.2

Cross references within the classification tables are given in the form:

Work Section number	:	Number from first column	.	Number from second column	.	Number from third column	.	Number from fourth column
---------------------	---	--------------------------	---	---------------------------	---	--------------------------	---	---------------------------

Example:

D20: 2. 2. 2. 1

Excavation and filling

Excavating

To reduce levels

Maximum depth $\leq 1.00\text{m}$

Commencing level stated where $> 0.25\text{m}$ below existing ground level.

12.3

An asterisk within a cross reference represents all entries in the column in which it appears.

12.4

The digit 0 within a cross reference represents no entries in the column in which it appears.

13. Work to existing buildings

13.1

Work to existing buildings shall be so described. Such work is defined as work on, or in, or immediately under work existing before the current project.

13.2

The additional rules for work to existing buildings are to be read in conjunction with the preceding rules in the appropriate Work Sections.

13.3

A description of the additional Preliminaries/General conditions which are pertinent to the work to the existing building shall be given, drawing attention to any specific requirements due to the nature of the work.

14. General definitions

14.1

Where the rules require work to be described as curved with the radii stated details shall be given of the curved work including if concave or convex, if conical or spherical, if to more than one radius and shall state the radius or radii.

14.2

The radius stated shall be the mean radius measured to the centre line of the material unless otherwise stated.

A Preliminaries/General conditions

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Location drawings as defined in General Rule 5.1 P2 Information to facilitate visiting site and addresses where drawings or other information additional to that required by these rules or other listed information may be inspected			D1 A fixed charge is for work the cost of which is to be considered as independent of duration D2 A time related charge is for work the cost of which is to be considered as dependent on duration	C1 Works of a temporary nature are deemed to include rates, fees and charges related thereto in Sections A36, A41, A42, and A44	
CLASSIFICATION TABLE					
A10 Project particulars					
1 Project particulars	1 Name, nature and location 2 Names and addresses of Employer and Consultants	item			
A11 Drawings					
1 Drawings	1 List of drawings from which the bills of quantities were prepared	item			
A12 The site/Existing buildings					
1 The site/Existing buildings	1 Site boundaries 2 Existing buildings on or adjacent to the site 3 Existing mains/services 4 Others, details stated	item			
A13 Description of the work					
1 Description of the work	1 Elements of each new building 2 Dimensions and shape relating to each building 3 Details of related work by others	item 1 Plan area and perimeter at each floor level 2 Heights between floors 3 Total height			M1 Given only when the equivalent information is not indicated on the drawings provided

1 For contract	<ul style="list-style-type: none"> 1 Schedule of clause headings of standard conditions 2 Special conditions or amendments to standard conditions 3 Appendix insertions 4 Employer's insurance responsibility 5 Performance guarantee bond 	item	Under sea
A30 Employer's requirements: Tendering/Sub-letting/Supply			
1 Employer's requirements or limitations	1 Details stated	<ul style="list-style-type: none"> 1 Fixed charge 2 Time related charge 	item
A31 Employer's requirements: Provision, content and use of documents			
1 Employer's requirements or limitations	1 Details stated	<ul style="list-style-type: none"> 1 Fixed charge 2 Time related charge 	item
A32 Employer's requirements: Management of the works			
1 Employer's requirements or limitations	1 Details stated	<ul style="list-style-type: none"> 1 Fixed charge 2 Time related charge 	item
A33 Employer's requirements: Quality standards/control			
1 Employer's requirements or limitations	1 Details stated	<ul style="list-style-type: none"> 1 Fixed charge 2 Time related charge 	item
A34 Employer's requirements: Security/Safety/Protection			
1 Employer's requirements or limitations, details stated	<ul style="list-style-type: none"> 1 Noise and pollution control 2 Maintain adjoining buildings 3 Maintain public and private roads 4 Maintain live services 5 Security 6 Protection of work in all sections 7 Others 	<ul style="list-style-type: none"> 1 Fixed charge 2 Time related charge 	item

A Preliminaries/General conditions continued

CLASSIFICATION TABLE			MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
A35 Employer's requirements: Specific limitations on method/sequence/timing						
1 Employer's requirements or limitations, details stated	1 Design constraints 2 Method and sequence of work 3 Access 4 Use of the site 5 Use or disposal of materials found 6 Start of work 7 Working hours 8 Others	1 Fixed charge 2 Time related charge	item			
A36 Employer's requirements: Facilities/Temporary work/Services						
1 Employer's requirements or limitations, details stated	1 Offices 2 Sanitary accommodation 3 Temporary enclosures, hoardings, screens and roofs 4 Name boards 5 Technical and surveying equipment 6 Temperature and humidity 7 Telephone/Facsimile installation and rental/maintenance 8 Others 9 Telephone/Facsimile call charges	1 Fixed charge 2 Time related charge	item			
			prov sum		C2 Heating, lighting, cleaning and maintenance are deemed to be included	
A37 Employer's requirements: Operation/Maintenance of the finished building						
1 Employer's requirements or limitations	1 Details stated	1 Fixed charge 2 Time related charge	item			

1 Man and staff	1 Fixed charge 2 Time related charge	Management and staff includes management, trades supervision, engineering, programming and production, quantity surveying support staff and the like		
A41 Contractor's general cost items: Site accommodation				
1 Site accommodation	1 Fixed charge 2 Time related charge	D4 Site accommodation includes offices, laboratories, cabins, stores, compounds, canteens, sanitary facilities and the like		
A42 Contractor's general cost items: Services and facilities				
1 Services and facilities	1 Fixed charge 2 Time related charge	D5 Items listed are not exhaustive and are for convenience of pricing only	C3 General attendance is deemed to include the use of the Contractor's temporary roads, pavings and paths, standing scaffolding, standing power operated hoisting plant, the provision of temporary lighting and water supplies, clearing away rubbish, provision of space for the sub-contractor's own offices and the storage of his plant and materials and the use of messrooms, sanitary accommodation and welfare facilities provided by the Contractor	
16 General attendance on nominated sub-contractors				

A Preliminaries/General conditions continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
A43 Contractor's general cost items: Mechanical plant							
1 Mechanical plant	1 Cranes 2 Hoists 3 Personnel transport 4 Transport 5 Earthmoving plant 6 Concrete plant 7 Piling plant 8 Paving and surfacing plant 9 Others	1 Fixed charge 2 Time related charge	1 Made available by the Employer, details and conditions stated	D6 Items listed are not exhaustive and are for convenience of pricing only			
A44 Contractor's general cost items: Temporary works							
1 Temporary works	1 Temporary roads 2 Temporary walkways 3 Access scaffolding 4 Support scaffolding and propping 5 Hoardings, fans, fencing etc. 6 Hardstanding 7 Traffic regulations 8 Others	1 Fixed charge 2 Time related charge	1 Made available by the Employer, details and conditions stated	D7 Items listed are not exhaustive and are for convenience of pricing only			
A50 Work/Materials by the Employer							
1 Work/Materials by the Employer	1 Work by others directly employed by the Employer, details stated 2 Attendance on others directly employed by the Employer, details stated 3 Materials provided by or on behalf of the Employer, details stated		item				

1 Nomi sub-contractors	1 Sub-contractor's work		1 Description stated in accordance with General Rule 10.3		p c sum		M2 General attendance on sub-contractor's work is measured in Section A42	D8 Scaffolding under this rule is special scaffolding, scaffolding additional to the Contractor's standing scaffolding, or standing scaffolding required to be altered or retained D9 Positioning includes unloading, distributing, hoisting and placing in position giving in the case of significant items the weight and/or size and position relative to ground level or other datum			S1 Particulars of any costs to be paid of conveying goods and materials to the site and/or of any special packing or similar requirements
	2 Main contractor's profit	3 Special attendance, details stated	1 Scaffolding 2 Access roads 3 Hardstandings 4 Positioning 5 Storage 6 Power 7 Temperature and humidity 8 Others	%	1 Fixed charge 2 Time related charge						
A52 Nominated suppliers											
1 Nominated suppliers	1 Supplier's materials		1 Description stated		p c sum		M3 Fixing only such items is measured in the appropriate Work Section				D10 Work by statutory authorities includes work by public companies responsible for statutory work when executing their statutory duty D11 For defined and undefined provisional sums see General Rule 10
	2 Main contractor's profit				%						
A53 Work by statutory authorities											
1 Work by statutory authorities	1 Work by the local authority 2 Work by statutory undertakings				prov sum						C1 Fixing only such items is deemed to include unloading, storing, hoisting the goods and materials and returning packaging materials to the nominated supplier carriage paid and obtaining credits therefor
A54 Provisional work											
1 Provisional work	1 Defined 2 Undefined				prov sum						
A55 Dayworks											
1 Dayworks	1 Labour				prov sum						
	2 Materials										
	3 Plant										

C Demolition/Alteration/Renovation

C10 Demolishing structures C30 Shoring

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the location and extent of existing structures to be demolished		M1 The rules within this Section apply to works to existing buildings as defined in the General Rules			
CLASSIFICATION TABLE					
1 Demolishing all structures 2 Demolishing individual structures 3 Demolishing parts of structures	1 Description sufficient for identification	1 Levels to which structures are demolished 1 Materials remaining the property of the Employer 2 Materials for re-use 3 Making good structures 4 Leaving parts of existing walls temporarily in position to act as buttresses 5 Temporarily diverting, maintaining or sealing off existing services 6 Toxic or other special waste	D1 Materials arising from demolitions are the property of the Contractor unless otherwise stated D2 Demolishing parts of structures excludes items covered by Section C20	C1 Demolition items are deemed to include: (a) disposal of materials other than those remaining the property of the Employer or those for re-use (b) temporary support incidental to demolitions which is at the discretion of the Contractor	S1 Method of demolition where by specific means S2 Stalling aside and storing materials remaining the property of the Employer or those for re-use S3 Employer's restrictions on methods of disposal of materials
4 Support of structures not to be demolished 5 Support of roads and the like	1 Position and type of shoring and nature of structure or road to be shored stated	1 Providing and erecting 2 Maintaining, duration stated 3 Adapting, details stated 4 Clearing away 5 Cutting holes in the structure, details stated 6 Making good all work disturbed	D3 Support is other than temporary support incidental to demolitions	C2 Support is deemed to include nails, wedges and bolts	

C20 Alterations - spot items

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under - A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work relative to the existing layout indicating the existing structure</p>		<p>M1 The rules within this Section apply to works to existing buildings as defined in the General Rules M2 Any operation to existing buildings involving removal of existing materials (other than for bonding purposes or renewal) is measured within this Section</p>	<p>D1 Materials arising from alterations - spot items are the property of the Contractor unless otherwise stated D2 Location is stated relative to existing building</p>	<p>C1 Shoring and scaffolding incidental to the work and making good all work disturbed by such shoring and scaffolding is deemed to be included within each item C2 Alterations - spot items are deemed to include: (a) disposal of materials other than those remaining the property of the Employer or those for re-use (b) work incidental to alterations - spot items which is at the discretion of the Contractor (c) all new fixing or joining materials required</p>	<p>S1 Method of operation, where by specific means S2 Sealing aside and storing materials remaining the property of the Employer or those for re-use S3 Employer's restrictions on methods of disposal of materials S4 Employer's restrictions on methods of shoring and scaffolding to be used</p>
CLASSIFICATION TABLE					
<p>1 Removing fittings and fixtures 2 Removing plumbing and engineering installations 3 Removing finishings 4 Removing coverings or recesses 5 Cutting openings or recesses 6 Cutting back projections 7 Cutting to reduce thickness 8. Filling in openings</p>	<p>1 Details sufficient for identification stated 2 Dimensioned description sufficient for identification including type and thickness of existing structure</p>	<p>Item</p> <p>1 Making good structures 2 Extending and making good finishings 3 Inserting new work, details stated 4 Toxic or other special waste</p>	<p>M3 Details stated for inserting new work are the equivalent of those details required by the rules for the measurement of the same in other work sections</p>	<p>D3 Inserting new work includes re-fixing or re-using removed materials</p>	
<p>9 Temporary roofs 10 Temporary screens</p>	<p>1 Dimensioned description</p>	<p>Item</p> <p>1 Providing and erecting 2 Maintaining, duration stated 3 Adapting, details stated 4 Clearing away 5 Disposing of rainwater, details stated 6 Providing openings, details stated</p>			<p>S5 Details of weather and dust proofing requirements</p>

C40 Repairing/Renovating concrete/brick/block/stone

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work relative to the existing layout indicating the existing structure</p>		M1 The rules within this Section apply to works to existing buildings as defined in the General Rules	D1 Materials arising are the property of the Contractor unless otherwise stated D2 Locations stated relative to the existing building	<p>C1 Shoring and scaffolding incidental to the work and making good all work disturbed by such shoring and scaffolding is deemed to be included</p> <p>C2 Work to existing buildings items are deemed to include: (a) disposal of materials other than those remaining the property of the Employer or those for re-use (b) incidental work which is at the discretion of the Contractor (c) all new fixing or joining materials required</p>	<p>S1 Method of operation, where by specific means</p> <p>S2 Sealing aside and storing materials remaining the property of the Employer or those for re-use</p> <p>S3 Employer's restrictions on methods of disposal of materials</p> <p>S4 Restrictions on the method of shoring and scaffolding</p>
CLASSIFICATION TABLE					
1 Cutting out defective concrete and replacing with new	1 Dimensioned description	1 Plain, details stated 2 Reinforced, details stated 3 Gun applied, details stated	m ² m nr	1 Treatment of reinforcement, details stated 2 Anchored mesh reinforcement, details stated	S5 Method of bonding new to existing
2 Resin or cement impregnation/injection	1 Dimensioned description	1 Concrete, details stated 2 Brickwork, details stated 3 Blockwork, details stated 4 Stonework, details stated	m ² m nr	1 Centres of drilling holes 2 Removing existing finishes	
3 Cutting out decayed, defective or cracked work and replacing with new	1 Size and depth or thickness stated	1 Brickwork, details stated 2 Blockwork, details stated 3 Stonework, details stated	m ² m nr	1 Making good with materials other than to match existing, details stated	S6 Method of bonding new to existing
4 Repointing	1 Size and depth of raking out of existing joint	1 Brickwork, details stated 2 Blockwork, details stated 3 Stonework, details stated	m ²	1 Type of pointing	S7 Composition and mix of mortar
			M2 Details stated include bond and size of component	C6 Repointing is deemed to include making good to adjoining work	

C40 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
5 Removing stains and the like (nr)	1 > 1.00 m ²	1 Concrete 2 Brickwork 3 Blockwork 4 Stonework	1 Facings 2 Efflorescence 3 Stains 4 Graffiti 5 Vegetation 6 Algae 7 Others, details stated	m ² nr			S8 Special cleaning materials
	2 ≤ 1.00 m ²						
6 Cleaning surfaces	1 Concrete	1 Facings	1 Washing 2 Abrasive blasting 3 Chemical treatments 4 Others, details stated	m ²			S9 Cleaning materials
	2 Brickwork						
	3 Blockwork						
	4 Stonework						
7 Inserting new wall ties	1 Size and type of tie	1 Brickwork 2 Blockwork 3 Stonework	1 Surface finishes, details stated	nr			S10 Details of cutting away and making good
	2 Detailed description and size of new profile						
	3 Detailed description and length and size of new profile						
8 Re-dressing to new profile	1 Concrete		1 To match existing	m ²			
	2 Brickwork						
	3 Blockwork						
	4 Stonework						
9 Artificial weathering	1 Detailed description and size of new profile			m nr			
	2 Detailed description and length and size of new profile						
9 Artificial weathering	1 Concrete			m ²			
	2 Brickwork						
	3 Blockwork						
	4 Stonework						

D Groundwork

D20 Excavating and filling

Q20 Hardcore/Granular/Cement bound bases/sub-bases to roads/pavings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities or stated as assumed:</p> <ul style="list-style-type: none"> (a) the ground water level and the date when it was established, defined as the pre-contract water level (b) the ground water level is to be re-established at the time each excavation is carried out and is defined as the post contract water level (c) ground water levels subject to periodic changes due to tidal or similar effects are so described giving the mean high and low water levels (d) details of trial pits or boreholes including their location (e) features retained (f) live over or underground services indicating location (g) pile sizes and layout in accordance with Sections D30 - D32 where applicable 						
CLASSIFICATION TABLE						
1 Site preparation	1 Removing trees	1 Girth 600 mm - 1.50 m		M1 Tree girths are measured at a height of 1.00 m above ground M2 Slump girths are measured at the top	C1 This work is deemed to include: (a) grubbing up roots (b) disposal of materials (c) filling voids	S1 Filling material described
	2 Removing tree stumps	2 Girth 1.50 - 3.00 m				
	3 Girth > 3.00 m, girth stated	3 Girth > 3.00 m, girth stated				
	3 Clearing site vegetation	4 Description sufficient for identification stated	D1 Site vegetation is bushes, scrub, undergrowth, hedges and trees and tree stumps ≤ 600 mm girth			
	4 Lifting turf for preservation	1 Method of preserving, details stated				

3 Items extra over any types of excavating irrespective of depth	<ul style="list-style-type: none"> 2 To reduce levels 3 Basements and the like 4 Pits (nr) 5 Trenches, width ≤ 0.30 m 6 Trenches, width > 0.30 m 7 For pile caps and ground beams between piles 8 To bench sloping ground to receive filling 	<ul style="list-style-type: none"> 1 Maximum depth ≤ 0. 2 Maximum depth ≤ 1.00 m 3 Maximum depth ≤ 2.00 m 4 and thereafter in 2.00 m stages 	m ³	<ul style="list-style-type: none"> 1 Type of service stated 	<ul style="list-style-type: none"> 1 Extra over any types of excavating irrespective of depth 	<ul style="list-style-type: none"> M6 To be measured where precautions are specifically required 	<ul style="list-style-type: none"> D2 Retaining a service is a precaution which is specifically required 	<ul style="list-style-type: none"> S2 Nature of special requirement
4 Breaking out existing materials	<ul style="list-style-type: none"> 1 Excavating below ground water level 	<ul style="list-style-type: none"> 1 Maximum depth ≤ 0. 2 Maximum depth ≤ 1.00 m 3 Maximum depth ≤ 2.00 m 4 and thereafter in 2.00 m stages 	m ³	<ul style="list-style-type: none"> 1 Type of service stated 	<ul style="list-style-type: none"> 1 Extra over any types of excavating irrespective of depth 	<ul style="list-style-type: none"> M5 If the post contract water level differs from the pre-contract water level the measurements are revised accordingly 	<ul style="list-style-type: none"> D2 Retaining a service is a precaution which is specifically required 	<ul style="list-style-type: none"> S2 Nature of special requirement
5 Breaking out existing hard pavings, thickness stated	<ul style="list-style-type: none"> 1 Excavating below ground water level 	<ul style="list-style-type: none"> 1 Maximum depth ≤ 0. 2 Maximum depth ≤ 1.00 m 3 Maximum depth ≤ 2.00 m 4 and thereafter in 2.00 m stages 	m ³	<ul style="list-style-type: none"> 1 Type of service stated 	<ul style="list-style-type: none"> 1 Extra over any types of excavating irrespective of depth 	<ul style="list-style-type: none"> M6 To be measured where precautions are specifically required 	<ul style="list-style-type: none"> D2 Retaining a service is a precaution which is specifically required 	<ul style="list-style-type: none"> S2 Nature of special requirement
6 Working space allowance to excavations	<ul style="list-style-type: none"> 1 Reduce levels, basements and the like 2 Pits 3 Trenches 4 Pile caps and ground beams between piles 	<ul style="list-style-type: none"> 1 Maximum depth ≤ 0. 2 Maximum depth ≤ 1.00 m 3 Maximum depth ≤ 2.00 m 4 and thereafter in 2.00 m stages 	m ²	<ul style="list-style-type: none"> 1 Type of service stated 	<ul style="list-style-type: none"> 1 Extra over any types of excavating irrespective of depth 	<ul style="list-style-type: none"> M7 Working space is measured where the face of the excavation is < 600 mm from the face of formwork, rendering, tanking or protective walls M8 The area measured is calculated by multiplying the girth of the formwork, rendering, tanking or protective walls by the depth of excavation below the commencing level of the excavation 	<ul style="list-style-type: none"> D4 Backfilling with special materials occurs where selected or treated excavated materials or imported materials are used 	<ul style="list-style-type: none"> S3 Details of backfilling with special materials

D20/Q20 continued

CLASSIFICATION TABLE

				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION					
7 Earthwork support	1 Maximum depth ≤ 1.00 m 2 Maximum depth ≤ 2.00 m 3 and thereafter in 2.00 m stages	1 Distance between opposing faces ≤ 2.00 m 2 Distance between opposing faces 2.00 – 4.00 m 3 Distance between opposing faces > 4.00 m	1 Curved 2 Below ground water level 3 Unstable ground 4 Next to roadways 5 Next to existing buildings 6 Left in	M9 Earthwork support is measured the full depth to all faces of excavation whether or not required except to: (a) face ≤ 0.25 m high (b) sloping faces of excavations where the angle of inclination is ≤ 45° from the horizontal (c) faces of excavations which abut existing walls, piers, or other structures M10 Earthwork support below ground water level or in unstable ground is measured from the commencing level of the excavation to the full depth M11 Earthwork support below ground water level is only measured where a corresponding item is measured in accordance with 3.1.0 and is adjusted accordingly if the post contract water level is different	D5 Earthwork support is deemed to mean providing everything to uphold the sides of excavation by means other than interlocking steel piling which is measured in Section D32 D6 Earthwork support next to roadways occurs where the horizontal distance from the face supported to the edge of the roadway or footpath is < the depth of the excavated face below the roadway or footpath D7 Earthwork support next to existing buildings occurs where the horizontal distance from the face supported to the nearest part of the foundations of the building, is < the depth of the excavated face below the bottom of the foundations D8 Unstable ground is running silt, running sand, loose gravel and the like	C3 Curved earthwork support is deemed to include any extra costs of curved excavation						
							8 Disposal	1 Surface water 2 Ground water	item	M12 An item for disposal of ground water is only measured where a corresponding item is measured in accordance with 3.1, and is adjusted accordingly if the post contract water level is different	D9 Surface water is water on the surface of site and the excavations	
												3 Excavated material

<p>10 Filling make up levels</p> <p>11 Filling of external planters and the like, position stated</p>	<p>2 Average thickness > 0.25 m</p>	<p>2 Obtained from on s spoil heaps</p> <p>3 Obtained off site, type stated</p>	<p>3 Topsoil</p> <p>4 Specified handling, details stated</p>	<p>M15 The average thickness measured for filling is that after compaction</p> <p>M16 The position of external planters and the like is only stated where not at ground level</p>	<p>D10 Work is only described as battered where the slope > 15° from horizontal</p>	<p>S6 Kind and quality of materials and rate of application</p>	<p>S7 Method of compacting</p> <p>S8 Kind and quality of materials</p>
<p>12 Surface packing to filling</p>	<p>1 To vertical or battered faces</p>	<p>1 To vertical or battered faces</p>	<p>m²</p>	<p>M17 Surface treatments may alternatively be given in the description of any superficial item</p>	<p>C5 Compacting is deemed to include leveling and grading to falls and slopes ≤ 15° from horizontal</p>	<p>S6 Kind and quality of materials and rate of application</p>	<p>S7 Method of compacting</p> <p>S8 Kind and quality of materials</p>
<p>13 Surface treatments</p>	<p>1 Applying herbicides</p> <p>2 Compacting</p> <p>3 Trimming</p>	<p>1 Ground</p> <p>2 Filling</p> <p>3 Bottoms of excavations</p>	<p>m²</p>	<p>M18 Specific blinding beds are measured as filling 10.*.*.*</p> <p>M19 Concrete blinding beds are measured in Section E10</p> <p>M20 Trimming sloping surfaces is only measured where the slope is > 15° from horizontal</p>	<p>C5 Compacting is deemed to include leveling and grading to falls and slopes ≤ 15° from horizontal</p>	<p>S6 Kind and quality of materials and rate of application</p>	<p>S7 Method of compacting</p> <p>S8 Kind and quality of materials</p>
<p>14 Surface treatments</p>	<p>4 Trimming rock to produce fair or exposed face</p> <p>5 Preparing subsoil for top soil</p>	<p>1 Sloping surfaces</p> <p>2 Sides of cuttings</p> <p>3 Sides of embankments</p>	<p>1 In rock</p> <p>1 Battered</p> <p>2 Vertical</p> <p>3 In rock</p>	<p>M20 Trimming sloping surfaces is only measured where the slope is > 15° from horizontal</p>	<p>C5 Compacting is deemed to include leveling and grading to falls and slopes ≤ 15° from horizontal</p>	<p>S6 Kind and quality of materials and rate of application</p>	<p>S7 Method of compacting</p> <p>S8 Kind and quality of materials</p>

D30 Cast in place concrete piling

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <ul style="list-style-type: none"> (a) the general piling layout (b) the positions of different types of piles (c) the positions of the work within the site and of existing services (d) the relationship to adjacent buildings <p>P2 Soil description:</p> <ul style="list-style-type: none"> (a) the nature of the ground is given in accordance with Section D20 Information Provided (b) where work is carried out near canals, rivers, etc. or tidal waters, the level of the ground in relation to the normal levels of the canal or river etc. or to the mean Spring levels of high and low tidal waters, is stated; flood levels are stated where applicable <p>P3 Commencing levels:</p> <ul style="list-style-type: none"> (a) the levels from which the work is expected to begin and from which measurements have been taken are stated; irregular ground is so described 					
CLASSIFICATION TABLE					
1 Bored piles	1 Nominal diameter stated	1 Total number, commencing surface stated	1 Preliminary piles	M1 Bored and driven depths are measured along the axes of the piles from the commencing surface to the bottom of the shafts of bored piles and to the bottom of the casings of driven piles	D1 Piles comprising a driven light gauge casing which is first filled with concrete and then withdrawn are classed as driven shell piles where the piles are designed for the load to be carried on the concrete D2 Filling such piles is not classed as filling hollow piles in accordance with Section D31:8.1.*.*
2 Driven shell piles		2 Total concreted length	2 Contiguous bored piles	M2 Pre-boring is only measured where it is specifically required	
3 Pre-boring driven piles		3 Total length, maximum depth stated	3 Raking, inclination ratio stated		C1 The work is deemed to include concrete placed in excess of the completed length C2 Pre-boring is deemed to include grouting up voids between sides of piles and bores C3 The work is deemed to include work below the specified bottom
4 Backfilling empty bores		1 Maximum depth stated	1 Type of backfill material stated		
5 Items extra over piling	1 Breaking through obstructions	1 Breaking through obstructions		M3 Breaking through obstructions is only measured where obstructions are encountered above the founding stratum of the pile	
	2 Enlarging bases for bored piles	1 Diameter of enlarged base stated			
	3 Enlarging bases for driven shell piles				

11 Disposal	1 Excavated material	1 Off site 2 On site	m ³	1 Specified locations, details stated 2 Specified handling, details stated	M5 The volume of disposal of surplus excavated materials is calculated from the nominal cross-sectional size of piles and their depths measured in accordance with 1 - 4.1.2.*	preparation and integration of reinforcement into pile cap or ground beam and disposal
					M6 Delays are only measured where they are specifically authorised	
12 Delays	1 Rig standing		h			C5 Delays are deemed to include associated labour
13 Pile tests	1 Details stated		nr			S6 Timing and details of tests

D32 Steel piling

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION		
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <ul style="list-style-type: none"> (a) the general piling layout (b) the positions of different types of piles (c) the positions of the work within the site and of existing services (d) the relationship to adjacent buildings <p>P2 Soil description:</p> <ul style="list-style-type: none"> (a) the nature of the ground is given in accordance with Section D20 Information Provided (b) where work is carried out near canals, rivers, etc. or tidal waters, the levels of the ground in relation to the normal levels of the canal or river etc. or to the mean Spring levels of high and low tidal water is stated; flood levels are stated where applicable <p>P3 Commencing levels:</p> <ul style="list-style-type: none"> (a) the levels from which the work is expected to begin and from which measurements have been taken are stated; irregular ground is so described 							
CLASSIFICATION TABLE							
1 Isolated piles	1 Mass per metre and cross-sectional size, or section reference stated	1 Total number driven specified length and commencing surface stated	nr	1 Preliminary piles 2 Raking, inclination ratio stated 3 To be extracted	D1 The specified length is that specifically required by the designer	C1 The cost of extraction is deemed to be included with piles so described	S1 Kind and quality of materials S2 Tests of materials
		2 Total driven depth					
2 Interlocking piles	1 Section modulus and cross-sectional size, or section reference stated	1 Total area of specified length ≤ 14.00 m	m ²				
		2 Total area of specified length 14.00 – 24.00 m					
		3 Total area of specified length > 24.00 m					
		4 Total driven area					
		M1 The measurement of the total driven depths includes for driving extended piles M2 The driven depth is measured from the commencing surface to the bottom of the pile toe along the axis of the pile M3 The following separate items are required for each group of interlocking piles: (a) one or more items for the total area of the group of piles divided into the ranges of specified lengths given in 2.1.1-3.* (b) an item for the total driven area of the group of piles M4 The areas of items for interlocking piles are calculated by multiplying the mean undeveloped horizontal lengths of the pile walls formed (including lengths occupied by special piles) by the depths measured in accordance with the definitions of driven					

3 Items extra over interlocking piles	1 Corners 2 Junctions 3 Closures 4 Tapers	1 Type stated	m	definition of lengths in the case of items for the specified areas of piles	
4 Isolated pile extensions	1 Mass per metre and cross-sectional size, or section reference stated 2 Section modulus and cross-sectional size, or section reference stated	1 Total number 2 Extension length ≤ 3.00 m 3 Extension length > 3.00 m	nr m	M5 The length measured for items extra over is the total length M6 Separate items are required for the length of pile extensions and for the number of pile extensions	C2 The cost of extraction is deemed to be included with piles so described C3 Pile extensions are deemed to include the work necessary to attach the extension to the pile
5 Interlocking pile extensions					C4 Cutting off surplus from specified lengths of piles is deemed to include provision and filling of working space and disposal
6 Cutting off surplus from specified lengths	1 Mass per metre and cross-sectional size, or section reference stated 2 Section modulus and cross-sectional size, or section reference stated	1 Isolated piles (nr) 2 Interlocking piles (nr)	m m	M7 The length measured is the surplus length of each pile	
7 Cutting interlocking piles to form holes	1 Dimensioned description		nr		
8 Delays	1 Rig standing	1 Isolated piles 2 Interlocking piles	h	M8 Delays are only measured where specifically authorised	C5 Delays are deemed to include associated labour
9 Pile tests	1 Details stated		nr		S3 Timing and details of tests

D40 Diaphragm walling

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) the arrangement of diaphragm walls and their relationship to surrounding buildings</p> <p>(b) the depths, lengths and thicknesses of diaphragm walls</p> <p>P2 Soil description:</p> <p>(a) the nature of the ground is given in accordance with Section D20 Information Provided</p> <p>(b) where work is carried out near canals, rivers, etc. or tidal waters, the level of the ground in relation to the normal level of the canal or river etc. or to the mean Spring levels of high and low tidal waters is stated; flood levels are stated where applicable</p> <p>P3 Commencing levels:</p> <p>(a) the levels from which the work is expected to begin and from which measurements have been taken are stated</p> <p>(b) irregular ground is so described</p>					
CLASSIFICATION TABLE					
1 Excavation and disposal	1 Thickness of wall stated	1 Maximum depth stated	m ³		S1 Details of support fluid S2 Limitations on method of disposal
2 Items extra over excavation	1 Breaking out existing materials 2 Breaking out existing hard pavings, thickness stated	1 Rock 2 Concrete 3 Reinforced concrete 4 Brickwork, blockwork or stonework 5 Coated macadam or asphalt	m ³ m ²		
3 Backfilling empty trench	1 Type of fill material stated		m ³		S3 Materials and mix details S4 Tests
4 Concrete	1 Thickness of wall stated		m ³	M1 The volume of excavation and disposal is calculated using the nominal lengths and depths of the walls. The depths are taken from the commencing surface	
				M2 Concrete volume is measured net except that deductions are not made for the following: (a) reinforcement (b) steel sections of area $\leq 0.50 \text{ m}^2$ (c) cast in accessories (d) voids $\leq 0.05 \text{ m}^3$ in volume	

6 Cutting off to specified level	1 Thickness of wall stated	m	C1 Cutting off to specified level is deemed to include provision and filling of working space and disposal
	7 Trimming and cleaning face of diaphragm wall	m ²	
	8 Waterproofed joints	m	
9 Guide walls	1 One side 2 Both sides	m	C2 Preparing cast in pockets or chases is deemed to include removing formwork and preparing cast in reinforcement
	10 Ancillary work in connection with diaphragm walling	item	
11 Delays	1 Preparing cast in pockets or chases at junctions, details stated	m ³	S5 Limitations on method of disposal
	2 Excavating temporary backfill		
	3 Removal of guide walls		
12 Tests	1 Flg standing	h	C4 Delays are deemed to include associated labour
	1 Details stated	nr	
Section and the mass measured includes that of stiffening, lifting and supporting steel cast in where specifically required			S6 Timing and details of tests
M4 Waterproofed joints are only measured where they are specifically required			
M5 The lengths measured for guide walls are those of the diaphragm walls			C3 Removal of guide walls is deemed to include disposal
M6 The extent to which excavation, disposal, support, concrete, reinforcement, formwork, and the like are to be included is stated in the item description			
M7 The lengths measured for guide walls are those of the diaphragm walls			C4 Delays are deemed to include associated labour
M8 Delays are only measured where they are specifically authorised			

5 Cutting away existing projecting foundations	2 Underpinning pits	1 Masonry 2 Concrete	1 Maximum width and depth of projection stated	m	M6 Earthwork support to underpinning pits is measured to the back, front and both ends of the underpinning pits and also between each section of the underpinning	
6 Preparing the underside of the existing work to receive the pining up of the new work	1 Width of existing work stated			m		
7 Disposal					M7 Disposal of water and excavated material are measured in accordance with Section D20:8.*.*.*	
8 Filling					M8 Filling is measured in accordance with Section D20:9 & 10.*.*.*	
9 Surface treatments					M9 Surface treatments are measured in accordance with Section D20:13.*.*.*	
10 Concrete 11 Formwork 12 Reinforcement 13 Brickwork 14 Tanking					M10 Concrete, formwork, reinforcement, brickwork and tanking are measured in accordance with the appropriate Work Sections	

D50 Underpinning

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the location and extent of the work (b) details of the existing structure to be underpinned</p> <p>P2 Information regarding the nature of excavation work is described in accordance with Section D20 Information Provided</p> <p>P3 The limit of length carried out in one operation and the number of sections the Contractor is permitted to undertake at one time</p>						
CLASSIFICATION TABLE						
1 Temporary support for existing structures	1 Particular requirements stated	item				
2 Excavating	1 Preliminary trenches 2 Underpinning pits	1 Maximum depth ≤ 0.25 m 2 Maximum depth ≤ 1.00 m 3 Maximum depth ≤ 2.00 m 4 and thereafter in 2.00 m stages upto 4.0 m	1 Curved 2 From one side only 3 From both sides	M1 Width allowances are related to the total depth of excavation measured from the top of the preliminary trench to the base of the underpinning pit as follows: (a) 1 m where the total depth is ≤ 1.5 m (b) 1.5 m where the total depth is 1.5 - 3m (c) 2 m where the total depth is > 3 m M2 The width of a preliminary trench is calculated as the sum of any projection of the retained foundation beyond the face of the wall plus any projection of the underpinning beyond the face of the retained foundation plus the width allowance M3 The width of an underpinning pit is calculated as the sum of the width of retained foundation plus any projection of the underpinning beyond the face of the retained foundation plus the width allowance M4 Items extra over are measured in accordance with Section D20:3-5 **. *. *. *	D1 Preliminary trenches extend down to the underside of existing foundations D2 Underpinning pits extend from the underside of existing foundations down to the base of the underpinning excavation	S1 Details of making good
3 Items extra over any type of excavating irrespective of depth						

12 Colourings 13 Staircases		1 Working around healing panels 2 Monolithic finishes, thickness stated	1 Top surface sloping $\leq 15^\circ$ 2 Top surface sloping $> 15^\circ$	M5 The area measured is the system area D10 Monolithic finishes Include those which are cast onto concrete by lining formwork	D8 Staircases include landings and stringings D9 Upstands exclude kickers	Measure when isolated and when their length on plan is \leq four times their thickness Measure when isolated and when their length on plan is $>$ three times their width DB Staircases include landings and stringings D9 Upstands exclude kickers
14 Upstands						
15 Items extra over the in situ concrete in which they occur						
16 Grouting		1 Slanchion bases 2 Grillages				
17 Filling		1 Mortices 2 Holes, (nr) 3 Chases $> 0.01 \text{ m}^2$ 4 Chases $\leq 0.01 \text{ m}^2$				

E11 Gun applied concrete

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <ul style="list-style-type: none"> (a) the relative positions of gun applied concrete members (b) the permissible loads in relation to casting times 					
CLASSIFICATION TABLE					
1 Slabs	1 Thickness stated	1 Tops 2 Soffits	m ²	1 Curved	S1 Kind and quality of materials S2 Preparatory work S3 Method of application and finish
2 Walls					
3 Beams					
4 Columns					
			M1 Reinforcement is measured in Section E30		

E20 Formwork for in situ concrete

INFORMATION PROVIDED

- P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
- the relative positions of concrete members
 - the size of members
 - the thickness of slabs
 - the permissible loads in relation to casting times

CLASSIFICATION TABLE

1 Sides of foundations 2 Sides of ground beams and edges of beds 3 Edges of suspended slabs 4 Sides of upstands 5 Steps in top surfaces 6 Steps in soffits 7 Machine bases and plinths	1 Plain vertical 2 Dimensioned description	1 Height > 1.00 m		1 Left in 2 Permanent		MEASUREMENT RULES M1 Except where otherwise stated, formwork is measured to concrete surfaces of the finished structure which require temporary support during casting M2 Curved work is so described with the radii stated	DEFINITION RULES D1 Plain formwork surfaces are those which contain no steps, rebates, pockets or other discontinuities D2 Formwork left in is that which is not designed to remain in position but is nonetheless impossible to remove D3 Permanent formwork is that which is designed to remain in position	COVERAGE RULES C1 Formwork is deemed to include adaptation to accommodate projecting pipes, reinforcing bars and the like C2 Formwork is deemed to include all cutting, splayed edges and the like	SUPPLEMENTARY INFORMATION S1 Kind and quality of materials and propping requirements for permanent formwork S2 Basic finish where not at the discretion of the Contractor
		Height ≤ 250 mm Height 250 – 500 mm Height 500 mm – 1.00 m	Horizontal Sloping ≤ 15° Sloping > 15°	m ² m	1 Height to soffit ≤ 1.50 m 2 and thereafter in 1.50 m stages 3 Left in 4 Permanent				
8 Soffits of slabs 9 Soffits of landings (nr)	1 Slab thickness ≤ 200 mm 2 and thereafter in 100 mm stages	1 Horizontal 2 Sloping ≤ 15° 3 Sloping > 15°	m ²	1 Height to soffit ≤ 1.50 m 2 and thereafter in 1.50 m stages 3 Left in 4 Permanent	M4 Voids ≤ 5.00 m ² irrespective of location are not deducted from the area measured M5 Soffits of collared or troughed slabs are measured as if to a plain surface M6 The thickness stated of the collared or troughed slabs is measured overall M7 Top formwork is measured for surfaces sloping > 15° or where otherwise specifically required	D4 Foundations include bases and pile caps D5 Edges of suspended slabs exclude those associated with attached beams at slab perimeters	D6 Formwork to soffits of slabs includes formwork to landings occurring at floor levels D7 Soffits of collared or troughed slabs include margins which are ≤ 500 mm wide		
10 Soffits of collared or troughed slabs	1 Size of mould and profile, centres of mould, and slab thickness stated								
11 Top formwork				1 Left in 2 Permanent					

E20 continued

CLASSIFICATION TABLE

		MEASUREMENT RULES		DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
12 Walls	<ol style="list-style-type: none"> 1 Vertical 2 Battered 	<ol style="list-style-type: none"> 1 Height > 3.00 m above floor level 2 Interrupted 3 To one side only, wall thickness and background to other side stated 4 Left in 5 Permanent to both sides 6 Permanent to one side only, wall thickness and background to other side stated 	<p>M8 Voids ≤ 5.00 m² irrespective of location are not deducted from the area measured for walls</p> <p>M9 The area measured for walls whose height is > 3.00 m includes the area below 3.00 m high</p> <p>M10 The area of wall kickers is not deducted</p>	D8 Walls include isolated columns and column casings whose length on plan is > four times their thickness			
13 Beams (nr)	<ol style="list-style-type: none"> 1 Attached to slabs 2 Attached to walls 3 Isolated 	<ol style="list-style-type: none"> 1 Regular shaped, shape stated 	<p>M11 Passings of subsidiary beams or other projections are not deducted from areas of formwork but such intersections are deemed to constitute the commencement of an additional member</p> <p>M12 Formwork to edges of suspended slabs associated with attached beams at slab perimeters is included with the measurement of the formwork to such beams</p> <p>M13 Recesses, ribs or rebates which occur in beam or column formwork measured in accordance with 13 - 16.*.2.* are included in the measurement of such formwork</p>	D9 Where a downstand beam is formed by temporary formwork but the slab is supported by permanent formwork the downstand beam is regarded as an isolated beam	C3 Formwork to beams, columns and casings is deemed to include ends		
14 Beam casings (nr)		<ol style="list-style-type: none"> 2 Irregular shaped, dimensioned diagram 				D10 Regular shaped includes rectangular, circular, hexagonal or other definable regular shape	
15 Columns (nr)							
16 Column casings (nr)							
17 Recesses (nr)	<ol style="list-style-type: none"> 1 Dimensioned description 	<ol style="list-style-type: none"> 1 Extra over the formwork in which they occur 2 Left in 3 Permanent 	M14 Recesses, ribs and rebates are only measured as extra over on superficial items of formwork	C4 Formwork to recesses is deemed to include ends			
18 Nibs (nr)							
19 Rebates (nr)							
20 Extra over a basic finish for formed finishes	<ol style="list-style-type: none"> 1 Slabs 2 Walls 3 Beams 4 Columns 5 Others, stated 			D11 Formed finishes are those where a finish other than a basic finish is required		S3 Details of formed finishes	

22	Suspended wall kickers	1 Plain 2 Dimensioned description	1 Width > 1.00 m 2 Width ≤ 250 mm 3 Width 250 – 500 mm 4 Width 500 mm – 1.00 m	m ²	2. Perimeter 3. Length of the wall and along the centre line of the wall and is deemed to include both sides	
23	Wall ends, soffits and steps in walls	1 Plain 2 Dimensioned description	1 Sizing, width stated 2 Sizing, dimensioned diagram	m	M16 Lengths of stairflights are measured between top and bottom nosings M17 Widths are measured overall	C5 Formwork to stairflights is deemed to include soffits, risers and strings
24	Openings in walls	1 Width of stairflight stated, waist and risers described 2 Dimensioned diagram	1 Sizing, width stated 2 Sizing, dimensioned diagram	m		
25	Stairflights (nr)	1 Girth ≤ 500 mm 2 Girth 500 mm – 1.00 m 3 and thereafter in 1.00 m stages	1 Depth ≤ 250 mm 2 Depth 250 – 500 mm 3 Depth 500 mm – 1.00 m 4 Depth > 1.00 m depth stated	nr	1 Left in 2 Permanent 3 Junction with wall	D12 Mortices include pockets D13 Holes are those ≤ 5.00 m ²
26	Mortices					
27	Holes					
28	Complex shapes		1 Dimensioned description 2 Dimensioned diagram	nr	1 Left in 2 Permanent	

E30 Reinforcement for in situ concrete

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the relative positions of concrete members (b) the size of members (c) the thickness of slabs (d) the permissible loads in relation to casing times					S1 Kind and quality of materials S2 Details of tests S3 Bending restrictions	
CLASSIFICATION TABLE						
1 Bar	1 Nominal size stated	1 Straight	1 Horizontal, length 12.00 – 15.00 m 2 and thereafter in 3.00 m stages 3 Vertical, length 6.00 – 9.00 m 4 and thereafter in 3.00 m stages	D1 Horizontal bars include bars sloping ≤ 30° from horizontal D2 Vertical bars include bars sloping > 30° from horizontal	C1 Bar reinforcement is deemed to include hooks and tying wire, and spacers and chairs which are at the discretion of the Contractor	
		2 Bent				
		3 Curved				
		4 Links				
2 Spacers and chairs	1 Dimensioned description			M3 Spacers, chairs and special joints are measured only where they are not at the discretion of the Contractor		
3 Special joint	2 Nominal size and type stated					
4 Fabric	1 Mesh reference and weight per m ² stated			M4 The area measured for fabric excludes laps. M5 Voids ≤ 1.00 m ² in area are not deducted	C2 Fabric reinforcement is deemed to include laps, tying wire, all cutting and bending, and spacers and chairs which are at the discretion of the Contractor C3 Bent fabric reinforcement is deemed to include that wrapped around steel members	S4 Minimum laps

INFC	DESCRIPTION PROVIDED	MEASUREMENT RULE	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1	The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the relative positions of concrete members (b) the size of members (c) the thickness of slabs (d) the permissible loads in relation to casting times				
CLASSIFICATION TABLE					
1	Members tensioned (nr)	1 Dimensioned description	nr	1 Composite construction	M1 Post tensioning is measured by the number of tendons in identical members S1 Number, length, material and size of wires in tendons S2 Ducts, vents and grouting S3 Anchorages and end treatment S4 Stressing sequence, transfer stress, initial stress S5 Limitation on propping

E40 Designed joints in in situ concrete

INFORMATION PROVIDED	MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions	M1 Construction joints located at the discretion of the Contractor are not measured			S1 Kind and quality of materials
CLASSIFICATION TABLE				
1 Plain	1 Width or depth ≤ 150 mm 2 and thereafter in 150 mm stages	1 Dimensioned description	m	1 Curved
2 Formed				
3 Cut			nr	D1 Plain joints are those which do not require formwork
4 Sealants				C1 Formed joints are deemed to include formwork C2 Work is deemed to include preparation, cleaners, primers and sealers
5 Sealants				S2 Details of fillers, waterstops, dowels, backing strips and reinforcement crossing joints S3 Method of application S4 Preparation of contact surfaces, cleaners, primers and sealers
6 Sealants				M3 Angles and intersections are measured only where they are welded or purpose made

E41 Worked finishes/Cutting to in situ concrete

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
CLASSIFICATION TABLE					
1 Tamping by mechanical means 2 Power floating 3 Trowelling 4 Hacking 5 Grinding 6 Sandblasting 7 Finishings achieved by other means	1 Sloping 2 Falls 3 Crossfalls 4 Solfills	m ²			S1 Description of finish required and method of achieving where not at the discretion of the Contractor
8 Cutting chases 9 Cutting rebates	1 Specific width stated 2 Making good 3 In reinforced concrete	m	M2 Width is required to be stated only where there is a specific width requirement		
10 Cutting mortices 11 Cutting holes	1 Specific cross sectional size stated 2 Making good 3 In reinforced concrete	nr	M3 Cross sectional size is required to be stated only where there is a specific cross sectional size requirement		

ION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the relative positions of concrete members
 (b) the size of members
 (c) the thickness of slabs
 (d) the permissible loads in relation to casting times

CLASSIFICATION TABLE

1 Type or name stated	1 Dimensioned description	m ² m m	1 Spacing dimensions stated

MEASUREMENT RULES	FINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
M1 Cast-in accessories are normally measured by number (nr). Linear or area measure may be used provided that any appropriate spacing dimensions are given in descriptions	D1 Cast-in accessories include anchor bolts, anchor boxes, anchor fixing bolts etc., dowels, column guards and isolated glass lenses. Cast-in accessories exclude reinforcement, tying wire, distance blocks, spacers, chairs, structural steelwork, hollow blocks, filler blocks, permanent formwork, joints and all components around which concrete is cast, but which are not fixed by the Contractor		S1 Kind and quality of materials and sizes or manufacturer's reference

- E50 Precast concrete large units
- F31 Precast concrete sills/lintels/copings/features
- H40 Glass reinforced cement cladding/features
- H50 Precast concrete slab cladding/features
- K33 Concrete/Terrazzo partitions

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 The following information is either shown on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <ul style="list-style-type: none"> (a) details of precast concrete members showing stressing arrangements (b) full details of anchorages, ducts, sheathing and vents (c) the relative positions of concrete members (d) the size of members (e) the thickness of slabs (f) the permissible loads 						
CLASSIFICATION TABLE						
1 Type or name stated	1 Dimensioned description	nr	1 Reinforcement, details stated 2 Cast-in accessories, details stated	M1 Precast units are normally measured by number (nr). Linear measurement may be used where the length of units is at the discretion of the Contractor, where the individual units are of an identical standard length, or where otherwise identical units vary in their length. In these cases the number of units is stated M2 Where floor units are of the same length they may be measured in square metres and grouped together stating length M3 Where units are measured linear, angles, fair ends, stools and the like are enumerated as extra over the units M4 Enumerated joints may be given in the description of the precast items in which they occur	C1 Precast units are deemed to include moulds, reinforcement, bedding, fixings, temporary supports, cast-in accessories and pretensioning	S1 Kind and quality of materials and mix details S2 Tests of materials and finished work S3 Methods of compaction and curing S4 Bedding and fixing S5 Surface finishes S6 Kind and quality of pretensioning materials, spacing and stresses
	2 Dimensioned description (nr)	m				
	3 Dimensioned description	m ²				
2 Items extra over the units on which they occur	1 Angles	nr				
	2 Fair ends					
	3 Stoolings					
	4 Others, details stated					
3 Joints	1 Dimensioned profile description	m				
	2 Dimensioned description	nr				

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bill of quantities:

- (a) details of purpose-made, prestressed concrete members showing stressing arrangements
- (b) full details of anchorages, ducts, sheathing and vents
- (c) the relative positions of concrete members
- (d) the size of members
- (e) the thickness of slabs
- (f) the permissible loads

CLASSIFICATION TABLE

	1 Thickness stated	m ²	Sloping	
			1 Sloping ≤ 15°	2 Sloping > 15°
1 Composite slabs				
2 Formwork				
3 Reinforcement				

M1 The thickness stated for composite slabs is measured overall
 M2 Composite slabs are measured over margins ≤ 500 mm wide
 M3 Margins > 500 mm wide are measured as ordinary slabs in Sections E10, E20 and E30

M4 Formwork to in situ component of work is measured in accordance with Section E20

M5 Reinforcement to in situ component of work is measured in accordance with Section E30

D1 Composite slabs include margins ≤ 500 mm wide, wider margins are included with ordinary slabs

C1 Composite slabs are deemed to include solid concrete work and filling ends

S1 Kind and quality of materials, sizes and spacings of planks and blocks
 S2 Top finish
 S3 Soffit finish
 S4 Margins
 S5 Formwork
 S6 Reinforcement and prestressing arrangements

F10/F11 continued

CLASSIFICATION TABLE

		MEASUREMENT RULES		DEFINITION RULES		COVERAGE RULES		SUPPLEMENTARY INFORMATION	
15 Facework sills	1 Dimensioned description	1 Vertical	m	1 Extra over the work in which they occur				S7 Method of forming sills, thresholds, copings and steps	
16 Facework thresholds		2 Raking		2 Building overhead					
17 Facework copings		3 Horizontal		3 Set weathering					
18 Facework steps		4 Others, details stated							
19 Facework lumbings to buttresses		1 Extra over the work in which they occur	m						
20 Facework key blocks									
21 Facework anchors									
22 Facework beams to pilasters									
23 Facework copings to pilasters									
24 Facework copings to isolated piers									
25 Bonding to existing	1 Thickness of new work stated		m						
26 Surface treatments	1 Type and purpose stated	1 Type of wall stated	m ²						D13 This item does not include application of materials to the wall

F20 Natural stone rubble walling
F21 Natural stone ashlar walling/dressings
F22 Cast stone walling/dressings

INFORMATION PROVIDED	MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) plans of each floor level and principal sections showing the position of and the materials used in the walls</p> <p>(b) external elevations showing the materials used</p>	<p>M1 Stonework is measured according to mean dimensions</p> <p>M2 No deduction is made for:</p> <p>(a) voids $\leq 0.10 \text{ m}^2$</p> <p>(b) flues, lined flues and flue blocks where voids and work displaced are together $\leq 0.25 \text{ m}^2$</p> <p>M3 Linear and enumerated items shall identify grooves, throats, flutes, rebates, cutting and mortises</p> <p>M4 Curved work is so described with the radii stated</p>	<p>D1 The thickness stated is the nominal thickness except where defined otherwise below</p> <p>D2 Stone dressings are those in walls of other materials</p> <p>D3 Dimensioned diagrams are given unless a written description is sufficient for full clarity</p> <p>D4 Work is deemed vertical unless otherwise described</p>	<p>C1 The work is deemed to include:</p> <p>(a) extra stone for joints</p> <p>(b) extra materials for curved work</p> <p>(c) mortises, (other than linear items) holes, stops and arrises</p> <p>(d) raking out joints to form key</p> <p>(e) metal cramps, slate dowels, metal dowels, lead plugs and the like</p> <p>(f) labours in eaves filling</p> <p>(g) labours in returns, ends and angles</p> <p>(h) dressed margins to rubble work</p> <p>(i) levelling uncoursed work</p> <p>(k) templates and patterns rough and fair square cutting</p>	<p>S1 Kind and quality of materials and, for rubble walling, whether of random or squared stones, built with or without mortar and where coursed the average height of the courses or maximum and minimum heights of diminishing course</p> <p>S2 Coatings to backs of stones</p> <p>S3 Coatings to surface of finished work</p> <p>S4 Cleaning on completion</p> <p>S5 Composition and mix of mortar</p> <p>S6 Type of pointing</p> <p>S7 Method of joining together and fixing</p> <p>S8 Thickness, mix and colour of the facing material to cast stonework</p> <p>S9 Stones not set on their natural bed</p> <p>S10 Type and positioning of metal cramps, slates, dowels, metal dowels, lead plugs and the like</p>

F20/F21/F22 continued

CLASSIFICATION TABLE

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1 Walls	1 Thickness stated	1 Vertical	m ²	M5 Building against other work and bonding to other work is measured where the other work is existing or consists of a differing material	D5 Battering walls are sloping walls with parallel sides D6 Tapering walls are walls of diminishing thickness D7 Thickness stated for tapering walls is mean thickness D8 Walls include skins of hollow walls D9 Columns are walls whose length on plan is ≤ four times their thickness, except where caused by openings D10 Attached columns include attached piers and pilasters D11 The dimensioned description stated for attached columns refers to the projection only	C2 Battering and tapering walls are deemed to include the extra materials required C3 Work is deemed to include extra material for bonding	S11 Method of bonding to backing S12 Type and spacing of fixing and method of securing to backing
2 Chimney stacks	1 Thickness stated	2 Battering 3 Tapering, one side 4 Tapering, both sides	m ²				
3 Isolated columns	1 Dimensioned description		m				
4 Attached columns	1 Dimensioned description		m				
5 Vaulting	1 Thickness and type stated		m ²				
6 Lintels	1 Dimensioned description		m				
7 Sills	2 Dimensioned diagram						
8 Mullions							
9 Transoms							
10 Quoin stones	1 Attached 2 Attached with different finish, type of finish stated 3 Isolated	1 Dimensioned description	m	M6 Quoins and jambs are measured on the vertical angle	D12 Attached stones are those attached to the same type of stone walling D13 Isolated stones are those attached to another form of construction D14 Slabs are those which are not bonded to their surrounding work		
11 Jamb stones							
12 Slab architraves	1 Dimensioned description		m				
13 Slab surrounds to openings							

F20/F21/F22 continued

CLASSIFICATION TABLE

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
33 Special purpose stones	1 Function stated	1 Plain cuboid, dimensions stated 2 Dimensioned description	nr	M11 Descriptions of stones are given as the smallest block from which each item can 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 dimensions are taken over one mortar bed and one mortar joint			
34 Carvings 35 Sculptures	1 Character of work stated	1 Component drawing	nr			C4 Carvings and sculptures are deemed to include: (a) selecting blocks of stone for size and quality (b) boasing for carving (c) working mouldings or similar members	
36 Centering	1 Arches 2 Tracery 3 Projecting masonry 4 Vaulting	1 Dimensioned description	nr	M12 A dimensioned description of centering gives the shape and width of the surface to be supported, the span of the soffit, and, in the case of arches, whether segmental, semicircular, invert and the like, stalling the rise		C5 Centering is deemed to include: (a) strutting, shoring, bolting, wedging, easing, sinking and removing (b) cutting (c) scribed and splayed edges (d) notching for key blocks, projecting voussoirs and the like	S13 Nature of supported surface

F30 Accessories/Sundry items for brick/block/stone walling

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) plans of each floor level and principal sections showing the position of and the materials used in the walls</p> <p>(b) external elevations showing the materials used</p>		M1 Curved work is so described		C1 Accessories are deemed to include: (a) rough and fair cutting on walls around accessories (b) bedding and pointing accessories (c) extra materials for curved work	S1 Kind and quality of materials
CLASSIFICATION TABLE					
1 Forming cavities	<ol style="list-style-type: none"> 1 In hollow walls 2 Between walls and other work 	<ol style="list-style-type: none"> 1 Width of cavity stated 	<ol style="list-style-type: none"> 1 Rigid sheet cavity insulation, thickness stated 		S2 Type, size and spacing of wall ties S3 Type, thickness and method of fixing cavity insulation
2 Damp proof courses	<ol style="list-style-type: none"> 1 Width ≤ 225 mm 2 Width > 225 mm 	<ol style="list-style-type: none"> 1 Vertical 2 Raking 3 Horizontal 4 Stepped 	<ol style="list-style-type: none"> 1 Cavity trays 	M2 No allowance is made for laps M3 No deduction is made for voids ≤ 0.50 m ²	S4 Gauge, thickness or substance of sheet materials S5 Number of layers S6 Composition and mix of bedding materials
3 Joint reinforcement	<ol style="list-style-type: none"> 1 Width stated 			M4 No allowance is made for laps	S7 Minimum laps
4 Weather filllets	<ol style="list-style-type: none"> 1 Size stated 				
5 Angle filllets					
6 Pointing in flashings				M5 Flashings are measured in Sections H70-H76	
7 Wedging and pinning	<ol style="list-style-type: none"> 1 Width of wall stated 				
8 Joints	<ol style="list-style-type: none"> 1 Dimensioned description 			M6 Joints are only measured where designed	S8 Type of filler and sealant S9 Method of application S10 Preparation of contact surfaces, cleaners, primers and sealers
9 Slates and tiles for creasing	<ol style="list-style-type: none"> 1 Width stated 	<ol style="list-style-type: none"> 1 Courses (nr) 			
10 Slate and tile sills					C6 Slates and tiles for creasing and sills are deemed to include ends, angles and pointing

F30 continued

CLASSIFICATION TABLE

CLASSIFICATION TABLE		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
11 Flue linings	1 Dimensioned description	m	M7 Brick flue linings are measured in Section F10:9.1.0.0	C7 Flue linings are deemed to include: (a) cutting to form easings (b) cutting to form bends (c) cutting to walls around linings	S11 Method of building
12 Air bricks 13 Ventilating gratings 14 Soot doors	1 Size of opening, nature and thickness of wall stated	nr	1 Lintels, details stated 2 Arches, details stated	CB Air bricks, ventilating gratings, soot doors and the like are deemed to include any necessary forming of openings, liners, cavity closers and damp proof courses	
15 Gas flue blocks	1 Size of block and number of flues in each stated	nr			S12 Method of building
16 Proprietary items	1 Dimensioned description	nr	1 Manufacturer's reference		S13 Method of fixing

3 Permanent formwork	1 Type and method of fixing stated	1 Curved	m ²	D6 Permanent formwork is that which is structurally integral with the framing	S4 Type of preparation, details of application and timing
	1 Type and method of fixing stated				
4 Cold rolled pultrins and cladding rails	1 Type and method of fixing stated	1 Castellated 2 Tapered 3 Curved 4 Cambered	m	D7 Use is defined as 1.1 – 1.10 inclusive D8 Fixing bolts are bolts fixing an isolated structural member to another element	
	1 Plain member 2 Built-up member				
5 Isolated structural member	1 Plain member	1 Use stated 2 Use and details of construction stated	t	M6 The mass of built up members is calculated as defined from 'Framing, fabrication' M7 Fixing bolts are measured in accordance with the rules contained in Section G20:25 *0.0	
	2 Built-up member				
6 Filling hollow sections	1 Water 2 Concrete	1 Details stated	item		
	1 Blast cleaning 2 Pickling 3 Wire brushing 4 Flame cleaning 5 Others, details stated				
7 Surface preparation	1 Blast cleaning 2 Pickling 3 Wire brushing 4 Flame cleaning 5 Others, details stated		m ²		
	1 Galvanising 2 Sprayed metal coating 3 Protective painting 4 Others, details stated				
8 Surface treatment	1 Galvanising 2 Sprayed metal coating 3 Protective painting 4 Others, details stated		m ²	M8 Localised protective coating is only measured to structural aluminium framing	
	1 Type stated				
9 Localised protective coating	1 Type stated		m ²	D9 Localised protective coatings are localised applications to surfaces in contact with dissimilar metals and aggressive building materials	

G20 Carpentry/Timber framing/First fixing

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work</p>					
CLASSIFICATION TABLE					
1 Trusses	1 Dimensioned description	nr	1 Stopped labours (nr)		
2 Trussed rafters					
3 Trussed beams					
4 Wall or partition panels					
5 Portal frames					
6 Floor members	1 Dimensioned description	m	1 Length > 6.00 m in one continuous length, length stated		
7 Wall or partition members					
8 Plates					
9 Roof members	1 Flat 2 Pitched	m		D2 Floor members include joists and beams D3 Partition members include struts and noggings D4 Plates are those to structural elements only and include bearers D5 Flat roof members include joists and beams D6 Pitched roof members include struts, purlins, rafters, hip and valley rafters, ridge boards, ceiling joists, binders and bracing	S4 Preservative treatments applied as part of the production process S5 Surface treatments applied as part of the production process S6 Selection and protection for subsequent treatment S7 Matching grain or colour S8 Limits on the planing margins and if deviation from the stated sizes is not permitted S9 Method of joining or form of construction where not at the discretion of the Contractor
10 Joist strutting	1 Herringbone, depth of joist stated 2 Block, depth of joist stated	m		M1 Strutting is measured over the joists	
11 Butt jointed supports	1 Width > 300 mm	m ²	1 Different cross-section shapes (nr)	M2 Supports and framed supports are measured overall	D7 Supports include grounds, battens, firrings, fillets, drips, rolls, upstands, kerbs or the like D8 Framed supports are where the members are jointed together other than butt jointed
12 Framed supports	2 Width ≤ 300 mm	m	2 Curved, radii stated 3 Stopped labours (nr) 4 Irregular shaped area 5 Irregular component, details stated		
13 Individual supports		m	1 Dimensioned overall cross-section description		

14	boards	th > 30	Dimen	descri	m ²	are each measured overall as individual components but grouped together	D9 C	ards in les
15	Fat	Width > 300 mm	2	Dimensioned overall cross-section description	m		D10	Fascia boards include barge boards
16	Eaves or verge soffit boards	Width ≤ 300 mm	3				D11	Cleats include sprockets and the like
17	Cleats		1	Dimensioned description	nr		D12	Wrot surfaces are those on sawn items only
18	Ornamental ends							
19	Wrot surfaces	1 Plain 2 Irregular	1 Width stated 1 Girth stated		m			
20	Straps	1 Dimensioned description 2 Dimensioned diagram			nr	M4 The length of a bolt is measured overall the head	D13	Bolts include heads, nuts and washers
21	Hangers							
22	Shoes							
23	Nail plates							
24	Metal connectors							
25	Bolts							
26	Rod bracing							
27	Wire bracing							
28	Others, details stated							

G32 Edge supported/Reinforced wool slab decking

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) the extent of the work and its height above ground level</p> <p>(b) the size of units where not at the discretion of the Contractor</p>			<p>D1 All sizes are nominal sizes unless stated as finished sizes</p>	<p>C1 Removal of lifting devices and consequent making good, and making good of handling holes and the like are deemed to be included</p>	
CLASSIFICATION TABLE					
1 Decking	1 Dimensioned description	1 Curved, radii stated			
2 Decking units (nr)		m ²			
3 Items extra over the decking or decking units in which they occur	<p>1 Holes</p> <p>2 Notches</p> <p>3 Others, details stated</p>	<p>1 Off site</p> <p>2 On site</p>	nr		
4 Woodwool kerbs	1 Dimensioned description		m		
5 Woodwool angle fillers					
6 Filling rebates with insulating strips					
7 Isolating strips					
		<p>M1 The number is stated only where the size of unit is not at the discretion of the Contractor</p> <p>M2 No deduction is made for voids ≤ 0.50 m²</p> <p>M3 Items 4-7: *.0.* are only measured under Section G32</p>			<p>S1 Kind and quality of materials and whether sawn or wrot</p> <p>S2 Method of fixing and hoisting where not at the discretion of the Contractor</p> <p>S3 Method of joining or form of construction where not at the discretion of the Contractor</p> <p>S4 Selection and protection for subsequent treatment</p> <p>S5 Surface treatments applied as part of the production process</p> <p>S6 Matching grain or colour</p> <p>S7 Limits on the planing margins and if deviation from the stated sizes is not permitted</p>

H Cladding/Covering

- H10 Patent glazing
- H12 Plastics glazed vaulting/walling
- H13 Structural glass assemblies

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) the scope and location of the work</p> <p>(b) component drawings</p>		M1 No deduction is made for voids $\leq 1.00 \text{ m}^2$			<p>S1 Kind, quality and thickness of materials</p> <p>S2 Type, finish, length and spacing of glazing members</p> <p>S3 Nature, thickness and spacing of structural supports</p>
CLASSIFICATION TABLE					
1 Rooks areas (nr)	1 Single tier	m ²	1 Site drilling the bearings	M2 Glazing is measured over bars	C1 Work is deemed to include securing to wood unless otherwise stated
2 Vertical surfaces (nr)	2 Multi-tier		1 Control gear to single unit, type, method of fixing and distance vertically and horizontally from unit stated		
3 Items extra over the glazing in which they occur	1 Doors 2 Windows 3 Fixed louvres 4 Adjustable louvres 5 Others, details stated	nr	2 Control gear to bank of units, type, method of fixing and distance vertically and horizontally from units stated	M3 Labours on glazing are grouped with the glazing to which they relate	C2 Stop ends, mitres and corners are deemed to be included
4 Raking cutting 5 Curved cutting		m			
6 Weatherings, lashings and fixing members at laps, bottoms and sides where part of the component	1 Preformed, gauge stated 2 Extruded, thickness stated	m	1 Site drilling, background stated		

INFO ION PROVIDED

MEASUREMENT RULES

FINITION RULES

COVERAGE RULES

SUPPLEMENTARY INFORMATION

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work
 (b) component drawings

CLASSIFICATION TABLE

1 Curtain walling	1 Dimensioned description	m ²		1 Flat
		1 Infill panels	1 Type and thickness stated	
2 Items extra over the curtain walling in which they occur	1 Infill panels		m ²	2 Sloping 3 Curved, radii stated
	2 Perimeter	1 Heads 2 Sills 3 Abutments	m	1 Irregular 2 Horizontal 3 Sloping 4 Vertical 5 Curved, radii stated
	3 Angle	1 Internal 2 External		
	4 Closer	1 Fire stops 2 Partition closer 3 Angle closer 4 Plaster stop		
	5 Opening lights 6 Doors	1 Dimensioned description	nr	

M1 Timber members which do not have a constant cross-section are so described and given stating the extreme dimensions
 M2 No deduction is made for voids ≤ 1.00 m²

D1 Curtain walling comprises non loadbearing walls of wood or metal framing, fixed as an integrated assembly, complete with windows and opening lights, glazing and infill panels
 D2 All sizes are nominal sizes unless stated as finished sizes

M3 Infill panels are measured over all framing

D3 Irregular junctions are any junctions with angles other than 90°

D4 Opening lights include opening gear as appropriate

C1 Curtain walling is deemed to include all cleals, brackets, bolts and fixings
 C2 Items include:
 (a) doors where supplied with the unit
 (b) architraves, trims and the like where part of the component
 (c) ironmongery where supplied with the component
 (d) finishes where part of the component as delivered
 (e) glazing where supplied with the component
 (f) mechanical operation and automatic operating equipment where supplied with the component
 (g) mastics/sealants unless executed by a specialist
 (h) fixings and fastenings

S1 Kind and quality of materials and if timber whether sawn or wrot
 S2 Preservative treatments applied as part of the production process
 S3 Surface treatments applied as part of the production process
 S4 Selection and protection for subsequent treatment
 S5 Matching grain or colour
 S6 Limits on planing margins on timber and if deviation from stated size is not permitted
 S7 Method of jointing or form of construction
 S8 Thickness or substance
 S9 Method of fixing where not at the discretion of the Contractor
 S10 Bedding and jointing or pointing compound
 S11 Fixing through vulnerable materials

H14 Concrete rooflights/pavement lights

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
CLASSIFICATION TABLE					
1 Rooflights	1 Dimensioned description (m ²)	1 Sizes and extent of reinforcement stated	M1 Isolated glass lenses are measured in Section E42	C1 Roof and pavement lights are deemed to include moulds, formwork, reinforcement, bedding and glass lenses	S1 Kind and quality of materials S2 Bedding and fixing S3 Surface finishes
2 Pavement lights	2 Dimensioned description (m ²)				
3 Vertical units	1 Dimensioned description (m)	1 Sizes of filling and sealants stated			
4 Joints					

- H20 Rigid sheet cladding
- H21 Timber weatherboarding
- K11 Rigid sheet flooring/sheathing/linings/casings
- K12 Under purlin/inside rail panel linings
- K13 Rigid sheet fine linings/panelling
- K20 Timber board flooring/sheathing/linings/casings
- K21 Timber narrow strip flooring/linings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
		M1 No deduction is made for voids ≤ 0.50 m ² M2 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), is so described stating the height in further 1.50 m stages	D1 The work is deemed internal unless described as external D2 All sizes are nominal sizes unless stated as finished sizes D3 Timber items which do not have a constant cross-section are so described and given stating the extreme	C1 The work is deemed to include: (a) labours, except as otherwise required (b) breather paper lining/sheathing angles, except as otherwise required (c)	

1 Wall.	1 Width > 300 mm	1 Dimensioned description		1 Laid diagonally		M3 Width stages are measured the width of each face		<p>S1 Type, quantity and thickness of materials and if timber whether sawn or wrot</p> <p>S2 Method of jointing or form of construction where not at the discretion of the Contractor</p> <p>S3 Nature of background</p> <p>S4 Preservative treatments applied as part of the production process</p> <p>S5 Surface treatments applied as part of the production process</p> <p>S6 Fire retardant treatments</p> <p>S7 Details of cover and jointing strips and cover mouldings</p> <p>S8 Selection and protection for subsequent treatments</p> <p>S9 Constraints on width of board and planing margins and limitations if deviation from stated sizes is not permitted</p> <p>S10 Matching grain or colour</p> <p>S11 Fixing through vulnerable materials</p> <p>S12 Method of fixing where not at the discretion of the Contractor</p> <p>S13 Details of finish, trim or support</p>
2 Floors	2 Width ≤ 300 mm			2 Slipping		D4 Walls include jambs and recesses in walls and attached columns		
3 Ceilings	3 Area ≤ 1.00 m ² , irrespective of width			3 Curved, radii stated		D5 Ceilings include soffits to openings and recesses in walls, all faces of recesses in ceilings and attached beams		
4 Floors	1 Total girth ≤ 600 mm			4 Obstructed by integral services		D6 Sloping is defined as sloping both > 10° from horizontal and > 10° from vertical		
5 Tops and cheeks of dormers	2 and thereafter in 600 mm stages					D7 Isolated beams and isolated columns include the faces of attached beams and attached columns which have a different finish from the adjoining face		
6 Isolated beams						D8 Abutments are defined as being where the detail is different from the standard detail and (where appropriate) include around openings etc.		
7 Isolated columns						D9 Finished angles are those where the decorative veneer or facing is returned or on panelling where angles are other than butt jointed		
8 Abutments	1 Type stated					D10 Holes are those for pipes, standards and the like		
9 Finished angles	1 External 2 Internal							
10 Holes								
11 Fire stops	1 Dimensioned description							
12 Items extra over the work in which they occur	1 Access panels	1 Dimensioned description						

- H30 Fibre cement profiled sheet cladding/covering/siding
- H31 Metal profiled/flat sheet cladding/covering/siding
- H32 Plastics profiled sheet cladding/covering/siding
- H33 Bitumen and fibre profiled sheet cladding/covering
- H41 Glass reinforced plastics cladding/features

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the extent of the work and its height above ground level					S1 Kind, quality and size of materials S2 Type and spacing of fixing
CLASSIFICATION TABLE					
1 Roof coverings 2 Wall cladding	1 Pitch stated	m ² 1 Curved, radii stated 2 Fixed through underlinings	M1 No deduction is made for voids ≤ 1.00 m ²	C1 Coverings are deemed to include: (a) work in forming voids ≤ 1.00 m ² other than holes (b) Integral underlay	S3 Minimum side and end laps S4 Jointing or sealing S5 Nature, thickness and spacing of structural supports
3 Abutments 4 Eaves 5 Verges 6 Ridges 7 Hips 8 Vertical angles 9 Valleys 10 Expansion joints 11 Barge boards 12 Skirtings 13 Flashings 14 Aprons sills 15 Cornices and stringings 16 Joints 17 Filler pieces	1 Dimensioned cross-section description	m 1 Raking 2 Curved, radii stated	M2 Boundary work to voids is only measured where the void is > 1.00 m ²	C2 Boundary work is deemed to include bedding, pointing, ends, angles and intersections	

18 Item 19 Items extra over wall cladding	1 Translucent sheets 2 Sheets with soaker flanges 3 Rooflight units 4 Sheets with louvre blades 5 Ventilators 6 Junctions	nr	
20 Cutting	1 Flaking 2 Curved	m	
21 Holes		nr	D1 Holes are those for pipes, standards and the like
22 Fire stops	1 Dimensioned description	m	

H51 Natural stone slab cladding/features
 H52 Cast stone slab cladding/features

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work		M1 Work is measured on the exposed face and no deduction is made for voids ≤ 0.50 m ² M2 Work in staircase areas and plant rooms are each given separately M3 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages M4 Curved work is so described with the radii stated measured on face	D1 All work is deemed external unless described as internal D2 The thickness stated is the thickness exclusive of keys, grooves and the like D3 Rounded internal and external angles > 10 mm radius are classified as curved work where not measured under 15.1.4.0	C1 The work is deemed to include: (a) fair joints (b) working over and around obstructions (c) additional labour for overhand work (d) cutting (e) drainage holes (f) bedding mortars and adhesives (g) grouting (h) cleaning, sealing and polishing	S1 Kind and quality of materials S2 Size, shape and thickness of units S3 Nature of base S4 Preparatory work S5 Nature of finished surface including any sealing/polishing S6 Bedding or other method of fixing S7 Treatment of joints S8 Layout of joints	
CLASSIFICATION TABLE						
1 Walls 2 Ceilings 3 Isolated beams 4 Isolated columns	1 Plain, width > 300 mm 2 Plain, width ≤ 300 mm 3 Work with joints laid out to detail, width > 300 mm 4 Work with joints laid out to detail, width ≤ 300 mm	1 Patterned, details stated 2 Dimensioned description 3 Level or to falls only ≤ 15° from horizontal 4 To falls and crossfalls and to slopes ≤ 15° from horizontal 5 To slopes > 15° from horizontal	m ² m m ² m	D4 Beams and columns are classified as isolated where the work is different from the abutting ceilings or walls D5 Work to sides and soffits of attached beams and openings and to sides of attached columns is classed as work to the abutting walls or ceilings D6 Floors include landings	C2 Work to walls, ceilings, beams and columns is deemed to include internal and external angles and intersections ≤ 10 mm radius C3 Work to floors is deemed to include intersections in sloping work	
	1 Plain 2 Work with joints laid out to detail, dimensioned diagram stated	1 Patterned work, details stated 2 Floors laid in bays, average size of bays stated 3 Inserts, size or section stated	m ²			

- H60 Clay/concrete roof tiling
- H61 Fibre cement slating
- H62 Natural slating
- H63 Reconstructed stone slating/tiling
- H64 Timber shingling

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the extent of the roofing work and its height above ground level

CLASSIFICATION TABLE

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1 Roof coverings	1 Pitch stated				S1 Kind, quality and size of materials S2 Method of fixing
2 Wall coverings		1 Curved, radii stated			
		m ²			
3 Abutments		1 Raking	M1 No deduction is made for voids ≤ 1.00 m ²	C1 Coverings are deemed to include: (a) underlay and battens (b) work in forming voids ≤ 1.00 m ² other than holes	S3 Minimum laps S4 Spacing of battens and counter battens
4 Eaves		2 Curved, radii stated	M2 Boundary work to voids is only measured where the void is > 1.00 m ²	C2 Boundary work is deemed to include undercloaks, cutting, bedding, pointing, ends, angles and intersections	S5 Method of forming
5 Verges					
6 Ridges					
7 Hips					
8 Vertical angles					
9 Valleys					
10 Fittings	1 Ventilators 2 Finials 3 Gas terminals 4 Hip irons 5 Soakers 6 Saddles	1 Dimensioned description			
		nr			
11 Holes		nr			D1 Holes are those for pipes, standards and the like

- H70 Malleable metal sheet prebonded coverings/cladding
- H71 Lead sheet coverings/flashings
- H72 Aluminium sheet coverings/flashings
- H73 Copper sheet coverings/flashings
- H74 Zinc sheet coverings/flashings
- H75 Stainless steel sheet coverings/flashings
- H76 Fibre bitumen thermoplastic sheet coverings/flashings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the extent of the roofing work and its height above ground level (b) the location and spacing of all laps, drips, wells, cross wells, beads, seams, rolls, upstands and downstands					S1 Type and quality of materials for backing, underlays, coverings, cladding and flashings S2 Thickness, weight and temper grade S3 Method of fixing S4 Details of laps, drips, wells, beads, rolls, joints, upstands and downstands S5 Type of support materials S6 Special finishes
CLASSIFICATION TABLE					
1 Roof coverings	1 Pitch stated	M1 No deduction is made for voids $\leq 1.00 \text{ m}^2$		C1 Coverings are deemed to include:	
2 Wall coverings		M2 The following allowances are made in calculating the area to be measured:		(a) isolated areas	
3 Prefabricated cladding panels		(a) 180 mm for each drip		(b) work to falls and crossfalls	
4 Dormers	1 Curved, radii stated	(b) 50 mm high		(c) underlay in contact with the covering	
5 Hoods		(c) 80 mm for each well		(d) work in forming voids $\leq 1.00 \text{ m}^2$ other than holes	
6 Gables		(d) 250 mm for each well			
7 Eaves		(e) 50 mm for each well			
8 Parapets		(f) 50 mm for each well			
9 Chimneys		(g) 50 mm for each well			
10 Staircases		(h) 50 mm for each well			
11 Skylights		(i) 50 mm for each well			
12 Windows		(j) 50 mm for each well			
13 Doors		(k) 50 mm for each well			
14 Stairs		(l) 50 mm for each well			
15 Balconies		(m) 50 mm for each well			
16 Terraces		(n) 50 mm for each well			
17 Roofs		(o) 50 mm for each well			
18 Gutters		(p) 50 mm for each well			
19 Downpipes		(q) 50 mm for each well			
20 Flashings		(r) 50 mm for each well			
21 Soffits		(s) 50 mm for each well			
22 Eaves		(t) 50 mm for each well			
23 Parapets		(u) 50 mm for each well			
24 Chimneys		(v) 50 mm for each well			
25 Staircases		(w) 50 mm for each well			
26 Windows		(x) 50 mm for each well			
27 Doors		(y) 50 mm for each well			
28 Stairs		(z) 50 mm for each well			
29 Balconies		(aa) 50 mm for each well			
30 Terraces		(ab) 50 mm for each well			
31 Roofs		(ac) 50 mm for each well			
32 Gutters		(ad) 50 mm for each well			
33 Downpipes		(ae) 50 mm for each well			
34 Flashings		(af) 50 mm for each well			
35 Soffits		(ag) 50 mm for each well			
36 Eaves		(ah) 50 mm for each well			
37 Parapets		(ai) 50 mm for each well			
38 Chimneys		(aj) 50 mm for each well			
39 Staircases		(ak) 50 mm for each well			
40 Windows		(al) 50 mm for each well			
41 Doors		(am) 50 mm for each well			
42 Stairs		(an) 50 mm for each well			
43 Balconies		(ao) 50 mm for each well			
44 Terraces		(ap) 50 mm for each well			
45 Roofs		(aq) 50 mm for each well			
46 Gutters		(ar) 50 mm for each well			
47 Downpipes		(as) 50 mm for each well			
48 Flashings		(at) 50 mm for each well			
49 Soffits		(au) 50 mm for each well			
50 Eaves		(av) 50 mm for each well			
51 Parapets		(aw) 50 mm for each well			
52 Chimneys		(ax) 50 mm for each well			
53 Staircases		(ay) 50 mm for each well			
54 Windows		(az) 50 mm for each well			
55 Doors		(ba) 50 mm for each well			
56 Stairs		(bb) 50 mm for each well			
57 Balconies		(bc) 50 mm for each well			
58 Terraces		(bd) 50 mm for each well			
59 Roofs		(be) 50 mm for each well			
60 Gutters		(bf) 50 mm for each well			
61 Downpipes		(bg) 50 mm for each well			
62 Flashings		(bh) 50 mm for each well			
63 Soffits		(bi) 50 mm for each well			
64 Eaves		(bj) 50 mm for each well			
65 Parapets		(bk) 50 mm for each well			
66 Chimneys		(bl) 50 mm for each well			
67 Staircases		(bm) 50 mm for each well			
68 Windows		(bn) 50 mm for each well			
69 Doors		(bo) 50 mm for each well			
70 Stairs		(bp) 50 mm for each well			
71 Balconies		(bq) 50 mm for each well			
72 Terraces		(br) 50 mm for each well			
73 Roofs		(bs) 50 mm for each well			
74 Gutters		(bt) 50 mm for each well			
75 Downpipes		(bu) 50 mm for each well			
76 Flashings		(bv) 50 mm for each well			
77 Soffits		(bw) 50 mm for each well			
78 Eaves		(bx) 50 mm for each well			
79 Parapets		(by) 50 mm for each well			
80 Chimneys		(bz) 50 mm for each well			
81 Staircases		(ca) 50 mm for each well			
82 Windows		(cb) 50 mm for each well			
83 Doors		(cc) 50 mm for each well			
84 Stairs		(cd) 50 mm for each well			
85 Balconies		(ce) 50 mm for each well			
86 Terraces		(cf) 50 mm for each well			
87 Roofs		(cg) 50 mm for each well			
88 Gutters		(ch) 50 mm for each well			
89 Downpipes		(ci) 50 mm for each well			
90 Flashings		(cj) 50 mm for each well			
91 Soffits		(ck) 50 mm for each well			
92 Eaves		(cl) 50 mm for each well			
93 Parapets		(cm) 50 mm for each well			
94 Chimneys		(cn) 50 mm for each well			
95 Staircases		(co) 50 mm for each well			
96 Windows		(cp) 50 mm for each well			
97 Doors		(cq) 50 mm for each well			
98 Stairs		(cr) 50 mm for each well			
99 Balconies		(cs) 50 mm for each well			
100 Terraces		(ct) 50 mm for each well			

CLASSIFICATION TABLE

CLASSIFICATION TABLE		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
10 Flashings	1 Dimensioned description 2 Dimensioned diagram	m	1 Horizontal 2 Sloping 3 Vertical 4 Stepped 5 Preformed 6 Dressing over corrugated roofing 7 Dressing over slating and tiling 8 Dressing over glass and glazing bars 1 Stepped 2 Secret 3 Sloping 4 Tapered 5 Preformed	C2 Work is deemed to include: (a) laps, seams, ends (b) angles and intersections (c) rolls (d) upstands and downstands (e) dressing/wedging into grooves, hollows, recesses and the like	
11 Aprons 12 Sills 13 Weatherings 14 Cappings 15 Hips 16 Kerbs 17 Ridges 18 Reveals, returns and jambs					
19 Gutters					
20 Catchpits 21 Sumps 22 Outlets	1 Dimensioned description	nr			
23 Edges	1 Welled 2 Beaded 3 Shaped	m			
24 Dressings	1 Corrugated roofing 2 Slating and tiling 3 Glass and glazing bars	m	1 Nature of roofing	1 Down corrugations 2 Across corrugations	
25 Saddles 26 Soakers and slates 27 Hatch covers 28 Ventilators	1 Dimensioned description	nr		1 Handed to others for fixing	C3 All dressing and bossing is deemed included
29 Collars around pipes, standards and the like	1 Size of member and length of collar stated				D1 Collars include pipe sleeves D2 Holes are those for pipes, standards and the like
30 Holes		nr			

J Waterproofing

- J20 Mastic asphalt tanking/damp proof membranes
- J21 Mastic asphalt roofing/insulation/finishes
- J22 Proprietary roof decking with asphalt finish
- J30 Liquid applied tanking/damp proof membranes
- J31 Liquid applied waterproof roof coatings
- M11 Mastic asphalt flooring

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) plan of each level indicating the extent of the work and its height above ground level together with restrictions on the siting of plant and materials</p> <p>(b) section indicating the extent of tanking work</p>		<p>M1 Mastic asphalt flooring in staircase areas and plant areas and plant rooms are each given separately</p> <p>M2 Curved work is so described</p>	<p>D1 Mastic asphalt flooring is deemed internal unless described as external</p>	<p>C1 Work is deemed to include:</p> <p>(a) cutting to line</p> <p>(b) bending and extra material for lapping the underlay and reinforcement</p> <p>(c) working into recessed duct covers and the like, shaped insets, recessed manhole covers, mat sinkings, outlet pipes, dishes to gullies and the like</p> <p>(d) work to falls and crossfalls</p>	<p>S1 Kind, quality and size of materials including underlays and reinforcement</p> <p>S2 Thickness and number of coats</p> <p>S3 Nature of base on which applied</p> <p>S4 Surface treatments</p> <p>S5 Method of fixing decking</p> <p>S6 Spacing of structural supports</p>
<p>CLASSIFICATION TABLE</p>		<p>1 Width ≤ 150 mm</p> <p>2 Width 150 – 225 mm</p> <p>3 Width 225 – 300 mm</p> <p>4 Width > 300 mm</p>	<p>1 Pitch stated</p>	<p>1 Work subsequently covered</p> <p>2 Carried out in working space ≤ 600 mm wide</p> <p>3 Overhand work</p>	<p>C2 Work is deemed to include:</p> <p>(a) working to metal or other flashings and working against frames of manhole covers, duct covers and the like</p> <p>(b) intersections on work to crossfalls</p> <p>C3 Work subsequently covered is deemed to include edges and arrises</p>

6 Fa	2 Girth 150 - 225 mm	1 Dimensioned description	m	2 Raking 3 Raking in two planes	M5 Boundary work to voids is only measured where the void is > 1.00 m ²	C5 Linings to gutters, channels and valleys and coverings to kerbs are deemed to include edges, arisises, internal angle-lillels, filling lilllels, turning nibs into grooves, ends, angles, intersections, outlets and extra material for turning into grooves	C6 Internal angle lilllels are deemed to include ends and angles	C7 Collars around pipes, standards and the like are deemed to include arisises and internal angle lilllels	C8 Linings to cesspools, sumps and the like are deemed to include arisises, internal angle-lillels and outlets	C9 Edge trim is deemed to include ends, angles and intersections
7 Aprons	3 Girth 225 - 300 mm									
8 Linings to gutters	4 Girth > 300 mm girth stated									
9 Linings to channels										
10 Linings to valleys		1 Coals,(nr) where other than two	m	1 Coals,(nr) where other than two	M6 12-17.*:0.* are only measured in association with work measured under 1-4.*:1.*		D2 Collars include pipe sleeves			
11 Coverings to kerbs			m		M7 Edges and arisises are only measured separately where the work is not subsequently covered					
12 Internal angle lilllels			nr							
13 Fair edges			nr							
14 Rounded edges										
15 Drips										
16 Arisises										
17 Turning asphalt nibs into grooves										
18 Collars around pipes, standards and like members	1 Size of member and length of collar stated									
19 Linings to cesspools										
20 Linings to sumps	1 Dimensioned description									
21 Linings to manholes										
22 Edge trim			m							
23 Roof ventilators			nr							

J40 Flexible sheet tanking/damp proof membranes
J41 Built up felt roof coverings
J42 Single layer plastics roof coverings
J43 Proprietary roof decking with felt finish

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) plan at each level indicating the extent of the work and its height above ground level together with restrictions on the siting of plant and materials		M1 Curved work is so described with the radii stated		C1 Work is deemed to include: (a) cutting and fair edges (b) notching, bending and extra material for laps	S1 Kind, quality and size of materials including undertays S2 Nature of base on which applied S3 Method of joining S4 Method of fixing decking S5 Spacing of structural supports
CLASSIFICATION TABLE					
1 Tanking and damp proofing	1 Pitch stated	m ²	M2 The area measured is that in contact with the base and no deduction is made for voids ≤ 1.00 m ²		
2 Roof coverings	1 Girth > 2.00 m 2 Girth ≤ 2.00 m in 200 mm stages	m ² m	M3 Boundary work to voids is only measured where the void is > 1.00 m ²	C2 Boundary work is deemed to include all cutting, ends, angles, intersections, notching, bending, turning into grooves, wedging, dressing, trimming and joining covering to flashings, working into channels and the like and filler pieces	
3 Abutments					
4 Eaves					
5 Verges					
6 Ridges					
7 Hips					
8 Vertical angles					
9 Valleys					
10 Skirtings					
11 Flashings					
12 Aprons					
13 Gutters and linings					
14 Coverings to kerbs					
15 Linings to cesspools	1 Dimensioned description	nr			
16 Linings to sumps					
17 Collars around pipes, standards and the like	1 Size of pipe and length of collar stated			D1 Collars include pipe sleeves	
18 Outlets and dishing to gullies	1 Dimensioned description				

K Linings/Sheathing/Dry partitioning

K10 Plasterboard dry lining

K31 Plasterboard fixed partitions/inner walls/linings

INFORMATION PROVIDED	MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) the scope and location of the work</p> <p>(b) the services located within the ceiling or partition where the work includes complex integral services</p>	<p>M1 Work in staircase areas and plant rooms are each given separately</p> <p>M2 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages.</p> <p>M3 Insulation, vapour barriers, fire barriers, isolating membranes, moisture resistant treatment and the like, are only measured in this section where they are an integral part of a lining, or partition or ceiling, or are fixed thereto</p>	<p>D1 Work is deemed internal unless described as external</p>	<p>C1 Work is deemed to include:</p> <p>(a) fair joints</p> <p>(b) working over and into recesses and shaped inserts</p> <p>(c) additional labour for overhead work</p> <p>(d) plaster for dabs, filling and finishing</p> <p>(e) joint and reinforcing tape</p> <p>(f) bitumen impregnated pads</p> <p>C2 Patterned work is deemed to include all extra work involved</p>	<p>S1 Kind, quality and thickness of sheathing and components</p> <p>S2 Method of construction</p> <p>S3 Layout and treatment of joints</p> <p>S4 Complex integral services</p> <p>S5 Method of fixing</p> <p>S6 Thermal insulation and vapour barriers fixed with lining</p> <p>S7 Insulation to limit sound transmission</p> <p>S8 Moisture resistant treatment and the like</p> <p>S9 Surface applications forming part of dry lining finish</p> <p>S10 Isolating membranes</p> <p>S11 Method of jointing composite panels</p>

1 Proprietary partitions	1 Height in 300 mm stages and thickness of partition stated	1 Boarded one side		1 Patterned, details stated	M4 The work is measured over obstructions	D2 The height of framed work is the height of the frame and where the heights of the boarding differ then this is so stated giving details	C3 Partitions and linings are deemed to include the following where part of the proprietary system. Where not a part of the proprietary system they are measured in accordance with the appropriate Work Section rules:	S12 Detail of finish or trim, grounds or framing
		2 Boarded both sides	2 Boarded both sides					
2 Linings	1 Walls	1 Height in 300 mm stages stated	1 Height in 300 mm stages stated	2 Curved, radii stated	M5 No allowance is made in measurement for lapped joints	D3 Reveals and soffits of openings and recesses in linings > 600 mm are defined as to walls, beams or columns	(a) Insulation and other plates; (b) studs, stiffening sections, firings and channels (c) metal resilient bars (d) jointing battens (e) insulation and barriers (f) fillets, battens and the like	
	2 Beams, faces (m)	1 Total girth ≤ 600 mm	1 Total girth ≤ 600 mm	3 Obstructed by integral services				
	3 Columns, faces (m)	2 and thinner in 600 mm stages	2 Width 300 - 600 mm					
	4 Reveals and soffits of openings and recesses	1 Width ≤ 300 mm	2 Width 300 - 600 mm					
	5 Ceilings							
3 Angles to partitions	1 Plain	1 Thickness of partition stated	1 Thickness of partition or lining stated	1 Between different forms of construction, finish details stated	M6 The linear measurement of partitions is the mean length of the partition	D4 Linings are those which do not form part of a proprietary system and exclude timber framing	C4 Angles, tee junctions, crosses and abutments are deemed to include the extra work involved, angle laps and the like	S12 Detail of finish or trim, grounds or framing
4 Tee junctions to partitions	2 Irregular							
5 Crosses to partitions					M7 The linear measurement of linings is the length on face	M8 No deduction is made for voids in partitions and linings measured linearly other than for those voids which extend full height, full girth or full width	C5 Angles are deemed to include the extra work involved, angle laps and the like	
6 Abutments								
7 Angles to linings	1 Internal 2 External			1 Between different board finishes, details stated	M9 No deduction is made for voids ≤ 0.50 m ² in linings measured superficially	M10 Where one face of a double sided partition or a face of lining is carried across the surface of an obstruction, the partition or lining is measured overall and no item of abutments is measured	D5 Abutments include trimming to openings which extend full height, full girth or full width unless finished with the same finish as the faces. Trimming to openings which are not full height, full girth or full width are deemed to be included	

K10/K31 continued

CLASSIFICATION TABLE

		MEASUREMENT RULES		DEFINITION RULES		COVERAGE RULES		SUPPLEMENTARY INFORMATION	
8	Fair ends to partitions	1 Thickness of partition stated	m	D6 Fair ends to partitions include trimming to openings	C6 Fair ends are deemed to include the extra work involved, studding, boarding, trims and the like	S13	Details of finish or trim		
9	Beads, function stated		m	D7 The function of beads as angle beads, casing beads, trims and the like are stated	C7 Beads are deemed to include working finishes thereto				
10	Fixings for heavy fittings	1 Sinks 2 Radiators 3 Cupboards 4 Others, details stated	nr	D8 Heavy fittings are those requiring additional support	C8 Fixings for heavy fittings are deemed to include additional supports and any cutting of boarding, trim or jointing	S14	Type of additional supports		
11	Items extra over the work in which they occur	1 Access panels	nr			S15	Type of panels		

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work
 (b) the services located within the partition

CLASSIFICATION TABLE

1 Partitions	1 Height and thickness of partition stated	1 Factory applied finish 2 Site applied finish		1 Curved, radii stated 2 Obstructed by integral services	MEASUREMENT RULES		DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
		1 Dimensioned description	1 Dimensioned description		m	m			
2 Trims	1 Dimensioned description					M1 The work is measured over the obstructions M2 The linear measurement of partitions is the mean length of the partition M3 Factory applied finishes and site applied finishes are only measured where not at the discretion of the Contractor	D1 Work is deemed internal unless described as external		
3 Openings, extra over the partitions in which they occur	1 Blanks 2 Doors 3 Windows 4 Glazed panels 5 Access panels	1 Dimensioned description	1 Dimensioned description				D2 Trims are separate items fixed on site as cover pieces to edges or panel joints D3 Openings is a general term for breaks in the general construction of partitions and includes the components filling the openings	C1 Partitions are deemed to include all integral components, holes, etc preformed at factory but excluding trim C2 Openings are deemed to include additional integral components C3 Openings are deemed to include ironmongery, glass, linings or the like but exclude trim	S1 Kind and quality of materials S2 Method of construction S3 Layout of joints S4 Method of fixing S5 Complex integral services S6 Method of bedding, jointing or pointing S7 Details of ironmongery, glass, linings or the like

K32 Framed panel cubicle partitions

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
(a) the scope and location of the work

CLASSIFICATION TABLE

		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1	Cubicle partitions: set	m	D1 Cubicle partitions include doors, ironmongery or the like but exclude trims D2 Trims refer to separate items fixed on site at junctions of cubicles and at junctions with adjoining constructions	C1 Cubicle partitions are deemed to include framing, stiffening, connecting and fixing devices supporting legs and brackets	S1 Kind and quality of materials S2 Method of construction S3 Method of fixing S4 Method of bedding, jointing or pointing
2	Trim				

INFORM ON PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work including integral fittings
 (b) the services located within the suspended ceiling void including any additional support for same

CLASSIFICATION TABLE

1 Ceilings	1 Depth of suspension ≤ 150 mm	1 Thickness of lining and method of fixing system to structure stated	m ²	1 Patterned, details stated 2 Sloping linings, details stated 3 Curved, radii stated 4 Suspension obstructed by services 5 Trims at regular intervals within area of suspended ceiling, details stated	
2 Beams	2 Depth of suspension 150 - 500 mm 3 and thereafter in 500 mm stages				
3 Isolated strips of suspended ceiling, thickness of lining stated		1 Width ≤ 300 mm 2 and thereafter in 300 mm stages	m		
4 Items extra over the lining in which they occur	1 Access panels	1 Dimensioned description	m		
5 Upstands	1 Thickness of lining	1 Height ≤ 300 mm 2 and thereafter in 300 mm stages	m		

MEASUREMENT RULES

M1 Soffit linings on battens, etc. fixed direct to underside of slab are measured elsewhere in the relevant Sections
 M2 Work in staircase areas and plant rooms are each given separately
 M3 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages

FINITION RULES

D1 All work is deemed internal unless described as external
 D2 Integral fittings occur where the fittings are designed and incorporated into the ceiling structure
 D3 Isolated strips of ceiling are those which are narrower than the specified relevant lining unit dimension

COVERAGE RULES

C1 Suspended ceilings etc. are deemed to include:
 (a) working over and around obstructions
 (b) support work and accessories for fittings
 (c) suspension and framed members
 C2 Patterned work is deemed to include all extra work involved
 C3 Work incorporating integral fittings is deemed to include additional hangers, framing and the like

SUPPLEMENTARY INFORMATION

S1 Kind and quality of materials
 S2 Size of panels and strips
 S3 Construction of framing and suspension systems
 S4 Method of fixing
 S5 Nature of backgrounds
 S6 Services in the suspended ceiling void
 S7 Insulation materials
 S8 Vapour barriers
 S9 Integral heating, ventilation, lighting and fire prevention fittings

S10 Composition of panels and method of fixing
 S11 Method of support and depth of suspension

K40 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
6 Irregular window and dormer cheeks	1 Dimensioned description	nr				C5 Irregular window and dormer cheeks are deemed to include cutting and extra supports	
7 Cavity fire barriers, total thickness stated	1 Plain 2 Obstructed by services	m	1 Height ≤ 300 mm 2 and thereafter in 300 mm stages			C6 Cavity fire barriers are deemed to include all scribing, angles, ends, and support work	
8 Edge trims	1 Plain 2 Floating	m	1 Dimensioned description		D4 Plain edge trims are those which are fixed to the structure D5 Floating edge trims are those which are fixed to the ceiling system	C7 Trims are deemed to include mitred, regular and irregular angles	S12 Centres of fixing
9 Angle trims				M8 Trims at regular intervals within the area of suspended ceiling are included within the item description of same 1-3.*.*.5 M9 Trims are measured to openings formed for fittings			
10 Items extra over the trims in which they occur	1 Irregular angle pieces	nr			D6 Irregular angle pieces are purpose made manufactured corner pieces		
11 Collars to services passing through fire barriers	1 Pipes 2 Trunking	nr	1 Length of sleeve each side of barrier stated		M10 Collars are measured where they are integral with fire barriers		S13 Types
12 Bridging	1 Span stated	m		1 Support to light fittings or the like		C8 Bridging is deemed to include additional fixings	
13 Fittings	1 Dimensioned description	m					

K41 Raised access floors

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
(a) the scope and location of the work

CLASSIFICATION TABLE

1 Floors	1 Thickness of panel stated	1 Height of cavity stated	m ²		1 Patterned, details stated	MEASUREMENT RULES	FINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
	1 Thickness, length and width stated		nr	nr					
2 Ramps	1 Special panels	1 Dimensioned description	nr			M1 No deduction is made for voids ≤ 0.50 m ² M2 The height stated for ramps is the height at each end		C1 Raised access floors are deemed to include (a) panels, supporting structures, adhesives, bearing pads and the like (b) cutting and notching and extra supports	S1 Kind and quality of materials S2 Supporting systems S3 Frames to panels S4 Method of fixing
3 Items extra over the floors in which they occur	1 Dimensioned description		m			M3 Skirtings and perimeter edge trims not executed as part of the access floor are measured in Section P20		C2 Skirtings and perimeter edge trims are deemed to include ends and angles	

L Windows/Doors/Stairs

- L10 Timber windows/rooflights/screens/louvres
- L11 Metal windows/rooflights/screens/louvres
- L12 Plastics windows/rooflights/screens/louvres

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions			D1 All sizes of timber are nominal sizes unless stated as finished sizes		
CLASSIFICATION TABLE					
1 Windows and window frames	1 Dimensioned diagram	M1 Standard sections are identified		C1 The work is deemed to include notching around obstructions C2 Items include: (a) doors where supplied with the unit (b) architraves, trims, sills, subframes, and the like where part of the component (c) ironmongery where supplied with the component (d) finishes where part of the component as delivered (e) glazing where supplied with the component (f) mechanical operation and automatic operating equipment where supplied with the component (g) fixings and fastenings	S1 Kind and quality of materials and if timber whether sawn or wrot S2 Preservatives treatment applied as part of the production process S3 Surface treatments applied as part of the production process S4 Selection and protection for subsequent treatment S5 Matching grain or colour S6 Limits on planing margins on timber and if deviation from stated size is not permitted S7 Method of joining or form of construction S8 Method of fixing where not at the discretion of the Contractor S9 Fixing through vulnerable materials S10 Bedding, jointing and pointing compound
8 Bedding frames					
9 Pointing frames					
10 Bedding and pointing frames					

L21 Metal doors/shutters/hatches

L22 Plastics/Rubber doors/shutters/hatches

INFORMATION PROVIDED

P1 Information is shown on location drawings under A Preliminaries/General conditions

CLASSIFICATION TABLE

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
D1 All sizes of timber are nominal sizes unless stated as finished sizes					
1 Doors	1 Dimensioned diagram	M1 Standard sections are identified	M1 Standard sections are identified M2 Each leaf of a multi-leafed door is counted as one door M3 Approximate weight is only stated for metal doors and includes their associated frames M4 Doors where supplied with their associated frames or linings are measured as composite items under General rule 9.1	C1 Doors are deemed to include fitting and hanging C2 The work is deemed to include notching around obstructions C3 Items include: (a) doors where supplied with the unit (b) architraves, trims and the like where part of the component (c) ironmongery where supplied with the component (d) finishes where part of the component as delivered (e) glazing where supplied with the component (f) mechanical operation and automatic operating equipment where supplied with the component (g) fixings and fastenings	S1 Kind and quality of materials and if timber whether sawn or wrot S2 Preservatives treatment applied as part of the production process S3 Surface treatments applied as part of the production process S4 Selection and protection for subsequent treatment S5 Matching grain or colour S6 Limits on planing margins on timber and if deviation from stated size is not permitted S7 Method of jointing or form of construction S8 Method of fixing where not at the discretion of the Contractor S9 Fixing through vulnerable materials S10 Bedding, jointing and pointing compound
2 Rolling shutters and collapsible gates 3 Sliding/folding partitions 4 Hatches 5 Strong room doors 6 Grilles	1 Approximate weight stated	M5 Enumerated composite door frame and lining sets need not state the number of sets within the description			
7 Door frames and door linings, sets (nr)	1 Dimensioned overall cross-section description	1 Repeats of identical sets (nr) 2 Different cross-section shapes (nr) 3 Stopped labours (nr)	m		
8 Bedding frames 9 Pointing frames 10 Bedding and pointing frames	1 Dimensioned description	1 Jamb 2 Heads 3 Sills (nr) 4 Mullions (nr) 5 Transoms (nr) 6 Composite sets	nr m		

L30 Timber stairs/walkways/balustrades
L31 Metal stairs/walkways/balustrades

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
CLASSIFICATION TABLE					
1 Composite item, type stated	1 Dimensioned description ----- 2 Component drawing	M1 Where accessories such as linings, trim nosings, ironmongery etc. are not included in a catalogue reference they are measured in the appropriate Work Sections M2 Isolated handrails are measured in Section P20	D1 Work in this Section covers: (a) staircases, ladders and loft ladders (b) landings, catwalks and access walkways (c) balustrades and handrails (d) hatch doors where part of a loft ladder component	C1 Composite items are deemed to include: (a) linings, nosings, cover moulds, trims and the like where part of the component (b) soffit lining, spandrel panels and the like where part of the component (c) ironmongery and operating gear to loft ladders where supplied with the component (d) finishes where part of the component as delivered (e) fixings, fastenings, blockings, wedges, bolts, brackets, cleats and the like C2 Staircases are deemed to include newels	S1 Kind and quality of materials and if timber whether sawn or wrot S2 Preservative treatments applied as part of the production process S3 Surface treatments applied as part of the production process S4 Selection and protection for subsequent treatment S5 Matching grain or colour S6 Limits on planing margins on timber and if deviation from stated size is not permitted
2 Isolated balustrades			D2 Isolated balustrades are those which do not form an integral part of a staircase unit	C3 Plain ends are deemed to be included	S7 Method of jointing or form of construction S8 Method of fixing where not at the discretion of the Contractor S9 Fixing through vulnerable materials
3 Associated handrails			D3 Associated handrails are handrails of a material different from the balustrade with which they are associated		
4 Extra over the isolated balustrades or associated handrails in which they occur	1 Ramps 2 Wreaths 3 Bends 4 Ornamental ends 5 Opening portions, details stated				
				1 Curved, radii stated	
				m	
				nr	

L40 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
2 Non-standard plain glass	1 Glazing 2 Louvres	1 Dimensioned description	nr	1 Multiple glazed panes 2 Glazing rebates 20-30 mm and thereafter in 10 mm stages 3 Brilliant cut panes, type of decoration stated 4 Bent in long dimension, radii stated 5 Bent in short dimension, radii stated 6 Bent in both dimensions, radii stated 7 Drilled panes, diameter, size and type of holes (nr) stated 8 Drilled panes with insulating sleeves, diameter, size and type of holes (nr) stated 9 Panes required to align with adjacent panes	D3 Non-standard plain glass is any glass (other than special glass) which is > 10 mm thick or is in panes > 4 m ² or is drilled, brilliant cut or bent D4 Special glass includes: (a) laminated (b) toughened (c) enamelled and toughened (d) bullet resistant (e) anti-bandit (f) solar control (g) sealed double glazing units (h) sealed multiple glazing units (i) lead (k) acrylic (l) polycarbonate (m) bullions		
	3 Special glass		nr				
4 Glass shop fronts	1 Component drawing reference		nr	M4 Glass shop fronts involving simple glass joints and glass reinforcing fins are measured here. Suspended glass shop fronts are measured in Section H13	D5 The component drawing referred to is to include details of the stiffeners		
5 Polished edges 6 Bevelled edges, width of bevel stated	1 Edges	1 Panes partly obscured 2 Panes wholly obscured	m	M5 Labours on glass are grouped with the glass to which they relate M6 Grinding, sandblasting and embossing are measured over the whole area of the pane		C2 Polished and bevelled edges are deemed to include external mitres	S6 Type and method of forming edges and shapings
	2 Internal mitres 3 Scallops and other shapings, details stated		nr				
7 Grinding 8 Sandblasting 9 Embossing 10 Engraving	1 Plain work	1 Dimensioned description	m ²	1 One or more dimensions ≤ 300 mm, size of pane stated			S7 Type of acid work for embossing
	2 Design work		nr				
11 Strips or channels for edges of panes			m	1 Fixed with other materials, type stated			S8 Kind, quality and size of materials

12 Mirr.	1 Dimensioned description	nr	nr	nr Mirrors used to walls are glazed into openings are measured here. Small mirrors in toilets, dressing rooms and the like are measured in Section N10		backings S10 Method of fixing S11 Fixing through vulnerable materials
13 Hacking out existing glass and preparing rebates	1 Type of sash or other surround and method of glazing stated together with type of glass	m	1 Beads for re-use, details stated	MB Hacking out existing glass and preparing rebates is measured the perimeter of the pane		

L41 Lead light glazing

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
P1 Information is shown on location drawings under A Preliminaries/General conditions						
CLASSIFICATION TABLE						
1 Lead light glazing	1 Both dimensions of lights > 300 mm	1 Shape and average size of panes stated	1 Panes required to align with adjacent panes	M1 The requirement to state the average size of panes is related to each light		
	2 One dimension only of lights ≤ 300 mm					m ²
	3 Both dimensions of lights ≤ 300 mm					m nr
2 Saddle bars	1 Length > 300 mm					
	2 Length ≤ 300 mm					

M Surface finishes

- M10 Sand cement/Concrete/Granolithic screeds/flooring
- M12 Trowelled bitumen/resin/rubber-latex flooring
- M20 Plastered/Rendered/Roughcast coatings
- M23 Resin bound mineral coatings
- J10 Specialist waterproof rendering

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work		M1 Resinous floor/wall finishes applied by brush or roller are measured in Section M60 M2 The area measured is that in contact with the base and no deduction is made for voids ≤ 0.50 m ² or grounds M3 Work in staircase areas and plant rooms are each given separately M4 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages M5 Curved work is so described with the radii stated measured on face	D1 The work is deemed internal unless described as external D2 The thickness stated is the nominal thickness D3 Rounded internal and external angles > 100 mm radius are classified as curved work D4 Floors include landings	C1 The work is deemed to include: (a) fair joints and around obstructions, pipes and the like, into recesses and shaped inserts (c) bonding agents where included with the work C2 Patterned work is deemed to include all extra work involved	S1 Kind, quality, composition and mix of materials including waterproofing agents and other admixtures and plasterboard or other rigid sheet lathing S2 Method of application S3 Nature of surface treatment including wax polishing or resin sealing coat S4 Special curving of finished work S5 Nature of base S6 Preparatory work where bonding is included with the work S7 Details of work to be carried out prior to fixing of frames or linings S8 Method of fixing and joining plasterboard or other rigid sheet lathing
CLASSIFICATION TABLE					
1 Walls	1 Width > 300 mm	1 Thickness and number of coats stated	1 Patterned, details stated	M6 Width is the width of each face	D5 Work to sides and soffits of attached beams and openings and to sides of attached columns is classified as work to the abutting walls or ceilings
2 Ceilings	2 Width ≤ 300 mm	2 Thickness of plasterboard or other rigid sheet lathing and thickness and number of coats stated	2 Floors laid in bays, average size of bays stated		C3 Plasterboard or other sheet backing is deemed to include joint reinforcing scrim C4 Work to walls, ceilings, beams and columns is deemed to include internal and external angles and intersections ≤ 10 mm radius
3 Isolated beams			3 Floors laid in one operation with their base		
4 Isolated columns			4 Overhand work		

M21 nsulation with rendered finish

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
(a) the scope and location of the work

CLASSIFICATION TABLE

	1 Width > 300 mm	1 Total thickness and number of coats of rendering stated	1 Overhand work	
			m ²	m
1 Walls				
2 Ceilings				
3 Isolated beams	2 Width ≤ 300 mm			
4 Beads, function stated	1 Dimensioned description			
5 Nosings				
6 Expansion strips				

MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>M1 Only proprietary construction is measured in this Section</p> <p>M2 Curved work is so described with the radii stated measured on face</p>	<p>D1 The work is deemed external unless otherwise described as internal</p> <p>D2 Rounded internal and external angles > 100 mm are classified as curved work</p>	<p>C1 Work is deemed to include:</p> <p>(a) fair joints</p> <p>(b) working over and around obstructions into recesses and shaped inserts</p> <p>(c) internal and external angles and intersections</p> <p>(d) joint and reinforcing tape</p> <p>(e) plaster dabs</p>	<p>S1 Proprietary name, kind, quality and thickness of board insulation and method of fixing</p> <p>S2 Construction of metal lathing</p> <p>S3 Kind, quality, composition, mix, and method of application and of materials for rendering</p> <p>S4 Type of adhesive renders with glass fibre matting</p> <p>S5 Nature of surface finish</p> <p>S6 Nature of base</p> <p>S7 Details of preparatory work where bonding is included with the work</p>
<p>M3 The area measured is that in contact with the base and no deduction is made for voids ≤ 0.50 m²</p> <p>M4 Width is the width on face</p>	<p>D3 The thickness stated is the nominal thickness</p> <p>D4 Work to sides and soffits of openings is regarded as work to the abutting walls</p> <p>D5 Function of beads as angle beads, casing beads, and the like are stated</p>	<p>C2 The work is deemed to include accessories for fixing</p> <p>C3 Beads, nosings and expansion strips are deemed to include working finishings thereto</p>	

M22 Sprayed mineral fibre coatings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work</p>		<p>M1 The area measured is that in contact with the base and no deduction is made for voids ≤ 0.50 m² or grounds</p> <p>M2 Work in staircase areas and plant rooms are each given separately</p> <p>M3 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages</p>	<p>D1 The work is deemed internal unless described as external</p>	<p>C1 Work is deemed to include: (a) fair joints (b) additional labour for overhand work (c) angles, intersections and curved work</p>	
CLASSIFICATION TABLE					
<p>1 Walls and columns</p> <p>2 Ceilings and Beams</p> <p>3 Structural metalwork</p>	<p>1 Thickness and number of coats stated</p> <p>2 Thickness of plasterboard or other rigid sheet lathing and thickness and number of coats stated</p>	<p>m²</p>			<p>S1 Kind and quantity of materials including plasterboard or other rigid sheet lathing</p> <p>S2 Nature of base</p> <p>S3 Preparatory work including bonding agents</p> <p>S4 Priming or sealing coats</p> <p>S5 Surface finish</p> <p>S6 Method of application</p>
<p>4 Accessories</p>	<p>1 Beads, function stated</p> <p>2 Nosings</p> <p>3 Anti-crack strips ≤ 300 mm wide</p>	<p>m</p>	<p>D2 Function of beads as angle beads, casing beads, and the like are stated</p>	<p>C2 Beads and nosings are deemed to include working finishings thereto</p>	<p>S7 Method of fixing where not at the discretion of the Contractor</p>

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work
 (b) the services located within the lathing, where the work includes complex integral services

CLASSIFICATION TABLE

MEASUREMENT RULES		DEFINITION RULES		COVERAGE RULES		SUPPLEMENTARY INFORMATION	
1 Suspended lathing ceilings	1 Depth of suspension ≤ 150 mm	1 Method of fixing suspension system to structure	1 Suspension system obstructed by services	M1 Work in staircase areas and plant rooms are each given separately	D1 All work is deemed internal unless described as external	S1 Kind and quality of materials	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing
	2 Depth of suspension 150 – 500 mm						
2 Walls	1 Width > 300 mm	1 Method of fixing to structure	M2 The area measured is that between boundaries and no deduction is made for voids ≤ 0.50 m ²	M2 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages	D3 Lathing to sides and soffits of attached beams and openings and to sides of attached columns is measured as work to the abutting walls or ceilings	C1 Work is deemed to include: (a) mechanical fixings to solid backings, steel rods, stirrups, spacer rods and hangers (b) steel channel framing (c) screws, staples, clips, clout nails, wire ties, steel banding, and other fixings (d) additional support and trimming for light fixings (e) internal and external angles < 100 mm radius	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing
	2 Width ≤ 300 mm						
3 Ceilings	1 Height ≤ 300 mm 2 and thereafter in 300 mm stages	1 Method of fixing suspension system to structure	M4 The area measured is that between boundaries and no deduction is made for voids ≤ 0.50 m ²	M5 Width is the width of each face	D5 Lathing to ceilings includes lathing to sloping ceilings	C2 Bridging is deemed to include additional fixings	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing
4 Isolated beams							
5 Isolated columns	1 Span stated	1 Method of fixing suspension system to structure	M7 Supports to light fittings and the like	M7 Width is the width of each face	D6 Lathing to ceilings includes lathing to sloping ceilings	C4 Bridging is deemed to include additional fixings	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing
6 Upstands							
7 Bridging	1 Dimensioned description	1 Method of fixing suspension system to structure	1 Supports to light fittings and the like	M8 Bridging is measured where the width of trunking or the like in the ceiling space obstructs the standard grid	D7 Lathing to ceilings includes lathing to sloping ceilings	C6 Bridging is deemed to include additional fixings	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing
8 Irregular window and dormer cheeks	1 Dimensioned description	1 Method of fixing suspension system to structure	1 Supports to light fittings and the like	M9 Bridging is measured where the width of trunking or the like in the ceiling space obstructs the standard grid	D8 Lathing to ceilings includes lathing to sloping ceilings	C7 Irregular window and chucks are deemed to include culling and extra supports	S2 Construction of framing and suspension system S3 Extent of laps and method of jointing

12 Columns				3 Vertical 4 Enrichments 5 Undercut	their extreme lengths	
13 Architraves					M7 Measured extra over 10 - 13.0.1.*	
14 Items extra over the work in which they occur	1 Ends 2 Internal angles 3 External angles 4 Intersections	1 Details stated	nr			
15 Ornaments	1 Character stated	1 Dimensioned description	nr			D3 Ornaments are irregularly occurring features
16 Consoles						
17 Overdoors						
18 Canopies						
19 Fireplace surrounds						
20 Specially made models	1 Character stated			1 Temporarily fixed in the building for inspection 2 Modeller's grounds, details stated 3 Modeller's boards, details stated		
21 Full size cartoons						

M40 Stone/Concrete/Quarry/Ceramic tiling/Mosaic
M42 Wood block/Composition block/Parquet flooring

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work

CLASSIFICATION TABLE

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
1 Walls 2 Ceilings 3 Isolated beams 4 Isolated columns	1 Plain, width > 300 mm 2 Plain, width ≤ 300 mm 3 Work with joints laid out to detail, width > 300 mm 4 Work with joints laid out to detail, width ≤ 300 mm	m ² m m ² m	1 Patterned, details stated 2 Tiles with long side horizontal 1 Dimensioned description	1 Patterned work, details stated 2 Floors laid in bays, average size of bays stated 3 Inserts, size or section stated	C1 The work is deemed to include: (a) fair joints (b) working over and around obstructions (c) additional labour for overhead work (d) cutting (e) drainage holes (f) bedding mortars and adhesives (g) grouting (h) cleaning, sealing and polishing	
	1 Level or to falls only ≤ 15° from horizontal 2 To falls and crossfalls and to slopes ≤ 15° from horizontal 3 To slopes > 15° from horizontal	m ²	1 Plain 2 Work with joints laid out to detail, dimensioned diagram stated	D1 All work is deemed internal unless described as external D2 The thickness stated is the thickness exclusive of keys, grooves and the like D3 Rounded internal and external angles > 10 mm radius are classified as curved work where not measured under 15.1-3.1.0 D4 Beams and columns are classified as isolated where the work is different from the abutting ceilings or walls D5 Work to sides and soffits of attached beams and openings and to sides of attached columns is classed as work to the abutting walls or ceilings D6 Tiles are deemed to be laid with their long side vertical unless otherwise described D7 Floors include landings	C2 Work to walls, ceilings, beams and columns is deemed to include internal and external angles and intersections ≤ 10 mm radius C3 Work to floors is deemed to include intersections in sloping work	S1 Kind and quality of materials S2 Size, shape and thickness of units S3 Nature of base S4 Preparatory work S5 Nature of finished surface including any sealing/polishing S6 Bedding or other method of fixing S7 Treatment of joints S8 Layout of joints
	1 Level or to falls only ≤ 15° from horizontal 2 To falls and crossfalls and to slopes ≤ 15° from horizontal 3 To slopes > 15° from horizontal	m ²	1 Plain 2 Work with joints laid out to detail, dimensioned diagram stated	D1 All work is deemed internal unless described as external D2 The thickness stated is the thickness exclusive of keys, grooves and the like D3 Rounded internal and external angles > 10 mm radius are classified as curved work where not measured under 15.1-3.1.0 D4 Beams and columns are classified as isolated where the work is different from the abutting ceilings or walls D5 Work to sides and soffits of attached beams and openings and to sides of attached columns is classed as work to the abutting walls or ceilings D6 Tiles are deemed to be laid with their long side vertical unless otherwise described D7 Floors include landings	C2 Work to walls, ceilings, beams and columns is deemed to include internal and external angles and intersections ≤ 10 mm radius C3 Work to floors is deemed to include intersections in sloping work	S1 Kind and quality of materials S2 Size, shape and thickness of units S3 Nature of base S4 Preparatory work S5 Nature of finished surface including any sealing/polishing S6 Bedding or other method of fixing S7 Treatment of joints S8 Layout of joints
	1 Level or to falls only ≤ 15° from horizontal 2 To falls and crossfalls and to slopes ≤ 15° from horizontal 3 To slopes > 15° from horizontal	m ²	1 Plain 2 Work with joints laid out to detail, dimensioned diagram stated	D1 All work is deemed internal unless described as external D2 The thickness stated is the thickness exclusive of keys, grooves and the like D3 Rounded internal and external angles > 10 mm radius are classified as curved work where not measured under 15.1-3.1.0 D4 Beams and columns are classified as isolated where the work is different from the abutting ceilings or walls D5 Work to sides and soffits of attached beams and openings and to sides of attached columns is classed as work to the abutting walls or ceilings D6 Tiles are deemed to be laid with their long side vertical unless otherwise described D7 Floors include landings	C2 Work to walls, ceilings, beams and columns is deemed to include internal and external angles and intersections ≤ 10 mm radius C3 Work to floors is deemed to include intersections in sloping work	S1 Kind and quality of materials S2 Size, shape and thickness of units S3 Nature of base S4 Preparatory work S5 Nature of finished surface including any sealing/polishing S6 Bedding or other method of fixing S7 Treatment of joints S8 Layout of joints

M41 Terrazzo tiling/in situ terrazzo

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work					
CLASSIFICATION TABLE					
1 Terrazzo tiling		M1 Terrazzo tiling is measured in accordance with the rules for Section M40			
2 In situ terrazzo		M2 In situ terrazzo is measured in accordance with the rules for Section M10			

M50 Rubber/Plastics/Cork/Lino/Carpet tiling/sheeting

M51 Edge fixed carpeting

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work		M1 Area measured is that in contact with the base and no deduction is made for voids $\leq 0.50 \text{ m}^2$ M2 Work in staircase areas and plant rooms are each given separately M3 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages M4 Curved work is so described with the radii	D1 The work is deemed internal unless described as external D2 Rounded internal and external angles > 100 mm radius are classified as curved work	C1 The work is deemed to include: (a) fair joints (b) working over and around obstructions, into recesses and shaped inserts (c) additional labour for overhand work (d) fixing at perimeter	S1 Kind, quality and size of materials S2 Nature and number of underlays S3 Extent of laps S4 Type of seams S5 Nature of base S6 Surface treatment S7 Pattern, width and laying direction of materials S8 Method of fixing and treatment of joints
CLASSIFICATION TABLE					

M52 Decorative papers/fabrics

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions		<p>M1 Where the manufacturer and pattern cannot be fully described work is measured as hanging/fixing only and the supply and delivery to site of papers/fabrics is covered by a prime cost or provisional sum</p> <p>M2 Work in staircase areas is given separately</p> <p>M3 The areas or lengths measured are the areas or lengths covered including allowances for the extra lengths of edges, mouldings, panels, sinkings, corrugations, flutings, carvings, enrichments and the like</p> <p>M4 No deduction is made for voids $\leq 0.50 \text{ m}^2$</p> <p>M5 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages</p>		C1 The work is deemed to include cutting or fitting -around obstructions, intrusions or projections	<p>S1 Kind and quality of materials, manufacturer and pattern</p> <p>S2 Nature of base</p> <p>S3 Preparatory work</p> <p>S4 Method of fixing and jointing</p>
CLASSIFICATION TABLE					
1 Walls and columns	1 Areas $> 0.50 \text{ m}^2$		1 Raking and curved cutting 2 Lining paper	m ²	
	2 Areas $\leq 0.50 \text{ m}^2$				
3 Border strips			1 Cutting border strips to profile	m	
			1 Cutting corners to profile 2 Cutting motifs to profile	nr	
4 Corners					
5 Moulds					
			D1 Paper is deemed to be hung vertically unless described otherwise	<p>C2 Border strips are deemed to include mitres and intersections</p>	

M60 Painting/Clear finishing

INFORMATION PROVIDED

P1 Information is shown on location drawings under A Preliminaries/General conditions

MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>M1 Work in staircase areas and plant rooms are each given separately</p> <p>M2 The area or girth measured is the area or girth covered including allowances for the extra girth of edges, mouldings, panels, sinkings, corrugations, flutings, carvings, enrichments and the like unless otherwise provided herein.</p> <p>M3 No deduction is made for voids ≤ 0.50 m²</p> <p>M4 Work to ceilings and beams over 3.50 m above floor (measured to ceiling level in both cases), except in staircase areas, is so described stating the height in further 1.50 m stages</p>	<p>D1 Work is deemed to be internal unless otherwise described</p> <p>D2 Multi-coloured work is defined as the application of more than one colour on an individual surface except on walls and piers or on ceilings and beams</p> <p>D3 Multi-coloured work on walls and piers or on ceilings and beams shall be defined as the application in one room of more than one colour on either the walls and piers or ceilings and beams</p> <p>D4 Irregular surfaces are corrugated, fluted, panelled, carved or ornamental surfaces</p> <p>D5 Features unpainted include fire stripping and weather stripping</p> <p>D6 Isolated surfaces include the girth of associated mouldings</p> <p>D7 Where reference within this table is made to painting it is deemed to include clear finishing as applicable</p> <p>D8 General surfaces are those not included in other Classifications</p>	<p>C1 The work is deemed to include rubbing down with glass, emery or sand paper</p> <p>C2 Multi-coloured work is deemed to include cutting in and cutting to line</p> <p>C3 Work to general surfaces is deemed to include work on butts and fastenings attached to doors, frames and linings</p>	<p>S1 Kind and quality of materials</p> <p>S2 Nature of base</p> <p>S3 Preparatory work</p> <p>S4 Priming or sealing coats (nr)</p> <p>S5 Undercoats (nr)</p> <p>S6 Finishing coats (nr) and surface finish</p> <p>S7 Method of application</p> <p>S8 Abrasive or other treatment applied between coats other than rubbing down with glass, emery or sand paper</p>

CLASSIFICATION TABLE

1 General surfaces	1 Girth > 300 mm	m ²	1 Multi-coloured work 2 Features unpainted, details stated 3 Irregular surfaces 4 Application on site prior to fixing
	2 Isolated surfaces, girth \leq 300 mm	m	
	3 Isolated areas ≤ 0.50 m ² irrespective of girth	nr	

M60 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
2 Glazed windows and screens 3 Glazed sash windows 4 Glazed doors	1 Panes, area ≤ 0.10 m ² 2 Panes, area 0.10 – 0.50 m ² 3 Panes, area 0.50 – 1.00 m ² 4 Panes, area > 1.00 m ²	1 Girth > 300 mm 2 Isolated surfaces, girth ≤ 300 mm 3 Isolated areas ≤ 0.50 m ² irrespective of girth	m ² m nr	1 Multi-coloured work	D9 Pane areas are those of individual panes	C4 Glazed work is deemed to include: (a) edges of opening lights and portions uncovered by sliding sashes in double hung casements (b) additional painting to the surrounding frame caused by opening lights (c) cutting in next glass (d) work on glazing beads, butts and fastenings attached thereto	
				2 Features unpainted, details stated			
				3 Partially glazed			
				4 Irregular surfaces			
5 Structural metalwork	1 General surfaces 2 Members of roof trusses, lattice girders, purlins and the like	1 Girth > 300 mm 2 Isolated surfaces, girth ≤ 300 mm 3 Isolated areas ≤ 0.50 m ² irrespective of girth	m ² m nr	1 Multi-coloured work	M8 The height of structural metalwork is measured to the highest point of the members in the stated height range	C5 Work to structural metalwork is deemed to include work to attached hookbolts, clips and the like	
				2 Features unpainted, details stated			
				3 Application on site to members prior to fixing			
				4 Structural metalwork height 5.00 – 8.00 m above floor level			
6 Radiators	1 Panel type 2 Column type	1 Girth > 300 mm 2 Isolated surfaces, girth ≤ 300 mm 3 Isolated areas ≤ 0.50 m ² irrespective of girth	m ² m nr	M9 Radiators are measured the area painted	M10 Plain open type fencing and gates are classified according to the size of their individual members M11 Each side of close type fencing and gates is measured overall M12 Each side of ornamental railings and gates is measured and notwithstanding the general measurement rule above is measured overall regardless of voids	C6 Work to radiators is deemed to include work to brackets and stays	
				5 and thereafter in 3.0 m stages			
				5 and thereafter in 3.0 m stages			
7 Railings, fences and gates	1 Plain open type 2 Close type 3 Ornamental type	1 Girth > 300 mm 2 Isolated surfaces, girth ≤ 300 mm 3 Isolated areas ≤ 0.50 m ² irrespective of girth	m ² m nr m ²	D10 Examples of plain open type fencing are plain post and wire, post and rail, chain link, wire mesh, cleft pale, palisade and metal bar D11 Examples of close type fencing are close boarded, built up concrete and corrugated	D10 Examples of plain open type fencing are plain post and wire, post and rail, chain link, wire mesh, cleft pale, palisade and metal bar D11 Examples of close type fencing are close boarded, built up concrete and corrugated		

8 Gullt	1 Valley and parapet 2 Eaves	1 Girth > 300 mm	m ²	C7 to gut deemed to include work to gutter brackets	C8 Work to services is deemed to include work to saddles, pipehooks, holderbals, conduit boxes and other components for fixing
		2 Isolated surfaces, girth ≤ 300 mm	m		
		3 Isolated areas ≤ 0.50 m ² irrespective of girth	nr		
9 Services		1 Girth > 300 mm	m ²	D12 Services include pipes, legged pipes, conduits, cables, ducting, trunking, straps, standards, bars and the like D13 Painting to isolated services units such as ventilating gratings, soot- doors, flushing cisterns, rainwater heads, strap hinges and the like is classed as painting services	
		2 Isolated surfaces, girth ≤ 300 mm	m		
		3 Isolated areas ≤ 0.50 m ² irrespective of girth	nr		
10 Coloured bands for coding service pipes	1 Colours (nr)	1 Description stated	nr		
		1 Multi-coloured work 2 Features unpainted, details stated 3 Painted throughout in coded colours 4 Application on site to members prior to fixing			

N Furniture/Equipment

- N10 General fixtures/furnishings/equipment
- N11 Domestic kitchen fittings
- N12 Catering equipment
- N13 Sanitary appliances/fittings
- N15 Signs/Notices
- N20, 21, 22, 23 Special purpose fixtures/furnishings/equipment
- Q50 Site/Street furniture/equipment

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
CLASSIFICATION TABLE					
1 Fixtures, furnishings and equipment not associated with services	1 Component drawing reference	nr	M1 It is permissible in respect of any individual item to use any other appropriate Rule in this document provided that it is stated which Rules have been applied to which item	D1 Fixtures, furnishings, equipment, fittings and appliances consist of those items listed as Sections N10 - 13, N15, N20 - 23 and Q50 at Appendix A excluding signwriting and carving and sculping	
	2 Dimensioned diagram				
2 Signwriting 3 Carving and sculping	1 Dimensioned description				
	1 Type, size and pattern, capacity, loading as appropriate and method of fixing all stated	nr	M2 Marking positions, loose ancillaries, identification, testing and commissioning, temporary operation, preparing drawings, operating and maintenance manuals are measured in Sections Y51, Y54 and Y59 as appropriate	C1 Providing everything necessary for joining is deemed to be included	S1 Such information as is appropriate to the procurement, design, execution, supply and/or manufacture of the item and its incorporation in the Works S2 Details of excavation and concrete backfilling for foundations to Site/Street furniture/equipment S3 Specified codes of practice and regulations S4 Kind and quality of materials S5 Gauge, thickness or substance of materials S6 Tests with which materials and equipment must comply
4 Fittings, equipment and appliances associated with services	1 Cross reference to specification				
	1 Ancillaries provided with fittings, equipment and appliances, details stated 2 Integral controls and indicators stated 3 Remote controls and connections between, details stated				

<p>SB Finishes a. Surface treatments applied off site stating whether applied before or after fabricating or assembly</p> <p>S9 Limiting dimensions on the size and weight of equipment</p>					<p>5 Ancillaries not provided with the fittings, equipment or appliances</p>
<p>C2 Joining ancillaries to fittings, equipment or appliances is deemed to be included</p>	<p>C3 Accepting delivery, storing and handling are deemed to be included</p>			<p>5 Initial charges, details stated</p> <p>6 Method of fixing and background stated</p>	<p>1 Type, size and method of joining stated</p>
			<p>1 Integral controls or indicators stated</p> <p>2 Remote controls or indicators and connections between, details stated</p>	<p>1 Provision of additional components, details stated</p> <p>2 Background stated</p>	<p>1 Type of fitting, equipment or appliance stated</p>
					<p>1 Type, size and method of fixing stated</p>
					<p>6 Fixtures, furnishings, equipment, fittings and appliances provided by the Employer</p>

P Building fabric sundries

P10 Sundry insulation/proofing work/fire stops

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION		
P1 Information is shown on location drawings under A Preliminaries/General conditions			<p>D1 Sundry insulation/proofing work/fire stops include:</p> <p>(a) flexible sheels, insulating boards and other materials, where not specified as part of another section, laid, hung or fixed horizontally, sloping or vertically as waterproofing, vapour barriers, fire stops, fire barriers, isolating membranes, sound insulation or thermal insulation</p> <p>(b) mineral fibre, plastics bead and cellulose loose fill thermal insulation laid between joists, etc.</p>				
CLASSIFICATION TABLE							
1 Sheets	1 Plain areas	m ²	1 Horizontal 2 Vertical 3 Soffit	M1 The area measured is that covered M2 Proofing work/fire stops are only measured independently in this Section where not specified as part of another Work Section	D2 Horizontal includes the upper surface of any sloping structure $\leq 45^\circ$ from the horizontal D3 Vertical includes the upper surface of any sloping structure $> 45^\circ$ from the horizontal D4 Soffit includes the underside of any horizontal or sloping structure	C1 All cutting is deemed to be included	S1 Type, quality and thickness of material S2 Extent of laps S3 Method of fixing where not at the discretion of the Contractor
2 Quills	2 Across members, centres of members stated						
3 Boards	3 Between members, centres of members stated						
4 Loose fill							

P1 Information is shown on location drawings under A Preliminaries/General conditions

CLASSIFICATION TABLE

1 Filling	1 Thickness stated	m ²	M1 The area measured is that filled	D1 Foamed/Fibre/Bead cavity wall insulation Includes foamed resin or loose fill insulation injected or blown into cavity walls		S1 Type and quality of material S2 Method of application including associated works

P20 Unframed isolated trims/skirtings/sundry items

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions		M1 Items which do not have a constant cross-section are so described and given stating the extreme dimensions M2 Items are only measured independently in this Section where not specified as part of another Work Section M3 Curved work is so described with the radii stated	D1 All timber sizes are nominal sizes unless stated as finished sizes	C1 The work is deemed to include ends, angles, mitres, intersections and the like except on hardwood items > 0.003 m ² sectional area	
CLASSIFICATION TABLE					
1 Skirtings, picture rails, architraves and the like	1 Dimensioned overall cross-section description	1 Built up timber members, size of components stated	m		
2 Cover fillets, stops, trims, beads, nosings and the like		2 Timber components tongued on			
3 Isolated shelves and worktops		3 Different cross-section shapes (nr)	nr		
4 Window boards		4 Stopped labours (nr)			
5 Unframed pinboards					
6 Duct covers					
7 Isolated handrails and grab rails					
8 Extra over the hardwood items, > 0.003 m ² sectional area, in which they occur	1 Ends 2 Angles 3 Mitres 4 Intersections				S1 Kind and quality of materials and if timber whether sawn or wrot S2 Preservative treatments applied as part of the production process S3 Surface treatments applied as part of the production process S4 Selection and protection for subsequent treatment S5 Matching grain or colour S6 Limits on planing margins on timber and if deviation from stated size is not permitted S7 Method of joining or form of construction S8 Method of fixing where not at the discretion of the Contractor S9 Fixing through vulnerable materials
9 Backboards, plinth blocks and the like	1 Dimensioned description	1 Built up timber members, size of components stated 2 Timber components tongued on 3 Stopped labours (nr)	nr		

P21 Ironmongery

INFORMATION PROVIDED

P1 Information is shown on location drawings under A Preliminaries/General conditions

CLASSIFICATION TABLE

		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1	Type of item, unit or set stated	1 Nature of base stated	D1 Ironmongery consists of the items listed as Section P21 at Appendix A of these rules	C1 Ironmongery is deemed to include fixing with screws to match and preparing base to receive same	S1 Kind and quality of materials and fixings S2 Surface finish S3 Constituent parts of the units or sets S4 Fixing through vulnerable materials

P22 Sealant joints

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities (a) scope and location of the work</p>			<p>D1 Sealant joints include forming sealant joints which for special reasons cannot reasonably be included in another Work Section as follows: (a) general expansion joints in the building not associated with any particular type of work (b) sealant joints required to be executed by a sealant specialist (c) renewal of sealant joints in existing buildings where not associated with replacement or refixing of a component</p>		
CLASSIFICATION TABLE					
1 Joints, contact surfaces stated	1 Type and size of components stated	1 Vertical 2 Sloping 3 Soffit 4 Horizontal	1 Raking out existing materials	M1 Lengths are measured on face	D2 Vertical joints include work inclined $\leq 10^\circ$ from vertical D3 Sloping joints include work to upper surfaces inclined $> 10^\circ$ from horizontal and $> 10^\circ$ from vertical D4 Soffit joints include all inclined soffits D5 Horizontal joints include work inclined $\leq 10^\circ$ from horizontal
2 Pointing, contact surfaces stated					C1 Work is deemed to include preparation, cleaners, primers and sealers appropriate to the contact surface C2 Raking out existing materials is deemed to include raking out/cutting back the existing components sufficiently to accommodate the new system, disposal, and any make up filler where excess is removed
					S1 Kind and quality of materials S2 Method of application S3 Preparation of contact surfaces, cleaners, primers and sealers

P30 Trenches/Pipeways/Pits for buried engineering services
P31 Holes/Chases/Covers/Supports for services

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 Information regarding the nature of excavation work is described in accordance with Section D20, Information Provided</p> <p>P2 The following information is shown either on location drawings/General conditions or on further drawings which accompany the bills of quantities: (a) the layout of the services</p>		<p>M1 Unless identified in these sections all other items of Builder's work associated with plumbing, mechanical and electrical installations are given in accordance with the appropriate Work Sections</p> <p>M2 Builder's work in connection with plumbing, mechanical and electrical installations are each identified under an appropriate heading</p>			<p>S1 Kind and quality of materials</p>	
<p>CLASSIFICATION TABLE</p>		<p>1 Services \leq 200 mm nominal size</p> <p>2 Services $>$ 200 mm nominal size, nominal size stated</p>	<p>1 Commencing level stated where $>$ 0.25 m below existing ground level</p> <p>2 Curved</p> <p>3 Below ground water level</p> <p>4 Next to roadways</p> <p>5 Next to existing buildings</p> <p>6 Unstable ground</p> <p>7 Specified multiple handling details stated</p> <p>8 Disposal at specified locations, details stated</p> <p>9 Backfilling with special materials, details stated</p> <p>10 Surface treatment, details stated</p>	<p>D1 Trenches next to roadways, next to existing buildings, and in unstable ground are defined in accordance with D20:7.*.*.3-5</p> <p>D2 Backfilling with special materials occurs where selected or treated excavated materials, or imported materials are used</p>	<p>C1 Excavating trenches are deemed to include: (a) earthwork support consolidation of trench bottoms (c) trimming excavations (d) special protection of services (e) backfilling with and compacting of excavated materials (f) disposal of surplus excavated materials</p>	<p>S2 Specified protection where required</p>

11 Items extra over the duct in which they occur	1 Fillings 2 Special treatment at ends	1 Description and method of jointing stated	nr			
12 Cover tiles 13 Identification tapes	1 Straight 2 Curved, radii stated	1 Type and size stated	m		1 Use of special colours for differing services 2 Staged laying 3 Handed to others for laying	
14 Marker posts 15 Marker plates	1 Type and size stated	1 Setting in hole, concrete or other material 2 Fixing to walls or other surfaces 3 Handed to others for setting or fixing	nr		1 Lettering required	
16 Surface boxes 17 Access chambers 18 Inspection chambers	1 Type, size and covers stated	1 Bedding, and jointing, details stated 2 Handed to others for fixing	nr			
19 Cutting or forming holes, mortices, sinkings and chases for electrical installations	1 Concealed conduits, type stated 2 Concealed cables, type stated 3 Exposed conduits, type stated 4 Exposed cables, type stated	1 Luminaire points 2 Socket outlet points 3 Fitting outlet points 4 Equipment and control gear points 5 Any point in unusually expensive coverings	nr		1 Making good 2 Making good vulnerable materials, details stated	C3 Associated switch points are deemed to be included
20 Cutting or forming holes for other services installations	1 Ducts, nature and thickness of structure stated 2 Pipes, nature and thickness of structure stated	1 Girth ≤ 1.00 m 2 Girth $1.00 - 2.00$ m 3 and thereafter in 1.00 m stages 1 ≤ 55 mm nominal size 2 $55-110$ mm nominal size 3 > 110 mm nominal size	nr		1 Rectangular 2 Circular 3 Dimensioned profile and description 4 Making good	D5 Ducts include trays, trunking, gratings and the like D6 Pipes include tubes, bars, cables, conduit and the like

P30/P31 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
21 Cutting or forming mortices, sinkings and the like for other services installations	1 Size stated	1 Nature of structure stated	nr	1 Making good			
	1 Number and size of services stated		m				
22 Cutting or forming chases for other services installations	1 Building in	1 Type, size of pipe or duct and nature of structure stated	nr	1 Fix only			
	2 Other fixing		2 Bedding and pointing				
23 Pipe and duct sleeves	1 Building in	1 Type, size of pipe or duct and nature of structure stated	nr	3 Fire resistant packing			
	2 Other fixing		4 Water proofing				
24 Ends of supports for services equipment, fittings, appliances and ancillaries	1 Type and size of support stated	1 Type, size of pipe or duct and nature of structure stated	nr	5 Making good			
	1 Pipes and ducts ≤ 55 mm nominal size		6 Method of fixing stated				
25 Ends of supports for pipes and ducts	1 Pipes and ducts ≤ 55 mm nominal size	1 Grouped together stating spacing of supports	m	1 Fix only			
	2 Pipes and ducts > 55 mm nominal size		2 Bedding and pointing				
26 Special measures where services pass through walls, floors, ceilings and roofs	1 Type of measure and size stated	1 Method of fixing and nature of structure stated	nr	3 Making good			
	1 Type and width stated		4 Method of fixing and background stated				
27 Trench covers and frames	1 Type and width stated	1 Method of fixing and background stated	m	1 Limitations to length of covers stated			
	1 Type and size stated		1 Method of fixing and nature of structure stated				
28 Duct covers and frames	1 Type and size stated	1 Method of fixing and nature of structure stated	nr				
29 Blockings, grounds and fixings for services	1 Type and size stated	1 Method of fixing and nature of structure stated	nr				

M11 Measured net length of pipe or duct over all fittings

D7 Special measures include precautions against the spread of fire and water

30	Supply services not provided with the services installation	<ul style="list-style-type: none"> 1 Pylons 2 Poles 3 Wall and soffit brackets and hangers 4 Pole brackets 5 Stays 6 Proprietary support components 	1 Type, size and method of fixing and background stated	nr	1 Pipes, pits and leveling		
31	Catenary cables	1 Type and size stated	1 Method of fixing and background stated	m	<ul style="list-style-type: none"> 1 Eye bolts, details stated 2 Shackles, details stated 3 Straining screws, details stated 	M12 Measured net, no allowance for sag	
Work to existing buildings							
32	Cutting mortices and sinkings for services installations	1 Size stated	1 Nature of structure stated	nr	1 Making good, details stated	M13 Cutting holes for services installations and making good alter is measured in accordance with the appropriate Work Sections	
33	Cutting chases for services installations	1 Number and size of services stated		m			
34	Lifting and replacing floor boards	<ul style="list-style-type: none"> 1 For pipes or ducts 2 For cables or conduits 	<ul style="list-style-type: none"> 1 Number and nominal size of pipe or duct stated 2 ≤ 3 cables or conduits 3 3 - 6 cables or conduits 4 > 6 cables or conduits 	m		M14 No distinction is made between routes parallel to or at an angle to the floor boards	C4 Cutting floor boards and notching or riving joists are deemed to be included
35	Lifting and replacing chequer plates, trench covers and duct covers	1 Type and width stated		m			

Q Paving/Planting/Fencing/Site furniture

Q10 Stone/Concrete/Brick kerbs/edgings/channels

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work		M1 In situ concrete kerbs/edgings/channels to in situ concrete roads are measured in Section Q21			
CLASSIFICATION TABLE					
1 Excavation		M2 Excavation work is measured in accordance with Section D20			
2 Kerbs		M3 Where otherwise identical units are required which vary in their length, the number of units is to be stated in the item			
3 Edgings	1 Dimensioned description				
4 Channels					
5 Items extra over the work in which they occur	1 Specials				
				C1 Kerbs, edgings and channels are deemed to include cut angles and ends C2 Foundation and haunching is deemed to include formwork	S1 Kind and quality of materials S2 Mix details S3 Bedding and fixings S4 Surface finishes S5 Nature and extent of foundation and haunching

Q21 .n situ concrete roads/pavings/ba .s

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work</p>					
CLASSIFICATION TABLE					
1 Concrete		M1 Concrete is measured in accordance with Section E10			
2 Formwork		M2 Formwork is measured in accordance with Section E20			
3 Reinforcement		M3 Reinforcement is measured in accordance with Section E30			
4 Joints		M4 Joints are measured in accordance with Section E40			
5 Worked finishes		M5 Worked finishes are measured in accordance with Section E41			
6 Accessories cast in		M6 Accessories cast in are measured in accordance with Section E42			

Q22 Coated macadam/Asphalt roads/pavings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work</p>			<p>D1 Work is deemed external unless identified as internal D2 The thickness stated is the finished thickness</p>	<p>C1 Work is deemed to include: (a) fair joints (b) working over and around obstructions into recesses and shaped inserts</p>	<p>S1 Kind, composition and mix of materials S2 Method of application S3 Nature of surface treatment S4 Special curing of finished work S5 Nature of base S6 Preparatory work where bonding is included with the finish</p>
CLASSIFICATION TABLE					
1 Roads	1 Thickness and number of coats stated	1 Level and to falls only			
2 Pavings		2 To falls and crossfalls and to slopes $\leq 15^\circ$ from horizontal	M1 The area measured is that in contact with the base and no deduction is made for voids $\leq 0.50 \text{ m}^2$ or grounds	<p>C2 Work is deemed to include forming or working into shallow channels and associated labours C3 Work to falls and crossfalls, and to slopes is deemed to include intersections C4 Linings to channels are deemed to include arisises, coves, ends, angles, intersections and outlets</p>	
		3 To slopes $> 15^\circ$ from the horizontal			
3 Linings to channels	1 Horizontal 2 To falls	1 Girth on face stated			

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work

CLASSIFICATION TABLE

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1 Roads 2 Pavings	1 Thickness stated	1 Level and to falls only 2 To falls and crossfalls and to slopes $\leq 15^\circ$ from horizontal 3 To slopes $> 15^\circ$ from horizontal	M1 Area measured is that in contact with base and no deduction is made for voids $\leq 0.50 \text{ m}^2$	C1 The work is deemed to include: (a) fair joints working over and around obstructions into recesses and shaped inserts C2 Edgings are deemed to include: (a) pegs and supports (b) angles and ends	S1 Kind and quality of materials S2 Formation, preparation and surface finish or treatment S3 Laying and compaction
3 Edgings	1 Thickness and height stated				S4 Type and method of fixing or support

Q24 Interlocking brick/block roads/pavings
Q25 Slab/Brick/Block/Sett/Cobble paving

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work</p>			<p>D1 Work is deemed external unless otherwise described D2 The thickness stated is the nominal thickness</p>	<p>C1 Work is deemed to include: (a) fair joints (b) working over and around obstructions into recesses and shaped inserts (c) cutting</p>	<p>S1 Kind and quality of materials including bedding S2 Size, shape and thickness of units S3 Nature of surface finish S4 Bedding or other method of fixing S5 Treatment of joints S6 Layout of joints S7 Nature of base S8 Preparatory work</p>
CLASSIFICATION TABLE					
1 Roads	1 Thickness stated	1 Level and to falls only	<p>M1 Work is measured on the exposed face and no deduction is made for voids $\leq 0.50 \text{ m}^2$</p>	<p>C2 Work is deemed to include forming or working finishes into shallow channels including all associated labours C3 Work to falls and crossfalls and to slopes $\leq 15^\circ$ is deemed to include all intersections</p>	
2 Pavings	1 Thickness stated	2 To falls and crossfalls and to slopes $\leq 15^\circ$ from the horizontal 3 To slopes $> 15^\circ$ from the horizontal			
3 Treads	1 Width stated	1 Bedding, thickness stated 2 Patterned, details stated 3 Work with joints laid out to detail, components detail drawing reference stated 4 Laid in bays, average size of bays stated			
4 Margins	1 Height stated	1 Patterned, details stated 2 Foundation and haunching 3 Curved, radii stated			
5 Risers	1 Dimensioned description				
6 Kerbs	1 Girth on face stated		<p>M2 Kerbs, edgings and channels in a similar material to the roads/pavings are measured here. Independent kerbs, edgings and channels are measured in Section Q10</p>	<p>C4 Work is deemed to include all fair edges, internal and external angles C5 Linings to channels are deemed to include edges, angles, intersections and outlets C6 Foundation and haunching is deemed to include formwork</p>	<p>S9 Nature and extent of foundation and haunching</p>
7 Edgings	1 Special units	1 Dimensioned description			
8 Linings to channels	2 Isolated special units	1 Thickness stated			
9 Items extra over the work in which they occur	1 Separating membranes	1 Dimensioned description			
10 Accessories	2 Movement joints	1 Curved, radii stated			
					<p>D4 Movement joints include expansion joints</p>

Q30 Seeding/Turfing

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work					
CLASSIFICATION TABLE					
1	Cultivating	1 Depth stated	D1 Types of surface applications include herbicides, selective weedkillers, peat, manure, compost, mulch, fertilizer, soil ameliorants, sand and the like	C1 Cultivating is deemed to include the removal of stones C2 Surface applications are deemed to include working in if required C3 Seeding is deemed to include raking or harrowing in and rolling C4 Cutting is deemed to include edge trimming	S1 Timing of operations S2 Method of cultivating and degree of tillth S3 Kind, quality, composition and mix of materials S4 Method of application S5 Method of securing turves
2	Surface applications	1 Type and rate stated			
3	Seeding	1 Rate stated			
4	Turfing				
5	Turfing edges of seeded areas	1 Width stated			
6	Protection	1 Temporary fencing			
		m ²	1 Weeding, details stated 2 Cutting, details stated 3 Preparatory work, details stated		
			M1 Protective temporary fencing is only measured here where specifically required and then in accordance with Section Q40		
			1 Duration and ultimate ownership, details stated		

Q31 Planting

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work					

CLASS	CULTIVATION TABLE		1 Depth stated	1 Type and rate stated	1 Botanical name	1 BS size designation and root system stated	2 Girth, height and clear stem and root system stated	1 Height and root system stated	1 Height stated	2 Height, spacing, number of rows, and layout stated	1 Size stated	2 Size and number per m ² stated	1 Size stated	1 Thickness and area stated	2 Thickness stated	1 Dimensioned description	2 Height and girth of tree or spread of plant stated	3 Height of wrapping and girth of tree stated	4 Temporary fencing	1 Weeding, details stated	2 Following, details stated	1 Planting in cultivated or grassed areas prepared by others, details stated	2 Initial cut back, details stated	3 Supports and ties	4 Refilling with special materials, details stated	5 Watering, details stated	1 Types of surface applications include herbicides, selective weedkillers, peat, manure, compost, mulch, fertilizer, soil ameliorants, sand and the like	D2 BS size designations include standard, advanced nursery stock or semi-mature trees	D3 Young nursery stock includes seedlings, transplants and whips	D4 Removing surplus excavated material means removing from site unless otherwise described	D1 Cultivating is deemed to include the removal of stones	C2 Surface applications are deemed to include working in if required	C3 Items include for excavating or forming pits, holes or trenches, refilling, watering in, removing surplus excavated material and labelling	C4 Refilling is deemed to include all necessary multiple handling	C5 Planting in cultivated or grassed areas prepared by others is deemed to include all necessary reinstatement	S1 Timing of operations and degree of lith	S2 Method of cultivating and degree of lith	S3 Kind, quality and composition of materials	S4 Size and type of pits, holes and trenches, excavated or formed	S5 Type of supports and ties	S6 Special materials for refilling	S7 Labelling	S8 Type of mulch, time and method of application	S9 Type of tree guard and method of fixing	S10 Type of spray and rate of application	S11 Type of wrapping and chemical application	M1 Temporary fencing is only measured here where specifically required and then in accordance with Section Q40
	1 Cultivating	2 Surface applications																																													
1	Cultivating		1 Depth stated	1 Type and rate stated	1 Botanical name	1 BS size designation and root system stated	2 Girth, height and clear stem and root system stated	1 Height and root system stated	1 Height stated	2 Height, spacing, number of rows, and layout stated	1 Size stated	2 Size and number per m ² stated	1 Size stated	1 Thickness and area stated	2 Thickness stated	1 Dimensioned description	2 Height and girth of tree or spread of plant stated	3 Height of wrapping and girth of tree stated	4 Temporary fencing	1 Weeding, details stated	2 Following, details stated	1 Planting in cultivated or grassed areas prepared by others, details stated	2 Initial cut back, details stated	3 Supports and ties	4 Refilling with special materials, details stated	5 Watering, details stated	1 Types of surface applications include herbicides, selective weedkillers, peat, manure, compost, mulch, fertilizer, soil ameliorants, sand and the like	D2 BS size designations include standard, advanced nursery stock or semi-mature trees	D3 Young nursery stock includes seedlings, transplants and whips	D4 Removing surplus excavated material means removing from site unless otherwise described	D1 Cultivating is deemed to include the removal of stones	C2 Surface applications are deemed to include working in if required	C3 Items include for excavating or forming pits, holes or trenches, refilling, watering in, removing surplus excavated material and labelling	C4 Refilling is deemed to include all necessary multiple handling	C5 Planting in cultivated or grassed areas prepared by others is deemed to include all necessary reinstatement	S1 Timing of operations and degree of lith	S2 Method of cultivating and degree of lith	S3 Kind, quality and composition of materials	S4 Size and type of pits, holes and trenches, excavated or formed	S5 Type of supports and ties	S6 Special materials for refilling	S7 Labelling	S8 Type of mulch, time and method of application	S9 Type of tree guard and method of fixing	S10 Type of spray and rate of application	S11 Type of wrapping and chemical application	M1 Temporary fencing is only measured here where specifically required and then in accordance with Section Q40

Q40 Fencing

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) the scope and location of the work
 (b) location of fencing specially designed to suit sloping ground

CLASSIFICATION TABLE

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
1 Fencing	1 Type stated	1 Height of fencing, spacing, height and depth of supports stated	M1 Fencing is measured over supports and special supports	D1 Supports are posts, struts or the like occurring at regular intervals D2 Special supports are posts, struts or the like other than those occurring at regular intervals D3 The height of fencing is measured from the surface of the ground (or other stated base) to the top of the infilling or where there is no infilling, to the top wire or rail D4 Curved fencing is fencing curved between supports D5 Integral gate posts are those integral with the fencing D6 The height of supports and special supports is the height above the surface of the ground or other stated base D7 The depth of supports and special supports is the depth below the surface of the ground or other stated base	C1 Work is deemed to include: (a) excavating holes for supports, special supports and independent gate posts (b) backfilling and disposal of surplus materials (c) earthwork support (d) supports	S1 Kind and quality of materials S2 Construction S3 Surface treatments applied as part of production process or applied before delivery to site S4 Size and nature of backfilling
	2 Special supports extra over fencing in which they occur	1 Fencing set out to a curve but straight between posts 2 Curved fencing radius > 100 m 3 Curved fencing radius ≤ 100 m, radii stated 4 Fencing to ground sloping > 15° from the horizontal 5 Lengths ≤ 3 m				
3 Independent gate posts	1 End posts 2 Angle posts 3 Integral gate posts 4 Straining posts 5 Others, details stated	1 Size, height and depth stated	M1 Fencing is measured over supports and special supports	D1 Supports are posts, struts or the like occurring at regular intervals D2 Special supports are posts, struts or the like other than those occurring at regular intervals D3 The height of fencing is measured from the surface of the ground (or other stated base) to the top of the infilling or where there is no infilling, to the top wire or rail D4 Curved fencing is fencing curved between supports D5 Integral gate posts are those integral with the fencing D6 The height of supports and special supports is the height above the surface of the ground or other stated base D7 The depth of supports and special supports is the depth below the surface of the ground or other stated base	C1 Work is deemed to include: (a) excavating holes for supports, special supports and independent gate posts (b) backfilling and disposal of surplus materials (c) earthwork support (d) supports	S1 Kind and quality of materials S2 Construction S3 Surface treatments applied as part of production process or applied before delivery to site S4 Size and nature of backfilling
	1 Type stated	1 End posts 2 Angle posts 3 Integral gate posts 4 Straining posts 5 Others, details stated				

4	lter ra over fencing, supports and independent gate posts irrespective of type	1 Excavating below ground water level	m ³	1 Rock	m ²	DB Rock is any material which is of such size or position that it can only be removed by wedges, special plant or explosives	C4 Making good existing hard pavings is deemed to be included	C5 Gates are deemed to include gate stops, gate catches and independent gate slays and their associated works	water is deemed to be included
				2 Concrete					
5	Gates	1 Type stated	nr	3 Reinforced concrete	nr				
				4 Brickwork, blockwork or stonework					
6	Ironmongery			5 Coated macadam or asphalt					
				1 Height and width stated					

R Disposal systems

- R10 Rainwater pipework/gutters
- R11 Foul drainage above ground

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <p>(a) the scope and location of the work</p>			<p>D1 Finishes and surface treatments exclude insulation and decorative finishes which are measured under Sections Y50 and M60</p>	<p>C1 Providing everything necessary for jointing is deemed to be included</p> <p>C2 Patterns, moulds, templates and the like are deemed to be included</p>	<p>S1 Specified codes of practice and regulations</p> <p>S2 Kind and quality of materials</p> <p>S3 Gauge, thickness or substance of materials</p> <p>S4 Tests with which materials must comply</p> <p>S5 Finishes or surface treatments applied on site</p> <p>S6 Finishes or surface treatments applied off site stating whether applied before or after fabrication or assembly</p>	
CLASSIFICATION TABLE						
1 Pipes	<p>1 Straight</p> <p>2 Curved, radii stated</p> <p>3 Flexible</p> <p>4 Extendable</p>	<p>1 Type, nominal size, method of jointing, type, spacing and method of fixing supports, all stated</p>	<p>1 Background and method of fixing stated</p> <p>2 In ducts</p> <p>3 In chases</p> <p>4 In floor screeds</p> <p>5 In situ concrete</p>	<p>M1 Pipes are measured over all fittings and branches</p> <p>M2 Flexible pipes and extendable pipes are measured fully extended</p>	<p>C3 Pipes are deemed to include joints in their running length</p> <p>C4 Pipes are deemed to include joints necessary solely for erection purposes</p> <p>C5 Pipes are deemed to include all labour excluding made bends</p>	
2 Items extra over the pipe in which they occur	<p>1 Made bends</p> <p>2 Special joints and connections</p>	<p>1 Type, and method of jointing stated</p>	<p>1 Nominal size stated where different from pipe in which joint or connection occurs</p>		<p>D2 Special joints and connections are joints which differ from those generally occurring in the running length or are connections to pipes of a different profile or material, connections to existing pipes or to equipment appliances or</p>	

	<p>3 Fittings, pipe \leq 65 mm diameter</p> <p>4 Fittings, pipe > 65 mm diameter</p>	<p>1 One end</p> <p>2 Two ends</p> <p>3 Three ends</p> <p>4 Others, details stated</p> <p>5 Type stated</p>	<p>1 With inspection door</p> <p>2 Method of joining stated where different from pipe in which fitting occurs</p>	<p>M3 Fittings which are reducing are measured extra over the largest pipe in which they occur</p>	<p>C6 Joining and joining pipes to fittings is deemed to be included</p>
<p>3 Screwed sockets</p> <p>4 Tappings</p> <p>5 Bosses</p>	<p>1 Type, size and method of joining stated</p>	<p>1 Nominal size and kind of pipe stated</p>	<p>nr</p>	<p>C7 Screwed sockets, lappings and bosses are deemed to include perforating the pipe</p>	
<p>6 Pipework ancillaries</p>	<p>1 Gullies</p> <p>2 Outlets</p> <p>3 Rainwater heads</p> <p>4 Gratings to outlets and rainwater heads</p> <p>5 Flashing plates</p> <p>6 Weathering aprons</p> <p>7 Tundishes</p> <p>8 Traps</p> <p>9 Pots</p>	<p>1 Type, nominal size, type of pipe, number and method of fixing any supports stated</p>	<p>1 Background and method of fixing stated</p> <p>2 In ducts</p>	<p>M4 Gratings may alternatively be given in the description of the enumerated item to which they relate</p>	<p>C8 Cutting and joining pipes to ancillaries is deemed to be included</p>
<p>7 Pipe supports which differ from those given with pipelines</p>		<p>1 Nominal size of pipe, type and size of support, method of fixing pipe and support stated</p>	<p>1 Lined with insulation, details stated</p> <p>2 Background and method of fixing stated</p>	<p>M5 Fabricated supports and supports carrying more than one service are measured under Section P30/31</p>	
<p>8 Pipe sleeves through walls, floors and ceilings</p>	<p>1 Length \leq 300 mm</p> <p>2 and thereafter in 300 mm stages</p>	<p>1 Type and nominal size of pipe stated</p>	<p>1 Method of fixing and type of packing stated</p> <p>2 Handed to others for fixing</p>		
<p>9 Wall, floor and ceiling plates</p>		<p>1 Type, size and method of fixing stated</p>	<p>nr</p>		

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
10 Gutters	1 Straight	1 Type, nominal size, method of joining, type, spacing and method of fixing supports stated	m	1 Background and method of fixing stated		C9 Gutters are deemed to include joints in the running length	
	2 Curved, radii stated		nr	1 Nominal size stated where different from gutter in which joint or connection occurs			
11 Items extra over the gutter in which they occur	1 Special joints and connections	1 Type and method of joining stated	nr	1 Method of joining stated where different from gutter in which fitting occurs	D3 Special joints and connections are joints which differ from those generally occurring in the running length or are connections to existing gutter or gutters of a different profile or material	C10 Cutting and jointing gutters to fittings is deemed to be included	
	2 Fittings	1 Type stated	1 Fittings which are reducing are measured extra over the largest gutters in which they occur				
12 Marking position of holes, mortices and chases in the structure	1 Installation stated		item	1 Formed during construction, details stated			
13 Identification	1 Plates	1 Type, size and method of fixing stated	nr	1 Details of engraving stated			
	2 Discs		2 Mounting of charts, details stated				
14 Testing and commissioning	3 Labels	1 Preparatory operations, details stated	item	1 Attendance required			
	4 Tapes or bands			2 Instruments to be provided			
15 Temporary operation of installations to Employer's requirements	5 Arrows, symbols, letters and numbers	2 Stage tests (nr) listed and purpose stated	item	2 Conditions imposed by Employer before operation allowed			
	6 Charts	3 Insurance Company tests, details stated		3 Special insurance requirements of Employer			
	1 Installation stated	4 Instruction of personnel in operation of completed installation		1 Attendance required			
	1 Installation and purpose of operation stated	1 Duration of operation period stated	item	1 Attendance required			
				2 Conditions imposed by Employer before operation allowed			
				3 Special insurance requirements of Employer			
				M8 Provision of water, fuel, gas, electricity and other supplies is covered by Provisional Sums in Section A54			
						C11 Provision of water, and other supplies are deemed to be included	
						C12 Provision of test certificates is deemed to be included	

16 Prep. drawings	1 Information required and number of copies stated	1 Negatives, prints or microfilms, details stated	1 Binding into sets, details stated 2 Names of recipients stated	Drawings include builder's work, manufacturer's and installation drawings and record or 'as fitted' drawings	
17 Operating and maintenance manuals					

R12 Drainage below ground
R13 Land drainage

INFORMATION PROVIDED

P1 Information regarding the nature of excavation work is described in accordance with Section D20 Information Provided
P2 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
(e) the layout of the drainage

CLASSIFICATION TABLE

1 Excavating trenches	1 Pipes ≤ 200 mm nominal size 2 Pipes > 200 mm nominal size, nominal size stated	1 Average depth of trench ≤ 250 mm 2 and thereafter in 250 mm stages	m	1 Commencing level stated where > 0.25 m below existing ground level 2 Curved 3 Below ground water level 4 Next to roadways 5 Next to existing buildings 6 Unstable ground 7 Specified multiple handling, details stated 8 Disposal at specified locations, details stated 9 Backfilling with special materials, details stated 10 Surface treatments, details stated

2 Items extra over excavating trenches, irrespective of depth	1 Breaking out existing materials	1 Rock 2 Concrete	m ³	M4 The measurement of extra over items is based on the width of the beds in the trenches. Where there are no beds the width to be taken is the nominal size of the service plus 300 mm. In both cases measurement is subject to a minimum width of 500 mm
	2 Breaking out existing hard pavings, thickness stated	3 Reinforced concrete 4 Brickwork, blockwork or stonework 5 Coated macadam or asphalt	m ²	
	3 Lifting turf for preservation	1 Method of preserving, details stated		

MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
M1 Special materials for backfilling are stated in accordance with D20.9.*.*.* M2 Surface treatments are stated in accordance with D20.13.*.*.* M3 Excavating trenches below ground water level is measured where the ground water level is above the bottom of the trench	D1 A run of pipe trench is an uninterrupted line of excavating such as between manholes or between an accessory and a manhole or between accessories D2 Trenches next to roadways, next to existing buildings, and in unstable ground are defined in accordance with D20.7.*.*.*-3-5 D3 Backfilling with special materials occurs where selected or treated excavated materials, or imported materials are used	C1 Excavating trenches is deemed to include: (a) earthwork support bottoms (b) consolidation of trench bottoms (c) trimming excavations (d) filling with and compaction of general filling materials (e) disposal of surplus excavated materials	S1 Kind and quality of materials S2 Specified protection where specified
D4 Rock is any material which is of such size or position that it can only be removed by wedges, special plant or explosives			

4 Next existing live services	1 Type of service stat.		5 Around existing live services crossing trench	6 Disposal	7 To be measured where precautions are specifically required	8 Requiring a service precaution which is specifically required	9 Nature of requirement
	m	nr					
1 Surface water 2 Ground water	item				M6 An item for disposal of ground water is only measured where a corresponding item is measured in accordance with 1. x. x. 3 and is adjusted accordingly if the post contract water level is different		
1 Width and thickness of bed stated	m				1 Designed joints, details stated		
1 Width, thickness of bed and thickness of surround stated			1 Nominal size of pipe stated				
1 Size stated							
1 In trenches 2 In ducts in the ground or below a floor 3 Bracketed off walls 4 Suspended from soffits	m		1 Nominal size stated		1 Iron pipes in runs ≤ 3 m long (nr) 2 Not laid in bottom of trench, average depth stated in accordance with 1. x. x. * 3 Vertical 4 Height > 3.50 m above floor level		S4 Method of joining pipes
1 Pipe fittings	nr		1 Description stated				S5 Method of joining fittings and accessories to pipes
1 Type stated	nr		1 Dimensioned description			D6 Accessories include gullies, traps, inspection shoes, fresh air inlets, non-return flaps and the like D7 Dimensions stated for accessories include the nominal size of each inlet and outlet	C2 Beds, haunchings, surrounds and casings are deemed to include formwork C3 Pipes are deemed to include pipe supports C4 Pipe fittings are deemed to include cutting and joining pipes to fittings and providing everything necessary for joining C5 Accessories are deemed to include joining pipes thereto and bedding in concrete

CLASSIFICATION TABLE

			MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
11 Manholes 12 Inspection chambers 13 Soakaways 14 Cesspits 15 Septic tanks	1 Excavation 2 Concrete 3 Formwork 4 Reinforcement 5 Brickwork 6 Rendered coatings	1 Dimensioned description nr	MB Excavation, concrete, formwork, brickwork, rendered coatings and other work are measured in accordance with the rules for the appropriate Work Sections		C6 Building in ends of pipes is deemed to include cutting pipes	
	7 Building in ends of pipes 8 Channels 9 Benching 10 Step irons 11 Covers 12 Intercepting traps 13 Others 14 Preformed systems		M9 Items 11-15.7-13.1.0 are only measured separately in non-preformed systems			
	1 Details stated	nr	M10 Connecting to Local Authority's sewer is only measured here where it is executed by the Contractor. Work by Statutory Authorities is measured in Section A53			
	1 Installation stated	1 Preparatory operations, details stated 2 Stage tests (nr) listed and purpose stated 3 Insurance Company tests, details stated 4 Instruction of personnel in operation of completed installations	1 Attendance required 2 Instruments to be provided			
16 Connecting to Local Authority's sewer	1 Details stated	nr				
17 Testing and commissioning	1 Installation stated	1 Preparatory operations, details stated 2 Stage tests (nr) listed and purpose stated 3 Insurance Company tests, details stated 4 Instruction of personnel in operation of completed installations			C7 Provision of water and other supplies is deemed to be included C8 Provision of test certificates is deemed to be included	

18 Prepared drawings	1 Information required and number of copies stated	1 Negatives, prints and microfilms, details stated	1 Binding into sets, details stated 2 Names of recipients stated	Drawings include Builder's work, manufacturer's and installation drawings and record or 'as fitted' drawings	
19 Operating and maintenance manuals					

X Transport systems

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) the scope and location of the work, including extent of work in motor, machinery or plant rooms		M1 It is permissible in respect of any individual item to use any other appropriate Rule in this document provided that it is stated which Rules have been applied to the item			S1 Such information as is appropriate to the procurement, design, execution, supply and/or manufacture of the item and its incorporation in the works
CLASSIFICATION TABLE					
1 Lifts 2 Escalators 3 Moving pavements 4 Hoists 5 Cranes 6 Travelling cradles 7 Goods distribution/Mechanised warehousing 8 Mechanical document conveying 9 Pneumatic document conveying 10 Automatic document filing and retrieval	1 Component drawing reference 2 Type, size, pattern, capacity, loading, length, floors served as appropriate, all stated	1 Cross reference to specification	M2 Work is classified in accordance with the following Work Sections and given under an appropriate Work Section heading: X10 Lifts X11 Escalators X12 Moving pavements X20 Hoists X21 Cranes X22 Travelling cradles X23 Goods distribution /Mechanised warehousing X30 Mechanical document conveying X31 Pneumatic document conveying X32 Automatic document filing and retrieval		
11 Marking position of holes, mortices and chases in the structure	1 Installation stated	1 Formed during construction, details stated			
12 Identification where not provided with equipment	1 Plates 2 Discs 3 Labels 4 Tapes or bands 5 Arrows, symbols, letters and numbers 6 Charts	1 Type, size and method of fixing stated	1 Details of engraving stated 2 Mounting of charts, details stated		

2 Item over the pipes in which they occur	1 Made bases	2 Special joints and connections	1 Type and method of joining stated	nr	1 Nominal size stated where different from pipe in which joint or connection occurs	D2 Special joints are joints which differ from those generally occurring in the running length or are connections to pipes of a different profile or material, connections to existing pipes or to equipment, appliances or ends of flue pipes	C5 Cutting and joining pipes to fittings, loops and compensators is deemed to be included	C6 Screwed sockets, tappings and bosses are deemed to include perforating the pipe	C7 Cutting and joining pipes to ancillaries is deemed to be included
3 Expansion loops	2 Special joints and connections	3 Fittings, pipe \leq 65 mm diameter,	2 One end	nr	1 Background stated 2 In ducts 3 In trenches				
			3 Two ends						
4 Expansion compensators	2 Special joints and connections	4 Fittings, pipe $>$ 65 mm diameter	4 Three ends	nr	1 Integral controls or indicators stated 2 Remote controls or indicators and connections between stated 3 Background stated 4 In ducts 5 In trenches				
			5 Others, details stated						
5 Screwed sockets 6 Tappings 7 Bosses	2 Special joints and connections	1 Type, nominal size, method of joining, type, number and method of fixing supports stated	6 Type stated	nr	1 Nominal size and kind of pipe stated				
			1 Type, nominal size, method of joining, type, number and method of fixing supports all stated						
8 Pipework ancillaries	2 Special joints and connections	1 Type, size and method of joining stated	1 Limiting dimensions and expansion accommodated stated	nr					
			1 Type, nominal size, method of joining, type, number and method of fixing supports all stated						

Y10, Y11 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
9 Pipe supports which differ from those given with pipelines			1 Nominal size of pipe, type and size of support, method of fixing pipe and support stated	nr	1 Lined with insulation, details stated 2 Spring compensated, loading and movement accommodated stated 3 Background stated		
10 Pipe anchors and guides			1 Nominal size of pipe, type, size and composition, method of fixing pipe and anchors or guide stated	nr			
11 Pipe sleeves through walls, floors and ceilings	1 Length ≤ 300 mm 2 and thereafter in 300 mm stages		1 Type and nominal size of pipe stated	nr	1 Method of fixing and type of packing stated 2 Handed to others for fixing		
12 Wall, floor and ceiling plates			1 Type, size and method of fixing stated	nr			
					M5 Fabricated supports and supports carrying more than one service are measured in Section P31		

Y2. Y25 General pipeline equipment
 Y40 - Y46 General air ductline equipment
 Y52 Vibration isolation mountings
 Y53 Control components - mechanical

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) scope and location of the work including extent of work in plant rooms		M1 Work related to these Sections is classified in accordance with Sections R14 - U70 as Appendix B and given under an appropriate Work Section heading M2 Work in plant rooms is identified separately	D1 Finishes and surface treatments exclude insulation and decorative finishes which are measured under Sections Y50 and M60	C1 Providing everything necessary for joining is deemed to be included C2 Patterns, moulds, templates and the like are deemed to be included	S1 Specified codes of practice and regulations S2 Kind and quality of materials S3 Gauge, thickness or substance of materials S4 Tests with which materials and equipment must comply S5 Finishes or surface treatments applied on site S6 Finishes or surface treatments applied off site stating whether applied before or after fabrication or assembly S7 Limiting dimensions on the size and weight of equipment
CLASSIFICATION TABLE					
1 Equipment	1 Type, size and pattern, rated duty, capacity, loading as appropriate and method of fixing all stated	1 Cross-reference to Specification	1 Ancillaries provided with equipment, details stated 2 Integral controls or indicators, details stated 3 Remote controls or indicators, and connections between, details stated 4 Supports, anti-vibration mountings, insulation provided with equipment, details and method of fixing stated 5 Initial charges, details stated 6 Background stated		

Y20-Y25/Y40-Y46/Y52/Y53 continued

CLASSIFICATION TABLE		MEASUREMENT RULES		DEFINITION RULES		COVERAGE RULES		SUPPLEMENTARY INFORMATION	
2 Ancillaries for equipment not provided with the equipment	1 Type, size and method of jointing stated	1 Type of equipment stated	nr	1 Integral controls or indicators, details stated 2 Remote controls or indicators, and connections between, details stated			C4 Jointing ancillaries to equipment is deemed to be included C5 Edge sealing strips are deemed to be included		
	3 Sill heaters 4 Skirting heaters	1 Elements (nr) 2 Casings	1 Output, type, size and method of jointing stated 2 Type, size and method of jointing stated	m m					
5 Items extra over the sill or skirting heater casings in which they occur	1 Angle sections 2 Matching plates 3 Valve access covers 4 End covers	1 Type, size and method of jointing stated	nr						
	6 Supports where not provided with the equipment	1 Type, size and method of fixing stated	nr	1 Background stated					
7 Independent vertical steel chimneys	1 Height, internal diameter and method of jointing stated			1 Base plates (nr) 2 Base plate templates (nr) 3 Linings (nr) 4 Claddings (nr) 5 Anchor bolts (nr) 6 Guy ropes (nr) 7 Ladders (nr) 8 Guard rails (nr) 9 Painters hooks (nr) 10 Clearing doors (nr) 11 Cows 12 Terminals					
	8 Anti vibration mountings where not provided with the equipment	1 Type, size and method of fixing stated		nr					
9 Anti vibration or sound insulation material	1 Plant bases	1 Nature and thickness	m ²	1 Handed to others for fixing					

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
 (a) scope and location of the work, including extent of work in plant rooms

CLASSIFICATION TABLE

1 Ducting	1 Straight 2 Curved, radii stated 3 Rectangular curved on wider side, radii stated 4 Rectangular curved on narrower side, radii stated 5 Flexible	1 Type, shape, size, method of joining type, spacing and method of fixing supports stated	m	1 Background stated	M1 Work related to this Section is classified in accordance with Sections U10 - U70 as Appendix B and given under an appropriate Work Section heading M2 Work in plant rooms is identified separately	D1 Finishes and surface treatments exclude insulation and decorative finishes which are measured under Sections Y50 and M60	C1 Providing everything necessary for joining is deemed to be included C2 Patterns, moulds templates and the like are deemed to be included	S1 Specified codes of practice and regulations S2 Kind and quality of materials S3 Gauge, thickness or substance of materials S4 Tests with which materials must comply S5 Finishes or surface treatments applied on site S6 Finishes or surface treatments applied off site stating whether applied before or after fabrication or assembly
2 Items extra over the ducting in which they occur	1 Lining ducting internally 2 Special joints and connections 3 Fittings 4 Access openings and covers or doors 5 Nozzle outlets 6 Test holes and covers	1 Type and thickness of lining material and internal size of ducting stated 1 Type, size, ducting size and method of joining stated 1 Type stated	m nr nr	1 Size stated where different from duct in which joint or connection occurs 1 Method of joining stated where different from duct in which fitting occurs	M3 Ducting is measured over all fittings and branches M4 Lining may alternatively be given in the description of the ducting M5 Where there is a preponderance of fittings (e.g. in plant rooms) they may be enumerated separately as individual full cost items	C3 Ducting is deemed to include: (a) joints in the running length (b) stiffeners C4 Access openings, nozzle outlets and test holes are deemed to include the stiffening of openings C5 Cutting and jointing ducts to fittings is deemed to be included		
J Joints and splitters where not provided with fittings	1 Type stated	1 Internal size of ducting stated	nr					

Y30/Y31 continued

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
4 Ancillaries	1 Type, size, method of joining, type, number and method of fixing supports all stated	1 Type of ducting stated	nr	1 Integral controls and indicators, details stated 2 Remote controls and indicators and connections between, details stated 3 Background stated		C6 Cutting and joining ducts to ancillaries is deemed to be included	
5 Breaking into existing ducts	1 Type, size and location of duct stated	1 Purpose of breaking in stated	Item	1 Obtaining approval for isolation where necessary 2 Isolating existing duct 3 Preparing ends of existing for new work 4 Limitations to shut down period			
6 Ducting supports which differ from those given with ductline		1 Shape, size of duct, type and size of support, method of fixing duct and support stated	nr	1 Lined with insulation, details stated 2 Spring compensated, loading and movement accommodated stated 3 Background stated	M6 Fabricated supports and supports carrying more than one service are measured in Section P31		
7 Ducting sleeves through walls, floors and ceilings	1 ≤ 300 mm length 2 and thereafter in 300 mm stages	1 Type and size of ducting stated	nr	1 Method of fixing and type of packing stated 2 Handed to others for fixing			

Y51 Testing and commissioning mechanical services
Y54 Identification - mechanical
Y59 Sundry common mechanical items

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions		M1 Work related to this Section is classified in accordance with Sections R14 - U70 as Appendix B and given under an appropriate Work Section heading			
CLASSIFICATION TABLE					
1 Marking position of holes, mortises and chases in the structure	1 Installation stated	1 Formed during construction, details stated			
2 Loose ancillaries	1 Keys 2 Tools 3 Spares 4 Parts/chemicals	1 Type and quality or quantity stated nr	1 Name of recipient stated		
3 Identification where not provided with equipment or ancillaries	1 Plates 2 Discs 3 Labels 4 Tapes or bands 5 Arrows, symbols, letters and numbers 6 Charts	1 Type, size and method of fixing stated nr	1 Details of engraving stated 2 Mounting of charts, details stated		
4 Testing and commissioning	1 Installation stated	1 Preparatory operations, details stated 2 Stage tests (nr) listed and purpose stated 3 Insurance Company tests, details stated 4 Instruction of personnel in operation of completed installation	1 Attendance required 2 Instruments to be provided	C1 Provision of water, fuel, gas, electricity and other supplies is deemed to be included C2 Provision of test certificates is deemed to be included	
5 Temporary operation of installations to Employer's requirements	1 Installation and purpose of operation stated	1 Duration of operation period stated	1 Attendance required 2 Conditions imposed by Employer before		
			M2 Provision of water, fuel, gas, electricity and other supplies is covered by		

6 Pref drawings	1 Information required and number of copies stated	1 Negatives, prints or microfilms, details stated	1 Binding into sets, details stated 2 Names of recipients stated	1 Drawings include builder's work, manufacturer's and installation drawings and record or 'as filled' drawings	
7 Operating and maintenance manuals					

Y60 Conduit and cable trunking

Y63 Support components - cables

INFORMATION PROVIDED

P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:
(a) scope and location of the work

MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION			
M1 Work related to these Sections is classified in accordance with Sections V10 - Y62 as Appendix B and given under an appropriate Work Section heading	D1 Finishes and surface treatments exclude decorative finishes which are measured under Section M60	C1 Providing everything necessary for joining is deemed to be included C2 Patterns, moulds, templates and the like are deemed to be included	S1 Specified codes of practice and regulations S2 Kind and quality of materials S3 Gauge thickness or substance of materials S4 Tests with which materials must comply S5 Finishes or surface treatments applied on site S6 Finishes or surface treatments applied off site stating whether applied before or after fabrication or assembly			
CLASSIFICATION TABLE						
1 Conduit	<ol style="list-style-type: none"> 1 Straight 2 Curved, radii stated 	<ol style="list-style-type: none"> 1 Type and external size and method of fixing stated 	m	<ol style="list-style-type: none"> 1 Background stated 2 To surfaces 3 In chases 4 In floor screeds 5 In situ concrete 	M2 Conduit is measured over all conduit fittings and branches M3 Independent earth conductors are measured separately under Section Y61 or Y80	C3 Conduit is deemed to include: (a) bending, cutting, screwing, joining and all conduit fittings excluding 2.*.1.* (b) clips, saddles and crampets (c) forming holes for conduit entry (d) draw wires, draw cables, and the like (e) components for earth continuity
2 Items extra over the conduit in which they occur	<ol style="list-style-type: none"> 3 Flexible connections 4 Extendable connections 	<ol style="list-style-type: none"> 1 Type, size, overall length and type of adaptors stated 	nr	<ol style="list-style-type: none"> 1 Earthing tails 		C4 Cutting and joining conduit to boxes is deemed to be included
	<ol style="list-style-type: none"> 1 Special boxes 2 Adaptable boxes 3 Floor trap boxes 4 Purpose made boxes 5 Rectangular junction boxes 6 Expansion joints 	<ol style="list-style-type: none"> 1 Type, size, cover and method of fixing stated 	nr	<ol style="list-style-type: none"> 1 Background stated 		

<p>4 Connections of conduit to equipment and control gear</p>	<p>2 Special boxes</p>	<p>1 Type, size, method of joining and type, spacing and method of fixing supports all stated</p>	<p>1 Background stated 2 Pin racks 3 Compartments (nr), size stated</p>	<p>M4 Cable trunking is measured over all fittings and branches M5 Independent earth conductors are measured separately under Sections Y61 and Y80</p>	<p>C5 Trunking is deemed to include components for earth continuity</p>
<p>5 Cable trunking</p>	<p>1 Straight 2 Curved, radii stated</p>	<p>1 Type, size, method of joining and type, spacing and method of fixing supports all stated</p>	<p>m</p>		
<p>6 Item extra over the cable trunking in which they occur</p>	<p>1 Fittings</p>	<p>1 Type stated</p>	<p>nr</p>	<p>1 Bushing material, type and size stated</p>	<p>C6 Cutting and joining trunking to fittings is deemed to be included</p>
<p>7 Connections of cable trunking to equipment and control gear</p>	<p>1 Forming holes 2 With flanges 3 With flanges and forming holes</p>	<p>1 Size of opening stated 2 Size of opening and type and size of flanges stated</p>	<p>nr nr</p>		
<p>8 Cable tray, ladders and racks</p>	<p>1 Straight 2 Curved, radii stated</p>	<p>1 Type, width, method of joining and type spacing and method of fixing supports, all stated</p>	<p>m</p>	<p>1 Background stated</p>	<p>C7 Cable tray is deemed to include components for earth continuity</p>
<p>9 Cable tray stools</p>	<p>1 Type and size stated</p>		<p>nr</p>		
<p>10 Items extra over the cable tray, ladders and racks in which they occur</p>	<p>1 Fittings</p>		<p>nr</p>		<p>C8 Cutting and joining tray to fittings is deemed to be included</p>
<p>11 Supports for cable trunking</p>	<p>1 Supports which differ from those given with the trunking or cable tray, ladders and racks</p>	<p>1 Size of trunking, tray ladder or rack, type and size of support, method of fixing trunking, tray, ladder or rack and support all stated</p>	<p>nr</p>	<p>1 Background stated</p>	
<p>12 Supports for cable tray, ladders and racks</p>					

Y61 HV/LV cables and wiring
Y62 Busbar trunking
Y80 Earthing and bonding components

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION	
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) scope and location of the work</p> <p>P2 The following information regarding final circuits is given: (a) a distribution sheet setting out the number and location of all fittings and accessories (b) a location drawing showing the layout of the points</p>		<p>M1 Work related to these Sections is classified in accordance with Sections V10 - W62 as Appendix B and given under an appropriate Work Section heading</p>	<p>D1 Finishes and surface treatments exclude decorative finishes which are measured in Section M60</p>	<p>C1 Providing everything necessary for joining is deemed to be included</p> <p>C2 Patterns, moulds, templates and the like are deemed to be included</p>	<p>S1 Specified codes of practice and regulations</p> <p>S2 Kind and quality of materials</p> <p>S3 Gauge, thickness or substance of materials</p> <p>S4 Tests with which materials must comply</p> <p>S5 Finishes or surface treatments applied on site</p> <p>S6 Finishes or surface treatment applied off site stating whether applied before or after fabrication or assembly</p> <p>S7 Details of colour coding or other markings of cables for phase identification</p>	
CLASSIFICATION TABLE						
1 Cables	<p>1 Type, size, number of cores, armouring and sheathing stated</p>	<p>1 Drawn into conduits or ducts or laid or drawn into trunking</p> <p>2 Laid or drawn into trunking and laced into circuit groups</p> <p>3 Fixed to surfaces</p> <p>4 Wrapped around pipework</p> <p>5 Laid in trenches</p> <p>6 Fixed to insulators in overhead lines</p> <p>7 Suspended from catenary cables</p>	<p>1 Type, spacing and method of fixing supports stated</p> <p>2 Background stated</p>	<p>M2 Cables in conduits or trunking and cables fixed to trays are measured as the net length of the conduit, trunking or tray. Other cables are measured as fixed without allowance for sag</p> <p>M3 The following allowances shall be made to those cables measured net: (a) 0.30 m on each cable entering fittings, luminaries or accessories (b) 0.60 m on each cable entering equipment or control gear</p>	<p>D2 Cables are defined as being laced into circuit groups where this is specified</p>	<p>C3 Cables are deemed to include: (a) wall, floor and ceiling plates (b) cable sleeves (c) connecting tails</p>
2 Flexible cable connections	<p>1 Type, size, number of cores, armouring, sheathing, capacity stated, length \leq 1.00 m</p> <p>2 and thereafter in 1.00 m</p>	<p>1 Details of connections at each end stated</p>				

Y61/Y62/Y80 continued

CLASSIFICATION TABLE

19 Cable and conduit in final circuits	CLASSIFICATION TABLE			MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<ol style="list-style-type: none"> 1 Cable installation, size and type of cable, and description of final circuit stated 2 Cable and conduit installation, size and type of cable and conduit, and description of final circuit stated 	<ol style="list-style-type: none"> 1 Sockets, switch sockets and the like 2 Immersion heaters, cooker outlets and the like 3 Lighting outlets 4 One way switches 5 Two way switches 6 Intermediate switches 	nr	<ol style="list-style-type: none"> 1 Cables and protective conductors for earthing 2 Special boxes 3 Surface 4 Concealed 5 Background and method of fixing stated 	<p>M6 Final circuits not forming part of a domestic or similar simple installation from distribution boards and the like are kept separate and measured in detail in accordance with Sections Y60 & Y63 and Sections Y61, Y62 & Y80; 1 - 18.*.*.*</p> <p>M7 Final circuits are measured on an enumerated points basis where they form part of a domestic or similar simple installation from distribution boards and the like</p> <p>M8 Each lighting outlet is measured as one point irrespective of the number of lamps</p> <p>M9 Cables and protective conductors for earthing are only given in the description where they form an integral part of the final circuit</p> <p>M10 Special boxes given in the description are specifically required boxes which differ from those included in C5</p>		<p>C6 Final circuits measured on an enumerated points basis are deemed to include:</p> <ol style="list-style-type: none"> (a) conduit accessories including conduit boxes required for the particular type of installation (b) fixing, bending, cutting, screwing and jointing (c) determining routes 	<p>S8 Voltage and ampere</p>

Y7. LV switchgear and distribution boards

Y72 Contactors and starters

Y92 Motor drives - electric

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) scope and location of the work</p>		<p>M1 Work related to these Sections is classified in accordance with Sections V10 – W62 as Appendix B and given under an appropriate Work Section heading</p>	<p>D1 Finishes and surface treatments exclude decorative finishes which are measured in Section M60</p>	<p>C1 Providing everything necessary for jointing is deemed to be included C2 Patterns, moulds, templates and the like are deemed to be included</p>	<p>S1 Specified codes of practice and regulations S2 Kind and quality of material S3 Gauge, thickness or substance of materials S4 Tests with which materials must comply S5 Finishes or surface treatments applied on site S6 Finishes and surface treatments applied off site stating whether applied before or after fabrication or assembly S7 Limiting dimensions on the size and weight of the equipment</p>
CLASSIFICATION TABLE					
1 Switchgear	1 Type, size, rated capacity and method of fixing stated	1 Cross reference to Specification	nr	1 Fuses 2 Supports provided with the equipment, details and method of fixing stated 3 Background stated	
2 Distribution boards					
3 Contactors and starters					
4 Motor drives					
5 Supports where not provided with switchgear, distribution boards, contactors and starters, or motor drives	1 Type, size and method of fixing stated		nr	1 Background stated	
				C3 Plates, discs and labels for identification provided with the equipment are deemed to be included	

Y73 Luminaires and lamps
Y74 Accessories for electrical services

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities: (a) scope and location of the work</p>		<p>M1 Work related to these Sections is classified in accordance with Sections Y10 - W62 as Appendix B and given under an appropriate Work Section heading</p>	<p>D1 Finishes and surface treatments exclude decorative finishes which are measured under Section M60</p>	<p>C1 Providing everything necessary for joining is deemed to be included C2 Patterns, moulds, templates and the like are deemed to be included</p>	<p>S1 Specified codes of practice and regulations S2 Kind and quality of materials S3 Gauge, thickness or substance of materials S4 Tests with which materials must comply S5 Finishes or surface treatments applied on site S6 Finishes or surface treatments applied off site stating whether applied before or after fabrication or assembly</p>
CLASSIFICATION TABLE					
1 Particular specification items	1 Type and description stated	nr	1 Boxes, details stated 2 Conduit boxes, details stated	D2 Particular specification items are those items of a fitting or ancillary nature particular to the Work Section concerned	
2 Luminaires	1 Type, size and method of fixing stated 2 Pendant, type, size and method of fixing stated	nr	3 Pattresses, details stated 4 Ceiling roses, details stated 5 Connector blocks, details stated 6 Flexible cords, details stated 7 Starters, chokes and capacitors, details stated 8 Shades, diffusers and reflectors, details stated 9 Lampholder, details stated 10 Conduit or chain suspension, details stated 11 Suspension system, details stated 12 Lighting columns, details stated		

3 Lamps	1 Type, size and rated capacity stated	nr	2 Lat. / alter. be given in the description luminaires	Plugs are d to include fixing into luminaires
4 Luminaires and lamps provided by the Employer	1 Type, size and method of fixing stated	nr	1 Provision of additional components and internal wiring, details stated 2 Background stated	C4 Accepting delivery, storing and handling are deemed to be included
5 Accessories	1 Type, box and method of fixing stated	nr	M3 Accessories are enumerated in gangs where appropriate	C5 Plugs are deemed to include fuses
6 Disconnecting, selling aside and refixing for the convenience of other trades	1 Type of equipment and purpose of disconnection stated	item		

Y81 Testing and commissioning electrical services
Y82 Identification - electrical
Y89 Sundry common electrical items

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
P1 Information is shown on location drawings under A Preliminaries/General conditions					
CLASSIFICATION TABLE					
1 Additional bonding	1 Bonding resulting from testing extraneous metal	prov sum			
2 Marking position of holes, mortices and chases in the structure	1 Installation stated	item	1 Formed during construction, details stated		
3 Loose ancillaries	1 Keys 2 Tools 3 Spares	nr	1 Names of recipients		
4 Identification where not provided with equipment or control gear	1 Plates 2 Discs 3 Labels 4 Tapes and bands 5 Arrows, symbols, letters and numbers 6 Charts		1 Details of engraving stated 2 Mounting of charts, details stated		
5 Testing and commissioning	1 Installation stated	item	1 Attendance required 2 Instruments to be provided	C1 Provision of electricity and other supplies is deemed to be included C2 Provision of test certificates is deemed to be included	
6 Temporary operation of installations, to Employer's requirements	1 Installation and purpose of operation stated	item	1 Attendance required 2 Conditions imposed by Employer before operation allowed 3 Special insurance	M3 Provision of electricity and other supplies is covered by Provisional Sums in Section A54	

7 Per drawings	Information required and copies (nr) stated	Negative prints microfilms, details	item stated	including in details stated 2 Names of recipients stated	D1 [] include installers work, installation drawings and record or 'as fitted' drawings	
8 Operating and maintenance manuals		item	item			

Additional rules – work to existing buildings

Work Groups H, J, K, L and M – work to existing buildings

INFORMATION PROVIDED		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION			
<p>P1 The following information is shown either on location drawings under A Preliminaries/General conditions or on further drawings which accompany the bills of quantities:</p> <ul style="list-style-type: none"> (a) the scope and location of the work relative to <ul style="list-style-type: none"> – the existing layout indicating the existing structure – the proposed layout 		<p>M1 These rules cover each work section within the Work Groups H, J, K, L and M and apply to works to existing buildings as defined in the General Rules</p>	<p>D1 Materials arising from the work are the property of the Contractor unless otherwise stated</p>	<p>C1 Shoring and scaffolding incidental to the work and making good all work disturbed by such shoring and scaffolding is deemed to be included within each item</p> <p>C2 Items for work to existing buildings are deemed to include:</p> <ul style="list-style-type: none"> (a) disposal of materials other than those remaining the property of the Employer or those for re-use (b) incidental work which is at the discretion of the Contractor (c) all new fixing or joining materials required 	<p>S1 Method of operation, where by specific means</p> <p>S2 Settling aside and storing materials remaining the property of the Employer or those for re-use</p> <p>S3 Employer's restrictions on methods of disposal of materials including toxic or other special waste</p> <p>S4 Kind, quality and thickness of materials</p> <p>S5 Type of construction</p> <p>S6 Special trims</p> <p>S7 Restrictions on the method of shoring and scaffolding</p>			
CLASSIFICATION TABLE								
1 Bonding/joining new to existing	1 Dimensioned description	<table border="1"> <tr><td>m²</td></tr> <tr><td>m</td></tr> <tr><td>nr</td></tr> </table>	m ²	m	nr	M3 This item is only measured separately where new work is purely extending the existing		
m ²								
m								
nr								
2 Stripping off/removing/taking down	1 Dimensioned description	<table border="1"> <tr><td>m²</td></tr> <tr><td>m</td></tr> <tr><td>nr</td></tr> </table>	m ²	m	nr	1 In preparation for replacement		
	m ²							
m								
nr								
2 Spot item dimensioned description	<table border="1"> <tr><td>item</td></tr> </table>	item		C3 Spot items are deemed to include jointing /bonding new to existing				
item								

4 Items extra over making good disturbed work	2 Spot item dimensioned description	m	nr	item	m	nr	1 Rectangular 2 Circular 3 Dimensioned profile description 4 Making good 5 Making good to match existing 6 Facework described	D2 Ducts include trays, trunking, gratings and the like D3 Pipes include tubes, bars, cables, conduit and the like	C4 Spot items are deemed to include jointing/bonding new to existing
5 Cutting									
6 Cutting holes	1 Ducts 2 Pipes								

R10-R13 Drainage – work to existing buildings
 Y Mechanical services – work to existing buildings

CLASSIFICATION TABLE				MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1 Breaking into existing pipes 2 Breaking into existing ducts	1 Type, size and location of existing pipe or duct stated	1 Purpose of breaking in stated	item	1 Obtaining approval for isolation where necessary 2 Isolating existing pipe or duct 3 Isolating and draining down existing pipe 4 Preparing ends of existing for new work 5 Limitations to shut down period			
3 Joining new pipes to existing 4 Joining new ducts to existing	1 Type, size of both pipes or ducts and method of joining stated		nr	1 Preparing ends of existing pipes and ducts where not taken with 1-2.1.1.4		C1 Providing everything necessary for joining is deemed to be included	
5 Stripping out part installations 6 Stripping out whole installations	1 Dimensioned description detailing extent and location 2 Spot item dimensioned description		nr item	1 Obtaining approval for isolation where necessary 2 Isolating part or whole to be removed 3 Isolating and draining down part or whole to be rescued 4 Making safe 5 Limitations to shut down period			
7 Provision of temporary services, bypasses and the like	1 Dimensioned description		nr	1 Fabrication prior to installation	M1 Alternatively this work may be measured in accordance with the Rules for new work and grouped under an appropriate heading	C2 Provision of temporary services, bypasses and the like is deemed to include removing and making good after	
8 Stripping off insulation to part of services installations 9 Stripping off insulation to whole services installations	1 Dimensioned description detailing extent and location 2 Spot item dimensioned description	1 Type of insulation to be removed	nr item	1 Safety measures to be applied 2 Disposal requirements			

<p>10 ig and commissioning existing plumbing and mechanical installations</p>	<p>1 Part installation stated 2 Whole installation stated</p>	<p>1 Preparatory opt details stated 2 Stage tests (nr) listed and purpose stated 3 Insurance Company tests, if any, details stated 4 Instruction of personnel in operation of completed installation</p>	<p>item 1 Attendance required 2 Instruments to be provided 3 Special insurance requirements of Employer stated</p>	<p>gas, electricity and other supplies is deemed to be included C4 Provision of test certificates is deemed to be included</p>	<p>inspector or, fuel</p>
---	--	--	--	---	--

Y Electrical services - work to existing buildings

CLASSIFICATION TABLE		MEASUREMENT RULES	DEFINITION RULES	COVERAGE RULES	SUPPLEMENTARY INFORMATION
1 Cables drawn into existing conduits or ducts or laid or drawn in existing trunking	1 Type, size, number of cores, armouring and sheathing stated	M1 Except for final circuits cables in conduits or trunking and cables fixed to trays are measured as the net length of the conduit, trunking or tray. Other cables are measured as fixed without allowance for sag	D1 Cables are defined as being laced into circuit groups only where this is specified	C1 Cables and tapes are deemed to include: (a) wall, floor and ceiling plates (b) cable sleeves	S1 Details of colour coding or other markings of cables for phase identification
2 Cables laid or drawn into existing trunking and laced into circuit groups	2 Type and size of existing conduit or duct stated 2 Type and size of existing trunking stated	M2 The following allowances shall be made: (a) 0.30 m on each cable entering fittings, luminaires or accessories (b) 0.60 m on each cable entering equipment or control gear		C2 Cables laid or drawn into existing conduits, existing ducts or existing trunking is deemed to include removing and replacing existing covers, existing inspection lids and the like	
3 Breaking into existing cables	1 Type, size and location of existing cable, equipment or control gear stated				
4 Breaking into existing equipment and control gear	1 Purpose of breaking in stated, details of associated conduit, trunking or tray given				
5 Joining new cables to existing	1 Type, size of both new and existing work and method of joining stated		1 Obtaining approval to isolation where necessary		
6 Joining new equipment and control gear to existing			2 Isolating existing cable, equipment or control gear		
7 Joining new conduits, trunking and trays to existing			3 Preparing existing for joining of new work		
8 Stripping out part installations	1 Dimensioned description detailing extent and location		1 Preparing existing for joining to new where not taken with 3-4.1.1.3		
9 Stripping out whole installations	2 Spot item dimensioned description		2 Joint boxes, type stated		
			3 Sealing boxes, type stated		
			4 Shrouds, type stated		
			5 Boxes, type stated		
			6 Special boxes, type stated		
			7 Other components, type stated		
			1 Obtaining approval for isolation where necessary		
			2 Isolating whole or part to be removed		
			3 Making safe		
			4 Limitations to shut down		
				C3 Providing everything necessary for jointing is deemed included	

10 Provision of temporary services	1 Dimensioned description		nr	M3 Alternatively this work may be measured in accordance with the rules for new work and grouped under an appropriate heading	C4 Provision of temporary services is deemed to include removing and making good after	
11 Testing and commissioning existing electrical installations	1 Part installation stated 2 Whole installation stated	1 Stage tests (nr) listed and purpose stated 2 Instruction of personnel in operation of completed installation	item	1 Attendance required 2 Instruments to be provided 3 Special insurance requirements of Employer stated	C5 Provision of electricity and other supplies is deemed to be included C6 Provision of test certificates is deemed to be included	

Appendix A

Fixtures, furnishings, equipment, fittings and appliances as referred to in the rules for Work Sections N10, N11, N12, N13, N15, N20-N23, P21 and Q50

N10 General fixtures/furnishings/ equipment

Furnishings, fittings and equipment, fixed to the building fabric or provided loose within the building, and 'general' in the sense that they may be found in a wide variety of buildings. Culinary and sanitary furnishings, fittings and equipment are excluded, together with items which would normally be included in building services sub-contracts. Minor items of special purpose equipment may be included here rather than in sections N20-N23 'Special purpose fixtures/furnishings/equipment'.

Included

- Counters, desks, benches, worktops
- Small mirrors in toilets, dressing rooms
- Curtain track and rails
- Curtains, loose wall hangings, fabrics, blinds
- Fireplaces, surrounds and hearths
- Telephone booths and enclosures
- Storage racks, shelves, shelving support systems
- Door mats, matwells
- Wall hangings, loose carpets
- Lockers, hat and coat rails
- General purpose chairs and tables
- Beds, divans
- Wardrobes, dressers, cupboards, cabinets
- Objets d'art and other ornamental features
- Fire extinguishers
- Dustbins
- Minor items of 'special purpose' equipment
- Fixing as required

N11 Domestic kitchen fittings

Domestic kitchen equipment of all kinds including units, worktops, cupboards, sinks, cookers, grills, refrigerators, etc.

Included

- Kitchen units, including base units, drawer units, worktops, hanging cupboards
- Ovens, cookers, hobs, grills
- Sinks, taps, waste fittings, waste disposal units where supplied as part of the kitchen fitting installation.
- Refrigerators, deep freezers
- Dishwashers
- Clothes washing machines, clothes dryers, ironing cabinets
- Waste bins, towel rails, storage racks and other accessories
- Kitchen equipment suites comprising any combination of the foregoing
- Fixing

N12 Catering Equipment

Culinary equipment designed for use in provision of food and drink on a communal or commercial scale.

Included

- Food storage equipment other than cold rooms
- Food preparation and cooking equipment
- Food transporting and serving equipment
- Serving counters and tray rails
- Sinks where supplied as part of the catering equipment installation
- Dishwashing and waste disposal equipment
- Food and drink vending machines
- Fixing

N15 Sanitary appliances/fittings

Appliances for health, hygiene and personal washing, together with their accessories, but excluding sinks for domestic kitchens.

Included

Low level WC suites
WC pans and cisterns
Slop hoppers
Urinals and cisterns
Sinks, including kitchen sinks not supplied as part of the kitchen fitting installation, and catering sinks not supplied as part of the catering equipment installation
Wash basins
Hand rinse basins
Wash fountains
Bidets
Baths
Jacuzzis
Showers including curtain rails, screens, etc.
Drinking fountains
Vanity units
Taps and waste fittings to the appliances
Float operated valves
Bath panels and trim
Hand dryers
Towel rails and holders not connected to a heating or hot water supply installation
Paper towel dispensers
Toilet paper holders
Waste bins
Soap dispensers and holders
Sanitary towel incinerators
Sanitary towel macerators
Saunas, sauna equipment

N15 Signs/Notices

Directories, notice boards, letters, signs, plaques, symbols and emblems of all kinds for identification and directional purposes.

Included

Signwriting
Lettering, emblems and other identification/directional symbols carved onto stone
Door or floor numbering or lettering
Name plates, plaques and identification symbols of all materials
Directional signboards and notice boards of all kinds and materials
Shop front lettering, emblems and symbols of all kinds and materials
Illuminated signs, lettering, emblems and symbols such as "Exit" signs, "Gentlemen", etc. where the illuminated fitting is simply connected to an adjacent electrical outlet

N20 - N23 Special purpose fixtures/furnishings/equipment

Furnishings, fittings and equipment, fixed to the building fabric or provided loose within the building, and 'special' in the sense that they are designed for the particular purpose(s) of the building. The title(s) of the section(s) should indicate the nature of the special purpose equipment, e.g. 'Special purpose hospital fixtures/furnishings/equipment'. Section titles will therefore vary from project to project. Four work section numbers have been allocated to provide for projects with several types of special purpose fixtures, furnishings and equipment.

General purpose, residential, culinary and sanitary fixtures, fittings and equipment are excluded, together with items which would normally be included in building services sub-contracts. Minor items of special purpose equipment may be included in section N10 'General fixtures/furnishings/equipment' rather than here.

Included

Fixtures, fittings and equipment for special purposes, including:
Rail, road, water and air transport buildings
Communications, power supply, mineral supply, water supply buildings
Agricultural, fishing and forestry buildings
Factories and other industrial buildings for food, drink, chemicals, engineering, textiles, clay, cement, timber, construction, etc.
Administrative, office and commercial buildings
Shops, showrooms, stores, shopping centres, warehouses
Defence, police, prison and fire service buildings
Hospital, medical, welfare and animal welfare buildings
Restaurants, snack bars, public houses
Entertainment buildings, community centres, clubs
Sports buildings, swimming pools, marinas, stadia
Religious buildings, funerary buildings
Educational buildings including scientific research facilities
Libraries, record offices, museums, galleries, zoos
Special residential buildings, hotels, old peoples' homes

P21 Ironmongery

Components and items of metal, plastics or other material fixed on site as door and window opening or closing devices, fasteners, supports, brackets, etc. but excluding

1. Items supplied with a window or other component.
2. Items of furniture or equipment in their own right (e.g. towel rails, toilet roll holders).

Included

Water bars
 Sliding and up and over door tracks or overhead rails; hangers, guides and fittings
 Sash balances
 Butts, hinges, pivots and other opening/closing devices
 Spring butts, door springs, door closers and other self closing devices
 Locks, latches, catches, cylinder locks, nightlatches and other locking devices
 Bolts, panic bolts, espagnolette bolts, security bolts, casement and sash fasteners and other securing devices
 Door handles, escutcheons, casement stays, sash pulls, letter plates, kicking plates, push plates, pull handles, trickle ventilators and other door and window furniture
 Shelf brackets other than part of a shelving system
 Handrail brackets
 Door stops, retaining devices, draughtproofing strips and sections
 Nameplates, numbers, knockers, bell pushes, door viewers
 Mechanical and/or automatic operating or opening equipment where not supplied with the component or installed as part of an access control installation

Q50 Site/Street furniture/equipment

General purpose furniture and equipment of any material designed for use externally, but excluding items provided by a statutory undertaker, local authority or services sub-contractor.

Included

Gates (when not part of fencing), including lifting barriers
 Pedestrian and vehicle barriers and railings
 Bollards (including removable and collapsible)
 Prefabricated plant containers
 Seats, benches, tables
 Litter bins, grit bins, dust bins
 Poster display units
 Cycle stands
 Flag staffs
 Clothes drying fittings
 Sculptures and other ornamental features
 Sports and playground equipment
 Other special purpose equipment occurring externally
 Excavation, concrete backfilling for foundations

Appendix B

Classification of mechanical and electrical services as referred to in the rules for Work Group Y

R Disposal systems	S Piped supply systems	T Mechanical heating/Cooling/ Refrigeration systems
R14 Laboratory/Industrial waste drainage	S10 Cold water	T10 Gas/Oil fired boilers
R20 Sewage pumping	S11 Hot water	T11 Coal fired boilers
R21 Sewage treatment/sterilisation	S12 Hot and cold water (small scale)	T12 Electrode/Direct electric boilers
R30 Centralised vacuum cleaning	S13 Pressurised water	T13 Packaged steam generators
R31 Refuse chutes	S14 Irrigation	T14 Heat pumps
R32 Compactors/Macerators	S15 Fountains/Water features	T15 Solar collectors
R33 Incineration plant	S20 Treated/Deionised/Distilled water	T16 Alternative fuel boilers
	S21 Swimming pool water treatment	T20 Primary heat distribution
	S30 Compressed air	T30 Medium temperature hot water heating
	S31 Instrument air	T31 Low temperature hot water heating
	S32 Natural gas	T32 Low temperature hot water heating (small scale)
	S33 Liquid petroleum gas	T33 Steam heating
	S34 Medical/Laboratory gas	T40 Warm air heating
	S40 Petrol/Oil - lubrication	T41 Warm air heating (small scale)
	S41 Fuel oil storage/distribution	T42 Local heating units
	S50 Vacuum	T50 Heat recovery
	S51 Steam	T60 Central refrigeration plant
	S60 Fire hose reels	T61 Primary/Secondary cooling distribution
	S61 Dry risers	T70 Local cooling units
	S62 Wet risers	T71 Cold rooms
	S63 Sprinklers	T72 Ice pads
	S64 Deluge	
	S65 Fire hydrants	
	S70 Gas fire fighting	
	S71 Foam fire fighting	

Comr oning mechanical services
 Communications systems - audio-visual
 Communications systems - data
 Communications systems - speech/audio
 Compactors, refuse (disposal systems)
 Complete buildings
 Components, standard
 Composite concrete decking
 Composite items
 Composition block flooring
 Compressed air (for instruments) supply systems
 Compressed air supply systems
 Computerised control systems
 Concrete decking, precast/composite
 Concrete kerbs/edgings/channels
 Concrete piling, cast in place
 Concrete piling, preformed
 Concrete repairing/renovating
 Concrete roof tiling
 Concrete rooflights/pavement lights
 Concrete screeds/flooring
 Concrete tiling/mosaic
 Concrete, gun applied
 Concrete, in situ
 Concrete, in situ, accessories cast into
 Concrete, in situ, cutting to
 Concrete, in situ, designed joints
 Concrete, in situ, formwork
 Concrete, in situ, reinforcement
 Concrete, in situ, roads/pavings/bases
 Concrete, in situ, worked finishes
 Concrete, precast large units
 Concrete, precast slab cladding/features
 Concrete, precast, sills, lintels, copings, features
 Concrete rooflights/pavement lights
 Concrete roof tiling
 Concrete/terrazzo partitions
 Conditions, general
 Conduit and cable trunking
 Contactors and starters
 Content of documents
 Contract
 Contractor's general cost items
 Control components - mechanical
 Control systems

Y51 159
 W20-23 181
 W30 181
 W10-13 181
 R32 181
 B -
 GR6 11
 E60 54
 GR9 11
 M42 111
 S31 181
 S30 181
 W62 181
 E60 54
 Q10 131
 D30 33
 D31 35
 C40 26
 H60 79
 H14 73
 M10 103
 M40 111
 E11 45
 E10 43
 E42 52
 E41 51
 E40 50
 E20 46
 E30 49
 Q21 132
 E41 51
 E50 53
 H50 53
 F31 53
 H14 73
 H60 79
 K33 53
 A -
 Y60 161
 Y72 166
 A31 18
 A20 18
 A40-44 20
 Y53 158
 W60-62 181

Cooling coils
 Cooling units, locally controlled
 Cooling, primary/secondary
 Copings, precast concrete
 Copper sheet coverings/flashings
 Cork tiling/sheeting
 Cost items, contractor's general
 Cost, management of works
 Covers for services
 Cranes
 Cubicle partitions, framed panel
 Culinary equipment
 Curtain walling
 Cutting to in situ concrete
 Cylinders/calorifiers

Y43
 T70 181
 T61 181
 F31 53
 H73 80
 M50 113
 A40-44 20
 A32 18
 P31 126
 X21 149
 K32 91
 N12 119
 H11 72
 E41 51
 Y23 154
 J40 85
 J30 83
 J20 83
 C41 28
 W30 181
 A55 22
 G30 69
 E60 54
 G31 70
 J22 83
 J43 85
 G32 70
 G32 70
 M52 115
 GR14 11
 S20 181
 S64 181
 C10 23
 K30 90
 A13 17
 GR4 11
 E40 50
 W50 181
 W41 181
 D40 39
 W13 181
 Y46 154

Direct current supply systems
 Direct electric boilers
 Direct fired self-contained heating units
 Disposal systems
 Distilled water supply systems
 Distribution boards
 Document conveying systems (mechanical)
 Document conveying systems (pneumatic)
 Document filing and retrieval systems
 Documents, provision, content and use
 Domestic kitchen fittings
 Doors, metal
 Doors, plastics/rubber
 Doors, timber
 Drainage below ground
 Drawings generally
 Drawings, list of
 Dressings, cast stone
 Dressings, natural stone ashlar
 Dry lining, plasterboard
 Dry riser distribution system
 Dual-duct air conditioning systems
 Ductlines and ancillaries, air
 Dust collection systems

E
 Earthing and bonding
 Earthing and bonding components
 Edge fixed carpeting
 Edge supported woodwool slab decking
 Edgings for pavings
 Electric heating systems
 Electric heating units, local
 Electric motor drives
 Electric underfloor heating systems
 Electrical cables and wiring
 Electrical equipment, general
 Electrical installation (small scale)
 Electrical items, other common
 Electrical supply/power/lighting systems
 Electricity generation plant
 Electricity generation/supply/hv distribution systems
 Electrode boilers
 W51 181
 Y80 163
 M51 113
 G32 70
 Q10 131
 V50 181
 V51 181
 Y92 166
 V50 181
 Y61 163
 Y70-74 166/9
 V90 181
 Y80-89 163/9
 V -
 V10 181
 V10-V12 181
 T12 181

Stone, natural, ashlar walling/dressings	F21	58	Tanking, mastic asphalt	J20	83	Traveling cradle systems	X22	149
Stone, natural, rubble walling	F20	58	Telecommunications systems	W10	181	Treated water supply systems	S20-21	181
Stone, natural, slab cladding/features	H51	77	Television communication systems	W20	181	Treated/deionised/distilled water supply systems	S20	181
Stone, natural, walling, accessories/sundry items	F30	62	Temporary or semi-permanent support	C30	23	Trenches/pipeways/pits for buried services	P30	126
Stone/concrete/brick kerbs/edgings/channels	Q10	131	Temporary works, contractor's general cost items	A44	21	Trims, unframed isolated	P20	123
Storage cylinders/calorifiers	Y23	154	Temporary works, employer's requirements	A36	19	Trowelling concrete	E41	51
Storage/distribution, fuel oil	S41	181	Tendering/sub-letting/supply	A30	18	Trunking, busbar	Y62	163
Street furniture/equipment	Q50	119	Terminal heat pump air conditioning systems	U43	181	Trunking, cable	Y60	161
Street lighting systems	V41	181	Terminal re-heat air conditioning systems	U42	181	Turfing	Q30	137
Strip sheathing/linings	K20-21	73	Terrazzo	M41	113			
Structural aluminium, framing	G11	65	Terrazzo partitions	K33	53			
Structural glass assemblies	H13	71	Testing and commissioning, electrical services	Y81	169			
Structural metal	G10-12	65	Testing and commissioning, mechanical services	Y51	159			
Structural metal members, isolated	G12	65	Thermal insulation	Y50	158	Under purlin/inside rail panel linings	K12	73
Structural steel framing	G10	65	Tile cladding/covering	H60-64	79	Underfloor heating systems, electric	V50	181
Structural steel framing	G20	67	Tiling, carpet	M50	113	Underpinning	D50	41
Structural timber	V42	181	Tiling, ceramic	M40	111	Unframed isolated trims/skirtings/sundry items	P20	123
Studio lighting systems	A20	18	Tiling, concrete	M40	111	Uninterrupted power supply systems	P32	181
Sub-contract	A51	22	Tiling, cork	M50	113	Unit decking, timber	G31	70
Sub-contractors, nominated	A30	18	Tiling, lino	M50	113	Use of documents	A31	18
Sub-letting	P	-	Tiling, plastics	M50	113	Use of site, limitations	A35	19
Sundries, building fabric	Y89	169	Tiling, quarry	M40	111			
Sundry common electrical items	Y59	159	Tiling, reconstructed stone	H63	79			
Sundry common mechanical items	A52	22	Tiling, roofs, clay/concrete	H60	79			
Suppliers, nominated	S	-	Tiling, rubber	M50	113			
Supply systems, piped	A30	18	Tiling, terrazzo	M41	113			
Supply, employer's requirements	Y63	161	Timber board flooring/sheathing/linings/casings	K20	73	VAV air conditioning systems	U31	181
Support components - cables	C30	23	Timber doors/shutters/hatches	L20	96	Vacuum cleaning systems (centralised)	R30	181
Support, temporary or semi-permanent	P31	126	Timber narrow strip flooring/linings	K21	73	Vacuum supply systems	S50	181
Supports for services	M	-	Timber repairing/renovating	C51	28	Vaulting, plastics glazed	H12	71
Surface finishes	Q26	136	Timber shingling	H64	79	Ventilation/fume extract systems	U10-17	181
Surfacings for sport	K40	92	Timber stairs/walkways/balustrades	L30	97	Vibration isolation mountings	Y52	154
Suspended ceilings	S21	181	Timber unit decking, prefabricated	G31	70			
Swimming pool water treatment	Y70	166	Timber weatherboarding	H21	73			
Switchgear, HV	Y71	166	Timber windows/rooflights/screens/louvres	L10	95			
Switchgear, LV	GR12	11	Timber, framing	G20	67	Walkways, metal	L31	97
Symbols	W20	181	Time, management of works	A32	18	Walkways, timber	L30	97
	GR2	11	Timing, limitations	A35	19	Wall insulation, cavity walls	P11	122
TV communications systems	C10	23	Toilet extract systems	U11	181	Wall mounted air conditioning units	U61	181
Tables, classification	E41	51	Trace heating	Y24	159	Walling, block	F10	55
Taking down structures						Walling, block, accessories/sundry		
Tanning concrete								

T

Walling, brick, accessories/sundry items 62
Walling, cast stone F22 56
Walling, curtain H11 72
Walling, diaphragm D40 39
Walling, glass block F11 55
Walling, natural stone ashlar F21 58
Walling, plastics glazed H12 71
Walling, rubble, natural stone F20 58
Walling, stone, accessories/sundry items F30 62
Walls, existing, chemical dpc C41 28
Walls, inner, plasterboard K31 87
Warm air heating T40 181
Warm air heating (small scale) T41 181
Water features S15 181
Water filtration equipment S15 181
Water supply systems S10-15 181
Water supply systems for fire fighting S60-65 181
Water supply systems, treated S20-21 181
Water tanks/cisterns Y21 154
Waterproof rendering, specialist J10 103
Waterproof roof coatings, liquid applied J31 83
Waterproofing J -
Weatherboarding, timber H21 73
Water riser distribution systems S62 181
Window/Wall air conditioning units U61 181
Windows, metal L11 95
Windows, plastics L12 95
Windows, timber L10 95
Wiring, HV/LV Y61 163
Woodblock flooring M42 111
Woodwool slab decking G32 17
Woodwool slab decking, edge supported/reinforced G32 17
Work by employer A50 21
Work by statutory authorities A53 22
Work, description of A13 17
Work not covered by rules GR11 11
Work, provisional A54 22
Work, special types GR7 11
Work, temporary A35 19
Work to existing buildings GR13 11
Worked finishes in situ concrete E41 51

X

No entries

Y

No entries

Z

Zinc sheet coverings/flashings