HDC 133 Appendix A

SPECIFICATION OF WORKS

In Respect Of

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

At

THE SYMINGTON BUILDING MARKET HARBOROUGH LEICESTERSHIRE LE16 7AG

For And On Behalf Of

HARBOROUGH DISTRICT COUNCIL

RCL Ref: 1149

April 2016

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CONTENTS

Appendix 1

Rhomco drawing - RCL1149/CDF/001/T01 – Site Set-Up Plan

Appendix 2

Rhomco drawing - RCL1149/CDF/002/T01 – Area of Proposed Works

Appendix 3

Clearview Environmental Ltd – Bulk Sampling Report – (Report No. J013652) 15th March 2016

Appendix 4

Roof Fixing Specification – Redland SpecMaster (S10-004093) & FixMaster (FM-10-001915)

Appendix 5

Selection of general photographs taken 24th February 2016.

SECTION 1

PRELIMINARIES

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

A1 THE PROJECT GENERALLY

A10 PROJECT PARTICULARS

110 THE PROJECT:

Name: Roofing covering replacement and associated works at The Symington Building, Market Harborough, Leicestershire

Nature: In general, the works will include the following:

- Remove all existing roof slates to the whole roof covering and replace with a new roof slate to match the finish, colour and size of the roof slates upon the front wing building;
- Remove and replace all existing ridge tiles to the whole roof covering in a similar ridge tile to match existing finish, colour and size;
- Remove and replace all underlay and battens with new breathable underlay and battens;
- Remove and replace all bedded cloak verge details to the gable-ends with new cloak verge to match existing;
- Remove and replace the snow guard at eaves level to match existing finish, colour and size;
- Existing strip glazed roof lights to remain as these seem to be in reasonable condition. Replace any cracked or blown units if any identified on site;
- Remove and replace all lead flashings, trims etc around the existing strip roof lights with new flashings in accordance with current standards;
- Over clad the existing timber fascia boards with new PVCu fascia/capping board to the East Elevation and remove the existing timber corbel to the West Elevation and replace with treated timber board and PVCu fascia/capping board all to match existing finish/profile, colour and size;
- Remove the existing half round PVCu guttering to the East Elevation and also the Ogee cast iron guttering to the West Elevation and replace with new Moulded cast aluminium guttering and square downpipes throughout all to match existing finish, colour and size;
- Review the existing insulation depth and properties to ascertain adequate thermal and cross ventilation design. This is also subject to the combined review of Building Control.
- Overlay a new built-up felt roof covering to the dormer roof on the East Elevation;
- Remove the existing half round PVCu guttering and downpipes to the dormer roof and replace with new Moulded cast aluminium rainwater goods all to match existing finish, colour and size;
- Remove all existing roof slates to the whole roof covering upon the small hip roof configuration located on the North Elevation and replace in a similar roof slate to match existing finish, colour and size;
- Remove and replace all underlay and battens with new breathable underlay and battens upon the small hip roof configuration located on the North Elevation;
- Remove the half round PVCu guttering and downpipes upon the small hip roof configuration located on the North Elevation and replace with new Moulded cast aluminium guttering and square downpipes throughout all to match existing finish, colour and size.

Location: The working areas comprise the specific areas and elements of the premises to be worked upon referred to as the Rear Wing of the Symington Building. Refer to Rhomco drawing - RCL1149/CDF/001/T01 – Site Set-Up Plan & RCL1149/CDF/002/T01.

Timescale for completion of the construction work: It is envisaged that the works will commence during early July 2016.

120 EMPLOYER (CLIENT):
Harborough District Council
Adam and Eve Street
Market Harborough
Leicestershire
LE16 7AG

127 THE PRINCIPAL C**O**NTRACTOR: The Contractor

141 CONTRACT ADMINISTRATOR (hereinafter referred to as 'CA'):
Rhomco Consulting Limited
Westview House
Oak Tree Court
Mulberry Drive
Cardiff Gate Business Park
Cardiff
CF23 8RS

147 PRINCIPAL DESIGNER (CDM REGULATIONS):
Rhomco Consulting Limited
Westview House
Oak Tree Court
Mulberry Drive
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Cardiff
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150 QUANTITY SURVEYOR:
Rhomco Consulting Limited
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A11 TENDER AND CONTRACT DOCUMENTS

160 THE PRE-CONSTRUCTION INFORMATION is provided in accordance with the CDM Regulations 2015 as a separate document. It refers to information given elsewhere in the preliminaries, specification and drawings.

170 The following drawings and specifications have been issued with the tender documentation and will become the contract drawings in due course:

Rhomco Consulting Limited

- Specification of Works (i.e. this document);
- Drawing no. RCL 1149/CDF/001/T01 – Site Set-Up Plan
- Drawing no. RCL 1149/CDF/002/T02 – Working Area
- Pre-Construction Information.

A12 THE SITE/EXISTING BUILDINGS

110 THE SITE:
The site comprises of the specific areas and elements of the premises to be worked upon.

140 EXISTING MAINS/SERVICES:
Water
Gas
Electricity
Telecommunications

200 ACCESS TO THE SITE:
In accordance with current provisions and to contractors liaison.

210 PARKING of contractors and employees' vehicles: Will be permitted in the designated car park herein referred to as ‘Fox Yard’ adjoining to the premises that is accessible from Symington Way, which will form part of the contractors overall compound. Full details to be agreed with CA prior to commencement of works on site.

220 USE OF THE SITE:
- Do not use the site for any purpose other than carrying out the Works.

230 SURROUNDING LAND/BUILDING USES:
The premises are situated off the junctions of Adam and Eve Street, Symington Way and Roman Way, Market Harborough. The building comprises of four-storey office accommodation.

The surrounding uses incorporate a variety of retail business and domestic dwellings.

Should the contractor require any additional information with regards to the surrounding land/building uses, their queries should be raised with the Contract Administrator as soon as practicable in order that further investigations and enquiries of the client can be made as appropriate.

240 RISKS TO HEALTH AND SAFETY:
- The nature and condition of the site / building cannot be fully and certainly ascertained before it is opened up. However the following risks are, or might, be present:

- Asbestos containing materials;
- Working from temporary access scaffold and platforms;
- Fire evacuation;
- Creation of dust and debris;
- Creation of noise;
- Working on and about live services installations;
- Working at high level;
- Working from mechanical access platforms / hoists;
- Works to a roof surface incorporating corroded and fragile sections;
- Debris removal;
- Working adjacent areas frequented by others.

- The accuracy and sufficiency of this information is not guaranteed by the Employer or the CA and the Contractor must ascertain for himself any information he may require to ensure the safety of all persons and the Works.

280 SITE VISIT: Before tendering, ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.

*Access to the site **must** be made by prior appointment by contacting Paul Lewis of Rhomco Consulting Limited on (029) 2073 5454.*

A13 DESCRIPTION OF THE WORK

120 THE WORK:
See item A10/110 above.

140 WORK BY OTHERS CONCURRENT WITH THE CONTRACT: It is possible that the employer will engage other contractors to undertake works within the subject premises at the same time as these works, albeit the designated working areas will be kept clear at all times.

A20 THE CONTRACT

INTERMEDIATE FORM OF CONTRACT: The form of contract will be the Intermediate Building Contract 2011 (IC 2011) published by the Joint Contracts Tribunal (JCT).

THE RECITALS

1st Recital
The work comprises the Roof Covering Replacement and Associated External Works at the Rear Wing of The Symington Building, Market Harborough, Leicestershire, LE16 7AG

2nd Recital

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

The following drawings / documents have been issued:
See section A11/170 of Rhomco specification preliminaries for list of documents.

3rd Recital
The reference to 'bills of quantities' and 'work schedules' will be deleted.
The reference to named sub-contract tender and agreement will also be deleted.

4th Recital
Alternative B will be deleted. Alternative A will apply.
Within alternative A the reference to 'bills of quantities' and 'work schedules' will be deleted.
Reference to an 'activity schedule' will be deleted.

6th Recital
This recital will be deleted.

THE ARTICLES

Article 3
Architect/Contract Administrator: See section A10.

Article 4
Quantity Surveyor: See section A10.

Article 5
CDM Coordinator: See section A10.

Article 8
Arbitration - will be deleted.

CONTRACT PARTICULARS

5th Recital and Clause 4.5 - the Employer is not a contractor.

7th Recital - CDM Regulations - the project is notifiable.

8th Recital - description of sections - as indicated in Rhomco Consulting Ltd schedule of works.

9th Recital - Framework Agreement - will be deleted.

10th Recital and Schedule 5 - Supplemental Provisions:

Collaborative working - does not apply

Health and safety - does not apply

Cost savings and value improvements - does not apply

Sustainable development and environmental considerations - does not apply

Performance indicators and monitoring - does not apply

Notification and negotiation of disputes - does not apply

Article 8 - Arbitration - Article 8 and clauses 9.3 to 9.8 do not apply

1.1 Base date: 1 March 2016

CDM Planning period: 2 week 'ending on the Date of Possession'

Date for Completion of the works - to be agreed

Dates for completion of the work in sections - does not apply.

1.7 As indicated at commencement of Agreement.

2.4 Date of Possession of the site - to be agreed

Dates for possession of sections - does not apply.

2.5 Deferment of possession of the site: applies. Maximum period 6 weeks

Reference to deferment of possession of sections: does not apply.

2.32.2 Liquidated damages: £5,000.00 per week

Sections: rate of liquidated damages for each Section: does not apply.

2.29 Sections:
Section sums - does not apply.

2.30 Rectification Period: 12 months

Sections: Rectification Periods: does not apply.

4.6 Advance payment - will be deleted.
Advance Payment Bond - will be deleted.

4.7.1 Interim payments - due dates - the first date will be 'one calendar month following commencement'.

4.8.1 Interim payments - percentages of value - prior to practical completion 95%, following practical completion $97^{1}/_{2}$%.

4.9.4 Listed items - uniquely identified - will be deleted.

4.9.5 Listed items - not uniquely identified - will be deleted.

4.15 and Schedule 4 - Contribution, levy and tax changes - will be deleted.

6.4.1.2 Contractor's insurance
Insurance cover to be not less than £5million

6.5.1 Insurance - liability of Employer.
May be required
Insurance cover to be not less than £5million

6.7 and Schedule 1 - Insurance of the Works - Insurance Option C applies

6.7 and Schedule 1 - Percentage to cover professional fees - 17%

6.7 and Schedule 1 - Annual renewal date of insurance - to be confirmed

6.10 and Schedule 1 - Terrorism Cover - will be deleted

6.12 Joint Fire Code - does not apply

6.15 Joint Fire Code - amendments / revisions - will be deleted

8.9.2 Period of suspension - 2 months

8.11.1.1 to 8.11.1.5 Period of suspension - 2 months

9.2.1 Adjudication - The Royal Institution of Chartered Surveyors

9.4.1 Arbitration - will be deleted

Collateral Warranties - not required

EXECUTION: The Contract will be subject to execution 'as a deed'. Reference to execution 'under hand' will be deleted.

NB: For the avoidance of doubt, where the building contract documentation makes reference to the *'CDM Regulations 2007'* this is to be substituted with the words *'CDM Regulations 2015'*. Likewise, where the building contract documentation makes reference to the '*CDM Coordinator'* this is to substituted with the words *'Principal Designer'.*

A30 TENDERING/SUBLETTING/SUPPLY

MAIN CONTRACT TENDERING

110 SCOPE: These conditions are supplementary to those stated in the invitation to tender and on the Form of Tender.

120 TENDERING PROCEDURE will be in accordance with the principles of the 'Code of Procedure for Single Stage Selective Tendering' 1996.

160 EXCLUSIONS: If the Contractor cannot tender for any part(s) of the work as defined in the tender documents he must inform the CA as soon as possible, defining the relevant part(s) and stating the reasons for his inability to tender.

170 ACCEPTANCE OF TENDER: The Employer and his representatives:
- Offer no guarantee that the lowest or any tender will be recommended for acceptance or accepted.
- Will not be responsible for any cost incurred in the preparation of any tender.

190 PERIOD OF VALIDITY: Tenders must remain open for consideration (unless previously withdrawn) for not less than **13 weeks** from the date fixed for the submission or lodgement of tenders. Information on the date for possession/commencement is given in section A20.

PRICING/SUBMISSION OF DOCUMENTS

211 PRELIMINARIES IN THE SPECIFICATION: The Preliminaries/General conditions sections (A10-A55 inclusive) must not be relied on as complying with SMM7.

301 QUANTITIES IN THE SPECIFICATION: Where and to the extent that quantities are included in the specification, they have been prepared in accordance with SMM7 only where and to the extent stated. Where not so stated, the items, descriptions and measurements:
- Must not be relied on as complying with SMM7.
- Must be priced taking account of the information given elsewhere in the tender documents, including for all associated and ancillary work shown or clearly apparent as being necessary for the complete and proper execution of the work.

310 SPECIFICATION WITHOUT QUANTITIES: Where and to the extent that quantities are not included in the specification, 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.

320 PRICING OF SPECIFICATION: Alterations and qualifications to the specification must not be made without the written consent of the CA. Tenders containing unauthorised alterations or qualifications may be rejected. Costs relating to items in the specification which are not priced will be deemed to have been included elsewhere in the tender.

330 THE PRICED SPECIFICATION must be submitted at time of tender.

340 ERRORS IN THE PRICED SPECIFICATION will be dealt with in accordance with the 'Code of Procedure for Single Stage Selective Tendering' 1996, Alternative 1 (the word 'specification' being substituted for 'bills of quantities').

460 A CONTRACT SUM ANALYSIS must be submitted upon request.

The Analysis must comprise a breakdown of the Contract Sum into at least the following categories:

- All works.

480 PROGRAMME: The Contractor's proposed programme as specified in Section A32 or a summary thereof showing the sequence and timing of the principal parts of the Works, periods for planning and design and itemising any work which is excluded must be submitted at time of tender.

500 TENDER STAGE METHOD STATEMENTS must be submitted upon request describing how and when the Contractor proposes and undertakes to carry out the following:

- All works.

The Contractor may, at his discretion and at the same time, submit method statements for other parts of the Works.

510 ALTERNATIVE METHOD TENDERS:
- In addition to and at the same time as his tender for the Works as defined in the tender documents, the Contractor may, at his discretion, submit alternative method(s) of construction for consideration. Alternatives which would involve significant changes to other work will not be considered.
- Such alternative(s) will be deemed to be alternative tender(s) and each must include a complete and precise statement of the effects on cost and programme.
- Carry out a health and safety risk assessment for each such alternative and where appropriate provide a safety method statement suitable for incorporation in the Health and Safety Plan.
- Full technical data for each such alternative must be submitted at the time of tender together with details of any consequential amendments to the design and/or construction of other parts of the Works.

516 ALTERNATIVE TIME TENDERS:
- In addition to and at the same time as his tender based upon the date or period specified in section A20, the Contractor may, at his discretion, submit an alternative tender based upon a different date for completion or period.
- If any such tender is accepted the date for completion inserted in the Appendix to the Contract will be the date stated in the alternative tender or determined from the period stated in the alternative tender.

540 QUALITY CONTROL RESOURCES: A statement must be submitted at the time of tender describing the organisation and resources which the Contractor proposes and undertakes to provide to control the quality of the Works, including the work of subcontractors. The statement must include the number and type of staff responsible for quality control, with details of their qualifications and duties.

551 HEALTH AND SAFETY INFORMATION: A statement must be submitted with the tender describing the organisation and resources which the contractor proposes and undertakes to provide to safeguard the health and safety of operatives, including those of subcontractors and of any person who may be affected by the works, including:
- A copy of the contractor’s health and safety policy document, including risk assessment procedures.
- Accident and illness 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.

570 AN OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN must be submitted upon request and at least 5 days prior to works commencing on site and is to include the following:

- Method statements related to the construction hazards identified in the pre-tender health and safety plan and/or statements on how the hazards will be addressed and other significant hazards identified by the contractor.
- 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 co-operation and co-ordination 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 any 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.

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

120 CA means the person nominated in the Contract as Architect or Contract Administrator or his authorised representative.

130 IN WRITING: When required to advise, notify, inform, instruct, agree, confirm, obtain information, obtain approval or obtain instructions do so in writing.

140 APPROVAL (and words derived there from) means the approval in writing of the CA unless specified otherwise.

150 PRODUCTS means materials (including naturally occurring materials) and goods (including components, equipment and accessories) intended for permanent incorporation in the Works.

180 CROSS-REFERENCES TO THE SPECIFICATION:

- Where a numerical cross-reference to a specification section or clause is given on drawings or in any other document the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause.
- Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the specification will apply, cross-reference thereto being by means of related terminology.
- Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to specification section dealing with general matters, ancillary products and workmanship also apply.
- The Contractor must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity which he may discover.

200 EQUIVALENT PRODUCTS:

- Where the specification permits substitution of a product of different manufacture to that specified and such substitution is desired, before ordering the product notify the CA and, when requested, submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevantappearance. Submit certified English translations of

any foreign language documents.
- Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole. If such substitution is sanctioned, and before ordering products, provide revised drawings, specification and manufacturer's guarantees as required by CA.

210 BRITISH STANDARD PRODUCTS: Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product 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 specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. In advance of ordering notify the CA of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements. Any submitted foreign language documents must be accompanied by certified translations into English.

220 REFERENCES TO BSI DOCUMENTS are to the versions and amendments listed in the BSI Standards Catalogue at the time of writing.

270 SIZES: Unless otherwise stated:
- Products are specified by their co-ordinating sizes.
- Cross section dimensions of timber shown on drawings are nominal sizes before any required planning.

280 FIX ONLY means all labours in unloading, handling, storing and fixing in position, including use of all plant.

290 SUPPLY AND FIX: Unless stated otherwise all items given in the schedule of work and/or on the drawings are to be supplied and fixed complete.

TERMS USED IN REFURBISHMENT/ALTERATION

311 REMOVE means disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials, and dispose of unwanted materials. It does not include removing associated pipework, wiring, ductwork or other services.

321 KEEP FOR REUSE means:
- During removal prevent damage to the stated components or materials, and clean off bedding and jointing materials.
- Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.

331 REPLACE means:
- Remove the stated existing components, features and finishes.
- Provide and fit in lieu new components, features or finishes which, unless specified otherwise, must match those which have been removed.
- Make good as necessary.

341 REPAIR means carry out local remedial work to components, features and finishes as found in the existing building. Resecure or refix as necessary and leave in a sound and neat condition. It does not include:
- Replacement of components or parts of components.
- Redecoration.

351 MAKE GOOD means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work under this Contract and leave in a sound and neat condition. It does not include:
- Replacement of components or parts of components.
- Redecoration.

The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.

361 EASE means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

371 TO MATCH EXISTING means use products, materials and methods to match closely all visual characteristics and features of the existing work, with joints between existing and new work as inconspicuous as possible, all to approval of appearance.

DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

410 ADDITIONAL COPIES OF DRAWINGS: Two copies of drawings (not counting any certified copy of the Contract Drawings) will be issued to the Contractor free of charge. Additional copies will be issued on request but will be charged to the Contractor.

430 ADDITIONAL COPIES OF SPECIFICATION: After execution of the Contract, two copies of the Specification will be issued to the Contractor in accordance with the Contract. Additional copies will be issued on request, if available, but will be charged to the Contractor.

440 DIMENSIONS: The accuracy of dimensions scaled from the drawings is not guaranteed. Obtain from the CA any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings.

450 THE MEASURED QUANTITIES: For purposes of ordering products and constructing the Works:
- The accuracy and sufficiency of the measured quantities is not guaranteed.
- The specification and drawings shall take precedence over the measured quantities.

460 THE SPECIFICATION: All sections of the specification must be read in conjunction with Main Contract Preliminaries/ General conditions.

DOC'S PROVIDED BY CONTRACTOR/SUBCONTRACTORS

692 AS BUILT DRAWINGS AND INFORMATION must be provided to the CA not less than 1 week prior to the date for Completion.

710 TECHNICAL LITERATURE: The Contractor is required to keep copies of the following on site *(such information to be passed to the CA upon completion of the works for inclusion within the Health & Safety File)*, readily accessible for reference by all supervisory personnel:
- Manufacturers' current literature relating to all products to be used in the Works.
- BSI Handbook No. 3, with all current revision sheets included and superseded sheets removed.
- Relevant BS Codes of Practice.
- Those parts of BS 8000 'Workmanship on building sites' which are invoked in the specification.

720 MAINTENANCE INSTRUCTIONS AND GUARANTEES:
Retain copies delivered with components and equipment (failing which, obtain), register with manufacturer as necessary and hand over to CA on or before Practical Completion.

A32 MANAGEMENT OF THE WORKS

GENERALLY

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

120 INSURANCES: Before starting work on site submit documentary evidence and/or policies and receipts for the insurances required by the Conditions of Contract.

130 INSURANCE CLAIMS: 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, forthwith give notice in writing to the Employer, the CA and the Insurers. Indemnify the Employer against any loss which may be caused by failure to give such notice.

140 CLIMATIC CONDITIONS: Keep an accurate record of:
- Daily maximum and minimum air temperatures (including overnight).
- Delays due to adverse weather, including description of the weather, type(s) of work affected and number of hours lost.

150 OWNERSHIP: Materials arising from the alteration work are to become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

160 HARDCORE: Brick rubble or other hard materials arising from the work may be reused as hardcore, subject to compliance with specification.

PROGRAMME/PROGRESS

211 PROGRAMME:
- As soon as possible and before starting work on site prepare in an approved form a master programme for the Works, which must make allowance for:
  – Design and production information provided by the Contractor/Subcontractors/Suppliers, including inspection and checking (see section A31)
  – Planning and mobilisation by the Contractor
  – 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 (see section A54)
  – Work by or on behalf of the Employer (see section A50) the nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the Contract Documents.
- Where and to the extent that the programme implications for work which is not so defined are impossible to assess the Contractor should exclude it from his programme and confirm this when submitting the programme.

320 DISTURBANCE OF REGULAR PROGRESS: Any application under Contract clause 4.11 in respect of direct loss and/or expense must be made as soon as practicable and with (or to be followed by) the requisite supporting information so as to afford the CA the opportunity to issue instructions designed (according to the circumstances) to minimise or avoid that loss and/or expense.

CONTROL OF COST

410 CASH FLOW FORECAST: As soon as possible and before starting work on site submit to the CA a forecast showing the gross valuation of the Works at the date of each Interim Certificate throughout the Contract period and based upon the programme for the Works.

432 PROPOSED INSTRUCTIONS: If the CA issues details of a proposed instruction with a request for an estimate of cost, submit such an estimate without delay and in any case within 7 days. The estimate must include:
- A detailed breakdown of the cost including any allowance for direct loss and expense.
- Details of any additional resources which may be required.
- Details of any adjustments which may have to be made to the programme for the Works.
- Any other information as is reasonably necessary for the CA to fully assess the implications of issuing such an instruction.

Inform the CA immediately if it is not possible to comply with any of the above requirements.

440 MEASUREMENTS: Give reasonable notice to the Quantity Surveyor before covering up work which the Quantity Surveyor requires to be measured.

460 INTERIM VALUATIONS: At least 3 days before the end of each established period for interim valuations submit to the CA details of amounts due under the Contract together with all necessary

supporting information.

471 UNFIXED MATERIALS: At the time of each valuation disclose to the CA which of the unfixed materials and goods on site are free from, and which are subject to, any reservation of title inconsistent with passing of property as required by Clause 1.10 of the Conditions of Contract, together with their respective values. When requested provide evidence of freedom from reservation of title.

480 LABOUR AND PLANT RETURNS: At the beginning of each week provide for verification by the CA records showing, for each day of the previous week:
- The number and description of craftsmen, labourers and other persons employed on or in connection with the Works, including those employed by subcontractors.
- The number, type and capacity of all mechanical and power-operated plant employed on the Works.

A33 QUALITY STANDARDS/CONTROL

MATERIALS AND WORK GENERALLY

110 GOOD PRACTICE: Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be:
- Of a standard appropriate to the Works and suitable for the functions stated in or reasonably to be inferred from the project documents, and
- In accordance with relevant good building practice.

120 GENERAL QUALITY OF PRODUCTS:
- Products to be new unless otherwise specified.
- For products specified to a British or European Standard obtain certificates of compliance from manufacturers when requested by CA.
- Where a choice of manufacturer or source of supply is allowed for any particular product, the whole quantity required to complete the work must be of the same type, manufacture and/or source unless otherwise approved. Produce written evidence of sources of supply when requested by CA.
- Ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance.
- Where consistency of appearance is desirable ensure consistency of supply from the same source. Unless otherwise approved do not use different colour batches where they can be seen together.
- If products are prone to deterioration or have a limited shelf life, order in suitable quantities to a programme and use in appropriate sequence. Do not use if there are any signs of deterioration, setting or other unsatisfactory condition.

130 PROPRIETARY PRODUCTS:
- Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/instructions. Inform CA if these conflict with any other specified requirement. Submit copies to CA when requested.
- The tender will be deemed to be based on the products specified and recommendations on their use as described in the manufacturers' literature current at the time of construction.
- Obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform CA and do not place orders for or use the affected products without further instructions.
- Where British Board of Agrément certified products are used, comply with the limitations, recommendations and requirements of the relevant valid certificates.

140 CHECKING COMPLIANCE OF PRODUCTS: Check all delivery tickets, labels, identification marks and, where appropriate, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, check to ensure that the correct type is being used in each location. In particular, check that:
- The sources, types, qualities, finishes and colours are correct, and match any approved samples.
- All accessories and fixings which should be supplied with the goods have been supplied.
- Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance.

- The delivered quantities are correct, to ensure that shortages do not cause delays in the work.
- The products are clean, undamaged and otherwise in good condition.
- Any products which have a limited shelf life are not out of date.

150 PROTECTION OF PRODUCTS:
- Prevent over-stressing, distortion and any other type of physical damage.
- Keep clean and free from contamination. Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.
- Keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate store off the ground and allow free air movement around and between stored products.
- Prevent excessively high or low temperatures and rapid changes of temperature in the products.
- Protect adequately from rain, damp, frost, sun and other elements as appropriate. Ensure that products are at a suitable temperature and moisture content at time of use.
- Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.
- Keep different types and grades of products separately and adequately identified.
- So far as possible keep products in their original wrappings, packings or containers, until immediately before they are used.
- Wherever possible retain protective wrappings after fixing and until shortly before Practical Completion.
- Ensure that protective measures are fully compatible with and not prejudicial to the products/materials.

160 SUITABILITY OF RELATED WORK AND CONDITIONS: Ensure that all trades are provided with necessary details of related types of work. Before starting each new type or section of work, ensure that:
- Previous, related work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work.
- All necessary preparatory work has been carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing.
- The environmental conditions are suitable, particularly that the building is suitably weathertight when internal components, services and finishes are installed.

170 GENERAL QUALITY OF WORKMANSHIP:
- Operatives must be appropriately skilled and experienced for the type and quality of work.
- Take all necessary precautions to prevent damage to the work from frost, rain and other hazards.
- Inspect components and products carefully before fixing or using and reject any which are defective.
- Fix or lay securely, accurately and in alignment.
- Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fastenings in compliance with section Z20. Fastenings to comply with relevant British Standards.
- Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten fixings.
- Adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular.
- Ensure that all moving parts operate properly and freely. Do not cut, grind or plane prefinished components and products to remedy binding or poor fit without approval.

180 BS 8000: BASIC WORKMANSHIP:
- Where compliance with BS 8000 is specified, this is only to the extent that the recommendations therein define the quality of the finished work.
- Where BS 8000 gives recommendations on particular working methods or other matters which are properly within the province and responsibility of the Contractor, compliance therewith will be deemed to be a matter of general industry good practice and not a specific requirement of the CA under the Contract.
- If there is any conflict or discrepancy between the recommendations of BS 8000 on the one hand and the project documents on the other, the latter will prevail.

190 WATER FOR THE WORKS: Clean and uncontaminated. If other than mains supply is proposed provide evidence of suitability. Test to BS 3148 if instructed.

SAMPLES/APPROVALS

210 APPROVAL OF PRODUCTS: Where approval of a product is specified the requirement for approval relates to a sample of the product and not to the product as used in the Works. Submit a sample or other evidence of suitability. Do not confirm orders or use the product until approval of the sample has been obtained. Retain approved sample in good, clean condition on site. Ensure that the product used in the Works matches the approved sample.

220 SAMPLES OF FINISHED WORK: Where a sample of finished work is specified for approval, the requirement for approval relates to the sample itself (if approval of the finished work as a whole is required this is specified separately). Obtain approval of the stated characteristic(s) of the sample before proceeding with the Works. Retain approved sample in good, clean condition on site. Ensure that the relevant characteristic(s) of the Works match the approved characteristic(s) of the sample. Remove samples which are not part of the finished Works when no longer required.

240 APPROVALS: Inspection or any other action by the CA must not be taken as approval of products or work unless the CA so confirms in writing in express terms 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.

ACCURACY/SETTING OUT GENERALLY

321 SETTING OUT: Check the levels and dimensions of the site against those shown on the drawings, and record the results on a copy of the drawings. Notify CA in writing of any discrepancies and obtain instructions before proceeding.

322 SETTING OUT: Inform CA when overall setting out is complete and before commencing construction.

340 APPEARANCE AND FIT:
- Arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of the design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular appearance.
- Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible.
- Without prejudice to the above and unless specified otherwise, tolerances will (where applicable) be not greater than those given in BS 5606, Tables 1 and 2.

370 LEVELS OF STRUCTURAL FLOORS: Maximum tolerances for designed levels to be as follows:
- Floors which are to be self-finished, and floors to receive sheet or tile finishes directly bedded in adhesive: +/-10 mm.
- Floors to receive dry board/panel construction with little or no tolerance on thickness: +/-10 mm.
- Floors to receive mastic asphalt flooring/underlays directly: +/-10 mm.
- Floors to receive mastic asphalt flooring/underlays laid on mastic asphalt levelling coat(s): +/-15 mm.
- Floors to receive fully bonded screeds/toppings/beds: +/-15 mm.
- Floors to receive unbonded or floating screeds/beds: +/-20 mm.

380 RECORD DRAWINGS: Record details of all grid lines, setting-out stations, bench marks and profiles on the site setting-out drawing. Retain on site throughout the contract and hand to CA on Completion.

SERVICES GENERALLY

410 SERVICES REGULATIONS: Any work carried out to or which affects new or existing services must be in accordance with the Bye Laws or Regulations of the relevant Statutory Authority.

420 SERVICE RUNS: Make adequate provision for services, including unobstructed routes and fixings. Wherever possible ducts, chases and holes are to be formed during construction rather than cut.

440 MECHANICAL AND ELECTRICAL SERVICES must have final tests and commissioning carried out so that they are in full working order at Practical Completion.

SUPERVISION/INSPECTION/DEFECTIVE WORK

510 SUPERVISION: In addition to the constant management and supervision of the works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.

515 CO-ORDINATION OF ENGINEERING SERVICES: The site organisation staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering services, one with another and each in relation to the Works generally. Submit to the CA, when requested, CVs or other documentary evidence relating to the staff concerned.

520 PERSON-IN-CHARGE: Give maximum possible notice to CA before changing the person-in-charge or site agent.

530 ACCESS FOR CA: 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.

540 OVERTIME WORKING: Whenever overtime is to be worked, give CA not less than 5 days notice, specifying times, types and locations of work to be done. Concealed work executed during overtime for which notice has not been given may be required to be opened up for inspection and reinstated at the Contractor's expense.

550 DEFECTS IN EXISTING CONSTRUCTION to be reported to CA without delay. Obtain instructions before proceeding with work which may:
- Cover up or otherwise hinder access to the defective construction, or
- Be rendered abortive by the carrying out of remedial work.

555 ACCESS FOR INSPECTION: Give CA not less than 5 days notice before removing scaffolding or other facilities for access.

560 TIMING OF TESTS AND INSPECTIONS: Agree dates and times of tests and inspections with CA several days in advance, to enable the CA and other affected parties to be present. On the previous working day to each such test or inspection confirm that the work or sample in question will be ready or, if not ready, agree a new date and time.

565 TEST CERTIFICATES: Submit a copy of each certificate to CA as soon as practicable and keep copies of all certificates on site.

570 PROPOSALS FOR RECTIFICATION OF DEFECTIVE WORK/PRODUCTS:
- As soon as possible after any part(s) of the work or any products are known to be not in accordance with the Contract, or appear that they may not be in accordance, submit proposals to CA for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
- Such proposals may be unacceptable to the CA, and he may issue contrary instructions.

580 MEASURES TO ESTABLISH ACCEPTABILITY: Wherever inspection or testing shows that the work, materials or goods are not in accordance with the Contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures:
- will be at the expense of the Contractor, and
- will not be considered as grounds for extension of time.

590 QUALITY CONTROL: Establish and maintain procedures to ensure that the Works, including the

work of all subcontractors, comply with specified requirements. Maintain full records, keep copies on site for inspection by the CA, and submit copies of particular parts of the records on request. The records must include:

- Identification of the element, item, batch or lot including location in the Works.
- The nature and dates of inspections by the Contractor or CA, tests and approvals.
- The nature and extent of any nonconforming work found.
- Details of any corrective action.

WORK AT OR AFTER COMPLETION

610 GENERALLY:

- Make good all damage consequent upon the work.
- Remove all temporary markings, coverings and protective wrappings unless otherwise instructed.
- Clean the works thoroughly inside and out including all accessible ducts and voids, remove all splashes, deposits, efflorescence, rubbish and surplus materials consequent upon the execution of the work.
- Cleaning materials and methods to be as recommended by manufacturers of products being cleaned, and to be such that there is no damage or disfigurement to other materials or construction.
- Obtain COSHH dated data sheets for all materials used for cleaning and ensure they are used only as recommended by their manufactures.
- Touch up minor faults in newly painted/repainted work, carefully matching colour, and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- Adjust, ease and lubricate moving parts of new work as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

640 SECURITY AT COMPLETION: Leave the Works secure with all accesses locked. Account for and adequately label all keys and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

650 MAKING GOOD DEFECTS: Make arrangements with the CA and give reasonable notice of the precise dates for access to the various parts of the Works for purposes of making good defects. Inform CA when remedial works to the various parts of the Works are completed.

A34 SECURITY/SAFETY/PROTECTION

GENERALLY

110 THE PRE-CONSTRUCTION INFORMATION is provided as a separate document. Notwithstanding this, the Preliminaries section of this specification includes the following general information:-

1. Nature of the project: Sections A10 and A13.
2. The existing environment: Section A12.
3. The design: Section A34.
4. Construction materials: Section A34.
5. Site-wide elements: Section A12.
6. Overlap with client's undertaking: Sections A34 and A36.
7. Site Rules: Sections A34 and A35.
8. Continuing liaison: Section A31.

120 THE CONSTRUCTION PHASE PLAN, developed from the Pre-Construction Information (see section A30) must be submitted to the CA upon request and before the proposed date for start of construction work. Do not start construction work until the Employer has confirmed in writing that in his view the Construction Phase Health and Safety Plan includes the procedures and arrangements required by CDM Regulations.

125 HSE APPROVED CODES OF PRACTICE: Comply with the following:

- Management of health and safety at work.
- Managing construction for health and safety.

130 SECURITY: Adequately safeguard the site, the Works, products, materials, plant, and any

existing buildings affected by the works from damage and theft. Take all reasonable precautions to prevent unauthorised access to the site, the Works and adjoining properly.

140 STABILITY: Accept responsibility for the stability and structural integrity of the works during the Contract, and support as necessary. Prevent overloading: details of design loads may be obtained from CA.

150 OCCUPIED PREMISES:
- Existing buildings will be occupied and/or used during the Contract.
- Carry out the Works without undue inconvenience and nuisance and without danger to occupants and users.

170 EMPLOYER'S REPRESENTATIVES SITE VISITS:
Inform the CA in advance of all safety provisions and procedures (including those relating to materials which may be deleterious) which will require the compliance of the Employer or his representatives when visiting the site. Provide protective clothing and/or equipment for the Employer and his representatives as appropriate.

PROTECT AGAINST THE FOLLOWING:

221 NOISE:
- Do not progress any noisy works operations without the prior agreement of the building occupants and CA.
- Do not use or permit employees to use radios or other audio equipment at any time during the works.
- Noisy works only to be undertaken at times agreed in advance with the site based Building Manager and CA.
- Comply generally with the recommended BS 5228:pt 1 for minimising noise levels.
- Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Keep all noisy works to a minimum. This should be reflected by working methods.
- Contractor’s to pay due attention to the noise sensitive nature of the activities within the subject and surrounding buildings.
- See also any other restrictions imposed by way of ‘schedule of works’ provided as part of this document.

230 POLLUTION: Take all reasonable precautions to prevent pollution of the site, the Works and the general environment including streams and waterways. If pollution occurs inform the appropriate Authorities and the CA without delay and provide them with all relevant information.

235 USE OF PESTICIDES:
- Use only where specified or approved, and then only suitable products as listed in the UK Pesticide Guide.
- Where work is near water, drainage ditches or land drains, comply with the MAFF guidelines for the use of herbicides on weeds in or near water courses and lakes'.
- Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longer required.
- Operatives must hold a BASIS Certificate of Competence, or work under the supervision of a Certificate holder.

240 NUISANCE: Take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

250 ASBESTOS BASED MATERIALS: Report immediately to the CA any suspected asbestos based materials discovered during demolition/refurbishment work. Avoid disturbing such materials. Agree with the CA methods for safe removal or encapsulation.

260 FIRE PREVENTION: Take all necessary precautions to prevent personal injury, death, and damage to the Works or other property from fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites' published by the Building Employers Confederation and the Loss Prevention Council.

263 FIRE PREVENTION: Smoking will not be permitted on site at any time.

265 BURNING ON SITE of materials arising from the work will not be permitted.

270 WATER: Prevent damage from storm and surface water.

280 MOISTURE: Prevent the work from becoming wet or damp where this may cause damage. Dry out the Works thoroughly. Control the drying out and humidity of the Works and the application of heat to prevent:
- Blistering and failure of adhesion.
- Damage due to trapped moisture.
- Excessive movement.

285 INFECTED TIMBER: Where instructed to remove timber affected by fungal/insect attack from the building, do so in a way which will minimise the risk of infecting other parts of the building.

290 WASTE:
- Remove rubbish, debris, surplus material and spoil on a daily basis and keep the site and Works clean and tidy.
- All works refuse and waste materials must be suitably bagged and deposited in a skip to be provided within the contractors compound. All skips to be fully enclosed and locked out of normal working hours in an attempt to prevent fire raising and vandalism etc.
- Remove all rubbish, dirt and residues from voids and cavities in the construction before closing in.
- Ensure that non-hazardous material is disposed of at a tip approved by a Waste Regulation Authority.
- Remove all surplus hazardous materials and their containers regularly for disposal off site in a safe and competent manner as approved by a Waste Regulation Authority and in accordance with relevant regulations.
- Retain waste transfer documentation on site.

PROTECT THE FOLLOWING:

410 WORK IN ALL SECTIONS: Adequately protect all types of work and all parts of the Works, including work carried out by others, throughout the Contract. Wherever work is of an especially vulnerable nature or is exposed to abnormal risks provide special protection to ensure that damage does not occur.

420 EXISTING SERVICES:
- Notify all service authorities and/or adjacent owners of the proposed works not less than one week before commencing site operations.
- Before starting work check positions of existing mains/services. Where positions are not shown on drawings obtain relevant details from service authorities or other owners.
- Observe service authority's recommendations for work adjacent to existing services.
- Adequately protect, and prevent damage to all services. Do not interfere with their operation without consent of the service authorities or other owners.
- If any damage to services results from the execution of the Works, notify CA and appropriate service authority without delay. Make arrangements for the work to be made good without delay to the satisfaction of the service authority or other owner as appropriate. Any measures taken by the CA to deal with an emergency will not affect the extent of the Contractor's liability.
- Replace any marker tapes or protective covers disturbed during site operations to the service authority's recommendations.

450 EXISTING FEATURES: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features which are to remain in position during the execution of the Works.

460 EXISTING WORK: Prevent damage to existing property undergoing alteration or extension and make good to match existing any defects so caused. Remove existing work the minimum necessary and with care to reduce the amount of making good to a minimum.

465 BUILDING INTERIORS: Protect building interiors exposed to weather during the course of the works with temporary enclosures of sufficient size to permit execution of the work and which will remain weathertight in severe weather.

470 EXISTING FURNITURE, FITTINGS AND EQUIPMENT: Prevent damage to any furniture, fittings or equipment left in the existing property. Move as necessary to enable the Works to be executed, cover and protect as necessary and replace in original positions.

481 ADJOINING PROPERTY: Prevent trespass of workpeople. Take all reasonable precautions to prevent damage to adjoining property. Obtain permission as necessary from the owners if requiring to erect scaffolding on or otherwise use adjoining property and pay all charges. Remove and make good on completion or when directed. Bear the cost of repairing any damage arising from execution of the Works.

490 EXISTING STRUCTURES:
- Provide and maintain during the execution of the Works all incidental shoring, strutting, needling and other supports as may be necessary to preserve the stability of existing structures on the site or adjoining, that may be endangered or affected by the Works.
- Support existing structure as necessary during cutting of new openings or replacement of structural parts.
- Do not remove supports until new work is strong enough to support the existing structure. Prevent overstressing of completed work when removing supports.

A35 SPECIFIC LIMITATIONS ON METHOD/SEQUENCE/TIMING

110 SCOPE: The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

140 ACCESS TO THE SITE: See section A12.

150 USE OF THE SITE: See section A12.

155 SCAFFOLDING: Ensure that standing scaffolding is erected early enough and/or dismantled late enough to suit the programmes of all subcontractors.

190 WORKING HOURS:
The working hours have been restricted all as per clause A34/221. They will also be dictated by the hours during which the existing building occupants operate from the premises on a day-to-day basis. See also any other restrictions imposed by way of ‘schedule of works’ provided as part of this document.

210 COMPLETION IN SECTIONS OR PARTS:
- Where the Employer is to take possession of any Section or part of the Works and such Section or part will, after its practical completion, depend for its adequate functioning on work located elsewhere on the site, complete such other work in time to permit such possession to take place.
- During execution of the remainder of the Works ensure that completed Sections or parts of the Works have continuous and adequate provision of services, fire precautions, means of escape and safe access.

A36 FACILITIES/TEMPORARY WORK/SERVICES

110 LOCATIONS: Inform CA of the intended siting of all temporary works and services.

120 MAINTAIN, alter, adapt and move temporary works and services as necessary. Remove when no longer required and make good.

261 SANITARY ACCOMMODATION: There will be no existing accommodation available for contractors use during work in progress. The contractor will however be permitted to site a combined welfare / mess and site office container within the contractors compound.

281 EXISTING ACCOMMODATION: There will be no existing accommodation available for contractors use during work in progress. The contractor will however be permitted to site a storage container within the contractors compound.

320 TEMPORARY FENCE(S):
Provide adequate temporary fences to permit the specified works to be undertaken fully in accordance with the specification.

340 TEMPORARY SCREEN(S):
Provide adequate temporary screens to permit the specified works to be undertaken fully in accordance with the specification.

350 TEMPORARY ROOF(S):
Provide adequate temporary roofs to permit the specified works to be undertaken fully in accordance with the specification and to ensure the premises interior is kept dry and free from defect at all times as a result of the specified works.

360 NAME BOARD: Provide a suitable temporary site name board fixed in position to be agreed with CA displaying:
- Title of project.
- Name of Employer.
- Names of Consultants as follows:
  Project Manager: Rhomco Consulting Limited, Cardiff.
  Principal Contractor: *Appointed Contractor.*
- Sub-contractors signage will not be permitted on site.

410 LIGHTING: During finishing work and inspection provide temporary lighting, the intensity and direction of which closely resembles that provided by the permanent installation.

420 LIGHTING AND POWER: Electricity supply from the Employer's mains may not be used during work in progress. Appropriate alternative arrangements should therefore be made by the contractor and agreed with the CA prior to works commencing on site.

430 WATER from the Employer's mains may not be used by the principal contractor during work in progress. Appropriate alternative arrangements should therefore be made by the contractor and agreed with the CA prior to works commencing on site.

461 TEMPERATURE AND HUMIDITY: The permanent heating installation may be used for drying out the Works and controlling temperature and humidity levels, but:
- The Employer does not undertake that it will be available.
- The Contractor must take responsibility for operation, maintenance and remedial work, and arrange supervision by and indemnification of the appropriate Subcontractors, and pay costs arising.

490 BENEFICIAL USE OF INSTALLED SYSTEMS: Unless specific permission is given by the Employer and installer, the permanent supply, disposal, mechanical, electrical, communications, transport and access systems may not be used for any purpose. Where permission is given for any other use of a system before practical completion of the works it must be subject to a separate written agreement between the parties and in accordance with the recommended procedures given in NJCC Guidance Note 10.

500 METER READINGS: Where charges for service supplies need to be apportioned ensure that meter readings are taken by relevant authority at possession and/or completion as appropriate. Ensure that copies of readings are supplied to interested parties.

510 THERMOMETERS: Provide onsite and maintain in accurate condition:
- A maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.
- A thermometer for measuring concrete and ground temperature.

A4 CONTRACTOR'S GENERAL COST ITEMS

A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF

110 MANAGEMENT AND STAFF

A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION

For details of site accommodation required or made/not made available by the Employer see section A36.

110 SITE ACCOMMODATION

A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES

For details of services and facilities required or made/not made available by the Employer see section A36.

110 POWER

120 LIGHTING

130 FUELS (excluding fuels for testing and commissioning)

140 WATER

150 TELEPHONE AND ADMINISTRATION

160 SAFETY, HEALTH AND WELFARE

170 STORAGE OF MATERIALS

180 RUBBISH DISPOSAL

190 CLEANING

200 DRYING OUT
210 PROTECTION OF WORK IN ALL SECTIONS

220 SECURITY

230 MAINTAIN PUBLIC AND PRIVATE ROADS

240 SMALL PLANT AND TOOLS

301 GENERAL ATTENDANCE ON NAMED SUBCONTRACTORS

310 ADDITIONAL SERVICES AND FACILITIES ITEMS: Insert below further cost items as may be required, with fixed charges and time related charges as appropriate:

A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT

110 CRANES

120 HOISTS

130 PERSONNEL TRANSPORT

140 TRANSPORT

150 EARTHMOVING PLANT

160 CONCRETE PLANT

170 PILING PLANT

180 PAVING AND SURFACING PLANT

250 ADDITIONAL MECHANICAL PLANT ITEMS: Insert below further cost items as may be required, with fixed charges and time related charges as required:

A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS

For details of temporary works required or made/not made available by the Employer see section A36.

110 TEMPORARY ROADS

120 TEMPORARY WALKWAYS

130 ACCESS SCAFFOLDING

140 SUPPORT SCAFFOLDING AND PROPPING

150 HOARDINGS, FANS, FENCING, ETC.

160 HARDSTANDING

170 TRAFFIC REGULATIONS

250 ADDITIONAL TEMPORARY WORKS ITEMS: Insert below further cost items as may be required, with fixed charges and time related charges as required:

A54 PROVISIONAL WORK/ITEMS

150 PROVISIONAL SUM:
Include the Provisional Sum of £3,500.00 for replacement/inclusion of new timber rafters to the main pitched roof.

590 CONTINGENCY SUM:
Include the Provisional Sum of £15,000.00

SECTION 2

PREAMBLES

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

C10 DEMOLISHING STRUCTURES

To be read with Preliminaries/General conditions.

GENERAL REQUIREMENTS

110 SURVEY: Before starting work, examine all available information, carry out a survey of the structure(s), site and surrounding area, and submit a survey report and method statement to the CA covering all relevant matters listed below and in the Health and Safety Executive Guidance Note GS29/1 paragraph 32:
- The form, condition and demolition methods of the structure(s).
- The form, location and removal methods of any toxic or hazardous materials.
- The type and location of adjoining or surrounding premises which may be adversely affected by noise, vibration, dust or removal of structure.
- The identification and location of services above and below ground.

SERVICES AFFECTED BY DEMOLITION

210 SERVICES REGULATIONS: Any work carried out to or which affects new or existing services must be in accordance with the byelaws or regulations of the relevant statutory authority.

220 LOCATION OF SERVICES: Locate and mark the positions of services affected by the work. Arrange with the appropriate authorities for the location and marking of the positions of mains services.

270 SERVICES WHICH ARE TO REMAIN: Notify the CA and service authority or owner of any damage. Make all arrangements for repair to the satisfaction of the CA and service authority or owner. Bear any costs arising.

DEMOLITION WORK

310 WORKMANSHIP GENERALLY:
- Demolish structure(s) in accordance with BS 6187 and Health and Safety Executive Guidance Notes GS29/1, 3 and 4.
- Operatives must be appropriately skilled and experienced for the type of work and hold or be training to obtain relevant CITB Certificates of Competence.
- Site staff responsible for supervision and control of the work are to be experienced in the assessment of the risks involved and in the methods of demolition to be used.

340 HEALTH HAZARDS: Take adequate precautions to protect site operatives and the general public from health hazards associated with dangerous fumes and dust arising during the course of the Works.

350 ADJOINING PROPERTY:
- When demolishing structure(s) against adjoining property leave adequate temporary support and protection at each stage and arrange for inspection by the CA. Maintain and alter temporary supports and protection as necessary as work progresses.
- Demolish structure(s) causing a minimum of damage to adjoining property and leave no unnecessary or unstable projections.
- Do not disturb support to foundations of adjoining property unless otherwise instructed.
- Report to the CA any defects exposed or becoming apparent in adjoining property.
- Promptly repair any damage caused to adjoining property by demolition work. Make good to ensure safety, stability, weather protection and security.

360 STRUCTURE(S) TO BE RETAINED:
- Adequately protect parts of existing structure(s) which are to be kept in place.
- Cut away and strip out the minimum necessary and with care to reduce the amount of making good to a minimum.
- Prevent debris from overloading any part of the structure which is not to be demolished.

370 PARTLY DEMOLISHED STRUCTURE(S):
- Leave partly demolished structure(s) in a stable condition, with adequate temporary support at

each stage to prevent risk of uncontrolled collapse.
- Prevent debris from overloading scaffolding platforms.
- Prevent access of unauthorised persons to partly demolished structure(s). Leave safe outside working hours.

380 DANGEROUS OPENINGS: Illuminate and protect as necessary.

391 ASBESTOS BASED MATERIALS: Report immediately to the CA any suspected asbestos based materials discovered during demolition work. Avoid disturbing such materials. Agree with the CA methods for safe removal.

440 COMPLETION: Clear away all debris and leave the site in a tidy condition on completion.

MATERIALS ARISING

510 OWNERSHIP: Components and materials arising from the demolition work are to become the property of the Contractor except where otherwise provided. Remove from site as work proceeds.

F10 BRICK/BLOCK WALLING

To be read with Preliminaries/General conditions.

WORKMANSHIP GENERALLY

410 RELATED WORK is specified in the following sections:
F30 Accessories/Sundry items for brick/block/stone walling.
F31 Precast concrete sills/lintels/copings/features.

420 SITE STORAGE: Store bricks/blocks in stable stacks clear of the ground and clearly identified by type, strength, grade, etc. Protect from adverse weather and keep clean and dry.

430 CONDITIONING OF BRICKS:
- Do not use clay bricks or calcium silicate bricks when still warm from the manufacturing process.
- In dry warm weather wet the surfaces of very absorbent bricks slightly to reduce suction. Do not soak.

440 CONDITIONING OF CONCRETE BRICKS/BLOCKS:
- Do not use autoclaved concrete bricks/blocks when still warm from the manufacturing process.
- Do not use nonautoclaved concrete bricks/blocks until at least four weeks after casting.
- Do not wet concrete bricks or blocks before laying; use an approved water retaining admixture in the mortar to counteract suction.

500 LAYING GENERALLY:
- Lay bricks/blocks on a full bed of mortar; do not furrow. Fill all cross joints and collar joints; do not tip and tail.
- Build walls in stretching half lap bond when not specified otherwise.
- Plumb perpends of facework every third or fifth cross joint along a course and even out the joint widths in between.

535 HEIGHT OF LIFTS:
- Rack back when raising quoins and other advance work.
  Do not use toothing.
- Raise no portion of the work more than 1.2 m above another at any time.
- In facework, complete each lift in one period of operation.
- Do not carry up any one leaf more than 1.5 m in one day unless permitted by the CA.

545 LEVELLING OF SEPARATE LEAVES: Bring both leaves of cavity walls to the same level at:
- Every course containing vertical twist type ties or other rigid ties
- Every third tie course for double triangle/butterfly ties
- Courses in which lintels are to be bedded.

560 COURSING: Gauge brick courses four to 300 mm including joints.

561 COURSING: Arrange brick courses to line up with existing work.

610 SUPPORT OF EXISTING WORK: Where new lintels or walling are to support existing structure, completely fill top joint with semidry mortar, hard packed and well rammed to ensure full load transfer after removal of temporary supports.

615 BRICKWORK TO RECEIVE ASPHALT DPC:Finish flush with mortar to give a smooth level bed.

620 BLOCK BOND new walls to existing, by cutting pockets into existing walls, not less than 100 mm deep, the full thickness of the new wall, and vertically as follows:
Brick to brick: 4 courses high at 8 course centres.
Block to block: Every other course.
Bond new walling into pockets with all voids filled solid with mortar.

635 JOINTING: When not specified otherwise, finish joints neatly to the specified profile(s) as the work proceeds.

645 UNEXPOSED JOINTS: As the work proceeds, strike off joints that will not be exposed to view in the finished work.

655 JOINTS IN MASONRY TO BE PLASTERED OR RENDERED: Unless keyed units or metal lathing are used, rake out joints as work proceeds, to a depth of approximately 15 mm.

665 POINTING: Where specified, rake out joints to a depth of 12-15 mm as the work proceeds. Subsequently, remove loose debris from the joints using a dry brush, dampen the work, and neatly point to the specified profile in a continuous operation from the top of the wall downwards as the scaffolding is taken down.

670 FIRE STOPPING: Fill joints around joist ends built into cavity walls with mortar to seal cavities from interior of building.

671 FIRE STOPPING: Ensure a tight fit between brickwork and cavity barriers to prevent fire and smoke penetration.

680 HOLES, RECESSES AND CHASES IN BRICK/BLOCK WALLING:Comply with the relevant clause in section P31.

690 ADVERSE WEATHER:
- Do not use frozen materials.
- Do not lay bricks/blocks when the air temperature is at or below 3 degC unless mortar has a minimum temperature of 4 degC when laid and walling is protected. Do not lay mortar on frozen surfaces.
- Maintain temperature of the work above freezing until mortar has fully hardened.
- Rake out and replace mortar damaged by frost. When instructed, rebuild damaged work.
- Protect newly erected walling against rain and snow by covering when precipitation occurs, and at all times when the work is not proceeding.

ADDITIONAL REQUIREMENTS FOR FACEWORK

710 THE TERM FACEWORK, where used in this specification, applies to all brick/block walls finished fair. Where any facework is to be painted, the only specification requirement to be waived is that relating to colour.

750 COLOUR MIXING:
- Agree with manufacturer and CA methods for ensuring that the supply of facing bricks/blocks is of a consistent, even colour range, batch to batch and within batches.
- Check each delivery for consistency of appearance with previous deliveries and with approved samples or reference panels; do not use if variation is excessive.
- Mix units from different packs and deliveries which vary in colour to avoid patches, horizontal stripes and racking back marks in the finished work.

760 APPEARANCE:
- Select bricks/blocks with unchipped arrises. Cut with a masonry saw where cut edges will be exposed to view.
- Set out and lay bricks to match appearance of relevant approved reference panel(s).
- Keep courses evenly spaced using gauge rods. Set out carefully to ensure satisfactory junctions and joints with adjoining or built-in elements and components.
- Protect facework against damage and disfigurement during the course of the works, particularly arrises of openings and corners.

780 GROUND LEVEL: Facework to start not less than 150 mm below finished level of external paving or soil except where shown otherwise.

790 PUTLOG SCAFFOLDING to facework will not be permitted.

800 TOOTHED BOND: Except where a straight vertical joint is specified, new and existing facework in the same plane to be bonded together at every course to give a continuous appearance.

820 BRICK SILLS/CAPPINGS: Bed solidly in mortar with vertical joints completely filled. Press mortar firmly into exposed joints and finish neatly.

830 CLEANLINESS: Keep facework clean during construction and thereafter until Practical Completion. Turn back scaffold boards at night and during heavy rain. If, despite precautions, mortar marks are deposited on the face of masonry units, leave to dry then remove with a stiff brush. Rubbing to remove marks or stains will not be permitted.

860 CRACKED BRICKS in existing facework to be cut out and replaced with matching bricks bedded in cement:lime:sand mortar, before repointing adjacent cracked joints as specified.

870 CRACKED JOINTS in existing facework which is not to be repointed: joints with cracks wider than 3mm to be cut out to form a square recess of 15-20 mm depth. Remove dust, lightly wet and neatly point in cement:lime:sand mortar to match existing work.

880 REPOINTING: Where specified carefully rake out existing joints by hand to form a square recess of 15-20 mm depth. Remove dust, lightly wet and neatly point in cement:lime:sand mortar to a profile matching adjoining work in a continuous operation.

F21 NATURAL STONE ASHLAR WALLING/DRESSINGS

To be read with Preliminaries/General conditions.

GENERAL REQUIREMENTS/PRODUCTION

210 RELATED WORK is specified in the following sections:
F10 Brick/Block walling.
F30 Accessories/Sundry items for brick/block/stone walling.

230 OPERATIVES: Cutting, dressing, laying and jointing of stone to be carried out by skilled masons. Provide evidence of previous experience and details of work previously carried out.

250 PRODUCTION: Stone to be cut and dressed:
- After seasoning but before delivery to site, including shaping, finish(es) and all sinkings for fixing and lifting devices.
- So that exposed and joint surfaces are square, true planes free from hollow or rough areas.
- With minimal deviation from specified dimensions to ensure that specified joint widths are maintained.
- So that natural bed is horizontal in plain walling, vertical and at right angles to wall face in projecting stones and copings, and at right angles to line of thrust in arches.

260 IDENTIFICATION: Mark each block/dressing clearly to indicate the natural bed and position in the finished work.

LAYING AND JOINTING

305 PROTECTION:
- Store dressed stone clear of the ground, separate with resilient spacers, protect from adverse weather and keep dry. Prevent soiling, chipping and contamination by salts and other deleterious substances.
- Prevent damage to stonework, particularly arrises and projecting features. Protect with suitable slats, boards, etc. and remove at Practical Completion.
- Prevent staining and other disfigurement of stonework during the course of subsequent works.

315 ADVERSE WEATHER:
- Do not use frozen materials and do not lay on frozen surfaces.
- Do not lay blocks/dressings:
  -In cement gauged mortars when the air temperature is at or below 3°C and falling or below 1°C and rising (unless mortar has a temperature of not less than 4°C when laid and walling is thoroughly protected).
  -In hydraulic lime:sand mortars when the air temperature is at or below 5°C and falling or below 3°C and rising.
- Maintain temperature of the work above freezing until mortar has fully set.
- Protect newly erected masonry against rain and snow by covering when precipitation occurs and at all times when work is not proceeding.
- Prevent newly erected masonry from drying out too rapidly in hot conditions and in drying winds.
- Rake out and replace mortar damaged by frost and where instructed, rebuild damaged work.

325 LAYING:
- Dampen stones to control suction as necessary and lay on a full even bed of mortar with all joints filled. Use temporary lead or stainless steel distance pieces to ensure consistent joint width; remove when mortar is sufficiently strong.
- Keep courses level and in line, and accurately plumb all wall faces, angles and features. Set out carefully to ensure satisfactory junctions and joints with adjoining or built-in elements and components.
- Keep stonework clean during construction and until Practical Completion. Ensure that no mortar encroaches on face when laying. Turn back scaffolding boards at night and during heavy rain. Rubbing to remove marks or stains will not be permitted.

330 GROUND LEVEL: Facing stonework to start not less than 150 mm below finished level of external paving or soil except where shown otherwise.

340 PUTLOG SCAFFOLDING will not be permitted.

350 ONE PIECE SILLS/THRESHOLDS: Leave bed joints open except under end bearings and under any masonry mullions. On completion, point with mortar to match adjacent work.

360 OPENINGS to be formed using rigid templates accurately fabricated to the required size.

370 JOGGLE JOINTS: Fill with bedding mortar and tamp to expel air.

380 JOINTING: Finish exposed joints neatly as the work proceeds.

390 POINTING: Carefully rake out exposed joints to a depth of 7–10 mm as work proceeds, then dust, dampen and neatly point in a continuous operation working from the top of the wall downwards.

420 REPAIRS to damaged components must not be undertaken without approval. Such approval will not be given where components are badly damaged or where the proposed repair will impair appearance or performance.

F31 PRECAST CONCRETE SILLS/LINTELS/COPINGS/FEATURES

To be read with Preliminaries/General conditions.

GENERAL REQUIREMENTS

210 MOULDS must be:
- Constructed accurately to give straight, square and true components. Permissible deviations on length +0, -6 mm, other dimensions +/-3 mm.
- Constructed to prevent loss of grout.
- Designed to permit demoulding without damage to the components.
- Coated evenly with a suitable release agent, which must not be allowed to touch the reinforcement.
- Maintained in clean, sound condition and inspected carefully for defects before each reuse. Damaged moulds must not be repaired and reused if this would impair the surface appearance of the components.

220 CONCRETE GENERALLY: Constituent materials, composition of mixes, production of concrete, information to be provided, sampling, testing and compliance to be in accordance with BS 5328 unless otherwise specified.

240 CHLORIDES: The total chloride ion content of the constituents of each mix, expressed as a percentage by weight of cement (including GGBS or PFA if used) in the mix, must not exceed 0.4. Do not use admixtures containing calcium chloride.

250 REINFORCEMENT:
- Type of reinforcement, unless otherwise specified: To BS 4449 and/or BS 4483, cut and bent to BS 4466.
- Galvanized reinforcement: Galvanized to BS 729 after cutting, chromate treated.
- Stainless steel reinforcement: To BS 6744, type 304 or 316.
- In addition to reinforcement required for structural purposes, precast units must be reinforced as necessary to resist shrinkage and handling stresses.
- Ensure that the metal of the reinforcement is compatible with the metal of any fixings and accessories that may make contact.
- At time of placing concrete, reinforcement to be clean and free of corrosive pitting, loose mill scale, loose rust, ice, oil and other substances which may adversely affect the reinforcement, concrete, or bond between the two.
- Fix accurately and securely using tying wire, approved steel clips, or tack welding if permitted. Wire or clips must not encroach into the concrete cover.

260 CASTING AND CURING: Thoroughly compact concrete by vibration.
- Do not demould components prematurely.
- Prevent damage to and distortion of immature components from movement, vibration, overloading, physical shock, rapid cooling and thermal shock.
- Ensure that components are protected from sun and drying winds until they are at least 5 days old.
- Do not deliver components to site until at least 14 days after casting.

FAIR FACED COMPONENTS

330 AGGREGATES FOR EXPOSED WORK: To BS 882, of consistent colour, free from absorbent particles which may cause popping, and other particles such as coal and iron sulfide which may be unsightly or cause unacceptable staining. Obtain from one source, and ensure that adequate supplies can be maintained throughout the contract.

340 FACING MIXES:
- Use exactly the same ingredients and batch proportions for all components required to have the same finish.
- Materials, batching and mixing must be carefully controlled to ensure consistency of colour and appearance.

341 SEPARATE FACING AND BACKING MIXES may be used provided:
- The difference in cement content is not more than 80 kg/cu m.
- The thickness of the facing mix is at least 10 mm greater than the nominal maximum size of aggregate, and in no case less than 25 mm.

- Reinforcement is not less than 20 mm away from the junction between mixes.
- The facing and backing mixes are placed and compacted in sequence without delay so that they are effectively monolithic.

350 QUALITY OF FINISHES must match the approved samples and be consistent throughout the contract. Components having arrises or faces which are broken, chipped, cracked, crazed, honeycombed, irregular, inconsistent, stained or otherwise marred such that their appearance or performance is significantly impaired will not be accepted.

361 GRADE AND COVER FOR EXTERNAL COMPONENTS:
- Concrete grade: RC50 or C50.
  Minimum cement content with 20 mm aggregate: 400 kg/cu m.
  Minimum cement content with 10 mm aggregate: 440 kg/cu m.
  Maximum free water/cement ratio: 0.45.
- Minimum nominal cover to reinforcement on exposed faces in the finished work:
  Single mix: 30 mm.
  Different mixes for facing and backing work (see clause 341): 50 mm.
- Nominal cover to reinforcement on internal and bedded faces: 20 mm.

370 COVER SPACERS must not be used to concrete faces which will be exposed in the finished work. Where such faces are to be cast against a mould submit details of proposed method of ensuring the specified cover.

380 UNIFORMITY OF METHOD: All exposed faces which are specified to be of the same finish must be identical in appearance. If different methods of producing such faces are proposed, submit evidence that there will be no difference in appearance and obtain approval; otherwise all such faces must be produced in the same way.

INSTALLATION

410 PROTECTION:
- Prevent overstressing of components during transit, handling, storage and fixing.
- Store components on level bearers clear of the ground and separate with resilient spacers. Lift units at designed lifting points where provided.
- Prevent damage to components and any chipping, staining, marking or dirtying of surfaces which will be visible in the completed work.

420 LAYING:
- Unless specified otherwise, lay components on a full bed of mortar used for adjacent work. If packing is required use slate.
- Position components accurately, true to line and level.
- Faces which will be exposed to view in the finished work to be kept clean with no mortar encroachment. Rubbing to remove marks or stains will not be permitted.

430 SUPPORT OF EXISTING WORK: Where new lintels are to support existing structure, completely fill top joint with semidry mortar, hard packed and well rammed to ensure full load transfer after removal of temporary supports.

440 ONE PIECE SILLS/THRESHOLDS: Leave bed joints open except under end bearings. On completion point with mortar to match adjacent work.

G20 CARPENTRY/TIMBER FRAMING/FIRST FIXING

To be read with Preliminaries/General conditions.

GENERAL INFORMATION/REQUIREMENTS

150 STRENGTH GRADING OF TIMBER:
- To be carried out by companies currently registered under a third party quality assurance scheme operated by any of the certification bodies approved by the UK Timber Grading Committee.
- Timber of a basic thickness less than 100 mm and not specified for wet exposure to be strength 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 wet exposure conditions to be clearly marked as 'WET' or 'GRN'.
- Structural timber members cut from large graded sections to be regraded to approval and marked accordingly.

WORKMANSHIP GENERALLY

401 CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD AND POPLAR TIMBER:
- Dimensions on drawings are target sizes as defined in BS EN 336.
- The tolerance indicators (T1) and (T2) specify the maximum permitted deviations from target sizes as stated in BS EN 336, clause 5.3:
  Tolerance class 1 (T1) for sawn surfaces
  Tolerance class 2 (T2) for planed surfaces.

402 CROSS SECTION DIMENSIONS OF NONSTRUCTURAL SOFTWOOD TIMBER:
- Dimensions on drawings are finished sizes.
- Maximum permitted deviations from finished sizes to be as stated in BS EN 1313:Part 1:
  Clause 6 for sawn sections
  Clause NA. 2 for further processed sections.

403 CROSS SECTION DIMENSIONS OF STRUCTURAL AND NONSTRUCTURAL HARDWOOD TIMBER:
- Dimensions on drawings are finished sizes.
- Maximum permitted deviations from finished sizes to be as stated in BS 5450:
  Clause 6.1 for sawn sections
  Clause 8.3 for further processed sections.

430 SELECTION AND USE OF TIMBER:
- Do not use timber members which are damaged, crushed or split beyond the limits permitted by their grading.
- Ensure that notches and holes are not so positioned in relation to knots or other defects that the strength of members will be reduced.
- Do not use scarf joints, finger joints or splice plates without approval.

440 PROCESSING TREATED TIMBER:
- Carry out as much cutting and machining as possible before treatment.
- Retreat all treated timber which is sawn along the length, ploughed, thicknessed, planed or otherwise extensively processed.
- Treat timber surfaces exposed by minor cutting and drilling with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

450 MOISTURE CONTENT of timber at time of erection to be not more than:

Covered in generally unheated spaces:	24%
Covered in generally heated spaces:	20%
Internal in continuously heated spaces:	20%

510 PROTECTION:
- Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.
- Store timber and components under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack.
- Arrange sequence of construction and cover timber as necessary during and after erection to ensure that specified moisture content is not exceeded.
- Keep trussed rafters vertical during handling and storage.

530 PAINTED FINISHES: Structural timber which is to be painted to be primed as specified before delivery to site.

540 CLEAR FINISHES: Structural timber which is to be clear finished to be kept clean and first coat of specified finish applied before delivery to site.

550 EXPOSED TIMBER: Prevent damage to and marking of surfaces and arrises of planed structural timber which will be exposed to view in completed work.

JOINTING TIMBER

570 JOINTING/FIXING GENERALLY: Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fasteners in compliance with section Z20. Fasteners to comply with relevant British Standards.

H61 FIBRE CEMENT SLATING

To be read with Preliminaries/General conditions.

ROOF SLATING:

105 Underlay: Vapour permeable underlay to BS EN 13859, Class W1.
- Direction: Parallel to eaves.
- Heap-lap (minimum): As per SpecMaster and FixMaster.
  Battens: Pressure impregnated softwood.
- Size: 50mm x 25 mm.
- Fixing: 65mm x 3.35 mm galvanized annular ring shank nails.
  Slates: To BS EN 492, type NT (nonasbestos).
- Manufacturer: Monier Redland Limited.
  Product reference: Cambrian Slate.
- Shape: Rectangular.
- Colour: TBC.
- Size: As per manufacturers Product Details.
- Headlap (minimum): As per SpecMaster and FixMaster.
- Fixing: As per SpecMaster and FixMaster.
- Accessories: As per SpecMaster and FixMaster.

SLATING GENERALLY

210 BASIC WORKMANSHIP:
- Keep slates clean and dry until laid.
- Set out to give true lines and regular appearance, fitting neatly at all edges, junctions and features.
- Fix slate roofing to make the whole sound and weathertight at the earliest opportunity.
- Repair any defects as quickly as practicable to minimise damage and nuisance.
- Keep gutters and pipes free of debris and clean out at completion.

220 A REMOVING EXISTING SLATING:
General: Carefully remove slates, battens, underlay, etc. with minimum disturbance of adjacent retained slating.
Note: Removal of exising slates to be carried out under controlled conditons by an Asbestos Licenced Contractor.

225 SUITABILITY OF STRUCTURE/BASE: Before commencement of slating, survey supporting structure/ base, checking line, level and fixing points. Report immediately to the CA if the structure/base is unsuitable to receive tiling.

235 VAPOUR PERMEABLE UNDERLAY:
Manufacturer: Monier Redland Ltd.
- Product reference: Spirtech 400 2S.
  Standard: To BS EN 13859-1.
- Reaction to fire: As per manufacturers litrature.
- Water vapour transmission (minimum): As per manufacturers litrature.
- Resistance to water penetration: As per manufacturers litrature.
- Tensile strength (minimum): As per manufacturers litrature.
- Tear resistance (minimum): As per manufacturers litrature.

- Other BS EN 13859 characteristics: None.
Weight (mass per unit area): As per manufacturers litrature.
Resistance to wind uplift: As per manufacturers litrature.

240 UNDERLAY:
Laying: Maintain consistent tautness.
Vertical laps (minimum): 100 mm wide, coinciding with supports and securely fixed.
Fixing: Galvanized steel, copper or aluminium 20 x 3 mm extra large clout head nails.
Eaves: Where exposed, use an external grade (UV resistant) underlay or a proprietary eaves support product.
Penetrations: Use proprietary underlay seals or cut underlay to give a watertight fit around pipes and components.
Ventilation paths: Do not obstruct.

245 BATTENS/ COUNTERBATTENS - TREATED:
Timber: Sawn softwood.
- Species: In accordance with BS 5534, clause 4.11.1.
- Permissible characteristics and defects: Not to exceed limits in BS 5534, Annex D.
- Grading: Factory pre-graded with site check for grading to take account of knots, wane, fissures and splits.
- Moisture content at time of fixing and covering (maximum): 22%. Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C8.
- Type: Water based organic.

255 COUNTERBATTENS ON RIGID SARKING:
- Fix at centres coinciding with rafters/trusses marking positions of latter at top edges and eaves before laying underlay.
- Fix through rigid sarking into rafters/trusses at not more than 300 mm centres.

265 BATTEN FIXING:
Setting out: Align parallel to ridge in straight horizontal lines to gauge of slates. Align on adjacent areas.
Batten length (minimum): Sufficient to span over three supports.
Joints in length: Square cut. Butt centrally on supports. Joints must not occur more than once in any group of four battens on one support.
Additional battens: Provide where unsupported laps in underlay occur between battens.
Fixing: Each batten to each support. Splay fix at joints in length.

270 BATTENS FIXED TO MASONRY:
- To be in straight horizontal lines with no batten less than 3 m long.
- Fix at not more than 400 mm centres.

275 SLATE FIXING:
Setting out: Lay slates to a half lap bond with not more than 5 mm gaps. Align tails.
Ends of courses: Use extra width slates to maintain bond and to ensure that cut slates are as large as possible. Do not use half slates.
Extra width slates: Use additional fixings as recommended by slate manufacturer.
Top courses: Cut top two slate courses as necessary to maintain gauge. Head-nail top course.
Fixings for slates: Nails/rivets recommended by slate manufacturer.

290 MORTAR BEDDING/POINTING:
Mortar: As section Z21, 1:3 cement:sand, with plasticizing admixtures permitted.
Bond strength providing resistance to uplift: In accordance with BS 5534.
Weather: Do not use in wet or frosty conditions or when imminent.
Preparation of slates and accessories to be bedded or pointed: Coat relevant surfaces with a suitable bonding agent.
Preparation of concrete and clay tile accessories to be bedded: Wet and drain surface water before fixing.

Appearance: Finish neatly as work proceeds and remove residue.

ROOF SLATING EDGES/JUNCTIONS/FEATURES

305 GENERALLY:
- Form details using the specified and manufacturer's recommended fittings and accessories; do not improvise without approval.
- Exposed fittings and accessories must match slate colour and finish unless specified otherwise.
- Cut slates only where necessary, with an appropriate tool, to give neat, close fitting joints and straight, clean edges.
- Fix edge slates and fittings securely to neat, true lines.
- Ensure that all flashings (specified in another section) are fixed with or immediately after the slating, and are neatly dressed down.

445 MORTAR BEDDED VERGES WITH BEDDED UNDERCLOAK:
Underlay: Carry 50 mm onto outer leaf of gable wall and bed on mortar.
Undercloak: Fibre cement slate or sheet.
- Position: Over underlay, level with underside of slating battens, sloping towards verge.
- Projection beyond face of wall: 38-50 mm.
- Bedding: On mortar identical to that used in gable walling.

Slating battens: Carry onto undercloak and finish 100 mm from verge edge.
Verge closure battens: Fix between ends of slating battens.
Verge slates:
- Bedding: Flush with undercloak on 75 mm wide bed of mortar.
- Pointing: Struck weathered profile, 5 mm back from verge slates.
- Fixing: Do not displace or crack mortar.

455 MORTAR BEDDED VERGES WITH NAILED UNDERCLOAK:
Underlay: Carry over full width of verge.
Undercloak: Fibre cement slate or sheet.
- Position: Over underlay, level with underside of slating battens, sloping towards verge.
- Projection: 38-50 mm beyond face of gable slating
- Fixing: Nails.

Slating battens: Carry onto undercloak and finish 100 mm from verge edge.
Verge closure battens: Fix between ends of slating battens.
Verge slates:
- Bedding: Flush with undercloak on 75 mm wide bed of mortar.
- Struck weathered profile, 5 mm back from verge slates.
- Fixing: Do not displace or crack mortar.

710 DRY CAPPED RIDGES:
Underlay: Lay courses over ridge.
- Overlap (minimum): 150 mm.

Top slating battens: Position and fix to suit fixing of ridge cappings.
Dry ridge cappings:
- Product reference: [Universal Angle Ridge Tiles with Rapid Vented Ridge system].
- Fixing: Screw to top slating battens.
- Joints in length: Face away from prevailing wind. Apply sealant strip.

Ridge terminals:
- Product reference: Universal Angle Ridge Tiles with Rapid Vented Ridge system.

VERTICAL SLATING EDGES/JUNCTIONS:

910 BOTTOM EDGES:
Slating substrate work: Fix timber tilting fillet to support bottom course of slates in correct vertical plane. Fix flashing to tilting fillet.
Underlay: Dress over flashing.
Undercourse and bottom course slates: Fix with tails neatly aligned.

920 TOP EDGES:
Top slate courses: Fix under abutment and make weathertight with flashings dressed down not less than 150 mm.

930 SIDE ABUTMENTS:
Slating substrate work: Chase abutment wall and insert stepped flashing.
- Flashing: Return not less than 75 mm behind slating, overlapping underlay and battens. Turn back to form a vertical welt.

Abutment slates: Cut and fix neatly.

950 ANGLES WITH SOAKERS:
Angle slates: Cut double width slates and fix to form a straight, close mitred junction.
Soakers: Interleave with angle slates. Fix by nailing to battens at top edge.

960 JUNCTIONS WITH ROOF VERGES:
Slating substrate work: Fix additional slating batten parallel to and below verges.
Course end slates: Splay cut slate and a half width slates to angle of verge rake. Fix to additional slating batten with cut edge parallel to and below verge.

H65 SINGLE LAP ROOF TILING TO MAIN ROOF - RE-ROOF

To be read with Preliminaries/General conditions.
REDLAND TECHNICAL SOLUTIONS
SpecMaster number S10-004093

It is a condition of the SpecMaster guarantee for this project that the works are carried out entirely in accordance with this SpecMaster specification and in accordance with Redland advice and instructions using normal standards of good workmanship and the requirements of British Standards for slating and tiling (BS 5534 and BS 8000 - Part 6). Failure to comply with this condition will invalidate the guarantee (see terms and conditions of SpecMaster guarantee).

TYPE(S) OF TILING

130 RECONSTITUTED SLATE ROOF TILING:
Insulation: Insulation Between Rafters (Partial Fill) and Insulation Between Horizontal Ceiling Joists (Cold Apex).
Underlay: Redland Spirtech 400 2S (920200).
Lay as clause 240 Lay underlay with a nominal 10mm drape.
Minimum horizontal lap: 100 mm.
Battens: As clause 245, size 50 x 25 mm.
Joints must not occur more than once in any group of four battens on any one support. An additional batten must be provided where an unsupported lap in the underlay occurs between battens. Fix each batten to each support, splay nailing at ends, using 65 x 3.35mm diameter galvanised smooth round nails.
Tiles: Redland Cambrian Slate (470130).
Colour: Slate Grey (30).
Size: 300 x 336 mm.
Headlap: Minimum 50 mm, maximum 90 mm.
Fixing recommendation: All Slates must be twice nailed using 30mm long x 2.65 mm diameter stainless steel ring shanked nails and clipped.
See clause 275 for more detailed information on fixing.
This construction is rated A in the 2008 BRE Green Guide to Specification.

TILING GENERALLY

200 WELL SEALED CEILING:
Ensure that all constructional gaps in the ceiling and at the wall/ceiling junction are sealed in accordance with BS 9250. In particular, any roof access hatches should incorporate compression seals and have an air leakage rate less than 1m³/hr at a pressure difference of 2 Pa when tested to BS EN 13141-1:2004 and recessed light fittings should be rated IP60 to IP65 or incorporate an appropriate sealed hood. The total air leakage through all recessed light fittings should not exceed 0.06 m³/h.m² of ceiling at 2 Pa. No access door or hatch should be located in rooms where large amounts of moisture are produced, including kitchens or bathrooms.

205 MANUFACTURERS INFORMATION:
Check the supporting roof structure to be roofed upon is in a suitable state to receive roof covering. It must be free from harmful conditions such as timber rot and must be structurally sound. Monier Ltd cannot be held responsible for problems with roof performance caused by pre-existing conditions that are not discovered and corrected prior to any roofing works.
It is your responsibility to ensure the submitted information on which this specification is based is correct; often information has to be assumed due to lack of clarification until the roofing works commence on site.
In this specification Redland product codes are given in parentheses, e.g. (8122).
Comply with Redland fixing instructions for each product. Check that this is the current edition of the fixing instructions; if not consult Redland Technical Solutions and draw to the attention of the CA any relevant technical changes.

210 BASIC WORKMANSHIP:
Set out to give true lines and regular appearance fitting neatly at all edges, junctions and features. Fix roof covering to make the whole roof sound and weathertight at the earliest opportunity. Repair any defects as quickly as practicable to minimise damage and nuisance. Keep gutters and pipes free of debris and clean out at completion

240 UNDERLAY:
Handle carefully to prevent tears and punctures and repair with adhesive tape any which do occur.
Vertical laps not less than 100 mm wide, coinciding with supports. Horizontal laps of the dimensions specified.
Where a horizontal lap occurs the lap should be sealed using the integral double glue strips provided; peel off the protective backing and press the glue strips firmly together using the hand to form a sealed joint.
Fix with extra large head fixings, keeping the number of perforations to a minimum.
Where pipes and other components penetrate the underlay, use proprietary underlay seals.

245 BATTENS:
Sawn softwood, species to BS 5534, clause 4.12.1. Grading: To BS 4978, clause 5 or 9. Moisture content not more than 22% at time of fixing.
To be in straight horizontal lines aligned on adjacent areas with battens to be fully supported over no less than 3 supports.
Batten joints to be square cut and butted centrally on supports.
Preservative Treatment: In accordance with BS 8417, being suitable for Hazard Class 2.

275 TILE FIXING:
Lay tiles broken bond in even courses with tails aligned.
Nail and use tile clips (919600)
Use eaves clips (919200) and verge/valley clips (919300)
Use verge clips left hand (919300) and right hand (919300)

EDGES/JUNCTIONS/FEATURES

305 GENERALLY:

Ensure that related trades are provided with all relevant information relating to carpentry and other work, etc. Before starting work ensure that previous related work is complete and in accordance with the project documents.

Form all details using the specified and Redland recommended fittings and accessories: do not improvise without approval.

Please be aware that this SpecMaster specification complies with the minimum requirements set out in British Standards so as to conform with Building Regulations. For certain projects such as new housing there may be additional non-regulatory technical requirements from third-party insurers that have to be satisfied. For example, from January 1st 2012 all mortar-bedded ridge and hip tiles must be mechanically-fixed to comply with NHBC Technical Standards so as to be eligible for NHBC Buildmark Warranty Cover. It is your responsibility to check what if any non-regulatory requirements exist for your project and ensure they are complied with.

Fittings and accessories to be supplied by Redland to match slate colour and finish unless specified otherwise.

Cut slates only where necessary with an appropriate tool to give straight, clean edges.

Fix edge slates and fittings securely to give neat, true lines. Ensure that all lead flashing are fixed with or immediately after the tiling and are neatly dressed down. For most flashing applications, Codes 3, 4 and 5 lead sheet will be adequate although on positions of extreme exposure thicker codes may be required. The fixed edge of any lead flashing into masonry must be adequately fixed, and sealed using suitable products; seek assurances from the product manufacturer regarding the fitness for purpose of their product for the application.

Note also that the free edge of a lead flashing must always be adequately fixed typically using clips: The material used for the clips, their spacing and, most important, the method of fixing will depend on the site exposure. Furthermore, ensure that any widths of lead or laps in the lead work either horizontal laps or side laps over lead or the slates are sufficient for the application, roof pitch, and site exposure. Please note that in the clauses in this section the laps specified assume a moderate site exposure e.g. for side abutments and other similar details it may be necessary to increase side laps from 150mm to a minimum of 200mm. It is your responsibility to check that the appropriate specification and fixing of lead is selected for the project site. As soon as practical, a smear coating of patination oil should be applied to the lead evenly in one direction and in dry conditions. For specific advice on any of these issues contact the Lead Sheet Association. Tel 01622 872432.

A roof maintenance program, as recommended by the CTMA should be built into any contract. More information can be downloaded from our website using the following link http://www.monier.co.uk/literature/msds-and-maintenance-documents.html

341 EAVES CORBELLED:

Ensure that top of timber batten support or fascia board is fixed at the correct height to ensure all slates are laid in an even and level plane.

Fix Underlay Support Tray (907600) at centres not exceeding 300 mm.

Remove rear section of tray by snapping or cutting along score line.

Fix underlay over Underlay Support Tray.

Fix all slates in the eaves course with eaves clips (919200), using appropriate size nails.

Fix all slates in the eaves course with tails projecting 50 mm.

344 EAVES TIMBER FASCIA:

Ensure that top of timber fascia board is fixed at the correct height to ensure all slates are laid in an even and level plane.

Fix Underlay Support Tray (907600) at centres not exceeding 300 mm.

Remove rear section of tray by snapping or cutting along score line.

Fix underlay over Underlay Support Tray.

Fix all slates in the eaves course with eaves clips (919200), using appropriate size nails.

Fix all slates in the eaves course with tails projecting 50 mm.

415 AMBIDRY VERGE:
Carry underlay over full width of gable.
Project tiling battens 50 mm beyond gable, ends aligned.
Fix standard slates and slate-and-a-half (470230) in alternate courses to left hand and right hand verges.
Fix Ambi-Dry Interlocking Verge System (957000) to battens with verge clips and clout nails.
At eaves and ridge use Eaves/Ridge Pack (949100).

530 RAPID HIP:
Overlap underlay courses at the hip line by not less than 150 mm.
Fix 50 x 25 mm noggins to sides of hip rafter with 50 mm galvanised nails to support ends of tiling battens, where required.
Fix 38 x 50 mm high batten full length of hip.
Cut slate-and-a-half (470230) to rake at not more than 30 mm from hip batten.
For Plan Angles at 90°:
Hip tiles: UA Hip With Nail Hole (777830).
Colour: Slate Grey (30).
Cover with Rapid Hip Pack (950300).
Block Ends (777930).
Hip Junctions - two hips meeting one ridge (952000).

603 GRP VALLEY:
Ensure that on each side of valley, 19 mm valley boards on noggins are cut between and flush with top of rafters to provide full support for valley.
Fix 50 x 25 mm valley support battens to valley boards on each side of valley.
Cut underlay to either rake and dress onto valley support batten. Alternatively first lay a single strip of underlay, full width of valley boards, up centre of valley below valley support battens, directly on top of valley boards and then lay underlay under GRP valley.
For Plan Angles at 90° and Areas Draining up to 25m²:
Fix Cambrian GRP Valley (955300) to support battens with 25 x 2.65 mm galvanised clout nails.
Cut slate-and-a-half (470230) neatly to form a 125 mm gap centred on valley.
Fix slates both sides every course with verge clips (919300) twice nailed to valley battens with 30 x 2.65 mm stainless steel ring shank nails.

662 GRP SECRET GUTTER SIDE ABUTMENT:
Turn underlay not less than 50 mm up abutment.
Fix Redland GRP Secret Gutter (959600) to ends of tiling battens with 25 mm galvanised clout nails.
Fix a timber tilting fillet to support the gutter outlet at the base of the secret gutter. Gutter outlet should be splayed out to ensure that water is discharged into gutter at eaves or out over slates immediately below side abutment.
Cut and fix Standard Slates (470130) and slate-and-a-half (470230) alternately to fit closely to abutment.
Dress Lead over slates by not less than 150 mm and up wall by not less than 65 mm.
Dress into wall and secure with clips and seal with suitable sealant.

670 TOP EDGE VENTILATED ABUTMENT:
Turn underlay over and nail to top tiling batten allowing not less than 10 mm airgap to abutment.
Fix top course of slates closely to abutment.
Fix Abutment Ventilation Pack (954800).
Ensure that lead apron flashing is firmly engaged into channel on the leading edge of tray provided.

675 TOP EDGE ABUTMENT:
Turn underlay not less than 50 mm up wall at abutment.
Fix top course of slates closely to abutment.
Ensure that lead apron flashing is dressed closely over slates by not less than appropriate amount required.

690 ROOF WINDOW:
Turn underlay up against window surround and cover with integral flashing all round.
Cut or fix slate-and-a-half (470230) and Double-Slates (470530) as necessary closely to both sides.
Fix tiles both sides every course with verge clips.

691 ROOF DORMER:
Turn underlay up against dormer surround and cover with integral flashing all round.
Cut or fix slate-and-a-half (470230) and Double-Slates (470530) as necessary closely to both sides.
Fix tiles both sides every course with verge clips.

720 RAPID VENTED RIDGE:
Finish underlay 30 mm from apex on either side of roof to allow an air gap.
Fix 38 mm wide batten to top of ridge board with fixing straps provided. Height of batten should provide a wood screw penetration of not less than 15 mm.
Fix top course of slates.
Ridge tiles: UA Ridge Without Nail Hole (450mm) (714630).
Colour: Slate Grey (30).
Fix using Rapid Vented Ridge Pack (930800).
Block Ends with wood screw for gables (751830).

810 JUNCTIONS:
Fix a lead saddle to provide a weathertight detail at each:
Junction of ridge with abutment.
Top of two valleys.

840 ROOF SLOPE VENTILATORS:
Fix ThruVent 4.5k (Cambrian) (770530), with underlay seal, to ventilate above insulation between the rafters, with spigot clear of insulation. Position in each and every rafter space, to even spacing as follows:
Top edge abutments, in second top slate course, where top edge ventilated abutment system is not being installed.
Hips, both sides, in first full slate adjacent to hip.
Roof windows, in second top slate course below.
Roof dormers, in second top slate course below.

850 ROOF SLOPE TERMINALS:
Soil Vent Pipe Terminals: Hi-Flow ThruVent Tile (Cambrian) (734930) with underlay seal, non-Redland Adaptor and Flexible Pipe.

852 ROOF SLOPE TERMINALS:
Mechanical Extract Terminals: ThruVent 4.5k (Cambrian) (770530) with underlay seal and Flexible Pipe (918800).

880 FINISHING: As soon as practical, apply a smear coating of patination oil, evenly in one direction and in dry conditions, to all leadwork.

H71 LEAD SHEET COVERINGS/FLASHINGS

To be read with Preliminaries/General conditions.

GENERAL REQUIREMENTS/PREPARATORY WORK

510 WORKMANSHIP GENERALLY:
- Cut, joint and dress lead neatly and accurately, to provide fully waterproof coverings/flashings, free from ripples, kinks, buckling and cracks.
- Comply with BS 6915 and current good practice as described in the latest editions of ‘The Lead Sheet Manual’ and Updates published by the Lead Sheet Association, unless specified or agreed otherwise.
- Do not use scribers or other sharp instruments to mark out lead.
- Use solder only where specified.

- Ensure that finished leadwork is fully supported, adequately fixed to resist wind uplift but also able to accommodate thermal movement without distortion or stress.
- Ensure that finished leadwork is protected against staining, discolouration and damage by subsequent works.

512 LEAD SHEET: Colour marked for thickness and weight and of the type and code specified:
- Rolled, to BS EN 12588, or
- Machine cast, Agrément certified and to code thicknesses with a tolerance (by weight) of ±5%, or
- Sand cast, from lead free from bitumen, solder, other impurities, inclusions, laminations, cracks, air, pinholes and blowholes; to code thicknesses but with a tolerance (by weight) of ±10%.

515 IN SITU LEADWELDING will not be permitted.

516 IN SITU LEADWELDING is permitted, subject to completion of a 'hot work permit' form and compliance with its requirements.

570 EXISTING LEAD TO BE REMOVED will become the property of the contractor. The scrap value of such lead must be estimated by the contractor, itemised separately in the tender, and set against the tender sum.

571 EXISTING LEAD TO BE REMOVED will remain the property of the Employer. Give ample notice to the CA of when the lead is to be stripped, so that arrangements can be made for supervision. Using a certified weighing machine, record the weight of all stripped lead and give copies of certificates to the CA. Store in an approved place.

580 REPLACEMENT OF EXISTING LEAD must be carried out in small sections at a time to reduce the risk of weather damage to a minimum. Provide and maintain temporary waterproof coverings to ensure that there is no damage to the existing base and building.

610 SUITABILITY OF BASES:
- Bases to be dry and free of dust, debris, grease and other deleterious matter.
- Laying of lead will be taken as acceptance by the lead contractor of the suitability of bases.

620 PREPARATION OF EXISTING TIMBER BASES:
- Inform CA of any defective boards and comply with instructions for replacement. Ensure that all boards are securely fixed. Punch in any protruding fastenings and plane or sand as necessary to achieve an even surface.
- Moisture content: Not more that 22% at time of covering. Inform CA if moisture content greater than 16%.

650 TIMBER FOR USE WITH LEADWORK:
- Planed, free from wane, pitch pockets, decay and insect attack except pinhole borers.
- Moisture content: Not more than 22% at time of covering. Inform CA if moisture content greater than 16%.
- Preservative treatment: CCA as section Z12 and British Wood Preserving and Damp-proofing Association Commodity Specification C8.

660 UNDERLAY:
- Handle carefully to prevent tears and punctures.
- Lay on dry base in strips across fall of roof, lapped and fixed in position with copper or stainless steel staples or clout nails.
- Do not lay over roof edges but do turn up at abutments.
- Wood core rolls, where used, must be fitted over the underlay.
- Keep underlay dry and cover with lead at the earliest opportunity.

FIXING/JOINTING LEAD

710 HEAD FIXING LEAD SHEET:
- Where not specified otherwise, secure top edge of lead sheets with two rows of fixings, 25 mm and 50 mm from top edge of sheet, at 75 mm centres in each row, evenly spaced and staggered.
- Sheets less than 500 mm deep may be secured with one row of fixings, 25 mm from top edge of sheet and evenly spaced at 50 mm centres.

715 FIXINGS:
- Where not specified otherwise, fix lead sheet to timber substrates with:
  Copper clout nails to BS 1202-2, table 2, with annular ringed, helical threaded or serrated shank, length not less than 20 mm, shank diameter not less than 2.65 mm, or Stainless steel (austenitic) clout nails with annular ringed, helical threaded or serrated shank, length not less than 19 mm, shank diameter not less than 2.65 mm.
- Where not specified otherwise, fix lead sheet to concrete or masonry substrates with:
  Brass or stainless steel screws to BS 1210, table 3, length not less than 19 mm and diameter not less than 3.35 mm, with washers of the same material and plastics plugs of length and diameter to suit screws.

720 CLIPS:
- Generally 50 mm wide where not specified to be continuous, length to suit detail.
- Lead clips to be cut from sheets of same code as sheet being secured.
- Copper clips to be cut from sheet to BS EN 1172, temper designation R220 in welts, seams and rolls, R240 elsewhere; dipped in solder if exposed to view.
- Stainless steel clips to be cut from sheet to
  BS EN 10088, grade 1.4301(304) terne coated if exposed to view.
- Unless specified otherwise fix each clip with two fastenings not more than 50 mm from edge of lead sheet. Clips welted around edges of sheets to be turned over 25 mm.

730 WOOD CORED ROLL JOINTS WITHOUT SPLASH LAP:
- Core: 45 x 45 mm rounded timber as clause 650 tapering to a flat base 25 mm wide. Fix to base with brass or stainless steel countersunk screws at not more than 300 mm centres.
- Dress undercloak half way around core.
- Fix copper or stainless steel clips (clause 720) to the roll at not more than 450 mm centres. Ensure that clip fixing does not restrict thermal movement of the undercloak.
- Dress overcloak around core with edge welted around ends of clips, finishing 5 mm clear of main surface.

740 WOOD CORED ROLL JOINTS WITH SPLASH LAP:
- Core: 45 x 45 mm rounded timber as clause 650 tapering to a flat base 25 mm wide. Fix to base with brass or stainless steel countersunk screws at not more than 300 mm centres.
- Dress undercloak three quarters around core and fix with nails at 150 mm centres for a distance of about one third the length of the panel starting from the head of the sheet.
- Dress overcloak around core and extend on to main surface to form a 40 mm splash lap.

750 HOLLOW ROLL JOINTS:
- Form with a 125 mm overcloak, 100 mm undercloak and copper or stainless steel clips (clause 720) at not more than 450 mm centres.
- Welt overcloak and clip around undercloak, and turn over to form a roll of consistent cross section.

770 WELTED JOINTS:
- Form with a 50 mm overlap, 25 mm underlap and copper or stainless steel clips (clause 720) at not more than 450 mm centres.
- Welt overlap and clips around underlap, loosely turn over and lightly dress down.

780 DRIPS WITH SPLASH LAPS:
- Dress underlap into rebate along top edge of drip and fix with one row of nails at 50 mm centres on centre line of rebate.
- Dress overlap over drip and form a 40 mm splash lap.

790 DRIPS WITHOUT SPLASH LAPS:
- Dress underlap into rebate along top edge of drip and fix with one row of nails at 50 mm centres on centre line of rebate.
- Dress overlap over drip to just short of lower level.

820 WEDGE FIXING INTO JOINTS/CHASES:
- Carefully rake out joint/chase to a depth of not less than 25 mm.
- Dress lead into joint/chase and fix with lead wedges at not more than 450 mm centres, at every

change of direction and with at least two for each piece of lead.
- Prepare joint/chase and apply sealant as section Z22.

830 WEDGE FIXING INTO DAMP PROOF COURSE JOINTS:
- Carefully rake/cut out joint under damp proof course to a depth of not less than 25 mm.
- Dress lead into joint and fix with lead wedges at not more than 450 mm centres, at every change of direction and with at least two for each piece of lead.
- Prepare joint and apply sealant as section Z22.

840 SCREW FIXING INTO JOINTS/CHASES:
- Carefully rake out joint/chase to a depth of not less than 25 mm.
- Dress lead into joint/chase and up back face. Fix into back face with stainless steel screws and washers and plastics plugs at not more than 450 mm centres, at every change of direction, and with at least two fixings for each piece of lead.
- Prepare joint and apply sealant as section Z22.

880 FINISHING: As soon as practical, apply a smear coating of patination oil, evenly in one direction and in dry conditions, to all leadwork.

L10 WINDOWS/ROOFLIGHTS/SCREENS/LOUVRES

To be read with Preliminaries/General conditions.

PRELIMINARY INFORMATION/REQUIREMENTS

110 EVIDENCE OF PERFORMANCE: Provide independently certified evidence that all specified variants of components comply with specified performance requirements.

120 SITE DIMENSIONS must be taken and recorded on shop drawings before starting to make.

INSTALLATION

710 PROTECTION OF COMPONENTS: Do not deliver to site components which cannot be put immediately into suitable clean, dry, floored and covered storage. Stack near vertical on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

720 MOISTURE CONTENT OF TIMBER COMPONENTS: During delivery, storage, fixing and thereafter to Practical Completion maintain conditions of temperature and humidity to suit specified moisture content(s) of components. When instructed by CA, test components with an approved electrical moisture meter used in accordance with manufacturer's recommendations.

730 PRIMING/SEALING: Before fixing components ensure that surfaces of timber which will be inaccessible after installation are primed or sealed as specified.

750 BUILDING IN will not be permitted except where specifically stated on the drawings.

755 INSTALL PVC-U WINDOWS in accordance with clause 783 and the British Plastics Federation window installation guide, reference COP3-B.

756 INSTALL PVC-U WINDOWS in accordance with clause 783 and BS 8213:Part 4.

765 WINDOW INSTALLATION:
- Install windows into prepared openings, maintaining a maximum gap of 5mm between the frame edge and the surrounding construction.
- Install windows without twist or diagonal racking.

780 FIXING OF TIMBER FRAMES:
- As section Z20.
- When not predrilled or specified otherwise, position fixings not more than 150 mm from each end of jamb, adjacent to each hanging point of opening lights, and at maximum 450 mm centres.

781 FIXING OF STEEL FRAMES:
- As section Z20.
- When not predrilled or specified otherwise, position fixings not less than 50 mm and not more than 190 mm from each end of jamb, adjacent to each hanging point of opening lights, and at maximum 900 mm centres.

782 FIXING OF ALUMINIUM FRAMES:
- As section Z20.
- When not predrilled or specified otherwise, position fixings not more than 250 mm from each end of jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

783 FIXING OF PVC-U FRAMES:
- As section Z20.
- When not predrilled or specified otherwise, position fixings 150–250 mm from each end of jamb, adjacent to each hanging point of opening lights, but no closer than 150 mm to a transom or mullion centre line, and at maximum 600 mm centres.

784 FIXING OF COMPOSITE FRAMES:
- Fix vertical jambs of frames.
- When not predrilled or specified otherwise, position fixings not more than 150 mm from each end of jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

800 BACKFILLING OF STEEL FRAME SECTIONS: After fixing, fill the back of steel frame sections with a waterproof cement fillet.

810 SEALANT JOINTS:
- Sealant manufacturer and reference: As specified.
  Colour: As specified.
- Prepare joints and apply sealant as section Z22. Finish triangular fillets with a flat or slightly convex profile.

820 IRONMONGERY: Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces. At completion check, adjust and lubricate as necessary to ensure correct functioning.

L40 GENERAL GLAZING

To be read with Preliminaries/General conditions.

130 REMOVAL OF GLAZING FOR REUSE:
- Carefully remove existing glazing and glazing compound, beads, etc., avoiding damage to the frame, to leave clean smooth rebates free from obstructions and debris.
- Report to CA any signs of deterioration of the surround revealed by removal of glazing, compounds, etc. Do not reglaze affected surrounds until instructed.
- Clean glazing, beads and other components that are to be reused.

150 WORKMANSHIP GENERALLY:
- Glazing generally: to BS 6262.
- The glazing must be wind and watertight under all conditions with full allowance made for deflections and other movements.
- Panes/sheets to be accurately sized, with clean, undisfigured surfaces and undamaged edges.
- Avoid contact between glazing panes/units and alkaline materials such as cement and lime.
- Keep materials dry until fixed. Keep insulating glass units and plastics glazing sheets protected from the sun and away from heat sources.
- Ensure that glass/plastics, surround materials, sealers primers and paints/clear finishes to be used together are compatible. Comply with glazing and sealant manufacturers' recommendations.

152 PREPARATION: Clean surrounds, rebates, grooves and beads, and prepare as specified before installing glazing.

155 GLASS GENERALLY:
Standards: To BS 952 and relevant parts of:

- BS EN 572 for basic soda lime silicate glass.
- BS EN 1096 for coated glass.
- BS EN 1748-1 for borosilicate glass.
- BS EN 1748-2 for ceramic glass.
- BS EN 1863 for heat strengthened soda lime silicate glass.
- BS EN 12150 for thermally toughened soda lime silicate safety glass
- BS EN 12337 for chemically strengthened soda lime silicate glass.
- BS EN 13024 for thermally toughened borosilicate safety glass.
- BS EN ISO 12543 for laminated glass and laminated safety glass.

Panes/ sheets: Clean and free from obvious scratches, bubbles, cracks, rippling, dimples and other defects.

- Edges: Generally undamaged. Shells and chips not more than 2 mm deep and extending not more than 5 mm across the surface are acceptable if ground out.

165 HEAT TOUGHENED GLASS to be fixed in the following locations must be subjected to a heat soaking regime. All panes must be heat soaked. Provide certified evidence of treatment.

175 EDGE TAPES TO INSULATING UNITS: Report to CA any damage to edge tapes. Obtain approval of proposed method of repair.

180 BEAD FIXING WITH PINS: Space pins evenly at not more that 150 mm centres, and within 50 mm of each corner. Punch pins just below the timber surface.

181 BEAD FIXING WITH SCREWS: Space screws evenly at not more that 225 mm centres, and within 75 mm of each corner.

TYPES OF GLAZING

210 PUTTY FRONTED SINGLE GLAZING

- Apply sufficient putty to produce not less than 1.5 mm finished thickness of back bedding after inserting glazing.
- Locate glazing centrally in surround using setting and location blocks, and secure with glazing sprigs/cleats/clips at 300 mm centres.
- Apply front putty and finish to a neat triangular profile stopping 2 mm short of sight line. Lightly brush surface to seal putty to glass and leave smooth with no brush marks.
- Seal putty as soon as sufficiently hard but not within 7 days of glazing. Within 28 days apply :
  - The full final finish, suitably protected until completion and cleaned down and made good as necessary, or
  - Keep opening lights in closed position until putty has set sufficiently to prevent displacement of glazing.

230 BEAD FIXED SINGLE GLAZING

- Apply glazing compound, using distance pieces to produce not less than 3 mm finished thickness of back bedding after inserting glazing.
- Locate glazing centrally in the surround using setting and location blocks.
- Apply front glazing compound, filling all voids, and insert distance pieces. Bed beads in compound and fix securely.
- Finish visible edge of compound internally and externally with a smooth chamfer.

M60 PAINTING/CLEAR FINISHING

To be read with Preliminaries/General conditions.

GENERALLY

215 HANDLING AND STORAGE:

- Coating materials must be delivered in sealed containers, each clearly labelled with the brand name, type of material and manufacturer's batch number.
- Wherever possible materials must be from one manufacturing batch. Inform the CA if materials from more than one batch are to be used, store separately and allocate to distinct parts or areas of the work.
- Store materials in accordance with manufacturer's recommendations. Use in order of delivery and

before expiry of any shelf life date.

280 PROTECTION:
- Adequately protect internal and external surfaces, fixtures and fittings which are not to be coated, by covering with dust sheets, masking or other suitable materials.
- Exhibit 'Wet paint' signs and provide barriers where necessary to protect other operatives and the general public, and to prevent damage to freshly applied coatings.

PREPARATION

400 PREPARATION GENERALLY:
- To BS 6150, Section 4.
- Materials used in preparation must be types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Prevent or control exposure of operatives to dust, vapour and fumes exceeding occupational exposure standards set in the current Health and Safety Executive (HSE) document EH40.
- Substrates must be sufficiently dry in depth to suit the coating to be applied.
- Remove efflorescence salts from surfaces. Repeat removal if efflorescence recurs.
- Clean off dirt, grease and oil from surfaces. If contamination of surfaces/substrates has occurred, obtain instructions before proceeding.
- Smooth surface irregularities. Fill joints, cracks, holes and other depressions with stoppers/fillers worked well in and finished off flush with surface. Abrade to a smooth finish.
- Apply oil based stoppers/fillers after priming. Apply water based stoppers/fillers before priming unless recommended otherwise by manufacturer. Patch prime water based stoppers/fillers when applied after priming.
- Remove dust and particles from dry abrasive preparation of surfaces.
- Remove residues from wet preparation of surfaces by rinsing with clean water, wiping and allowing to dry.
- Ensure that doors, opening windows, etc, are 'eased' as necessary before coating. Prime any resulting bare areas.

420 FIXTURES: Before commencing work, remove all following fixtures and fittings, set aside and replace on completion.

425 IRONMONGERY: Remove from surfaces to be coated and refix on completion. Do not remove hinges unless instructed to do so.

430 IRONMONGERY: Remove all old paint and varnish marks from existing ironmongery. Thoroughly clean and polish before refixing.

440 PREVIOUSLY COATED SURFACES GENERALLY:
- Prepare in accordance with BS 6150, Section 6.
- When removing or partially removing coatings, use methods which will not damage the substrate or adjacent surfaces or adversely affect subsequent coatings.
- Carefully remove all loose, flaking or otherwise defective areas to a firm edge.
- Completely remove alkali affected coatings.
- Where coatings are suspected of containing lead, obtain instructions before proceeding.
- Where substrates containing asbestos are revealed, obtain instructions before proceeding.
- Where significant rot, corrosion or other degradation of substrates is revealed, obtain instructions before proceeding.
- Thoroughly clean retained coatings with appropriate detergent solutions or solvents to remove all dirt, grease and contaminants. Abrade gloss coated surfaces when still wet to provide a key.
- Apply additional preparatory coats to areas of partial removal to restore original coating thicknesses. Abrade junctions to give a flush surface.
- Where coatings are completely removed, prepare surfaces as specified for uncoated surfaces.

461 PREVIOUSLY COATED TIMBER:
- Remove any degraded or weathered surface timber by abrading.
- Ensure that repairs to degraded substrate timber have been carried out with sound timber of the same species.
- Apply two coats of knotting to exposed resinous areas and knots and allow to dry.

471 PREPRIMED TIMBER: Abrade chalking, powdery and other defective primer back to bare timber, remove dust and reprime resulting bare areas.

481 UNCOATED TIMBER:
- Abrade to a smooth, even finish with arrises and moulding edges lightly rounded or eased.
- Ensure that heads of fasteners are countersunk sufficiently to hold stoppers/fillers.
- Apply two coats of knotting to resinous areas and knots and allow to dry.

490 PREVIOUSLY COATED STEEL:
- Abrade corrosion and loose scale back to bare metal.
- Treat any residual rust with a proprietary removal solution. Prime as soon as possible.

500 PREPRIMED STEEL: Abrade defective primer, corrosion and loose scale back to bare metal, remove dust and reprime resulting bare areas.

511 GALVANIZED, SHERARDIZED AND ELECTROPLATED STEEL to receive lead free primer: Pretreat with 'T wash'/mordant solution to achieve blackening of the whole surface or apply pretreatment etching primer where recommended by the coating system manufacturer.

521 UNCOATED STEEL - MANUAL CLEANING:
- Remove oil and grease.
- Abrade to remove corrosion, loose scale, welding slag and spatter.
- Treat any residual rust with a proprietary removal solution. Prime as soon as possible.

541 UNCOATED ALUMINIUM/COPPER/LEAD: Remove any surface corrosion/oxidization and lightly abrade with fine abrasive paper and white spirit. Apply pre-treatment etching primer where recommended by the coating system manufacturer.

552 UNCOATED PVC-U: Wash with warm detergent solution to remove dirt and grease. Do not abrade.

570 UNCOATED MASONRY/RENDERING: Remove loose and flaking material with a stiff brush.

580 UNCOATED PLASTER: Scrape off nibs, trowel marks and plaster splashes. Abrade lightly any overtrowelled 'polished' areas.

590 UNCOATED PLASTERBOARD: Fill depressions around fixings.

601 UNCOATED PLASTERBOARD - TO RECEIVE TEXTURED COATING: Fill joints, tape and feather out using materials recommended by the textured coating manufacturer.

622 TREATMENT OF ORGANIC GROWTHS:
- Remove all loose growths and infected coatings/decorations.
- Apply appropriate biocidal solution to growth areas and surrounding surfaces.
- Scrape or brush off all dead growth. Remove infected materials immediately to ensure that no other areas become infected.
- Apply appropriate residual effect biocidal solution to inhibit re-establishment of growths.
- Biocides must be approved and registered by the Health and Safety Executive (HSE) and listed in the current 'Reference Book 500', Part B, as surface biocides.

631 PREVIOUSLY PAINTED WINDOW FRAMES:
- Remove existing paint to the extent specified or instructed.
- Remove old paint splashes and old paint encroaching beyond the glass sight line.
- Remove loose and defective putty.
- Thoroughly clean putty cavities and junctions between previously painted surfaces and glass.
- Patch prime, reputty and paint as soon as sufficiently hard.

640 POINTING TO EXISTING FRAMES:
- Remove defective sealant pointing.
- Thoroughly clean the joint recess, remove all dust and seal joint surfaces as recommended by sealant manufacturer.
- Check that depth of joint is approximately half its width, and adjust using recommended backing

strip if necessary.
- Repoint neatly using mastic gun during dry conditions when the ambient temperature is above 5degC.

652 EXISTING GUTTERS: Clean all dirt and debris from inside of all gutters (even though not to be coated). Clean out defective joints and seal with approved jointing material.

APPLICATION

700 UNSUITABLE CONDITIONS:
- Take all necessary precautions including restrictions on working hours, providing temporary protection and allowing extra drying time, to ensure that coatings are not adversely affected by climatic conditions during and after application.
- Prevent or control exposure of operatives to solvent vapour levels exceeding occupational exposure standards set in the current Health and Safety Executive (HSE) document EH40.
- Unless it is specifically permitted by the coating manufacturer, do not apply coatings:
  -To surfaces affect by moisture, frost or airborne dust.
  -When the air or substrate temperature is below 5degC.
  -When the relative humidity is above 80%.
  -When heat is likely to cause blistering or wrinkling.

711 COATING GENERALLY:
- To BS 6150, Section 5.
- Do not use materials which show any bittiness or other defects when applied. Do not thin or intermix unless specified or recommended otherwise.
- Apply priming coats as soon as possible on the same day as preparation is completed. They must be of adequate thickness and suit surface porosity.
- Apply coatings by brush or roller unless otherwise specified or approved.
- Keep brushes and equipment in a clean condition. Dispose safely of cleaning and waste materials, do not pour into sanitary appliances or drains.
- Subsequent coats of the same pigmented material must be of a different tint to ensure that each coat provides complete coverage.
- Apply coatings to clean, dry surfaces in accordance with the manufacturer's recommended intervals between coats.
- Apply coatings evenly to give a smooth finish of uniform colour, free from brush marks, sags, runs and other defects. Cut in neatly and cleanly. Do not splash or mark adjacent surfaces.
- Adequately protect drying and completed work from damage.

730 CONCEALED JOINERY SURFACES: Where one or more additional coats are specified to be applied in the factory, they must be applied to all surfaces, including those which will be concealed when components are fixed in place.

760 VARNISHING: Thin first coat with white spirit in accordance with manufacturer's recommendations. Brush well in avoiding aeration and lay off. Apply further coats of varnish, rubbing down lightly between coats along the grain.

770 EXTERNAL DOORS: Prime and coat bottom edges before hanging.

781 BEAD GLAZING: Joinery which is to be varnished must have the first two coats of varnish applied to rebates and beads before glazing.

782 BEAD GLAZING: Joinery which is to be painted must have the primer and one undercoat applied to rebates and beads before glazing.

790 PUTTY GLAZING: Allow putty to set for 7 days then, within a further 14 days, seal with an oil based primer. Ensure that putty is fully protected by coating system as soon as it is sufficiently hard. Extend finishing coats on to glass up to sight line.

820 COMPLETION: Ensure that opening lights and other moving parts move freely. Remove all masking tape and temporary coverings.
- Remove dust by vacuum cleaning and wash, using mops dampened with water containing a

neutral detergent.
- When dry, apply a water based seal of a type and number of coats recommended by cork manufacturer. Allow each coat to dry thoroughly and dry burnish using a fine-grade synthetic fibre web pad or brush.
- Apply two coats of emulsion polish of a type recommended by cork manufacturer, dry burnishing each coat as before.

N10 GENERAL FIXTURES/FURNISHINGS/EQUIPMENT

To be read with Preliminaries/General conditions.

INSTALLATION

710 MOISTURE CONTENT: During delivery, storage, fixing and thereafter to practical completion maintain conditions of temperature and humidity to suit specified moisture content(s) of timber components. When instructed by CA, test components with an approved moisture meter to manufacturer's recommendations.

720 INSTALLATION GENERALLY: Methods of fixing and fastenings to be as section Z20 unless specified otherwise.

770 TRIMS: Wherever possible to be in unjointed lengths between angles or ends of runs. Where running joints are unavoidable obtain approval of location and method of jointing. Mitre angle joints unless otherwise specified.

780 COMPLETION:
- Ensure that doors and drawers are accurately aligned and do not bind. Adjust as necessary to ensure smooth operation.
- Check, adjust and lubricate ironmongery as necessary to ensure correct functioning.

P10 SUNDRY INSULATION/PROOFING WORKS

To be read with Preliminaries/General conditions.

TYPES OF INSUALTION

125 INSULATION LAID BETWEEN CEILING TIES/ JOISTS:
Manufacturer: [ROCKWOOL Ltd].
- Product reference: [Flexi].
Material: [Rock wool to BS EN 13162].
Recycled content: [Not applicable].
Thickness: [To achieve a U value of 0.16 W/m²K].
Installation requirements:
- Installation standard: [To BS 5803-5].
- Joints: Butted, no gaps.
- Insulation at perimeter: Carried over wall plates.
- Eaves ventilation: Unobstructed.
- Service holes: Sealed, and debris removed before laying insulation.
- Water cistern platforms: [Not applicable].

140 INSULATION FITTED AT RAFTER LEVEL:
Manufacturer: [Kingspan Insulation Ltd].
- Product reference: [Kooltherm K7].
Location: [Between rafters].
Material: [Phenolic foam to BS EN 13166].
Facing: [Metal foil].
Recycled content: [Not applicable].
Thickness: [To achieve a U value of 0.16 W/m²K].
Installation requirements:
- General: Insulation to be friction fitted between rafters with no gaps.
- Joints: Butted, no gaps.
- Fasteners: Used where necessary to retain insulation and/ or prevent slumping.

- Vapour control facing (if specified): Fit insulation with facing on warm side. Staple overlap (if provided) to underside of rafters; tape joints between adjacent overlaps using vapour impermeable adhesive tape.
- Air space above insulation: Not restricted.
- Eaves ventilation: Unobstructed.

R10 RAINWATER PIPEWORK/GUTTERS

To be read with Preliminaries/General conditions.

INSTALLATION

400 BEFORE COMMENCING WORK specified in this section, ensure that:
- Below ground drainage is ready to receive rainwater or that the discharge can be dispersed by approved means to prevent damage or disfigurement of the building fabric.
- Any specified painting of surfaces which will be concealed or inaccessible is completed.

410 INSTALLATION GENERALLY:
- Install pipework/gutters to ensure the complete discharge of rainwater from the building without leaking.
- Obtain all components for each type of pipework/guttering from the same manufacturer unless specified otherwise.
- Provide access fittings and rodding eyes as necessary in convenient locations to permit adequate cleaning and testing of pipework.
- Avoid contact between dissimilar metals and other materials which would result in electrolytic corrosion.
- Do not bend plastics or galvanized steel pipes.
- Adequately protect pipework/gutters from damage and distortion during construction. Fit purpose made temporary caps to prevent ingress of debris. Fit all access covers, cleaning eyes and blanking plates as the work proceeds.
- Where not specified otherwise use plated, sherardized, galvanized or nonferrous fastenings, suitable for the purpose and background, and compatible with the material being fixed.

420 FIXING GUTTERS:
- Set out to a true line and even gradient to ensure no ponding or backfall. Position high points of gutters as close as practical to the roof and low points not more than 50 mm below the roof.
- Position outlets to align with connections to below ground drainage, unless shown otherwise on drawings.
- Provide for thermal and building movement when fixing and jointing, and ensure that clearances are not reduced as fixing proceeds.
- Seal as specified to make watertight.
- Ensure that roofing underlay is dressed into gutter.

450 RAINWATER OUTLETS: Ensure that:
- Outlets are securely fixed before connecting pipework.
- Junctions between outlets and pipework can accommodate all movement in the structure and pipework.

460 FIXING PIPEWORK:
- Fix securely at specified centres plumb and/or true to line.
- Make changes in direction of pipe runs only where shown on drawings unless otherwise approved.
- Fix branches and low gradient sections with uniform and adequate falls to drain efficiently.
- Fix externally socketed pipes/fittings with sockets facing upstream.
- Provide additional supports as necessary to support junctions and changes in direction.
- Fix every length of pipe at or close below the socket collar or coupling.
- Provide a load bearing support for vertical pipes at not less than every storey level. Tighten fixings as the work proceeds so that every storey is self supporting and undue weight is not imposed on fixings at the base of the pipe.
- Isolate from structure where passing through walls or floors and sleeve pipes as specified in Section P31.
- Provide for thermal and building movement when fixing and jointing, and ensure that clearances are not reduced as fixing proceeds.

- Fix expansion joint pipe sockets rigidly to the building and elsewhere use fixings that allow the pipe to slide.

465 JOINTING PIPEWORK/GUTTERS:
- Joint using materials, fittings and techniques which will make effective and durable connections.
- Joint differing pipework/gutter systems with adaptors recommended by manufacturer(s).
- Cut ends of pipes to be clean and square with burrs and swarf removed. Chamfer pipe ends before inserting into ring seal sockets.
- Ensure that jointing or mating surfaces are clean, and where necessary lubricated, immediately before assembly.
- Form junctions using fittings intended for the purpose ensuring that jointing material does not project into bore of pipes, fittings and appliances.
- Remove surplus flux/solvent/cement/sealant from joints.

510 ELECTRICAL CONTINUITY: Use clips or suitable standard couplings supplied for the purpose by pipework manufacturer to ensure electrical continuity at all joints in metal pipes with flexible couplings and which are to be earth bonded.

560 INTERNAL PIPEWORK TEST:
- Temporarily seal open ends of pipework with plugs.
- Connect a U tube water gauge and air pump to the pipework via a plug.
- Pump air into pipework until gauge registers 38 mm.
- Allow a period for temperature stabilization, after which the pressure of 38 mm is to be maintained without loss for not less than 3 minutes.

561 INTERNAL PIPEWORK TEST:
- Temporarily seal open ends of pipework with plugs.
- Connect a U tube water gauge and air pump via a plug.
- Pump air into pipework until gauge registers 50 mm.
- Allow a period for temperature stabilization, after which the pressure of 50 mm is to be maintained without loss for not less than 5 minutes.

570 GUTTER TEST: Block all outlets, fill gutters to overflow level and after 5 minutes closely inspect for leakage.

Z10 PURPOSE MADE JOINERY

To be read with Preliminaries/General conditions.

110 FABRICATION GENERALLY:
- Fabricate joinery components to BS 1186:Part 2.
- Form sections out of the solid when not specified otherwise. Carefully machine timber to accurate lengths and profiles. After machining, sections to be free from twist and bowing, and surfaces to be smooth and free from tearing, wooliness, chip bruising and other machining defects.
- Assemble with tight, close fitting joints to produce rigid components free from distortion.
- All screws to have pilot holes. Screws of 8 gauge or more and all screws into hardwood to have clearance holes. Screw heads to be countersunk not less than 2 mm below timber surfaces that will be visible in completed work.

120 CROSS SECTION DIMENSIONS OF TIMBER:
- Dimensions on drawings are finished sizes.
- Maximum permitted deviations from finished sizes for softwood sections to be as stated in BS EN 1313:Part 1:
  Clause 6 for sawn sections
  Clause NA. 2 for further processed sections.
- Maximum permitted deviations from finished sizes for hardwood sections to be as stated in BS 5450:
  Clause 6.1 for sawn sections
  Clause 8.3 for further processed sections.

130 PRESERVATIVE TREATED TIMBER:
- Carry out as much cutting and machining as possible before treatment.

- Retreat all timber which is sawn along the length, ploughed, thicknessed, planed or otherwise extensively processed.
- Treat surfaces exposed by minor cutting and drilling with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

140 MOISTURE CONTENT of timber and wood based boards to be maintained within the range specified for the component during manufacture and storage.

250 FINISHING AND PROTECTING:
- Sand all joinery to give smooth, flat surfaces suitable to receive specified finishes. Arrises to be eased unless specified otherwise.
- Before assembly, seal all end grains for external components with primer or sealer as specified in section M60 and allow to dry.
- Protect completed joinery against damage, dirt, moisture and other deleterious substances.

Z11 PURPOSE MADE METALWORK

To be read with Preliminaries/General conditions.

110 MATERIALS GENERALLY:
- Grades of metals, section dimensions and properties to be to the appropriate British Standard. When not specified, select grades and sections appropriate for the purpose.
- Prefinished metal may be used if methods of fabrication do not damage or alter appearance of finish, and finish is adequately protected.
- Fasteners to be to the appropriate British Standard and, unless specified otherwise, to be of the same metal as the component, with matching coating or finish.

120 FABRICATION GENERALLY:
- Fabricate components carefully and accurately to ensure compliance with design and performance requirements.
- Do not permit contact between dissimilar metals in components which are to be fixed where moisture may be present or occur.
- Finished components to be rigid and free from distortion, cracks, burrs and sharp arrises. Moving parts must move freely and without binding.
- Unless specified otherwise, mitre corner junctions of identical sections.

130 COLD FORMED WORK: Use brake presses or cold rolling to produce accurate profiles with straight arrises.

170 WELDING/BRAZING GENERALLY:
- Thoroughly clean surfaces to be joined.
- Ensure accurate fit using clamps and jigs where practicable. Use tack welds only for temporary attachment.
- Make joints with parent and filler metal fully bonded throughout with no inclusions, holes, porosity or cracks.
- Prevent weld spatter falling on surfaces of materials which will be self-finished and visible in completed work.
- Remove all traces of flux residue, slag and weld spatter.

180 WELDING OF STEEL: Metal arc welding to BS 5135 and BS EN 1011-1, or other methods subject to approval.

250 FINISHING WELDED/BRAZED JOINTS:
- Butt joints which will be visible in completed work to be smooth, flush with adjacent surfaces.
- Fillet joints which will be visible in completed work to be executed neatly. Grind smooth where specified.

310 PREPARATION FOR APPLICATION OF COATINGS:
- Before applying coating ensure that fabrication is complete and all fixing holes have been drilled, unless otherwise specified.
- Remove all paint, grease, flux, rust, burrs and sharp arrises.
- Make good all defects which would show after application of coating and finish surfaces smooth.

360 GALVANIZING: To BS EN ISO 1461. Provide all necessary vent and drain holes in approved locations and seal to approval after galvanizing.

380 ANODIZING: To BS 1615 unless specified otherwise. Provide a certificated of assurance that anodizing has been carried out as specified.

390 ANODIZING: To BS 3987.

Z20 FIXINGS/ADHESIVES

To be read with Preliminaries/General conditions.

110 FIXING GENERALLY: Use fixing and jointing methods and types, sizes, quantities and spacings of fasteners which are suitable having regard to:
- Nature of and compatibility with product/material being fixed and fixed to,
- Recommendations of manufacturers of fasteners and manufacturers of components, products or materials being fixed and fixed to,
- Materials and loads to be supported,
- Conditions expected in use,
- Appearance, this being subject to approval.

130 FASTENERS for materials and components:
- Forming part of external construction but not directly exposed to the weather to be of corrosion resistant material or have a corrosion resistant finish.
- Directly exposed to the weather to be of corrosion resistant material.

140 FIXING THROUGH FINISHES: Ensure that fasteners and plugs (if used) have ample penetration into the backing.

150 PACKINGS:
- Provide suitable, tight packings at fixing points to take up tolerances and prevent distortion.
- Use noncompressible, rot proof, noncorrodible materials positioned adjacent to fixing points.
- Ensure that packings do not intrude into zones that are to be filled with sealant.

160 CRAMP FIXING:
- When not specified otherwise, position cramps not more than 150 mm from each end of frame sections and at 600 mm maximum centres.
- Secure cramps to frames with matching screws as masonry work proceeds, and fully bed in mortar.

230 PELLETING: Countersink screw heads 6 mm below timber surface and glue in grain-matched pellets not less than 6 mm thick, cut from matching timber. Pellets to occupy the whole depth of the holes and be finished off flush with surface.

250 POWDER ACTUATED FIXING SYSTEMS:
- Do not use without approval.
- Tools to be to BS 4078:Part 2 and Kitemark certified, and used in accordance with BS 4078:Part 1. Operatives to be trained and certified as competent by tool manufacturer.
- Fasteners, accessories and consumables to be types recommended by the tool manufacturer.
- Ensure that operatives take full precautions against injury to themselves and others.
- Remove all unspent cartridges from the site when no longer required.
- Apply zinc rich primer to heads of fasteners used externally, in external walls or in other locations subject to dampness.
- Use top hat section plastics washers to isolate cartridge fired nails from stainless steel components fixed externally, in external walls or in other locations subject to dampness.

510 ADHESIVES:
- Adhesive types: As specified in the relevant section.
- Surfaces to receive adhesive to be sound, unfrozen, free from dust, grease and any other contamination likely to affect bond. Where necessary, clean surfaces using methods and materials recommended by adhesive manufacturer.

- Adjust surface regularity and texture as necessary to suit bonding and gap filling characteristics of adhesive.
- Ensure that operatives observe manufacturer's and statutory requirements for storage and safe usage of adhesives.
- Do not use adhesives in unsuitable environmental conditions or beyond the storage period recommended by the manufacturer.
- Apply adhesives using recommended spreaders/applicators to ensure correct coverage. Bring surfaces together within recommended time period and apply pressure evenly over full area of contact to ensure full bonding.
- Remove surplus adhesive using methods and materials recommended by adhesive manufacturer and without damaging surfaces.

Z21 MORTARS

To be read with Preliminaries/General conditions.

CEMENT GAUGED MORTARS

110 MIX PROPORTIONS FOR CEMENT GAUGED MORTARS and other particular requirements are specified elsewhere.

120 SAND FOR CEMENT GAUGED MORTARS:
- To BS 1200 unless specified otherwise.
- Sand for facework mortar to be from one source, different loads to be mixed if necessary to ensure consistency of colour and texture.
- When a range is specified (e.g. 1:1:5-6) use lower proportion of sand for Grade G sands and higher proportion for Grade S.

131 READY-MIXED LIME:SAND FOR CEMENT GAUGED MORTARS:
- Unless specified otherwise, use ready-mixed lime:sand to BS 4721.
- Coloured mortar, where required, to be made using a proprietary coloured ready-mixed lime:sand, colour to approval where not specified.

160 CEMENT FOR MORTAR: When not specified otherwise, to be Portland cement or Portland blastfurnace cement, to class 42.5 or 52.5, manufactured and supplied under the BSI Kitemark scheme for cement. All cements must comply with the appropriate British Standard.

180 ADMIXTURES: Do not use in mortar unless specified or approved. Do not use calcium chloride or any admixtures containing calcium chloride. Admixtures, if specified, to be to BS 4887.

200 SITE STORAGE OF CEMENT GAUGED MORTAR MATERIALS:
- Store different sands and aggregates in different stockpiles on hard clean bases that allow free drainage.
- Store factory produced premixed lime:sand for mortar and ready-to-use retarded mortars in covered containers to prevent excessive drying out or wetting.
- Store bags of cement and hydrated lime in dry conditions, raised off the ground and not touching damp surfaces. Do not use cement or hydrated lime affected by damp.
- Avoid intermixing and contamination between stored materials and other building materials, debris or other
deleterious matter.

210 MAKING CEMENT GAUGED MORTAR:
- Keep plant and banker boards clean at all times.
- Measure materials accurately by volume using clean gauge boxes or clean, undamaged buckets. Proportions of mixes are for dry sand; allow for bulking if sand is damp.
- Mix ingredients thoroughly to a consistence suitable for the work and free from lumps. Mix mortars containing air entraining admixtures by machine, but do not overmix.
- Do not mix mortar when the air temperature is at or below 3°C and falling or below 1°C and rising.
- Use mortar within about two hours of mixing at normal temperatures. Use retarded mortar within the time and site temperatures recommended by the manufacturer. Mortar may be retempered to restore workability, but only within these time limits.

Z22 SEALANTS

To be read with Preliminaries/General conditions

110 SEALANT TYPES: As specified in the relevant section.

120 SUITABILITY OF JOINTS: Before commencing, check that:
- Joint dimensions are within limits specified for the sealant.
- Surfaces are smooth and undamaged.
- Preparatory work which must be done before assembly of the joint has been carried out

Inform CA if joints are not suitable to receive sealant and submit proposals for rectification

130 PREPARING JOINTS:
- Clean surfaces to which sealant must adhere using methods and materials recommended by sealant manufacturer.
- Remove all temporary coatings, tapes, loosely adhering material, dust, oil, grease and other contaminants which may affect bond.
- Keep joints clean and protect from damage until sealant is applied.
- Backing strip, bond breaker, primer: Types recommended for the purpose by sealant manufacturer.
- Insert backing strips and/or bond breaker tape into joint leaving no gaps.
- Cover adjacent surfaces with masking tape to prevent staining and protect surfaces which would be difficult to clean if smeared with primer or sealant.

160 APPLYING SEALANTS:
- Ensure that operatives observe manufacturer's and statutory requirements for storage and safe usage of sealants.
- Use equipment and methods recommended by sealant manufacturer and apply within the recommended application life of primer and sealant, and the recommended air and substrate temperature ranges.
- Do not apply to damp surfaces (unless recommended otherwise), to surfaces affected by ice or snow or during inclement weather. Do not heat joints to dry them or raise the temperature.
- Fill joints completely, leaving no gaps, excluding all air and ensuring firm adhesion of sealant to required joint surfaces. Tool the sealant to a neat, slightly concave profile unless specified otherwise.
- Protect until cured.

SECTION 3

SCHEDULE OF WORKS

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

ITEM	DESCRIPTION	(£)
1.0	**GENERALLY**	
1.1	The contractor must allow to protect all finishes, surfaces, services, installations and the like not directly affected by the works. Any damage caused by the contractor shall be rectified at his own expense and to the satisfaction of the Contract Administrator (CA). This clause also to include for temporary protection of all finished work as required and prior to 'practical completion' of the project.	
1.2	The contractor should note that noise pollution is to be kept to a minimum. This as referenced within the specification preliminaries and pre-construction information (provided as a separate document). Do not progress any excessively noisy works operations without the prior agreement of the CA.	
1.3	The contractor should ensure that all temporary screening and the like is provided for the full duration of the works so that all dust, debris and the like is confined to the working areas. Full working methods are to be agreed with the CA prior to works commencing on site.	
1.4	The contractor should consider the Health and Safety of all persons likely to be affected by the works, at all times, and provide adequate protection to such persons, details of which must be agreed with the CA prior to works commencing on site.	
1.5	The contractor must ensure that the security of the premises is maintained at all times and is not breached as a result of the works.	
1.6	The contractor must submit a detailed method statement relating to the entire works, which must be approved by the CA prior to work commencing on site.	
1.7	Before commencing the works, the contractor should carry out a thorough examination of the site and surrounding areas. *This should be progressed at tender stage by prior arrangement with the CA.*	
1.8	The works are to cause as little inconvenience as possible to the general public and occupants of the premises. The contractor shall be held responsible for any claims that may arise as a result of disregard from this item.	
1.9	All making good shall be executed with materials and workmanship to match in every respect the surrounding works.	
1.10	Provide all necessary temporary services installations / connections to allow the works to be undertaken all as specified.	
1.11	Comply fully with and allocate appropriate resources to permit compliance with requirements of the CDM Regulations 2015. The contractor is to comply fully with the requirements and content of the pre-construction information.	
1.12	Allow to provide on **day one** of the works and maintain for the full duration of the contract a suitable temporary site office / welfare container, storage container, skip(s) secure painted timber hoarding to underpass with door access all bounded within the external contractors compound by heras fencing identified on Rhomco drawing no. RCL 1149/CDF/001/T01 – Site Set-Up Plan (see appendix 1 hereto). Allow also against this item for making any necessary services connections and pay all associated costs associated therewith.	
1.13	**NB:** This project is not the subject of phased completion under the terms of the associated Building Contract. However and to assist the Client team in	

ITEM	DESCRIPTION	(£)
	management of their ongoing occupation of the premises during the contract period, they have suggested the works be progressed in the following sequence: Form site compound and temporary site accommodation including secure access to underpass; Seal-off and temporarily encapsulate internal office area at 3rd floor level beneath the roof coverings to be replaced; Erect scaffold and external access equipment; Controlled removal of asbestos containing roofing slates (felt and battens to be retained at this juncture); Periodic reassurance air tests of sealed internal area during and on completion of controlled asbestos removal; Environmental cleaning of existing roofing felt and battens by asbestos removal contractor, together with associated certification of same; Subsequent removal of remaining roof covering materials (to include felt and battens); Provision of new roof coverings and rainwater goods; Implementation of all other specified works in conjunction.	
2.0	**SITE SAFETY PROVISIONS**	
2.1	Allow to provide all necessary independent scaffolding, scaffold staircase, mechanical access hoists / platforms, roof level edge protection, roof level walkways, roof level crash decks and the like during work in progress in order to provide suitable external access and protection for materials / labour and to permit the safe implementation of all specified works. Refer to Rhomco drawing no. RCL1149/CDF/001/T01 – Site Set-Up (appendix 1 hereto). In addition to all necessary scaffold lifts / working platforms, a full scaffold platform is to be erected to the perimeter of the roof/eaves to form a safe working platform for access to roof edge details/gable-ends and to gain high-level access about the premises during work in progress. Temporary guard rail edge protection is to be provided adjacent this full perimeter high level walkway at a height of at least 910mm above the working platform and to be provided with minimum 150mm high toe boards, together with mid-rails. Scaffold netting is to be fixed to all scaffolding elevations to full height when works are in progress in order to contain all debris and the like to within the working areas. In addition, allow to fully encapsulate the upper scaffold lift i.e. beneath associated walkways and over outer handrails / edge protection using reinforced polythene sheeting (Monaflex or similar). Access between scaffold lifts is to be provided via an integrated scaffold staircase located in position indicated on Rhomco drawing no. RCL1149/CDF/001/T01 – Site Set-Up (appendix 1). A dedicated loading deck is to be provided to the top platform adjacent the staircase for the storage and off-loading of waste bags during removal of the existing asbestos roofing slates in position indicated on Rhomco drawing no. RCL1149/CDF/001/T01 – Site Set-Up (appendix 1). Include also for providing a dedicated and automated caged scaffold lift for material delivery and removal from roof level during the works. All scaffold is to be designed and calculated by a suitably qualified structural engineer appointed by the contractor. This to ensure the scaffold design is suitably developed and detailed prior to works commencement so as to negate any risk associated with wind loading, cantilevered scaffold sections, over sailing and the like.	

ITEM	DESCRIPTION	(£)
	Scaffold may not be fixed back to the building structure. The contractor is to be responsible for establishing a safe fixing specification for the access provisions at tender stage. Access to successive scaffold platform levels is to be available at all times during working hours on all separate scaffold sections. Include to provide ladder guards to all ladders that are to be locked out of hours. All scaffolding is to be erected to comply with current British Standards, Codes of Practice and Health and Safety Executive legislation. All scaffold is to remain in position until all works are completed and inspected by the CA. The contractor is to be mindful of security of the building. The contractor is to provide a '*Security Method Statement'* on request. All scaffold is to bridge existing entrances to and exits from the property at ground floor level, with adequate protection provided thereto. All scaffold is to incorporate necessary edge protection, access platforms, fans, screens and the like in order to enable the works specified elsewhere to be carried out safely. As a minimum, scaffold fans to be provided at second floor level. *NB: All ground bearing scaffold sections are to be suitably protected and highlighted / coloured between ground and first scaffold lifts to prevent unnecessary injury or impact by others.*	
2.2	**Provisional:** Allow to provide and install temporary infra-red scaffold alarms to 1st and 2nd scaffold lift levels for use out of working hours. Alarm to activate sounders and strobe lights fitted to outer face of scaffold upon activation.	
2.3	Allow for suitable MEWP access to enable the specified downpipe replacement works noted at item 4.9 of this schedule to be undertaken safely. All associated pavement licenses / Local Authority approvals are to be obtained by the contractor in advance.	
2.4	**Provisional:** Allow to supply and install a fully protected temporary scaffold roof over the entire working area, spanning between both sides of the main scaffold, in order to provide a fully weathertight working enclosure during implementation of the specified roof covering works. Once again, this to be subjected to full structural design and appraisal by a suitably qualified structural engineer employed by the contractor prior to installation. Temporary roof to be covered with a reinforced polythene sheeting (Monaflex of similar) cover.	
2.5	During the use of any mechanical access hoists / platforms ensure that only suitably trained operatives are employed to utilise the associated equipment during the works.	
2.6	Allow to provide all necessary temporary cordons and signage to ensure that the areas below mechanical access hoists / platforms are suitably secured during work in progress to ensure no unauthorised persons can gain access thereto.	

ITEM	DESCRIPTION	(£)
2.7	All other temporary access equipment required to enable the specified works to be progressed must be provided by the contractor at their own cost and as required.	
2.8	Provide and utilise during work in progress suitable harnesses, roof ladders, harnesses, crawling boards and walkways to ensure the safety of all operatives during work in progress.	
3.0	**ROOF COVERING REPLACEMENT WORKS**	
3.1	**Provisional:** Allow to temporarily protect all existing internal furniture to remain within office area situated directly beneath roof coverings to be worked upon. As a minimum allow to sheet and tape all with polythene and remove same on completion. For the purposes of this item, the contractor is to assume the Employer will arrange for removal of all other equipment, storage and the like from the working area in advance of works commencement. Allow also against this item to thoroughly clean all furniture following removal of temporary covers and in advance of Practical Completion.	
3.2	Allow to supply and install a full height (floor to ceiling) temporary internal partitioning system in location indicated on Rhomco drawing no. RCL1149/CDF/002/T01 - Area of Proposed Works. New partition to be installed to fully enclose and seal-off the internal office accommodation situated beneath the working area, whilst also ensuring a protected route to the existing internal staircase is maintained from the adjoining office accommodation. Allow also to form temporary internal partition walls to create lobby enclosure in position indicated on Rhomco drawing no. RCL1149/CDF/002/T01 - Area of Proposed Works. Temporary lobby to incorporate doorway to provide safe internal route to area beneath roof coverings. As a minimum the temporary partitions are to comprise of plywood clad, timber stud partition walls sealed to both sides with suitably taped and jointed polythene sheeting to ensure an air-tight structure. Allow also against this item for removal of temporary partitions on completion of all specified works and for all associated internal making good to existing finishes.	
3.3	Allow to temporarily oversheet and protect all existing glazed roof lights with suitable plywood sheeting for the full duration of all specified works.	
3.4	Allow to engage a fully Licenced asbestos removal contractor to strip and remove all existing roof slates, ridge tiles and undercloak verges serving the roof coverings to be worked on. The asbestos removal contractor must be a fully registered member of the Asbestos Removal Contractors Association (ARCA). During the asbestos removal works, care must be taken to ensure that all existing underlay, membranes, slate battens and double glazed roof-lights are not disturbed or damaged in any way. All existing exposed surfaces of the underlay membrane, slate battens, guttering, scaffolding platform and surfaces of all other remaining elements within the working area are to be thoroughly and professionally cleaned on	

ITEM	DESCRIPTION	(£)
	removal of all existing asbestos material. This to be progressed by the accredited asbestos removal contractor, who must also fully certify their work on completion. A full method statement for all asbestos removal works is to be presented to the CA prior to commencement on site and must include reference to all proposed working procedures. All asbestos removal work is to be completed fully in accordance with the Control of Asbestos Regulations 2012.	
3.5	Allow to employ the accredited asbestos removal contractor, or such other specialist company as is agreed with the CA in advance, to undertake 5no. periodic reassurance air tests within the sealed office area during the works (i.e. 1no. immediately on completion of internal partitioning works and prior to commencement of external roof level asbestos removal, 1no. midway through external asbestos removal works, 1no. on completion of external asbestos removal works and 1no. on completion of all works and before temporary internal partitioning is removed, 1no. on completion of works to remove internal partitioning and before office area is put back into use). *NB: Final air test to be progressed 'out of normal office hours'.* Air test results to be verbally confirmed to CA on completion of survey work. Full written test results to be made available to CA within 2 days of tests being concluded on site.	
3.6	Allow to dismantle and remove the existing PVCu guttering and downpipes to the East Elevation and the Cast iron guttering and downpipes to the West Elevation and dispose all waste materials off site. Include to remove the PVCu guttering and downpipes to the Dormer roof on the East Elevation and also the Hipped roof to the North Elevation.	
3.7	Allow to remove all existing snow guards to the eaves of the roof, including the separate hip roof at North Elevation and dispose all waste material off site.	
3.8	Allow to strip and remove all existing underlay membrane, slating battens and lead flashing across the roof and dispose all waste material off site. ***NB:*** *As noted elsewhere in this schedule, this work is to be undertaken as a separate exercise to the asbestos removal works and at a subsequent time.*	
3.9	Allow to prepare and treat the existing timber rafters with a timber preservative that includes fungicidal and insecticide treatment, all applied fully in accordance with manufacturer's recommendations and guidance.	
3.10	**Provisional:** Allow for incorporating additional fixings at each rafter to the joint of birds mouth of the rafter to wall plate using truss clips all fixed using 6.5 x 80mm Timber-Tite Joist Screws. *Allow to provide the provisional quantity of 150no. new truss clips at the direction of the CA on site.*	
3.11	**Provisional:** Allow for incorporating additional fixings at each collar joint of the rafters/ceiling connection using exterior Coach Bolts, Nut and Washer M10 x 160. *Allow to provide the provisional quantity of 150no. new anchor bolts at the direction of the CA on site.*	

ITEM	DESCRIPTION	(£)
3.12	Allow to carefully remove and replace existing insulation between the rafters across the entire roof and dispose all waste material off site. Incorporate new 75mm thick rigid insulation boards, tightly fitted between the rafters from eaves level up to the collar joint of the ceiling joist ensuring a 25mm gap is maintained between top of insulation and top rafter to allow ventilation. All edges of insulation board butt joints to be sealed with aluminium foil tape coated with a long lasting ultra violet resistant acrylic adhesive on one side, tested to BS476 Part 6 and 7 standards and meets class 1 and class O Fire Regulations. Approx 30 micron tape thickness. New insulation boards to comprise of Kooltherm K7 'Pitched Roof Board' incorporating thermoset insulation core with low emissivity composite foil facings on both sides (0.020 W/m/k - thermal conductivity) Class 0 fire rated insulation core, water vapour resistant, with zero ozone depletion potential (ODP) and low GWP, manufactured by Kingspan Insulation Ltd (Tel: 01544 388 601).	
3.13	Allow to carefully remove and replace existing horizontal laid insulation laid at ceiling level beneath the subject roof coverings and dispose all waste material off site. Incorporate new 300mm thick flexible insulation slabs, tightly fitted between and over the ceiling joists. New insulation slabs to be Rockwool Flexi and to comprise of flexible slabs (0.035 W/m/k - thermal conductivity) Class A1 fire rated insulation, manufactured by Rockwool Ltd (Tel: 0871 222 1780). U-Value to achieve 0.16 W/m2K to roof.	
3.14	Allow to supply and install a new high performance reinforced breather membrane to comprise of Spirtech 400 2S, laid horizontally over the rafters and dressed up and around the glazed roof lights, ridge and verges details. All horizontal laps to be a minimum of 150mm with the membrane draped between the rafters to a minimum of 10mm for drainage beneath tiling battens. New breathable membrane to be installed in accordance with BS 5534, manufactured by Monier Redland Ltd (Tel: 03708 702595). At eaves level provide support between the rafters over the timber tilting fillets by incorporating a rigid PVC sheet. The eaves carrier should be fixed to the rafters with 40mm zinc clout nails, with each section having a vertical overlap of minimum 100mm and over sailing the fascia and dressed into the gutter to a minimum of 50mm. Apply a double-sided tape (acrylic) to the eaves carrier and bond the breather membrane over the eaves carrier to lap at a minimum of 150mm. At ridge level dress and fold back the membrane 30mm from apex on either side of the roof to allow an air gap. Refer to item 3.20 below in connection with incorporating ventilation detail. At verge level dress the breather membrane over the full width of the gable-end wall cutting neatly and finishing to the outer edge of the face brickwork, leaving 50mm short to outer edge of undercloak. Refer to item 3.15 below in connection with constructing mortar bedded verges. At top edge abutment to roof lights, turn breather membrane over and nail to	

ITEM	DESCRIPTION	(£)
	top slating batten allowing not less than 10mm airgap to abutment. Refer to item 3.20 below in connection with incorporating ventilation detail. All to be fitted fully in accordance with the manufacturer's recommendations and guidance. See Appendix 4 – SpecMaster (S10-004093) and FixMaster (FM-10-001915)**.**	
3.15	At each gable-end of the roof form new mortar bedded verges from the ridge to eaves level. The bedded verges are to comprise of a undercloak board 150mm wide fibre cement board laid on top of the outer wall skin brickwork and over sailing the outer face of the wall by 50mm, falling slightly away from the gable-end wall all to prevent and minimize water tracking back and staining the wall. The undercloak board is to sit on top off the breather membrane with the slating battens overlapping the board finishing approximately 100mm short of the outside edge of the verge to allow for mortar bed without coming into contact. The under cloak should be jointed neatly at the ridge to prevent large insects entering the roof void and at eaves should be jointed to sit on top of the fascia board to prevent the eaves tile to kick up. Include to infill the verge with cement mortar at 1;3 cement:sand ratio with a blended soft and sharp sand mix, and include to incorporate an all-purpose water proofer, mortar plasticiser and salt inhibitor, filling in approx. 40mm bed allowing a gap without coming into contact with the ends of the timber battens, all in accordance with BS 5534: 2014.	
3.16	Allow to supply and install new cavity closer to the gable-end walls using a new PVCu insulated cavity closer using Type J Support and Closer, manufactured by Cavity Trays (Tel: 01935 474769). The cavity closer is to be installed to suit the width of the existing cavity.	
3.17	Allow to supply and fix new slating batten over the breathable membrane across the entire roof using 50mm x 25mm treated battens fixing into rafters using galvanized angular ring shank clout nails 75mm x 3.75mm dia. All end to end joints of battens are to half lap over rafters for support and fixed securely. At eaves detail, fit a second under eaves batten of adequate thickness to equal the combined thickness of a regular batten and interlocking slate to ensure that the eaves slate lay in the same plane as all the slates above. At verge details the ends of battens are to finish approximately 100mm short of the outside edge of the verge to allow for mortar bed without coming into contact. *(Refer to item 3.15 above in connection).* At ridge level, install a ridge batten directly upon the top of the rafters designed to a sufficient thickness to allow adequate fixing of ridge tiles using 100mm long wood screws. *Refer to item 3.21 below in connection for fixing ridge batten.* The gauge of the battens are to be fixed in accordance with the design requirements referenced at Appendix 4 – SpecMaster (S10-004093) and FixMaster (FM-10-001915). All battens to conform and be assessed / graded to comply with the strength requirements of BS 5534 : 2003 + A1 : 2010.	

ITEM	DESCRIPTION	(£)
3.18	Allow to carefully remove and replace all existing apron lead flashings dressed around the existing glazed roof lights. New apron flashings to comprise of new Code 5 grade lead, in lengths of 1,500mm and widths of 300mm. The end to end vertical lap joints to be not less than 200mm and all horizontal laps over glazed roof lights and slates not less than 200mm. All lead flashing to be dressed neatly over the profile of the existing glazing bars. The free edge of the flashing to be clipped with stainless steel clips spaced at 300mm centres. Stainless steel clips should be cut from 50mm wide fully annealed stainless steel strip of not less than 0.46mm thickness. All fixings to be nails comprising of stainless steel annular ring shanks of 30mm x 3.35mm dia. all conforming to BS 1202-1 and -2. All installations to comply with the requirements of BS EN 12588 Upon installation of all apron lead flashings in stages, apply a water based patination oil treatment, ensuring to coat lower edges of leadwork and between laps all to be in accordance with manufacturers recommendations.	
3.19	**Provisional:** Allow to carefully remove and replace the existing lead lined gutter at the valley detail located to the South-East corner elevation (approx. 7,000mm x 450mm gutter) ensuring all lead is dressed up under new roof slates by 500mm fixed to rafters. Include to strip and set aside 2no. rows of slates to the opposite roof, dress up new lead flashing by 500mm fixed to rafters and refix existing slates. Include tilting fillets to both sides of the roof.	
3.20	Allow to supply and install new interlocking slates to the entire roof using Redland - Cambrian slates (colour range to be confirmed by CA prior to order) manufactured by Monier Redland Ltd (Tel: 03708 702595). New slates are to be laid in a broken bond pattern and fixed using nails and various clips as a three point system, fully in accordance with the manufacturer's recommendations and guidance. Each individual slate is to be fixed to new underlying timber battens with nails comprising of stainless steel annular ring shanks of 30mm x 2.65mm dia. and incorporating slate clips to the head of each slate. At the eaves course, the edges of the slates are required to overhang the fascia and into the gutter by a minimum of 50mm and secured using eaves clips fixed with stainless steel annular ring shanks of 55mm x 2.65mm dia. Include to install a fascia ventilator using the RedVent 25 Over-Fascia Vent fixing securely to the top of the fascia board. At verge details, all slates are to neatly finish flush with the edge of the undercloak verge, all protruding 50mm from the surface of the face brickwork. Every verge slate is required to be twice nailed where on-site drilling is required for additional holes into slates. All edges of the verge slates are to be secured using verge clips that are fixed to the face of the battens with stainless steel annular ring shanks of 30mm x 2.65mm dia. twice nailed.	

ITEM	DESCRIPTION	(£)
	At top edge abutment to roof lights, all slates abutting edges are required to be twice nailed with stainless steel annular ring shanks of 30mm x 2.65mm dia. and secured using verge clips that are fixed to the face of the battens with stainless steel annular ring shanks of 30mm x 2.65mm dia. twice nailed. Include to install a ventilation strip along the full length using the Top Edge Abutment Ventilation System, installing all rachet clips, supports tray and vented strip. All installation and fixing of roof slates / ridges to be fully in accordance with BS 5534 'Code of practice for slating and tiling' and BS 8000-6. Refer to Appendix 4 - SpecMaster (S10-004093) and FixMaster (FM-10-001915). The contractor is required to contact the local area representative (Stephen Smith - 07702 952069) for Monier Redland Ltd to arrange periodic inspections during the installation of the new roof coverings. Refer to item 3.15 above for details of the mortar bed to the verges.	
3.21	Allow to supply and install new concrete ridge tiles on completion of new slate installation works using Redland - Universal Angle Ridge Tiles (9308) (colour range to be confirmed by CA prior to order) manufactured by Monier Redland Ltd (Tel: 03708 702595). New ridge tiles to be secured by a dry fix method using the Rapid Vented Ridge system fixed along the ridge line. The Rapid Vented Ridge system comprises of securing the ridge batten to the top of the rafters using stainless steel batten straps wrapped tightly around ridge batten and fixed with stainless steel annular ring shanks of 30mm x 2.65mm dia into rafters at every rafter intersection. Fix through the upper holes of the stainless steel straps and into the ridge battens and through into the top of the rafters using galvanized clout nails of sufficient designed length to suit. *Refer to item 3.17 above of the installation of the ridge batten*. Lay over the ridge battens a rollable membrane centrally along the ridge line and secured with stapes to the ridge batten. Expose the butyl adhesive strip and dress down the crimped edges of the membrane neatly down onto the surface of the slates either side of the ridge to provide a continuous surface contact. Secure the ridge tiles to the ridge battens using wood screws and clamping plates. Place a flexi seal and clamping plate between each joint to the ridge tiles ensure all jots are tightly butted. All ridge tiles to be aligned straight and secured with clamping plates and neoprene washers located at the center of then ridge tile and fix down using 100mm x 4mm wood screws. At each end of the ridge tiles incorporate block end ridge tiles. All installation and fixing of roof slates / ridges to be in accordance with BS 5534 'Code of practice for slating and tiling' and BS 8000-6. Refer to Appendix 4 - SpecMaster (S10-004093) and FixMaster (FM-10-001915).	
3.22	**Provisional:** Allow to carefully remove and replace *the provisional quantity of 2no. defective double glazed units serving existing roof lights* (approx. 620mm x 2,010mm) with new hermetically sealed double glazed units to match existing glass composition, thickness and tint in every respect.	

ITEM	DESCRIPTION	(£)
	All glazing units to comprise of toughened, hermically sealed, argon filled double glazed units, pyrolytic low-emissivity coated thermal glass properties, achieving a U-value of 1.4 W/m2K. The window installations are to be fitted by a qualified person registered under the FENSA self-certification scheme with certification provided upon completion. All windows are to be in accordance with BS 5713 and EN 1279-2.	
3.23	**Provisional:** Allow to overlay the existing Dormer flat roof with a new lead sheet covering to comprise of Code 5 grade lead installed fully in accordance with the recommendations and guidance of The Lead Sheet Flashing Association. All edges of lead are to be dressed down a minimum of 100mm with corners adequately cut and lapped, welded and clipped. Upon completion of the installation, apply a water based patination oil treatment, ensuring to coat lower edges of leadwork and between laps all to be in accordance with manufacturers recommendations.	
3.34	Allow to thoroughly clean both internal and external faces of all existing glazed roof lights set into roof coverings being worked upon, leaving same in a pristine condition on condition. This to include all associated exposed metal framework and the like.	
3.35	**Provisional:** On completion of all other specified roofing works, allow to fill and seal any existing cracks and other imperfections, prepare and redecorate existing internal plastered ceiling serving office area situated beneath roof coverings to be replaced with 1no. undercoat and 2no. finishing coats of trade matt emulsion. *Colour to be confirmed by CA*.	
3.36	**Provisional:** On completion of all other specified roofing works, allow to prepare and redecorate existing internal stained timber purlins and also timber battens bounding roof lights serving office area situated beneath roof coverings to be replaced with 2no. finishing coats of trade wood stain. *Colour to be confirmed by CA*.	
4.0	**ELEVATIONS**	
4.1	Allow to thoroughly clean, prepare and redecorate all timber fascia boards and decorative corbel to the eaves of the roof, including the separate hipped roof, with 1no. primer coat, 1no. undercoat and 2no. finishing coats of trade gloss. *Colours to be confirmed by CA on site.*	
4.2	Allow to thoroughly clean, prepare, treat corrosion and redecorate the exposed metal lintels above windows to the North, East and West Elevations with 1no. primer coat, 1no. undercoat and 2no. finishing coats of trade gloss. *Colours to be confirmed by CA on site.*	
4.3	Allow to thoroughly clean, prepare, treat corrosion and redecorate all metal and timber window installations to the North, East and West Elevations with 1no. primer coat, 1no. undercoat and 2no. finishing coats of trade gloss. *Colours to be confirmed by CA on site.*	

ITEM	DESCRIPTION	(£)
4.4	Allow to thoroughly clean, prepare and redecorate the metal and timber louvers / grills set into the North, East and West Elevations with 1no. primer coat, 1no. undercoat and 2no. finishing coats of trade gloss. *Colours to be confirmed by CA on site.*	
4.5	Allow to supply and install new cast aluminium powder coated finish rainwater goods to the West and East elevations. ***NB:*** *East Elevation has a timber fascia board and the West Elevation has a timber corbel design.* New guttering to comprise of 'Moulded' profile 155mm (girth) x 110mm (deep) finished in black including all stop ends, joints and gutter brackets all installed in accordance with the manufacturers recommendations and to BS 8000 part 13. New rainwater downpipes to comprise of Rectangular profile of 160mm x 110mm finished in black including all outlet joints and brackets. All rainwater downpipes to be installed in equivalent locations to existing installation and be connected direct to below ground drainage system using existing socket connections. Allow to undertake full water test to all new rainwater goods on completion of installation to ensure all new joint connections are adequately sealed and jointed, with no leaks.	
4.6	Allow to supply and install new cast aluminium powder coated finish rainwater goods to the Dormer roof located on the East Elevation and the separate hip roof located to the North Elevation. New guttering to comprise of 'Moulded' profile of 110mm (girth) x 65mm (deep) finished in black including all stop ends, joints and gutter brackets all installed in accordance with the manufacturers recommendations and to BS 8000 part 13. New rainwater downpipes to comprise of Rectangular profile of 65mm x 65mm finished in black including all outlet joints and brackets. All rainwater downpipes to be installed in equivalent locations to existing installation and be connected direct to below ground drainage system using existing socket connections. Allow to undertake full water test to all new rainwater goods on completion of installation to ensure all new joint connections are adequately sealed and jointed, with no leaks.	
4.7	Allow to supply and install new snow guards to the fascia board and face brickwork wall to the West and East elevations, together with the separate hip roof located to the North Elevation. New snow guards to match design and dimensions of existing in every respect and to comprise of external grade materials. Include for all necessary fixing brackets. New guards to be installed fully in accordance with the manufacturer's recommendations and guidance.	
4.8	Allow to thoroughly clean both internal and external faces of all existing glazing serving window installations set into elevations to be worked upon, leaving same in a pristine condition on condition.	

ITEM	DESCRIPTION	(£)
4.9	Allow to carefully remove and replace existing rainwater downpipe located at abutment of rear wing to the Main Building at third floor level. Refer to photo no. 21 and no. 24. in Appendix 5 for location of existing downpipe. During installation of new pipework, allow to incorporate suitable fall to aid future drainage to existing outfall location set into face brickwork. Include for all necessary MEWP access from the junction of Roman way and Church Square Road. Include for obtaining all necessary Licenses and approvals from the Local Authority. **NB:** The Employer is dealing with License to over-sail the existing adjoining premises during the work as a separate exercise.	

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

WORKS SECTION COLLECTION:

GENERALLY	**£**
SITE SAFETY PROVISIONS	**£**
ROOF COVERING REPLACEMENT WORKS	**£**
ELEVATIONS	**£**
TOTAL (excluding VAT)	**£**

SECTION 4

SUMMARY OF TENDER

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

SUMMARY OF TENDER

• General Conditions and Preliminaries	**£**
• Works Section	**£**
• Provisional Sums & Project Contingency	**£**
TOTAL (excluding VAT)	**£**

SECTION 5

FORM OF TENDER

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

FORM OF TENDER

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

We having visited the above site, read the Conditions of contract and Specification and hereby offer to execute and complete the whole of the Improvement works in accordance with terms and conditions of Contract, on a fixed price basis, for the sum of:

£

( ) exclusive of VAT.

For the purposes of valuing additional works, authorised under the contract to be carried out on a Dayworks basis, our rates will be as follows:-

Craftsmen	£	/hr
Labourer	£	/hr
Materials	Cost +	%
Plant	Cost +	%

We undertake to commence works within ..... weeks of receipt of instructions and complete the whole of the works within ..... weeks from the date of commencement.

We accept that the Employer does not undertake to accept the lowest nor any of the tenders received.

We understand and accept that tenders will be treated in accordance with Alternative 1 of Section 6.0 of the Code of Produce for Single Stage Selective Tendering, produced by NJCC for Building.

We undertake, that in the event of acceptance, to execute with the Employer, a formal contract embodying all the terms and conditions contained on this offer.

This tender remains open for consideration for **13 weeks** from the date hereof.

Signed: in the capacity of

Dated Day of 2016

Duly authorised to sign tenders for and on behalf of:

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

CERTIFICATE AS TO COLLUSIVE TENDERING AND CANVASSING

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

The Council is seeking bona fide competitive Tenders. In recognition of this, I/We certify that—

(i) My/Our Tender is bona fide and intended to be competitive;
(ii) I/We have not fixed or adjusted the amount of this Tender by or in accordance with any agreement with any other person;
(iii) I/We have not previously communicated to any other person the amount or approximate amount of this Tender, or information which would enable the amount or approximate amount to be calculated, except where such a disclosure was made in confidence in order to obtain insurance premium or other quotations necessarily required for the preparation of the Tender;
(iv) I/We shall not have entered into any agreement with any other person as to the amount of their Tender, or whereby they shall refrain from Tendering, for the provision of the above-named supply;
(v) I/We have not obtained or attempted to obtain information from any other person concerning another Tenderer's submission;
(vi) I/We have not and have not offered 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 award of the above named contract, any act or thing of the nature specified above.

I/We further hereby undertake that—

(vii) I/We have not directly or indirectly canvassed or solicited any Member or Employee of the Council in connection with the award of any Contract resulting from this Invitation to Tender or any other Invitation to Tender or proposed Invitation to Tender for the provision of the above-named supply;
(viii) I/We shall not in future, directly or indirectly, canvass or solicit any Member or Employee of the Council in connection with the award of any Contract resulting from this Invitation to Tender or any other Invitation to Tender or proposed Invitation to Tender for the provision of the above-named supply.

In this Certificate 'person' includes persons and any body of persons, corporate or non corporate, and 'agreement' includes any arrangement, whether formal or informal and whether legally binding or not.

Signature:

Name:

For and on behalf of (company/organisation):

Position held:

Date:

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

CERTIFICATE OF COMPETENCE - PRINCIPAL CONTRACTOR

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS
THE SYMINGTON BUILDING, MARKET HARBOROUGH, LEICESTERSHIRE

I/We certify that this firm is fully competent to carry out the duties and obligations required of the Principal Contractor as defined and specified in the CDM Regulations 2015.

Signed:…….....

Dated:……..…….....

On behalf of:…….....

APPENDIX 1

RHOMCO DRAWING NO. RCL 1149/CDF/001/T01 - SITE SET UP PLAN

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

APPENDIX 2

RHOMCO DRAWING NO. RCL 1149/CDF/002/T01 - AREA OF PROPSOED WORKS

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

APPENDIX 3

CLEARVIEW ENVIRONMENTAL LTD ASBESTOS REPORT - (REPORT NO. J013652) 15TH MARCH 2016

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

APPENDIX 4

ROOF FIXING SPECIFICATION - SPECMASTER (S10-004093) & FIXMASTER (FM-10-001915)

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE

APPENDIX 5

SELECTION OF GENERAL PHOTOGRAPHS TAKEN 24TH FEBRUARY 2016

ROOF COVERING REPLACEMENT AND ASSOCIATED EXTERNAL WORKS

AT

THE SYMINGTON BUILDING
MARKET HARBOROUGH
LEICESTERSHIRE