ARN5 AGREED RULES OF MEASUREMENT



Agreed Rules of Measurement

The Agreed Rules of Measurement have been prepared and revised by Joint Committees established by the Construction Industry Federation and the Society of Chartered Surveyors Ireland.

The first edition of ARM was published in October 1994. ARM 2, ARM 3 and ARM 4 followed with revisions made to take account of users' comments and industry changes. ARM 4 Supplement 1 was published to provide Rules for particular Work Sections that were better suited to the requirements of the Public Works Conditions of Contract, while ARM 4 Supplement 2 provided a condensed set of Rules for use in measuring Mechanical and Electrical Services.

Many people within the industry and profession have contributed to the preparation of the Agreed Rules of Measurement since the decision was made in the early 1990s to prepare a set of Rules. In particular, we acknowledge our predecessors who produced the Agreed Method of Measurement of Building Works

Applicable to Work in Ireland (AMM) in 1952 and to our colleagues on the RICS Standing Joint Committee for the Standard Method of Measurement (SMM), who produced SMM 6 and SMM 7.

ARM 5 supersedes ARM 4, is in digital format with livelinks provided and presented in landscape orientation. The generic nature of ARM 5 means that ARM 4 Supplement 1 is no longer required and the Rules of ARM 5 for work related to Mechanical and Electrical Services make ARM 4 Supplement 2 redundant.

ARM 5 has been produced to meet the needs of the construction industry as it has now evolved, with revisions incorporated to numerous Work Sections of ARM 4 and some new Work Sections included in recognition of developments in both industry practices and technology. We trust that ARM 5 will be widely used and of benefit to all participants in the industry – whether commissioning, designing, constructing or supplying work – by providing a consistent and readily comprehensible set of rules for the measurement of building works.

The Joint Committee responsible for the production of the original ARM up to ARM 2, was composed as follows:

Representing the Construction Industry Federation: Kevin Callan, Ian Hagan, Hugh McAtamney, Padraig O'Kennedy.

Representing the Society of Chartered Surveyors: Richard Bird, Michael Scollard, Clive Scott, Michael Webb (Chairman).

Observers representing the Department of Finance: John Brownlee, Neil Murphy.

Consultants appointed by the Joint Committee: William Hourie, Andrew O'Kelly. The Joint Committee responsible for the production of ARM 3 was composed as follows:

Representing the Construction Industry Federation: Hugh McAtamney, Padraig O'Kennedy.

Representing the Society of Chartered Surveyors: Michael Scollard, Gerard O'Sullivan, Michael Mulryan.

Observer representing the Department of Finance: Neil Murphy. The Joint Committee responsible for the production of ARM 4 was composed as follows:

Representing the Construction Industry Federation: Jim Duggan, Ian Hagan.

Representing the Society of Chartered Surveyors: Gerard O'Sullivan, Alan Hardy, Michael Mulryan.

Observer representing the Department of Finance: Neil Murphy. The Joint Committee responsible for the production of ARM 5

was composed as follows: Chairman – Michael Mulryan

Representing the Construction Industry Federation: John Curtin and Kieran Masterson

Representing the Society of Chartered Surveyors Ireland: Gerard O'Sullivan and Neil Murphy

> **Observers representing the GCCC:** Charles Mitchell and Colin Cleary

The Joint Committee will continue in existence to review the operation of ARM 5 and to consider any observations made by users within the industry.

Michael Mulryan, Chairman Secretariat Paul Sheridan, Director – Main Contracting, Construction Industry Federation Shirley Coulter – Chief Executive Officer, Society of Chartered Surveyors Ireland

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on General Rules

1 Introduction

These Agreed Rules of Measurement provide a uniform basis for measuring building work and embody the essentials of good practice. More detailed information than is required by this document shall be given where necessary to define the precise nature of the required work. These Agreed Rules of Measurement shall apply equally to both proposed and executed works.

Rules of measurement adopted for forms of construction not covered in this document shall be stated.

2 Bills of Quantities

Bills of Quantities shall fully describe and accurately represent the quantity and quality of the work to be carried out.

Bills of Quantities are not specifications and shall not be used for such purposes nor for ordering material or goods.

Work that cannot be measured or described shall be given as a Provisional Sum, Provisional Quantities or in a Bill of Approximate Quantities, subject always to the provisions of the Conditions of Contract. Provisional Quantities shall be identified as such.

3 Definitions

Bill of Quantities – a list of items providing appropriate descriptions and accurate quantities incorporating the information on the drawings, specifications and other works requirements for the work needed to deliver a project, prepared in compliance with the requirements of this document.

Confined space - refer to Safety, Health and Welfare at Work (Confined Spaces) Regulations 2001, or as subsequently amended.

Conditions of Contract – in the absence of a definition within the terms of the agreement for the execution of the work for which the Bill of Quantities has been prepared, the Conditions of Contract shall be the agreement in place between the Employer and the Contractor or, where relevant to the work that is the subject of the particular Bill of Quantities, between the Contractor and Subcontractor.

Contractor Design Development Works – any works for which the Contractor is required to undertake the design development, whether directly or through a subcontractor, when work is designed by the Employer but not fully detailed.

Existing - means existing before the current project. It does not relate to earlier processes in the same project or works package.

Provisional, Prime Cost and Reserved Sums – may be used as follows where the utilisation of such a mechanism is provided for in the Conditions of Contract:

a. The term 'Provisional Sum' is a sum provided for work or for costs that cannot be entirely foreseen, defined or detailed at the time the tendering documents are issued.

b. The term 'Prime Cost Sum' is a sum provided for work or services to be executed by a nominated sub-contractor or for materials or goods to be obtained from a nominated supplier.

c. The term 'Reserved Sum' is a sum provided for work or services to be executed by a reserved specialist.

Required – an item of work that is essential for the delivery of the scope of work called up in the drawings and specifications and which the Rules of this document set out requirements for the measurement and quantification of.

Roadway – is used in the normal sense of carriageway, whether public or private. It does not apply to temporary roadways provided by the Contractor at their own discretion for their own use, nor to site roadways under their control. A pedestrian footpath alongside the carriageway is part of the roadway for this purpose.

Site - the area identified as such either on the Contract drawings or otherwise in the Contract agreement between the parties to the Contract.

Works – The scope of the work to be undertaken as described in the Conditions of Contract in compliance with 02.1.1. Otherwise, a detailed description of the scope of the Works shall be given.

4 Application of Tabulated Rules

The Agreed Rules of Measurement are set out in Work Sections. The Rules of this Section 01 shall govern the application of the Rules of all other Sections.

The Rules, with the exception of those in this Work Section and in Subsection 1 of the Preliminaries Work Section, are set out in tabular format. The application of the tabular format is set out below.

The 'Information Required' and 'General Rules' requirements shall each apply to all subsequent Rules within the Work Section they appear in until superseded by another set.

Horizontal lines (stepped in some cases) divide the Work Section pages into mutually exclusive zones to which different Rules apply. Where the horizontal line across a column is dashed, the Rules of the zones immediately above and below it may apply as alternatives.

No more than one requirement from each of the Category 1, 2 and 3 columns can be applied in one description. For Work Sections with a Category 4 column, as many requirements, if any, of the Category 4 column that are applicable to the item of work being measured shall be satisfied in the description.

Where the text '(nr)' is given in a Category column, the number shall be stated in the item description (as well as giving the Unit quantity separately).

Work that is 'Deemed to be included' shall neither be measured separately nor included in descriptions but the requirement for it must be clearly shown on drawings or described in specifications made available with the Bill of Quantities.

In some instances, the Rules require the work listed to be measured as 'extra over' other items. The 'extra over' item must follow directly after the item to which it refers unless otherwise required by these Rules. The facility of measuring work as 'extra over' other work may be adopted in other instances, if preferred.

5 Measurement

Unless the term metre used in these Rules is preceded by the words 'square' or 'cubic' it shall be deemed to be linear.

Work shall be measured net as fixed in position and each measurement shall be taken to the nearest 10mm (i.e. 5mm and over shall be regarded as 10mm and less than 5mm shall be disregarded). This Rule shall not apply to any dimensions stated in descriptions.

Where minimum deductions of voids are dealt with in this document, they shall refer only to voids that are not abutting the boundaries of measured areas. Voids that are at the boundaries of measured areas shall always be the subject of deduction irrespective of size.

Where classification is given in this document as being between two limiting dimensions then the interpretation shall be as exceeding the first dimension but not exceeding the second.

The following symbols have been used to denote either a range or a limiting dimension for descriptive purposes:

- < means 'less than'
- \leq means 'less than or equal to' but not exceeding
- > means 'exceeding'

The following abbreviations have been used:

millimetre mm metre m m² square metre cubic metre m³ number nr tonne t ka kilogramme hr hour % percentage PC Sum Prime Cost Sum Prov Sum Provisional Sum

6 Descriptions

The order of stating dimensions shall be consistent and generally in the sequence of length, width and height. Where that sequence is not appropriate or where ambiguity could arise, the dimensions shall be specifically identified.

Unless otherwise specifically required by these Rules, the following shall be deemed to be included for with all items:

- a Labour and all costs in connection therewith.
- b Materials, fixings, consumables, 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 All cutting.
- g Establishment charges, overhead charges and profit.

Value Added Tax shall not be included for in the rates for specific items in the Bill of Quantities but, where required to be reflected in the total cost for the Bill of Quantities, may be included for in a summary section collating the total for the sections within the Bill of Quantities.

Junctions between straight and curved work shall in all cases be deemed to be included in the work in which they occur.

Where the term 'like items' is used, a detailed description of the item required shall be given.

Notwithstanding the provisions in these Rules for labours to be given as linear items, such labours may be given in the description of any linear items of work on which they occur.

Notwithstanding the provisions in these Rules for labours to be enumerated, such labours may be given in the description of any enumerated item of work on which they occur.

7 Detailed Descriptions

The requirements of these Rules for 'detailed descriptions' shall be deemed to have been complied with if a precise reference to drawn information made available in conjunction with the Bill of Quantities is provided that indicates fully the items being described.

A precise reference to a clause or clauses in the specific project specification or a precise reference to a catalogue item may be given in an item description instead of the descriptive requirements of these Rules or a Component Detail. As an alternative to the foregoing, specific products and materials may be named where such a practice is in accordance with the Employer's Directions. Unless the specific project specification refers to published Standard Specification (EN, IS, etc.) applicable to the item and/or workmanship, this information shall be given in the item description.

8 Drawn Information

Drawn information required to be provided for the full implementation of these Rules is defined as follows:

- a Location Drawings
 - (i) Block Plan: To locate the outline and position of the building site in relation to town plan or other wider context and to locate the position of the building in relation to general layout of site and means of access.
 - (ii) Site Plan: To locate the position of the building in relation to general layout of site and means of access.
 - (iii) Plans, Section and Elevations: To show the position occupied by the various spaces in the building and the general construction and location of the principal elements and components.
- b Component Details

Component Details referred to shall show all the information necessary for the pricing of the component.

Location Drawings, Component Details and any other drawings referred to in the Work Sections shall be made available to tenderers. All other drawings used in the preparation of the Bill of Quantities shall be available for inspection by tenderers.

Quantities

Where the unit of billing is the metre, quantities shall be billed to the nearest whole unit. Fractions of a unit less than half shall be disregarded and all other fractions shall be regarded as a whole unit.

Where the unit of billing is tonne, quantities shall be billed to the nearest two places of decimals.

Where the application of the foregoing would cause an entire item to be eliminated, such item shall be included in the Bill of Quantities as one whole unit, or in the case of items measured by the tonne, shall be billed as 0.01 tonne.

10 Work in Special Conditions

Alterations and other work in existing buildings shall be so described. Handling materials and getting them in or out of such buildings shall be deemed to be included with the items. Labours on existing work shall be so described.

Work outside the boundaries of the site, as defined for the project, shall be so identified.

Work in confined spaces shall be so described.

Work carried out in, over, adjacent to or under a body of water shall be so described. In the event the body of water is subject to tidal changes, the mean spring levels of high and low water shall be stated by reference to an identified datum.

11 Contractor Design Development Works

Where the Contractor is required to take responsibility for the design development of discrete parts of the project, such as piled foundations, windows, precast concrete components, roof trusses and/or mechanical and electrical engineering services, the work items shall be identified as Contractor Design Development Works.

Contractor Design Development Works shall be billed under an appropriate heading that makes clear the provision of design input for the work is required of the Contractor.

The requirements of these Rules for 'detailed descriptions' shall be deemed to have been complied with if the final design objectives or criteria that the Contractor will be required to meet in respect of Contractor Design Development Works are clearly defined by way of outline drawings and specifications that are referred to within the descriptions of measured items.

Where the Rules in this Document are not appropriate to particular Contractor Design Development Works, for example, where Contractor Design Development Works comprises a complete section (e.g., the entire mechanical or electrical installations for a building), the method of measurement adopted shall be stated in accordance with Rule 1 of this Work Section and shall be adequate to facilitate the pricing of the work in a manner that allows an analysis of the price of Contractor Design Development Works.

'Contractor Design Development Work' shall be deemed to include all costs in connection with design, design management, design approval, the programming and planning of all design works and construction risks.

For each work package for which the 'Contractor Design Development Works' mechanism is used, items shall be given for the following: 11.1 Design and design management 11.2 Design review and approval process

01

02 Preliminaries

1 INFORMATION REQUIREMENTS

1.1 Preliminary Particulars

- 1.1.1 Project, parties, consultants and description of the Works provide:
 - The name, nature and location of the Project.
 - A general description of the Works.
 - Names and addresses of Employer, Employer's agents and the Design Team Consultants together with the roles of the agents and Consultants.
 - Identify, where relevant, works related to the project to be carried out by others on site concurrent with the carrying out
 of the Works.

1.1.2 Description of site – provide appropriate information to convey the following:

- The boundaries of the site by reference to drawing(s).
- The means of access to the site including any particular limitations.
- The position of the Works on the site, including any work(s) outside the site boundary by reference to drawing(s).
- Attention shall be drawn to:
 - adjacent or abutting buildings/structures
 - existing buildings on site and their protected status, if any
 - site topography of a critical nature if not shown on relevant drawings
 - the location of utilities including drainage, water, gas and other mains or power/telecommunication services known to exist on, under or over the site. Where Contractor retains the risk associated with existing utilities on site, the liability of the Employer for the provision of such information will be so limited in accordance with the Conditions of Contract
 - use or activities carried out on the land and/or buildings on the site if known.
- Any existing relevant Safety File and arrangements for its inspection where not provided with tender documents.
- Arrangements to facilitate visiting the site.
- 1.1.3 Drawings and other documents provide:
 - A list of the drawings and other documents from which the Bill of Quantities has been prepared. The list shall identify those made available to tenderers.
 - Addresses (including electronic address locations) where drawings and other documents not made available to tenderers may be inspected, by appointment or otherwise.
 - Drawings and documents not forming part of the Contract Documents shall be identified as such.

| CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|--|--|--|------|---|--|
| Conditions of Contract and Agreement | where published for general use, state full title of Conditions of Contract and Agreement, particulars of the version and edition to be used, published date and revision reference list of clause headings; amendments to standard Conditions of Contract shall be given in full including deletions | 1 where published Conditions provide for alternative or optional clauses, those to apply shall be stated | Item | Where the Contract provides for a Price Variation mechanism, details of the mechanism applicable shall be stated and any information required to be provided by Employer to facilitate its operation shall be provided. Where Conditions of Contract are not published for general use, the Conditions shall be set out in full in the tender documents or a full set of Conditions shall be supplied with the tender documents. | Items shall be given for each of the requirements. Non-standard Conditions of Contract include bespoke forms |
| 5 | 3 non-standard Conditions of Contract | | | | |
| Schedule and/or Appendices to the Conditions of Contract | list each item in the Schedules and/or Appendices for convenience of pricing and provide details of each Employer entry within the relevant item | | - | 3 An item for the convenience of pricing shall be provided where risk is identified as being transferred to Contractor. | For every item where the responsibility for risk of delay and/or compensis to be allocated, indicate clearly which party carries that risk. Where in the Schedule and/or Appendices specific risks such as ground conditions are directed to be at the risk of Contractor, specific attention be drawn to the fact that the relevant Work Sections so affected are measured in accordance with the Rules of that relevant Work Section. |
| Model forms and other supplemental forms/additional documentation associated with Conditions of Contract | 1 list standard documents/forms associated with the use of the Conditions of Contract | | | | |
| Contractor's liability for risk or injury to persons and property, and for damage to the Works | | | | 4 Where Employer intends to relieve Contractor of liability for any risk, the relevant particulars of the relief shall be given. | |
| Contractor's insurance in respect of Contractor's liability | 1 state particulars and extent of insurance required including limitations and permitted exclusions by reference to relevant clauses/terms in the Conditions of Contract/schedule/appendices | | | 5 Where Employer requires Contractor to effect insurance in respect of Contractor's liability for any risks, an item for the insurance of each such risk shall be given. | |
| Contractor's liability for risk or injury to persons and property and damage to the Works caused by Contractor's Design Development Works | | | | | |
| Contractor's Professional Indemnity Insurance 1 for liability for Contractor Design Development Works | 1 state particulars and extent of insurance required including limitations and permitted exclusions | | | 6 Where professional indemnity insurance is required for Specialists' collateral warranties, a separate item for each Specialist shall be given. | |
| Insurance liability of Employer 1 | 1 where insurance liability of Employer is required to be included in the Contract Sum, describe details of the liability and relevant information that may influence the insurance cost | | | 7 Where Provisional Sums are permitted under the Conditions of Contract, such insurance cost shall be given as a Provisional Sum but otherwise insurance liability of Employer shall be detailed as an item and priced. | |

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| CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|--|--|---|------|--|---|
| 9 Additional or alternative insurance requirements | state particulars of the special additional and/or alternative insurance required including limitations and permitted exclusions | | ltem | | Reference to relevant contractual clauses/schedules where available show suffice in respect to particulars to be given. Alternative insurance includes non-negligence, airside, terrorism, financia loss, pollution and Employer controlled insurance, temporary fire protection and the like. |
| 10 Statutory authorities'/service utilities' fees and charges | where Contractor is required to pay local/statutory authority or service utilities fees and/or charges that are for the benefit of Employer, they shall be described and a separate item provided for each fee and/or charge | | | 8 Where Provisional Sums are permitted under the Conditions of Contract, such fees and/or charges shall be given as a Provisional Sum but otherwise shall be described and priced. | 1 Such fees and/or charges that form part of Contractor's general facilities and obligations shall be deemed included under Work Section 02:4. |
| 1 Performance bonds | 1 describe by reference to standard/bespoke document/wording | state percentage of Contract Sum required; state where the amount to be bonded is to be based upon the VAT inclusive cost of the Contract and the period for which bond is required after Practical/Substantial Completion is certified | | | |
| 12 Parent company guarantees | 1 Employer's requirements to be described | | | | |
| 13 Collateral warranties | 1 Employer's requirements to be described in respect of each and every warranty to be provided | | | 9 Items shall be given for each and every collateral warranty that is required. | |
| 4 Ancillary certification under BCAR | 1 provide reference to Assigned Certifier's Inspection Plan | | | | |
| | | | | | |

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| | CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|---|--|--|---|------|---|--|
| 1 | I The site | 1 access to and possession or use of the site; describe particulars of obligations and/or restrictions/limitations | 1 state where access and possession or use of the site is to be shared with Employer and/or third parties or the public | ltem | | |
| | 2 Works to be carried out outside the site | 1 particulars of obligations and/or restrictions/limitations imposed on Contractor for the carrying out of such Works | | | | |
| | 3 Working area | 1 limitations imposed by Employer; state location by specific reference to drawn information | | | | |
| | Limitation on operations with respect to adjoining property/boundaries | limitations on construction operations with respect to adjoining property/ boundaries details of schedule of dilapidations and/or surveys of adjoining properties/boundaries | | | Provide reference to any existing schedule of dilapidations and/or surveys including photographic surveys of adjoining properties/boundaries. Where no existing schedule of dilapidations and/or survey of adjoining properties/boundaries exist and where agreement of adjoining owners/occupiers has been obtained by Employer, an item for carrying out a schedule of dilapidations/survey by Contractor will be provided. | |
| | 5 Working time | 1 limitations/requirements imposed | | | 3 Include details of any notice and consent procedures where necessary works are required to be carried out outside working time limitations. | |
| | Noise, dust control, vibration and other environmental/health related obligations | 1 limitations on works related to noise levels or other environmental/health related restrictions | | | | General statutory requirements shall be measured in accordance with the Rules of Work Section 02:4. Specific Employer requirements shall be dea with as detailed herein. |
| | 7 Material found on the site – use and disposal | | | | Where it is intended that any particular materials found shall become the property of Employer, an item shall be provided in the Bill of Quantities to enable Contractor to price for any credit offered. A note shall be provided advising that all found treasure/archaeology artifacts shall be deemed the property of Employer unless archaeological excavations/surveys are measured as part of the Works, in which case matters of ownership will be dealt with in that Work Section item. | 1 Generally materials found on the site will be dealt with in accordance with the Rules under the relevant Work Sections. |
| | 3 Temporary structures required by Employer | provide details of any specific material requirements, lighting, signage, temporary works relevant drawings, locations and all critical dimensions including where relevant number of temporary structures hoardings walkways gates/doors fencing screens/partitions roofs name boards or the like | designed by Employer designed by Contractor | | 6 For name boards, provide relevant details and drawing. 7 For hoardings, describe any limitations on advertising rights. 8 Where temporary structures are to be retained after Completion as the property of Employer, same shall be stated in the description. | 1 As an alternative, temporary structures required by Employer may be measured in accordance with the Rules of the relevant Work Section. |
| 9 | Maintaining and protecting existing services on, under and over the site | services owned by Employer services owned by third parties including utility providers | | | Specific requirements for maintaining and protecting existing services shall be stated. | |

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| | CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|-------------------|---|--|--|------|---|---|
| | 0 Execution or completion of the Works | work to be carried out in a specific order; sequence to be stated work to be carried out in sections or phases; requirements to be stated including any specific sequencing and handover requirements | | ltem | 10 Describe any coincidental works within the order of works, work in sections or phases which are not at the discretion of Contractor. | 1 Where work is to be carried in a specific order or in sections and/or phases and the requirements are fully set out and described in drawn information, specific reference to that drawn information shall suffice to satisfy the requirements for a detailed description. |
| | 1 Maintenance of temperature and humidity levels | 1 required levels and works to which they relate | | | | |
| | 2 Construction related temporary accommodation and facilities for the use of Employer | details of size, quality of finishes, heating, lighting, water and waste facilities, security, furnishing, equipment, consumables and attendance required | delivery, installation and connections of services maintaining, securing, servicing, cleaning and paying all charges in connection with the temporary accommodation for the duration of the Contract disconnecting and removal on completion | | | Temporary buildings for Employer's operational purposes, for example, temporary classrooms, shall be measured in accordance with the Rules of Work Section 25. |
| | 3 Temporary voice and data services for use of Employer | connection of systems describing requirements voice, data and communications system infrastructure software requirements periodic usage, maintenance and access charges for systems | | | | 1 BIM related requirements shall be dealt with in accordance with the requirements of Work Section 02:03.14. |
| | 4 BIM requirements | 1 prepare post contract BIM execution plan 2 deliver post contract BIM execution plan | | | 11 Where Building Information Modelling is required by Employer, Contractor shall provide a Post Contract BIM Execution plan in response to Employer's Information Exchange Requirements and Pre Contract BIM Execution Plan. | |
| | 5 Provision of services of Project Supervisor Construction Stage under Safety Health & Welfare at Work (Construction) Regulations | details of the services where Contractor is to be engaged to provide them Contractor assisting Employer and their appointed consultants in completing the Safety File | | | | 1 Specific reference to The Project Preliminary Health and Safety Plan and details of the Project Supervisor Design Process shall suffice with respect to the details to be provided where the documents are made available with the Bill of Quantities. |
| 100 1 1 1 | 6 Additional supervision and co-ordination requirements | 1 specific additional requirements | | | 12 Additional supervision and/or co-ordination requirements imposed by Employer specific to project requirements shall be separately itemised and described. | |
| | 7 Documents to be provided by Contractor | documentation required specifically by Employer in addition to that required by the Conditions of Contract and/or statutory obligations | | | 13 Details of the documents required and of any procedures for submittal of documentation and times for responses to be given if not stated in the Conditions of Contract. | |
| | 8 Approval procedure for materials/suppliers/subcontractors | 1 procedures for approvals by Employer and/or Employer's design team | | | 14 Description of procedures shall include time frames for submittals where relevant. | |
| | 9 Site progress meetings and any other meetings notified by Employer and/or Contract Administrator | 1 requirements on Contractor | | | 15 Where known, details of outline agendas, frequency, location, attendees required, chairperson, minutes preparation and circulation and other relevant matters. | |

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| 02 | CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|------------------------------------|--|---|---|------|---|---|
| imposed on Contractor | 20 Cost management measures in addition to those required by the Conditions of Contract | provide separate items for each of the following, describing procedures: a) cash flow forecasts, b) valuation of proposed instructions, c) measurement of works, d) value engineering proposals, e) vouching time and material works, f) progress payment applications, g) payment for unfixed materials, h) labour and plant returns, i) price variation documentation, j) records supporting valuation of compensation events, k) any other cost management measures | | ltem | | 1 The requirement to provide a separate item to describe each type of cost management measure shall be met if same is covered by items with respect to Conditions of Contract clauses, schedules, appendices and other documentation described and measured in accordance with the Rules of Section 02:2. |
| ations im | 21 Noxious weeds | 1 prevent the growth of noxious weeds on site for the duration of the project | | | | 1 Treatment/removal and disposal of noxious weeds shall be measured in accordance with the Rules of Work Section 04:2. |
| tions and Restrictions/Limitations | 22 Maintenance and protection of existing features, manmade or natural, on site | describe by reference to location drawings details of existing features, manmade or natural, on site to remain for the duration of the Works duration of maintenance and protection describe requirements for schedule of dilapidation/surveys provision for engagement of experts or specialists with relevant qualifications and experience to plan, manage and report on particular maintenance requirements for existing features insurance requirements for protected features | | | 16 Provide specific details of temporary works to protect and maintain features where the design and provision of such temporary works is not at the discretion of Contractor. 17 Where Contractor required to insure existing feature, Employer's valuation for the feature shall be provided. | |
| ements – Obligations | 23 Maintain, protect and reinstate existing roads, pavings, green areas or buildings provided for the temporary use of Contractor where so provided | describe by reference to location drawings including any requirements for surveys/schedules of dilapidations required provide for compliance with traffic management provisions imposed by Employer and provision of a traffic management plan where required | | | 18 Requirements to maintain and reinstate shall be deemed to be to the standard existing at date of tender or, where so provided with the tender documentation, a contemporaneous schedule of dilapidations/survey for these features. 19 Where no schedule of dilapidations and/or survey exists and where required by Employer, an item for carrying out a schedule of dilapidations/survey by Contractor shall be provided. | |
| requiremen | 24 Restrictions on site compound and on site storage | 1 limitations as to location and/or size | | | 20 Restrictions placed upon Contractor shall be identified. | |
| 3. Employer's | 25 Use of Employer's service utilities | 1 provide full details | | | 21 An item shall be provided for each utility. | 1 Full details include arrangements for connections/disconnections and for calculating usage of and payment for same to Employer. |

| 02 | CATEGORIES 1 | 2 | 3 | 3 Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|--|---|--|--|--------|--|--|
| or | 26 Liaising with Employer's personnel | identify Employer's personnel and third parties that Contractor is required to liaise with during course of Contract | identify specific arrangements for communications and information to be provided | item | | |
| Contractor | 27 Liaising with utility providers contracted by Employer | 1 provide for management of utility providers, details stated | | | 22 An item shall be provided for each utility. | 1 Work necessary for the provision of utility connections, e.g., trenching, shall be measured in accordance with the Rules of relevant Work Sections. |
| uo | 28 Employer specific security requirements | 1 specific requirements, details stated | | | | |
| pose | 29 Setting out the Works | | | | | |
| ions im | 30 Specific protection measures for the work not at the discretion of Contractor | | | | | |
| mitat | 31 Arrangements for the handover of the site on completion of the Works | | | | | |
| Restrictions/Limitations imposed | 32 Arrangements for the compilation, provision and handover of operations and maintenance manuals | | | | | |
| 3. Employer's requirements – Obligations and Restric | 33 Other obligations and restrictions/limitations | | | | | |
| 3. Emp | | | | | | |

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MEASUREMENT SCOPE/ADDITIONAL INFORMATION

Maintaining temporary works, adapting and making good shall be deemed included in all items measured in accordance with the Rules of Work Section

2 Notices and fees to statutory authorities or public or private utility providers or undertakings related to items included in the Bill of Quantities in accordance with the Rules of Work Section 02:4 shall be deemed included.

02:4.

MEASUREMENT RULES

3 Unit

| | 1 Supervision and co-ordination of the Works | | Item |
|-------------|--|--|------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | 2 Plant, tools and vehicles3 Scaffolding and the like | on site mobilisation and erection maintaining on site for duration of Works demobilisation and removal from site | |
| | | | |
| | 4 Site administration | provision, maintenance and keeping of all statutory records and other documentation required | |
| Suc | 5 Security for the Works | | |
| Obligations | 6 Clearly identifiable site perimeters and surroundings |] | |
| d Obl | 7 Protection of the public, other third parties and visitors to the site | 1 from site operations in accordance with statutory requirements | |
| - | | | |

2

| iuc | 5 | Security for the Works |
|--|----------|---|
| igatio | 6 | Clearly identifiable site perimeters and surroundings |
| d Obl | 7 | Protection of the public, other third parties and visitors to the site |
| . Contractor's General Facilities and Obligation | 11 12 | Transport for work people Protection of the Works from inclement weather Water for the Works Temporary lighting and power for the Works Temporary roads, hardstandings, crossings and similar items Temporary accommodation for use of Contractor |
| 4. Co | | |

02

CATEGORIES

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| CATEGORIES 1 | 2 | 3 Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|---|---|--------|-------------------|---|
| 14 Temporary storage areas | | ltem | | Includes suitable and separate storage for dangerous materials and substances. |
| 15 Temporary voice and data communications for use of Contractor | | | | |
| 16 Traffic regulations | | | | |
| 17 Welfare facilities for workpeople | | | | 1 Facilities shall be deemed those necessary for compliance with the Safety, Health and Welfare at Work legislation. |
| | operation of requirements of Safe Pass and Construction Skills Certificate schemes safety officers, safety supervisors, first aiders, inspectors and certifiers tests and certificates on Contractor's plant and equipment safety signs and signals personal protective clothing and personal protective equipment provision and maintenance of emergency routes and exits and designated personnel responsible for emergency procedures energy distribution installations temporary fire detection and firefighting systems maintenance of appropriate working conditions and work stations provision and maintenance of on-site traffic routes provision of first aid equipment and first aid room as appropriate other requirements | | | |

| 02 CA | ATEGORIES | 1 : | 2 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|---|----------------------------------|--|-----|------|-------------------|--|
| 25 | Temporary works | hoardings walkways gates/doors fencing screens/partitions roofs fans planked footways guardrails floors stairs roof edge protection opening protection afety nets similar items, type stated | | Item | | |
| 26 | Statutory environmental controls | 1 noise 2 pollution 3 vibration 4 dust | | | | |
| Contractor's General Facilities and Obligations | Protection of the Works | | | | | |

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| 02 | CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|---|--|--|--|----------------|--|---|
| | 1 General Rules | | | | | 1 All Bill of Quantities content relating to the requirements of this subsection and relevant to a particular award of work shall be grouped together – i.e. items resulting from Category 1, items 5-8 and 12-13 shall follow the items provided in compliance with Category 1, items 2-4 and 10-11. |
| | 2 Work by nominated sub-contractor/specialist | 1 describe work and state Prime Cost Sum | | PC sum | 1 Work required to be carried out by a nominated sub-contractor/specialist shall be given as a Prime Cost Sum for each subcontract/specialist. | 1 The name of the party to carry out the work shall be stated where known. |
| | 3 Works by reserved specialist | 1 describe work and state Reserved Sum | | Reserved sum | 2 Work required to be carried out by a reserved specialist shall be given as a Reserved Sum for each reserved specialist. | |
| lists, | 4 Works by novated specialist | 1 describe novated work and state novated sum | | Novated sum | Work required to be carried out by a novated specialist shall state the Contract Sum for each novated sum. The terms of the novation agreement, the scope and the terms and conditions of the novated contract shall be provided. | |
| amed Specia | 5 Contractor's profit associated with employment of each | nominated sub-contractor/specialist reserved specialist novated specialist | | % | 5 An item to facilitate pricing Contractor's profit for each nominated sub- contractor/specialist, reserved specialist and novated specialist shall be given. | |
| ·ks by Na | 6 Contractor's charges associated with employment of each | | | ltem | | 1 Shall include for establishment charges and overhead charges. |
| and Materials Supplied by Nominated Suppliers, Works by Named Specialists, Engaged Directly by Employer | 7 General attendance associated with employment of each | | | | | Attendance is the work to be executed or services to be provided by Contractor by way of assistance or facilitation of each nominated sub- contractor/specialist or reserved specialist or novated specialist. General attendance shall be deemed to include for the use of Contractor's welfare facilities, temporary roads, hard-standings, standing scaffolding, standing power-operated hoists, the provision of temporary background lighting and water supplies, provision of space for the sub- contractor's/specialist's own offices and for storage of their plant and materials. |
| 5.Works by Nominated Sub-Contractors, Goods and Materials Supplied Works by Utility Providers and Works by Others Engaged Directly by Er | 8 Special attendance associated with employment of each | | temporary access roads and hard-standing required with a description of traffic to be catered for, width of carriageway, extent of accessway to be provided and remedial works to be carried out to the trafficked areas waterproof covered storage and accommodation – floor area to be provided together with details of any enhancements required including minimum eaves heights, lighting levels, power supply requirements, heating, ventilation, water and drainage services and, where relevant, site location power supply giving the phase and maximum electrical loading required scaffolding the area of elevation and/or roof/ceiling area to be accessed including scaffold boards, ladders and the like and adjusting and managing its use. unloading, hoisting and distributing items maintenance of specific temperature and humidity levels waste handling and disposal other special attendances, details stated | | 6 For every special attendance required to be provided by Contractor, an item shall be provided for each such item and full information of the nature of the attendance required shall be stated in the description. 7 Where access towers are to be provided, size, height and number shall be stated. 8 The size and weight of each item to be unloaded, hoisted and distributed and its destination in the Works shall be described. 9 Required temperatures and humidity levels shall be stated. Any restrictions on the use of the permanent mechanical or electrical installations of the building shall be stated. | Special attendances not listed in the Bill of Quantities shall be deemed included in the Prime Cost Sum for the work of the nominated sub- contractor/specialist or the Reserved Sum for works of the reserved specialist or the contract sum for the novated specialist. Sub-contractors/specialists shall be deemed to be responsible for the cost of providing transformers and temporary distribution cabling unless otherwise stated in the description of the power supply special attendance. |

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| 2 | CATEGORIES 1 | 2 | 3 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE/ADDITIONAL INFORMATION |
|--|--|--|---|-----------------|---|--|
| | 9 Goods and materials supplied by nominated supplier | 1 describe goods and materials and state prime cost sum | | PC sum | 10 The amounts for goods or materials to be supplied by a nominated supplier shall be given as a Prime Cost Sum for each nominated supplier. | The name of the party to supply the goods/materials shall be stated where known. |
| | 10 Goods or materials supplied by reserved supplier | 1 provide a description of goods or materials to be supplied and state Reserved Sum | | Reserved sum | 11 The amounts for goods or materials to be supplied by a reserved specialist shall be given as a Reserved Sum for each specialist | |
| | 11 Goods and materials supplied by novated supplier | | | Novated sum | 12 The Contract Sum for goods and materials required to be obtained from a novated specialist shall be stated for each novated specialist. | |
| [2, | 12 Contractor's profit in association with the purchase of work items from each | 1 nominated supplier 2 reserved specialist 3 novated supplier | | % | 13 An item to facilitate pricing of Contractor's profit on each purchase of work from each nominated supplier, nominated specialist and novated specialist shall be given. | |
| d specialis | 13 Contractor's charges associated with the engagement of each | | | ltem | | |
| 's, works by Named Specialists, | 14 Fixing goods and material supplied by nominated supplier/specialist or novated specialist | | | | Provide measurements and descriptions for relevant fixing work in accordance with the Rules of relevant Work Sections. Particulars shall be given where Contractor is required to pay the costs of conveying goods and materials to the site and/or any special packing or similar requirements. | 1 The cost of taking delivery, unloading, storing and hoisting the goods and materials and returning packing materials to the nominated supplier, carriage paid and obtaining credits therefore shall all be deemed included with the items for fixing. |
| and Materials Supplied by Nominated Suppliers, \ Engaged Directly by Employer | 15 Dispute resolution reserved sum | for Contractor's share of Standing Conciliator's fees/charges related to his/her availability to Project Board and for monitoring progress and attending on Project Board | | Reserved sum | | 1 This shall only apply where the Conditions of Contract provide for the inclusion of a net contribution by Contractor. |
| Coods and Materials Others Engaged Dire | 16 Work by utility provider | work which is to be carried out by a statutory authority, public undertaking or public or private utility provider shall be so described | | Item | 16 Provide measurements and descriptions for relevant builder's work in accordance with Work Section 17 or, where Provisional Sums are permitted under the Conditions of Contract, such cost may be given as a Provisional Sum. | |
| urractors, Works by | 17 Contractor's charges associated with the employment of utility provider | | | ltem | 17 An item shall be given for Contractor's charges associated with the employment of each utility provider | |
| 5.Works by Nominated Sub-Contractors, Works by Utility Providers and Works by | 18 Works by others engaged directly by Employer | works to be carried out by others directly engaged by Employer on the site of the Works during the period prior to completion of the Works shall be described obligations of Contractor with respect to each item of such work and forbearances required in connection with its execution shall be listed | | | 18 Any attendances required shall be given in accordance with Rules 02:5.7 and 02:5.8. | |

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INFORMATION REQUIRED

- Location Drawings.
- Location of demolitions or alterations.
- Reports on and surveys of buildings to be demolished.
- Materials remaining property of Employer.
 Restrictions on disposal of materials.
- Handling and disposal of dangerous materials. Particulars of materials to be given where known.

- Materials permitted to be re-used.
 Temporary diverting, maintaining or sealing off existing services.
 Method of demolition where required to be by specific means.

| 03 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------|---|---|--|---|------|---|---|---|
| | 1 General Rules | | | | | Materials arising from demolitions shall become the property of Contractor unless otherwise stated. | | Clearing away and removal off-site of materials other than those remaining the property of Employer or those for re-use. Temporary works and supports incidental to demolitions at the discretion of Contractor and design thereof. Dust suppression by water or other appropriate means. |
| | General clearance Demolishing individual structures Demolishing parts of structures | 1 detailed description | 1 levels to which structures are to be demolished | leaving parts of existing structure in position to act as buttresses setting aside materials for re- use | item | | General clearance includes the demolition and removal of all structures that are expressly required to be cleared, except where separate items are provided in the Bill of Quantities. Setting aside and storing materials on site for Employer where specified. | |
| | 5 Materials remaining property of Employer6 Making good remaining | | | 1 making good finishings | | | | |
| | structures 7 Supporting of existing structures 8 Supporting of existing roadways | position and type of shoring, nature of structure or road to be supported | | adapting cutting holes in the structure making good work disturbed | | Support to existing structures shall only be measured to structures that are not to be demolished. | | |
| | 9 Temporary weathering 10 Temporary roofs 11 Temporary screens | 1 detailed description | | 1 providing doors, windows and the like giving details | | | | 1 Disposal of rainwater. |
| | 12 Decontamination | removal of hazardous materials stating type decontamination of existing premises stating nature of contamination removal of infestations stating nature | | provision of required certificates, details stated limitations imposed by Employer | | | | |
| | 13 Recycling of materials arising from demolitions and alterations | 1 detailed description of material | | | | | | |
| 1. Demolition | | | | | | | | |

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| 03 | CATEGORIES 1 | 2 | 3 | | 4 Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------------|-----------------|--|--|---|---------------|---|---|---|
| | 1 General Rules | | | | | Materials arising from alterations shall become the property of Contractor unless otherwise stated. | | Clearing away and removal off-site of materials other than those remaining the property of Employer or those for re-use. Temporary works and supports incidental to alterations at the discretion of Contractor and design thereof. Dust suppression by water or other appropriate means. |
| | 2 Cutting | openings or recesses in walls openings or recesses in floors openings or recesses in roofs projections to reduce thickness | 1 detailed description including type and thickness of existing structure, floor level | making good structure making good finishings | nr m m² | | 1 Descriptions of work to be carried out shall include whether it is to walls, floors, roofs, etc., and whether to the internal or external fabric of the existing building. | |
| | 3 Removing | 1 fittings and fixtures | 1 detailed description | | nr | | 1 Fittings and fixtures include windows and doors. | |
| | | 2 mechanical installations3 electrical installations | 1 type of installation | | item | | | |
| | | 4 finishes 5 coverings | 1 detailed description | | nr | | | |
| | | 6 partitions | | | m m² | | | |
| | 4 Building up | 1 openings or recesses | | | nr | | | |
| 2. Alterations | | | | | | | | |

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3. Demolition and Alterations: Treatment/Repairs

INFORMATION REQUIRED

- Location Drawings.Method where required to be by specific means.

- Kind and quality of materials.
 Composition and mix of mortar, type of pointing.
 Treatment of timber to eradicate fungus attack or insect infestation.
 Repair, renovation or refurbishment details.

| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--|--|--|---------------|--|--|---|
| 1 General Rules | | | | | Materials arising from treatment/repairs shall become the property of Contractor unless otherwise stated. | 1 Abutting masonry units shall each count as a single area. | Clearing away and removal off-site of materials other than those remaining the property of Employer or those for re-use. Temporary works and supports incidental to treatment/repairs at the discretion of Contractor and design thereof. Dust suppression by water or other appropriate means. |
| 2 Repointing (nr of areas) | 1 brickwork 2 blockwork 3 stonework | 1 size and depth of raking out of existing joint | | m² | 2 Repointing descriptions shall include bond, size(s) and material of existing masonry components and number of areas to be repointed. | | |
| 3 Cleaning surfaces | concrete brickwork blockwork stonework like items, type stated | washing abrasive blasting chemical treatments like items, type stated | 1 removing stains, nature stated | | | 1 Stains include efflorescence, graffiti, vegetation, algae. | |
| 4 Damp proof system | 1 detailed description | | removing existing finishes thickness of wall and centres of drilling holes | m | 3 Making good work disturbed following damp proof system and repair/treatment work shall be measured under the Rules of the appropriate Work Section. | | |
| Metal repair Timber repair Treatment of existing timber Render and plaster repairs | 1 detailed description | | | nr m m² | Repair and treatment descriptions must clearly identify all work in; exploration, preparation, execution and associated works. | 1 Repairs include renovation and refurbishment. | |
| 9 Brick, block and stonework repair or replacement | detailed description of brick/block/stonework units, mortar, bedding and pointing bond pattern | | 1 each area ≤ 5 units 2 each area $>5 \leq 10$ units 3 each area $>10 \leq 20$ units 4 each area >20 units | nr | | | |
| | | | | | | | |

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| 03 | CATEGORIES | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------|---|---|----------------------------|--|------|-------------------|---|--|
| | 10 Inserting wall ties in existing walls | 1 size and type of new ties; nature and thickness of wall | | 1 tie centres | nr | | 1 Where the extent of the work is measured in square metres, the removal of the wall finish and, | 1 Making good holes and damage to finishes arising from the insertion process. |
| | | outer skin; width of wall cavity and nature of backing structure; nature of existing finish to facing wall being fixed through | | 2 tie rate per square metre | m² | | where required, its replacement shall be measured separately. | |
| | 11 Inserting masonry reinforcement in existing walls | 1 type and width of reinforcement; detailed description of masonry to be | 1 horizontal 2 vertical | 1 isolated individual lengths stating the length to be inserted | nr | | | |
| | | reinforced including bond pattern, leaf thickness, jointing material; details of surface finish; method of installation where not at Contractor's discretion | | 2 continuous lengths stating minimum laps | m | | | |
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| v | | | | | | | | |
| Treatment/Repairs | | | | | | | | |
| tment/ | | | | | | | | |
| 3. Trea | | | | | | | | |

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1. Excavation and Earthwork: Ground and Archaeological Investigations

INFORMATION REQUIRED

Location Drawings.

- Methods, tests and reporting requirements.
 Nature of contaminated or hazardous materials arising from excavations and requirements for disposal.

| 04 | CATEGORIES 1 | 2 | 3 | 4 | L Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------------------------------|---|---|---|--------------------------------------|----------------|--|--|---|
| | 1 Site exploration | 1 observations 2 taking samples 3 tests | 1 detailed description stating number | 1 site 2 laboratory | item | | 1 Tests include the following: stability, acidity, water levels, percolation and the like. | Preparing reports on observations, work methods and results. |
| | 2 Trenches for archaeological investigation 3 Trial holes for site investigation (nr) 4 Trial holes for archaeological investigation (nr) | 1 excavating | maximum depth – 1 ≤2.00m 2 >2.00m in 2m stages | 1 backfilling | m³ | Commencing level shall be given. Restrictions on the methods of excavation shall be described. Excavating below groundwater level, excavating around existing services, handling and disposal of hazardous materials, breaking out hard materials and like items, being next to existing buildings and roadways, earthwork support, disposal of water and disposal of excavated material shall be measured in accordance with the Rules of Work Section 04:2. Details of backfilling with material other than that arising from the excavation shall be stated. Attendances required on site investigations and on archaeology provided by Employer shall be measured in accordance with the Rules of Work | | |
| ons | 5 Bore holes for site investigation (nr) | 1 method of excavation | maximum depth – 1 ≤4.00m 2 >4.00 ≤8.00m 3 >8.00m | 1 raking 2 lining, details stated | m | - Sections 02:5.7 and 02:5.8. | | |
| Investigations | | 2 capping | 1 details stated | | nr | | | |
| 1. Ground and Archaeological Inves | 6 Reinstatement of surface finish | 1 detailed description | 1 temporary 2 permanent | | m ² | | | Preparation of and jointing and sealing to existing finishes. |

2. Excavation and Earthwork: Excavation

INFORMATION REQUIRED

- Ground Investigation and Environmental Reports indicating the nature of the ground.
- ► The groundwater level and date when established (pre-contract level).
- Groundwater subject to periodic changes such as tidal effects.
 Over and underground services, location and nature.
- Nature of contaminated or hazardous materials arising from excavations and requirements for disposal.
- Location Drawings that show existing features, buildings, services and the like, indicating those for retention and/or protection. • Materials for filling and details of compaction.
- Limitations on methods of execution.

| CATEGORIES | 1 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------|---|---|---|----------------|--|---|--|
| 1 Removing | 1 trees 2 tree stumps | girths – 1 $\leq 0.45m$ 2 >0.45 $\leq 1.5m$ 3 >1.5 $\leq 3.0m$ 4 >3.0m; girth stated | filling material where not at Contractor's discretion; details stated | nr | 1 Girths shall be measured at 1.00m over ground level. | Trees <0.45m girth occurring within a hedge are deemed to be included with the hedge. Site vegetation includes trees <0.45m girth, bushes, undergrowth and scrub. | Grubbing up roots and disposal. Type of fill material where at Contractor's discretion. |
| | 3 hedges | 1 detailed description | | m | | | |
| | 4 site vegetation | | | m ² | | | |
| | 5 noxious weeds; nr of growth areas stated | detailed description of work required including name(s) of weeds involved and depth to which excavation is to be carried out | 1 filling material where not at Contractor's discretion | | 2 For noxious weeds, the area measured shall be the growth area. | Growth area is the identified area of infestation together with the sanitary cordon surrounding it that is required to be dealt with as if the infestation has spread. Where growth areas overlap, the attached areas shall be counted as | |
| | 6 requirements associated with the removal of noxious weeds details stated | obtaining licences management plan for biosecurity measures traffic management plan records of vehicular and personnel access additional fencing and signage disinfection and cleaning facilities for personnel disinfection and cleaning facilities for vehicles provision of specific access routes removal and making good machinery and equipment other, requirement described | | item | | a single area removed. Invasive species that are required to be removed shall be measured as noxious weeds. Backfilling shall only be measured to areas requiring it and shall exclude areas where new construction renders it unnecessary. | |
| 2 Treating in-situ | 1 noxious weeds; nr of affected locations stated | detailed description of work required including name(s) of weeds involved and, where a cycle of treatments is required, the treatment and testing regime to be complied with | | m² | | An affected location is each discrete area where evidence of the specified plant growth is visible. Invasive species that are required to be treated shall be measured as noxious weeds. | |
| 3 Preparation | 1 lifting sods | 1 method and depth stated | | | Lifting sods shall be measured only where required for preservation. Where ground investigation reports are not available a description of the assumed ground and the pre-contract water level shall be stated. | L | 1 Careful storage and maintenance for rela |
| 4 Excavation | 1 topsoil for preservation | 1 average depth stated | | | 5 Quantities for all excavation items shall be taken as the bulk before excavation. 6 In all excavation categories, starting level shall be stated where >0.25m below existing ground levels. | | 1 Compaction, levelling or grading bottoms excavation. |
| | reduce levels basements foundation trenches isolated pits (nr) nile cans (nr) | maximum depth $-$ 1 \leq 2.00m 2 >2.00m in 2 m stages | | m ³ | | 1 Foundation trenches include associated pads and ground beams. | |

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6 pile caps (nr)

| 04 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------|-----------------------------------|--|--|---|----------------|---|---|---|
| | 5 Extra over excavation items for | below groundwater level around existing services stating type | 1 adjacent to excavations | | m³ m | 7 Items shall be measured as the total volume irrespective of depth. 8 Measurement of work beside/around existing services is required only where the existing services are to be retained or remain live and where the service is within 2.00m of the excavation. 9 Where ground investigation reports are not available a description of the ground and the procession of the service and the procession. | 1 Contaminated or hazardous materials shall be described in accordance with the Environmental Protection Agency (EPA) waste acceptance criteria. | |
| | | | 2 crossing excavations | | nr | pre-contract water level that has been assumed shall be stated. | | |
| | | 3 handling and disposal of contaminated or hazardous materials | 1 details stated | | m³ | Where the Employer is retaining the ground conditions risk, groundwater level shall be re- established at the time the various excavation works are carried out and the measurement of 'extra over excavation items for being below groundwater level' shall be adjusted accordingly. Descriptions for the breaking out of hard | | |
| | | 4 breaking up existing | 1 rock 2 concrete 3 reinforced concrete 4 brick, block, stonework | | m ³ | surfaces shall state the nature of same. | Rock is any hard material that is of such size or location that it can only be removed by the use of wedges, rock hammers, special plant or explosives. A boulder ≤1m³ in volume or one larger than | |
| | | | 5 underground services, detailed description | | m | | the bottlee's first an environment of one larger than that which can be lifted out in the bucket of the excavator(s) on site will not constitute rock. Degraded or friable rock that can be scraped out by a standard bucket on the excavator(s) on site does not constitute rock. Excavation next to existing buildings or existing roadways is deemed to arise when the horizontal distance between the excavation and the existing building/roadway is less than the depth of excavation. (Extra over) excavation for work next to existing buildings/roadways is taken as the area of the face of excavation measured from the starting level to the bottom of such excavations. | |
| | | | 6 hard surfaces; detailed description including depth | | m² | | | |
| | | 5 being next to | existing buildings existing roadways | | | | | |
| 2. Excavation | 6 Earthwork support | maximum depth – 1 ≤1.00m 2 ≤2.00m 3 >2.00m in 2m stages | 2 >2.00 ≤4.00m 3 >4.00m | curved below groundwater level in unstable ground next to roadways next to existing buildings left in, permanent rock | m ² | Earthwork support shall be deemed to mean providing everything necessary to uphold the sides of excavations by whatever means are necessary (other than piling or interlocking driven sheet piling). Earthwork support shall not be measurable where the face of excavation does not exceed 0.25m in height. Earthwork support below groundwater level or in unstable ground is measured from the commencing level of the excavation to the full depth. Earthwork support shall not be measurable to rock. | Earthworth support next to roadways occurs where the horizontal distance from the face supported to the edge of the roadway or footpath is <the depth="" excavation.<="" li="" of="" the=""> Earthworth support next to existing buildings occurs where the horizontal distance from the face supported to the nearest part of the existing building is <the depth="" excavation.<="" li="" of="" the=""> Unstable ground is running silt, running sand, loose gravel and the like and shall be so described and measured from the starting level of the excavation to the full depth. Interlocking sheet steel piling where not at Contractor's discretion shall be measurable in accordance with the Rules of Work Section 05. </the></the> | 1 Curved earthwork support is deeemed to include any extra costs of curved excavation. |

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| CATEGORIES | 1 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|---|---|----------------|--|--|--|
| 2 baseme 3 foundati 4 isolated | reduce levels basements foundations isolated pits (nr) pile caps (nr) | maximum depth – 1 ≤2.00m 2 >2.00m in 2m stages | 1 backfilling with special materials, details stated | m² | 16 Working space shall be measured where formwork, rendering, tanking or protective walls are required to the face of construction below starting level of excavation but only where the face of excavation is <0.60m distant and subject to 17 and 18 below. 17 Working space shall be measured where the height of formwork, rendering, tanking or protective walls below starting level of excavation is >1.00m or where the bottom of the formwork, rendering, tanking or protective walls is >1.00m below starting level of excavation. 18 Designed interlocking steel piling shall be measured in accordance with the Rules of Work Section 05. | Backfilling with special materials means material other than that arising from the excavation. For the purpose of measurement, the height of working space shall be taken from the starting level of relevant excavation to the bottom of formwork, rendering, tanking, or protective walls. | Additional earthwork support, disposal, backt with excavated material. Additional ground or surface water disposal. |
| 8 Extra on working space excavation items for | below groundwater handling and disposal of contaminated or hazardous materials breaking up existing rock and other hard surfaces | 1 detailed description | | m² | 19 To be measured only when corresponding excavation related items are measured. | Contaminated or hazardous materials shall be described in accordance with the EPA waste acceptance criteria. Rock is any hard material which is of such size or location that it can only be removed by the use of wedges, rock hammers, special plant or explosives. A boulder ≤1m³ in volume or one that can be lifted out in the bucket of the excavator(s) on site will not constitute rock. Degraded or friable rock that can be scraped out by a standard bucket on the excavator(s) on site does not constitute rock. | |
| 9 Disposal | 1 water | surface ground contaminated surface contaminated ground | | item | 20 Disposal of groundwater shall only be measured where a corresponding item for excavation below groundwater level is measured and, where the Employer is retaining the ground conditions risk, shall be adjusted accordingly if post contract water levels differ from the pre | 1 Surface water is water on the surface of the site and the excavations. | |
| | 2 topsoil | 1 for preservation | 1 specific locations; detailed descriptions | m ³ | contract levels. 21 Quantities for the disposal of excavated | | |
| | 3 excavated material | 1 on site 2 off-site | 2 specific handling and/or restrictions; detailed description | | materials shall be the bulk before excavation. 22 Details shall be provided of the type of contamination | | 1 All excavated material including broken up ha material and the like. |
| 10 Filling; material stated | 1 to excavations 2 to make up levels | average thickness – 1 ≤250mm 2 >250mm | 1 details of special sources, selection, treatment, handling | | 23 The volume of filling shall be taken as equal to the excavation void as measured. | | 1 Levelling or grading to falls. |
| 11 Surface treatments | 1 blinding filling 2 trimming rock | | 1 horizontal 2 vertical 3 sloping | m² | 24 Details of surface treatments shall be stated. | Areas of rock shall include both the sides and bottoms that are required to be trimmed. | 1 Compaction to filling and bottoms of excavations. |

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3. Excavation and Earthwork: Underpinning

INFORMATION REQUIRED

- Location and Survey Drawings.
 Ground Investigation Environmental Reports indicating the nature of the ground.
- Nature of contaminated or hazardous materials arising from excavations and requirements for disposal.
- Details of the existing structure to be underpinned.
- Extent of underpinning works including ground preparation, soil stability, tests, concrete, reinforcement, formwork, brickwork, blockwork and the like items.

| 1 Temporary support | | | | | | | |
|---------------------|--|--|--|----------------|---|---|---|
| | 1 to existing structures | | | item | | | |
| 2 Preparation | 1 removing existing projecting foundation, dimensioned description | 1 concrete 2 reinforced concrete 3 other, details stated | within existing building access from one side access from both sides | m | | | |
| | 2 surfaces of existing work to receive new supports, width stated | | | | | | |
| 3 Excavation | 1 preliminary 2 under existing structure | maximum depths – 1 ≤2.00m 2 >2.00 in 2m stages | | m ³ | Excavation depths shall be taken below commencing level for each type. Excavating below groundwater level and around existing services shall be measured in | The width of the preliminary excavation shall be the sum of any projection of the retained foundation beyond the face of the wall plus any projection of the underpinning beyond the face | Earthwork support, working space, backfill wi excavated material, disposal of surplus and o water, breaking out rock, hard materials and l itome. |
| 4 Underpinning | works required are to be fully described including reference to drawings | 1 dimensioned description overall and for each component | | m | accordance with Work Section 04:2. Details of backfilling with material other than that arising from the excavation shall be stated. The volume of filling shall be that of the preliminary excavation. | of the retained foundation. 2 The depth of preliminary excavation is that from the commencing level to the top of the retained foundation except where the underpinning is to | items. |
| | 2 designed continuity connections on reinforcement bars | 1 dimensioned description | | nr | Where ground investigation reports are not available a description of the assumed ground and the pre-contract water level shall be stated. Where the Employer is retaining the ground conditions risk, groundwater level shall be re- established at the time the various excavation | project beyond the retained foundation in which case the depth shall be to the underside of the retained foundation. Excavation under existing structure is that from the underside of the existing foundation to the proposed bearing level of the new works. | |
| 5 Filling | imported material, details stated excavated material | | | m ³ | works are carried out and the measurement of 'extra on excavation items for being below groundwater level' shall be adjusted accordingly. | | |
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• Limitation on the extent of underpinning operations to be carried out in a

single section.

Limitation on method of execution.

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INFORMATION REQUIRED

Drawings showing scope and location of each type of work
Original ground levels
Finished ground levels
Kind and quality of materials

| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------|--|--|--|---|--|---|---|
| 1 Crib walls | 1 thickness at base of wall stated | 1 type of fill and treatment required | 1 vertical 2 battering | m² | No deductions shall be made for voids ≤1.00m². | 1 Area is measured on front face. | Dowels, pins. Granular infill. Compacting fill. Special units. Providing manufacturer's certificates. Building in pipes. Forming openings ≤1.00m². |
| 2 Extra over for | 1 ends 2 corners irrespective of angles | | | m | | | |
| 3 Gabions | 1 basket size; gauge of basket wire; special handling required; type of fill and treatment required; width of the base of wall | | vertical vertical with battered face; slope of face stated to follow slope curved on plan; radius stated | m² | | Area is measured on front face. For walls with a battered or stepped face the height shall be deemed to be vertical distance from base to top of the wall ignoring additional lengths due to slope and/or widths of steps. | 1 Assembling, tying, fixing, bracing and tying lids. |
| 4 Earth reinforcement | 1 mesh 2 fabric | 1 details stated including method of anchoring and minimum laps | horizontal vertical curved on plan; radius stated | | 2 No deductions shall be made for voids ≤1.00m ² . | 1 Area measured in contact with base excludes laps. | Assembling, tying, fixing, stacking and tensioning deemed included. |
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| | Crib walls Extra over for Gabions | 1 Crib walls 1 thickness at base of wall stated 2 Extra over for 1 ends 2 Extra over for 1 ends 2 corners irrespective of angles 3 Gabions 1 basket size; gauge of basket wire; special handling required; type of fill and treatment required; width of the base of wall 4 Earth reinforcement 1 mesh | 1 Crib walls 1 thickness at base of wall stated 1 type of fill and treatment required 2 Extra over for 1 ends 2 corners irrespective of angles 3 Gabions 1 basket size; gauge of basket wire; special handling required; type of fill and treatment required; width of the base of wall 1 details stated including method 4 Earth reinforcement 1 mesh 1 details stated including method | 1 Crib walls 1 thickness at base of wall stated 1 type of fill and treatment required 1 vertical 2 Extra over for 1 ends 2 corners irrespective of angles 3 Gabions 1 basket size; gauge of basket wire; special handling required; type of fill and treatment required; width of the base of wall 1 vertical 2 vertical with battered face; slope of face stated 4 Earth reinforcement 1 mesh 1 details stated including method of anchoring and minimum laps 1 horizontal | 1 Crib walls 1 thickness at base of wall stated 1 type of fill and treatment required 1 vertical m ² 2 Extra over for 1 ends 2 corners irrespective of angles Image: Corners irresp | 1 Crib walls 1 thickness at base of wall stated 1 type of fill and treatment required 1 vertical 2 battering m ² 1 No deductions shall be made for voids ≤1.00m ² . 2 Extra over for 1 ends 2 corners irrespective of angles Image: Cor | 1 Crib walls 1 thickness at base of wall stated 1 type of fill and treatment required 1 vertical m ² 1 No deductions shall be made for voids ±1.00m ² . 1 Area is measured on front face. 2 Extra over for 1 ends 2 corners irrespective of angles m m Incomposition 1 Area is measured on front face. 3 Gabions 1 basket size; gauge of basket wire; special handling required; type of fill and treatment required; width of the base of wall 1 vertical m ² m ² I Area is measured on front face. 4 Earth reinforcement 1 mesh 1 details stated including method of anchroing and minimum lags 1 horizontal 1 horizontal 2 No deductions shall be made for voids ±1.00m ² . 1 Area measured in contact with base excludes |

5. Excavation and Earthworks: Diaphragm Walls

GENERALLY

 Diaphragm walls are walls constructed using bentonite slurry or other support fluids to temporarily support excavated trench faces.

INFORMATION REQUIRED

- Ground Investigation and Environmental Reports indicating the nature of the ground.
- Location drawings that show existing features, buildings, services and the like, indicating those for retention.
- Drawings indicating the layout.

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Nature of contaminated or hazardous materials arising from excavations and disposal requirements.
The groundwater level and date when established (pre-contract level).
Groundwater subject to periodic changes such as tidal effects.
Kind and quality of materials and workmanship.
Limitation on methods of execution.

| CATEGORIES 1 | | 2 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|------------------------|---|--|------|--|---|--|
| 1 Excavation and support fluid | 1 width stated in mm | maximum depths – 1 ≤2.00m 2 >2.00 in 2m stages | support fluid, details stated curved, radius stated | m³ | Depths shall be taken from the commencing level to the cut off level. Ancillary excavation work including excavating below groundwater level, handling and disposal of hazardous materials, breaking out hard materials and like items, excavating around existing services and being next to existing buildings and roadways, disposal of water and disposal of excavated material shall be measured in this Work Section in accordance with the Rules of Work Section 04:2. | The commencing level is the ground level at which the diaphragm wall commences. The cut off level is the bottom level of the diaphragm wall. | Preliminary trenching. Preparation and upholding sides of excavation Temporary propping. |
| 2 In-situ concrete in diaphragm walls | 1 detailed description | 1 thickness stated in mm | 1 curved, radius stated 2 reinforced | m³ | Wall heights shall be taken from the commencing level to the cut off level. In-situ concrete shall be measured in accordance with the Rules of Work Section 06:1 Reinforcement shall be measured in accordace with the Rules of Work Section 06:3 | | 1 Formwork at Contractor's discretion. |
| 3 Reinforcement | | | | t | | | |
| 4 Trimming and finishing exposed faces of cast walls | | wall height – 1 ≤5.00m 2 >5.00m in 5m stages | | m² | | | |
| 5 Guide walls | | | - | m | | | |
| 6 Joints | | vertical horizontal raking curved, radius stated | | | | | |
| | | | | | | | |
| | | | | | | | |

1. Piling: Piles

INFORMATION REQUIRED

- Location drawings that show the trial pits or bore holes.
- Location drawings that show existing features, buildings, services and the like, indicating those for retention and/or protection.
- Ground Investigation Report and Environmental Reports indicating the nature of the ground.
- Groundwater subject to periodic changes such as tidal effects.
 Nature of contaminated or hazardous materials arising from excavations and requirements for disposal.
- Materials for filling and details of compaction.
- ▶ The general layout of piles.

► The position of work within the site.

- Over or underground services, location and nature.
- The groundwater level and date when established (pre-contract level). • Kind and quality of materials, required sequence, bearing load,
- commencing levels, proposed bearing level and/or resistance
- requirement. Limitations on methods of execution.

| 05 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------|---|--|---|---|------|--|--|---|
| | 1 General Rules | | | | | Materials that piles are composed of shall be stated in the descriptions. Bored and driven depths shall be measured along the axis of piles from the commencing surface to the toe levels of bored piles, to the bottom of the casings of driven cast-in-place piles and to the bottom of toes of other driven piles. For the purposes of measurement, the pre- and post-contract commencing level shall be the same. In-situ concrete filling, unless otherwise required in this Work Section, shall be described in accordance with the Information Required Rules for Work Sections 06:1, 06:3 and 06:4. | For each pile type measured, items shall be given for the number of piles of each size with a further item for the overall depth in the ground (bored or driven as appropriate) for each size. In the case of cast-in-place piles, the concreted length shall also be given for each pile size. Length of piles is taken to mean the length expressly required to be supplied including extensions but excluding heads and shoes. | 1 Pre-boring. |
| | 2 Mobilise, demobilise and set-up | 1 mobilise and demobilise | 1 on site | | Item | | | |
| | for piling excluding interlocking steel piling | 2 set up | 1 at each pile location | | nr | | | |
| | Bored cast-in-place concrete piles (nr) | 1 diameter or sectional shape and dimensions stated in mm stating the loading performance | concreted length – 1 ≤5m 2 >5m in 2m stages | preliminary contiguous/secant piling raking (inclination ratio stated) restricted headroom, height above commencing level stated | m | 5 The concreted lengths of cast-in-place piles shall be measured from the cut-off levels expressly required to the toe levels expressly required. 6 Disposal of 'pile arisings' material shall be measured in accordance with the Rules of Work Section 02. | | 1 Double handling and temporary storage of 'pile arisings'. |
| | 4 Driven cast-in-place concrete piles (nr) | | driven length – 1 ≤5m 2 >5m in 2m stages | raking (inclination ratio stated) restricted headroom, height above commencing level stated | | | Piles comprising a driven permanent steel casing that is filled with concrete shall be classed as 'driven cast-in-place concrete piles' where the piles are designed for the load to be carried on the concrete. | |
| | 5 Preformed concrete piles (nr) | | | raking (inclination ratio stated) restricted headroom, height above commencing level stated | | 7 The cross-section shape and dimension(s) or diameter shall be stated in the description. Details of coatings, treatments, driving heads and shoes shall be stated in the description. | | |
| | 6 Preformed prestressed concrete piles (nr) | | | | | | | |
| | 7 Timber piles (nr) | | | | | | | |
| 1. Piles | 8 Isolated steel piles | 1 mass stated in kg/m | | preliminary raking (inclination ratio stated) restricted headroom, height above commencing level stated | | 8 The mass per metre and cross-sectional dimensions shall be stated in the description. 9 Details of coatings and treatments shall be stated in the description. | | |

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| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|---|--|------|--|--|---|
| 9 Mobilise and demobilise for interlocking steel piling | 1 on site | | | item | | | 1 Setting up for each interlocking steel pile location. |
| 10 Interlocking steel piles | 1 elastic section modulus stated in cm ³ /m and mass stated in kg/m ² of pile wall | pile area of length – 1 ≤5m 2 >5m in 2m stages | raking (inclination ratio stated) restricted headroom, height above commencing level stated | m² | The elastic section modulus and, where expressly specified, the mass of the pile wall shall be stated in the description. The type of special pile shall be stated in the description. The piled area of interlocking steel piles shall be | Vertical lengths of interlocking steel piles shall be the lengths expressly required to be supplied excluding extensions. Interlocking steel corner, junction, closure and taper piles shall be classed as 'special piles'. | |
| | | 3 special piles, type described (nr) | m | m | calculated by multiplying the horizontal length of pile wall formed (including special piles) by the | | |
| | | 4 driven area 5 removal of piles (where not a Contractor's descretion) | | m² | total average vertical length within the particular depth category. 13 Details of coatings and treatments shall be stated in the description. 14 The area for the removal of interlocking steel piles shall be calculated by multiplying the length of pile wall formed (including special piles) by the depth driven. 15 Closure and taper piles, classed as special piles, shall only be measured where expressly required by the design. | | |
| 11 Extra over piling generally | 1 detailed description, including the type of piling | 1 boring into or breaking out rock | | m | | | 1 Disposal off-site of material removed, replacement of damaged piles, linings, etc. |
| | | pile extensions cutting off surplus lengths (excluding interlocking steel piling) enlarging heads (diameter or shape/dimensions of head stated) enlarging bases (diameter or shape/dimensions of base stated) preparing heads | | nr | 16 Descriptions for cutting off surplus lengths shall state if permanent casings are also to be cut. | 1 The length of timber pile extensions shall include the length of the joints. | 2 Pre-boring. |
| | | 7 reinforcement | | t | 17 Reinforcement shall be measured in accordance with the Rules of Work Section 06:3 except where otherwise required in this Work Section. | | |
| | | 8 removing obstructions | | hr | 18 Removal of obstructions shall only be measured for breaking out rock and the like encountered above the founding stratum of bored piles. | | |
| | | 9 standing time | | | 19 Standing time shall be measured where required. | 1 Standing time is the time during which the piling operations are suspended due to circumstances outside Contractor's control. | |

1. Piles

| 05 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------------|--|---|---|--|------|---|--|--|
| | 1 Piling mat | | | | item | Where piling is measured an item shall be given for a piling mat. | 1 A piling mat is a temporary surface that may be provided to support piling operations. | 1 Additional excavation and disposal, surface treatment and compaction, removal and disposal on completion. |
| | 2 Extra over cast-in-place concrete piles | backfilling empty bore (material stated) permanent casings, details stated | | each length – 1 ≤5m (nr) 2 >5m in 2m stages (nr) | m | 2 The diameter or sectional shape of the pile with dimensions stated in mm shall be given for backfilling empty bore and permanent casings. | 1 Pre boring. | Driving heads and shoes on permanent casings. Preparing heads of piles includes labour to reinforcement for incorporation into capping or other overlying construction. Disposal off-site of material arising. |
| | | 3 reinforcement | | | t | 3 Reinforcement shall be measured in accordance with the Rules of Work Section 06:3 except where otherwise required in this Work Section. | | |
| | 3 Extra over interlocking steel piles | elastic section modulus stated in cm³/m and mass, where expressly required in kg/m² of pile wall | cutting off surplus lengths welding clutches of piles (details stated) | | m | 4 The length categories for cutting off surplus lengths of interlocking piles shall be the mean undeveloped horizontal run lengths to be cut (including lengths occupied by special piles). | | 1 Disposal of surplus lengths of piles. |
| | | pile wai | 3 heads 4 shoes | | nr | 5 The lengths measured for welding clutches of piles shall be the total vertical length of all runs of welding. | | |
| | 4 Pile tests | maintained loading with various reactions constant rate of penetration horizontal loading non-destructive integrity inclinometer installations like items, type stated | 1 mobilisation and demobilisation of testing equipment as required | | item | 6 Descriptions for tests shall state the requirements to be satisfied. | | |
| | | | 2 testing | 1 piles, type stated | nr | | | |
| ng Ancillaries | 5 Ground anchorages | detailed description stating number and maximum depth | in material other than rock or artificial hard material in material including rock or artificial hard material | 1 temporary 2 permanent | m | 7 Composition, location, working load, details of water and grout testing, pregrouting and grouting shall all be stated in descriptions for ground anchorages. 8 The total length of tendons shall be measured between the outer ends of anchorages. 9 Type of corrosion protection shall be stated in the description. | | |
| 2. Piling | | | | | | | | |

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INFORMATION REQUIRED

- Location Drawings.
 Kind and quality of materials; performance or mix details; tests.
 Limitations on method of pouring, placing compacting and curing.
 Method of waterproofing.
 Concrete specification to produce designed concrete finish.

| CATEGORIES 1 | ı 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|--------------------------------|--|----------------|--|--|---|
| 1 General Rules | | | | | Volume of concrete shall be nett except that deductions shall not be made for; a reinforcement, b cast-in accessories, and c void <0.10m³ other than in troughed or coffered slabs. | | |
| Blinding Bulk filling Foundations Ground beams Isolated foundations | | | reinforced poured on or against earth or unblinded hardcore waterproof sloping >15° upper surfaces | m ³ | | Blinding is non-structural levelling layer ≤150mm thick. Foundations include attached column bases and pile caps. Isolated foundations include column bases and pile caps. | |
| 7 Paths 8 Roads 9 Beds 10 Slabs 11 Coffered/troughed slabs 12 Walls | thickness: 1 ≤150 2 >150 | | | | | Thickness categories of beds, slabs and walls are taken without regard to projections or recesses. Beds and slabs include attached beams and beam casing. Coffered and troughed slabs include margins ≤500mm wide. Walls include attached columns and column casings. | 1 Labour in forming kickers. |
| Beams Beam casings Columns Column casings Upstands and the like | 1 cross-sectional area ≤0.10m ² >0.10m ² | | | | Columns are defined as having a plan dimension ratio <4:1. Upstands are defined as projections on top of slabs where the upstand height to width ratio <6:1. | 1 Upstands excludes kickers. | |
| 18 Other items | 1 details stated | | | | | | |
| 19 Staircases | | | | | | Staircases include associated strings and landings. | |
| 20 Sundries | 1 filling | 1 holes (nr) 2 cavity walls | | | | | Making good formed surfaces and filling holes whether at Contractor's discretion or otherwise as a consequence of temporary work or construction methodology. |

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2. Concrete Work: Sundries

INFORMATION REQUIRED

Kind and quality of materials.Methods of application.

| CATEGORIES | 1 | 2 3 | | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLU |
|--------------------|---|---|--------------------------|---|----------------|---|--|--|
| Designed joints | 1 detailed description | 1 width or depth in 150mm stages | 1 curved 2 fire rated | | m | Width or depth of joint shall be measured overall. Waterstop angles or intersections shall only be measured where welded or purpose-made. Required fire rating shall be stated. | | Construction joints located at Con discretion. Day joints. Formwork. |
| | 2 waterstops, horizontal3 waterstops, vertical | 1 detailed description | | | | | | 4 Preparation of surfaces including |
| | 4 waterstop angles5 waterstop intersections | | | | nr | | | |
| 2 Surface finishes | 1 power floating 2 trowelling | | 1 falls 2 cross-falls | | m ² | | | 1 Tamped finishes. |
| | 3 hacking 4 grinding 5 sand blasting 6 bush hammering 7 brushed 8 like items | | 3 soffits 4 vertical | | | | | |
| | 9 monolithic finishes | 1 detailed description | _ | | | | Monolithic finishes include those cast onto concrete by lining formwork. | |
| 3 Labours | 1 cutting chases 2 cutting rebates | width and depth $1 \leq 50$ $2 > 50 \leq 100$ $3 > 100 \leq 150$ | | | m | | | |
| | 3 cutting mortices 4 cutting holes | 1 size stated and depth given in 100mm stages | | | nr | | | 1 Making good in-situ concrete. |
| | | | | | | | | |
| | | | | | | | | |

3. Concrete Work: Reinforcement

INFORMATION REQUIRED

► Kind and quality of materials.

| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------|--|---|---|------|---|---|---|
| 1 Bar | straight or bent curved links | nominal sizes stated in ranges – 1 ≤12mm diameter 2 >12 ≤25mm diameter 3 >25mm diameter | | t | | 1 Links include stirrups and the like. | 1 Tying wire. 2 Cutting. |
| 2 Fabric | 1 laps and reference (or kg/m ²) stated | 1 vertical 2 horizontal | 1 wrapping around structural members | m² | 1 Voids \leq 1.00m ² shall not be deducted from area of fabric. | Area of fabric reinforcement makes no allowance for laps. | Laps and tying wire. Cutting or bending. Cutting to void ≤1.00m². Cutting to narrow widths. |
| 3 Spacers and chairs | 1 detailed description | | | item | | | |
| | 2 design at Contractor's discretion | | | t | 2 Where the design of spacers and chairs to provide support and cover is at Contractor's discretion an item shall be provided. | | |
| 4 Special connections | 1 type or make stated | 1 nominal size of bars | | nr | | | |
| 5 Post tensioned | detailed description stating the nature of construction and method of tensioning | | | t | 3 State number, length, material and wire sizes, anchorages, end treatment, stressing sequence, initial and transfer loads and other special requirements. | | |
| | | | | | | | |

3. Reinforcement

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GENERALLY

Designed concrete finish is one achieved by use of specific formwork facing, specific layouts, achievement of specific fixings layout, day joint positions and other features to be incorporated in the finish.

INFORMATION REQUIRED

Finish to concrete where not at Contractor's discretion shall be fully described.
Drawings, details and a specification of the formwork requirements to produce the designed finish to concrete.

| 06 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------|--|--|---|---|------|--|---|---|
| | 1 General Rules | | | | | Formwork shall be measured to surfaces of the finished structure that require to be temporarily supported during the placing of the concrete. Where formwork over 4.00m high is required it shall be measured from the structural floor level vertically below the supported surface. Formwork to produce a designed concrete finish shall be so described. Curved work shall be so described. Permanent formwork shall be measured separately. Specially formed finishes shall be measured as extra over the items on which they are required. | Permanent formwork is that which is designed to remain in position. Specially formed finishes are those other than the general finish as described and measured elsewhere. | Cutting or adapting for continuity bars, projecting pipes or the like. Formwork facing, specific layouts, achievement of specific fixings layout, day joint positions and other features to be incorporated in the finish. |
| | 2 Sides of foundations 3 Edges of beds 4 Edges of suspended slabs and landings 5 Slides of upstands and steps in top surfaces | height/width – 1 ≤250 2 >250 ≤500 | | | m | 7 Detailed description shall be given where the profile is other than at Contractor's discretion. | Foundations include ground beams, bases and pile caps. Edges of suspended slabs exclude those associated with downstand beams. | |
| | | 3 >500 | | | m² | | | |
| | 7 Stairflights (nr) | 1 width of stairflight stated, waist and risers and wall abutments described | | 1 string kerbs, dimensions stated | m | Lengths of stairflights shall be measured between top and bottom nosings. Widths of strings shall be measured overall. Details of kerbs and junctions at walls and strings shall be specifically given in the description. | | 1 Soffits, risers and strings. |
| | Soffits of slabs Soffits of landings | | | soffit height >4.00m in 2.00m stages slab thickness >350mm sloping - 3 ≤15° | m² | Voids ≤5.00m² shall not be deducted from soffit formwork. Soffits of coffered or troughed slabs shall be measured as a plane surface. Margins ≤500mm wide in coffered or troughed slabs shall be included with that formwork. | | |
| | 10 Soffits of coffered or troughed slabs | 1 detailed description stating overall thickness | | 4 >15° | | 14 Where margins are >500mm wide the total width of the margin shall be measured (as soffits of slabs). | | |
| 4. Formwork | 11 Sloping upper surfaces | | | | | 15 Formwork shall only be measured to upper surfaces where sloping >15°. | | |

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| 06 | |
|----|--|
| | |

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|---|---|----------|---|--|--|
| 2 Kickers | 1 walls | | | m | 16 Wall kickers shall be measured along the centre of the wall to be constructed. 17 Column kickers shall be enumerated irrespective of size. 18 Wall or column formwork shall not be adjusted for the bajet of kielers. | 1 Kickers heights shall be at Contractor's discretion unless specified. | |
| | 2 columns | 1 rectangular 2 circular 3 other shape (detailed description) | | nr | for the height of kickers. | | |
| 13 Walls | 1 vertical 2 battered | | one side only; thickness and background stated height >4.00m measured overall in 2.00m stages | m² | 19 Where wall formwork >4.00m high is required the total area of the formwork to that wall face shall be categorised by the required maximum face height. 20 Voids ≤5.00m² shall not be deducted from wall formwork. 21 The area of the ends of the walls shall be measured with the area of the wall formwork. | | |
| 14 Edges of openings | 1 walls 2 suspended slabs 3 beds | area of opening $1 \leq 1.00m^2$ $2 > 1.00 \leq 5.00m^2$ $3 > 5.00m^2$ | 1 ≤250 wide 2 >250 high | nr m² | 22 Where an opening is >5.00m ² the edge formwork shall be measured in m ² . | | |
| 15 Beams 16 Beam casings | 1 isolated 2 attached | 1 rectangular 2 circular 3 other shape (detailed description) | 1 soffit height >4.00m in 2.00m stages | | 23 For rectangular beams, columns and casings state if cross-sectional area ≤0.10m². 24 Edges of slabs associated with downstand beams shall be measured with the beam | 1 Work on items with cross-section dimension in a ratio >4:1 is classified as work to slabs or walls as appropriate. | 1 Ends of beam, column or casing formwork. |
| 17 Columns 18 Column casing | | | 1 height >4.00m in 2.00m stages | | formwork. 25 On rectangular beams or columns, recesses and the like shall be measured as extra over the item on which they occur. 26 Where column formwork >4.00m high is required the total area of formwork to that column face shall be categorised by the required maximum face height. | | |
| 19 Other items | 1 detailed description | | | m | | | |
| | | | - | nr | | | |
| 20 Extra over on any of the foregoing formwork categories for: | 1 recesses 2 projections | 1 dimensions stated | | nr | | | 1 Ends. |
| | 3 specially formed finish, details described | | | m² | | | |

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5. Precast Concrete/Composite Construction/Stone Faced Concrete Panels

- Location Drawings.Concrete performance or mix details; design characteristics.
- Reinforcement type and content.
- ► Surface treatments.
- Method of fixing, jointing or bedding.

| CATEGORIES 1 | 2 | |
|---|--|-----|
| 1 General Rules | | |
| External walls Cladding Internal walls | maximum panel height – 1 ≤4.00m 2 >4.00 in 2m stages | 1 d |
| 5 Floor or roof slabs | maximum span – 1 <u><</u> 5.00m 2 >5.00 in 2m stages | |
| 6 Columns 7 Beams 8 Staircase flights 9 Balcony units 10 Copings 11 Sills 12 Lintels 13 Kerbs 14 Like items | | |
| 15 Sundries | angles and intersections stooled ends forming holes, recesses and the like | |
| 16 Fixings | 1 dowels 2 cramps 3 bolts 4 brackets 5 angles | |
| 17 Designed joints | 1 sealant and grouting stated | |
| Page 38 Agreed Rules of Mo | easurement | |

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--|------------------------|--------------------------|------|--|---|---|
| 1 General Rules | | | | | Natural stone faced panels and reconstituted stone shall be measured in accordance with Rules of this Work Section. Precast concrete units may be measured in metres for continuous work or where length is at Contractor's discretion. | Bedding and jointing, where not at Contractor's discretion, is to be stated within the description. | Temporary supports. Moulds, bedding and pre-tensioning. Lifting eyes. Sealing joints to prevent loss of grout and the like. Filling ends of hollow cores. |
| External walls Cladding Internal walls | maximum panel height – 1 ≤4.00m 2 >4.00 in 2m stages | 1 detailed description | | m² | | | |
| 5 Floor or roof slabs | maximum span – 1 ≤5.00m 2 >5.00 in 2m stages | | | | | | |
| 6 Columns 7 Beams 8 Staircase flights 9 Balcony units 10 Copings 11 Sills 12 Lintels 13 Kerbs 14 Like items | | | | nr | | | |
| 15 Sundries | angles and intersections stooled ends forming holes, recesses and the like | | | | 3 Labours shall be measured as extra over the items on which they occur. | | |
| | 1 dowels 2 cramps 3 bolts 4 brackets 5 angles | | | | | | |
| 17 Designed joints | 1 sealant and grouting stated | | 1 curved 2 fire rated | m | 4 Required fire rating to be stated. | | |

1. Brickwork and Blockwork: Brickwork/Blockwork

INFORMATION REQUIRED

- Location Drawings.
 Kind, quality and size of bricks and blocks.
 Type of bond.
 Composition and mix of mortar.
 Surface finish.

- Survey missin.
 Type of pointing.
 Composition and mix of mortar for pointing if different from that in the body of the work.

| 07 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------------------|--|---|---|---|------|---|---|-----------------------|
| | 1 General Rules | | | | | Brickwork and blockwork shall be measured on the centre line of the material unless otherwise stated. No deductions shall be made for voids ≤0.50m². Work required to be built overhand shall be so described. Glass blockwork shall be measured in accordance with the rules of this Work Section. Bedding the perimeter of glass blockwork in material different from the general mortar shall be given in metres stating the width and the kind of bedding material. Building against other work and bonding to other work shall be measured where the other work is existing or is of differing material. | 1 Walls include skins of cavity walls. | |
| | Walls in trenches Walls Isolated columns Isolated casings Chimneys | 1 thickness | | curved tapering; one face tapering; two faces built against other work bonded to other work, giving details | m² | 7 No deduction shall be made for flues, sills, lintels and the like. | Columns are defined as having plan dimension ratio <4:1. Chimneys are taken to be isolated stacks. | |
| 1. Brickwork/Blockwork | 7 Labours | on brickwork on blockwork on fair faced blockwork | | | item | | Labours are: 1 Rough and fair cutting. 2 Fair vertical internal and external angles. 3 Raking out joints to form key. 4 Returns, ends, angles and the like. 5 Labour in eaves filling. 6 Building in ends. 7 Mixing bricks to ensure consistent colour distribution. | |

| 07 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------------|---|---|------------------------|------------------------------|------|--|---|-----------------------|
| | 8 Extra over for special bricks/blocks | reveals returns exposed edges angles/quoins fair squint angles fair chamfered angles corbels sills lintels thresholds copings like items, purpose stated | 1 detailed description | 1 curved | m | 8 Sills, lintels, threshold, copings and the like shall be measured as either special bricks/blocks or a surface feature as appropriate. 9 Concrete filling and reinforcement to u-block lintels shall be described with the item. 10 Flush quoins shall be measured where they are formed with bricks/blocks that differ in kind or size from the work generally. 11 Quoins shall be measured on the vertical angle. | | |
| | | 13 stooled ends 14 key blocks 15 bases to pilasters 16 cappings to pilasters 17 cappings to isolated columns 18 like items, purpose stated | | | nr | | | |
| | 9 Extra over for surface features | flush bands sunk bands sills lintels thresholds copings projections like items, purpose stated | | 1 curved | m | | Projections are defined as attached columns or attached chimneys having a plan dimension ratio <4:1, plinths, bands, oversailing courses and the like. | |
| | 10 Arches | 1 height on face, width of soffit and shape of arch stated | | 1 purpose made bricks/blocks | | 12 Arches shall be measured on the face for the mean length. | | 1 Centring. |
| | 11 Chimney shafts and the like including lining | | | | | | | |
| ckwork | 12 Boiler seatings 13 Like items, purpose stated | | | | nr | | | |
| Brickwork/Blockwork | 14 Bonding to other work | | | | m | | | |
| | | | | | | | | |

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2. Brickwork and Blockwork: Ancillaries to Brickwork/Blockwork

INFORMATION REQUIRED

Location DrawingsKind and quality of materials

2. Ancillaries to Brickwork/Blockwork

| CATEGORIES | 1 2 | | 3 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------------------------|---|--------------------------|---|------|---|---|--|
| 1 Forming cavities | between new walls between new walls and other work between new walls and existing walls | 1 width of cavity stated | cavity insulation giving detailed specification curved | m² | Wall ties shall be given in the description stating type and spacing. The nature of 'other work' shall be described. | | Cutting cavity insulation for holes, openings and the like. |
| 2 Closing cavities | 1 width of cavity and method of closing | | | m | | | |
| 3 Damp proof courses | 1 width <u>≤</u> 225 | 1 laps stated | 1 horizontal 2 vertical | | | | 1 Laps. |
| | 2 width >225 | | raking stepped curved | m² | | | |
| | 3 cavity trays | 1 detailed description | | m | | | |
| 4 Joint reinforcement | 1 width and laps stated | | 1 curved 2 fire rating | | 3 Fire rating to be stated. | | |
| 5 Weather fillets 6 Angle fillets | 1 size stated | | | | | | |
| 7 Designed joints | | | | | 4 State type of filler and sealant, method of application and preparation of designed joints. | | |
| 8 Flue linings | | | | | | 1 Brick linings shall be measured with chimneys. | 1 Bends, easings and cutting walls around linings. |
| 9 Sundries | 1 cutting chases | | | | 5 Flashings shall be measured in accordance with the Rules of Work Section 09. | 1 Relieving angles shall be measured in accordance with the Rules of Work Section 12:1. | |
| | 2 wedging and pinning up new work to existing | | | | | | |
| | 3 air bricks 4 ventilation openings 5 soot door 6 chimney pots 7 like items, purpose stated | | | nr | | | 1 Air bricks, ventilation openings, soot doors and the like are deemed to include any necessary associated forming of openings, liners, cavity closures and damp proof courses. |

- Location Drawings.
 Kind and quality of materials: random or squared stones.
 Type of coursing.
 Surface finish.

- Composition and mix of mortar.
 Type of pointing.
 Composition and mix of mortar for pointing if different from that in the body of the work.

| 08 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------|--|---|------------------------|--|----------------|--|---|--|
| | 1 General Rules | | | | | 2 No deduction shall be made for voids $\leq 0.50 \text{ m}^2$. | Walls include skins of cavity walls. Isolated columns have plan dimension ratio <4:1. Thickness stated is average thickness. | Rough and fair cutting. Fair vertical internal and external angles. Raking out joint to form a key. Labour in eaves filling. Building in ends. |
| | 2 Walls in trenches 3 Walls 4 Isolated columns 5 Isolated casings 6 Chimneys | 1 thickness | | curved tapering; one face tapering; two faces built against other work bonded to other work giving details built without mortar | m ² | | | |
| | | reveals returns exposed edges fair squint angles fair chamfered angles projections dressed margins copings | 1 detailed description | | m | | 1 Projections are defined as attached piers or chimneys having plan dimension ratio <4:1. | |
| l. Rubble Walling | 8 Arches | 1 height on face, width of soffit and shape of arch stated | | | | 6 Arches shall be measured on the face for the mean length. | | 1 Centring. |

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-

- Location Drawings.
 Kind and quality and size of materials.
 Jointing of stones.
 Surface finish.

- Composition and mix of mortar.Type of pointing.
- > Type and positioning of metal cramps, slates, dowels, lead plugs and the like.

| 08 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----|--|------------------------|---|--|------|---|--|---|
| | 1 General Rules | | | | | Work shall be measured on the centre line of the material unless otherwise stated. No deductions shall be made for voids ≤0.50m². No deductions shall be made for sills, lintels and flues. Stones or blocks >0.50m³ shall be so described. | 1 Walls include skins of cavity walls. | Extra stone for joints. Raking out joints to form a key. Labour in square angles and the like. Labour in eaves filling. Templates and patterns. Rough and fair square cutting. |
| | 2 Walls 3 Chimneys | 1 thickness | | curved tapering; one face tapering; two faces built against other work bonded to other work giving details | m² | 5 Building against other work and bonding to other work shall be measured where the other work is existing or is of differing material. | 1 Thickness stated is average thickness. | |
| | 4 Isolated columns5 Projections | 1 detailed description | | | | | Projections include piers and pilasters. Projections are defined as attached piers or chimneys having a plan dimension ratio <4:1. | |
| ork | 6 Quoins 7 Jambs 8 Lintels 9 Sills 10 Mullions 11 Transoms 12 Band courses 13 String courses 14 Copings 15 Cornices 16 Corbel stones 17 Cover stones 18 Kerbs 19 Like items, purpose stated | | | 1 curved 2 raking | m | 6 Quoins shall be measured on the vertical angle. | | |

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| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|---|------------------------|---|------|--|--|-----------------------|
| 20 Arches | 1 height of face, width of soffit and shape of arch stated | | | m | 7 Arches shall be measured on the face for the mean length. | | 1 Centring. |
| 21 Vaulting | 1 thickness and type stated | 1 detailed description | | m² | | | |
| 22 Steps (nr) | 1 detailed description | 1 plain 2 spandrel | | m | | 1 Spandrel steps are steps with sloping soffits. | |
| 23 Winders 24 Landings | | | | nr | | | |
| 25 Rough cutting 26 Fair cutting | 1 raking 2 circular | 1 state thickness | | m | | | |
| 27 Grooves28 Rebates29 Throats30 Flutes | 1 size stated | | | | 8 Grooves, rebates, throats, flutes and mouldings shall be measured separately on superficial items of masonry and attached columns. | | |
| 31 Mouldings | 1 detailed description | | | | | | |
| 32 Cutting | | 1 rough 2 fair | | | | | |
| 33 Special purpose stones34 Carvings35 Sculpture | | | | nr | | | |

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Location Drawings.Kind and quality of materials.

| | CATEGORIES 1 | 2 | | 3 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|---|---|--------------------------|---|------|---|-------------------|---|
| | 1 Forming cavities | between new walls between new walls and other work between new walls and existing walls | 1 width of cavity stated | cavity insulation giving detailed specification curved | m² | Wall ties shall be given in the description stating type and spacing. The nature of 'other work' shall be described. | | 1 Cutting cavity insulation for holes, openings and the like. |
| - | 2 Closing cavities | 1 width of cavity and method of closing | | | m | | | 1 Laps. |
| - | 3 Damp proof courses | 1 width ≤225 | 1 laps stated | 1 horizontal 2 vertical 3 raking 4 stepped | | | | |
| | | 2 width >225 | | 5 curved | m² | | | |
| | | 3 cavity trays | 1 detailed description | | m | | | |
| | | 4 levelling uncoursed rubble work | | | | | | |
| | 4 Joint reinforcement | 1 width and laps stated | | 1 curved | | | | |
| | 5 Wedging and pinning up new work to existing | 1 width of new wall stated | | | | | | |
| | 6 Designed joints | | | 1 curved 2 fire rating | | Type of filler and sealant, method of application and preparation of designed joints shall be stated. Required fire rating to be stated. | | |
| | | | | | | | | |

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4. Stonework: Stone cladding

INFORMATION REQUIRED

- Location Drawings.
 Kind and quality of materials.
 Size, shape and thickness of units.
 Layout and treatment of joints.
 Method and nature of fixings and supports.
 Surface finish.
 Bedding mortars.
 Pattern

- Pattern.
 Nature of base.
 Preparatory work

| 08 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------|---|------------------------------------|-----------------------|--|----------------|---|---|---|
| | 1 General Rules | | | | | Work shall be measured on the exposed face. No deduction shall be made for voids ≤0.50m². Stone faced concrete panels shall be measured in accordance with the Rules of Work Section 06:5. Cavities where required shall be measured in accordance with the Rules of Work Section 08:3. | | Fair joints. Overhand work. Cutting. Drainage holes. Bedding mortars and adhesive. Grouting. Cleaning, sealing and polishing. |
| | 2 Walls 3 Soffits 4 Roofs 5 Isolated beams 6 Isolated columns 7 Floors 8 Landings | thickness detailed description | | 1 isolated ≤300 wide 2 curved 3 in staircase areas | m ² | 5 Work ≤300 wide isolated from similar work shall be so described. | Walls include attached columns and beams. Soffits include sloping soffits and attached beams not measured with walls. Where either the stone type or finish differs from adjoining surfaces the work shall be measured as isolated. | |
| | 9 Treads | 1 width or height stated | | | m | | | |
| | 10 Risers | | 1 plain 2 undercut | | | | | |
| 4. Stone cladding | 11 Skirtings 12 Bands 13 Sills 14 Strings 15 Aprons 16 Kerbs 17 Reveals | 1 detailed description | | | | | 1 Bands include flush, raised or sunk bands. | |

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DEEMED TO BE INCLUDED

08

CATEGORIES

| | 18 Extra over for | external angles internal angles fair edges moulded edges beaded edges coved junctions mouldings like items, purpose stated | 1 detailed description | | m | | Ornaments are defined as applied features or complex shapes. | |
|----------|-----------------------|---|--|---------|-------|--|--|--|
| | 19 Lining to channels | | girth – 1 ≤150 2 >150 ≤300 3 >300 in stages of 300 | 1 falls | m | | | Linings to channels are deemed to include arrises, coves, ends angles, intersections and working around outlets. |
| | 20 Sundries | 1 dividing strips 2 cover strips 3 movement joints | | | | | | |
| | 21 Labours | 1 making good around obstructions and the like | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00 ≤2.00m 4 >2.00m stating girth | | nr | 6 Labours arising from mechanical and electrical installation shall be measured in accordance with the rules in Work Section 17. | Obstructions include access covers, floor springs, joists, matwells, outlets, pipes, ventilators and the like. | |
| | | 2 fair joint to flush fair edges of other finishes | | | m | | | |
| cladding | | | | | | | | |

4 UNIT

MEASUREMENT RULES

MEASUREMENT SCOPE

4. Stone claddir

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Location Drawings.

 Mastic asphalt and viscous liquid coatings: Kind and quality of asphalt.
 Thickness and number of coats.
 Nature of base on which material is applied.
 Underlay, insulation and reinforcement.
 Surface finish. Waterproof and gas proof sheet coverings and other membranes: Kind, quality and thickness of materials.
 Number of layers and extent of laps.
 Nature of base on which material is applied.
 Underlay and insulation.
 Types of gas being protected against.

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|----------------------------------|-----------------------------------|---------|--|--|--|
| 1 General Rules | | | | | Work in plant rooms shall be given separately. No deductions shall be made for voids ≤1.00m². Work carried out overhand shall be so described. Work carried out in confined situations shall be so described. Work to isolated areas ≤2.00m² shall be measured separately and enumerated. Work at boundaries requiring liquid sealing solution shall be so described. | Horizontal includes sloping ≤5°. A confined situation is one where at least 0.6m of working space from the face of the work cannot be provided. | Temporary rules. Jointing between sections. Forming falls and crossfalls. Work in forming voids ≤1.00m². Cutting, notching and bending. Extra material for lapping the covering, underlay and reinforcement. Intersections on work to crossfalls. Working into metal or other flashings, into/against frames of manhole covers, duct covers, mat sinkings, gullies, outlet pipes and the like. |
| Damp proofing Tanking Gas proofing | 1 horizontal 2 vertical | 1 ≤300 2 >300 | 1 curved | m² | 7 Work ≤300 wide isolated from similar work shall be so described. 8 Fair edges, rounded edges, drips, arrises and | | 1 Ends, angles and intersections only if of same material as the work they are associated with. |
| 5 Roofing 6 Flooring 7 Paving | sloping: - 3 >5°- ≤15° 4 >15°- ≤25° - 25° | | 2 isolated areas $\leq 2.00m^2$ | nr | turning nibs into grooves, internal angles fillets and tilting fillets shall be included in the description for lineal items and measured | | |
| 8 Geotextile membranes | 5 >25°- ≤45° 6 >45° | 3 <u>≤</u> 300 wide: isolated | | m | separately for superficial items. When ends, angles or intersections are purpose made/preformed in materials different from the work they are associated with they shall be so described and enumerated separately. | | |
| 9 Skirtings 10 Upstands 11 Fascias 12 Aprons 13 Gutters 14 Channels 15 Valleys 16 Kerbs 17 Flashings 18 Designed joints 19 Like items, type stated | 1 detailed description, stating girth in stages of 150 | | 1 curved 2 raking 3 stepped | m | uescribeu anu enumerateu separatery. | | |
| 20 Preformed purpose made accessories | 1 detailed description | | | m nr | | | |
| 21 Collars around pipes, posts and the like | 1 state size of member and height of collar | | | nr | 10 Preformed collars shall be fully described including any liquid sealant infill. | 1 Collars include pipe sleeves. | |
| 22 Lining to | tanks sumps manholes outlets like items, type stated | 1 detailed description | | | | | |

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| 09 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------------------------|------------------------------|--|---|---|------|-------------------|--|---|
| | 23 Sundries | ventilating strips edge trim | | | m | | 1 Edge trim includes preformed angle trim. | Ends, angles and intersections on edge trims. Sealing. |
| Coverings | | 3 jointing new to existing finishes | | | | | | |
| Cove | | | | | | | | |
| Sheet (| | radon sumps like items, type stated | | | nr | | | |
| l Flexible 9 | | 6 holes | girth – 1 ≤0.50m girth 2 >0.50 ≤1.00m girth 3 >1.00 ≤2.00m girth 4 >2.00m girth | | | | 1 Holes include those for pipes, posts and the like. | |
| Gas Proof Non-Metal Flexible | | | | | | | | |
| s Proof N | | | | | | | | |
| | | | | | | | | |
| Waterproof and | | | | | | | | |
| atings, W | | | | | | | | |
| iquid Coatings, | | | | | | | | |
| Viscous Li | | | | | | | | |
| phalt, V | | | | | | | | |
| Mastic Asphalt, | | | | | | | | |
| | Page 49 Agreed Rules of Me | asurement | | | | | | |

2. Roofing, Cladding and Waterproofing: Slate and Tile Coverings

INFORMATION REQUIRED

- Location Drawings.
 Kind, quality and size of material.
 Minimum extent of side and end laps.
 Method of fixing.
 Size, material and spacing of battens and counter battens.
 Type of underlay.

| 9 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------------|---|--|--------------------------|----------------------|------|---|--|--|
| | 1 General Rules | | | | | 1 No deductions shall be made for voids ≤0.50m ² . | | Work in forming voids ≤1.00m². Cutting to work subsequently covered except where otherwise required. Notches. |
| | 2 Coverings | 1 vertical sloping: $-$ 2 $\leq 25^{\circ}$ 3 $>25^{\circ} \leq 45^{\circ}$ 4 $>45^{\circ}$ | 1 ≤300 wide >300 wide | 1 curved | m² | 2 Curved work shall be deemed to be in one plane unless otherwise stated. | | 1 Double or one and a half width slates or tiles. |
| | 3 Eaves 4 Verges 5 Ridges 6 Hips 7 Valleys | detailed description z raking cutting | | 1 raking 2 curved | m | Boundary work to voids shall only be measured where the void >1.00m². Raking cutting shall be measured where required. | | Ends, angles and intersections. Undercloak courses, bedding, pointing and straight cutting on boundary work. |
| | 8 Vertical angles9 Ventilation strips10 Like items, type stated | | | | | | | |
| | 11 Special fittings | purpose made tiles ventilators finials hip irons soakers saddles like items, type stated | 1 detailed description | | nr | | | |
| | 12 Holes | girth – 1 ≤0.50m 2 >0.50 ≤1.00m 3 >1.00 ≤2.00m 4 >2.00m | | | | | 1 Holes include those for pipes, posts and the like. | |
| Slate and Tile Coverings | | | | | | | | |
| 2. Slate | | | | | | | | |

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- Location Drawings.
 Kind, composition and quality of sheeting stating thickness.
 Minimum size of side and end laps.

- Jointing or sealing.
 Jointing or sealing.
 Nature and spacing of structural supports.
 Method of fixing.
 Insulation.

- Vapour barrier.

| 09 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------------------------|---|--|----------------------------|-----------------------------------|---------|---|--|--|
| | 1 General Rules | | | | | 1 No deductions shall be made for voids $\leq 1.00m^2$. | 1 Horizontal includes sloping ≤5°. | Work in forming voids ≤1.00m². Work to falls and crossfalls. Intersections on work to crossfalls. Notches and square cutting. Cutting to work subsequently covered except where otherwise required. |
| | 2 Coverings 3 Decking | 1 horizontal 2 vertical sloping: $-$ 3 $>5^{\circ} \le 15^{\circ}$ 4 $>15^{\circ} \le 25^{\circ}$ 5 $>25^{\circ} \le 45^{\circ}$ 6 $>45^{\circ}$ | 1 ≤300 wide 2 >300 wide | 1 curved | m² | 2 Curved work shall be deemed to be in one plane unless otherwise stated. | | |
| | 4 Extra over for | rooflight units louvre units ventilators sheets with soaker flanges for pipes, etc. translucent wall sheets translucent roof sheets | 1 detailed description | | nr | | | |
| Coverings and Decking | 5 Skirtings 6 Flashings 7 Fascias 8 Aprons/sills 9 Gutters 10 Valleys 11 Eaves 12 Verges 13 Ridges 14 Hips 15 Barge boards 16 Jambs 17 Filler pieces 18 Vertical angles 19 Expansion joints 20 Bearings 21 Kerbs 22 Nibs 23 Profile fillers | 1 detailed description stating girth in stages of 150 | | 1 curved 2 raking 3 stepped | m | 3 Work to edges of voids shall only be measured where the void is >1.00m². 4 Pointing and bedding shall be included in the description. 5 When ends, angles or intersections are purpose made/preformed in materials different from the work they are associated with they shall be so described and enumerated separately. | Bearers, kerbs, nibs and profile fillers are measured with decking only. | Ends, angles and intersections but only if of the same material as the work they are associated with. Blocks and fillets. |
| Sheet C | 24 Preformed purpose made accessories | 1 detailed description | | | m nr | | | |
| 3. Rigid Sl | 25 Holes | $\begin{array}{rrr} \text{girth} - \\ 1 & \leq 0.50\text{m} \\ 2 & > 0.50 \leq 1.00\text{m} \\ 3 & > 1.00 \leq 2.00\text{m} \\ 4 & > 2.00\text{m} \end{array}$ | | | nr | | 1 Holes include those for pipes, posts and the like. | |

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4. Roofing, Cladding and Waterproofing: Flexible Sheet Metal Coverings

INFORMATION REQUIRED

- Location Drawings.Kind and quality of metal, gauge and thickness.
- Laps, drips, rolls, welts, cross welts, seams, joints and beads.
 Nature of base.
- Underlay.
- ▶ Insulation.
- ► Surface finish.
- Method of fixing.

| 09 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------|---|--|------------------------------------|---|---------|---|------------------------------------|---|
| | 1 General Rules | | | | | 1 No deductions shall be made for voids $\leq 1.00 \text{m}^2$. | 1 Horizontal includes sloping ≤5°. | Work in forming voids ≤1.00m². Additional work and materials required for laps, drips, rolls, welts, cross, seams, joints, beads, ends, angles and intersections; dressing/wedging into grooves; hollows, recesses and the like; edges, bossing, clips and tacks. Notches. |
| | | 1 horizontal 2 vertical sloping: - 3 $>5^{\circ} \le 15^{\circ}$ 4 $>15^{\circ} \le 25^{\circ}$ 5 $>25^{\circ} \le 45^{\circ}$ 6 $>45^{\circ}$ | 1 <u>≤</u> 300 wide 2 >300 wide | 1 curved | m² | 2 Curved work shall be deemed to be in one plane unless otherwise stated. | | |
| | Eaves Verges Flashings Aprons Sills Weatherings Cappings Hips Kerbs Ridges Reveals, returns and jambs Upstands, downstands | 1 detailed description stating girth in stages of 150 | | 1 stepped 2 preformed 3 curved 4 raking | m | Work to edges of voids shall only be measured where the void is >1.00m². Pointing and bedding shall be stated in the description. Boundary work to voids shall only be measured where the void >1.00m². | | Ends, angles and intersections only if of the same material as the work they are associated with. |
| gs | 16 Gutters | | | 1 curved 2 sloping >5° 3 secret 4 stepped 5 preformed | _ | | | |
| Coverings | 17 Preformed purpose made accessories | 1 detailed description | | | m nr | 6 When ends, angles or intersections are purpose made/preformed in materials different from the work they are associated with they shall be so described and enumerated separately. | | |
| Sheet Metal | 18 Lining to manholes and the like | 1 detailed description | | | m² | | | |
| xible | Lining to outlets Soakers and slates Saddles Ventilators | | | | nr | | | |

| 09 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------------|---|--|---|---|------|-------------------|--|-----------------------|
| | 23 Collars around pipes, posts and the like | 1 state size of member and height of collar | | | nr | | 1 Holes include those for pipes, posts and the like. | |
| | | noight of contai | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 24 Holes | girth – 1 <u>≤</u> 0.50m | | | | | | |
| | | 2 >0.50 ≤1.00m 3 >1.00 ≤2.00m | | | | | | |
| | | 4 >2.00m | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 25 Ornaments 26 Lead plugs | 1 detailed description | | | | | | |
| | 27 Lead dots | | | | | | | |
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| Coverings | | | | | | | | |
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| 4. Flexible Sheet Metal | | | | | | | | |
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- Location Drawings.
 Timber type, quality, preservative treatment, surface finish, fixings and jointing.
 Colour and/or grain matching.
 Connectors, cleats and the like.

| 10 | CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------------|------------------|---|--------------------------------------|--|------|---|--|--|
| | 1 General Rules | | | | | All sizes shall be deemed to be nominal sizes unless stated as finished sizes. Limits on planing margins shall be stated. Fixings other than nails shall be stated in descriptions. Fixing to backgrounds other than timber shall be stated in the descriptions. Work to curve or special shape shall be so described giving a detailed description. Pelleting where required shall be given in the descriptions. Where items do not have constant cross-section, the maximum dimensions shall be stated and described as such. | | Labours except as otherwise specifically required by these rules. Nail fixings. Fixing to timber backgrounds. Cutting associated with differing cross-sectional dimensions. |
| | 2 Pre-fabricated | 1 trusses 2 rafters 3 beams 4 wall or partition panels | 1 detailed description | 1 laminated construction | nr | | 1 Pre-fabricated items are those that may arrive on site ready for incorporation into the Works without further assembly. | Connectors, cleats, webs and the like forming part of the pre-fabricated items. Breaking into sections for handling and subsequent reassembly. |
| | 3 Carcassing | walls or partitions floors or flat roofs pitched roofs joist strutting | 1 cross-section dimensions stated | length >5.00m in one piece herringbone | m | 8 Items >5.00m shall only be measured as such where long lengths are specifically required to be from a single continuous length of timber. | Wall/partition members include studs, noggings, sole and head pieces. Floor/flat roof members include joists, wallplates and beams. Pitched roof members include rafters, hip/valley rafters, purlins, wallplates, ridge boards, ceiling joists, binders, collars, struts, bracing and the like. | 1 Labour trimming members to openings and obstructions. |
| st Fixings | 4 First fixings | | | | m | | First fixings include battens, bearers, grounds, fillets, drips, rolls, upstands, kerbs, firrings and the like. | |
| ural and First | 5 Labours | wrot surfaces; girth stated cleats or sprockets ornamental ends, details | 1 dimensions stated | | m | 9 Wrot surfaces shall only be measured where occurring on timber described as having a 'sawn' finish. | | |
| 1. Structural | | stated 4 notching to metal | | | | | | |

- Location Drawings.
 Timber, type, quality, preservative treatment, surface finish, fixings and jointing.
 Colour and/or grain matching.
 Connectors, cleats and the like.

| CATEGORIES | 1 2 | 3 | | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------------|--|---|---|----------|---------------|--|---|---|
| 1 Boarding and sheeting | detailed description including whether to: 1 floors 2 walls 3 ceilings 4 roofs 5 tops and cheeks of dormers 6 isolated beams 7 isolated columns | 1 >300 wide 2 ≤300 wide 3 isolated area ≤1.00m ² | fixed diagonally sloping falls and crossfalls | | m² m nr | Where work to any one face is ≤300mm wide this shall be stated in the description. Work shall be measured as sloping where to a fall >5° from horizontal. No deduction shall be made for voids ≤1.00m². | Walls include linings to openings, recesses and attached columns. Ceilings include linings to openings, recesses and attached beams. Work to isolated beams or columns means work to beams or columns that are isolated from adjoining work or where adjoining work is of a different material. | Labours except as otherwise specifically required by these Rules. Cutting to square boundaries on diagonally lai sheeting. |
| | 8 gutter linings 9 eaves and verges | | | | | | 4 Eaves and verge boarding includes fascias, soffits, barges and the like. | 3 End cutting, mitres, splays and the like. |
| 2 Extra over | raking cutting curved cutting scribing | | | | m | | | |
| | 4 access panels | - | | \vdash | nr | - | | |
| 3 Second fixings | skirtings, picture rails and dado rails. architraves trims window boards handrails isolated shelves glazing beads like items, type stated | | 1 built-up members; components stated | | m | 4 Description of the work shall include details of the mouldings and decorative treatments. | Short lengths are those ≤500 long. Trims include cover fillets, nosings, edgings and stops. | 1 Ends, angles, intersections, mitres, splays ar the like. |
| | | | 2 short lengths | | nr | | | |
| | | | | | | | | |
| | 9 plinth blocks 10 like items, type stated | 1 built-up members; components stated | | nr | | | | |
| | | | | | | | | |

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- Location Drawings.
 Component Details where not fully described.
 Timber type, quality, preservative treatment, surface finish, fixings and jointing.
 Colour and/or grain matching.

| 10 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------|-----------------------------|---|--|----------|------|--|--|---|
| | 1 Composite items | doors doors with associated frame set frame sets windows screens rooflights stair flights balustrades like items, type stated | 1 detailed description | | nr | Description for composite items shall include the overall dimensions and the cross-section size and profiles of each component where not shown on drawings and/or component details. Ironmongery, glazing and painting and decoration required to be included shall be clearly stated in the composite item description. | Composite Items are those that may arrive on site ready for incorporation into the works without further assembly. Screens include fanlights, sidelights, borrowed lights and the like. Rooflights include lantern lights, skylights and the like. Balustrades measured as a composite item shall include associated handrails, newels, balusters, accessories or the like. | Breaking into sections for handling, subsequent reassembly and any adjustment necessary for incorporation into the Works. Fixing of all metalwork, ironmongery and the like included in the description. |
| | 2 Framing | 1 jambs and heads 2 sills 3 mullions 4 transoms 5 like items, type stated | 1 cross-section dimensions and labours stated | | m | 2 Door frames associated with screens shall be included with the description of the screens. | | |
| | 3 Balustrades | 1 rails | | 1 curved | | 3 Balustrades that do not form an integral part of a stairs flight or landing shall be measured separately. | | |
| | | 2 newel posts 3 balusters | 1 detailed description | | nr | | | |
| ems | 4 Extra on balustrades for: | 1 ramps 2 bends 3 wreaths 4 ornamental ends 5 like items, type stated | | | | | | |
| . Composite Items | | | | | | | | |

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Location Drawings.
Kind and quality of materials.
Surface finish.

| 10 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------------------------|--|--|---|---|------|---|---|--|
| | 1 Insulation | 1 thermal 2 acoustic 3 vapour barrier | 1 detailed description | | m² | | | 1 Cutting insulation for holes, openings and the like and sealing as required. |
| | 2 Ironmongery | 1 detailed description | | fixing to backgrounds other than timber, background stated. | nr | 1 Items of ironmongery may be described by the set where appropriate and this shall be stated in the description. | Ironmongery includes the following or similar items: locks and latches, handles and handle sets, door tracks and operating gear hinges, door stops and retaining clips, draughtproofing seals, push, finger or kick plates, labels, closer floor springs, shelf brackets and supports. | Screws, bolts and the like. Labours on timber to receive ironmongery. |
| | 3 Accessories | water bar dowel bar straps and hangers sash weights like items | 1 detailed description | | | 2 Accessories may be described by the set where appropriate and this shall be stated in the description. | | Installation including forming recesses and the like in all materials to receive the items. Cords to sash weights and labour balancing on new work. |
| and Sundries | 4 Sundries | bedding pointing bedding and pointing | 1 width and thickness stated | | m | 3 Where pointing is to both sides this shall be stated in the description. | | |
| Accessories a | | 4 air seals5 intumescent seals6 like items | 1 detailed description | | | | | |
| ry, Acces | 5 Fixings (where not otherwise included in the descriptions) | 1 shot | detailed description stating centres and background | | | | | |
| 4. Insulation, Ironmongery | | 2 drilled | | | | 4 Pelleting to fixings where required shall be included in the description. | Drilling includes that required for plugs, bolts, sleeved screws and sleeved anchors. Drilling includes both the item to be fixed and the background. | |

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Drawings that show the nature and locations of the various components or built-up members with serial sizes and fixing details provided.
Steel grade, surface treatments, connections, bolts, welds, accessories, grouting and tests.

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--|--|---|------|--|---|---|
| Fabricated members, secondary steelwork | beams stanchions bracings purlins/cladding rails like items grillages built-up stanchions built-up beams trusses | 1 ≤25 2 >25 ≤50 | 1 castellated 2 tapered 3 curved 4 cambered 5 architectural steelwork, specific requirements stated | t | All steelwork shall be measured by serial size weight without adjustment for rolling margin, welds, bolts, nuts, washers, protective treatments and without deduction for holes, cut ends or notches. The mass of hot rolled steel shall for measurement purposes be taken as 7850kg/m³. The mass of fabricated members shall include all components except where of a differing grade of steel, which shall be measured separately. Serial sizes of steel members or components shall be stated in the descriptions where not otherwise provided. The weight of fittings shall be measured separately. Lengths of steelwork not exceeding 1.00m, lengths over 1.00m, but not exceeding 9.00m and lengths over 9.00m shall be measured separately. | Primary steelwork is that constituting the main structure that is crucial to the building's structural integrity. Secondary steelwork is not crucial to the building's structural integrity. It supports other components of the building including façade treatment and like items. Architectural steelwork is generally exposed and may require specific detailing, fittings, bolted and welded connections and off-site surface treatment, to achieve a specific concept. Hot rolled steel is taken to be steel shaped by a hot rolling process. Cold rolled steel is taken to be steel shaped from flat. Fabrication is understood to mean any work other than cutting to length. Profile of members means UB, UC, RSC, RSJ, RHS, RCS, RSA and the like. Fittings include caps, bases, haunches, gussets, end plates, splice plates, cleats, brackets, stiffeners, distance pieces and the like. | Shop and site bolts, nuts and washers for st to steel connections. Provision of shop drawings for inspection. Assembly and erection. Wedging and packing to correct levels. Holes in steelwork for fixings. |
| | 10 fittings | | | | | | |
| Unfabricated members | 1 function and position stated | member profile stated in kg/m ranges – 1 ≤25 | 1 architectural steelwork, specific requirements stated | | | | |
| | | | | | | | |
| Lintols | 1 detailed description | | | nr | | | |
| | 1 function and position stated | 1 details stated | | m | | | |
| | 2 special fittings | | | nr | 1 | | |

| 11 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------|---------------------------------|--|------------------------|---------------------|------|--|--|------------------------|
| - F | 8 Corrosion protective coatings | 1 preparation and treatments | 1 detailed description | | | 7 Protective coatings measured in this section are those specified as applied off-site. Site applied | 1 Corrosion protection includes galvanic protection, protection required to surfaces in | 1 Touching up on site. |
| | 9 Fire protection coatings | | | | m² | protective coatings shall be measured in accordance with the Rules of Work Section 21:1. | contact with dissimilar metals or agressive building materials and the like. | |
| | | | | | | | | |
| | | 2 localised work | | | nr | | | |
| | 10 Bolts | 1 type and size stated | | 1 nuts 2 washers | | 8 Only bolts for fixing to material other than steel are to be measured. | | |
| | | | | | | | | |
| | 11 Holding down assemblies | 1 detailed description | | | | | | |
| | 12 Site welding | 1 continuous runs | | | m | | | |
| | | 2 isolated connections | | | nr | | | |
| - | | 1 holding down bolts | | | | | | |
| | | 2 base plates | | | | | | |
| | 14 Sundries | 1 drilling/forming holes in other construction for fixing of | | | | | | |
| | | SLEEIWOIK | | | | | | |
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| | | base plates drilling/forming holes in other | | | | | | |

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- Location Drawings.
 Metal grade and type, surface treatments, connections, bolts, fixings, accessories and tests.
 Component details where not fully described.

| 1. Служение larges 1. dation (model are and as or) Averages 1. addiser (model are and as or) Averages 1. addiser | CATEGORIES | 1 2 | 3 | | 4 UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|-------------------|---|--|---|--------|---|---|--|
| 2 Sheeting 1 duct covers, detailed description I ends | 1 Composite Items | 2 ladders 3 doors 4 windows 5 screens 6 rooflights 7 smoke vents 8 gates 9 roller shutters 10 louvred panels 11 frames 12 like items, type stated 13 balustrades 14 handrails 15 railings 16 extra on balustrades, handrails | overall size and size of components 1 ends 2 ramps 3 bends | | m | included with the description of the item even where they have been manufactured in sections to facilitate transport and handling. 2 Details of the construction, fixing, accessories, sizes and types of components shall be given in the descriptions. 3 Descriptions of stairs shall include details of the number of risers and landings. 4 Frames shall be only measured separately where not part of a complete unit. 5 Protective coatings measured in this section shall be those specified as applied off-site. Site applied protective coatings are measured in accordance with the Rules of Work Section 21:1. 6 Handrails shall be measured as Composite Items only where fixing brackets form an integral part of the item. 7 Handrails shall be measured separately only where not part of a balustrade. 8 Glazing may be described in relevant composite items or measured separately in accordance | site assembled ready for incorporation into | been manufactured in sections to facilitat transport and handling. 2 Glazing, ironmongery and accessories wh part of the item. 3 Fixings, fastenings, connections and drilli |
| 2floor plates, detailed description1width ≤300m3screen plates, detailed description2width >300m²4like items, details stated1m² | 2 Sheeting | | 4 wreaths 5 decorative features 1 ends 2 intersections | - | | framing. | | description. |
| description 4 like items, details stated 2 width >300 m ² | | description | | _ | | | | |
| | | description 2 width >300 4 like items, details stated | | - | | | | |

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| 12 | |
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| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------------------|---|--|---|------|--|-------------------|-------------------------|
| 3 Isolated items; small | surface boxes inspection covers mat frames straps collars hangers brackets like items, type stated | 1 detailed description stating size | | nr | | | |
| 4 Bars, rods and the like | support angles beading skirting boundary trims like items, type stated | 1 detailed description | | m | | | |
| 5 Fixings | 1 bolts | 1 type, size and background to be fixed to stated | | nr | 11 Bolts shall only be measured separately where not described with the items or where required for connections between composite units. | | 1 Drilling for fixings. |
| | 2 site welding 3 site riveting 4 pointing or sealing edges | 1 details stated | | m | 12 Pointing/sealing at edges shall only be measured where not described with the items. | | |

1. Non-Structural

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1. Façade Systems and Curtain Walling

INFORMATION REQUIRED

- Location Drawings.Component details where not fully described.
- Detailed description of façade system and curtain walling including kind, composition, finishes, quality and structural, wind, acoustic, thermal, fire and airtightness performance.

- Jointing or sealing.
 Methods of fixing, jointing and sealing.
 Details of infill and cladding panels including finish.

| 13 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------------------------------|---|--|--|----------|------|--|---|---|
| | 1 General Rules | | | | | Work shall be measured on the exposed face. No deductions shall be made for openings or voids ≤0.50m². Secondary steelwork shall be measured in accordance with the Rules of Work Section 11. | 1 Horizontal includes sloping ≤15°. | Work in forming openings and voids. Additional framing required to support spandrel, infill panels, or integral openings. Ends, angles and intersections. |
| | Façade and curtain walling systems Spandrel or infill panels of differing materials to the façade system | 3 sloping >45° stating slope | 1 ≤300 wide 2 >300 wide | 1 curved | m² | | | |
| | 4 Integral openings | 1 detailed description including ironmongery | | | nr | | Integral openings include doors, windows, vents louvres and the like. | |
| | 5 Flashings and sub-flashings | 1 detailed description stating girth in stages of 150mm | | | m | | | |
| | 6 Junction with other materials/systems | 1 detailed description | | | | | | |
| 1. Façade Systems and Curtain Walling | 7 Extra over for | power assisted openers actuators to vents | 1 detailed description including motor, control panels and the like. | | nr | 4 Electrical installation work shall be measured in accordance with the Rules of Work Section 15. | | |

- ► Floor and site plans indicating layout of systems.
- Cross sections and elevations.
- System schematics and indicative layouts for plant rooms and principal services installation areas.
- ► Installation details of primary equipment and terminal equipment and

fittings.

- Equipment schedules.
- Kind and quality of materials, tests on materials and final installations.

| Pierce Pierce Address Address | 14 | CATEGORIES | 1 | 2 | 3 | 4 UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|----|------------|---|---|---|--------|--|-------------------|---|
| - industrial gas/compressed instrument air | ΠS | | | | З | 4 UNIT | All work is deemed internal unless stated as external. Work shall be classified as per the installations/systems defined within the International Cost Management Standard ICMS 3 or as required by Employer. (a) Heating, ventilation and air-conditioning seawater system cooling water system chilled water system steam and condensate system fuel oil system water treatment air handling and distribution system condensate drain system unitary air-conditioning system mechanical ventilation system fume and smoke extraction system kitchen ventilation system air-curtains fans. (b) Water supply and drainage above ground/inside basement cold water supply flushing water supply grey water supply grey mater supply grey water supply soli and waste disposal kitchen drainage disposal. planter drainage disposal. planter drainage disposal. planter drainage disposal. planter drainage disposal. kitchen drainage disposal. kitchen drainage disposal. planter drainage disposal. kitchen drainage disposal. planter drainage disposal. kitchen drainage disposal. kitchen drainage disposal. kitchen drainage disposal. planter drainage disposal. kitchen drainage disposal. coil and waste industrial waste | MEASUREMENT SCOPE | Fixing to backgrounds. Plant and equipment connections to pipe and duct work. Connections between pipes of the same material. |
| - vacuum - steam. (f) Other specialist services. | | | | | | | – vacuum – steam. | | |

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| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|---|--|---|------|---|--|--|
| Mains supply: public Mains supply: private | 1 provision of supply | nature, type and location of supply stated | | item | 3 Connections to public mains, making good public highway and any other work which may only be carried out by a Public Undertaking or Local Authority shall be given a Provisional Sum. Where the Conditions of Contract do not allow Provisional Sums, the cost of such connections and making good shall be dealt with outside the Contract. Connections to private mains, making good and other necessary work shall be described in detail and when required, be measured in accordance with the relevant Work Sections. | 1 Mains supply to the system noted in Measurement Rule 14:2. | |
| Primary equipment | detailed description including type, size, capacity and rating off-load and position primary equipment | 1 location of installation | | nr | Electrical connections and controls shall be measured in accordance with the Rules of Work Section 15. Support steelwork, hoppers and the like shall be measured in accordance with the Rules of Work Sections 11 and 12 as appropriate. | Primary equipment is defined as plant or equipment from which a system originates, e.g., boiler, main storage tank, air handling unit, and the like. Supports for primary equipment shall be given in the descriptions. Anti vibration mountings for preliminary equipment shall be given in the descriptions. | |
| | 3 assembly of composite items of primary equipment 4 connecting primary equipment to mains | 1 nature, type and location of supply stated | | | | | |
| Terminal equipment and fittings | 1 detailed description including type, size, capacity and rating | 1 location of installation | | | Electrical connections and controls shall be measured in accordance with the Rules of Work Section 15. Support steelwork, hoppers and the like shall be measured in accordance with the Rules of Work Sections 11 and 12 as appropriate. | 1 Terminal equipment and fittings are defined as any item to which a system is distributed, e.g., radiators, heat emitters, grilles, fan coil units and the like. | |
| Pipework | material, finish, nominal diameter, method of jointing, fixings and background for fixing | 1 location of installation | | m | 8 Length of pipework to be measured along the centre line. 9 Pipework shall be measured over all fittings. 10 Pipework supports shall be given in the description of the pipework, stating the type and spacing of supports. 11 Connecting primary equipment to mains. | 1 Nature, type and location of supply stated. | Joints and couplers in the running length Supports. Everything necessary for jointing. Flanges and unions necessary solely for opurposes. |

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| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------------------|--|----------------------------|---|----------------|--|---|--|
| Pipework fittings and ancillaries | 1 type, material, finish, nominal diameter, method of jointing | | | nr | 12 For reducers, tees and the like, the maximium diameter shall be stated. | Pipework fittings include unions, connectors, flanges, bends, tees, junctions, reducers, test points, bosses, sockets, tappings and the like. Pipework ancillaries include valves, strainers, expansion bellows, anchors, guides and rollers, outlets, rainwater heads, tundishes, pipe sleeves, wall and floor plates and the like. | |
| Ductwork | material finish, shape, gauge, dimensions, fire rating, method of jointing, fixing and background for fixing | 1 location of installation | | m | 13 Ducts shall be measured over all fittings. 14 Duct supports shall be given in the description of the pipework, stating the type and spacing of supports. | Material type includes fire rating, and other special requirements. | Joints in the running length and stiffene Supports. Everything necessary for jointing. |
| Ductwork fittings and accessories | 1 type, material, finish, nominal diameter, method of jointing | | | nr | 15 Dimensions of fittings shall be stated in the descriptions. | Duct fittings include unions, connectors, flanges, bends, tees, sets, junctions, reducers, test points, bosses, sockets, tappings and the like. Duct accessories include access hatches, dampers, in-duct heater/cooler coils, detectors, thermostats, flow control devices and the like. | 1 Stiffening, additional supports and every necessary for jointing. |
| 0 Insulation | pipework, nominal diameter stated ductwork, size and shape stated | 1 thickness stated | | m | 16 Descriptions shall include details of protective coverings to the insulation. | | Working around supports, pipework fitti ancillaries. Working around supports, ductwork fitti ancillaries. |
| | 3 primary equipment 4 terminal equipment and fittings | 1 details stated | | M ² | | | 3 Working around associated pipework, d controls and fittings. |

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| CATEGORIES 1 | 2 | ! | 3 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|---|------------------------|-----|------|-------------------|-------------------|--|
| 11 Identification | plates discs labels tapes symbols and numbers bands charts or diagrams like items, type stated | 1 detailed description | | item | | | |
| 12 Testing | pressure testing sterilisation chemical treatments purging like items, type stated | | | | | | |
| Commissioning and system validation Operation and maintenance manuals | | | | | | | Commissioning and system validation includ all final balancing, calibration and setting to work. |
| 15 Drawing preparation | 1 installation 2 co-ordination 3 as installed and recorded | _ | | | | | |
| 16 Training 17 Demonstration | | - | | | | | |
| 18 Loose ancillaries | 1 keys 2 tools 3 spares 4 chemicals 5 like items, type stated | | | | | | |
| 19 Post completion services | maintenance servicing like items, type stated | | | | | | |

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- ► Floor and site plans indicating layout of systems.
- Cross sections and elevations.
- System schematics and indicative layouts for plant rooms and principal services installation areas.
- ► Installation details of primary equipment and terminal equipment and

fittings.

- Equipment schedules.
- Kind and quality of materials, tests on materials and final installations.

| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--|---|---|------|--|---|--|
| 1 General Rules | 1 detailed description | | | | All work is deemed internal unless stated as external. Work shall be classified as per the installations defined within the International Construction Measurement Standards ICMS 3 or as required by Employer (a) high-voltage transformers and switchboards (b) incoming mains, low-voltage transformers and switchboards (c) mains and submains (d) standby system (e) lighting and power (f) uninterruptible power supply (g) electric underfloor heating (h) local electrical heating units (i) earthing/lightning protection and bonding (j) information and communication technology (k) staff paging/location (l) public address system (o) close circuit television (p) communal aerial broadcast distribution and the like (q) other specialist systems. | | Fixing to backgrounds. All joints (including fittings required in running lengths of rack/tray and trunking). All brackets, supports, fixings and cast in channels. Drilling holes ≤ 25mm diameter. |
| Mains supply public Mains supply private | 1 provision of supply | 1 nature, type and location of supply | | item | 3 Connections to public mains, making good public highway and any other work which may only be carried out by a Public Undertaking or Local Authority shall be given a Provisional Sum. Where the Conditions of Contract do not allow Provisional Sums, the cost of such connections and making good shall be dealt with outside the Contract. Connections to private mains, making good and other necessary work shall be described in detail and when required, be measured in accordance with the relevant Work Sections. | 1 Mains supply to the system noted in Measurement Rule 15:1.2. | |
| 4 Primary equipment | detailed description including type, size, capacity and rating off-load and position primary equipment assembly of composite items | 1 location of installation | | nr | | Primary Equipment is defined as plant or equipment from which a system originates, e.g., main switchboard, main control box and the like. Supports for primary equipment shall be stated in the description. | |
| | of primary equipment 4 connecting primary equipment to mains | 1 nature, type and location of supply stated | - | | | | |
| 5 Terminal equipment and fitting | detailed description including type, size, capacity and rating | 1 location of installation | | | | 1 Terminal equipment and fittings are defined as any item to which a system is distributed, e.g., luminaires, switches, power outlets, actuators and the like. | |

| 15 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------------|---------------------------------|---|---|--|------|---|---|--|
| | 6 Cable containment | type, material, finish, gauge, shape, dimensions, number of compartments, method of jointing, fixings and background for fixing | 1 location of installation | | m | 4 Cable containment shall be measured over all fittings, i.e., joint boxes, connectors, flanges, bends, tees, junctions, reducers, spigots and the like. | | |
| | 7 Cable containment fittings | type, material, finish, gauge, shape, dimensions, method of jointing | | | nr | | Fittings includes joint boxes, connectors, flanges, bends, tees, sets, junctions, reducers, spigots, offsets and the like. | |
| | 8 Cables | type, rating, size, number of cores, material, armouring, sheathing, method of jointing, fixings and background for fixing | 1 location of installation | | m | | | |
| | 9 Cable terminations and joints | type, rating, size, number of cores, material, armouring, sheathing | 1 location of installation | | nr | | | Includes pots, seals, glands, lugs, connector blocks and shrouds. |
| | 10 Final circuits | cable type, rating, size, number of cores, material and the like | 1 location of installation | lighting points - nr switches, type stated - nr socket points, type stated - nr fittings, equipment and control gear points, type stated - nr | nr | 5 Final circuits shall be measured by enumerating them and stating in the description(s) of the circuits the types of points and the number of such points in each circuit described. | 1 Final circuits are connections from primary equipment to terminal equipment and fittings. | Junction boxes, terminations, seals, glands, lugs, connector blocks and shrouds. |
| stallations | 11 Modular wiring systems | cables and containment terminations and joints | location of installation, type, rating, size, number of cables and cores, material, armouring, sheathing and method of jointing of cables | 1 containment type, material, finish, gauge, shape, dimensions, number of compartments, method of jointing, fixings and background for fixings | m | 6 Final circuits that are part of modular wiring systems shall be measured in accordance with the Rules of this Work Section. | 1 Modular wiring is a prefabricated system of cabling intended to service one or more electrical installations. Where the containment system is required to form part of the prefabricated system it shall be included in the description of the work. | |
| 1. Electrical Installations | 12 Busbars | type, rating, material, number of bars, method of jointing, fixings and background for fixing | 1 location of installation | | m | 7 Each busbar to be measured through all fittings, i.e., connectors, flanges, bends, tees, sets, junctions, feeder units, tap-off boxes, fire barriers and the like. | | |

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| CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|--|---|------|---|---|---|
| 13 Busbar fittings | | type, material, finish, shape, dimensions, method of jointing. | | nr | | 1 Fittings include connectors, flanges, bends, tees, sets, junctions, feeder units, tap-off boxes, joints, reducers, spigots, test holes, fire barriers and the like. | |
| 14 Tapes | type, rating, size, material, sheathing, method of jointing, fixings and background for fixing | 1 location of installation | | m | | | 1 All connections, joints, test clamps. |
| 15 Lightning protection | 1 type and rating | | | item | 8 Requirements and restrictions on design shall be stated. | | Bonding to earth pits. All components associated with the lightning protection system. |
| 16 Identification | | 1 detailed description | | item | | | |
| 17 Testing 18 Commissioning and system validation 19 Operation and maintenance manuals | | | | | | | |
| 20 Drawing preparation | 1 installation 2 co-ordination 3 as installed and recorded | | | | | | |
| 21 Training22 Demonstration23 Loose ancillaries | | | | | | | |
| 24 Post completion services | maintenance servicing like items, type stated | | | | | | |

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Plans, sections and details sufficient to show the scope and the location of the various works relating to this Work Section.
Type, quality and thickness of materials.
Fire rating where required as part of the system.

| 16 | CATEGORIES 1 | 2 | 3 | 2 | L Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------------|--|--|--|-----------------------|--------|---|-------------------|---|
| | 1 General Rules | | | | | All work is deemed internal unless stated as external. Work shall be classified as per the installations/systems defined within the International Cost Management Standard ICMS3 or as required by Employer. Movement systems lifts/elevators platform lifts escalators travellators/moving walkways conveyors/vacuum transmission other movement systems. | | |
| | 2 System | detailed description off-load and position primary equipment assemble component items of primary equipment | | | nr | 3 Detailed description to include, as necessary, number of stops, storey height, associated integrated or remote ancillaries, controls, indicators, components and the like. | | |
| | | 4 interface with and connect to Mechanical and Electrical Installations | 1 type of mechanical system 2 type of electrical system | 1 nature of interface | ltem | | | |
| | 3 Identification | | 1 detailed description | | 1 | | | |
| | Testing Commissioning and system validation | | | | | | | 1 Commissioning and system validation include all final balancing, calibration and setting to work. |
| | 6 Operation and maintenance manuals | | | | | | | |
| | 7 Drawing preparation | installation co-ordination as installed and record | | | | | | |
| | 8 Training 9 Demonstration 10 Loose ancillaries | | | | | | | |
| 1. Movement Systems | 11 Post completion services | 1 maintenance 2 servicing 3 like items | | | | | | |

| 17 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|---|--|--|------|--|---|---|
| Movement Systems | 1 General Rules | | | | | All work is deemed internal unless stated as external. Type of installation shall be given in accordance with Measurement Rule 1.2 of Work Sections 14, 15 and 16. Service trenches, cable ducts, chambers and the like shall be measured in accordance with the Rules of Work Section 22:2. | | 1 Making good structure and finishings. |
| Electrical Installations and I | General builders' work in connection with Marking position of holes, mortices and chases in the structure for | 1 type of installation stated | | | ltem | | 1 An item shall be given for each and every installation. | 1 All builders' work necessary in connection with the stated services installation except those required to be measured in accordance with the Rules of this Work Section. |
| ctrical | 4 Bases, plinths and the like | 1 detailed description, size and type stated | | | nr | | | |
| | 5 Forming or cutting openings in Walls Floors Roofs | for services distribution, shape stated, nature and thickness of structure and finishes stated for pipes, nature and thickness | girth – $1 \leq 0.50m$ $2 > 0.50m \leq 1.00m$ 3 > 1.00m in 1.00m stages nominal diameter – | 1 openings in walls over 4.00m above floor level immediately below | | Fireproofing around services shall be measured in accordance with the Rules of Work Section 18. Where a group of services passes through an opening, the girth of the opening shall be stated as for openings for services distribution. | | 1 Infilling around services other than firestopping. |
| lechan | | of structure and finishes stated | $\begin{array}{l} 1 > 25 \le 50 \\ 2 > 50 \le 100 \\ 3 > 100 \end{array}$ | | | | | |
| . Builders' Work in Connection with Mechanical and | | 3 for ducts, shape, nature and thickness of structure and finishes stated | girth – 1 ≤0.50m 2 >0.50m ≤1.00m 3 >1.00m in 1.00m stages | | | | | |

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| 7 | CATEGORIES 1 | 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--|---|--|---|------|---|--|--|
| sms | 6 Pipes and duct sleeves, fixed in openings in Walls Floors Roofs | size and type, nature and thickness of structure and finishes and method of fixing stated | | | nr | 6 Fire rated sleeves shall be measured in accordance with the Rules of the Firestopping Work Section. | | 1 Making good around sleeves or puddle flanges. |
| Electrical Installations and Movement Systems | 7 Puddle flanges, fixed in openings | size and type, nature and thickness of structure and method of fixing stated | | | | | | |
| | 8 Holes, mortices, chases and the like for | lighting points socket points fittings, equipment and control gear points | | unusually expensive coverings, type stated. concealed installations conduit fixed within hollows of blockwork or cavities | | 7 Cutting or forming holes, mortices, chases or the like shall be enumerated on a points basis. | Lighting or socket points include doubles or larger sizes each occurence measured as a single regardless of the number of points incorporated. Unusually expensive coverings shall be those other than painted plastered finishes to walls and ceilings and sheet or flexible coverings to floors. Concealed installation shall include casting into concrete. | 1 Cutting, forming or leaving holes, mortices, chases or the like and subsequent making good to structure and finishes. |
| | 9 Lifting and refixing | 1 existing floor boards | 1 width of boards and thickness stated, size and number of services stated | 1 replacing to match existing | m | 8 No distinction shall be made between routes parallel to or at an angle to the floor boards. | | Cutting and notching floor boards, chequer plates and raised access flooring and notching and holing joists, holing other structural members and the like. |
| crical | | 2 existing duct covers or chequer plates | 1 width and type stated | | | | | ule inc. |
| H Elect | | 3 existing raised access floors4 existing suspended ceiling tiles | 1 width, size of panels and type stated | | | | | |
| al and | 10 Sundries | 1 pipe casings | 1 detailed description | 1 horizontal 2 vertical | | | 1 Pipe casings do not include those constructed of in-situ concrete or brick/blockwork. | |
| hanic | | 2 underfloor ducts3 underground ducts | | | | | | |
| h Mec | | 4 chases | | | | 9 Chases shall be measured stating the width and depth and the nature of the structure. | | |
| ection with Mechanical and | | 5 like items | | | | | | |
| | | 6 trenches | | | | 10 Services trenches, chambers and the like shall be measured in accordance with the Rules of Work | | |
| 1. Builders' Work in Connect | | 7 chambers and the like | | | nr | Section 22:2. | | |

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INFORMATION REQUIRED

Plans, sections and details sufficient to show the scope and the location of the various works relating to this Work Section.

- Type, quality and thickness of materials.
 Fire rating required.
 Method of fixing, laying or applying where not at the discretion of Contractor.

| CATEGORIES 1 | 2 | 3 | | 4 Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|---|---|--|--------|---|-------------------|-------------------------------|
| 1 Fire barriers | detailed description including whether in 1 walls | | 1 horizontal 2 vertical 3 raking | m² | 1 Firestopping and fire protection integral with services equipment and its installation shall be measured in accordance with the Rules of Work | | |
| | 2 floors/floor voids | 2 not exceeding 300 wide | STANIIG | m | Sections 14, 15 or 16. | | |
| | 3 ceiling/ceiling voids4 roof/roof voids5 like items, details stated | 3 isolated areas not exceedimg 1.00m ² each | | nr | | | |
| 2 Intumescent mastic | 1 detailed description stating width and depth of joint | between partition sole plate and floor between partition head plate and soffit like items | | m | - | | |
| 3 Fire sealing, detailed description | 1 in services distribution openings, nature and thickness of structure and shape stated | girth – 1 ≤0.50m 2 >0.50m ≤1.00m 3 >1.00m in 1.00m stages | 1 horizontal 2 vertical | nr | | | 1 Infilling around services. |
| | 2 around pipes | nominal diameter – $1 \le 50$ $2 > 50 \le 100$ 3 > 100 stating pipe diameter | | | 2 Where a group of pipes pass through a hole, the girth of the hole shall be stated as for services distribution openings. | | |
| | 3 around ducts shape stated4 around trunking and cable trays | girth – 1 ≤0.50m 2 >0.50m ≤1.00m 3 >1.00m in 1.00m stages | | | | | |
| 4 Fire rated pipe and duct sleeves, fixed in openings | size and type stated, nature and thickness of structure and method of fixing stated | 1 walls 2 floors 3 roofs | | | | | 1 Making good around sleeves. |
| 5 Identification | | 1 detailed description | | item | - | | |
| 6 Preparation of drawings | installation co-ordination as installed and recorded | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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1. Floor, Wall and Ceiling Finishings: Finishings

INFORMATION REQUIRED

Location Drawings.

- In-situ Finishes: Nature of and preparatory work to base. Kind and quality of materials. Composition of mix and method of application. Number of coats and thickness. Nature of surface treatment. Any special curing of finished works
- Board Finishes: Nature of and preparatory work to base. Kind, quality and thickness of materials. Layout and treatment of joints. Method of fixing. Applied in-situ finish. Integral insulation and vapour barriers.
- Tile, Slab and Mosaic Finishes: Nature of and preparatory work to base. Kind and quality of materials. Size and thickness of units and treatment of joints. Bedding or other method of fixing. Surface finish.
- Flexible Sheet Finishes: Nature of and preparatory work to base. Kind, quality and thickness of materials. Width and laying direction of materials. Treatment of joints. Method of fixing. Nature of surface treatment.
- Sprayed Finishes: Nature of and preparatory work to base. Kind and quality of materials. Thickness and number of coats. Nature of surface treatment.
- Fitted Carpeting: Nature of and preparatory work to base. Kind and grade or quality of materials. Width and laying direction. Treatment of joints. Method of fixing generally and at perimeter. Nature of surface treatment. Grade or quality and number of underlays.

| 19 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----|-----------------|---|---|---|------|--|--|--|
| | 1 General Rules | | | | | Work shall be measured on the exposed face. No deduction shall be made for voids ≤0.50m². Work ≤300 wide isolated from similar work shall | Beds and backings shall be measured in accordance with the appropriate Rules for Finishings. Where the applied finish to a beam or column differs from adjoining surfaces the work shall be measured as isolated. | Fair joints, fair edges, internal and external angles, ends and intersections except where specifically required by the Rules of this Work Section. |
| | | - | | | | | | |

| 19 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------|--|---|---|--|------|---|--|--|
| | Walls Ceilings Isolated beams Isolated columns Pipe encasements | 1 ≤300 wide 2 >300 wide 3 ≤300 wide isolated | | curved staircase areas isolated areas ≤2.00m² number stated | M2 | 9 Curved work is deemed to be in one plane unless otherwise stated. | Walls include attached columns. Ceilings include attached beams not measured with walls. | Joints and reinforcing tape with board finishes. Plaster for dabs and filling and finishes with board finishes. |
| | 7 Floors8 Landings9 Roofs | 1 ≤300 wide 2 >300 wide 3 ≤300 wide isolated | | 1 to falls 2 to falls and crossfalls | M2 | 10 Where falls and crossfalls are to be achieved within the thickness of the work being described the average thickness shall be stated. | 1 Landings are defined as isolated landings in stairwells that are not contiguous with floors. | 1 Intersections on work to crossfalls. |
| | 10 Treads 11 Winders | 1 width or height stated | | | m | 11 For winders the width stated shall be the maximum width. | | 1 Raking cutting for winders. |
| | 12 Risers | | 1 plain 2 undercut | | | | | |
| | 13 Strings 14 Bands 15 Cornices and coves 16 Architraves 17 Covering to kerbs 18 Lining to channels 19 Skirtings 20 Plinths 21 Like items, type stated | girth – $1 \le 150$ $2 > 150 \le 300$ 3 > 300 in stages of 300 | 1 detailed description | curved staircase areas enrichments, details stated | | | Bands include flush, raised or sunk bands. Enrichments are defined as regularly occurring features. | |
| | 22 Achieving required moisture content in concrete floors prior to laying floor finish | | existing buildings new buildings | | m² | A separate item shall be provided for each floor finish. Where levelling compound is required, details shall be provided of the material and minimum | | 1 All work required. |
| | 23 Levelling compound | description of floor finish and base to which the floor finish is to be applied | | | | thickness. | | |
| sgn | | 2 at Contractor's discretion | | | item | | | |
| 1. Finishings | 24 Protection of floor finishes | 1 detailed description | | | | 14 Where protection is required details shall be provided. | | 1 Maintenance, removal and disposal. |

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| 19 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------|---|--|---|----------|------|---|--|-----------------------|
| | 25 Extra over for | 1 special tile, slab, block and mosaic units | | | m | | Special tile, slab, block and mosaic units that include units to form fair edges, external and internal angles, moulded edges, beaded edges, coved junctions, mouldings and the like. | |
| | 26 Special corner or end units27 Ornaments28 Complex shapes | 1 detailed description | | | nr | 15 Special corner or end units shall be measured separately for tile, slabs, block and mosaic units and plaster coves only. | 1 Ornaments are defined as irregularly occurring features applied where required. | |
| | | dividing strips cover strips movement joints beads reinforcement nosings rinserts stair rods like items, type stated | 1 size and type stated | | m | | 1 Beads include angle beads, stop beads and the like. | |
| | 30 Labours | 1 flush joint between new and existing finishes described | | 1 curved | | 16 Rounded angles >100 girth shall be measured as curved work. | 1 Rounded angles are defined as those \leq 100 girth. | |
| | | 2 rounded angles 3 curved cutting | | | | | | |
| Finishings | | 4 making good and/or cutting around obstructions | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00m in stages of 1.00m | | nr | 17 Builders' work arising from Mechanical and Electrical Installations shall be measured in accordance with the Rules of Work Section 17. | 1 Obstructions include; access covers floor springs joists matwells outlets and the like. | |
| 1. E | | | | | | | | |

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2. Floor, Wall and Ceiling Finishings: Stud Partitions

INFORMATION REQUIRED

- Location Drawings.
 Kind, quality and thickness of materials.
 Nature of construction; layout and spacing of supports.
 Layout and treatment of joints.
 Method of fixing with details of background fixed to.

- Surface finish or applied in-situ finish.
 Acoustic and thermal insulation.
- Vapour barriers.
- Services located within the partition.

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------------|--|---|--|---|--|--|--|
| General Rules | | | | | Metal and timber stud partitions shall be measured in accordance with the Rules of this Work Section. | | |
| P Metal and stud partitions | 1 detailed description stating height | | 1 curved 2 fire rating, details stated | m | 2 The work shall be measured as the mean length of partitions. | | Head and sole plates, vertical studs and intermediate stiffeners. Sealing at the perimeter. |
| B Extra over for | 1 deflection heads | 1 detailed description | | m | | | |
| | 2 angles to partitions 3 three-way intersection 4 four-way intersection 5 abutments to other finishes 6 fair ends to partitions 7 movement joints | 1 detailed description | | nr | | | |
| | 8 forming openings | 1 size and description | | | | | |
| Bearers and grounds | 1 size and type stated | | | m | | Bearers and grounds are defined as additional members supporting fittings that are fixed in/to partitioning. | |
| | 2 function stated | | | nr | | paradoning. | |
| ; Labours | 1 making good and/or cutting around obstructions | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00m in stages of 1.00m | | nr | 3 Builders' work arising from Mechanical and Electrical Installations and Movement Systems shall be measured in accordance with the Rules of Work Section 17. | 1 Obstructions include access covers floor springs joists matwells outlets and the like. | |
| 5 | Labours | Labours 1 making good and/or cutting around obstructions | Labours 1 making good and/or cutting girth – | Labours 1 making good and/or cutting around obstructions 1 ≤300 2 >300 ≤1.00m | Labours 1 making good and/or cutting around obstructions 1 ≤300 2 >300 ≤1.00m | Labours 1 making good and/or cutting around obstructions 2 >300 ≤1.00m for the Rules shall be measured in accordance with the Rules | Labours1making good and/or cutting around obstructionsgirth - 1SoloNr3Builders' work arising from Mechanical and Electrical Installations and Movement Systems shall be measured in accordance with the Rules of Work Section 17.1Obstructions include access covers floor springs joists matwells outlets |

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3. Floor, Wall and Ceiling Finishings: System Partitions

INFORMATION REQUIRED

- Location Drawings.
 Kind and quality of materials and method of construction.
 Surface finish; sound insulation requirements.
 Fixing of partitions with details of background.
 Ironmongery and glazing.
 Services located within the partitions.

| Ð | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|----------------------|---|---|---|--|-------|--|--|--|
| | Partitions Partitions with integrated services | 1 detailed description stating height | | 1 curved 2 fire rated, details stated | m | The work shall be measured as the mean length of partitions. | | Cover trims between panels. Sealing at perimeter. Linings to openings. |
| | 3 Extra over for | door sets glazed areas access panels | 1 detailed description | | nr | | | |
| | | 4 angles to partitions 5 three-way intersection 6 four-way intersection 7 abutments to other finishes 8 fair end to partitions 9 movement joints | | | | | | |
| | | 10 forming openings | | | | | | |
| | | | | | | | | |
| | 4 Cubicles | | | | | Each range of cublicle partitions shall be measured separately. | 1 Cubicle partitions include doors, ironmongery, fixings, support legs and the like. | |
| | 5 Bearers and grounds | size and type stated function stated | | | m | | 1 Bearers and grounds are defined as additional members supporting fittings that are fixed in/to partitioning. | |
| | | | | | | | | |
| 3. System Partitions | 6 Labours | | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00m in stages of 1.00m | | nr | 3 Builders' work arising from Mechanical and Electrical Installations and Movement Systems shall be measured in accordance with the Rules of Work Section 17. | 1 Obstructions include access covers floor springs joists matwells outlets and the like. | |

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4. Floor, Wall and Ceiling Finishings: Raised Access Floors

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INFORMATION REQUIRED

- Location Drawings.
 Kind and quality of materials.
 Plan size of panels.
 Construction, supporting system and imposed loads.
 Overall height above supporting floor.
 Surface finish and pattern.
 Aidight page where required.

- Airtightness where required.

| 19 | CATEGORIES 1 | 2 | 3 | | 4 UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------------------|---|---|---|-----------|--------|--|--|---|
| | Floors Ramps Treads and risers of steps | detailed description detailed description, width and height stated width or height stated | | 1 sloping | m² | Work shall be measured on the exposed face. No deduction shall be made for voids ≤0.50m². Skirting and edge trims shall be measured separately. If a minimum clearance below the raised access | 1 Ramps are sloping areas within level floors. | 1 Additional supporting structure at abutments. |
| | 4 Cavity closer5 Cavity barriers | | | | m | floor is required it shall be specifically stated. Fire rated cavity closers and barriers shall be measured in accordance with the Rules of Work Section 18. | | |
| | 6 Labours | 1 raking cutting 2 curved cutting | | | | 6 Builders' work arising from Mechanical and Electrical Installation shall be measured in accordance with the Rules of Work Section 17. | 1 Obstructions include access covers floor springs joists | |
| SI | | 3 making good and/or cutting around obstructions | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00m in stages of 1.00m | | nr | | matwells outlets ventilators and the like. | |
| 4. Raised Access Floors | | | | | | | | |

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5. Floor, Wall and Ceiling Finishings: Suspended Ceilings

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INFORMATION REQUIRED

- Location Drawings.
- ► Nature of background.
- Kind, quality, size and thickness of tiles including joint details.
 Kind, quality and thickness of plasterboard with details of surface finish or applied in-situ finish.

- ▶ Pattern requirements.
- Nature, construction and fixing of framing and suspension systems.
 Nature of services in the suspended ceiling cavity and any requirements/restrictions on supporting system.
- Insulation materials; vapour barriers.
 Airtightness where required.

| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|---|--|---|------|--|--|--------------------------|
| General Rules | | | | | Work shall be measured on the exposed face. No deduction shall be made for voids ≤0.50m². Work ≤300 wide isolated from similar work shall be so described. Fire rated cavity closers and barriers shall be measured in accordance with the Rules of Work Section 18. | 1 Horizontal includes sloping ≤15°. | |
| Ceilings Bulkheads Upstands/downstands Lining to openings | depth of suspension – $1 \leq 150$ $2 > 150 \leq 500$ 3 > 500 in stages of 500 | detailed description including fire rating girth – 1 ≤150 2 >150 ≤500 3 >500 in stages of 500 | 1 sloping >15° stating slope 2 staircase areas 3 curved | m² | | 1 Bulkheads include sides and soffits. | |
| Accessories | 1 access panels | 1 detailed description | | nr | | | |
| | 2 edge trims3 angle trims | | 1 curved | m | | | |
| Cavity barriers | 1 detailed description | girth – $1 \le 150$ $2 > 150 \le 500$ 3 > 500 in stages of 500 | | | | | 1 Junctions and fixings. |
| Labours | 1 making good and/or cutting around obstructions | girth – 1 ≤300 2 >300 ≤1.00m 3 >1.00m in stages of 1.00m | | nr | 5 Builders' work arising from Mechanical and Electrical installation are measured in accordance with the Rules of Work Section 17. | 1 Obstructions include: access covers outlets and the like. | |
| | | | | | | | |
| | | | | | | | |

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1. Glazing

INFORMATION REQUIRED

- Location Drawings.
 Method of glazing.
 Method of securing including details of gaskets where required.
 Nature of frame or surround that glazed units are fixed/set into.

| | | | | to which they relate. Multiple glazed panes shall be measured and, where not in sealed units, each pane shall be measured separately. | | 1 Raking and curved cutting. |
|--|---|--|--|--|---|---|
| area – $1 \le 0.15 \text{m}^2$, stating nr of panes $2 > 0.15 \le 4.00 \text{m}^2$ $3 > 4.00 \text{m}^2$ | 1 detailed description | irregular shape aligned with adjacent panes multiple glazed panes curved | m² | | | |
| 1 double 2 multiple, stating number of sheets | | 1 irregular shaped units 2 curved | | | | |
| 1 grinding 2 sandblasting 3 embossing 4 engraving 5 etching 6 manifestations | | | nr | | 1 Etchings and manifestations include graphics, characters and the like, whether formed on the glass or within a surface treatment to the glass. | |
| | | 1 curved | m | | | |
| | | | | | | Angles, intersections, abutments a openings. |
| 1 door sets | | | nr | | | |
| | | | m | | | Angles, intersections, abutments a openings. |
| | | | nr | | | 1 Ironmongery referred to in the des |
| | | | | | | |
| | 1 ≤0.15m², stating nr of panes 2 >0.15 ≤4.00m² 3 >4.00m² 1 double 2 multiple, stating number of sheets 1 grinding 2 sandblasting 3 embossing 4 engraving 5 etching 6 manifestations | 1 ≤0.15m², stating nr of panes 2 >0.15≤4.00m² 3 >4.00m² 1 double 2 multiple, stating number of sheets 1 grinding 2 sandblasting 3 embossing 4 engraving 5 etching 6 manifestations | 1 ≤0.15m², stating nr of panes 2 aligned with adjacent panes 2 >0.15 ≤4.00m² 3 multiple glazed panes 3 >4.00m² 1 irregular shaped units 1 double 1 irregular shaped units 2 multiple, stating number of sheets 1 irregular shaped units 1 grinding 2 curved 2 sandblasting 4 engraving 3 endossing 4 engraving 5 etching 1 curved 1 orner 1 curved | 1 ≤0.15m ² , stating nr of panes 2 aligned with adjacent panes 2 >0.15 ≤4.00m ² 3 multiple glazed panes 3 >4.00m ² 1 irregular shaped units 2 multiple, stating number of sheets 1 irregular shaped units 1 grinding 2 curved 1 2 sandblasting 3 empraving 1 4 engraving 6 manifestations 1 curved m 1 door sets 1 curved m 1 m | area - 1 s0.15m ² , stating nr of pares 2 s0.15m ² , stating nr of pares 3 s4.00m ² 1 detailed description 1 irregular shape 2 aligned with adjacent pares 3 multiple glazed pares m ² 1 double 2 mothashing 3 embodshing 4 engraving 5 etching 6 manifestations 1 detailed description 1 irregular shape 2 aligned with adjacent pares 3 multiple glazed pares m ² 1 double 2 mothashing 3 embossing 4 engraving 5 etching 6 manifestations 1 detailed description 1 irregular shape 2 aligned with adjacent pares 3 multiple glazed pares m ² 1 double 2 mothashing 3 embossing 4 engraving 5 etching 6 manifestations 1 curved m ² 1 door sets 1 curved m | area - 1 detailed description 1 irregular shape 3 Aligned with digents and saparably. 4 Glacing and sealed glazed units forming part of a glazed on with fields stall be measured and, where not in sealed units centing part of a glazed on with fields stall be measured in according with the yeales is a holid or sound reduction area - 1 Glazing and sealed glazed units forming part of a glazed on with the yeales is a ball be measured in according with the yeales is a ball be a ball |

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INFORMATION REQUIRED

- Location Drawings.
 Preparatory work to base.
 Kind and quality of materials.
 Number of priming or sealing coats and undercoats.
 Number of finishing coats stating the surface finish.
 Abrasive or other treatment before or between coats.
 Method of application where not at Contractor's discretion.

| 21 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-------------|---|--|--------------------------------------|---|----------|---|---|--|
| | 1 General Rules | | | | | The work is deemed to be internal. External work shall be given separately. Work in plant rooms shall be given separately. Nature of base shall be stated in description. Work shall be measured on the exposed face except for framed glazed surfaces, which shall be measured as the plane surface across the framing and glass. No deduction shall be made for voids ≤0.50m². Work ≤300 girth isolated from similar work shall be so described. Work to ceilings and cornices >4.00m above structural floor level (measured to ceiling level in both cases) shall be so described, stating the height in further 2.00m stages. This height categorisation shall not apply in staircase areas. Redecoration or work of a restorative nature shall be so described. Painting required to be carried out before fixing an item shall be so described. | | Cutting in next glass. Opening edges. |
| | Walls Ceilings Floors General surfaces | 1 girth >300 2 girth ≤300, isolated | 1 general areas 2 staircase areas | isolated areas ≤0.50m² lsolated areas in staircase areas ≤0.50m² | m² nr | | Walls include columns. Ceilings include beams not measured with walls. General surfaces include frames to doors, associated linings, sills and unglazed doors. Doors with glazing not exceeding 0.04m² shall be measured as general surfaces. | |
| | 6 Second fixings 7 Cornices | 1 girth <u>≤</u> 300 | | 1 staircase areas | m | _ | 5 Second fixings include skirtings, dado-rails, picture rails, wall mouldings, capping and margins. | |
| Painting | | 2 girth >300 | | | m² | | | |
| | | | | | | | | |

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| 21 | |
| | |

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|-------------------------|---------------------------------------|------|---|---|--|
| 8 Glazed doors and screens9 Windows | | | 1 size of pane $\leq 0.15 \text{m}^2$ | m² | 10 Where panes of more than one size occur they shall be averaged. | | |
| 10 Structural metalwork | general surfaces members of roof trusses, purlins, rails, lattice girders | 1 girth ≤300 | | m | | | 1 Work to hookbolts, clips and the like. |
| | and the like | 2 girth >300 | | m² | | | |
| 11 Radiators | | | | | 11 Work on radiators shall be measured to the area to be painted. | | 1 Work to brackets and stays. |
| 12 Railing, fences, gates | 1 close type 2 open type 3 ornamental | | | | 12 Work to railings, fences, gates and balustrades shall be measured each side with no deduction for voids. | Open type includes plain post and wire, post and rail, chain link, wire mesh, cleft pale, palisade, metal bar and the like. Close type includes close boarded, built up concrete and corrugated. | |
| 13 Balustrades | 1 detailed description | | | | | | |
| 14 Gutters 15 Pipes, ducts and the like | 1 girth <u>≤</u> 300 | | 1 painting in coded colours | m | | 1 Pipes, ducts and the like include: pipes and conduits lagged pipes | Work to gutter brackets. Work on saddles, pipehooks, holderbats, condiboxes and the like. |
| | 2 girth >300 | | | m² | | cables ducting and trunking straps, standards, bars and the like. | 3 Cutting in between coded colours. |
| 16 Cutting to line in multi-coloured work | 1 straight 2 curved | | | m | 13 Cutting to line shall only be measured once for each change of colour. | Multi-coloured work shall be defined as the application in one room of more than one colour on either the walls and piers or the ceilings and beams. | 1 Cutting to line at junctions between walls and ceilings and between walls and floors. |
| 17 Sundries | 1 gratings 2 soot doors 3 flushing cisterns 4 rainwater heads 5 strap binang and the like | $1 \le 0.50 \text{m}^2$ | | nr | | | |
| | 5 strap hinges and the like | 2 >0.50m ² | | m² | | | |
| 18 Signwriting | 1 detailed description | | | nr | | | |

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2. Painting and Decorating: Decorative Paper/Fabrics

INFORMATION REQUIRED

- Location Drawings.
 Preparatory work to base.
 Kind and quality of materials.
 Method of fixing and jointing.
 Manufacturer and pattern.

| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------|--------------------------------------|---|-------------------|---------|---|---|---|
| 1 General Rules | | | | | Work shall be measured on the exposed face to be covered. Nature of base shall be stated in the description. No deduction shall be made for voids ≤0.50m². Work to ceilings and beams >4.00m above structural floor level (measured to ceiling level in both cases) shall be so described stating the height in further 2.00m stages. This height categorisation shall not apply in staircase areas. Redecoration or work of a restorative nature shall be so described. Where lining paper is required as preparatory work for decorative paper/fabrics details shall be included in the description. | | Decorative paper/fabric is deemed to be hivertically unless otherwise stated. Cutting and fitting around obstructions. |
| 2 Walls 3 Ceilings | 1 ≤300 girth 2 >300 girth | | 1 staircase areas | m m² | _ | Walls include columns. Ceilings include beams not measured with walls. | |
| | 3 isolated areas <0.50m ² | | | nr | | | |
| 4 Border strips | 1 detailed description | | | m | | | |
| 5 Motifs | | | | nr | | | |
| | | | | | | | |

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INFORMATION REQUIRED

- Location Drawings.
 Statutory regulations and codes of practice.
 Kind and quality of materials.
 Method of jointing.
 Background and method of fixing.

| 22 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------------|--|-------------------------|--|---|------|--|--|---|
| | 1 General Rules | | | | | Pipes/gutters shall be measured along their centre lines. Fittings that are reducing the pipe/gutter size shall be measured as 'extra over' the largest pipe/gutter on which they occur. Builders' work shall be measured in accordance with the Rules of Work Section 17. | | Marking positions of holes, mortices and chases in the structure. Everything necessary for jointing. Temporary blanking caps. |
| | 2 Pipes | | surface fixed in ducts cast in | 1 horizontal 2 vertical 3 sloping 4 curved 5 flexible | m | Pipes shall be measured over all pipe fittings and branches. The lengths of flexible pipes shall be measured as the gap to be filled. Standard pipe supports shall be given in the description of the pipes stating the type and spacing of the supports. | For non-circular pipes the cross-sectional dimensions shall be given. Horizontal pipes include those sloping >5°. | 1 Cutting and jointing pipes to fittings. |
| | 3 Extra over pipes on which they occur for | 1 fittings, type stated | 1 nominal diameter | 1 special joints, type stated | nr | | Fittings include – bends junctions reducers adaptors couplers screwed sockets tappings bosses and the like. Special joints are joints that differ from those specified in the running length. | Screwed sockets, tappings and bosses include for perforating the pipe. |
| 1. Disposal above ground | 4 Special supports | 1 detailed description | | 1 supports for multiple pipes | nr | 7 Special supports shall only be measured where they differ from those given with the pipework description. | | |

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| 22 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------------|--|--|----------------|-----------------------------|------|--|---|-----------------------|
| | 5 Pipework ancillaries | 1 detailed description | | | nr | | 1 Pipework ancillaries include: rainwater heads hopper heads gratings traps shoes and the like. | |
| | 6 Pipe sleeves | | | 1 supply only 2 fix only | | | | |
| | 7 Plates | | | | | | | |
| | 8 Gutters | 1 type, shape, size, method of joining and supporting | | 1 curved on plan | m | 8 Gutters shall be measured over all fittings. | | |
| 1. Disposal above ground | 9 Extra over gutters on which they occur for | 1 fittings, type stated | 1 nominal size | | nr | | 1 Gutter fittings include: bends stopped ends angles outlets and the like. | |

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INFORMATION REQUIRED

- Location Drawings.
- Ground investigation reports and details of groundwater in accordance with details of existing overground or underground services which may affect these works.
- Nature of contaminated or hazardous materials arising from excavations and requirements for disposal.
- Starting level of excavations.
- Kind and quality of materials.
 Materials for filling and method of compaction if not at Contractor's discretion.

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|--|--|------|--|---|--|
| Excavating trenches for | pipe ≤250 nominal diameter pipe >250 ≤450 nominal diameter pipe >450 nominal diameter in 250 stages multiple pipes stating number and nominal diameter of each pipe | 1 average depth of trench in stages of 500 | curved below groundwater level in unstable ground backfilled with special materials, details stated | m | Where Employer is retaining the ground conditions risk, groundwater level shall be re- established at the time the various excavation works are carried out and it is described hereinafter as the post-contract water level. Excavating trenches below groundwater level shall be measured where the groundwater level is above the bottom of the trench and shall be adjusted accordingly if the post contract water level differs from the pre-contract water level. Backfilling with special materials occurs where selected or treated excavated materials, or imported materials, are specified. Where the Employer is retaining the ground conditions risk and where ground investigation reports are not available a description of the ground and the pre-contract water table that has been assumed shall be stated. | Average depth of trench is the average depth between adjacent manholes from the stated starting level of excavation. Unstable ground includes running silt, running sand and the like. Rock is defined in 04:2, Measurement Scope 11.1. Multiple pipes in trenches shall be measured where the new trench is for more than one pipe. | Earthwork support. Preparation of surfaces. Disposal of excavated materials unless otherwinequired. Backfilling with excavated materials. Working space. |
| Extra over excavating trenches irrespective of depth for | 1 breaking up material in excavations, thickness stated | 1 rock 2 concrete 3 reinforced concrete 4 brick, block, stonework | | | | | |
| | 2 handling and disposal of contaminated or hazardous materials | 1 detailed description | | | | | |
| | 3 breaking up hard surfaces | 1 detailed description | 1 reinstating to match existing | - | 4 Extra over items shall be measured as extra over each of the trench categories listed in Category | | |
| | 4 next/alongside existing services | 1 type of services stated | 1 multiple pipes in trench | - | 2 Column Rules 1.1 to 1.4. 5 Excavation next to existing buildings or existing roadways shall be deemed to arise when the horizontal distance between the centre line of the execution and the existing huilding/coduct. | | |
| | 5 around existing services crossing excavations | | | nr | the excavation and the existing building/roadway is less than the depth of the excavation. 6 Where the provision of interlocking steel piles to excavate pipe trenches is a requirement of the | | |
| | 6 next to existing roadways 7 next to existing buildings | | | m | work requirements/specification or drawings, the piling work shall be measured in accordance with the Rules of Work Section 05:1. | | |
| | 8 lifting sods for preservation | 1 method and depth stated | 1 re-laying sods | | | | |
| | | | | | | | |



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| | |

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|--|---|-----------------------------------|------|---|--|---|
| 3 Disposal | 1 groundwater 2 surface water | | | item | 7 Disposal of groundwater shall be measured only when excavating below groundwater level is also measured and, where the Employer is retaining the ground conditions risk, shall be adjusted accordingly if the post-contract water level differs from the pre-contract water level. | 1 Surface water is water on the surface of the site and the excavations. | |
| 4 Beds 5 Beds and haunching | 1 width and thickness of bed | nominal diameter of pipe multiple pipes stating number and nominal diameter of pipes | 1 designed joints, giving details | m | | | Beds, haunches, surrounds and casings are deemed to include formwork. |
| 6 Beds and surrounds | 1 width and thickness of bed and surround | | | | | | |
| 7 Vertical casings | 1 thickness of surround | - | | | | | |
| 8 Pipes | 1 type, nominal diameter and method of jointing | | | | 8 Pipes shall be measured over all fittings and branches. 9 Individual pipe runs ≤3.00m shall be measured as short lengths. | | |
| | | | 1 short lengths \leq 3.00m | nr | do anoi i hongula. | | |
| 9 Extra over pipes on which they occur for | 1 fittings, type stated | 1 nominal diameter stated | | | | 1 Fittings include: bends junctions reducers adaptors ends and the like. | Cutting and jointing pipes to fittings and providing everything necessary for jointing. |
| 10 Pipe accessories | 1 detailed description | | | | | 1 Pipe accessories include: AJs gullies traps inspection/access units fresh air inlets non-return flaps and the like. | Accessories are deemed to include jointing pipes thereto and bedding and surrounding in concrete. |

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| 22 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------|---|---|--|---------------------------------|----------------|---|---|--|
| | Manholes Soakaways Cesspits Inspection chambers Waste treatment plants specific to the effluent from the site Like items | detailed description stating internal dimensions and depths in stages of 500 proprietary units | 1 detailed description | | nr | 10 Work to existing manholes shall be so described. 11 Breaking up shall be measured as the overall dimension of the base by the thickness of the material. | Depth of manholes, soakaways, cesspits, inspection chambers, waste water treatment plants and the like items is defined as cover level to invert level. Like items include: surface water attenuation tanks, petrol interceptors, etc. | Excavation. Earthwork support. Preparation of surfaces. Disposal of excavated material. Backfilling with excavated material. Working space. Making good rendered finishes. Building in ends of pipes and the like. All work required for the construction of manholes, etc. unless specifically required |
| | 17 Extra over excavating irrespective of depth for | 1 breaking up | 1 rock 2 concrete 3 reinforced concrete 4 brick, block, stonework | | m ³ | - | | elsewhere in this Section. |
| | | | 5 underground services, details stated | | m | | | |
| | | | 6 hard surfaces; detailed description | 1 reinstating to match existing | m² | | | |
| | | 2 handling and disposal of contaminated or hazardous materials | 1 detailed description | | m ³ | - | | |
| | 18 Sundries | channels benching step irons covers intercepting traps backdrop assemblies like items | 1 detailed description | | nr | - | | |
| pur | 19 Connections to | 1 mains public 2 mains private | 1 detailed description | | item | 12 Connections to public mains, making good public highways and any other work which may only be carried out by a Public Undertaking or Local Authority shall be given as a Provisional Sum. Where the Conditions of Contract do not allow Provisional Sums, the cost of such connections and making good shall be dealt with outside the Contract. Connections to private mains, making good and other necessary work shall be described in detail and, when required, shall be measured in accordance with the relevant Work Sections. | | |
| 2. Below ground | 20 Testing and Commissioning | 1 detailed description | | | | | | Provision of supplies for testing and commissioning. |

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1. Surface Paving, Fencing and Landscaping: In-Situ Surface Pavings

INFORMATION REQUIRED

- Location Drawings.
 Kind, quality composition and mix of materials.
 Method of application.
 Nature of surface treatment.
 Special curing of finished work.
 Nature of base and preparatory work.

| CATEGORIES | 1 2 | | 3 | 4 UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|--------------------------------------|-----------------------------|-----------------------------------|--------|--|-------------------|---|
| 1 General Rules | | | | | Excavations and earthworks shall be measured in accordance with the Rules of Work Section 04:2. Concrete roads and footpaths shall be measured in accordance with the Rules of Work Section 06:1. Work shall be measured on the exposed face to which the work is to be applied. No deduction shall be made for voids ≤0.50m². Work of a repairing nature shall be kept separate. | | Working over and around obstructions. Working into recesses and shaped inserts. Forming or working into shallow channels ar associated labours. |
| 2 Roads 3 Pavings | 1 thickness and number of coats | | 1 falls 2 falls and crossfalls | m² | 6 The thickness stated shall be the finished thickness. | | 1 Intersections on work to crossfalls. |
| 4 Linings to channels | | 1 girth on face | | m | | | Arrises, coves, ends, angles, intersections ar working to outlets. |
| 5 Sundries | 1 separating membrane | 1 thickness | | m² | _ | | |
| | 2 fair joint to existing finishes | 1 nature of existing finish | _ | m | - | | |
| | 3 designed joint | 1 detailed description | 1 curved | | | | |
| | 4 tree grilles | | | nr | | | |
| Line marking Letters and figures Traffic boxes | 1 detailed description, width stated | | | m | 7 Consistently sized gaps shall be ignored in calculating the length. | | |
| 7 Letters and figures 8 Traffic boxes 9 Ghost islands 10 Pedestrian crossings 11 Like items | 1 detailed description | | | nr | | | |

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2. Surface Paving, Fencing and Landscaping: Pre-Formed Paving and Edging Units

INFORMATION REQUIRED

- Location Drawings.Nature and preparatory work to base.
- Kind, quality and size of materials.
 Composition and mix of mortar, bedding or other method of fixing.
 Treatments of joints.
- ▶ Purpose-made bricks or slabs.
- ▶ Pattern.

| CATEGORIES | 1 2 | | 3 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|-----------------------|-----------------------------------|-----------------------------|--|------|---|-------------------|--|
| 1 General Rules | | | | | Excavations and earthworks shall be measured in accordance with the Rules of Work Section 04:2. Work shall be measured on the exposed face to which the work is to be applied. No deduction shall be made for voids ≤0.50m². The thickness stated shall be the nominal thickness. Work of a repairing nature shall be kept separate. | | Fair edges, internal and external angles. Cutting and fittings around obstructions. Forming, cutting and fitting into recesses shaped inserts. Forming or working into shallow channels associated labours. |
| 2 Roads 3 Pavings | 1 thickness | | 1 falls 2 falls and crossfalls | m² | | | 1 Intersections on work to crossfalls. |
| 4 Margins 5 Treads | 1 width or height and thickness | | curved foundation and haunching, details stated | m | | | 1 Excavation, disposal and formwork to foundations and haunchings. |
| 6 Risers | 1 plain 2 undercut | - | | | | | |
| 7 Kerbs 8 Edgings | 1 detailed description | | | | | | |
| 9 Linings to channels | 1 thickness | 1 girth on face | _ | | | | 1 Ends, angles, intersections and cutting to outlets. |
| 10 Sundries | 1 separating membrane | 1 thickness | | m² | - | | |
| | 2 fair joint to existing finishes | 1 nature of existing finish | - | m | - | | |
| | 3 curved cutting | | 1 | | | | |
| | 4 designed joints | 1 detailed description | 1 curved | 1 | | | |
| | 5 tree grilles | 1 | | nr | 1 | | |

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3. Surface Paving, Fencing and Landscaping: Fencing

INFORMATION REQUIRED

- Location Drawings.Kind, quality and size of materials.
- Nature of construction and support foundations.
 Surface treatment of materials.
 Struts and backstays.

| CATEGORIES | 1 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|------------------|--|--|---|------|--|-------------------|---|
| 1 Fencing | 1 type | 1 height of fence, spacing and size of supports and depth below ground | curved on ground sloping >15° concrete foundations giving details isolated lengths <3.00m, stating number of areas | m | Fencing shall be measured overall including supports and special supports. The height of fencing shall be measured from the finished ground level or other stated base to the top of the fencing, top wire or top rail between the posts. | | Excavation. Backfilling and disposal of surplus excavated materials. |
| 2 Extra over for | end posts angle posts straining posts like items | height of fence, sectional dimensions and depth below ground stated | | nr | 3 Extra over for breaking up shall be measured, where required, for each category of work measured in accordance with Category 2 column. | | |
| 3 Gates | 1 detailed description including ironmongery | | | | | | |
| 4 Gate posts | 1 detailed description | | | | | | |
| 5 Extra over for | 1 breaking up; stating thickness | rock concrete reinforced concrete brick, block, stonework hard surface; detailed description | 1 reinstating to match existing | | | | |
| | excavating, handling and disposal of contaminated or hazardous materials | 1 details stated | | | | | |
| | | | | | | | |
| | | | | | | | |

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4. Surface Paving, Fencing and Landscaping: Grassing and Planting

INFORMATION REQUIRED

- Location Drawings.
 Kind, quality composition and mix of applied materials and method of application.
- Kind, quality and botanical name of planted items.
 Size and type of pits/trenches for planting.

- Method of cultivating. Type of supports and ties.
 Aftercare and watering.
- Labelling.
 Timing of operations.

| 23 | CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--------------------------|--|---|-------------------------|--|------|---|---|---|
| | | imported preserved specially formulated, details stated | 1 finished depth stated | | m² | Proprietory 'green roof' systems shall be measured in accordance with the Rules of Work Section 09:4. | Specially formulated topsoil is designed to achieve specific requirements such as weight reduction. | 1 Spreading and grading topsoil to levels. |
| | 2 Preparation | 1 detailed description, depth stated | | weeding of existing surfaces cutting back existing growth | | | | |
| | 3 Surface applications | 1 type and rate of application | | | | | 1 Surface applications include: weedkillers, herbicides, peat, manure, compost, mulch, fertiliser, sand and the like. | 1 Working in surface applications. |
| | 4 Seeding | | | | | | | |
| | 5 Sod laying | 1 detailed description | | | | | | |
| | Bulbs, corms and tubers Plants Shrubs Trees | | | 1 mulching after planting | nr | | | 1 Refilling, removal of surplus material and watering in. |
| | 10 Hedges | | | | m | | | |
| | 11 Sundries | 1 tree guards 2 wrapping | 1 detailed description | | nr | | | |
| 4. Grassing and Planting | 12 Maintenance for Defects Liability Period | 1 detailed description of requirements | | | item | | | |

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1. Fittings: Fittings, Equipment and Furniture

INFORMATION REQUIRED

Location Drawings.
Component drawings and details.
Nature of construction, components and source.

|--|

| CATEGORIES 1 | 2 | 3 | 4 | UNIT | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---|---|---------------------------|---|------|-------------------|-------------------|---|
| 1 Fittings | sanitary signage fireplace and hearth special purpose, details stated | 1 detailed description | fixing requirements where not at Contractor's discretion special storage or protection, details stated | nr | | | Fixing to backgrounds where at Contractor's discretion. Making good finishings. Disconnecting, setting aside and subsequent refixing, for the convenience of other trades. Fittings, accessories and the like that are part of the set of |
| 2 Equipment | storage play domestic kitchen catering special purpose, details stated | | | | | | the item. 5 Assembling. |
| 3 Furniture, furnishings, details stated | internal furnishings curtains or blinds site special purpose, details stated catering ranges cupboards built-in seating shelving curtain tracks | | | | | | |
| 4 Rails 5 Protective guards | 1 rubbing rails or the like | | | m | | | |
| | 2 base pads | | | nr | | | |
| 6 Fixing items supplied by a Reserved Supplier, Nominated | 1 detailed description | 1 method of fixing stated | | | | | 1 Accepting delivery, storing and fixing in position |
| Supplier or by Employer | | | | | | | |
| | | | | | | | |

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INFORMATION REQUIRED

> Drawings showing scope and location of each type of work.

- Location of the buildings, pods or elements.
- ▶ Plans, elevations and section drawings.
- Methods of fixing and installing.
- Nature of work in connecting to other work and mechanical and electrical
- services.
- > Details and locations of mechanical and electrical services to be connected to.
- Kind and quality of materials, for structure, components, finishes, services and fittings.

| 5 | CATEGORIES 1 | l 2 | 3 | 4 | Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|--|------------------------------------|---|------------------------|---|----------------|--|-------------------|--|
| nts | 1 General rules | | | | | Required off-site elements and components such as external walls, internal walls, floors, stairs, roofs, structural frames, windows, doors, screens, curtain walling, balustrades and handrails, rooflights, mechanical and electrical installations, lifts and the like, fittings, equipment and furniture, manholes, chambers and the like, fencing and gates shall be so described and measured in accordance with the Rules of the relevant Work Sections. | | |
| n Building Elements | 2 Prefabricated buildings | medical buildings office and commercial buildings educational buildings residential buildings other buildings, type and function stated | 1 detailed description | | nr | 2 Associated work on site shall be measured in accordance with the relevant Work Sections. | | Contractor's design input. Manufacture and assembly off-site. All off-site structural work, components, finishes, services and fittings. Transport to site. Off-loading and storing on site. On site assembling and hoisting into position. Fixing/installing. Connection to mechanical and electrical services |
| Modular System | 3 Prefabricated building pods | toilet/bathroom pods kitchen pods bedroom pods other, type and function stated | | | nr | | | 8 Connection to mechanical and electrical services |
| Off-Site Fabrication – Prefabricated Buildings, Pods and Moo | 4 Modular system building elements | 1 external wall panels 2 internal walls 3 floors 4 roof 5 other, type and function stated | | | m ² | | | |
| 1. Off-Site Fabrica | | | | | | | | |

| | | 3 | | 4 Unit | MEASUREMENT RULES | MEASUREMENT SCOPE | DEEMED TO BE INCLUDED |
|---------------------|--|---|---|--------|--|--|-------------------------|
| 1 Material samples | detailed description of samples required including sizes, numbers required and disposal requirements | | 1 off-site – location and details stated | item | | | 1 Removal and disposal. |
| 2 Exemplar rooms | 1 detailed description of room construction and fit-out, location and timing | | | | | | |
| 3 Mock-ups | 1 detailed description of mock- up required | | | | | | |
| 4 Tests and reports | 1 detailed description of tests and reports required | 1 the number and/or frequency of tests required and, where relevant, size, and number of samples required | | | 1 The requirements for a full description of the test required may be met by provision of details of standard test references. | 1 Testing required for work measured under the Rules of Work Sections 14, 15 and 16 shall be measured in accordance with the Rules of the respective Work Sections. | |

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| A Abbreviations | 5 |
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