

# **TENDER DOCUMENTS (Phase 3)**

**for**

**Yorkshire Dales National Park Authority,  
Yoredale, Bainbridge, Leyburn, North  
Yorkshire DL8 3EL**

**at**

**Dales Countryside Museum, Station Yard,  
Burtersett Rd, Hawes DL8 3NT**

**Project No: K861**

**Date: March 2019**

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# **INSTRUCTIONS TO TENDERERS**

**Day Cummins Ltd**

**Dales Countryside Museum**

## Contract Documents

The Specification will, together with the Contract Drawings, form part of the contract and the Contractor shall, if so requested, submit to the Employer within FOUR working days of demand and before the contract is a signed copy of the Specification fully priced & monied out in BLACK INK.

Should there be any doubt or obscurity as to the meaning of any portion of the Specification, the contractor shall submit in writing particulars of such doubts as soon as possible, in order that the doubt or obscurity may be removed prior to the submission of his tender.

Any unauthorised alterations, additions or notes made by the Contractor to the text of the Bills of Quantities will not be recognised & in case of dispute, the original text of the Bills will be adhered to.

## Pricing

All items in 'Preliminaries' are to be priced out where applicable, otherwise rates for measured work will be deemed to include for these items.

All items which the contractor wishes to price must be priced individually; lump sums against groups of items will not be acceptable.

If any items are left un-priced, the Contractor will be required to execute the works without charge.

Items shall be priced in pounds and decimal parts of a pound. Extensions into the money column must be restricted to two places of decimals.

## **The following tender documents are to be returned:**

- Selection Questionnaire – Completed details/information
- Form of Tender
- Collusive Tender Certificate
- Summary of Tender
- Priced schedule of works
- Details of flat roofing system (incl BBA certificate)

## FORM OF TENDER (FIRM PRICE QUOTATION)

**Day Cummins Ltd**

**Dales Countryside Museum**

I/We the undersigned ..... undertake to execute the whole of the work required to be carried out in connection with the completion of the above project as shown on the Contract Drawings and described in the Contract Specification to the full and complete satisfaction of the Contract Administrator for the following sum;

**Firm Priced Tender:**

**Pounds.....Pence.....**

**£.....**

I/We confirm that I/We have visited the site.

The particulars to be inserted in Clause 2 of the Form of Contract will be as follows:

Earliest Date of Commencement: 23<sup>th</sup> September 2019 (TBC)

Date for Completion: 20<sup>th</sup> December 2019

Contract Period: 13 Weeks

Liquidated Damages: £ 100.00 per week

This form of tender accompanied by the Completed Selection Questionnaire, Pre-Collusive Tendering Certificate, Summary of Tender, Priced schedule of works, Details of flat roofing system (incl BBA certificate) must be returned not later than **12 noon 7th June 2019**

Signature of the Contractor.....

Title of the Firm.....

Date.....

Telephone No.....

The Employer is not bound to accept the lowest or any tender and no liability will be accepted for any cost incurred in the preparation of any tender. The period for acceptance of tenders is to be three months.

## **COLLUSIVE TENDERING CERTIFICATE**

**Day Cummins Ltd**

**Dales Countryside Museum**

We certify that this is a bona fide tender, and that we have not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other person. We also certify that we have not done and we undertake that we will not do at any time before the hour and date specified for the return of this tender any of the following acts:-

a. Communicating to a person other than the person calling for those tenders the amount or approximate amount of the proposed tender except where the disclosure, in confidence, of the approximate amount of the tender was necessary to obtain insurance's premium quotations required for the preparation of the tender.

b. Entering into any agreement or arrangement with any other person that he shall refrain from tendering or as to the amount of any tender to be submitted.

c. Offering or paying or giving or agreeing to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the said work any act or thing of sort described above.

In this certificate the word 'person' includes any persons and any body or association, corporate or unincorporated; and any agreement or arrangement' includes any such transaction, formal or informal, and whether legally binding or not.

Signed:.....

On Behalf of:.....

Date:.....

## **SUMMARY of TENDER**

**Day Cummins Ltd**

**Dales Countryside Museum**

Preliminaries	£
Contingency/Provisional Sum	£6,000.00
Specification	£
Schedule of Works Pages	£
Health & Safety	£
<b>TOTAL CARRIED TO FORM OF TENDER</b>	<b>£</b> <u>          </u>

**DAY CUMMINS LTD**

**CORPORATE MAINTENANCE PROGRAM, CUMBRIA**

**TENDER PACKAGE – Dales Countryside Museum**

**DETAILS OF FLAT ROOFING SYSTEM**

Contractor to provide details with appropriate BBA certifying certificate of the proposed flat roofing system to be adopted

Contractor:

.....

Confirmation of flat roof system proposed for **Dales Countryside Museum**

:

.....

Roofing System BBA Certificate Number

.....

## Section 1:

### Preliminaries



## **A10 PROJECT PARTICULARS**

### **110 THE PROJECT**

- Name: Dales Countryside Museum.
- Nature: Description of work Phase 3 - Remedial water ingress measures & replacement of Atrium.
- Location: Dales Countryside Museum
- Length of contract: 13 weeks.

### **120 EMPLOYER (CLIENT)**

- Name: Yorkshire Dales National Park Authority.
- Address: Yoredale, Bainbridge, Leyburn North Yorkshire DL8 3EL
- Contact: Fiona Rosher (Museum Manager).
- Telephone: 01969666219.
- E-mail: Fiona.Rosher@yorkshiredales.org.uk

### **130 PRINCIPAL CONTRACTOR (CDM)**

- Name: The Contractor.
- Address: TBC.
- Contact: TBC.
- Telephone: TBC.
- E-mail: TBC.

### **140 ARCHITECT/ CONTRACT ADMINISTRATOR**

- Name: Day Cummins Ltd.
- Address: Lakeland Business Park, Lamplugh Rd, Cockermouth, Cumbria CA13 0QT .
- Contact: Mark Bramley.
- Telephone: 01539722658.
- E-mail: mark.bramlet@day-cummins.co.uk.

### **150 PRINCIPAL DESIGNER**

- Name: Peter Bromiley.
- Address: Lakeland Business Park, Lamplugh Rd, Cockermouth, Cumbria CA13 0QT
- Contact: Peter Bromiley.
- Telephone: 07786262001.
- E-mail: peter.bromiley@day-cummins.co.uk

## **A11 TENDER AND CONTRACT DOCUMENTS**

### **110 TENDER DRAWINGS**

- The tender drawings are: 861/01 – 861/05, structural engineers drwg (19-056 DWG001\_D) & associated Bauder package

### **120 CONTRACT DRAWINGS**

- The Contract Drawings: The same as the tender drawings.

### **160 PRECONSTRUCTION INFORMATION**

- Format: The Preconstruction information is described in these preliminaries in Section A34. It refers to information given elsewhere in the preliminaries and other tender documents.

### **180 OTHER DOCUMENTS**

- Inspection: Drawings and other documents relating to the Contract but not included in the tender documents may be seen by appointment during normal office hours at the office of the property.
- The documents include: Asbestos Register, relevant Health & safety Files.

## **A12 THE SITE/ EXISTING BUILDINGS**

### **110 THE SITE**

- Description: A local tourist attraction site with Museums, Cafe and public parking

- 120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE
- Description: Museums, Café, public parking and toilet
- 140 EXISTING UTILITIES AND SERVICES
- Drawings: (Information shown is indicative only): None Available.
  - Other information: Drawings/information may be available from the building manager upon request.
- 160 SOILS AND GROUND WATER
- Information: n/a.
- 170 SITE INVESTIGATION
- Report: N/A.
- 180 HEALTH AND SAFETY FILE
- Availability for inspection: The Health and Safety File for the site/ building may be seen by appointment during normal office hours at Dales Countryside Museum.
  - Other documents: Asbestos register.
  - Arrangements for inspection: To be made with property manager.
- 200 ACCESS TO THE SITE
- Description: The property is located off the A684 (Burtersett Road) in Hawes, North Yorkshire.
  - Limitations: To be agreed with property manager.
- 210 PARKING
- Restrictions on parking of the Contractor's and employees' vehicles: To be agreed with property manager.
- 220 USE OF THE SITE
- General: Do not use the site for any purpose other than carrying out the Works.
  - Limitations: No specific limitation, other than to follow site rules at all times
- 230 SURROUNDING LAND/ BUILDING USES
- General: Adjacent or nearby uses or activities are as follows:
    - Museums, public parking and toilet
- 240 HEALTH AND SAFETY HAZARDS
- General: The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up. However, the following hazards are or may be present:
    - Asbestos. (Refer to Pre-refurbishment – no asbestos identified)
    - Glazed Atrium -non load bearing.
  - Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer's representative. Ascertain if any additional information is required to ensure the safety of all persons and the Works.
  - Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.
- 250 SITE VISIT
- Assessment: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
  - Arrangements for visit: **Property Manager: – Fiona Rosher (Museum Manager) Tel- 01969 666219**

## A13 DESCRIPTION OF THE WORK

- 110 PREPARATORY WORK BY OTHERS
- Works: Carried out under a separate contract and completed before the start of work on site for this Contract.
  - Description: None.
- 120 THE WORKS
- Description: Atrium roof to be replaced with a flat roof structure incorporating lantern lights, flat roof over-roofing, parapet cladding/coping works and internal making good works.

130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Description: None.

140 COMPLETION WORK BY OTHERS

- Description: None.

## **A20 JCT MINOR WORK BUILDING CONTRACT (MW)**

### **JCT MINOR WORKS BUILDING CONTRACT**

- The Contract: JCT Minor Works Building Contract 2016 Edition.
- Requirement: Allow for the obligations, liabilities and services described.

### **THE RECITALS**

#### **First - THE WORKS AND THE CONTRACT ADMINISTRATOR**

- The work comprises the Atrium roof to be replaced with a flat roof structure incorporating lantern lights, flat roof over-roofing, parapet cladding/coping works and internal making good works.
- Architect/ Contract Administrator: See clause A10/140.

#### **Second - CONTRACT DOCUMENTS**

- Contract drawings: As listed in clause A11/120.  
Contract documents: The following have been prepared which show and describe the work to be done
  - A specification;
  - Work schedules; and
  - The drawings.

#### **Third - PRICED DOCUMENTS**

- Documents to be priced or provided by the Contractor as above. The references to Schedule of Rates will be deleted..

### **THE ARTICLES**

#### **3 - ARCHITECT/ CONTRACT ADMINISTRATOR**

- Architect/ Contract Administrator: See clause A10/140.

#### **4 and 5 - PRINCIPAL DESIGNER/ PRINCIPAL CONTRACTOR**

- Principal Designer: See clause A10/150
- Principal Contractor: See clause A10/150

### **CONTRACT PARTICULARS**

#### **Fourth Recital and Schedule 2 - BASE DATE**

- Base date: 23/4/2019.

#### **Fourth Recital and clause 4.2 - CONSTRUCTION INDUSTRY SCHEME (CIS)**

- Employer at the Base Date is a 'contractor' for the purposes of the CIS.

#### **Fifth Recital - CDM REGULATIONS**

- The project is notifiable.

#### **Sixth Recital - FRAMEWORK AGREEMENT**

- Framework agreement: Does not apply.
- Details:
  - Date: n/a.
  - Title: n/a.
- Parties: n/a.

#### **Seventh Recital and Schedule 3 - SUPPLEMENTAL PROVISIONS**

- Collaborative working: Supplemental Provision 1 applies.
- Health and safety: Supplemental Provision 2 applies.

- Cost savings and value improvements: Supplemental Provision 3 applies.
- Sustainable development and environmental considerations: Supplemental Provision 4 applies.
- Performance indicators and monitoring: Supplemental Provision 5 does not apply.
- Notification and negotiation of disputes: Supplemental Provision 6 applies. Where Supplemental Provision 6 applies, the respective nominees of the parties are:
  - Employer's nominee: The President or vice president or the chairman of The Royal Institution of Chartered Surveyors.
  - Contractor's nominee: \_\_\_\_\_.
 Or such replacement as each party may notify to the other from time to time.

#### Article 7 - ARBITRATION

- Article 7 and Schedule 1 apply.

#### Clause 2.3 - COMMENCEMENT AND COMPLETION

- Works Commencement date: 23/9/2019
- Date for Completion: 20/12/2019

#### Clause 2.8 - LIQUIDATED DAMAGES

- At the rate of £100.00 per calendar week or pro-rata thereto.

#### Clause 2.10 - RECTIFICATION PERIOD

- Period: 12 months from the date of practical completion.

#### Clause 4.3 - INTERIM PAYMENTS

##### Interim Valuation Dates:

- The first Interim Valuation Date is: TBA at pre-start.
- Thereafter at intervals of: TBA at pre-start.
- Payments due prior to practical completion:
  - Percentage of total value of the work etc.: 95 per cent.
- Payments becoming due on or after practical completion:
  - Percentage of the total amount to be paid: 97.5 per cent.

#### Clause 4.8.1 - SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED

- Period: Three months from the date of practical completion.

#### Clause 5.3 - CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY

- The required level of cover for any one occurrence or series of occurrences arising out of one event:
  - Not less than: 5,000,000.00.

#### Clauses 5.4A, 5.4B and 5.4C - INSURANCE OF THE WORKS, ETC. - ALTERNATIVE PROVISIONS

- Clause 5.4B applies (Works and existing structures insurance by Employer in Joint Names)
- Where clause 5.4.A or 5.4B applies. percentage to cover professional fees: 15 per cent.

#### Clause 7.2 - ADJUDICATION

- The Adjudicator is: to be appointed.
- Nominating body: Royal Institution of Chartered Surveyors.

#### Schedule 1 paragraph 2.1 - ARBITRATION

- Appointor of Arbitrator (and of any replacement): President or a Vice president of the: Royal Institution of Chartered Surveyors.

## THE CONDITIONS

### SECTION 1: DEFINITIONS AND INTERPRETATION

### SECTION 2: CARRYING OUT THE WORKS

### SECTION 3: CONTROL OF THE WORKS

## SECTION 4: PAYMENT

## SECTION 5: INJURY, DAMAGE AND INSURANCE

## SECTION 6: TERMINATION

## SECTION 7: SETTLEMENT OF DISPUTES

## EXECUTION

- The Contract: Will be executed of as a deed. (12 years)

# A30 TENDERING/ SUBLETTING/ SUPPLY

## MAIN CONTRACT TENDERING

### 110 SCOPE

- General: These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.

### 145 TENDERING PROCEDURE

- General: In accordance with NBS Guide to Tendering for Construction Projects.
- Errors: Alternative 2 is to apply.

### 160 EXCLUSIONS

- Inability to tender: Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.
- Relevant parts of the work: Define those parts, stating reasons for the inability to tender.

### 170 ACCEPTANCE OF TENDER

- Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non-acceptance will be given.
- Costs: No liability is accepted for any cost incurred in the preparation of any tender.

### 190 PERIOD OF VALIDITY

- Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 6 months.
- Date for possession/ commencement: See section A20.

## PRICING/ SUBMISSION OF DOCUMENTS

### 210 PRELIMINARIES IN THE SPECIFICATION

- The Preliminaries/ General conditions sections (A10-A56 inclusive) must not be relied on as complying with SMM7/ NRM2.

### 250 PRICED DOCUMENTS

- Alterations: Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
- Measurements: Where not stated, ascertain from the drawings.
- Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.
- Submit: With tender.

### 310 TENDER

- General: Tenders must include for all work shown or described in the tender documents as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.

### 440 SCHEDULE OF RATES

- Schedule of rates (unpriced): Included with the tender documents. The Contractor may insert additional items. All items must be fully priced.
- Fully priced copy: Submit with the tender.

## 500 TENDER STAGE METHOD STATEMENTS

- Method statements: Prepare, describing how and when the following is to be carried out:
  - Soft Landings.
- Statements: Submit with the tender.

## 530 SUBSTITUTE PRODUCTS

- Details: If products of different manufacture to those specified are proposed, submit details with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered.
- Compliance: Substitutions accepted will be subject to the verification requirements of clause A31/200.

## 550 HEALTH AND SAFETY INFORMATION

- Content: Describe the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
- Include:
  - A copy of the contractor's health and safety policy document, including risk assessment procedures.
  - Accident and sickness records for the past five years.
  - Records of previous Health and Safety Executive enforcement action.
  - Records of training and training policy.
  - The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.
- Submit: Within one week of request.

## 570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Content: Submit the following information within one week of request:
  - Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed.
  - Details of the management structure and responsibilities.
  - Arrangements for issuing health and safety directions.
  - Procedures for informing other contractors and employees of health and safety hazards.
  - Selection procedures for ensuring competency of other contractors, the self-employed and designers.
  - Procedures for communications between the project team, other contractors and site operatives.
  - Arrangements for cooperation and coordination between contractors.
  - Procedures for carrying out risk assessment and for managing and controlling the risk.
  - Emergency procedures including those for fire prevention and escape.
  - Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
  - Arrangements for welfare facilities.
  - Procedures for ensuring that all persons on site have received relevant health and safety information and training.
  - Arrangements for consulting with and taking the views of people on site.
  - Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
  - Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
  - Review procedures to obtain feedback.

## 599 FREEDOM OF INFORMATION

- Records: Retain, make available for inspection and supply on request information reasonably required to allow response to requests made under the provisions of the Freedom of Information Act.
- Determination: Submit requests received. Do not supply information to anyone other than the project participants without express written permission.
- Confidentiality: Maintain at all times.

## **SUBLETTING/ SUPPLY**

## 630 DOMESTIC SUBCONTRACTS

- General: comply with Construction Industry Board 'Code of Practice for the selection of subcontractors'.

#### 640 'LISTED' DOMESTIC SUBCONTRACTORS

- General: The work listed below and described in the Contract Documents must be carried out by persons identified in a list as provided for in clause A30/645:
  - The work: n/a.
  - Enter into a contract with one of the following:  
n/a.

#### 645 'LISTED' DOMESTIC SUBCONTRACTORS

- General: Contract Documents provide that certain work must be carried out by a person of the Contractor's choice selected from a list of not less than three persons given therein.
- The selected person: Will become a subcontractor as provided for in the Contract Condition for Subletting.
- Additions to lists:
  - The Employer or Employer's representative may, but only with the consent of the Contractor which shall not be unreasonably withheld, add additional person(s) to the list at any time prior to the execution of a binding subcontract agreement.
  - The Contractor may, but only with consent, which will not be unreasonably withheld, add additional persons to the list and must, if requested, submit (in an approved form) evidence of the suitability of such additional person(s). Wherever possible, submissions for addition of person(s) must be made, and consent obtained, before return of the tender. When any submission for addition of person(s) is made with the tender the consequences, if any, to the tender price compared to the use of the listed persons are to be made clear or the tender will be treated as qualified.
- Shortage of names: If at any time prior to execution of a binding subcontract agreement less than three persons named in the list (including any persons added as provided above) are able and willing to carry out the relevant work, give notice without delay. The Employer will then forthwith add the names of other persons as provided above so that the list comprises not less than three such persons, or confirm that no names will be added. If the Employer fails to do either within one week of the Contractor's notification the Contractor, who may subcontract in accordance with the Contract, must carry out the work.
- Agreement: Before the start of work to which the list relates enter into a binding subcontract agreement and confirm that this has been done, giving the name of the selected subcontractor.

## A31 PROVISION, CONTENT AND USE OF DOCUMENTS

### DEFINITIONS AND INTERPRETATIONS

#### 110 DEFINITIONS

- Meaning: Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated therein or in the appropriate British Standard or British Standard glossary.

#### 120 COMMUNICATION

- Definition: Includes advise, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.
- Format: In writing to the person named in clause A10/140 unless specified otherwise.
- Response: Do not proceed until response has been received.

#### 130 PRODUCTS

- Definition: Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
- Includes: Goods, plant, materials, site materials and things for incorporation into the Works.

#### 135 SITE EQUIPMENT

- Definition: All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
- Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.

#### 140 DRAWINGS

- Definitions: To BSRIA BG 6 A design framework for building services. Design activities and drawing definitions.
- CAD data: In accordance with BS 1192.

#### 145 CONTRACTOR'S CHOICE

- Meaning: Selection delegated to the Contractor, but liability to remain with the specifier.

#### 155 SUBMIT PROPOSALS

- Meaning: Submit information in response to specified requirements.

#### 160 TERMS USED IN SPECIFICATION

- Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
- Fix: Receive, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packaging including all labour, materials and site equipment for that purpose.
- Supply and fix: As above, but including supply of products to be fixed. All products to be supplied and fixed unless stated otherwise.
- Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer/ Purchaser or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Refix: Fix removed products.
- Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

#### 170 MANUFACTURER AND PRODUCT REFERENCE

- Definition: When used in this combination:
  - Manufacturer: The firm under whose name the particular product is marketed.
  - Product reference: The proprietary brand name and/ or reference by which the particular product is identified.
- Currency: References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

#### 200 SUBSTITUTION OF PRODUCTS

- Products: If an alternative product to that specified is proposed, obtain approval before ordering the product.
- Reasons: Submit reasons for the proposed substitution.
- Documentation: Submit relevant information, including:
  - manufacturer and product reference;
  - cost;
  - availability;
  - relevant standards;
  - performance;
  - function;
  - compatibility of accessories;
  - proposed revisions to drawings and specification;
  - compatibility with adjacent work;
  - appearance;
  - copy of warranty/ guarantee.
- Alterations to adjacent work: If needed, advise scope, nature and cost.
- Manufacturers' guarantees: If substitution is accepted, submit before ordering products.



## 210 CROSS REFERENCES

- Accuracy: Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
- Related terminology: Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.
- Relevant clauses: Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
- Discrepancy or ambiguity: Before proceeding, obtain clarification or instructions.

## 220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

## 230 EQUIVALENT PRODUCTS

- Inadvertent omission: Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

## 240 SUBSTITUTION OF STANDARDS

- Specification to British Standard or European Standard: Substitution may be proposed complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
- Before ordering: Submit notification of all such substitutions.
- Documentary evidence: Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

## 250 CURRENCY OF DOCUMENTS AND INFORMATION

- Currency: References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to Tender.

## 260 SIZES

- General dimensions: Products are specified by their co-ordinating sizes.
- Timber: Cross section dimensions shown on drawings are:
  - Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
  - Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

### **DOCUMENTS PROVIDED ON BEHALF OF THE EMPLOYER**

## 410 ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

- Additional copies: Issued free of charge.

## 440 DIMENSIONS

- Scaled dimensions: Do not rely on.

## 450 MEASURED QUANTITIES

- Ordering products and constructing the Works: The accuracy and sufficiency of the measured quantities is not guaranteed.
- Precedence: The specification and drawings shall override the measured quantities.

## 460 THE SPECIFICATION

- Coordination: All sections must be read in conjunction with Main Contract Preliminaries/ General conditions.

## 480 TECHNICAL DOCUMENTS

- Reference documents: Available for inspection by appointment during the normal office hours at the office of the property.
- Document titles:
  - Asbestos Register, Health & Safety Files.

### **DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS**

## 630 TECHNICAL LITERATURE

- Information: Keep on site for reference by all supervisory personnel:
  - Manufacturers' current literature relating to all products to be used in the Works.
  - Relevant British, EN or ISO Standards.

#### 640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

- Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
- Information location: In Building Manual.
- Emergency call out services: Provide telephone numbers for use after completion. Extent of cover: office hours only.

## A32 MANAGEMENT OF THE WORKS

### GENERALLY

#### 110 SUPERVISION

- General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
- Coordination: Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for coordination of the work.

#### 115 CONSIDERATE CONSTRUCTORS SCHEME

- Registration: Before starting work, register the site and pay the appropriate fee:
- Contact:
  - Address: Considerate Constructors Scheme Office, PO Box 75, Great Amwell, Ware, Hertfordshire, SG12 0YX.
  - Tel. 01920 485959.
  - Fax. 01920 485958.
  - Free phone 0800 7831423
  - Web. [www.ccscheme.org.uk](http://www.ccscheme.org.uk)
  - E mail. [enquiries@ccscheme.org.uk](mailto:enquiries@ccscheme.org.uk)
- Standard: Comply with the Scheme's Code of Considerate Practice.
- Minimum compliance level: basic compliance.

#### 120 INSURANCE

- Documentary evidence: Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract.

#### 130 INSURANCE CLAIMS

- Notice: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the Employer, the person named in clause A10/140 and the Insurers.
- Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

#### 140 CLIMATIC CONDITIONS

- Information: Record accurately and retain:
  - Daily maximum and minimum air temperatures (including overnight).
  - Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

#### 150 OWNERSHIP

- Alteration/ clearance work: Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

### PROGRAMME/ PROGRESS

#### 210 PROGRAMME

- Master programme: Immediately when requested and before starting work on site submit in an approved form a master programme for the Works, which must include details of:
  - Planning and mobilisation by the Contractor
  - Subcontractor's work.
  - Running in, adjustment, commissioning and testing of all engineering services and installations.
  - Work resulting from instructions issued in regard to the expenditure of provisional sums.
  - Work by others concurrent with the Contract.

- Submit one copy.

#### 245 START OF WORK ON SITE

- Notice: Before the proposed date for start of work on site give minimum notice of one week.

#### 250 MONITORING

- Progress: Record on a copy of the programme kept on site.
- Avoiding delays: If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.
- Key Performance Indicators:
  - Details: n/a.
  - Record progress against each of the KPIs. If performance against KPI falls short of target, submit proposals for remediation.

#### 260 SITE MEETINGS

- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
- Frequency: TBC but anticipated - every month.
- Location: The Site.
- Accommodation: Ensure availability at the time of such meetings.
- Attendees: Attend meetings and inform subcontractors and suppliers when their presence is required.
- Chairperson (who will also take and distribute minutes): Contract Administrator.

#### 310 EXTENSIONS OF TIME

- Notice: When a notice of the cause of any delay or likely delay in the progress of the works is given under the contract, written notice must also be given of all other causes which apply concurrently.
- Details: As soon as possible submit:
  - Relevant particulars of the expected effects, if appropriate, related to the concurrent causes.
  - An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the date for completion.
  - All other relevant information required.

### **CONTROL OF COST**

#### 420 REMOVAL/ REPLACEMENT OF EXISTING WORK

- Extent and location: Agree before commencement.
- Execution: Carry out in ways that minimize the extent of work.

#### 430 PROPOSED INSTRUCTIONS

- Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.

#### 440 MEASUREMENT

- Covered work: Give notice before covering work required to be measured.

#### 450 DAYWORK VOUCHERS

- Before commencing work: Give reasonable notice to person countersigning daywork vouchers.
- Content: Before delivery each voucher must be:
  - Referenced to the instruction under which the work is authorised.
  - Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.
- Submit: By the end of the week in which the work has been executed.

#### 470 PRODUCTS NOT INCORPORATED INTO THE WORKS

- Ownership: At the time of each valuation, supply details of those products not incorporated into the Works which are subject to any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values.
- Evidence: When requested, provide evidence of freedom of reservation of title.

## **A33 QUALITY STANDARDS/ CONTROL**

### **STANDARDS OF PRODUCTS AND EXECUTIONS**

#### **110 INCOMPLETE DOCUMENTATION**

- General: Where and to the extent that products or work are not fully documented, they are to be:
  - Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
  - Suitable for the purposes stated or reasonably to be inferred from the project documents.
- Contract documents: Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

#### **120 WORKMANSHIP SKILLS**

- Operatives: Appropriately skilled and experienced for the type and quality of work.
- Registration: With Construction Skills Certification Scheme.
- Evidence: Operatives must produce evidence of skills/ qualifications when requested.

#### **130 QUALITY OF PRODUCTS**

- Generally: New. (Proposals for recycled products may be considered).
- Supply of each product: From the same source or manufacturer.
- Whole quantity of each product required to complete the Works: Consistent kind, size, quality and overall appearance.
- Tolerances: Where critical, measure a sufficient quantity to determine compliance.
- Deterioration: Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

#### **135 QUALITY OF EXECUTION**

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: Without defects, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
- Location and fixing of products: Adjust joints open to view so they are even and regular.

#### **140 COMPLIANCE**

- Compliance with proprietary specifications: Retain on site evidence that the proprietary product specified has been supplied.
- Compliance with performance specifications: Submit evidence of compliance, including test reports indicating:
  - Properties tested.
  - Pass/ fail criteria.
  - Test methods and procedures.
  - Test results.
  - Identity of testing agency.
  - Test dates and times.
  - Identities of witnesses.
- Analysis of results.

#### **150 INSPECTIONS**

- Products and executions: Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
  - Date of inspection.
  - Part of the work inspected.
  - Respects or characteristics which are approved.
  - Extent and purpose of the approval.
  - Any associated conditions.

#### **160 RELATED WORK**

- Details: Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:

- Appropriately complete.
- In accordance with the project documents.
- To a suitable standard.
- In a suitable condition to receive the new work.
- Preparatory work: Ensure all necessary preparatory work has been carried out.

#### 170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

- General: Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
- Changes to recommendations or instructions: Submit details.
- Ancillary products and accessories: Use those supplied or recommended by main product manufacturer.
- Agrément certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

#### 180 WATER FOR THE WORKS

- Mains supply: Clean and uncontaminated.
- Other: Do not use until:
  - Evidence of suitability is provided.
  - Tested to BS EN 1008 if instructed.

### **SAMPLES/ APPROVALS**

#### 210 SAMPLES

- Products or executions: Comply with all other specification requirements and in respect of the stated or implied characteristics either:
  - To an express approval.
  - To match a sample expressly approved as a standard for the purpose.

#### 220 APPROVAL OF PRODUCTS

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

#### 230 APPROVAL OF EXECUTION

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

### **ACCURACY/ SETTING OUT GENERALLY**

#### 320 SETTING OUT

- General: Submit details of methods and equipment to be used in setting out the Works.
- Levels and dimensions: Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
- Inform: When complete and before commencing construction.

#### 330 APPEARANCE AND FIT

- Tolerances and dimensions: If likely to be critical to execution or difficult to achieve, as early as possible either:
  - Submit proposals; or
  - Arrange for inspection of appearance of relevant aspects of partially finished work.
- General tolerances (maximum): To BS 5606, tables 1 and 2.

#### 360 RECORD DRAWINGS

- Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the contract and hand over on completion.

## **SERVICES GENERALLY**

### **410 SERVICES REGULATIONS**

- New or existing services: Comply with the Byelaws or Regulations of the relevant Statutory Authority.

### **420 WATER REGULATIONS/ BYELAWS NOTIFICATION**

- Requirements: Notify Water Undertaker of any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.
- Consent: Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

### **430 WATER REGULATIONS/ BYELAWS CONTRACTOR'S CERTIFICATE**

- On completion of the work: Submit (copy where also required to the Water Undertaker) a certificate including:
  - The address of the premises.
  - A brief description of the new installation and/ or work carried out to an existing installation.
  - The Contractor's name and address.
  - A statement that the installation complies with the relevant Water Regulations or Byelaws.
  - The name and signature of the individual responsible for checking compliance.
  - The date on which the installation was checked.

### **435 ELECTRICAL INSTALLATION CERTIFICATE**

- Submit: When relevant electrical work is completed.
- Original certificate: To be lodged in the Building Manual.

### **440 GAS, OIL AND SOLID FUEL APPLIANCE INSTALLATION CERTIFICATE**

- Before the completion date stated in the Contract: Submit a certificate stating:
  - The address of the premises.
  - A brief description of the new installation and/ or work carried out to an existing installation.
  - Any special recommendations or instructions for the safe use and operation of appliances and flues.
  - The Contractor's name and address.
  - A statement that the installation complies with the appropriate safety, installation and use regulations.
  - The name, qualification and signature of the competent person responsible for checking compliance.
  - The date on which the installation was checked.
- Certificate location: H & S file/Building manual.

### **445 SERVICE RUNS**

- General: Provide adequate space and support for services, including unobstructed routes and fixings.
- Ducts, chases and holes: Form during construction rather than cut.
- Coordination with other works: Submit details of locations, types/ methods of fixing of services to fabric and identification of runs and fittings.

### **450 MECHANICAL AND ELECTRICAL SERVICES**

- Final tests and commissioning: Carry out so that services are in full working order at completion of the Works.
- Building Regulations notice: Copy to be lodged in the Building Manual.

## **SUPERVISION/ INSPECTION/ DEFECTIVE WORK**

### **525 ACCESS**

- Extent: Provide at all reasonable times access to the Works and to other places of the Contractor or subcontractors where work is being prepared for the Contract.
- Designate: Contract Administrator.

### **530 OVERTIME WORKING**

- Notice: Prior to overtime being worked, submit details of times, types and locations of work

to be done.

- Minimum period of notice: Two days.
- Concealed work: If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.

#### 540 DEFECTS IN EXISTING WORK

- Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
- Documented remedial work: Do not execute work which may:
  - Hinder access to defective products or work; or
  - Be rendered abortive by remedial work.

#### 560 TESTS AND INSPECTIONS

- Timing: Agree and record dates and times of tests and inspections to enable all affected parties to be represented.
- Confirmation: One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.
- Records: Submit a copy of test certificates and retain copies on site.

#### 570 AIR PERMEABILITY

- Testing organization: UKAS accredited and registered with the Air Tightness Testing and Measurement Association (ATTMA).
- Method:
  - Pressure test in accordance with Good Practice Guide 268.
- Standard:
  - Design Air tightness value (maximum):  $50.\text{m}^3/(\text{h}.\text{m}^2)$ .
- Results:
  - Content: Include test results and all supporting data.
  - Copies: Required for building control inspection and inclusion in Building Manual.
  - Electronic deposit: Through the ATTMA lodgement database
  - Additional copies: Provide on request.

#### 580 CONTINUITY OF THERMAL INSULATION

- Record and report: Confirm that work to new, renovated or upgraded thermal elements has been carried out to conform to specification. Include:
  - The address of the premises.
  - The Contractor's name and address.
  - The name, qualification and signature of the competent person responsible for checking compliance.
  - The date on which the installation was checked.
- Submit: Before completion of the Works.
- Copy: To be lodged in the Building Manual.

#### 590 RESISTANCE TO PASSAGE OF SOUND

- Method: Specified constructions.
- Compliance: Submit results of testing,
  - Copies: Incorporate in the Building Manual.

#### 595 ENERGY PERFORMANCE CERTIFICATE

- Assessment: Undertaken by a member of an approved accreditation scheme. Submit details of scheme name and evidence of qualifications when requested.
  - Building Type: Non-dwelling.
  - Method: Contractor's choice.
- Format:
  - Certificate: To be incorporated in the Building Manual.
  - Report: as per regs.
- Submit: Before the date for completion stated in the contract.

#### 610 DEFECTIVE PRODUCTS/ EXECUTIONS

- Proposals: Immediately any work or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
- Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

## **WORK AT OR AFTER COMPLETION**

### **710 WORK BEFORE COMPLETION**

- General: Make good all damage consequent upon the Works.  
Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.
- Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
- Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
- COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
- Minor faults: Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- Moving parts of new work: Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

### **720 SECURITY AT COMPLETION**

- General: Leave the Works secure with, where appropriate, all accesses closed and locked.
- Keys: Account for and adequately label all keys and hand over to Employer with itemized schedule, retaining duplicate schedule signed by Employer as a receipt.

### **730 MAKING GOOD DEFECTS**

- Remedial work: Arrange access with Contract Administrator.
- Rectification: Give reasonable notice for access to the various parts of the Works.
- Completion: Notify when remedial works have been completed.

## **A34 SECURITY/ SAFETY/ PROTECTION**

**(Also refer to Section 5.7 incl Pre-construction Information)**

## **SECURITY, HEALTH AND SAFETY**

### **120 EXECUTION HAZARDS**

- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: The design of the project includes the following:
  - Hazard: Working on an occupied site. Public/tourists will be entering & leaving the main concourse during normal working hours. Contractor to assess working practices with building manager to ensure normal day to day operations are not unduly disrupted. (Incl mobile scaffolding, barrier protection, adequate signage)
  - Hazard: Existing buildings will be occupied for the duration of the contract. Contractor will need to agree a programme for roof replacement work with the building manager in advance, to ensure availability to complete the works without causing disruption to the day to day activities.
    - Precautions assumed: Areas of work cordoned off/protected. Exercise good practice & monitor and be aware of the surroundings and the activity of others to avoid conflict and any other activity could cause.
    - Specification reference: general.
    - Drawing reference: as tender drawings.

### **130 PRODUCT HAZARDS**

- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits.
- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: Specified construction materials include the following:
  - Hazard: not listed. Control by good management and site practice.
  - Material: refer to preconstruction info.
  - Specification reference: refer to section 5.7 of tender documentation.

### **140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN**

- Submission: Present to the Employer/ Client no later than 1 week.
- Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by the CDM Regulations.
- Content: Develop the plan from and draw on the Outline Construction Phase Health and



Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan/ Preconstruction information.

150 SECURITY

- Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
- Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.
- Special requirements: n/a.

160 STABILITY

- Responsibility: Maintain the stability and structural integrity of the Works and adjacent structures during the Contract.
- Design loads: Obtain details, support as necessary and prevent overloading.

170 OCCUPIED PREMISES

- Extent: Working on an occupied site. Public/tourists will be entering & leaving the main concourse during normal working hours. Contractor to assess working practices with building manager to ensure normal day to day operations are not unduly disrupted. (Incl mobile scaffolding, barrier protection, adequate signage) • Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.
- Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be allowed, provided that such overtime is authorized in advance.

180 ACCESS CONTROL

- Controlled areas: Passes will be required for access to the property. Contractor to supply photo ID passes.
- Control type: Pass card.
- Authorised persons: Submit a list of the names of all persons requiring access together with any other related information reasonably required.
- Return of credentials: When requested or on completion of the work to which the controlled area relates.

190 OCCUPIER'S RULES AND REGULATIONS

- Compliance: Conform to the occupier's rules and regulations affecting the site.
  - Copies:
    - Location: Property.
- Arrangements for inspection **Property Manager: – Fiona Rosher (Museum Manager) Tel- 01969 666219**

200 MOBILE TELEPHONES AND PORTABLE ELECTRONIC EQUIPMENT

- Restrictions on use:
  - none.

210 EMPLOYER'S REPRESENTATIVES SITE VISITS

- Safety: Submit details in advance, to the Employer or the person identified in clause A10/140, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
- Protective clothing and/ or equipment: Provide and maintain on site for the Employer and the person stated in clause A10/140 and other visitors to the site.

220 WORKING PRECAUTIONS/ RESTRICTIONS

- Hazardous areas: Operatives must take precautions as follows:
  - Work area: TBC with Property Manager at Pre-Start Meeting.
  - Precautions: TBC with Property Manager at Pre-Start Meeting.
- Permit to work: Operatives must comply with procedures in the following areas:
  - Work area: TBC with Property Manager at Pre-Start Meeting.
  - Procedures: TBC with Property Manager at Pre-Start Meeting.

**PROTECT AGAINST THE FOLLOWING**

330 NOISE AND VIBRATION

- Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
- Noise levels from the Works: Maximum level: refer to regulations dB(A) when measured from as per regulations.

- Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Restrictions: Do not use:
  - Percussion tools and other noisy appliances without consent during the hours of TBC.
  - Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

#### 340 POLLUTION

- Prevention: Protect the site, the Works and the general environment including the atmosphere, land, streams and waterways against pollution.
- Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

#### 360 NUISANCE

- Duty: Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
- Surface water: Prevent hazardous build-up on site, in excavations and to surrounding areas and roads.

#### 370 ASBESTOS CONTAINING MATERIALS

- Duty: Report immediately any suspected materials discovered during execution of the Works.
  - Do not disturb.
  - Agree methods for safe removal or encapsulation.

#### 371 DANGEROUS OR HAZARDOUS SUBSTANCES

- Duty: Report immediately suspected materials discovered during execution of the Works.
  - Do not disturb.
  - Agree methods for safe removal or remediation.

#### 375 ANTIQUITIES

- Duty: Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the Works.
- Preservation: Keep objects in the exact position and condition in which they were found.
- Special requirements: None.

#### 380 FIRE PREVENTION

- Duty: Prevent personal injury or death, and damage to the Works or other property from fire.
- Standard: Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

#### 390 SMOKING ON SITE

- Smoking on site: Not permitted.

#### 400 BURNING ON SITE

- Burning on site: Not permitted.

#### 410 MOISTURE

- Wetness or dampness: Prevent, where this may cause damage to the Works.
- Drying out: Control humidity and the application of heat to prevent:
  - Blistering and failure of adhesion.
  - Damage due to trapped moisture.
  - Excessive movement.

#### 420 INFECTED TIMBER/ CONTAMINATED MATERIALS

- Removal: Where instructed to remove material affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.
- Testing: carry out and keep records of appropriate tests to demonstrate that hazards presented by concentrations of airborne particles, toxins and other micro organisms are within acceptable levels.

#### 430 WASTE

- Includes: Rubbish, debris, spoil, surplus material, containers and packaging.
- General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.

- Handling: Collect and store in suitable containers. Remove frequently and dispose off site in a safe and competent manner:
  - Non-hazardous material: In a manner approved by the Waste Regulation Authority.
  - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
- Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
- Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
- Waste transfer documentation: Retain on site.

#### 460 POWER ACTUATED FIXING SYSTEMS

- Use: Not permitted.

#### 470 INVASIVE SPECIES

- General: Prevent the spread of species (e.g. plants or animals) that may adversely affect the site or Works economically, environmentally or ecologically.
- Special precautions: none.
- Duty: Report immediately any suspected invasive species discovered during execution of the Works.
  - Do not disturb.
  - Agree methods for safe eradication or removal.

### PROTECT THE FOLLOWING

#### 510 EXISTING SERVICES

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
- Identification: Before starting work, check and mark positions of utilities/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services:
  - Comply with service authority's/ statutory undertaker's recommendations.
  - Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
- Identifying services:
  - Below ground: Use signboards, giving type and depth;
  - Overhead: Use headroom markers.
- Damage to services: If any results from execution of the Works:
  - Immediately give notice and notify appropriate service authority/ statutory undertaker.
  - Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
  - Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
- Marker tapes or protective covers: Replace, if disturbed during site operations, to service authority's/ statutory undertakers recommendations.

#### 520 ROADS AND FOOTPATHS

- Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
- Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.

#### 530 EXISTING TOPSOIL/ SUBSOIL

- Duty: Prevent over compaction of existing topsoil and subsoil in those areas which may be damaged by construction traffic, parking of vehicles, temporary site accommodation or storage of materials and which will require reinstatement prior to completion of the Works.
- Protection: Before starting work submit proposals for protective measures.

#### 540 RETAINED TREES/ SHRUBS/ GRASSED AREAS

- Protection: Preserve and prevent damage, except those not required.
- Replacement: Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

- 550     **RETAINED TREES**
- Protected area: Unless agreed otherwise do not:
    - Dump spoil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or place temporary accommodation within an area which is the larger of the branch spread of the tree or an area with a radius of half the tree's height, measured from the trunk.
    - Sever roots exceeding 25 mm in diameter. If unintentionally severed give notice and seek advice.
    - Change level of ground within an area 3 m beyond branch spread.
- 555     **WILDLIFE SPECIES AND HABITATS**
- General: Safeguard the following: None specific.
  - Protected habitats and species: Upon discovery immediately advise. Do not proceed until instruction is received.
  - Education: Ensure employees and visitors to the site receive suitable instruction and awareness training.
- 560     **EXISTING FEATURES**
- Protection: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.
  - Special requirements: none.
- 570     **EXISTING WORK**
- Protection: Prevent damage to existing work, structures or other property during the course of the work.
  - Removal: Minimum amount necessary.
  - Replacement work: To match existing.
- 580     **BUILDING INTERIORS**
- Protection: Prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.
- 600     **EXISTING FURNITURE, FITTINGS AND EQUIPMENT**
- Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstall in original positions.
  - Extent: Before work in each room starts the Employer will remove all items other than the following:
    - TBA.
- 620     **ADJOINING PROPERTY**
- Permission: Obtain as necessary from owners if requiring to erect scaffolding on or otherwise use adjoining property.
- 625     **ADJOINING PROPERTY RESTRICTIONS**
- Precautions:
    - Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.
    - Pay all charges.
    - Remove and make good on completion or when directed.
  - Damage: Bear cost of repairing damage arising from execution of the Works.
- 630     **EXISTING STRUCTURES**
- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
  - Supports: During execution of the Works:
    - Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining, that may be endangered or affected by the Works.
    - Do not remove until new work is strong enough to support existing structure.
    - Prevent overstressing of completed work when removing supports.
  - Adjacent structures: Monitor and immediately report excessive movement.
  - Standard: Comply with BS 5975 and BS EN 12812.
- 640     **MATERIALS FOR RECYCLING/ REUSE**
- Duty: Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.

- Storage: Stack neatly and protect until required by the Employer or for use in the Works as instructed.

## **A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING**

### **130 METHOD/ SEQUENCE OF WORK**

- Specific Limitations: Include the following in the programme:
  - Deliveries and removal of arisings to and from the site. Contractor to submit proposals with tender following liaison with property manager during tender period. Programme of work and sequencing to be drafted and agreed following pre-start meeting.

### **160 USE OR DISPOSAL OF MATERIALS**

- Specific limitations: None specific, but arisings to be disposed of in accordance with waste management regulations.

### **170 WORKING HOURS**

- Specific limitations: To be confirmed and agreed at pre-start meeting.

## **A36 FACILITIES/ TEMPORARY WORK/ SERVICES**

### **GENERALLY**

### **110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES**

- Location: Give notice and details of intended siting.
- Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

### **ACCOMMODATION**

### **230 TEMPORARY ACCOMMODATION**

- Proposals for temporary accommodation and storage for the Works: Submit two weeks prior to starting on site.
- Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

### **TEMPORARY WORKS**

### **340 NAME BOARDS/ ADVERTISEMENTS**

- Name boards/ advertisements: Are permitted.

### **SERVICES AND FACILITIES**

### **410 LIGHTING**

- Finishing work and inspection: Provide temporary lighting, the intensity and direction of which closely resembles that delivered by the permanent installation.

### **420 LIGHTING AND POWER**

- Supply: Electricity from the Employer's mains may be used for the Works as follows:
  - Metering: Free of charge or as agreed at pre-start.
  - Point of supply: mains.
  - Available capacity: 240v.
  - Frequency: 50 Hz.
  - Phase: single.
  - Current: Alternating.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

### **430 WATER**

- Supply: The Employer's mains may be used for the Works as follows:

- Metering: Free of charge or as agreed at pre-start.
- Source: mains.
- Location of supply point: to be agreed.
- Conditions/ Restrictions: none.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

#### 440 TELEPHONES

- Direct communication: As soon as practicable after the Date of Possession provide the Contractor's person in charge with a mobile telephone.

#### 520 USE OF PERMANENT HEATING SYSTEM

- Permanent heating installation: May be used for drying out the Works/ services and controlling temperature and humidity levels.
- Installation: If used:
  - Take responsibility for operation, maintenance and remedial work.
  - Arrange supervision by and indemnification of the appropriate Subcontractors.
  - Pay costs arising.

#### 540 METER READINGS

- Charges for service supplies: Where to be apportioned ensure that:
  - Meter readings are taken by relevant authority at possession and/ or completion as appropriate.
 Copies of readings are supplied to interested parties.

#### 570 PERSONAL PROTECTIVE EQUIPMENT

- General: Provide for the sole use of those acting on behalf of the Employer, in sizes to be specified:
  - Safety helmets to BS EN 397, neither damaged nor time expired. Number required: Refer to Pre-construction plan.
  - High visibility waistcoats to BS EN ISO 20471 Class 2. Number required: Refer to Pre-construction plan.
  - Safety boots with steel insole and toecap to BS EN ISO 20345. Pairs required: Refer to Pre-construction plan.
  - Disposable respirators to BS EN 149.FFP1S.
  - Eye protection to BS EN 166.
  - Ear protection - muffs to BS EN 352-1, plugs to BS EN 352-2
  - Hand protection - to BS EN 388, 407, 420 or 511 as appropriate.

## A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

### GENERALLY

#### 110 THE BUILDING MANUAL

- Responsibility: Principal Contractor to develop the manual and information
- Content: Obtain and provide comprehensive information for owners and users of the completed Works. Include an overview of the main design principles and describe key components and systems within the finished Works, so affording a complete understanding of the Works, including all buildings and their systems to enable efficient and safe operation and maintenance.
- Specific requirements: TBA.
- Format: Hard / electronic.
- Number of copies: TBA.
- Delivery to: Property manager/client by (date) No later than handover.

#### 115 THE HEALTH AND SAFETY FILE

- Responsibility: The Principal Contractor to provide the relevant information as required within the CDM 2015 Regulations with the Principal Designer responsible for the Safety File development and forwarding to the Client.
- Content: Obtain and provide the following information: As outlined within the CDM 2015 Regulations.
- Format: 2 hard copies and 2 cd versions
- Delivery to: Principal Designer By (date): To be supplied at handover

115 HEALTH AND SAFETY INFORMATION

- Content: Obtain and provide the following information Any electrical test certificates/guarantees/manuals.:
- Format: Either - Hard /electronic.
- Deliver to: Property manager No later than: handover.

155 CONTENT OF THE BUILDING MANUAL

- General: Details of the property, the parties, fire safety strategy, operational requirements and constraints of a general nature.
- Building fabric: Design criteria, maintenance details, product details, and environmental and trafficking conditions.
- Building services: Description and operation of systems, diagrammatic drawings, record drawings, identification of services, product details, equipment settings, maintenance schedules, consumable items, spares and emergency procedures.
- Documentation: Guarantees, warranties, maintenance agreements, test certificates and reports.

160 PRESENTATION OF BUILDING MANUAL

- Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
- Selected drawings needed to illustrate or locate items mentioned in the Manual: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.
- As-built drawings: The main sets may form annexes to the Manual.

190 MAINTENANCE SERVICE

- Scope; provide a comprehensive maintenance service for the following items of plant and equipment: Include all planned preventative maintenance, as set out within the maintenance schedule and replacement of all consumable items
  - n/a
- Terms: \_n/a
- Commencement: n/a
- Duration: n/a.

## **A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF**

110 MANAGEMENT AND STAFF

- Cost significant items: To be identified by the Contractor.

## **A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION**

110 SITE ACCOMMODATION

- Details: Site accommodation required or made/ not made available by the Employer: See section A36.
- Cost significant items: to be identified by contractor.

## **A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES**

110 SERVICES AND FACILITIES

- Details: Services or facilities required or made/ not made available by the Employer: See section A36.
- Cost significant items: to be identified by contractor.

## **A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT**

- 110 MECHANICAL PLANT
  - Cost significant items: to be identified by contractor.

## **A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS**

- 110 TEMPORARY WORKS
  - Details: Temporary works required or made/ not made available by the Employer: See section A36.
  - Cost significant items: to be identified by contractor.

## **A53 WORK BY STATUTORY AUTHORITIES/ UNDERTAKERS**

- 120 WORK BY STATUTORY UNDERTAKERS
  - Item: n/a.
  - Description of work: n/a
  - Provisional Sum: Include n/a.
  - Allow for general attendance.

## **A54 PROVISIONAL WORK/ ITEMS**

- 590 CONTINGENCIES
  - Provisional sum: Include: £6,000.00



## Client specific additions to Contract

These include the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, General Data Protection Regulation 2016 and the Data Protection Act 2018 amongst others.

### Access to information

15.1 The Contractor acknowledges that the Authority is subject to the provisions of the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 and that this Contract does not constitute or contain any obligation of confidentiality in terms of information provided to the Authority by any Party.

15.2 Where the Authority receives a request for information under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004, the Contractor shall on request take all reasonable steps to assist the Authority in complying with the request in accordance with such legislation.

15.3 Where we are being asked to disclose information provided by another Party we would normally consult the third party concerned before deciding whether to release the information

### Data Protection:

15.4 Each of the Parties undertakes to comply with its obligations under the General Data Protection Regulation 2016 and the Data Protection Act 2018, and in particular must not disclose any personal data as defined by that legislation to any individual unless the relevant conditions permitting disclosure are met.

### General

15.5 Any information or data provided by the Authority to the Contractor, and used by the Contractor directly or indirectly in the performance of this Contract, shall remain at all times the property of the Authority and shall be identified as such by the Contractor in all documentation.

15.6 The Contractor shall indemnify the Authority for any breach of the legislation above which renders the Authority liable for any costs, fines, claims or expenses however arising.

### Termination

16.1 If the Contractor:-

- (a) has offered any gift or consideration of any kind as an inducement or disincentive for doing anything in respect of this contract or any other contract with the Authority; or
- (b) has committed an offence under the Bribery Act 2010; or
- (c) has made any material misrepresentation in any document leading to the execution of this Contract; or
- (d) is in a position such that any of the circumstances listed in Clause 10.2 apply to the Contractor; or
- (e) is in persistent and/or material breach of contract (by failure to achieve the Contract Standards or otherwise);

the Authority may terminate the Contract immediately by notice in writing and may recover its losses resulting from such termination under Clause 10.3 below.

16.2 The circumstances referred to in Clause 16.1(d) are:

- (a) an application for an interim order is made pursuant to sections 252 – 253 of the Insolvency Act 1986 or a proposal is made for any composition scheme or arrangement with, or assignment for the benefit of, the Contractor's creditors; or
- (b) a petition is presented and not dismissed within 14 days or order made for the Contractor's bankruptcy; or

- (c) a receiver or similar officer is appointed over the whole or any part of the Contractor's assets or any person becomes entitled to appoint a receiver or similar officer over the whole or any part of his assets; or
- (d) the Contractor is unable to pay its debts or has no reasonable prospect of doing so, in either case within the meaning of Section 268 of the Insolvency Act 1986; or
- (e) a creditor or encumbrancer attaches or takes possession of, or a distress, execution, sequestration or other such process is levied or enforced on or sued against the whole or any part of the Contractor's assets and such attachment or process is not discharged within 14 days; or
- (f) the Contractor suspends or ceases, or threatens to suspend or cease, to carry on all or a substantial part of its business.
- (g) a proposal is made for a voluntary arrangement within Part I of the Insolvency Act 1986 or of any other composition scheme or arrangement with, or assignment for the benefit of, its creditors; or
- (h) a petition is presented for its winding up (which is not dismissed within 14 days of its service) or an application is made for the appointment of a provisional liquidator or a creditors' meeting is convened pursuant to Section 98 of the Insolvency Act 1986; or
- (i) a receiver, administrative receiver, or similar officer is appointed over the whole or any part of its business or assets; or
- (j) an application order is made either for the appointment of an administrator or for an administration order, an administrator is appointed, or notice of intention to appoint an administrator is given; or
- (k) it is or becomes insolvent within the meaning of Section 123 of the Insolvency Act 1986; or
- (l) the relevant regulatory body decides to intervene in the Contractor's business.

10.3 If the Contract is terminated under Clause 10.1, the Authority shall:

- (a) cease to be under any obligation to pay the Contract Charges until the costs of the termination have been calculated, and provided such calculation then shows an amount due to the Contractor;
- (b) be entitled to reoccupy any premises and any other resources licensed or leased to the Contractor in connection with the Contract;
- (c) be entitled to use an alternative person to provide the Service or to provide it itself;
- (d) be entitled, in respect of any costs directly resulting from the termination of the Contract, to deduct them from any amount which would have been due to the Contractor under this or any other contract with the Contractor, or to recover them from the Contractor as a debt. Such costs shall include the reasonable costs of the Authority in terminating the Contract and making alternative arrangements for the Service and any additional expenditure incurred by the Authority in relation to the provision of the Service throughout the remainder of the Contract Period (the Authority taking all reasonable steps to mitigate such additional expenditure);
- (e) when the total costs, resulting from the termination of the Contract have been calculated and after taking into account any deduction made by the Authority from any sum which would (but for (a) above) have been due to the Contractor, be entitled to any balance due to the Authority which shall be recoverable as a debt, or alternatively the Authority, shall pay to the Contractor any balance due.

10.4 The rights of the Authority under this Clause 10 are in addition to and without prejudice to any other rights or remedies the Authority may have whether against the Contractor directly or pursuant to any guarantee or indemnity. Subject to the foregoing provisions of this Clause 10, termination of the Contract shall be without prejudice to any rights, remedies or obligations accrued under the Contract prior to termination.

10.5 Upon the expiry or termination of this Contract for any reason, the Contractor shall immediately return to the Authority all property (including intellectual property) belonging to the Authority and all confidential information and personal data which has come into the possession of or has been produced by the Contractor in connection with its provision of the Service; and the Contractor will co-operate with the Authority to ensure an orderly end to the provision of the Service or transition to the provision of the Service by the Authority or by another person (as the case may be).

Section 2:  
Specification  
(Materials & Workmanship)

## **C20 Demolition**

### **To be read with Preliminaries/ General Conditions**

#### **GENERAL REQUIREMENTS**

##### **5 SURVEY**

- Scope: Before starting deconstruction/ demolition work, examine available information, and carry out a survey of:
  - the structure or structures to be deconstructed/ demolished,
  - the site on which the structure or structures stand, and
  - the surrounding area.
- Report and method statements: Submit, describing:
  - Form, condition and details of the structure or structures, the site and the surrounding area.
  - Extent: As per the Schedule of Work.
  - Type, location and condition of features of historical, archaeological, geological or ecological importance.
  - Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures or by noise, vibration and/ or dust generated during deconstruction/ demolition.
  - Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.
  - Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.
  - Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
  - Proposed programme of work, including sequence and methods of deconstruction/ demolition.
  - Details of specific pre-weakening required.
  - Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
  - Arrangements for control of site transport and traffic.
  - Special requirements: Disposal methods for gypsum-based products.

##### **10 EXTENT OF DECONSTRUCTION/ DEMOLITION**

- General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to levels indicated within Schedule of Work.

##### **15 BENCH MARKS**

- Unrecorded bench marks and other survey information: Give notice when found. Do not remove marks or destroy the fabric on which they are found.

##### **20 FEATURES TO BE RETAINED**

- General: Keep in place and protect the following: All surrounding areas not intended for demolition.

##### **35 LIVE FOUL AND SURFACE WATER DRAINS**

- General: Protect drains and fittings still in use. Keep free of debris and ensure normal flow during deconstruction/ demolition work.
- Damage: Make good damage arising from deconstruction/ demolition work. Leave clean and in working order at completion of deconstruction/ demolition work.

##### **40 SERVICE BYPASS CONNECTIONS**

- General: Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction/ demolition is taking place and to adjoining sites/ properties.
- Notice: Give adequate notice to adjoining owners and all affected occupiers if shutdown is necessary.

- 45 SERVICES TO BE RETAINED
- Damage to services: Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition.
  - Repairs to services: Complete as directed, and to the satisfaction of the service authority or owner.
- 50 WORKMANSHIP
- Standard: Demolish structures in accordance with BS 6187.
  - Operatives: Appropriately skilled and experienced for the type of work. Holding, or in training to obtain, relevant CITB Certificates of Competence.
  - Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction/ demolition to be used.
- 55 SITE HAZARDS
- Precautions: Prevent fire and/ or explosion caused by gas and/ or vapour from tanks, pipes, etc.
  - Dust: Reduce by periodically spraying with an appropriate wetting agent, or contain.
  - Lead dust: Submit method statement for control, containment and clean-up regimes.
  - Site operatives and general public: Protect from vibration, dangerous fumes and dust arising during the course of the Works.
- 70 PARTLY DECONSTRUCTED/ DEMOLISHED STRUCTURES
- General: Leave partly in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Make secure outside working hours.
  - Temporary works: Prevent overloading due to debris.
  - Access: Prevent access by unauthorized persons.
- 71 DANGEROUS OPENINGS
- General: Provide guarding at all times, including outside of working hours. Illuminate during hours of darkness.
  - Access: Prevent access by unauthorized persons.
- 75 ASBESTOS-CONTAINING MATERIALS – KNOWN OCCURENCES
- General: Materials containing asbestos are known to be present in the structure(s) to be demolished in the following locations: As per Asbestos Survey Report.
  - Removal: By contractor licensed by the Health and Safety Executive, and prior to other works starting in these locations.
- 76 ASBESTOS-CONTAINING MATERIALS – UNKNOWN OCCURENCES
- Discovery: Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ demolition work. Avoid disturbing such materials.
  - Removal: Submit statutory risk assessments and details of proposed methods for safe removal.
- 78 UNFORESEEN HAZARDS
- Discovery: Give notice immediately when hazards, such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition.
  - Removal: Submit details of proposed methods for filling, removal, etc.
- 85 SITE CONDITION AT COMPLETION
- Debris: Clear away and leave the site tidy on completion.
  - Special requirements: As per Schedule of Work.
- 90 CONTRACTOR'S PROPERTY
- Components and materials arising from the deconstruction/ demolition work: Property of the Contractor except where otherwise provided.
  - Action: Remove from site as work proceeds where not to be reused or recycled for site use.
- 95 RECYCLED MATERIALS
- Materials arising from deconstruction/ demolition work: Can be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification and in accordance with any site waste management plan.

- 5 COPINGS
- Manufacturer: Marley Alutec, Unit 1 (G-H), Hudson Road, Elms Farm Industrial Estate, Bedford MK41 0LZ  
Tel: 01234 359438, Fax: 01234 357199.  
Email: enquiries@marleyalutec.co.uk  
Reference: Aluminium composite coping system  
Size: To be determined on site by contractor  
Type / grade: 4mm thick aluminium composite. Polyethylene thermal break between external surfaces.
  - Finish: Kynar 500 fluorocarbon PVDF paint system including nano self cleaning additive  
Colour:- to match existing. from manufacturer's standard range  
Functional life expectancy: 50 years
  - Wind loading – Independently tested to withstand hurricane force winds
  - Fire resistance: BS476: Part 6 Class 0, BS476: Part 7 Class 1
  - Thermal resistance: 0.013m2.KW
  - Sound insulation: 26dB
  - Jointing: Internal jointing – Weather tight butyl seal
  - Fixing: Secret fix to structure at 1.5m centres with Aluminium Brackets in accordance with Alutec installation guide. Visible fixings to be colour matched.
- 10 CAVITIES
- Concrete fill to base of cavity:
  - Concrete generally: To BS EN 206-1 and BS 8500-2.
    - Designated concrete: GEN1 or Standard mix ST2 with high workability.
    - Extent: Maintain 75 mm between top of fill and external ground level and a minimum of 225 mm between top of fill and ground level dpc.
  - Cleanliness: Keep cavity faces, ties and dpcs free from mortar and debris.
- 15 PERPEND JOINT WEEP HOLES
- Form: Open clear perpend joint.
  - Locations: Through outer leaf, immediately above base of cavity, at cavity trays, stepped dpcs and over openings. 75 mm above top of cavity fill at base of cavity.
  - Provision: At not greater than 1000 mm centres and not less than two over openings.
- 18 CAVITY CLOSERS contractor choice
- Manufacturer: contractor choice.
    - Product reference: na.
  - Accessories: na.
- 33 FIXING TIES IN MASONRY CAVITY WALLS WITH PARTIAL FILL CAVITY INSULATION
- Embedment in mortar beds (minimum): 50 mm.
  - Placement: Sloping downwards towards outer leaf without bending. Drip centred in the cavity and pointing downwards.
  - Spacing: Evenly spaced in non staggered horizontal and vertical rows:
    - Horizontal centres: as per manufacturers recommendations .
    - Vertical centres: 450mm .
  - Spacing centres of top (eaves) row of ties: as per manufacturers recommendations .
  - Provision of additional ties: Within 225 mm of reveals of unbonded openings 300mm .
- 39 WALL STARTERS/ CONNECTORS
- Manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
  - Material/ finish: Austenitic stainless steel.
  - Sizes: to suit.
  - Sealant to external vertical joint: to suit.
    - Colour: To match adjacent walling.
    - Joint preparation and sealant application: As section Z22.
- 46 DAMP PROOF COURSE - POLYETHYLENE
- Standard: To BS 6515.
  - Manufacturer: Contractor's choice.  
Product reference: Contractor's choice.
- 54 GAS RESISTANT DPCS/ CAVITY TRAYS
- Manufacturer: Contractor's choice.

Product reference: Contractor's choice.

56 PREFORMED CAVITY TRAYS

- Manufacturer: Contractor's choice.
- Product references and locations: Contractor's choice.

58 PREFORMED DPC/ CAVITY TRAY JUNCTION CLOAKS/ STOP ENDS

- Manufacturer: Contractor's choice.
- Product references and locations: Contractor's choice.
- Placement: Seal all laps with dpcs and/ or cavity trays to provide a free draining and watertight installation.

66 INSTALLATION OF HORIZONTAL DPCS

- Placement: In continuous lengths on full even bed of fresh mortar, with 100 mm laps at joints and full laps at angles.
- Width: At least full width of masonry leaf. Edges of dpc not covered with mortar or projecting into cavity.
- Overlying construction: Immediately cover with full even bed of mortar to receive next masonry course.
- Overall finished joint thickness: As close to normal as practicable.
- Ground level dpcs joint with damp proof membrane: Continuous and effectively sealed.
- Low level dpcs in external walls: Install not less than 150 mm above adjoining finished ground level.
- Sill dpcs form and placement: In one piece and turned up at the back when the sill is in contact with inner leaf.
- Dpcs crossing cavity: Provide support to prevent sagging.

68 SEALING DPCSGENERALLY

- Overlaps and junctions: Seal with Adhesive recommended by dpc manufacturer .

74 INSTALLATION OF VERTICAL DPCS

- Form: In one piece wherever possible.
- Joints: Upper part overlapping lower not less than 100 mm.
- Dpcs to jambs of openings: Fully lap behind cavity tray/ lintel at head and over horizontal dpc at sill. Project not less than 25 mm into cavity and maintain full contact with frames.
- Fixing of jamb dpcs to back of built in timber frames: Secure using galvanized clout nails or staples.

83 PRECAST CONCRETE LINTELS

- Standard: To BS EN 845-2.
- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.
- Types: As schedule.
- Sizes: As schedule.
- Placement: Bed on mortar used for adjacent work.
- Bearing length (minimum): 150 mm.

85 PREFABRICATED STEEL LINTELS

- Standard: To BS EN 845-2.
- Manufacturer: Catnic (pre-insulated) or suitably approved.
- Product reference: Contractor's choice.
- Types: Single.
- Material/ finish: Zinc coated steel to BS EN ISO 1461 with minimum coating mass of 710 g/m<sup>2</sup> and coating minimum thickness 100 micrometres.
- Sizes: To fit new openings.
- Placement: Bed on mortar used for adjacent work.

Bearing length (minimum): 150 mm.

Note - Contractor to confirm structural calculations, size and installation of lintels are approved by Building control prior to installation.

**F001 Stone Repointing (Preparation of Lime based Mortar for Joints and Re-pointing)**

To be read in conjunction with Section C41 of the National Building Specification (NBS).

1. Pre-mixed lime mortars may be obtained ready to use in plastic tubs as the preferred method of procurement. Alternatively, where agreed: made from hydrated lime, ash and lime sand; make the lime putty by dissolving hydrated lime in water and allowing to soak for at least a week, stirring and beating as required to form a thick creamy liquid. Large plastic tubs with rope handles and circular plywood lids are ideal for this. About five gallons of water is sufficient to soak one bag of hydrated lime powder. The use of a heavy duty paint mixer attached to an electric drill may be used to stir the lime powder into the water, and after about 15 minutes of mixing the liquid should have a "creamy yoghurt like" texture. This will settle after 24 hours, and a thin crystalline crust may form on the surface of the water. The mixture can be beaten up with the paint whisk on a drill every few days for a period of two weeks, the longer the better.
2. It is important to avoid creating lumps of congealed lime particles. Care should therefore be taken to obtain fresh hydrated lime that is as dry as possible.
3. Once a creamy consistency has been achieved the lime putty can be used, but unlike cement, it can also be stored in covered plastic buckets or mixed with sand to form what is called "coarse stuff". Lime putty stored in buckets will slowly settle out leaving a lake of clear "limewater" with a sediment of white lime putty underneath. The longer this putty is stored the more it will improve. Old lime putty that has been kept under water and away from air will solidify, but it can easily be knocked up to become workable again.
4. The surface water can be removed to encourage a thicker consistency if needed. It is also possible to ladle the thicker lime putty from the bottom of the tub using a plumber's ladle.
5. While the lime putty is soaking, prepare the masonry to be re-pointed. Before starting work remove any vegetation. Where chipped or broken pieces as wedges between the courses have been used, these should not be removed; if they fall out or seem to be missing in places, then they can be replaced with new matching broken pieces of stone. They should be pushed in firmly, and only just enough to secure the courses. Traces of the previously applied render should be removed carefully, and any old loose mortar should be raked out using simple tools made from a bent spoon, screwdriver or file (not mechanically chased).
6. The sands and grits used as aggregate should be sharp and well washed. Modern 'concreting' sands, which are well graded, are more likely to be appropriate than soft or 'builders' sands; a blend of the two may also be considered. The size of the largest aggregate particles should normally be no more than about one-third of the joint width.
7. Joints shall be raked out carefully, to a depth greater than that of the width of the joint and leaving corners square to the masonry units to provide a good key for the mortar. Only rake out additional mortar that is obviously damaged. Do not remove so much that the structure becomes unsafe. If necessary do small sections at a time and re-point before continuing. Generally the use of wedged galleting stones will secure a wall whilst raking out.
8. When the lime putty is fully soaked, the final mortar can be mixed. Samples of the old mortar should be used as a guide to the composition and texture to be aimed at. Most old mortars are a mix of lime putty, lime sand, and grit. The basic mix should be one part lime putty to three parts sand/ aggregate by volume.
9. Mix the materials to make up the lime mortar as closely as possible to match that which was used before. Keep the mixture too dry rather than too wet as it is easy to add water but impossible to remove it. The addition of a small amount of fine stove ash will make the mortar sticky and easier to use. If a mixing box or bucket is used, measure each mix carefully then a consistent texture can be achieved over the whole wall. Ensure that the joints are clean and damp before application of the mortar.
10. It is important that the mortar is well compacted in the joint. The pointing should be slightly recessed from the stone face by about 3mm to 7mm. Aim to leave the mortar surface about 5mm behind the exposed surface of the stones. Raised and trowelled pointing (sometimes called ribbon pointing) should not be used. Care should be taken not to create thin feathered edges.
11. Wash the whole wall down after a day or so, when the mortar has begun to harden.

## **G20 Carpentry/ timber framing/ first fixing**

### **2 TIMBER PROCUREMENT**

- Timber (including timber for wood-based products): Obtained from well managed forests/ plantations in accordance with:
  - The laws governing forest management in the producer country or countries.
  - International agreements such as the Convention on International Trade in Endangered



- Species of wild fauna and flora (CITES).
  - Documentation: Provide either:
    - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied, or
    - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.
- 5      **STRUCTURAL SOFTWOOD FOR JOISTS, PURLINS & RAFTERS**
- Grading standard: To BS 4978, BS EN 14081-1, or other national equivalent and so marked.
  - Timber of a target thickness less than 100 mm and not specified for wet exposure: Graded at an average moisture content not exceeding 20% with no reading being in excess of 24% and clearly marked as 'DRY' or 'KD' (kiln dried).
  - Timber graded undried (green) and specified for installation at higher moisture contents: Clearly marked as 'WET' or 'GRN'.
  - Strength class to BS EN 338: C24.
  - Treatment: Organic solvent impregnation to NBS section Z12 and Wood Protection Association Commodity Specification C8, Service life: 40 years.
- 30      **SELECTION AND USE OF TIMBER**
- Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.
- 32      **NOTCHES, HOLES AND JOINTS IN TIMBER**
- Notches and holes: Position in relation to knots or other defects such that the strength of members will not be reduced.
  - Scarf joints, finger joints and splice plates: Do not use without approval.
- 35      **PROCESSING TREATED TIMBER**
- Cutting and machining: Carry out as much as possible before treatment.
  - Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc.
  - Surfaces exposed by minor cutting/ drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.
- 40      **MOISTURE CONTENT**
- Moisture content of wood and wood based products at time of installation: Not more than:
    - Covered in generally unheated spaces:      24%.
    - Covered in generally heated spaces:      20%.
- 43      **BOLTED JOINTS**
- Bolt spacings (minimum): To BS 5268-2, table 81.
  - Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.
  - Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible.
  - Bolt tightening: So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.
  - Checking: At agreed regular intervals. Tighten as necessary.
- 50      **ADDITIONAL SUPPORTS**
- Provision: Position and fix additional studs, noggings and/ or battens to support edges of sheet materials, and wall/ floor/ ceiling mounted appliances, fixtures, etc. shown on drawings.
  - Material properties: Timber to be of adequate size and have the same treatment as adjacent timber supports.
- 55      **JOISTS GENERALLY**
- Centres: Equal, and not exceeding designed spacing.
  - Bowed joists: Installed with positive camber.
  - End joists: Positioned about 50 mm from masonry walls.
- 70      **TRIMMING OPENINGS**
- Trimmers and trimming joists: Not less than 25 mm wider than general joists.

## H20 RIGID SHEET CLADDING

### ROCKPANEL® Colours

A ROCKPANEL surface treated with four layers water-based acrylic coating, available in a range of 20 standard colours with any RAL or NCS colour available to order (subject to minimum quantity). The surface has excellent UV resistance when tested in accordance with TR010 and judged in accordance with EN 20105-A02.

Board dimensions: 3050 x 1200mm (2500 x 1200mm) available in some colours)

Board thickness: 8 mm (Durable and Xtreme)

Available in a choice of durable – for general applications, Xtreme – for applications where greater mechanical strength is required and suitable for ground level installations or FS Xtra - in case a non-combustible board is required. Each has the option of Protect Plus finish. The finish improves UV protection and provides an anti graffiti finish. The Protect Plus finish requires a minimum order quantity of 100m<sup>2</sup> and a six-week lead time. All standard ROCKPANEL products have a maximum lead time of 2 weeks.

ROCKPANEL Rockclad has been awarded with an European Technical Approval: ETA 07/0141 for Durable Quality and ETA 12/0054 for Xtreme quality

ROCKPANEL Rockclad can be used in ventilated and non-ventilated constructions. For use in non-ventilated constructions, please contact ROCKWOOL BV / ROCKPANEL Group for advice.

## 150 RIGID SHEET CLADDING....

### Product reference:

ROCKPANEL Rockclad Durable board

**Material:** Inert ROCKWOOL panels with pre-finished decorative coating (white Rockpanel “Colours” 8mm durable board)

**Manufacturer;** ROCKWOOL BV / Lapinus, Industrieweg 15, 6045 JG Roermond, The Netherlands.

**Sales Representative;** ROCKWOOL BV / ROCKPANEL Group, Wern Tarw, Pencoed, Bridgend CF35 6NY.  
Tel:01656 863210. Fax: 01656 863611.

E-mail: [info@rockpanel.co.uk](mailto:info@rockpanel.co.uk). Web: [www.rockpanel.co.uk](http://www.rockpanel.co.uk).

### Technical queries –

**Contact - Tom Uzelac Area Sales Manager – North West & Yorkshire**

**T +44 1656 863210**

**M +44 7824 848916**

**[tom.uzelac@rockpanel.com](mailto:tom.uzelac@rockpanel.com)**

**Thickness:** 8 mm for Durable Board

**Finish:** Standard finish

**Colours:** Pure White RAL 9010

### Fire Classification according EN 13501-1:

ROCKPANEL Rockclad Durable board providing B-s2,d0

### Fixings for Aluminium:

- Aluminium (AlMg5) Rivet with colour match head minimum Ø 14mm, length 18 mm and shank diameter 5 mm. Pre-drill Rockpanel with 8 mm holes and 5.2 mm for centre fixings. A spacer tool should be used when fixing rivets.
- Ref:RP/fix 20 Stainless steel (A4 grade) self tapping screws (thickness aluminium between 1,2 and 2,5 mm) with colour matched heads. Please note when using self tappers the maximum panel size is 1500 x 1200mm.

**Ref:** River/spacer tool

**Manufacturer:** Plastestrip (Profiles) Ltd, Trenance Mill, St Austell, Cornwall, PL25 5LZ. Tel: 01726 74771. Fax: 01726 69238.

E-mail: [sales@plastestrip.com](mailto:sales@plastestrip.com) Web: [www.plastestrip.com](http://www.plastestrip.com)

**Number and location:**

8mm boards            Rivets and self-tappers to be fixed at a maximum span of 600 mm and maximum 600 mm vertical centres.

Please consult ROCKWOOL BV / ROCKPANEL Group for wind loading calculations. Fixings to be positioned minimum 15 mm from the vertical edge of the board and minimum 50mm from the horizontal edge of the board.

**Joints**

Type/treatment:

Vertical joint treatment

If desired, blackout tape can be applied to prevent light reflection from aluminium supports.

Horizontal joint treatment

ROCKPANEL profile A:

- Aluminium horizontal chair section (with high back) for 8 mm boards

ROCKPANEL profile B: Aluminium horizontal V-bird section

External Corner Treatment

ROCKPANEL profile D:

- External corner profile (aluminium) for 8 mm boards

ROCKPANEL profile E:

- External capped corner profile (aluminium) for 8 mm boards

**Colour**                      Colour matched to board/Black/White

**Distance between boards:** > 5 mm

**Air gap:** Minimum 20 mm

Consult ROCKPANEL Group for recommendations and details if designing to NHBC requirements

**Secondary support system/framing system;**

**Product reference:**        **Plastestrip Top Hat and Z profile system (or suitably approved)**

**Material:**                      **Aluminium**

**26mm cavity**

Ref: AL/TH/26/50            Top Hat Profile

Ref:AL/Z/26/50/26           Z profile

**40mm cavity**

Ref: AL/TH/40/55            Top Hat Profile

Ref:AL/Z/40/55/26           Z profile

**Fixings: number and location**

Consult with Plastestrip for recommendations and details

**Manufacturer:**            Plastestrip (Profiles) Ltd, Trenance Mill, St Austell, Cornwall, PL25 5LZ. Tel: 01726 74771. Fax: 01726 69238.

E-mail: [sales@plastestrip.com](mailto:sales@plastestrip.com) Web: [www.plastestrip.com](http://www.plastestrip.com)

**Thermal Insulation**        As clause 775

**Breather membrane:**    As clause 785

**ROCKPANEL Accessories:**

Bottom Drips

ROCKPANEL profile J: aluminium bottom drip profile

**General Accessories:**

**Accessories:**

Ventilated profiles:

Ref: 025/10K    bottom vent strip – 25mm cavity

**Manufacturer:**

Plastestrip (Profiles) Ltd, Trenance Mill, St Austell, Cornwall, PL25 5LZ. Tel: 01726 74771. Fax: 01726 69238.

E-mail: [sales@plastestrip.com](mailto:sales@plastestrip.com) Web: [www.plastestrip.com](http://www.plastestrip.com)

**GENERAL REQUIREMENTS**

210 CONTROL SAMPLES

- General: Complete an area of the cladding and obtain approval of appearance before proceeding.
  - Location :...
  - Extent of area...

260 FIXING SHEETS

- General: Secure to supports without producing distortion.
- Fasteners: Evenly spaced in straight lines, in pairs across joints and sufficient distance from edge of sheet to prevent damage.

270 COVER STRIPS

- General: Form straight runs in single lengths wherever possible
- Location and method of forming joints: Submit proposals where not detailed.

**H22 Weatherboarding (Entrance Parapet/soffit)**

20 BREATHER MEMBRANE

- Material: Thermoplastic film.
- Manufacturer: Contractor's choice.
  - Product reference: Submit proposals for Contract Administrator approval.
- Installation: Provide a complete barrier to water, snow and wind blown dust. Extend membrane below bottom edge of cladding and into reveals of openings.
  - Horizontal laps: 100 mm.
  - Vertical laps: 150 mm and staggered.
  - Fasteners: Galvanized, sherardized or stainless-steel large head nails or stainless steel staples.

30 BATTENS/ COUNTERBATTENS

- Timber: Regularized softwood free from decay, insect attack (except ambrosia beetle damage) and with no knots wider than half the section width.
- Preservative treatment:
  - Standard: To Wood Protection Association Commodity Specification C8.
  - Type: Organic solvent.
- Moisture content at time of fixing: Not exceeding 20%.
- Length (minimum): 1200 mm.
- Installation: In straight lines, and with fastener heads finished flush with or slightly below batten face.

40 FIXING BOARDING

- Environmental conditions: Do not fix cladding when ambient temperature is at or below 0°C, or above 30°C.
- Movement: Allow for thermal movement of boards and fixings to prevent springing, excessive opening of joints or other defects.
- Heading joints: Position centrally over supports and at least two board widths apart on any one support.

## H71 Lead sheet coverings/ flashings

To be read with Preliminaries/ General conditions.

### TYPES OF LEADWORK

#### 5 DORMERS

- Underlay: See Drawing.
- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 4).
- Joints in top/ sill: None.
- Joints in cheeks: Horizontal laps (100 mm minimum).
- Intermediate fixings in cheeks: Brass cup and screw with die-cast lead dome.
- Other requirements: Lead facings to battens at joints and lead skirt cover flashings at junction with roof.

#### 15A VALLEY GUTTER LININGS TO SLATE/ TILE ROOFS

- Underlay: Waterproof building paper to BS 1521, class A.
- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 6).
- Laying: Over and beyond tilting fillets. In lengths not more than 1500 mm.
- Lead : Code 7 to be laid to lengths of max 2400mm for box valleys.
  - Cross joints: Lapped not less than 150 mm.
- Fixing: Welt edges. Nail top edge of each sheet. Dress bottom edge neatly into eaves gutter.

#### 30A APRON FLASHINGS Generally

- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 4).
- Dimensions:
  - Lengths: Not more than 1500 mm.
  - End to end joints: Laps not less than 100 mm.
  - Upstand not less than 75 mm.
  - Cover to abutment: Not less than 150 mm.
- Fixing:
  - Top edge: Lead wedges into bed joint.
  - Bottom edge: Clips.

Material: Stainless steel.  
Spacing: At laps and 500 mm centres.

#### 35 COVER FLASHINGS

- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 4).
- Dimensions:
  - Lengths: Not more than 1500 mm.
  - End to end joints: Laps of not less than 100 mm.
  - Cover: Overlap to upstand not less than 75 mm.
- Fixing:
  - Top edge: Lead wedges into bed joint.
  - Bottom edge: Clips.

Material: Stainless steel.  
Spacing: To suite.

#### 45 STEP AND COVER FLASHINGS GENERALLY

- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 4).
- Dimensions:
  - Lengths: Not more than 1500 mm.
  - End to end joints: Laps not less than 100 mm.
  - Upstand: Not less than 85 mm.
  - Cover to roof: Not less than 150 mm.
- Fixing:
  - Top edge: Lead wedges at every course.
  - Bottom edge: Clips.

Material: Stainless Steel.  
Spacing: To suite.

## 52 CHIMNEY FLASHINGS

- Lead:
  - Thickness: 1.75 or 1.80 mm (Code 4).
- Front apron:
  - Dimensions:
    - Length: Width of chimney plus not less than 150 mm underlap to each side flashing.
    - Upstand: Not less than 75 mm.
    - Cover to roof: Not less than 150 mm.
  - Fixing: Lead wedges into bed joint.
- Back gutter:
  - Dimensions:
    - Length: Width of chimney plus not less than 100 mm overlap to each side flashing.
    - Upstand: Not less than 100 mm.
    - Gutter Sole: Not less than 150 mm.
    - Cover up roof: Not less than 225 mm.
- Back gutter cover flashing:
  - Dimensions:
    - Length: Width of chimney plus not less than 100 mm overlap to each side flashing.
    - Cover: Overlap to back gutter upstand not less than 75 mm.
  - Fixing: Lead wedges into bed joint.

## 60 MATERIALS AND WORKMANSHIP GENERALLY

- Lead production method:
  - Rolled, to BS EN 12588.
  - Machine cast: BBA certified.
- Identification: Colour marked for thickness/ code, weight and type.
- Workmanship standard: To BS 6915 and latest editions of 'Rolled lead sheet. The complete manual' published by the Lead Sheet Association.
- Fabrication and fixing: To provide a secure, free draining and weather tight installation.
- Marking out: Do not use scribes or other sharp instruments to mark out lead without approval.
- Solder: Use only where specified.
- Finished lead work: Fully supported, adequately fixed to resist wind uplift but also able to accommodate thermal movement without distortion or stress.
- Patination oil: Apply smear coating to all visible lead, evenly in one direction and in dry conditions.

## 62 LEADWELDING

- In situ lead welding: Not permitted.

## 75 TIMBER FOR USE WITH LEADWORK

- Quality: Planed, free from wane, pitch pockets, decay and insect attack (ambrosia beetle excepted).
- Moisture content: Not more than 22% at time of fixing and covering. Give notice if greater than 16%.
- Preservative treatment: Organic solvent as section Z12 and Wood Protection Association Commodity Specification C8.

## 76 UNDERLAY

- Handling: Prevent tears and punctures.
- Laying: Butt or overlap jointed onto a dry substrate.
  - Fixing edges: With copper or stainless steel staples or clout nails.
  - Do not lay over roof edges.
  - Turn up at abutments.
- Wood core rolls: Fixed over underlay.
- Protection: Keep dry and cover with lead at the earliest opportunity.

## 78 FIXING LEAD SHEET

- Top edge: Secured with two rows of fixings, 25 and 50 mm from edge.
- Fixings:
  - Nails to timber substrates: Copper clout nails to BS1202-2 , or stainless steel (austenitic) clout nails to BS 1202-1.
  - Shank type: Annular ringed, helical threaded or serrated.

Length: Not less than 20 mm or equal to substrate thickness.

- Screws to concrete or masonry substrates: Brass or stainless steel to BS 1210.

Diameter: Not less than 3.35 mm.

Length: Not less than 19 mm.

Washers and plastics plugs: Compatible with screws.

#### 80 CLIPS

- Material:
  - Lead clips: Cut from sheets of the same thickness/ code as sheet being secured.
  - Copper clips: Cut from 0.70 mm thick sheet to BS EN 1172, temper R220 (soft) or R240 (half hard) depending on position, dipped in solder if exposed to view.
  - Stainless steel: Cut from 0.38 mm sheet to BS EN 10088, grade 1.4301(304), terne coated if exposed to view.
- Dimensions:
  - Width: 50 mm where not continuous.
  - Length: To suit detail.
- Fixing clips: Secure each to substrate with either two screw or three nail fixings not more than 50 mm from edge of lead sheet. Use additional fixings where lead downstands exceed 75 mm.
- Fixing lead sheet: Welt clips around edges and turn over 25 mm.

#### 83 WEDGE FIXING INTO JOINTS/ CHASES

- Joint/ chase: Rake out to a depth of not less than 25 mm.
- Lead: Dress into joint/ chase.
  - Fixing: Lead wedges at not more than 450 mm centres, at every change of direction and with at least two for each piece of lead.
- Sealant: Contractor's choice.  
Application: As section Z22.

#### 96 DRIPS WITH SPLASH LAPS

- Underlap: Dress up full height of drip upstand.
  - Fixing: Two rows of nails to lower level substrate. Seal over nails with a soldered or leadwelded dot.
- Overlap: Dress over drip and form a 75 mm splash lap.
  - Fixing: Lead clips leadwelded to underlap at bay centres.

#### 98 WELTED JOINTS

- Joint allowance: 50 mm overlap, 25 mm underlap.
- Copper or stainless steel clips: Fix to substrate at 450 mm centres.
- Overlap: Welt around underlap and clips and lightly dress down.

### NBS SECTION H71 RELATED LEADWORK CLAUSES

(to be read in conjunction with Section J41-110A & J41-110B)

#### 780A NON-LEAD COUNTER-FLASHINGS (CHASES UP TO 18 MM WHERE A DPC IS PRESENT)

- **Location:** Counter-flashings to abutment upstands
- **Thickness:** 3.5 mm.
- **Lengths:** these should not exceed 1500 mm when one edge is wedged and pointed into a chase in masonry. Where counter-flashings are built into bitumen sheet roofing (sandwiched between layers) the maximum length should be reduced to 1000 mm.
- **Installation:** All counter-flashing sections to be lapped by 150 mm and base clipped with wedges provided at 300 mm centres. All work should be carried out by competent tradesmen in accordance with current British Codes of Practice and the manufacturers instructions.
- **Chase preparation:** Cut a chase in the mortar bed course (normally 10 mm width approx.) to a depth of 25 mm. In addition, cut a rebate in the top of the brick course under the joint to increase the overall chase width to not more than 18 mm and to a depth of 25 mm, so that there is sufficient space to insert both the counter-flashing and the wedges, without damaging the DPC. All chases should be brushed clean and sealed using Bauder sealant primer prior to the application of the Bauder Mastic Sealant.
- **Sealant:** Bauder Mastic Sealant, colour: Grey.

## **J41 – FLAT ROOF**

**All contractors to price for a BBA certificated flat roofing system to provide min 20-year product performance.**

**We recommend to use Bauder flat roof system as per drawings and specification or other equal and approved warranted system.**

**Contractor must confirm which system has been priced for within their tender and provide confirmation of the BBA certification.**

### **Works Generally**

Contractor to provide a price for installing manufacturer backed flat roofing system to the flat roof areas as indicated on project drawings and contract documents. The adopted system is to be manufacturer designed / detailed and installed by Manufacturer **certified and approved contractors (Bauder)**. The flat roof system to be low odour, cold applied surface for use on an occupied / live building.

### **Contact – Bauder Ltd**

**Chris Rea – Area Technical Manager**

**T: +44 (0)1473 257671**

**M: 07825 795280**

**F: +44 (0)1473 230761**

**E: [c.rea@bauder.co.uk](mailto:c.rea@bauder.co.uk)**

The Contractor and flat roof manufacturer to establish the condition and suitability of the existing flat roof covering (Roof 1) & new roof (Roof 2) for the inclusion of existing penetrations / wall junctions / abutments (including raising flashings, cavity trays and weep holes etc) for the installation of their system and make adjustment to the tender figure to cover additional enabling works as deemed necessary.

The Contractor should visit the premises before tendering and ascertain all local conditions and restrictions likely to affect the execution of the works. No claims arising from failure to do so will be considered.

New flat roof system (to Entrance/atrium concourse -Roof 2) to achieve a min U-value of 0.18 W/m<sup>2</sup>K. Roofing contractor to provide a copy of proposed roofing detail and U-value calculation along with condensation risk analysis of existing roof make up, to be issued Local Authority Building Control for approval prior to execution of the works.

All new flat roofs laid to falls to outlets.

The contractor shall remain responsible for checking all dimensions and levels on site prior to placing any orders for materials or services or commencing manufacture and fixing at any point

The contractor must comply will all health & safety legislation and liaise with the site administrator / supervisor.

The contractor shall allow for protection of all working areas in order to minimise/damage and injury to the Building and staff/pupils during the course of the contract. The school representative and contract administrator should approve storage of materials, cabins and skips, before commencement or delivery

Remove all rubbish and surplus materials as they accumulate and keep the site and works clean and tidy at all times.

The Contractor shall reinstate any damage caused by the execution of the works at his/her own expense and leave the site, premises, services and surrounding areas in a satisfactory condition to the Clerk of Works approval.

The contractor is to provide his own site supervisor and must be responsible for any sub-contractors and must inform the contract administrator immediately if they have any queries.

### **Site Preparation**

The contractor is to include for the cost of providing the necessary working platforms, scaffold, handrails, barrier rails, edge protection and ladders all to comply with current safety legislation. They must be of solid and sound design to suit the site conditions and be completely adequate for the type of work being carried out in this contract  
Secure fencing is to be erected round the scaffolding, as considered necessary with all health & safety notices fixed to it. This shall include the perimeter of the working area including the site compound. As a precaution against trespassing and vandalism.



Contractor to safeguard the works, materials and plant against damage and theft, including the provision of watching and lighting as considered necessary. Maintain public or private roads, footpaths, kerbs etc. Protect, uphold and maintain all public or private pipes, ducts, sewers, gas, water and electric service mains, overhead cables etc., during the execution of the works.

Roof work to be carried out in stages so not to leave areas of roof exposed to adverse weather

Access ladders to scaffolding must be removed (and locked away/down) or disabled at the end of each working day. Ladders must not be left unattended

The contractor shall allow for the complete protection of the working areas and adjacent areas in order to minimise contamination/damage during the course of the contract

The contractor shall include for maintaining adequate weather protection to existing building/structure. Any damage caused by water ingress, wind etc shall be made good at the contractor's own expense

The Contractor shall provide means of access with ladders, scaffolding, gangways etc., and the necessary attendance to move and adapt the same as directed, for the inspection, testing or measurement of the works by the Clerk of Works. Scaffolding to be so designed to ensure means of access/egress and not hindered & are protected.

Upon completion of the works allow for cleaning of the roof, gutters, downspouts and the ground below, remove all materials waste and debris and making good as required.

Remove site compound and scaffolding and thoroughly clean the areas affected upon completion, making good to all areas damaged / disturbed.

## • **NBS SECTION J41 - DESCRIPTION OF WORKS**

Section J41 deals with the installation of the Bauder Waterproofing System, comprising coverings of multiple layers of reinforced bituminous membranes laid and jointed using self-adhesive and/or torch application as required. It includes where required, the vapour control layer, thermal insulation, underlayer and capping sheet membranes (root resistant for green roof systems) and presumes the deck substrate and roof falls as stated within the specification below. Accessories are included where relevant.

It is intended for use on projects where the detailed design is completed by the specifier (architect or landscape architect) with technical assistance from the manufacturer as required and should be read in conjunction with any project specific drawings provided.

### **'Safe2Torch' advice:**

*The application of torch-on materials to or in the vicinity of combustible deck materials does not conform to the recommendations of BS8217:2005, clause 7.3.2.1, paragraph 3, or the advice given in the 'Safe2Torch' document produced by the National Federation of Roofing Contractors. When encountering an area which contains combustible material a minimum 900mm deep zone of the flat area around the material and any detail flashing to the material itself there is a requirement for 'TORCH-FREE' detailing. In these instances an appropriate alternative Bauder self-adhesive membrane should be used as described in: 'TORCH-FREE' & 'TORCH-SAFE' zones (as per clause 773) - ALTERNATIVE MEMBRANES AND APPLICATION. The 'TORCH-FREE' & 'TORCH-SAFE' zone detailing and method of application will be described in the Additional Items section and the 'TORCH-FREE' & 'TORCH-SAFE' zones section of this specification and further shown in the Bauder 'TORCH-FREE' & Bauder Bituminous detail drawings. This specification should be read in conjunction with the Bauder Roof Survey Report.*

## **SCOPE OF WORKS**

### **This section includes:**

- The Bauder waterproofing systems.
- Related Bauder system accessories
- Thermal insulation that meets the required U Value.

### **This section does not include:**

- Construction of the structural deck.
- Proprietary rainwater drainage / plumbing – refer NBS section R10
- Lightning protection – refer NBS Engineering Services, Section W60.
- Lead sheet coverings / flashings – See NBS Section H71.
- Bauder Euroglaze Rooflights - see NBS Section L10-460 and the project specific Bauder roof light schedule
- Associated building work – refurbishment related builders work is not covered by NBS. For a list of items requiring attention before re-waterproofing, please see the associated Bauder survey report and the separate Builders work / additional items list provided.

**Contractor to refer to structural engineers' drawings/spec and associated schedule of works/dwgs for work items**

#### **J41 REINFORCED BITUMEN MEMBRANE ROOF COVERINGS**

To be read with Preliminaries/ General Conditions & Attached Bauder roofing specification

#### **TYPES OF COVERING**

#### **ROOF 1**

**Refer to Attached/Appended Bauder specification document –**

**REF No: B181325  
PROJECT NAME: DALES COUNTRYSIDE MUSEUM  
ROOF AREA NAME: ROOF AREA 1  
DATE: 01.05.2018**

**SYSTEM CONSTRUCTION -  
Waterproofing System: Bauder Total Roof System – Cold roof construction  
Substrate: Asphalt Overlay  
Roof Fall: (1°) 1:60**

#### **ROOF 2**

**Refer to Attached/Appended Bauder specification document –**

**REF No: B181325  
PROJECT NAME: DALES COUNTRYSIDE MUSEUM  
ROOF AREA NAME: ENTRANCE CORRIDOR  
DATE: 18.01.2019**

**SYSTEM CONSTRUCTION -  
Waterproofing System: Bauder Total Roof System – Warm roof construction  
Substrate: Existing Glazing – New Plywood Re-Deck  
Roof Fall: (1°) 1:60**

#### **Roof lights –**

**Refer to Section L10 below**

#### **COMPLETION**

#### **910 INSPECTION**

- **Interim and final roof inspections:** in accordance with the manufacturer's requirements for guarantee.

- **Notification:** It is the responsibility of the approved contractor to advise Bauder Ltd when the roofs are ready for Final Inspection. The 'Final Inspection' of the waterproofing must be carried out and approved by Bauder Ltd prior to any landscaping products/materials being installed, otherwise a guarantee cannot be issued.
- **Other requirements:** Please also refer to preliminaries / general conditions.
- **If project needs to follow NHBC Requirements:** The waterproofing must be visually inspected and electronically tested for waterproofing integrity, faults rectified, and retested prior to the installation of any landscaping products. The results of the test(s) should be made available to the NHBC.
- **Site contact details - : Bryan Turner, Tel. 07545 642311**
- **Technical Contact Details - Area Sales Manager: Chris Rea, Tel: 07825 795280**

#### 940 COMPLETION

- **Roof areas:** Clean.
- **Outlets:** Clear.
- **Work necessary to provide a weather tight finish:** Complete.
- **Storage of materials on finished surface:** Not permitted.
- **Completed membrane:** Do not damage. Protect from chemicals, traffic and adjacent or high level working.

#### 950B GUARANTEE

- A 20 year system product, workmanship and design guarantee is to be provided upon completion following a Final Inspection by Bauder. Details regarding the full terms and conditions are available separately from Bauder Ltd upon request. This system must installed by a Bauder Approved Contractor, to be eligible for guarantee. The system comprises the waterproofing membranes, insulation, vapour control layer, and attachment of these products.

### K10 Plasterboard dry linings/ partitions/ ceilings

#### 15 LINING ON TIMBER

- Substrate: New timber framing and studwork.
- Linings: One layer 12.5 mm foil backed plasterboard.
  - Recycled content: Contractor's choice.
- Fixing: As recommended by board manufacturer.
- Finishing: Skim coat plaster.
  - Primer/ Sealer: As recommended by board manufacturer for improved moisture resistance.
  - Accessories: Metal beads/ stops recommended by board manufacturer.

#### 25 LINING ON TIMBER FRAMED CEILINGS

- Substrate: Assumed existing timber rafters and purlins.
- Linings: One-layer foil backed (vapour check) 12.5 mm plasterboard.
  - Recycled content: Contractor's choice.
- Fixing: As recommended by board manufacturer.
- Finishing: Skim coat plaster.
  - Primer/ Sealer: As recommended by board manufacturer for improved moisture resistance.
  - Accessories: Metal beads/ stops recommended by the board manufacturer.

#### 65 DRY LINING GENERALLY

- General: Use fixing, jointing, sealing and finishing materials, components and installation methods recommended by board manufacturer.
- Plasterboards: To BS EN 520.
- Cutting plasterboards: Neatly and accurately without damaging core or tearing paper facing. Minimize cut edges.
- Two layer boarding: Stagger joints between layers.
- Finishing: Neatly to give flush, smooth, flat surfaces free from bowing and abrupt changes of level.

#### 67 SKIM COAT PLASTER FINISH GENERALLY

- Plaster type: As recommended by board manufacturer.
  - Thickness: 2-3 mm.
- Joints: Fill and tape except where coincident with metal beads.
- Finish: Tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks.

- 69      **INSTALLING BEADS/ STOPS**
- Cutting: Neatly using mitres at return angles.
  - Fixing: Securely using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.
  - Finishing: After joint compounds/ plasters have been applied, remove surplus material while still wet from surfaces of beads exposed to view.
- 70      **ADDITIONAL SUPPORTS**
- Framing: Accurately position and securely fix to give full support to:
    - Partition heads running parallel with, but offset from main structural supports.
    - Fixtures, fittings and services.
    - Board edges and lining perimeters.
- 85      **MINERAL WOOL INSULATION**
- Fitting insulation: Closely butted joints and no gaps. Prevent slumping.
  - Electrical cables overlaid by insulation: Size accordingly.
- 87      **SEALING GAPS AND AIR PATHS**
- Sealing: Apply sealant to perimeter abutments and around openings as a continuous bead with no gaps.

## **K11 Rigid sheet flooring/ sheathing/ decking/ sarking/ linings/ casings**

- 30      **PARTICLEBOARD FLOORING (where applicable)**
- Substrate: New timber joists.
    - Additional supports: To be provided as found necessary once on site.
  - Flooring: Particleboard to BS EN 312, Type P5.
    - Thickness: 22 mm.
    - Edges: Tongued and grooved all edges.
    - Recycled content: Contractor's choice.
    - Setting out: Long edges running across joists. End joints central over joists and staggered.
    - Fixing to joists:
      - Fasteners: 50 mm x 8 gauge wood screws into pilot holes.
      - Fixing centres (maximum): 200 mm around floor perimeter and along short edges of each board; 400 mm along intermediate supports.
  - Joint adhesive: PVA to BS EN 204, class D3.
  - Expansion provision: 10 mm clear expansion gap around floor perimeter of floor area and any upstands.
- 40      **PLYWOOD**
- Substrate: existing.
    - Additional supports: n/a.
  - Plywood: Manufactured to the relevant standards and quality control procedures specified in BS EN 636, and so marked.
    - Type: roofing grade - contractors choice.
    - Grade: contractors choice - exterior roofing grade.
    - Nominal thickness/ number of plies: min 18mm.
    - Edges: Tongued and grooved long edges.
  - Setting out: Long edges running across supports. End joints central over supports and staggered.
  - Fixing to supports:
    - Fasteners: 65 x 3.35 mm galvanized annular ringed shank nails.
    - Fixing centres (maximum): 150 mm along all supported edges; 150 mm along intermediate supports.
- 67      **ADDITIONAL SUPPORTS**
- Additional studs, noggings/ dwangs (Scot) and battens:
    - Provision: In accordance with board manufacturer's recommendations and as follows:
      - Tongue and groove jointed rigid board areas: To all unsupported perimeter edges.
      - Butt jointed rigid board areas: To all unsupported edges.
    - Size: Not less than 50 mm wide and of adequate thickness.

72 BOARD MOISTURE CONTENT AND CONDITIONING

- Moisture content of boards at time of fixing: Appropriate to end use.
- Conditioning regime: Submit proposals for Contract Administrator approval.

85 FIXING GENERALLY

- Timing: Building to be weathertight before fixing boards internally.
- Moisture content of timber supports (maximum): 18%.
- Fasteners: Evenly spaced in straight lines and in pairs across joints.
  - Distance from edge of board: Sufficient to prevent damage.

90 OPEN JOINTS

- Perimeter joints and joints between boards: Free from plaster, mortar droppings and other debris.
- Temporary wedges/ packings: Remove on completion of board fixing.

**L10 WINDOWS/ ROOFLIGHTS/ SCREENS/ LOUVRES**

To be read with Preliminaries/ General Conditions.

**Supplied By:** Bauder Limited, 70 Landseer Road, Ipswich, Suffolk, IP3 0DH

**Tel:** 01473 257671

**Fax:** 01473 250194

**Email:** rooflights@bauder.co.uk

**Manufactured in accordance with:**

20 Years Insurance Protected Guarantee (excluding electrical components)

To be manufactured by a member of the National Association of Rooflight Manufacturers.

**Rooflight Product reference:**

Euroglaze BA.X2.A.01.SF 1200mm x 1200mm roof opening size, N hit and miss ventilation kerb 160mm minimum height to underside of vent, manufactured in self-finish UPVC with vertical UPVC insulation stop to fit direct to roof to suit flat board insulation depth of 120mm, complete with Euroglaze BA.DM.3.SF dome shaped triple skin roof light, 3mm uv protected clear polycarbonate outer skin, 2mm clear polycarbonate middle skin, 2mm diffused polycarbonate inner skin, supplied with a Euroglaze security frame.

**Note - RL1 to Include – Hinged Access opening hatch**

**Rooflight details Euroglaze BA.X2.A.01.SF**

Thermally enhanced white self-finish PVCu kerb designed to suit the depth of insulation and fixing arrangement. The upper 160 mm of the kerb is to be splayed at 35 degrees from vertical and any vertical riser sections are to be constructed from white PVCu and manufactured to suit the depth of the new insulation, acting as an insulation stop. Both external and internal walls of the kerb are to be a minimum of 2mm thick; the external suitable for the application of the weatherproofing membrane. Kerb to have a 60mm detachable weather drip to protect the top edge of the weather proofing membrane.

**Glazing details: Euroglaze BA.DM.3.SF**

Dome shaped triple skin rooflight, 3mm UV protected polycarbonate outer skin, 2mm polycarbonate middle skin, 3mm UV protected polycarbonate inner skin, supplied with Euroglaze security frame.

Manufactured to suit flat board insulation scheme

**Ventilation:** Hit and Miss controllable background ventilation complete with insect mesh

**Other Requirements**

**Fire Performance:** To be class 1 to BS 476 Pt 7, TPa, and can be deemed as being Class 0

**Non Fragility:** To be Class B Non Fragile to ACR [M] 001:2014 – Test for Non Fragility of

U Value: The whole rooflight is to have a maximum overall  $U_d$  value of 1.6 W/m<sup>2</sup>/°K

## **CONTACT INFORMATION**

***For further information contact Bauder Limited.***

**Head office:** T: 01473 257671 E: [technical@bauder.co.uk](mailto:technical@bauder.co.uk)

**Area Technical Manager:** Chris Rea, Tel. 07825 795280

**Site Technician:** Bryan Turner, Tel. 07545 642311

## **M20 Plastered/ Rendered/ Roughcast coatings**

- 10 CEMENT:LIME:SAND External render
- Substrate: Existing.
    - Preparation: Apply bonding coat.
  - Mortar: Contractor's choice.
  - Sand: To BS EN 13139.
    - Grading: 0/2 or 0/4 (CP or MP); category 2 fines.
  - Lime: Nonhydraulic to BS EN 459-1, type CL 90S.
  - Undercoats:
    - Mix (cement:lime:sand): 1:2:8–9.
    - Thickness (excluding dubbing out and keys): First coat 8–12 mm and second coat 6–10 mm.
  - Final coat:
    - Mix (cement:lime:sand): 1:2:8–9.
    - Thickness: 5-8 mm.
  - Finish: To match existing. (Ashlar)
- 25 GYPSUM PLASTER ON CEMENT GAUGED UNDERCOATS where applicable
- Substrate: Existing .
    - Preparation: Apply bonding coat.
  - Undercoats:
    - Sand: To BS EN 13139.
      - Grading: 0/2 or 0/4 (CP or MP); category 2 fines.
    - Mix: 1:5-6 sulfate resisting cement:sand (air entrained).
    - Thickness (excluding dubbing out and keys): 10-20mm.
  - Final coat: Gypsum plaster to BS EN 13279-1, class B.
    - Manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
    - Thickness: 2-3 mm.
    - Finish: To match existing.
- 50 GYPSUM PLASTER SKIM COAT ON PLASTERBOARD
- Plasterboard manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
  - Plaster: Board finish plaster to BS EN 13279-1, class B.
    - Manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
    - Thickness: 2-5 mm.
    - Finish: Smooth.
- 60 CEMENTS FOR MORTARS
- Cement: To BS EN 197-1.
    - Types: Portland cement, CEM I.
    - Portland slag cement, CEM II.
    - Portland fly ash cement, CEM II.
    - Strength class: 32.5, 42.5 or 52.5.
  - Sulfate resisting cement: To BS EN 197-1.
    - Strength class: 42.5.
  - Masonry cement: To BS EN 998-1 and Kitemarked
    - Class: MC 12.5 (with air entraining agent).

- 62      ADMIXTURES FOR CEMENT GAUGED MORTARS
- Air entraining (plasticizing) admixtures: To BS EN 934-2 and compatible with other mortar constituents.
  - Other admixtures: Submit proposals.
  - Prohibited admixtures: Calcium chloride and admixtures containing calcium chloride.
- 65      MIXING
- Render mortars (site-made):
    - Batching: By volume using gauge boxes or buckets.
    - Mix proportions: Based on damp sand. Adjust for dry sand.
  - Mixes: Of uniform consistence and free from lumps.
- 67      COLD WEATHER
- Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3°C.
  - External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising.
- 71      SUITABILITY OF SUBSTRATES
- General: Suitable to receive coatings. Sound, free from contamination and loose areas.
- 74      EXISTING DAMP AFFECTED PLASTER/ RENDER
- Plaster affected by rising damp: Remove to a height of 300 mm above highest point reached by damp or 1 m above dpc, whichever is higher.
  - Perished and salt contaminated masonry:
    - Mortar joints: Rake out.
    - Masonry units: Submit proposals.
  - Drying out substrates: Establish drying conditions.
- 76      REMOVING DEFECTIVE EXISTING PLASTER
- Plaster for removal: Loose, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
  - Removing plaster: Cut back to a square, sound edge.
- 78      REMOVING DEFECTIVE EXISTING RENDER
- Render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
  - Removing defective render: Cut out to regular rectangular areas with straight, square cut or slightly undercut edges.
    - Render with imitation joints: Cut back to joint lines.
  - Cracks (other than hairline cracks): Cut out to a width of 75 mm (minimum).
- 80      PLASTERBOARD BACKINGS
- Additional framing supports:
    - Fixtures, fittings and service outlets: Accurately position to suit fasteners.
    - Board edges and perimeters: To suit type and performance of board.
  - Joints:
    - Joint widths (maximum): 3 mm.
    - End joints: Stagger between rows.
    - Two layer boarding: Stagger joints between layers.
  - Joint reinforcement tape: Apply to joints and angles except where coincident with metal beads.
- 82      BEADS/ STOPS
- Location: External angles and stop ends.
  - Materials:
    - External render: Stainless steel.
    - Internal plaster/ render: Galvanized steel.
  - Fixing: Secure and true to line and level.
    - Beads/ stops to external render: Fix mechanically.
- 87      APPLICATION OF COATINGS
- General: Apply coatings firmly and achieve good adhesion.
  - Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
    - Accuracy: Finish to a true plane with walls and reveals plumb and square.

- Drying out: Prevent excessively rapid or localized drying out.
- Keying undercoats: Cross scratch (plaster coatings) and comb (render coatings). Do not penetrate undercoat.

#### 93 CURING AND DRYING OF RENDER COATINGS

- Curing: Keep each coat damp by covering with polyethylene sheet and/ or spraying with water
  - Curing period (minimum): as recommended by manufacturer).
- Drying: Allow each coat to dry thoroughly, with shrinkage substantially complete before applying next coat.

#### 99 RENDER FINAL COAT - PLAIN FLOATED FINISH

- Finish: Even, open texture free from laitance.

### **M60 Painting/ clear finishing**

#### **5 EMULSION PAINT TO INTERNAL PLASTERED SURFACES**

- Manufacturer: Contractors Choice.
  - Product reference: Premium Contract Matt Emulsion.
- Surfaces: Existing and new plaster substrate.
  - Preparation: Tape and fill joints and wash down all surfaces.
- Initial coats: As per the Schedule of Work.
  - Number of coats: 1.
- Undercoats: As per the Schedule of Work.
  - Number of coats: 1.
- Finishing coats: As per the Schedule of Work.
  - Number of coats: 1.

#### **10 EGGSHELL PAINT TO INTERNAL PLASTERED SURFACES**

- Manufacturer: Contractor choice.
  - Product reference: Premium Contract Eggshell.
- Surfaces: Existing and new plaster substrate.
  - Preparation: Tape and fill joints and wash down all surfaces.
- Initial coats: As per the Schedule of Work.
  - Number of coats: 1.
- Undercoats: As per the Schedule of Work.
  - Number of coats: 1.
- Finishing coats: As per the Schedule of Work.
  - Number of coats: 1.

#### **12 GLOSS PAINT TO INTERNAL TIMBERWORK**

- Manufacturer: Contractor choice.
  - Product reference: Universal Primer and Acrylic Gloss.
- Surfaces: Existing and new timberwork.
  - Preparation: Degrease and provide key and remove existing gloss paint.
- Primer coats: As per the Schedule of Work.
  - Number of coats: 2.
- Finishing coats: As per the Schedule of Work.
  - Number of coats: 2.

#### **16 DECORATIVE WOODSTAIN/ VARNISH/ PRESERVATIVE/GLOSS TO EXTERNAL WINDOW FRAMES, DOORS AND DOOR FRAMES**

- Manufacturer: Contractor's choice.
  - Product reference: Submit proposals for Contract Administrator approval.
- Surfaces: Existing and new timberwork.
  - Preparation: Degrease and provide key and remove existing gloss paint.
- Initial coats: As per manufacturer's recommendations.
  - Number of coats: As per manufacturer's recommendations.
- Finishing coats: As per manufacturer's recommendations.
  - Number of coats: As per manufacturer's recommendations.



- 20      **EXTERNAL MASONRY PAINT:** As per the drawings and schedule of works
- Manufacturer: Contractor's choice.
  - Product reference: Contractor's choice.
  - Surfaces: As per the drawings and schedule of works.
  - Preparation: Wash down surfaces to remove dust and debris.
  - Initial coats: As recommended by manufacturer.
  - Number of coats: 1.
  - Finishing coats: As recommended by manufacturer.
  - Number of coats: 2.
- 30      **PREPARATION GENERALLY**
- Standard: In accordance with BS 6150.
  - Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
  - Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
  - Substrates: Sufficiently dry in depth to suit coating.
  - Efflorescence salts, dirt, grease and oil: Remove.
  - Surface irregularities: Provide smooth finish.
  - Organic growths and infected coatings:
    - Remove with assistance of biocidal solution.
    - Apply residual effect biocidal solution to inhibit regrowth.
  - Joints, cracks, holes and other depressions: Fill with stoppers/ fillers. Provide smooth finish.
  - Dust, particles and residues from preparation: Remove and dispose of safely.
  - Doors, opening windows and other moving parts:
    - Ease, if necessary, before coating. Prime resulting bare areas.
- 32      **PREVIOUSLY COATED SURFACES GENERALLY**
- Preparation: In accordance with BS 6150, clause 11.5.
  - Contaminated or hazardous surfaces: Give notice of:
    - Coatings suspected of containing lead.
    - Substrates suspected of containing asbestos or other hazardous materials.
    - Significant rot, corrosion or other degradation of substrates.
  - Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
  - Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
  - Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
  - Alkali affected coatings: Completely remove.
  - Retained coatings:
    - Thoroughly clean.
    - Gloss coated surfaces: Provide key.
  - Partly removed coatings: Apply additional preparatory coats.
  - Completely stripped surfaces: Prepare as for uncoated surfaces.
- 37      **WOOD PREPARATION**
- General: Provide smooth, even finish with lightly rounded arrises.
  - Degraded or weathered surface wood: Take back surface to provide suitable substrate.
  - Degraded substrate wood: Repair with sound material of same species.
  - Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
  - Resinous areas and knots: Apply two coats of knotting.
  - Defective primer: Take back to bare wood and reprime.
- 39      **STEEL PREPARATION**
- Corrosion and loose scale: Take back to bare metal.
  - Residual rust: Treat with a proprietary removal solution.
  - Bare metal: Apply primer as soon as possible.
- 43      **PLASTER PREPARATION**
- Nibs, trowel marks and plaster splashes: Scrape off.
  - Overtrowelled 'polished' areas: Provide suitable key.
- 45      **PREVIOUSLY PAINTED WINDOW FRAMES**
- Paint encroaching beyond glass sight line: Remove.
  - Loose and defective putty: Remove.

- Putty cavities and junctions between previously painted surfaces and glass: Clean thoroughly.
  - Finishing:
    - Patch prime, re-putty, as necessary and allow to harden.
    - Seal and coat as soon as sufficiently hard.
- 50      EXTERNAL POINTING TO EXISTING FRAMES
- Defective sealant pointing: Remove.
  - Joint depth: Approximately half joint width; adjust with backing strip if necessary.
  - Sealant:
    - Manufacturer: Contractor's choice.
    - Product reference: Submit proposals for Contract Administrator approval.
    - Preparation and application: As section Z22.
- 55      EXISTING GUTTERS
- Dirt and debris: Remove from inside of gutters.
  - Defective joints: Clean and seal with suitable jointing material.
  - Suspected hazardous materials: submit method statement.
- 61      COATING GENERALLY
- Application standard: In accordance with BS 6150, clause 9.
  - Conditions: Maintain suitable temperature, humidity and air quality.
  - Surfaces: Clean and dry at time of application.
  - Thinning and intermixing: Not permitted unless recommended by manufacturer.
  - Priming coats: Apply as soon as possible on same day as preparation is completed.
  - Finish:
    - Even, smooth and of uniform colour.
    - Free from brush marks, sags, runs and other defects.
    - Cut in neatly.
  - Doors, opening windows and other moving parts: Ease before coating and between coats.
- 68      STAINING WOOD
- Primer: Apply if recommended by stain manufacturer.
  - Application: Apply in flowing coats and brush out excess stain to produce uniform appearance.
- 70      EXTERNAL DOORS
- Bottom edges: Prime and coat before hanging.
- 75      BEAD GLAZING TO COATED WOOD
- Before glazing: Apply first two coats to rebates and beads.
- 80      PUTTY GLAZING
- Setting: Allow putty to set for seven days.
  - Sealing:
    - Within a further 14 days, seal with an oil based primer.
    - Fully protect putty with coating system as soon as it is sufficiently hard.
    - Extend finishing coats on to glass up to sight line.

## **P10 Sundry insulation/ proofing work**

### **10 RIGID INSULATION (excl Bauder roof -refer to specification)**

- Manufacturer: Celotex or similarly approved.
- Product reference: as per manufacturers recommendations/Schedule of works
- Material: PIR rigid to BS EN 845-1 : 2013.
- Recycled content: Contractor's choice.
- Depth/ Thickness: as per schedule of works
- Installation: To manufacturer's instructions.

## **P20 Unframed isolated trims/ skirtings/ sundry items**

- 10      **SOFTWOOD general**
- Quality of wood and fixing: To BS 1186-3.
    - Species: Contractor's choice.
    - Class: 2.
  - Moisture content at time of fixing: 10-14%.
  - Preservative treatment: Not required.
  - Fire rating: Not applicable.
  - Profile: na.
  - Finished size: to suit.
  - Finish as delivered: Prepared and primed as section M60.
  - Fixing: Plugged, and screwed.
- 80      **INSTALLATION GENERALLY**
- Joinery workmanship: As section Z10.
  - Metal workmanship: As section Z11.
  - Methods of fixing and fasteners: As section Z20.
  - Straight runs: To be in one piece, or in long lengths with as few joints as possible.
  - Running joints: Location and method of forming to be agreed where not detailed.
  - Joints at angles: Mitre, unless shown otherwise.
  - Position and level: To be agreed where not detailed.

## **P31 Holes, chases, covers and supports for services**

- 10      **HOLES, RECESSES AND CHASES IN MASONRY**
- Locations: To maintain integrity of strength, stability and sound resistance of construction.
  - Sizes: Minimum needed to accommodate services.
    - Holes (maximum): 300 x 300 mm.
  - Walls of hollow or cellular blocks: Do not chase.
  - Walls of other materials: Sandstone
    - Vertical chases: No deeper than one third of single leaf thickness, excluding finishes.
    - Horizontal or raking chases: No longer than 1 m. No deeper than one sixth of the single leaf thickness, excluding finishes.
  - Chases and recesses: Do not set back to back. Offset by a clear distance at least equal to the wall thickness.
  - Cutting: Do not cut until mortar is fully set. Cut carefully and neatly. Avoid spalling, cracking and other damage to surrounding structure.
- 20      **NOTCHES AND HOLES IN STRUCTURAL TIMBER**
- General: Avoid if possible.
  - Sizes: Minimum needed to accommodate services.
  - Position: Do not locate near knots or other defects.
  - Notches and holes in same joist: Minimum 100 mm apart horizontally.
  - Notches in joists: Locate at top. Form by sawing down to a drilled hole.
    - Depth (maximum): 0.125 x joist depth.
    - Distance from supports: Between 0.07 and 0.25 x span.
  - Holes in joists: Locate on neutral axis.
    - Diameter (maximum): 0.25 x joist depth.
    - Centres (minimum): 3 x diameter of largest hole.
    - Distance from supports: Between 0.25 and 0.4 of span.
  - Notches in roof rafters, struts and truss members: Not permitted.
  - Holes in struts and columns: Locate on neutral axis.
    - Diameter (maximum): 0.25 x minimum width of member.
    - Centres (minimum): 3 x diameter of largest hole.
    - Distance from ends: Between 0.25 and 0.4 of span.
- 30      **PIPE SLEEVES**
- Material: Match pipeline.
  - Sleeves: Extend through full thickness of wall or floor. Position accurately.
    - Clearance around service (maximum): 20 mm or diameter of service, whichever is the lesser.

- Installation: Bed solid.

#### 40 SEALING AROUND SERVICES

- Service: general.
- Location: Pipe sleeves through walls and floors.
- Sealing material: to suit.
- Method: Completely fill gaps with sealant and finish neatly.
- Requirements: na.

### **Z20 Fixings and adhesives**

#### 10 FIXINGS AND FASTENERS GENERALLY

- Integrity of supported components: Select types, sizes, quantities and spacings of fixings, fasteners and packings to retain supported components without distortion or loss of support.
- Components, substrates, fixings and fasteners of dissimilar metals: Isolate with washers or sleeves to avoid bimetallic corrosion.
- General usage: To recommendations of fastener manufacturers and/ or manufacturers of components, products or materials fixed and fixed to.
- Fixings: To be in straight lines, at regular centres.

#### 25 FASTENER DURABILITY

- Materials: To have:
  - Bimetallic corrosion resistance appropriate to items being fixed.
  - Atmospheric corrosion resistance appropriate to fixing location.
- Appearance: Submit samples on request.

#### 30 FIXINGS THROUGH FINISHES

- Penetration of fasteners and plugs into substrate: To achieve a secure fixing.

#### 35 PACKINGS

- Materials: Non-compressible, corrosion proof.
- Area of packings: Sufficient to transfer loads.

#### 40 CRAMP FIXINGS

- Fasteners: Fix cramps to frames with screws of same material as cramps.
- Fixings in masonry work: Fully bed in mortar.

#### 50 PELLETTED COUNTERSUNK SCREW FIXINGS

- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
- Pellets: Cut from matching timber, grain matched, glued in to full depth of hole.
- Finished level of pellets: Flush with surface.

#### 55 PLUGGED COUNTERSUNK SCREW FIXING

- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
- Plugs: Glue in to full depth of hole.
- Finished level of plugs: Projecting above surface.

#### 60 APPLYING ADHESIVES

- Surfaces: Clean. Regularity and texture to suit bonding and gap filling characteristics of adhesive.
- Support and clamping during setting: Provide as necessary. Do not mark surfaces of or distort components being fixed.
- Finished adhesive joints: Fully bonded. Free of surplus adhesive.

### **Z21 Mortars**

#### 10 MORTAR MIXES

- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

#### 20 SAND FOR SITE MADE CEMENT GAUGED MASONRY MORTARS

- Standard: To BS EN 13139.
- Grading: 0/2 (FP or MP).
  - Fines content where the proportion of sand is specified as a range (e.g. 1:1: 5-6):  
Lower proportion of sand: Use category 3 fines.  
Higher proportion of sand: Use category 2 fines.
- Sand for facework mortar: Maintain consistent colour and texture. Obtain from one source.

## 25 SAND FOR LIME:SAND MASONRY MORTARS

- Type: Sharp, well graded.
  - Quality, sampling and testing: To BS EN 13139.
  - Grading/ Source: As specified elsewhere.

## 30 READY-MIXED LIME:SAND FOR CEMENT GAUGED MASONRY MORTARS

- Standard: To BS EN 998-2.
- Lime: Nonhydraulic to BS EN 459-1.
  - Type: CL 90S.
- Pigments for coloured mortars: To BS EN 12878.

## 40 CEMENTS FOR MORTARS

- Cement: To BS EN 197-1 and CE marked.
  - Types:
    - Portland cement, CEM I.
    - Portland limestone cement, CEM II/A-LL.
    - Portland slag cement, CEM II/B-S.
    - Portland fly ash cement, CEM II/B-V.
  - Strength class: 32.5, 42.5 or 52.5.
- White cement: To BS EN 197-1 and CE marked.
  - Type: Portland cement, CEM I.
  - Strength class: 52.5.
- Sulfate resisting Portland cement:
  - Types:
    - To BS 4027 and kitemarked.
    - To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
  - Strength class: 32.5, 42.5 or 52.5.
- Masonry cement: To BS EN 413-1 and CE marked.
  - Class: MC 12.5.

## 50 ADMIXTURES FOR SITE MADE MORTARS

- Air entraining (plasticizing) admixtures: To BS EN 934-3 and compatible with other mortar constituents.
- Other admixtures: Submit proposals for Contract Administrator approval.
- Prohibited admixtures: Calcium chloride, ethylene glycol and any admixture containing calcium chloride.

## 60 MAKING MORTARS GENERALLY

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mix proportions: Based on dry sand. Allow for bulking of damp sand.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
  - Mortars containing air entraining admixtures: Mix mechanically. Do not overmix.
- Contamination: Prevent intermixing with other materials.

## 70 MAKING HYDRAULIC LIME:SAND MORTARS

- Mixing hydrated hydraulic lime:sand: Follow the lime manufacturer's recommendations for each stage of the mix.
- Water quantity: Only sufficient to produce a workable mix.

## Z22 Sealants

### 31 JOINTS

- Primer, backing strip, bond breaker: Types recommended by sealant manufacturer.

### EXECUTION:

### 61 SUITABILITY OF JOINTS

- Pre-sealing checks:
  - Joint dimensions: Within limits specified for the sealant.
  - Substrate quality: Surfaces regular, undamaged and stable.
- Joints not fit to receive sealant: Submit proposals for Contract Administrator approval for rectification.

## 62 PREPARING JOINTS

- Surfaces to which sealant must adhere:
  - Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
  - Clean using materials and methods recommended by sealant manufacturer.
- Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.
- Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
- Protection: Keep joints clean and protect from damage until sealant is applied.

## 63 APPLYING SEALANTS

- Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
- Environmental conditions: Do not dry or raise temperature of joints by heating.
- Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.
- Sealant profiles:
  - Butt and lap joints: Slightly concave.
  - Fillet joints: Flat or slightly convex.
- Protection: Protect finished joints from contamination or damage until sealant has cured.

## Section 3:

### Schedule of works

This schedule is to be interpreted as including everything necessary to carry out the work shown in the Architects drawings.

All items specified to be supplied and fitted unless otherwise stated and contractor is to price each item individually and is deemed to include for all labour and plant required to achieve the details, not otherwise included in preliminaries.

Contractor to allow for, and carting away of, removed waste materials. Materials and Workmanship as per Specification and Drawings

Contractor to allow for all decommissioning, installation, re-commissioning, testing and certification works as required.

Contractor to allow for all statutory inspections, attendance, highway closures/permissions etc and safe working procedures. Contractor to allow for all plant/scaffolding required.

**The Contractor is to notify the CA immediately and seek clarification should there be any discrepancies with tender documentation.**

	Description		£
	<b>General site information (Also refer to Prelims/supporting information)</b>		
	<p><b>Contractor to note the following and also information within the HDRA/PCI form and include in prelims any additional costs incurred.</b></p> <p><b>Contractor Note –</b></p> <ul style="list-style-type: none"> <li>It is anticipated that the museum is to remain open during the works and that the contractor can carry out flat roof structural decking whilst existing glazed atrium is insitu, with a phased approach to make water tight roof structure when removing the atrium structure.</li> <li>Works to abutting parapets above glazed atrium anticipated to be carried out following installation of Bauder flat roof by approved roofing contractor. Should these works be carried out by others and not roofing contractor, the new roof finish/roof-lights will need to be adequately protected for the duration of the works to the satisfaction of Bauder rep (See item 2.3) – to ensure its Guarantee is not affected.</li> </ul> <p>Contractor to provide confirmation at tender stage.</p> <p>ALL certification including – Building control, test certificates and guarantees to be handed over at practical completion.</p>	Item	
<b>A</b>	<b>EXISTING FLAT ROOFING WORK (Roof 1)</b>		
<b>1.0</b>	(Refer to Drwgs 681 01-05 / 19-056-DWG001 & Bauder details incl Attached Bauder Specification/report & Section H71 & J41)		
1.1	<p>Roof preparation</p> <p>Contractor to strip back existing roof finishes/deck, including up stands to perimeter of roof / abutment</p>	Item	

	<p>flashings/changes in roof levels and prepare existing asphalt deck and parapet upstands including chutes etc ready for new roof finish as per Bauder specification, report and manufacturers recommendations (Attached)</p> <p>Include for temporary removal of existing projecting flue fittings and its re-instatement/recommissioning should it be disturbed roofing/parapet upstand works. (refer to M &amp; E section 5.0 below)</p> <p>Allow for removal and disposal of existing roof material off site.</p>		
		Item	
1.2	Allow for carrying out an inspection of all roofing structure and report any defects to contract administrator for further instruction.		
1.3	<p>Contractor to allow for taking down, setting aside and re-fixing isolate services/ aerials/ loose cables/roof projections incl boiler flues/lightening conductor and the like, that may disturb the roof works.</p> <p>Contractor to ensure for re-commissioning upon completion and that all are left undamaged and in good working order. Contractor to provide test certificates upon completion, as required. (Refer to M &amp; E Section 5.0 below)</p>	Item	
1.4	<p><b>Roof lights (RL1)</b></p> <p>Carefully remove existing roof light and prepare existing kerb as indicated on drawing and dispose off site.</p> <p>Prepare roof light openings ready to receive new. Supply and fit 1no. New Bauder Euroglaze Modular Rooflight with <b>Access Hatch</b> or suitably approved to opening as show on drawings, including up stands and all accessories. All as per specification &amp; supporting Bauder information (Roof 1) and in accordance with manufacturer's installation instructions and recommendations.</p> <p>Contractor to include for making good internal linings/finishes disturbed by the works upon completion to match existing.</p>	Item	
1.5	<p><b>Flat roof 1</b></p> <p>Supply and install Bauder total roofing system (BTRS) cold roof construction (by approved and certified Bauder contractor) or equally approved including all accessories in accordance with manufacturer's specification/drwg, installation instructions</p> <p>Include for forming up stands/abutments/rainwater outlets and water check details at junction between new and existing roof coverings, Incl roof projections to suit new roof levels and as per manufacturers recommendations. Include for installing new non- lead flashings to roof abutments/parapets/chutes to suit roof levels</p> <p>Allow for providing raised perimeter edging detail using Bauder GRP edge trim, as per manufacturer's recommendations.</p> <p>Include for supplying and fitting new collars to roof</p>	Item	



	<p>projections (flues) and leave watertight. Refer to M&amp; E section 5.0 below</p> <p>Allow for making good existing parapets/chutes to suit new abutment upstands to flat roofs. Include for all builders work as per manufacturers' recommendations / specification and details.</p> <p><b>Contact – Bauder</b>  <b>Chris Rea – Area Technical Manager</b>  <b>T: +44 (0)1473 257671</b>  <b>M: 07825 795280</b>  <b>F: +44 (0)1473 230761</b>  <b>E: c.rea@bauder.co.uk</b></p> <p>Note – Refer to M&amp; E section 5.0 below</p>		
1.6	<p>Leadwork – (also refer to Bauder specification)</p> <p>Supply and fit new lead work to roof/upstands/abutments/parapets/pitched roofs as per drawings and specification. All work to be carried out as per guidance and recommendations from the lead sheet association/ manufacturer's instructions and recommendations.</p>	Item	
1.7	<p>Contractor to rake out and re-point to match existing failed /cracked pointing to abutting stone parapet walls.</p> <p>Allow provisionally for 10m2 – to be re-measured on site</p>	Item	
<b>B</b>	<b>ATRIUM REPLACEMENT ROOFING WORK (Roof 2)</b>		
<b>2.0</b>	(Refer to Drwgs 681 01-05 / 19-056-DWG001 & Bauder details incl Attached Bauder Specification/report & Section H71 & J41)		
2.1	<p>Strip out works</p> <p>Carefully dismantle and remove existing glazed atrium structure and make good finishes disturbed incl-</p> <ul style="list-style-type: none"> <li>• Internal bulkhead to abutting parapet to flat roof 1 above stairs</li> <li>• External stonework/pointing to match existing. (Also refer to item 3.2 below)</li> <li>• Carefully remove upper patent timber and glazed panels to front entrance façade above entrance door and prepare ready to receive new roof structure.</li> </ul> <p>Allow for making good / cleaning out and repairing retained central gutter element ready for new flat roof structure/finish. Allow for removal and disposal of existing roof material off site.</p> <p>Internal - Allow for temporary removal of electrical fittings internally disturbed and making good finishes disturbed. (Refer to M&amp;E section 5.0 below)</p>	Item	
2.2	<p>New flat roof structure (read in conjunction with Bauder roof specification.)</p> <p>Contractor to frame out new flat roof structure, with sw timber, as detailed in structural engineers' drawings.</p>	Item	

	<p>Prepare ready to receive new roof deck 18mm ply by Bauder Roofing System (Refer to Bauder specification attached). Allow for all builder's work in connection of framing out for –</p> <ul style="list-style-type: none"> <li>• New roof lights</li> <li>• Firings min 38x50mm @ 600c/c to provide suitable fall for Bauder roof system</li> <li>• Packers, as required, to suit new roof falls to central guttering.</li> </ul> <p><u>Front Entrance Parapet</u> Construct/form new front entrance timber framed parapet wall with sw timbers as per Structural engineer's drwgs/spec (19-056-DWG001) and associated noggins. Allow for providing inner faced raised perimeter edging detail using Bauder GRP edge trim / Marley-Alutec-Evoke-coping system or suitably approved.</p> <p>Include for 18mm ply sheathing board/ breather membrane and fixing battens to outer parapet wall.</p> <p><u>Outer parapet cladding</u> Face to be clad with 8mm rock panel boards or suitably approved (colour – black) with a tapered rock panel barge &amp; fascia board to match existing entrance aspect &amp; colour.</p> <p><u>Recessed window alcoves above flat roof structure</u> Allow for framing out exposed recessed wall /alcoves- openings to abutment walls above proposed flat roof structure in timber as indicated upon drawing (K861-002-005) and installing 120mm PUR rigid insulation (refer to Bauder specification- or suitably approved) &amp; render carrier board incl mesh ready to receive new external render finish -as outlined within specification &amp; item 3.2 below. Include for framing out soffit ready for new plasterboard ceiling.</p> <p>Include for all builders work and installations as per manufacturers' recommendations / specification and details.</p>		
2.3	<p>Flat roof system (incl box gutter lining)</p> <p>Supply and install Bauder total roofing system (BTRS) (by approved and certified Bauder contractor) or equally approved including all accessories in accordance with manufacturer's specification- Entrance Corridor/drwgs, installation instructions and current building regulation requirements.</p> <p>Allow for providing all details as listed below. All works to comply with current building regulations and (Roof to achieve a min U value of 0.18W/m2K - Part L)</p> <p>Include for insulation laid to new falls to suit, forming up stands/abutments/rainwater outlets and water check details at junction between new and existing roof coverings, incl roof projections to suit new roof levels and as per manufacturers recommendations. Include for installing new non- lead flashings to roof abutments/chutes to suit new roof levels</p> <p>Allow for providing raised perimeter edging detail using Bauder GRP edge trim and coping, as per manufacturer's recommendations.</p>	Item	

	<p>Allow for making good existing parapets/chutes to suit new abutment upstands to flat roofs. Include for all builders work as per manufacturers' recommendations / specification and details.</p> <p>All detailing to be confirmed by the manufacturer to ensure manufacturers guarantee is provided.</p> <p>The contractor shall include for seeking 'sign off' from the manufacturer (Bauder) and supply documentary evidence to the Contract Administrator of manufacturers 20-year materials and workmanship guarantee. Documentary evidence to be provided immediately to prevent delay.</p> <p><b>Contact – Bauder</b>  <b>Chris Rea – Area Technical Manager</b>  <b>T: +44 (0)1473 257671</b>  <b>M: 07825 795280</b>  <b>F: +44 (0)1473 230761</b>  <b>E: <a href="mailto:c.rea@bauder.co.uk">c.rea@bauder.co.uk</a></b></p> <p>Note – Refer to M&amp; E section 5.0 below</p>		
2.4	<p>Leadwork – (also refer to Bauder specification)</p> <p>Flat roof 2 – Supply and fit new lead work to roof/ upstands/abutments/parapets as per drawings and specification.</p> <p>Additional- Include for an allowance to replace abutment lead flashings to parapet coping to abutment pitch roof. Allow 5 lin m – to be re-measured on site.</p> <p>All work to be carried out as per guidance and recommendations from the lead sheet association/ manufacturer's instructions and recommendations.</p>	Item	
2.5	<p>Roof lights (RL2 – RL13) – over atrium/entrance corridor</p> <p>Supply and fit 12no. New Euroglaze BA.X2.A.01.SF 1200mm x 1200mm roof lights or suitably approved to opening as show on drawings, including up stands and all accessories. All as per attached specification &amp; supporting Bauder information and in accordance with manufacturer's installation instructions and recommendations.</p> <p>Contractor to include for all builder's work / making good internal linings/finishes disturbed by the works upon completion to match existing.</p>	Item	
2.6	<p>Roof drainage (RWG's)</p> <p>Allow for taking off/cleaning/altering/adapting and refixing/resealing of existing rainwater goods wher disturbed/new to suit new roof levels/falls including, rwp/shoes/brackets, as required to suit roof finishes &amp; soffit and all as per specification/drwgs, manufacturer recommendations and building regulations.</p> <p>Contractor to include for cleaning existing surface water</p>	Item	

	gullies. Leave watertight & free flowing upon completion.		
<b>3.0</b>	<b>Existing abutment Parapet Wall Remedial Works - Refer to Drwgs K681 01-04</b>		
3.1	<p>Copings</p> <p>Carefully remove existing metal parapet coping /capping system. Make good and prepare stone work incl pointing ready for new coping installation. Remove arisings from site.</p> <p>Supply and fit new Aluminum coping/capping system by Marley (Alutec-evoke-coping system) or suitably approved. Contractor to take site measurements prior to ordering to confirm exact dimensions. Incl for o/h &amp; profit.</p> <p>Include for all angles, stop ends, T-junctions, raking angles, apex angles, upstand stop ends, stepped junctions between capping sizes as required.</p> <p>Include for making good disturbed abutment pitched roof slope lead flashings disturbed by the works. (Also Refer to Item 2.4 – leadwork above).</p> <p>(Also refer to cladding section item 3.2 below)</p>	Item	
3.2	<p>Parapet Over-Cladding to abutting pitched roof (Education), abutting engine roof walls &amp; Roof 1 (Refer to drwg K861-001-005)</p> <p>Render work Prepare existing wall finish (render) ready to receive new render finish &amp; new cladding system including rails where indicated on drwgs. Include for-</p> <ul style="list-style-type: none"> <li>• Hacking off exposed internal plaster (following removal of glazed atrium- and new flat roof levels)</li> <li>• Removal of existing s/s fall arrest system, de-bonded/defective existing external render,</li> <li>• Removal &amp; making good passive vents openings to walls</li> <li>• Re-rendering to match existing including expamet re-enforcement mesh to areas of cracking.</li> <li>• All render stop beadings, as required.</li> </ul> <p>Over-cladding walls Supply and fit Rock Panel ventilated system including supporting rails and accessories, as per specification and in accordance with manufacturer's installation instructions and recommendations.</p> <p><b>Technical Queries Contact – Tom Uzelac - Area Sales Manager – North West &amp; Yorkshire T +44 1656 863210 M +44 7824 848916 tom.uzelac@rockpanel.com</b></p> <p>Refer to Section 2 &amp; Item 3.1 above to ensure integrity. Leave watertight.</p>	Item	

3.3	<p><b>External entrance soffit to new flat Roof 2</b></p> <p>Supply &amp; fit 8mm rock panel system, include for packing out beam level irregularities / framing out boxed gutter/associated penetrations incl rwp's Contractor to allow for breather membrane and ply sheathing board and fixing battens.</p> <p>Include for –</p> <ul style="list-style-type: none"> <li>Boxing out external entrance beam/ installing 25mm celotex or suitably approved. Prior to installing rock panel cladding board to match.</li> <li>Install rigid PUR insulation (130mm) between flat roof joists above glazed entrance beam prior to installing soffit rock panel cladding.</li> </ul> <p>All as per manufacturers recommendations and instructions (See contact details – Item 3.2)</p> <p>Include for all builder's work.</p>	Item	
<b>C</b>	<b>Internal works</b>		
4.0	(Refer to Drwgs K681 - 01-05)		
4.1	<p><b>New Flat roof to Atrium Entrance (Roof 2)</b></p> <p><b>New Internal Ceiling</b></p> <p>Supply and fix new 12.5mm foil backed (vapour check) plasterboard to –</p> <ul style="list-style-type: none"> <li>New ceiling joists</li> <li>Lining new skylight apertures/openings</li> <li>Alcove recesses</li> <li>Bulk head above stairs where disturbed.</li> </ul> <p>All joints to be scrimmed and all finished with 3mm skim coat plaster. Include for corner beads and the like.</p> <p>Beam abutments to be sealed using a suitable flexible decorative sealant.</p> <p>Prepare for decoration.</p>	Item	
4.2	<p><b>Atrium/concourse water ingress damaged walls abutting sales/education rooms (localized repairs - (Refer to drwg K861-004)</b></p> <p>Masonry walls internally where plaster damaged by water ingress/roofing works. Allow for carefully removing and made good finishes using renovating plaster to existing levels and prepare for redecoration.</p> <p>Allow provisionally for 10m2 – to be re-measured on site</p> <p>Include for making good damaged plaster finishes where disturbed by new roofing works ready to receive new finish.</p>	Item	
4.3	<p><b>Water damaged ceiling outside kitchen and to first floor landing gutter box casing.</b></p> <p>Kitchen –</p> <p>Carefully remove water damaged plasterboard and prepare for renewal. Supply and fit new plasterboard and skim finish to match existing levels ready for localized decoration.</p> <p>First floor landing-</p> <p>Make good water damaged &amp; disturebed plaster/painted</p>	Item	

	finishes apply stain block and prepare boxing for redecoration.		
4.4	<p><b>Archives store raised flooring remedial repairs</b></p> <p>Supply and fit raised floor platform to areas as indicated on drwg K681-04 using –</p> <p>RYNO RDC-10-40 Deck Support "Joist Cradle" 10MM-40MM -Cradle spacing 400 mm centre -to -centre (Joist spacing at 500mm maximum) or suitably approved. Supply and fit 50 x 100mm joists and high density P5 chipboard, manufactured to meet BS EN 312:2003, finished bare chipboard to be fitted in accordance with manufacturers instructions/recommendations.</p> <p>Contractor to allow for all builder's work and include for associated stringers, pedestal gaskets/adhesive and supply &amp; fit hazard tape to raised step edge.</p>	Item	
4.5	<p><b>Decoration</b> <b>(Refer to drwg K861-05 for areas of decoration)</b></p> <p>New &amp; Existing Paint Finished Walls/Ceilings disturbed by works Make good finishes were disturbed. PVA sealer coat plus 1 coat primer and 2 coats emulsion to painted wall surfaces – Colour to match existing</p> <p>Metal work (atrium exposed beam structure) &amp; Timber generally (incl boxing) Paint with 1 coat primer /1 coat undercoat (where required) and two coats satin/gloss. Colour to be agreed.</p>	Item	
<b>5.0</b>	<b>General Mechanical &amp; Electrical (to areas disturbed by work only)</b>		
5.1	<p>All work to meet/comply with current IEE/Building Regulation requirements. Allow for the design, installation, inspection/testing, commissioning, statutory certification for all new electrical installations: modifications/alterations to existing installations as required. Electrical test certificate to be provided at practical completion.</p>	Item	
5.2	<p>Contractor to allow for the temporary disconnection/relocation and reconnection/re-commissioning of any boiler /flues/ lightening conductors/electrical data and alarm cabling/wiring/sockets/extractor fans/fused spurs/switches/fire bell/break glass/smoke&amp; fire detectors/lighting &amp; associated mechanical items disturbed by the above works.</p> <p>Specific electrical items –</p> <ul style="list-style-type: none"> <li>Removal of wall light fittings abutting education room walls &amp; redundant atrium beam structure fittings.</li> <li>Relocation of smoke detectors fixed to existing</li> </ul>	Item	

	<p>atrium roof structure to new flat roof finish.</p> <ul style="list-style-type: none"> <li>• Temporary removal and relocation of wall mounted WIFI receiver &amp; beam fixed people counter near entrance.</li> <li>• Surface mounted conduit, emergency lighting and speaker system disturbed by works.</li> <li>• Allow for protecting/maintaining existing lighting to soffit of existing atrium guttering structure for duration of works</li> </ul> <p>Allow for protecting items to remain insitu for duration of replacement works.</p> <p>Contractor to allow for all builder's work and accessories to re-instate items upon completion. Leave in good working order.</p>		
	<p style="text-align: right;"><b>TOTAL</b> <b>TO SUMMARY OF TENDER</b></p>		

## Section 4:

# Project Health & Safety Information

Introduction

- 1 Description of the Project
- 2 Client's considerations and management requirements
- 3 Environmental restrictions and existing on-site risks
- 4 Significant design and construction hazards
- 5 The Health and Safety File
- 6 Additional Requirements
- 7 **Supporting Information Pre-Construction Information & (HDRA Form) Designer Risk Assessment**



## **1. DESCRIPTION OF THE PROJECT**

### **1.1 Refer to Preliminaries sections A10 / A11 / A12 & A13**

## **2 CLIENT'S CONSIDERATIONS AND MANAGEMENT REQUIREMENTS**

### **2.1 Arrangements for health, safety and welfare *Planning and managing for construction work***

The safety goals for this project are:

- No fatalities
- No major injuries
- No dangerous occurrences
- No exposure to substances and processes hazardous to health
- Minimise and/or remove, where reasonably practicable, the risk of ill health or injury to employees, subcontractors and others, including the general public.

The Main Contractor will manage, monitor and review on an ongoing basis health and safety implementation and performance and copy reports etc. to the Principal Designer/CDMC.

The Main Contractor will make suitable safe provision for the following:

- Management of construction tasks, e.g.
- Arrangements of work at height;
- Adequate site accommodation and welfare facilities;
- Loading and unloading of materials and equipment;
- Safe storage of materials, plant and equipment, etc.
- Access and egress to the site and security and isolation of the works;
- Ensure that PPE Regulations are employed.

Minimum security for the site area is to be 2m fencing as indicated in the HSE Guidance Note GS151 'Protecting the public-your next move'.

#### ***Communication and liaison between client and others***

Any changes to the Plan required as a result of design changes shall be discussed with the Principal Designer/CDM Co-ordinator.

The Main contractor will also need to liaise with the Designer on the requirements for the Health and Safety File (see section 4.0).

Health and Safety will be an item on the agenda of all project progress meetings. The Main Contractor will be expected to provide a report on any health and safety issues that have arisen since the previous meeting. As a minimum, this will include:

- Health and safety incidents
- Time lost due to accidents
- Safety Inspections and Audits (key issues, action)
- HSE visits (observations, enforcement notices, action)
- Implications of developing design issues and changes

The Main contractor must liaise with client's project lead designer, the design team, to co-ordinate all matters of health and safety management as they may affect the users, maintainers and those carrying out construction work.

#### ***Security of the site***

Contractors must undertake a site specific assessment and make necessary measures to ensure that their security is sufficiently stringent to avoid incidents affecting themselves, children, parents, visitors, residents or any building users or other person who may be in the vicinity of the works. See also HSG 151 "Protecting the public –Your next move."

Minimum security for the compound should be 2m fencing as indicated in the HSE Guidance Note GS7 'Accidents to Children on Construction Sites' and HSG 151

Further security to work areas within the building should be explained within the Construction Phase Health and Safety Plan.

- Workers to wear visible ID
- All visitors to site to report to site office and sign in/out
- All vehicles manoeuvring on and within the site or the entrance area must be fully supervised by trained banksman.
- Agreed access routes to the site must be observed at all times.
- All roads and footpaths must be protected and maintained in a condition suitable for vehicular and pedestrian traffic.
- Adequate safety signs and notices must be displayed indicating the construction area and sufficient lookouts must be provided to prevent unauthorised people entering the construction area.
- All delivery vehicles must use the designated entrance and comply with any site restrictions
- Work will cease in an area if material suspected as being asbestos or hazardous in nature is discovered.

Access and egress routes to the construction site is to be agreed between the Contractor and the Lead designer prior to work commencing and reviewed throughout the contract complimented by fire drills to assess effectiveness.

#### ***Welfare provision***

Welfare facilities are to be of a standard laid down in the Construction (Design and Management) Regulations 2007 or better and the Main contractor is to satisfy himself with regard to the facilities he is providing on site and the number of people it is anticipated will be required to use the facilities.

## **2.2 Site transport arrangements/vehicle movement restrictions**

Refer to the Contract preliminaries of the tender specification for any working time restrictions.

Contractors to produce a full access plan indicating access; egress; and segregation.

The speed limit must be observed at all times.

A method for preventing excess detritus being transferred to the road should be considered as part of the Construction Plan.

#### ***Emergency procedures and means of escape***

The Main contractor will be responsible for developing proposals and providing signs for the construction site to cover day to day access, information and emergency matters.

A Full fire emergency response plan must be developed in accordance with the project programme and the Contractor must include emergency lighting and evacuation routes from the work area. Fire (including temporary alarms during the construction phase) to be maintained operable at all times.

The emergency plan must be integrated with any existing plan.

The Contractor must prepare and maintain drawings to show all temporary means of escape during the construction phase. All temporary means of escape must be kept clear of obstructions at all times and provided with adequate lighting and signage at regular intervals on long routes and changes of directions. Signs should be located where clearly visible and they must be securely fixed.

#### **Smoking, parking and other restrictions**

No radios

No eating or drinking, except in those areas agreed and highlighted in the Construction Phase Health and Safety Plan

No lewd behaviour

No smoking on the site.

No site fires

## **3.0 ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS**

### **3.1 Introduction**

The hazards referred to in this section of the Plan are either known to be present or are suspected to be present.

The Main contractor must ascertain for himself any further information he may require to ensure the safety of all persons affected by the works.

### **3.2 Safety issues**

#### ***Boundaries and access, including temporary access***

Site boundaries must be maintained and controlled for the duration of the project.

#### ***Restrictions on deliveries/waste collection/storage***

Waste should be removed daily and not allowed to accumulate. Any skips left overnight must have secure locking lids, which must be used. Public highways and the access to adjoining properties must not be obstructed. All vehicles carrying waste from the site must be operated by registered "Waste Carriers".

#### ***Adjacent land uses***

The Main Contractor must ensure that local land users are not adversely affected by their movements.

#### ***Existing storage of hazardous materials***

Should be identified within the tender documents.

#### ***Location of existing services***

Services where known are identified in the contract documents including the relevant utility plans. The contractor should request revised and updated utility plans before commencing work (there may be time delays between preparation of contract documents and start on site. The contractor must undertake the normal precautions before excavating.

#### ***Ground conditions, underground structures, water courses***

Should be identified within the tender documents.

#### ***Existing structures***

Should be identified within the tender documents.

#### ***Previous structural modifications***

Should be identified within the tender documents.

#### ***Fire damage, ground shrinkage, movement or poor maintenance***

Should be identified within the tender documents.

#### ***Difficulties relating to plant and equipment***

Include details that may affect the Main Contractors selection of plant and equipment such as overhead gantries whose height restricts access.

Access for machinery should be confirmed prior to starting on-site and any issues dealt with accordingly within the Construction Phase Health & Safety Plan.

#### ***Historic health and safety information***

Should be identified within the tender documents.

#### ***Manual Handling***

Should be identified within the tender documents.

#### ***Additional safety issues***

Should be identified within the tender documents.

### **3.3 Health hazards**

#### ***Asbestos***

If any asbestos is encountered work will cease until a recovery plan can be put into operation.

#### ***Existing storage of hazardous materials***

Should be identified within the tender documents.

***Contaminated land, including results of surveys***

The Main Contractor is responsible for carrying out appropriate risk assessments for occupational health issues and where health risks are identified the Main Contractor shall provide health surveillance and monitoring and safe working procedures accordingly.

***Existing structures containing hazardous materials***

Should be identified within the tender documents.

***Health risks arising from client's activities***

The Main Contractor will detail in the Construction Plan how all health hazards identified in their risk assessments will be managed during the works. The Main Contractor shall possess material safety data sheets for all substances being used in the works and an associated COSHH assessment for its use in the specific situation.

**4 SIGNIFICANT DESIGN AND CONSTRUCTION HAZARDS**

Significant hazards and associated health and safety aspects of the design which the designer has been unable to eliminate are included within the tender documentation on the Designers Risk Assessment.

**4.1 Significant design assumptions and suggested work methods, sequences or other control measures**

At the completion of the detailed design, all of the risks should either have been eliminated or reduced to a level that can be controlled safely on site. Any which have not been eliminated have been identified on the PCI & Designers Risk Assessment.

**4.2 Arrangements for co-ordination of ongoing design work and handling design changes**

Ongoing design changes should be discussed and approved via the Designer.

**4.3 Information on significant risks identified during design**

The Main Contractor shall include in the Construction Plan the procedure controlling significant risks.

**4.4 Materials requiring particular precautions**

Construction materials of an unusual nature used in this project and identified as liable to introduce significant hazards are included within the PCI & Designer's Risk Assessment.

**5 THE HEALTH AND SAFETY FILE**

The File structure is to be discussed with the Client.

**6 ADDITIONAL REQUIREMENTS**

**Main contractor resources**

The Designer is to assess the resources of the Main contractor for this project with respect to health and safety.

**7 HAZARD DESIGN RISK ASSESSMENT**

Designer Risk Assessment