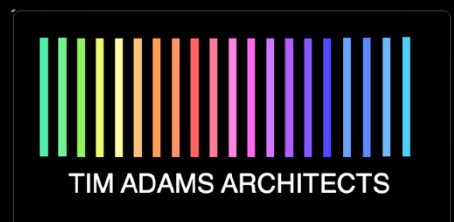


Lutterworth Town Council Building

Architectural Specification

12-12-2023



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C20 Demolition

To be read with preliminaries/ general conditions.

5 Desk study/ survey

1. Scope: Before starting deconstruction/ demolition work, examine available information, and carry out a survey of: The structure or structures to be deconstructed/ demolished.
2. Report and method statements: Submit, describing:
 - 2.1. Form, condition and details of the structure or structures, the site and the surrounding area.
 - 2.1.1.Extent: As drawing 3000 Proposed Demolition Plan.
 - 2.2. Type, location and condition of features of historical, archaeological, geological or ecological importance.
 - 2.3. Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures or by noise, vibration and dust generated during deconstruction or demolition.
 - 2.4. Identity and location of services above and below ground, including those required for the contractor's use, and arrangements for their disconnection and removal.
 - 2.5. Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.
 - 2.6. Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
 - 2.7. Proposed programme of work, including sequence and methods of deconstruction or demolition.
 - 2.8. Details of specific pre-weakening required.
 - 2.9. Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
 - 2.10. Arrangements for control of site transport and traffic.
 - 2.11. Special requirements: None required.
3. Format of report: Electronic submission.

10 Extent of deconstruction/ demolition

1. General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to finished floor level.

20 Features to be retained

1. General: Keep in place and protect the following: any/all structures and elements not indicated to be demolished on drawing 3000 Proposed Demolition Plan..

50 Workmanship

1. Standard: Demolish structures in accordance with BS 6187.
2. Operatives
 - 2.1. Appropriately skilled and experienced for the type of work.
 - 2.2. Holding, or in training to obtain, relevant Construction Skills certification of competence.

3. Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction and demolition to be used.

55 Site hazards

1. Precautions: Prevent fire or explosion caused by gas and vapour from tanks, pipes, etc.
2. Site operatives and general public: Protect from health hazards associated with vibration, dangerous fumes and dust arising during the course of the works.

76 Asbestos-containing materials – unknown occurrences

1. Discovery: Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction and demolition work. Avoid disturbing such materials.
2. Removal: Submit statutory risk assessments and details of proposed methods for safe removal.

78 Unforeseen hazards

1. Discovery: Give notice immediately when hazards, such as unrecorded voids, tanks, chemicals, are discovered during deconstruction or demolition.
2. Removal: Submit details of proposed methods for filling, removal, etc.

90 Contractor's property

1. Components and materials arising from the deconstruction and demolition work: Property of the contractor, except for designated items which remain the property of the employer
2. Action: Remove from site as work proceeds where not to be reused or recycled for site use

Ω End of Section

F10 Brick/ block walling

Clauses

5 Facing brickwork

1. Description: ABOVE DPC
2. Bricks: To BS EN 771-1.
 - 2.1. Manufacturer: Contractor's choice
 - 2.1.1. Product reference: Submit proposals
 - 2.2. Recycled content: Contractor's choice
 - 2.3. Special shapes: None
3. Mortar: As section Z21.
 - 3.1. Standard: To BS EN 998-2
 - 3.2. Mix: 1:1:6 cement:lime:sand
4. Bond: To match existing
5. Joints: Approved

18 Concrete facing blockwork Type A

1. Description: ABOVE DPC
2. Blocks: To BS EN 771-3.
 - 2.1. Manufacturer: Contractor's choice
 - 2.1.1. Product reference: Contractor's choice
 - 2.2. Configuration: Group 1
 - 2.3. Compressive strength: Not applicable
 - 2.3.1. Category: I
 - 2.4. Freeze/ thaw resistance: Not applicable
 - 2.5. Recycled content: Not applicable
 - 2.6. Work sizes (length x width x height): 440 x 100 x 215 mm
 - 2.6.1. Tolerance category: D1
 - 2.7. Finish/ colour: Shot blasted white
 - 2.8. Special shapes: None
 - 2.9. Additional requirements: None
3. Mortar: As section Z21.
 - 3.1. Standard: To BS EN 998-2
 - 3.2. Mix: 1:1:6 cement:lime:sand
4. Bond: Off centre stretcher
5. Joints: Approved
6. Features: None

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Brick/ block walling
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18 Concrete facing blockwork Type B

1. Description: BELOW DPC
2. Blocks: To BS EN 771-3.
 - 2.1. Manufacturer: Contractor's choice
 - 2.1.1. Product reference: Contractor's choice
 - 2.2. Configuration: Group 1
 - 2.3. Compressive strength: Not applicable
 - 2.3.1. Category: I
 - 2.4. Freeze/ thaw resistance: Not applicable
 - 2.5. Recycled content: Not applicable
 - 2.6. Work sizes (length x width x height): 440 x 100 x 215 mm
 - 2.6.1. Tolerance category: D1
 - 2.7. Finish/ colour: Shot blasted white
 - 2.8. Special shapes: None
 - 2.9. Additional requirements: None
3. Mortar: As section Z21.
 - 3.1. Standard: To BS EN 998-2
 - 3.2. Mix: 1:1:6 cement:lime:sand
4. Bond: Off centre stretcher
5. Joints: Approved
6. Features: None

51 Basic workmanship

1. Bond where not specified: Half lap stretcher.
2. Mortar joints: Fill all vertical joints. Lay bricks, solid and cellular blocks on a full bed.
3. AAC block thin mortar adhesive and gypsum block adhesive joints: Fill vertical joints. Lay blocks on a full bed.
4. Clay block joints
 - 4.1. Thin layer mortar: Lay blocks on a full bed.
 - 4.2. Interlocking perpend: Butted.
5. Quoins and advance work: Rack back.
6. Locations for equal levelling of cavity wall leaves
 - 6.1. Every course containing vertical twist type ties or other rigid ties.
 - 6.2. Every third tie course for double triangle/ butterfly ties.
 - 6.3. Courses in which lintels are to be bedded.
7. Lift height (maximum) for walling using cement gauged or hydraulic lime mortar: 1.2 m above any other part of work at any time.
8. Daily lift height (maximum) for walling using cement gauged or hydraulic lime mortar: 1.5 m for any one leaf.
9. Lift height (maximum) for walling using thin layer mortar: 1.3 m above any other part of work at any time.

F10

Brick/ block walling

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55 Facework

1. Commencement of facework: Not less than 150 mm below finished level of adjoining ground or external works level.
2. Brick/ block selection: Do not use units with damaged faces or arrises.
3. Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.
4. Coursing brickwork and concrete blockwork: Evenly spaced using gauge rods. To produce satisfactory junctions and joints with built-in elements and components.

60 Alterations/ Extensions

1. Coursing: Line up with existing work.
2. Block bonding new walls to existing: Unless agreed otherwise cut pocket requirements as follows:
 - 2.1. Width: Full thickness of new wall.
 - 2.2. Depth (minimum): 100 mm.
 - 2.3. Vertical spacing: As follows:
 - 2.4. Brick to brick: 4 courses high at 8 course centres.
 - 2.5. Block to block: Every other course.
 - 2.6. Pocket joints: Fully filled with mortar.
3. New and existing facework in the same plane: Bonded together at every course to achieve continuity of bond and coursing.
4. Support of existing work: Fully consolidate joint above inserted lintel or masonry with semidry mortar to support existing structure.

66 Fire stopping

1. Avoidance of fire and smoke penetration: Fit tightly between cavity barriers and masonry. Leave no gaps.

Ω End of Section

F30**Accessories/ sundry items for brick/ block/ stone walling****To be read with preliminaries/ general conditions.****5 Cavities**

1. Concrete fill to base of cavity:
2. Concrete generally: To BS EN 206 and BS 8500-2.
3. Extent: Maintain 75 mm between top of fill and external ground level and a minimum of 225 mm between top of fill and ground level dpc.
4. Placement: Compact to eliminate voids.
5. Cleanliness: Keep cavity faces, ties and dpcs free from mortar and debris.

6 Cleanliness

1. Cavity base and faces, ties, insulation and exposed dpcs: Free from mortar and debris.

10 Full fill cavity insulation

1. Insulation: Rock wool batts to BS EN 13162
 - 1.1. Product certification: British Board of Agrément (BBA) Certified.
2. Manufacturer: Knauf Insulation.
 - 2.1. Product reference: See class 10 below.
3. Recycled content: Not applicable
4. Face size: 1200 x 600 mm
5. Thickness: 125 mm
6. Placement: Continuous and free of mortar and debris.

10 Knauf rockwool slab insulation

1. Manufacturer: [Knauf Insulation Ltd](#)
 - 1.1. Contact details
 - 1.1.1. Address: Knauf Insulation
Stafford Road
St Helens
Merseyside
WA10 3LZ
 - 1.1.2. Telephone: [+44 \(0\)1744 766 666](tel:+44(0)1744766666)
 - 1.1.3. Web: www.knaufinsulation.co.uk
 - 1.1.4. Email: technical.uk@knaufinsulation.com
 - 1.2. Product reference: [Knauf Insulation DriTherm® Cavity Slab 32](#)
2. General requirements: Insulation products generally.
3. Standard: To BS EN 13162.
4. Thickness: 125 mm.

F30

Accessories/ sundry
items for brick/ block/
stone walling

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5. Facing: Unfaced.
6. Edges: Square.
7. Density: 26-32 kg/m³.
8. Thermal conductivity (maximum): 0.032 W/mK.
9. Fire performance: Euroclass A1 to BS EN 13501-1.
10. Recycled content: 80%.
11. Thickness tolerance: T4.
12. Water absorption: WS.
13. Water vapour resistance: 5.00 MNs/g.m.

24 Cavity wall ties

1. Description: GENERALLY
2. Standard: To BS EN 845-1.
 - 2.1. Type: 2 (Masonry general purpose)
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Movement: Non-tolerant
5. Additional requirements: None

48 Damp-proof course

1. Manufacturer: Contractor's choice
 - 1.1. Product reference: Contractor's choice

56 Preformed cavity trays

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

66 Installation of horizontal dpcs

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

F30

Accessories/ sundry
items for brick/ block/
stone walling
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Ω End of Section

F30
Accessories/ sundry
items for brick/ block/
stone walling
12-12-2023

G20

Carpentry/ timber-framing/ first fixing

Clauses

2 Timber procurement

1. Timber (including timber for wood-based products): Obtained from well-managed forests/ plantations in accordance with:
 - 1.1. The laws governing forest management in the producer country or countries.
 - 1.2. International agreements such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
2. Documentation: Provide either in accordance with chain of custody certification scheme requirements:
 - 2.1. Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied. or
 - 2.2. Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.
3. Chain of Custody Certification scheme: Contractor's choice, in accordance with UK Government Timber Procurement Policy (UKTPP), i.e. FSC, GiB or PEFC

30 Selection and use of timber

1. Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.

35 Processing treated timber

1. Cutting and machining: Carry out as much as possible before treatment.
2. Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc.
3. Surfaces exposed by minor cutting/ drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.

40 Moisture content

1. Moisture content of wood and wood-based products at time of installation: Not more than:
 - 1.1. Covered in generally unheated spaces: 24%.
 - 1.2. Covered in generally heated spaces: 20%.
 - 1.3. Internal in continuously heated spaces: 20%.

43 Bolted joints

1. Bolt spacings (minimum): To BS EN 1995-1-1, section 8.5.
2. Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.
3. Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible.

4. **Bolt tightening:** So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.
 - 4.1. **Checking:** At agreed regular intervals. Tighten as necessary.

50 Additional supports

1. **Provision:** Position and fix additional studs, noggings and/ or battens to support edges of sheet materials, and wall/ floor/ ceiling-mounted appliances, fixtures, etc. shown on drawings.
2. **Material properties:** Timber to be of adequate size and have the same treatment as adjacent timber supports.

55 Joists generally

1. **Centres:** Equal, and not exceeding designed spacing.
2. **Bowed joists:** Installed with positive camber.
3. **End joists:** Positioned about 50 mm from masonry walls.

70 Trimming openings

1. **Trimmers and trimming joists:** Not less than 25 mm wider than general joists.

99 Fascias/ barges/ soffits

1. **Description:** - PVC-U
2. **Manufacturer:** Contractor's choice
 - 2.1. **Product reference:** Contractor's choice
3. **Material:** Cellular PVC-U core with impact-modified PVC-U skin and containing no lead or cadmium
4. **Finish:** Polyester powder-coated
5. **Colour:** Black
6. **Edge profile:** Bespoke as show on drawing 6100 Proposed Sections
7. **Installer:** A contractor approved by the system manufacturer.

Ω End of Section

H31

Metal profiled/ flat sheet self-supporting cladding/ roof covering

To be read with preliminaries/ general conditions.

10 Metal profiled sheet self-supporting roof covering systems

1. External sheets
 - 1.1. Manufacturer: [Ash & Lacy](#)
 - 1.1.1. Contact details
 - 1.1.1.1. Address: Bromford Lane
West Bromwich
West Midlands
B70 7JJ
 - 1.1.1.2. Telephone: +44 (0)121 525 1444
 - 1.1.1.3. Web: www.ashandlacy.com
 - 1.1.1.4. Email: spec@ashandlacy.com
 - 1.1.2. Product reference: [Ashzip Standing Seam Roofing System](#)
 - 1.2. External sheets
 - 1.2.1. Material: Zinc sheets.
 - 1.3. Outer finish/ colour: Axalta powder coated system.

Performance requirements

34 Fire performance

1. Reaction to fire
 - 1.1. External wall surfaces: To BS EN 13501-1, Class A1
 - 1.2. External roof surfaces: To BS EN 13501-5, Class Broof(t4)
 - 1.3. Internal (cavity) surfaces: To BS EN 13501-1, Class A1
2. Fire resistance of cavity fire barriers
 - 2.1. Standard: To BS EN 13501-2
 - 2.2. Requirement: To resist the passage of flame and smoke for not less than 30 minutes' integrity, 30 minutes' insulation.

38 Product samples

1. General: Before commencing detailed design, submit labelled samples of the following: Ash & Lacy standing seam colour (tbc).

55 Breather membrane

1. Standard: To BS EN 13859-1
2. Manufacturer: As recommended by manufacturer.

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Metal profiled/ flat sheet
self-supporting cladding/
roof covering
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- 2.1. Product reference: As recommended by manufacturer.
3. Continuity: No breaks. Minimize joints
 - 3.1. Penetrations and abutments: Fully bond to breather membrane with tape
 - 3.2. Laps: Not less than 150 mm, fully bond with tape
4. Tape: As recommended by breather membrane manufacturer

70 Fixing generally

1. Cut edges: Clean true lines
2. Penetrations: Cut openings to minimum size necessary
3. Sheet orientation: Exposed joints of side laps away from prevailing wind
4. Sheet ends, laps and raking cut edges: Fully supported and with fixings at top of lap
5. Fasteners: Drill holes. Position at regular intervals in straight lines, centred on support bearings
 - 5.1. Position of fasteners in oversized drill holes: Central
 - 5.2. Fasteners torque: Sufficient to correctly compress washers
6. Debris: Remove dust and other foreign matter before finally fixing sheets
7. Completion: Check fixings to ensure watertightness and that sheets are secure
8. Cut edges: Paint to match face finish

Ω End of Section

H31
Metal profiled/ flat sheet
self-supporting cladding/
roof covering
12-12-2023

J42

Single-layer polymeric sheet roof coverings

To be read with preliminaries/ general conditions.

10 Warm deck roof covering

1. Description: Single ply to proposed extension roof.
2. Substrate: Plywood deck
 - 2.1. Preparation: Not required
3. Roof covering system
 - 3.1. Manufacturer: Bauder Ltd
 - 3.1.1. Product reference: Contractor's choice
4. Air and vapour control layer: Reinforced bitumen membrane, as section J41
5. Insulation: Mineral wool insulation boards, as clause 27
6. Waterproof membrane: As clause 28.

15 Roofing generally

1. Surfaces to be covered: Secure, clean, dry, smooth, free from frost, contaminants, voids and protrusions.
2. Preliminary work: Complete, including:
 - 2.1. Grading to correct falls.
 - 2.2. Formation of upstands, kerbs, box gutters, sumps, grooves, chases and expansion joints.
 - 2.3. Fixing of battens, fillets and anchoring plugs/ strips.
3. Moisture content and stability of substrate: Must not impair integrity of roof.
4. Adverse weather: Do not lay membrane at temperatures below 5°C in high winds, wet or damp conditions, unless effective temporary cover is provided over working area.
5. Unfinished areas of roof: Keep dry and protect edges of laid membrane from wind action.
6. Completed coverings: Firmly attached, fully sealed, smooth, weatherproof and free-draining.

27 Thermal insulation

1. Manufacturer: Contractor's choice
 - 1.1. Product reference: Contractor's choice
2. Standard: Mineral wool to BS EN 13162
 - 2.1. Reaction to fire: Manufacturer's standard
 - 2.2. Thermal conductivity (minimum): Manufacturer's standard
 - 2.3. Thickness: Manufacturer's standard
 - 2.4. Compressive strength (minimum): Manufacturer's standard

28 Waterproof membrane

1. Manufacturer: Contractor's choice
 - 1.1. Product reference: Contractor's choice

J42

Single-layer polymeric sheet roof coverings

12-12-2023

2. Type: Polyvinyl chloride (PVC) with standing seam profiles
3. Colour: Contractor's choice
4. Guarantee: 25 years

40 Laying warm deck roof insulation

1. Setting out
 - 1.1. End edges: Adequately supported.
 - 1.2. Joints: Butted together.
 - 1.3. End joints: Staggered.
2. Completion: Boards must be in good condition, well-fitting and secure.

Ω End of Section

K10

Gypsum board dry linings/ partitions/ ceilings

To be read with preliminaries/ general conditions.

35 Insulated Plasterboard IW2

1. Description: INSULATED PLASTERBOARD TO EXISTING CAVITY WALL (IW2)
2. Manufacturer: [Saint-Gobain Insulation UK](#)
 - 2.1. Contact details
 - 2.1.1. Address: Saint-Gobain House
East Leake
Loughborough
Leicestershire
United Kingdom
LE12 6JU
 - 2.1.2. Telephone: +44 (0) 1473 822093
 - 2.1.3. Web: insulation-uk.com
 - 2.1.4. Email: InsulationUK.MarketingTeam@saint-gobain.com
3. Wall: Concrete blockwork
4. Insulation: Celotex PL4065

50 Suspended ceiling system on metal framing

1. Description: TO GROUND FLOOR
2. Standard: To BS EN 13964.
3. Evidence of compliance: Submit Declaration of Performance (DoP).
4. Ceiling system manufacturer: Contractor's choice
 - 4.1. Product reference: Contractor's choice
5. Structural soffit: Existing slab
6. Ceiling
 - 6.1. Soffit height above finished floor level: Refer to drawing 2500 Proposed Ceiling Plan.
7. Suspension system
 - 7.1. Hangers: Type recommended by board manufacturer screwed to sides of joists
 - 7.2. Hanger centres: 1200 mm
 - 7.3. Primary grid centres: 600mm
 - 7.4. Secondary grid centres: 600mm
8. Fire performance
 - 8.1. Reaction to fire: To BS EN 13501-1, Class B-s3, d2 or better
 - 8.2. Fire resistance of complete ceiling lining assembly: To BS EN 13501-2, REI 30 or better
9. Linings: 12.5 mm plasterboard
10. Insulation: Not required

K10
Gypsum board dry
linings/ partitions/
ceilings
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11. Finishing: Seamless jointing

125 Gypsum board partition systems

1. Manufacturer: [British Gypsum](#)
2. Contact details
 - 2.1. Address: Drywall Academy
East Leake
Loughborough
Leicestershire
LE12 6HX
 - 2.2. Telephone: [+44 \(0\)844 800 1991](tel:+44(0)8448001991)
 - 2.3. Web: www.british-gypsum.com
 - 2.4. Email: bgtechnical.enquiries@bpb.com
3. Product reference: Gyproc Wallboard
4. Description: STUD PARTITIONS
5. Substrate: Studs at 600 mm centres
6. Metal resilient (acoustic) bars: Not required
7. Fire performance
 - 7.1. Reaction to fire: To BS EN 13501-1, Class B-s3, d2 or better
8. Linings: Two layers 12.5 mm plasterboard
 - 8.1. Fixing: As recommended by manufacturer.

Installation

60 Ceilings

1. Sequence: Fix boards to ceilings before installing dry lined walls and partitions.
2. Orientation of boards: Fix with bound edges at right angles to supports and with ends staggered in adjacent rows.
3. Two layer boarding: Stagger joints between layers.

61 Metal framing for partitions/ wall linings

1. Setting out: Accurately aligned and plumb.
 - 1.1. Frame/ Stud positions: Equal centres to suit specified linings, maintaining sequence across openings.
 - 1.2. Additional studs: To support vertical edges of boards.
2. Fixing centres at perimeters (maximum): 600 mm.
3. Openings: Form accurately.
 - 3.1. Doorsets: Use sleeved or boxed metal studs and/ or suitable timber framing to achieve strength grade requirements for framing assembly and adequately support weight of door.
 - 3.2. Services penetrations: Allow for associated fire-stopping.

K10
Gypsum board dry
linings/ partitions/
ceilings
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65 Dry lining generally

1. **General:** Use fixing, jointing, sealing and finishing materials, components and installation methods recommended by board manufacturer.
2. **Standard:**
3. Gypsum plasterboard to BS EN 520.
4. Gypsum fibre board to BS EN 15283-2.
5. **Evidence of compliance:** Submit Declaration of Performance (DoP).
6. **Cutting gypsum boards:** Neatly and accurately without damaging core or tearing paper facing.
7. **Cut edges:** Minimize and position at internal angles wherever possible. Mask with bound edges of adjacent boards at external corners.
8. **Two layer boarding:** Stagger joints between layers.
9. **Finishing:** Neatly to give flush, smooth, flat surfaces free from bowing and abrupt changes of level.

67 Skim coat plaster finish

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

70 Additional supports

1. **Framing:** Accurately position and securely fix to give full support to:
 - 1.1. Partition heads running parallel with, but offset from main structural supports.
 - 1.2. Fixtures, fittings and service outlets. Mark framing positions clearly and accurately on linings.
 - 1.3. Board edges and lining perimeters, as recommended by board manufacturer to suit type and performance of lining.

90 Seamless jointing

1. **Cut edges of boards:** Lightly sand to remove paper burrs.
2. **Filling and taping:** Fill joints, gaps and internal angles with jointing compound and cover with continuous lengths of tape, fully bedded.
3. **Protection of edges/ corners:** Reinforce external angles, stop ends, etc. with specified edge/ angle bead.
4. **Finishing:** Feather out jointing compound to give a flush, smooth, seamless surface.
5. **Nail/ screw depressions and minor indents:** Fill with jointing compound to give a flush surface.
6. **Minor imperfections:** Remove by light sanding.

91 Vertical joints

1. **Joints:** Centre on studs.
 - 1.1. **Partitions:** Stagger joints on opposite sides of studs.

K10
Gypsum board dry
linings/ partitions/
ceilings
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- 1.2. Two layer boarding: Stagger joints between layers.

92 Horizontal joints

1. Surfaces exposed to view: Horizontal joints not permitted. Seek instructions where height of partition/ lining exceeds maximum available length of board.
2. Two layer boarding: Stagger joints between layers by at least 600 mm.
3. Edges of boards: Support using additional framing.
 - 3.1. Two layer boarding: Support edges of outer layer.

93 Fixing gypsum board to metal framing/ Furrings

1. Partitions/ Wall linings: Fix securely and firmly at the following centres (maximum):
 - 1.1. Single layer boarding: To all framing at 300 mm centres. Reduce to 200 mm centres at external angles.
 - 1.2. Multi-layer boarding: Face layer at 300 mm centres, and previous layers around perimeters at 300 mm centres.
2. Ceilings: 230 mm. Reduce to 150 mm at board ends and at lining perimeters.
3. Position of screws from edges of boards (minimum): 10 mm.
 - 3.1. Screw heads: Set in a depression. Do not break paper or gypsum core.

94 Fixing gypsum board to timber

1. Fixing to timber: Securely at the following centres (maximum):
 - 1.1. Nails: 150 mm.
 - 1.2. Screws to partitions/ wall linings: 300 mm. Reduce to 200 mm at external angles.
 - 1.3. Screws to ceilings: 230 mm.
2. Position of nails/ screws from edges of boards (minimum)
 - 2.1. Bound edges: 10 mm.
 - 2.2. Cut/ unbound edges: 13 mm.
3. Position of nails/ screws from edges of timber supports (minimum): 6 mm.

95 Fixing gypsum board with adhesive dabs

1. Setting out boards: Accurately aligned and plumb.
2. Fixing to substrates: Securely using adhesive dabs.
3. Adhesive dab spacings for each board
 - 3.1. Horizontally: One row along top edge and one continuous dab along bottom edge.
 - 3.2. Vertically: One row along each edge and thereafter at intermediate spacings to suit size of board:
 - 3.2.1. 9.5 mm thick board, 1200 mm wide to have dab centres at 400 mm (min).
 - 3.2.2. 9.5 or 12.5 mm thick board, 900 mm wide to have dab centres at 450 mm (min).
 - 3.2.3. 12.5 mm thick board, 1200 mm wide to have dab centres at 600 mm (min).
4. Adhesive dab dimensions (width x length): At least 50-75 mm x 250 mm.
 - 4.1. Position of dabs from edges/ ends of boards (minimum): 25 mm.

K10

Gypsum board dry
linings/ partitions/
ceilings

12-12-2023

Finishing

97 Level of dry lining across joints

1. Sudden irregularities: Not permitted.
2. Joint deviations: Measure from faces of adjacent boards using methods and straightedges (450 mm long with feet/ pads) to BS 8212, clause 3.3.5.
 - 2.1. Tapered edge joints
 - 2.1.1. Permissible deviation (maximum) across joints when measured with feet resting on boards: 3 mm.
 - 2.2. External angles
 - 2.2.1. Permissible deviation (maximum) for both faces: 4 mm.
 - 2.3. Internal angles
 - 2.3.1. Permissible deviation (maximum) for both faces: 5 mm.

98 Repairs to existing gypsum board

1. Performance of repairs must match original specified performances.
2. Filling small areas with broken cores: Cut away paper facing, remove loose core material and fill with jointing compound.
 - 2.1. Finish: Flush, smooth surface suitable for redecoration.
3. Large patch repairs: Cut out damaged area and form neat hole with rectangular sides. Replace with matching gypsum board.
 - 3.1. Fixing: Use methods to suit type of dry lining, ensuring full support to all edges of existing and new gypsum board.
 - 3.2. Finishing: Fill joints, tape and apply jointing compound to give a flush, smooth surface suitable for redecoration.

Ω End of Section

K10
Gypsum board dry
linings/ partitions/
ceilings
12-12-2023

K13

Rigid sheet fine linings and panelling

Types of lining and panelling

105 Wood-based sheets generally

1. Standard: To BS EN 13986.
 - 1.1. Evidence of compliance: All sheets to be UKCA/ UKNI/ CE marked. Submit Declaration of Performance (DoP).

145 Plastics sheet wall claddings Splashback

1. Description: TO KITCHEN SPLASHBACK
2. Substrate: Proposed insulated plasterboard
3. Panels
 - 3.1. Manufacturer: [Altro](#)
 - 3.1.1. Contact details
 - 3.1.1.1. Address: Works Road
Letchworth Garden City
Hertfordshire
SG6 1NW
 - 3.1.1.2. Telephone: +44 (0)1462 480480
 - 3.1.1.3. Web: www.altro.com/uk
 - 3.1.1.4. Email: enquiries@altro.com
 - 3.1.2. Product reference: Whiterock (colour tbc)
4. Installation

General requirements

260 Environmental conditions

1. General requirements prior to starting work specified in this section: Building weathertight; wet trades completed and affected areas dried out.
2. Temperature and humidity before, during and after fixing lining/ panelling: Maintained at levels approximating to those which will prevail after building is occupied.

Fabrication/ fixing/ finishing

350 Fixing linings and panelling

1. Setting out: Accurate, true to line and level, free from undulations and lipping, with lines and joints aligned, straight and parallel unless specified otherwise.
2. Movement allowance: Adequate for future moisture and temperature movement of boards.
3. Fixing of panels: Secure, to prevent pulling away, bowing, or other movement during use.
4. Methods of fixing and fasteners: As section Z20 unless specified otherwise.
5. Trims: Wherever possible, to be in unjointed lengths between angles or ends of runs.

K13

Rigid sheet fine linings
and panelling

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- 5.1. Running joints: Where unavoidable, submit proposals for location and method of jointing.
- 5.2. Angle joints: Mitred, unless specified otherwise.

480 Clear finishes

1. Nail holes: Filled with stopping coloured to match wood.
2. Prepared surface: Smooth, closed and free from sanding marks.
3. Finish: Smooth free from brush marks, nibs, sags, runs and other defects.

Ω End of Section

K40

Demountable suspended ceilings

To be read with preliminaries/ general conditions.

20 Board-suspended ceiling systems

1. Description: TO GROUND FLOOR
2. Standard: To BS EN 13964.
 - 2.1. Evidence of compliance: All ceilings kits to be UKCA/ UKNI/ CE marked. Submit Declaration of Performance (DoP).
3. Ceiling system manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Fire performance
 - 4.1. Reaction to fire: To BS EN 13501-1, Class B-s3, d2 or better
5. Ceiling
 - 5.1. Boards: As manufacturers standard
 - 5.2. Soffit height above finished floor level: Refer to drawing 2500 Proposed Ceiling Plan.
6. Suspension system
 - 6.1. Grid
 - 6.1.1. Form: Non-interlocking
 - 6.1.2. Grid centres: 600mm
 - 6.1.3. Hanger centres: 600mm
7. Access: Infill units fully demountable

Components

31 Standards

1. Steel panels: To BS EN 10346.
2. Aluminium sheet, strip and plate: To BS EN 485-1 and -2.
3. Aluminium bars, tubes and sections: To relevant parts of BS EN 515, BS EN 573, BS EN 755 and BS EN 12020.

Execution

40 Workmanship generally

1. Fixing: Secure. In accordance with manufacturers' recommendations and in accordance with BS EN 13964. Provide additional bracing and stiffening to give a stable ceiling system.
2. Setting out: Accurate. Provide level soffits free from undulations and lipping.
3. Infill and access units, integrated services: Fitted correctly and aligned.
4. Lines and joints: Straight and parallel to walls, unless specified otherwise.
5. Edge infill units size (minimum): Half standard width or length.
6. Corner infill units size (minimum): Half standard width and length.

K40
Demountable suspended
ceilings
12-12-2023

7. **Grid:** Position to suit infill unit sizes. Allow for permitted deviations from nominal sizes of infill units.
8. **Infill joints and exposed suspension members:** Straight, aligned and parallel to walls, unless specified otherwise.
9. **Suitability of construction:** Give notice where building elements and features to which the ceiling systems relate are not square, straight or level.

50 Installing hangers

1. **General:** Straighten and tension before use.
2. **Installation:** Install vertical without bends or kinks. Do not allow hangers to press against fittings, services, or insulation covering ducts/ pipes.
3. **Obstructions:** Where obstructions prevent vertical installation, either brace diagonal hangers against lateral movement, or hang ceiling system on an appropriate rigid sub-grid bridging across obstructions and supported to prevent lateral movement.
4. **Extra hangers:** Provide as necessary to carry additional loads.
5. **Fixing**
 - 5.1. **Wire hangers:** Tie securely at top and bottom with tight bends to loops to prevent vertical movement.
 - 5.2. **Angle/ Strap hangers:** Do not use rivets for top fixing.

51 Installing perimeter trims

1. **Jointing:** Neat and accurate, without lipping or twisting.
 - 1.1. **Intermediate butt joints:** Minimize. Use longest available lengths of trim. Align adjacent lengths.
2. **Fixing:** Fix firmly to perimeter wall, edge battens or other building structure.
 - 2.1. **Fixing centres:** 600 mm

52 Installing board-suspended ceiling systems

1. **Cut boards:** Neat and accurate.
2. **Fixing to grid**
 - 2.1. **Board edges:** Fully support. Screw to grid members. Set heads of screws below surface of boards and fill flush with surface.
 - 2.2. **Boards applied in two or more layers:** Stagger joints.
3. **Movement joints:** Provide as appropriate for the area of ceiling system and/ or to coincide with movement joints in surrounding structure.

53 Openings in ceiling materials

1. **General:** Neat and accurate. To suit sizes and edge details of fittings. Do not distort ceiling system.

66 Ceiling-mounted luminaires

1. **Support:** By ceiling system
 - 1.1. **Ceiling supported luminaires:** Modifications and/ or extra support required: To each luminaire.

- 1.2. Independently supported luminaires: Suspension adjusted to line and level of ceiling.
2. Surface mounted luminaires: Units installed so that in the event of fire, the designed grid expansion provision is not affected.
3. Modular fluorescent recessed luminaires: Compatible with ceiling module. Extension boxes must not foul ceiling system.
4. Recessed rows of luminaires: Provide flanges for support of grid and infill units, unless mounted above grid flanges. Retain in position with lateral restraint.
5. Fire-protecting/ resisting ceiling systems: Luminaires must not diminish protection integrity of ceiling system.
6. Access: Provide access for maintenance of luminaires.

Completion - Not Used

Ω End of Section

K40
Demountable suspended
ceilings
12-12-2023

L10**Windows/ rooflights/ screens/ louvres**

To be read with preliminaries/ general conditions.

5 Timber procurement

1. Timber (including timber for wood-based products): Obtained from well-managed forests and/ or plantations in accordance with:
 - 1.1. The laws governing forest management in the producer country or countries.
 - 1.2. International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
2. Documentation: Provide either in accordance with chain of custody certification scheme requirements:
 - 2.1. Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
 - 2.2. Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.

30 PVC-U windows

1. Standard: Fire and/ or smoke-rated opening windows to BS EN 14351-1, BS EN 16034 and BS 7412
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice
 - 2.2. Colour/ Texture: Light oak to match timber louvres colour.
3. Thermal performance (U-value maximum): Manufacturer's standard
4. Acoustic performance rating: Manufacturer's standard
5. Fire performance
 - 5.1. Fire resistance: Manufacturer's standard
 - 5.2. Reaction to fire: Manufacturer's standard
6. Glazing details: Manufacturer's standard
7. Ironmongery/ accessories: Manufacturer's standard
8. Fixing: Manufacturer's standard
 - 8.1. Fastener spacing: When not pre-drilled or specified otherwise, position fasteners 150-250 mm from ends of each 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.

40 PVC-U subframes

1. Manufacturer: Contractor's choice
 - 1.1. Product reference: Contractor's choice
2. Fire performance: Manufacturer's standard
3. Fixing: Use lugs and ties supplied by subframe manufacturer; install to manufacturer's recommendations.

L10

Windows/ rooflights/
screens/ louvres

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54 Louvres

1. Description: WOOD
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice
3. Material: Softwood
4. Finish as delivered: Manufacturer's standard
5. Fire performance
 - 5.1. Fire resistance: Manufacturer's standard
 - 5.2. Reaction to fire: Manufacturer's standard
6. Number of louvre banks: Manufacturer's standard
7. Blanking panels: Not required
8. Accessories/ other requirements: Manufacturer's standard
9. Fixing: Manufacturer's standard

65 Priming/ sealing

1. Wood surfaces inaccessible after installation: Prime or seal as specified before fixing components.

70 Fire-resisting frames

1. Gap between back of frame and reveal: Completely fill with intumescent mastic or tape.

75 Sealant joints

1. Sealant
 - 1.1. Manufacturer: Contractor's choice
 - 1.1.1. Product reference: Contractor's choice
 - 1.2. Application: As section Z22 to prepared joints. Finish triangular fillets to a flat or slightly convex profile.

80 Ironmongery

1. Fixing: In accordance with any third party certification conditions applicable. Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Do not damage ironmongery and adjacent surfaces.
2. Checking/ adjusting/ lubricating: Carry out at completion and ensure correct functioning.

90 Replacement window installation

1. Standard: To BS 8213-4.

Ω End of Section

L20

Doors/ shutters/ hatches

To be read with preliminaries/ general conditions.

10 Timber procurement

1. Timber (including timber for wood-based products): Obtained from well-managed forests and/ or plantations in accordance with:
 - 1.1. The laws governing forest management in the producer country or countries.
 - 1.2. International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
2. Documentation: Provide either in accordance with chain of custody certification scheme requirements:
 - 2.1. Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied; or
 - 2.2. Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.

55 Doorsets

1. Description: INTERNAL
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice
3. Finish as delivered: Factory applied primer
4. Glazing/ Infill details: Clear single glazing (where required).
5. Ironmongery: As ironmongery schedule (to be produced before construction)
6. Perimeter seals: Fire and smoke seal
7. Thermal performance (U-value maximum): Manufacturer's standard
8. Fire performance
 - 8.1. Fire resistance: Manufacturer's standard
 - 8.2. Smoke leakage: Manufacturer's standard
 - 8.3. Reaction to fire: To BS EN 13501-1, Class B or better

70 Fire and smoke resistance

1. Requirement: Specified performance to be the minimum period attained when tested for integrity in accordance with BS 476-22, BS EN 1634-1 or BS EN 1634-3.
2. Components and assemblies will be marked to the relevant product standard and/ or third party certification rating.

75 Fire-resisting/ smoke control doors/ doorsets

1. Gaps between frames and supporting construction: Filled as necessary in accordance with door/ doorset manufacturer's instructions.

L20

Doors/ shutters/ hatches

12-12-2023

80 Sealant joints

1. Sealant

1.1. Manufacturer: Contractor's choice

1.1.1. Product reference: Contractor's choice

1.2. Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.

85 Fixing ironmongery generally

1. Fasteners: Supplied by ironmongery manufacturer.

1.1. Finish/ Corrosion resistance: To match ironmongery.

2. Holes for components: No larger than required for satisfactory fit/ operation.

3. Adjacent surfaces: Undamaged.

4. Moving parts: Adjusted, lubricated and functioning correctly at completion.

Ω End of Section

L20

Doors/ shutters/ hatches

12-12-2023

L40

General glazing

To be read with preliminaries/ general conditions.

10 Workmanship and positioning generally

1. Glazing
 - 1.1. Generally: In accordance with BS 6262 series.
 - 1.2. Integrity: Wind and watertight under all conditions. Make full allowance for deflections and other movements.
2. Glass
 - 2.1. Standards: Generally to BS 952 and to the relevant parts of:
 - 2.1.1. BS EN 572 for basic soda lime silicate glass.
 - 2.1.2. BS EN 1096 for coated glass.
 - 2.1.3. BS EN 12150-2 for thermally toughened soda lime silicate glass.
 - 2.1.4. BS EN ISO 12543 for laminated glass.
 - 2.2. Quality: Free from scratches, bubbles and other defects.
 - 2.3. Dimensional tolerances: Panes/ sheets to be accurately sized.
 - 2.4. Material compatibility: Glass/ plastics, surround materials, sealers primers and paints/ clear finishes to be compatible. Comply with glazing/ sealant manufacturers' recommendations.
 - 2.5. Protection: Keep materials dry until fixed. Protect insulating glass units and plastics glazing sheets from the sun and other heat sources.

30 Preparation

1. Surrounds, rebates, grooves and beads: Clean and prepare before installing glazing; ensure compliance with any certified installation requirements.

55 Bead-fixed insulating glass units

1. Description: DOUBLE GLAZING TO ALL PROPOSED
2. IGU: As clause 60.
 - 2.1. Perimeter taping: Do not use.
3. Surround/ bead: PVC-U
 - 3.1. Preparation: Sealant primer
4. Glazing system: As recommended by manufacturer
5. Thermal performance (U-value maximum): Manufacturer's standard
6. Glazing installation
 - 6.1. Insulating unit: Located centrally in surround using setting and location blocks.
 - 6.2. Gaskets and beads: Installed as recommended by frame manufacturer.
 - 6.2.1. Gasket fit at corners: Tight, without gaps.
 - 6.3. Drainage and ventilation holes: Unobstructed.

Ω End of Section

L40
General glazing
12-12-2023

M10

Cement based levelling/ wearing screeds

To be read with preliminaries/ general conditions.

7 Proprietary quick drying levelling screeds

1. Description: TO GROUND FLOOR NEW EXTENSION ONLY
2. Substrate: In situ concrete slab
3. Screed manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Screed construction: Unbonded on dpm
5. Thickness
 - 5.1. Nominal: 65mm (to SE specification).
6. Mix
 - 6.1. Cement: To SE specification.
 - 6.2. Proportions (cement:sand): Manufacturer's standard.

21 Suitability of substrates

1. General
 - 1.1. Suitable for specified levels and flatness/ regularity of finished surfaces. Consider permissible minimum and maximum thicknesses of screeds.
 - 1.2. Sound and free from significant cracks and gaps.
2. Concrete strength: In accordance with BS 8204-1, Table 2.
3. Cleanliness: Remove plaster, debris and dirt.
4. Moisture content: To suit screed type. New concrete slabs to receive fully or partially bonded construction must be dried out by exposure to the air for minimum six weeks.

22 Proprietary levelling/wearing screeds

1. General: Materials, mix proportions, mixing methods, minimum/ maximum thicknesses and workmanship must be in accordance with recommendations of screed manufacturer.
2. Standard: To BS EN 13813

37 Unbonded construction

1. Separation: Lay screed over a suitable sheet dpm or a separating layer.
 - 1.1. Type: Polyethylene dpm, as section J40
2. Installation of separating layer: Lay on clean substrate. Turn up for full depth of screed at abutments with walls, columns, etc. Lap 100 mm at joints.

50 Mixing

1. Water content: Minimum necessary to achieve full compaction, low enough to prevent excessive water being brought to surface during compaction..

M10

Cement based levelling/
wearing screeds

12-12-2023

2. **Mixing:** Mix materials thoroughly to uniform consistency in a suitable forced action mechanical mixer. Do not use a free fall drum type mixer.
3. **Consistency:** Use while sufficiently plastic for full compaction.
4. **Ready-mixed retarded screed mortar:** Use within working time and site temperatures recommended by manufacturer. Do not retemper.

52 **Compaction**

1. **General:** Compact thoroughly over entire area.
2. **Screeds over 50 mm thick:** Lay in two layers of equal thickness. Roughen surface of compacted lower layer then immediately lay upper layer.

85 **Finishing generally**

1. **Timing:** Carry out all finishing operations at optimum times in relation to setting and hardening of screed material.
2. **Prohibited treatments to screed surfaces**
 - 2.1. Wetting to assist surface working.
 - 2.2. Sprinkling cement.

90 **Curing**

1. **General:** Prevent premature drying. Immediately after laying, protect surface from wind, draughts and strong sunlight. As soon as screed has set sufficiently, closely cover with polyethylene sheeting.
2. **Curing period (minimum):** As soon as screed has set sufficiently, closely cover with polyethylene sheeting for seven days.
3. **Drying after curing:** Allow screeds to dry gradually. Do not subject screeds to artificial drying conditions that will cause cracking or other shrinkage related problems.

Ω End of Section

M10
Cement based levelling/
wearing screeds
12-12-2023

M20

Plastered/ rendered/ roughcast coatings

To be read with preliminaries/ general conditions.

19 Proprietary cement gauged render

1. Description: TO FRONT FACADE - EW1
2. Substrate: Concrete blockwork as section F10
 - 2.1. Preparation: Not required
3. Manufacturer: As below
4. Undercoats
 - 4.1. Product reference: K rend standard UF base
 - 4.2. Thickness (excluding dubbing out and keys): First coat 8-12 mm and second coat 6mm
5. Final coat
 - 5.1. Product reference: K rend silicone roughcast
 - 5.2. Thickness: 5-8 mm
6. Finish: Dry dash

20 Cementitious renders Type A

1. Description: As clause 19
2. Manufacturer: [K Rend Silicone Coloured Renders](#)
3. Contact details
 - 3.1. Address: Kilwaughter Minerals Ltd
9 Starbog Road
Larne
County Antrim
BT40 2TJ
 - 3.2. Telephone: [+44 \(0\)28 2826 0766](tel:+44(0)2828260766)
 - 3.3. Web: www.k-rend.co.uk
 - 3.4. Email: sales@k-rend.co.uk

62 Admixtures for cement gauged mortars

1. Suitable admixtures: Select from:
 - 1.1. Air entraining (plasticizing) admixtures: To BS EN 934-2 and compatible with other mortar constituents.
 - 1.2. Other admixtures: Submit proposals.
2. Prohibited admixtures: Calcium chloride and admixtures containing calcium chloride.

63 Sand for cement gauged mortars

1. Standard: To BS EN 13139.
 - 1.1. Grading: 0/2 or 0/4 (CP or MP); category 2 fines.
2. Colour and texture: Consistent. Obtain from one source.

65 Mixing

1. Render mortars (site-made)
 - 1.1. Batching: By volume using gauge boxes or buckets.
 - 1.2. Mix proportions: Based on damp sand. Adjust for dry sand.
 - 1.3. Lime:sand: Mix thoroughly. Allow to stand, without drying out, for at least 16 hours before using.
2. Mixes: Of uniform consistence and free from lumps.
3. Contamination: Prevent intermixing with other materials.

67 Cold weather

1. General: Do not use frozen materials or apply coatings on frozen or frost bound substrates.
2. Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3°C.
3. External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising.

69 Ready prepared lime putty

1. Type: Slaked directly from CL 90 quicklime to BS EN 459-1, using an excess of water.
 - 1.1. Maturation: In pits/ containers that allow excess water to drain away.
 - 1.2. Density of matured lime putty: 1.3-1.4 kg/L.
2. Maturation period before use (minimum): 90 days.
3. Storage: Prevent drying out or wetting. Protect from frost.

71 Suitability of substrates

1. General: Suitable to receive coatings. Sound, free from contamination and loose areas.
2. Cutting, chasing, making good, fixing of conduits and services outlets and the like: Completed.
3. Tolerances: Permitting specified flatness/ regularity of finished coatings.
4. Cleanliness: Free from dirt, dust, efflorescence and mould, and other contaminants incompatible with coatings.

86 Crack control at junctions between dissimilar solid substrates

1. Locations: Where defined movement joints are not required. Where dissimilar solid substrate materials are in same plane and rigidly bonded or tied together.
2. Crack control materials
 - 2.1. Isolating layer: Building paper to BS 1521.
 - 2.2. Metal lathing: Externally: Stainless steel ribbed expanded metal
3. Installation: Fix metal lathing over isolating layer. Stagger fixings along both edges of lathing.
4. Width of installation over single junctions
 - 4.1. Isolating layer: 150 mm.
 - 4.2. Lathing: 300 mm.
5. Width of installation across face of dissimilar substrate material (column, beam, etc. with face width not greater than 450 mm)

M20

Plastered/ rendered/
roughcast coatings

12-12-2023

- 5.1. Isolating layer: 25 mm (minimum) beyond junctions with adjacent substrate.
- 5.2. Lathing: 100 mm (minimum) beyond edges of isolating layer.

87 Application of coatings

1. General: Apply coatings firmly and achieve good adhesion.
2. Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - 2.1. Accuracy: Finish to a true plane, to correct line and level, with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
3. Drying out: Prevent excessively rapid or localized drying out.
4. Keying undercoats: Cross scratch plaster coatings and comb render coatings. Do not penetrate undercoat.

94 Flatness/ surface regularity

1. Sudden irregularities: Not permitted.
2. Deviation of plaster surface: Measure from underside of a straight edge placed anywhere on surface.
 - 2.1. Permissible deviation (maximum) for plaster not less than 13 mm thick: 3 mm in any consecutive length of 1800 mm.

95 Render final coat – dry dash

1. Coarse aggregate: To BS EN 12620. Well washed.
2. Application and finishing: Achieve firm adhesion and an even overall appearance.

97 Render final coat – scraped finish

1. Finish: Scraped to expose aggregate and achieve an even texture.

99 Render final coat – plain floated finish

1. Finish: Even, open texture free from laitance.

Ω End of Section

M50**Rubber/ plastics/ cork/ lino/ carpet tiling/ sheeting****To be read with preliminaries/ general conditions.****15 Carpet tiling F1**

1. Description: As shown on drawing 2600 Proposed Finishes Plan
2. Base: Existing
 - 2.1. Preparation: Remove existing carpeting
3. Fabricated underlay: As manufacturer standard
4. Carpet tiles to BS EN 14041 and BS EN 1307
 - 4.1. Evidence of compliance: Submit.
 - 4.2. Manufacturer: Forbo Flooring Systems
 - 4.2.1. Product reference: Flotex Carpet Tiles
 - 4.3. Size: 500 x 500 mm
 - 4.4. Colour/ pattern: TBC

45 Existing floor covering removed

1. Substrate: Clear of covering and as much adhesive as possible. Skim with smoothing compound to give smooth, even surface.

60 Setting out tiles

1. Method: Set out from centre of area/ room so that wherever possible:
 - 1.1. Tiles along opposite edges are of equal size.
 - 1.2. Edge tiles are more than 50% of full tile width.

65 Laying coverings

1. Base/ substrate condition: Rigid, dry, smooth, free from grease, dirt and other contaminants.
2. Use a primer where recommended by adhesive manufacturer. Allow to dry thoroughly.
3. Adhesive: As specified, as recommended by covering manufacturer or, as approved.
4. Conditioning of materials prior to laying: As recommended by manufacturer.
5. Environment: Before, during and after laying, provide adequate ventilation and maintain temperature and humidity approximately at levels which will prevail after building is occupied.
6. Finished coverings: Accurately fitted, tightly jointed, securely bonded, smooth and free from air bubbles, rippling, adhesive marks, stains, trowel ridges and high spots.

80 Skirtings

1. Types: Hardwood
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Bullnose skirting

M50
Rubber/ plastics/ cork/
lino/ carpet tiling/
sheeting
 12-12-2023

3. Fixing: Securely bond with mitred corners.
 - 3.1. Corners: Mitre joints.

85 Waste

1. Spare covering material: Retain suitable material for patching. On completion submit pieces for selection. Hand over selected pieces to Employer.

Ω End of Section

M50
Rubber/ plastics/ cork/
lino/ carpet tiling/
sheeting
12-12-2023

M60

Painting/ clear finishing

To be read with preliminaries/ general conditions.

10 Emulsion paint

1. Description: TO ALL INTERNAL WALL
2. Manufacturer: Dulux
 - 2.1. Product reference: Diamond Matt (colour tbc)
3. Initial coats: As recommended by manufacturer
4. Undercoats: As recommended by manufacturer

22 Handling and storage

1. Coating materials: Deliver in sealed containers, labelled clearly with brand name, type of material and manufacturer's batch number.
2. Materials from more than one batch: Store separately. Allocate to distinct parts or areas of the work.

28 Protection

1. 'Wet paint' signs and barriers: Provide where necessary to protect other operatives and general public, and to prevent damage to freshly applied coatings.

30 Preparation generally

1. Standard: In accordance with BS 6150.
2. Refer to any pre-existing CDM Health and Safety File and CDM Construction Phase Plan where applicable.
3. Risk assessments and method statements for suspected hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
4. Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
5. Substrates: Sufficiently dry in depth to suit coating.
6. Efflorescence salts, dirt, grease and oil: Remove. Give notice if contamination of surfaces/ substrates has occurred.
7. Surface irregularities: Provide smooth finish.
8. Organic growths and infected coatings
 - 8.1. Remove with assistance of biocidal solution.
 - 8.2. Apply residual effect biocidal solution to inhibit regrowth.
9. Joints, cracks, holes and other depressions: Fill with stoppers/ fillers. Provide smooth finish.
10. Dust, particles and residues from preparation: Remove and dispose of safely.
11. Water-based stoppers and fillers
 - 11.1. Apply before priming unless recommended otherwise by manufacturer.
 - 11.2. If applied after priming: Patch prime.

12. Doors, opening windows and other moving parts
 - 12.1. Ease, if necessary, before coating.
 - 12.2. Prime resulting bare areas.

32 Previously coated surfaces generally

1. Preparation: In accordance with BS 6150.
2. Contaminated or hazardous surfaces: Give notice of:
 - 2.1. Coatings suspected of containing lead.
 - 2.2. Substrates suspected of containing asbestos or other hazardous materials.
 - 2.3. Significant rot, corrosion or other degradation of substrates.
3. Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
4. Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
5. Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
6. Alkali affected coatings: Completely remove.
7. Retained coatings
 - 7.1. Thoroughly clean.
 - 7.2. Gloss-coated surfaces: Provide key.
8. Partly removed coatings
 - 8.1. Apply additional preparatory coats.
 - 8.2. Junctions: Provide flush surface.
9. Completely stripped surfaces: Prepare as for uncoated surfaces.

37 Wood preparation

1. General: Provide smooth, even finish with lightly rounded arrises.
2. Degraded or weathered surface wood: Take back surface to provide suitable substrate.
3. Degraded substrate wood: Repair with sound material of same species.
4. Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
5. Resinous areas and knots: Apply two coats of knotting.
6. Defective primer: Take back to bare wood and reprime.

39 Steel preparation

1. Areas of defective primer, corrosion and loose scale: Take back to bare metal. Reprime as soon as possible.
2. Defective paintwork: Remove to leave a firm edge and clean bright metal.
3. Sound paintwork: Provide key for subsequent coats.
4. Corrosion and loose scale: Take back to bare metal.
5. Residual rust: Treat with a proprietary removal solution.
6. Bare metal: Apply primer as soon as possible.
7. Remaining areas: Degrease.

M60

Painting/ clear finishing

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43 Plaster preparation

1. Nibs, trowel marks and plaster splashes: Scrape off.
2. Overtrowelled 'polished' areas: Provide suitable key.
3. Depressions around fixings: Fill with stopper/ filler.

45 Previously painted window frames

1. Paint encroaching beyond glass sight line: Remove.
2. Loose and defective putty: Remove.
3. Putty cavities and junctions between previously painted surfaces and glass: Clean thoroughly.
4. Finishing
 - 4.1. Patch prime, reputty, as necessary and allow to harden.
 - 4.2. Seal and coat as soon as sufficiently hard.

55 Existing gutters

1. Dirt and debris: Remove from inside of gutters.
2. Defective joints: Clean and seal with suitable jointing material.
3. Suspected hazardous materials: submit method statement.

61 Coating generally

1. Application: In accordance with BS 6150,
2. Conditions: Maintain suitable temperature, humidity and air quality.
3. Surfaces: Clean and dry at time of application.
4. Thinning and intermixing: Not permitted unless recommended by manufacturer.
5. Overpainting: Do not paint over intumescent strips or silicone mastics.
6. Priming coats: Apply as soon as possible on same day as preparation is completed.
7. Finish
 - 7.1. Even, smooth and of uniform colour.
 - 7.2. Free from brush marks, sags, runs and other defects.
 - 7.3. Cut in neatly.
8. Doors, opening windows and other moving parts: Ease before coating and between coats.

70 External doors

1. Bottom edges: Prime and coat before hanging.

75 Bead glazing to coated wood

1. Before glazing: Apply first two coats to rebates and beads.

Ω End of Section

N10**General fixtures/ furnishings/ equipment****To be read with preliminaries/ general conditions.****10 Entrance matting F1**

1. Description: PRIMARY
2. Manufacturer: [Gradus](#)
3. Contact details
 - 3.1. Address: Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 3.2. Telephone: [+44 \(0\)1625 428922](tel:+44(0)1625428922)
 - 3.3. Web: www.gradus.com
 - 3.4. Email: imail@gradus.com
4. Product reference: Esplanade 1000 carpet wipers
5. Finishes: As manufactured (colour tbc)

10 Entrance matting F2

1. Description: SECONDARY
2. Manufacturer: [Gradus](#)
3. Contact details
 - 3.1. Address: Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 3.2. Telephone: [+44 \(0\)1625 428922](tel:+44(0)1625428922)
 - 3.3. Web: www.gradus.com
 - 3.4. Email: imail@gradus.com
4. Product reference: Boulevard stripe matting
5. Finishes: As manufactured (colour tbc)

15 Reception desk

1. Description: TO RECEPTION 00-002
2. Item: Reception corner desk unit with bespoke opening hatch
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Plan shape: 'L' shape
5. Dimensions: As shown on drawing 2200 Proposed GA Plan

N10

General fixtures/
furnishings/ equipment

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6. Pedestal units
 - 6.1. Material: Manufacturer's standard
 - 6.2. Finish/ Colour: Natural
 - 6.3. Exposed edges: Wood veneer
7. Other requirements: Integral opening hatch

15 Worktop Kitchen

1. Description: TO KITCHEN 00-010
2. Item: Kitchen worktop
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Plan shape: Rectangular
5. Dimensions: As shown on drawing 2200 Proposed GA Plan
6. Pedestal units
 - 6.1. Material: Manufacturer's standard
 - 6.2. Finish/ Colour: Natural
 - 6.3. Exposed edges: Wood veneer
7. Other requirements: Integral opening hatch

Ω End of Section

N13 Sanitary appliances and fittings

To be read with preliminaries/ general conditions.

25 Sinks

1. Description: - KITCHEN
2. Type: Stainless steel, to BS EN 13310
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Size: As shown on drawing 2200 Proposed GA Plan
5. Material: Stainless steel

70 Installation generally

1. Standards: In accordance with BS 6465-1, -2 and -3.
2. Assembly and fixing: Fix appliances securely to structure, without taking support from pipelines, level and plumb and so that surfaces designed to fall drain as intended.
3. Fasteners: Non-ferrous or stainless steel.
4. Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes, to form watertight joints between appliances and backgrounds (except cisterns) and between appliances and discharge pipes.
5. Supply and discharge pipework: Fix before appliances.
6. Timing: Tiled backgrounds, other than splashbacks, complete before fixing appliances. Do not overstress tiles when fixing appliances.
7. On completion: Components and accessories working correctly with no leaks.
8. Labels and stickers: Remove.

76 Installing taps

1. Fixing: Secure against twisting.
2. Seal with appliance: Watertight.
3. Positioning: Hot tap to left of cold tap as viewed by user of appliance.

77 Installing wastes and overflows

1. Bedding: Waterproof jointing compound.
2. Fixing: With resilient washer between appliance and backnut.

Ω End of Section

P21

Door/ window ironmongery

To be read with preliminaries/ general conditions.

3 Quantities and locations

1. Quantities and locations of ironmongery are to be included on revised door schedule at construction stage. Price for level handles, additional information included on drawing 2900 Proposed Access & Security Plan .
2. Fixing: As sections L10 and L20.

4 Ironmongery range selected by contractor

1. Source: Single coordinated range.
2. Notification: Submit details of selected range, manufacturer and/ or supplier.
3. Principal material/ finish: Allow for Satin stainless steel, grade 1.4301 (304), material/finish tbc.

6 Samples

1. General: Before placing orders with suppliers submit labelled samples of the following: all ironmongery for client confirmation.
 - 1.1. Conformity: Retain samples on-site for the duration of the Contract. Ensure conformity of ironmongery as delivered with labelled samples.

12 Automated overhead door closers Self closing

1. Description: As indicated on drawing 2900 Proposed Access & Security Plan.
2. Standard: To BS EN 1154.
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice
4. Operational adjustment
 - 4.1. Variable power: Matched to size, weight and location of doors. Fully closing latched doors and holding unlatched doors closed.
 - 4.2. Closing against smoke seals of fire doors: Positive. No gaps.

24 Door locks

1. Description: As indicated on drawing 2900 Proposed Access & Security Plan.
2. Standard: To BS EN 12209.
3. Manufacturer: Contractor's choice
 - 3.1. Product reference: Contractor's choice

38 Lever handles

1. Description: TO ALL INTERNAL DOORS
2. Standard: To BS EN 1906.
3. Manufacturer: Contractor's choice

3.1. Product reference: Contractor's choice

92 Weatherstrip to windows

1. Description: TO ALL PROPOSED NEW WINDOWS
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice

Ω End of Section

P21
Door/ window
ironmongery
12-12-2023

Q24**Interlocking brick/ block roads/ pavings** **ADDED****To be read with preliminaries/ general conditions.****10 Precast concrete slabs** **ADDED**

1. Description: Allowance made to cover minimum amount to gain access to front entrance.
2. Laying course
 - 2.1. Material: In accordance with BS 7533-3.
 - 2.2. Method of screeding, in accordance with BS 7533-3: Contractor's choice of compaction or uncompacted
3. Blocks: To BS EN 1338:
 - 3.1. Manufacturer: Contractor's choice
 - 3.1.1. Product reference: Contractor's choice
4. Jointing
 - 4.1. Material: In accordance with BS 7533-3.
 - 4.2. Joint width: 2-5 mm.

22 Execution generally – concrete block and clay paver paving **ADDED**

1. Standard: In accordance with BS 7533-3.

25 Samples **ADDED**

1. General: Before placing orders submit samples of concrete blocks/ pavers, that are representative of colour and appearance.

27 Adverse weather **ADDED**

1. General: Do not use frozen materials or lay bedding on frozen or frost covered sub-bases.

50 Completion of paving **ADDED**

1. Final compaction of the surface course: In accordance with BS 7533-3.
2. Vacuum cleaning machines: Not allowed.

Ω End of Section

Q24

Interlocking brick/ block
roads/ pavings

12-12-2023

Q28

Topsoil and soil ameliorants

To be read with preliminaries/ general conditions.

20 Imported topsoil to BS 3882 TO SOFT LANDSCAPE

1. Description: As indicated on drawing 4100 Proposed Site Plan
2. Quantity: Provide as necessary to make up any deficiency existing on site and to complete the work.
3. Standard: To BS 3882.
4. Source: Contractor's choice
 - 4.1. Product reference: Contractor's choice

30 Spreading topsoil

1. Standard: In accordance with BS 3882.
2. Temporary roads or surfacing: Remove before spreading topsoil.
3. Layers
 - 3.1. Depth (maximum): 150 mm.
 - 3.2. Gently firm each layer before spreading the next.
4. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

Ω End of Section

Q37 Green roofs

General

130 Extensive green roof systems Type B

1. Manufacturer: [Bauder Ltd](#)
2. Contact details
 - 2.1. Address: 70 Landseer Road
Ipswich
Suffolk
IP3 0DH
 - 2.2. Telephone: +44 (0)1473 257671
 - 2.3. Web: www.bauder.co.uk
 - 2.4. Email: info@bauder.co.uk
3. Product reference: [BauderGREEN XF301 lightweight sedum system with BauderGREEN DU UK organic slow release fertiliser](#)
4. Protection
 - 4.1. Protection layer: BauderGREEN SV 600 protection and moisture mat.
5. Moisture control
 - 5.1. Drainage layer: BauderGREEN SDF drainage and protection mat.
6. Planting systems
 - 6.1. Planting requirements: Bauder XF301 Sedum System with Bauder Xero Flor Organic Fertiliser.
7. Maximum Slope: 25°.

Performance - Not Used

Products - Not Used

Execution

710 Installation generally

1. Preparation: Clear all surfaces of debris.
 - 1.1. Timing: After certification of waterproof membrane integrity.
 - 1.2. Surface condition: Visually inspect waterproof membrane, report any damage.
2. Faults in waterproof membrane: Report.
3. Contamination: Do not use materials detrimental to healthy plant growth.
4. Storage: Do not overload.
 - 4.1. Point loads: Avoid.
5. Outlets: Do not block.
 - 5.1. Outlet grilles: Installed.

720 Adverse weather

1. Unfinished work: Secure from damage and wind uplift.
2. Conditions: Do not install or work with frozen materials.

730 Installation of inverted roof insulation

1. Preparation: Clear roof of other trades.
2. Condition of substrate: Clean.
3. Fitting: Loose lay.
4. Joints: Butt together.
 - 4.1. End joints: Stagger.
5. Cutting: Minimize.
 - 5.1. Perimeters and upstands: Fit full sized pieces.
 - 5.2. Penetrations: Cut cleanly and fit closely.
6. Stability: Springing and rocking not permitted.
7. Protection: Cover to prevent wind uplift.

740 Root barrier installation

1. Joints: Minimize.
 - 1.1. Overlaps (minimum): Manufacturer's recommendation
2. Upstands: Extend to top of growing medium.

750 Protection layer installation

1. Joints: Minimize.
 - 1.1. Overlaps (minimum): Manufacturer's recommendation
2. Upstands: Extend to top of growing medium.

755 Separation layer installation

1. Joints: Minimize.
 - 1.1. Overlaps (minimum): Manufacturer's recommendation
2. Upstands: Extend to top of growing medium.

770 Drainage layer installation

1. Extent: Continuous over entire roof area.
2. Fitting: Manufacturer's recommendation
3. Upstands: Fit closely around penetrations and outlets.

800 Vegetation blanket installation

1. Handling blankets
 - 1.1. Timing: Lay within 36 hours of lifting from growing position.
 - 1.2. Excessive stacking: Not permitted.
 - 1.3. Material loss (maximum): 3% of total surface area.

2. Growing medium condition: Thoroughly watered.
3. Laying blankets
 - 3.1. Dry, damaged, frosty or waterlogged blankets: Do not lay.
 - 3.2. Orientation: Diagonal or perpendicular to slope of roof.
 - 3.3. Joints: Stagger. Butt together or slightly overlap to prevent gaps. Do not stretch blankets. Secure with biodegradeable pegs.
 - 3.4. Edges: Finish with whole blankets.
 - 3.5. Consolidation: Firm as laying proceeds to ensure full contact with the growing medium. Do not use rollers.
4. Watering: Thorough, immediately after laying and dressing.

Completion

910 Inspection

1. Timing: Before handover.
 - 1.1. Give notice (minimum): Three days.

920 Completion

1. General: Leave the works in a clean, tidy condition.
2. Surfaces: Clean immediately before handover.
3. Outlets: Clean and clear of obstructions.
4. Completed green roof: Protect from adjacent or high level working.

930 Documentation

1. Timing: Submit at handover.
2. Contents
 - 2.1. Growing medium declaration of analysis.
 - 2.2. Manufacturers' guarantees and warranties.
 - 2.3. Procedures for maintenance of the green roof.
 - 2.4. Record drawings showing the location of planting and associated features.
3. Number of copies: 3

Ω End of Section

R10 Rainwater drainage systems

To be read with preliminaries/ general conditions.

16 PVC-U gutters

1. Standard: To the relevant parts of BS EN 607 and BS EN 1462, Kitemark certified.
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice
3. Profile: Half round
4. Nominal size: 100 mm
5. Colour: Black
6. Brackets: Galvanized steel top rafter type
 - 6.1. Fixings: Stainless steel screws

35 PVC-U pipework

1. Standard: To BS EN 12200-1, Kitemark certified
2. Manufacturer: Contractor's choice
 - 2.1. Product reference: Contractor's choice
3. Section: Round
4. Colour: Black
5. Brackets: PVC-U clips, black
 - 5.1. Fixings: Stainless steel screws

50 Installation generally

1. Electrolytic corrosion: Avoid contact between dissimilar metals where corrosion may occur.
2. Discharge of rainwater: Complete, and without leakage or noise nuisance.
3. Components: Obtain from same manufacturer for each type of pipework and guttering.
4. Allowance for thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.
5. Fixings and fasteners: As section Z20.
6. Protection
 - 6.1. Fit purpose made temporary caps to prevent ingress of debris.
 - 6.2. Fit access covers, cleaning eyes and blanking plates as the work proceeds.

60 Gutters laid to fall

1. Setting out: To true line and even gradient to prevent 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.
2. Joints: Watertight.
3. Roofing underlay: Dressed into gutter.

65 Gutters laid level

1. **Setting out:** Level and as close as practical to roof.
2. **Joints:** Watertight.
3. **Roofing underlay:** Dressed into gutter.

70 Pipework

1. **Fixing:** Securely, plumb and/ or true to line with additional supports as necessary to support pipe collars, particularly at changes in direction.
2. **Cut ends of pipes and gutters:** Clean and square with burrs and swarf removed.

75 Fixing insulation to internal pipelines and gutters

1. **Fixing:** Secure and neat. Provide continuity at supports and leave no gaps. Fix split pipe insulation with the split on 'blind' side of pipeline.
2. **Timing:** Do not fit insulation until completion of pipe airtightness or leakage testing.

92 Gutter test

1. **Preparation:** Temporarily block all outlets.
2. **Testing:** Fill gutters to overflow level and after 5 minutes closely inspect for leakage.

Ω End of Section

Z10

Purpose-made joinery

To be read with preliminaries/ general conditions.

110 Fabrication

1. Standard: To BS 1186-2.
2. Sections: Accurate in profile and length, and free from twist and bowing. Formed out of solid unless shown otherwise.
 - 2.1. Machined surfaces: Smooth and free from tearing, wooliness, chip bruising and other machining defects.
3. Joints: Tight and close fitting.
4. Assembled components: Rigid. Free from distortion.
5. Screws: Provide pilot holes.
 - 5.1. Screws of 8 gauge (4 mm diameter) or more and screws into hardwood: Provide clearance holes.
 - 5.2. Countersink screws: Heads sunk at least 2 mm below surfaces visible in completed work.
 - 5.3. Adhesives: Compatible with wood preservatives applied and end uses of timber.

120 Cross section dimensions of timber

1. General: Dimensions on drawings are finished sizes.
2. Maximum permitted deviations from finished sizes
 - 2.1. Softwood sections: To BS EN 1313-1:-
 - 2.1.1. Clause 6 for sawn sections.
 - 2.2. Hardwood sections: To BS EN 1313-2:-
 - 2.2.1. Clause 6 for sawn sections.
 - 2.2.2. Clause NA.3 for further processed sections.

130 Preservative treated wood

1. Cutting and machining: Completed as far as possible before treatment.
2. Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc.
3. Surfaces exposed by minor cutting and/ or drilling: Treat as recommended by main treatment solution manufacturer.

140 Moisture content

1. Wood and wood-based products: Maintained within range specified for the component during manufacture and storage.

250 Finishing

1. Surfaces: Smooth, even and suitable to receive finishes.
 - 1.1. Arrises: Eased unless shown otherwise on drawings.

Z10

Purpose-made joinery

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2. End grain in external components: Sealed with primer or sealer as section M60 and allowed to dry before assembly.

Ω End of Section

Z10

Purpose-made joinery

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Z20

Fixings and adhesives

Products

310 Fasteners generally

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

320 Packings

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

340 Masonry fixings

1. Light duty: Plugs and screws.
2. Heavy duty: Expansion anchors or chemical anchors.

350 Plugs

1. Type: Proprietary types to suit substrate, loads to be supported and conditions expected in use.

390 Adhesives generally

1. Standards
 - 1.1. Hot-setting phenolic and aminoplastic: To BS 1203.
 - 1.2. Thermosetting wood adhesives: To BS EN 12765.
 - 1.3. Thermoplastic adhesives: To BS EN 204.

410 Powder actuated fixing systems

1. Types of fastener, accessories and consumables: As recommended by tool manufacturer.

Execution

610 Fixing generally

1. Integrity of supported components: Select types, sizes, quantities and spacings of fixings, fasteners and packings to retain supported components without distortion or loss of support.
2. Components, substrates, fixings and fasteners of dissimilar metals: Isolate with washers/ sleeves to avoid bimetallic corrosion.
3. Appearance: Fixings to be in straight lines at regular centres.

620 Fixing through finishes

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

Z20

Fixings and adhesives

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630 Fixing packings

1. **Function:** To take up tolerances and prevent distortion of materials and components.
2. **Limits:** Do not use packings beyond thicknesses recommended by fixings and fasteners manufacturer.
3. **Locations:** Not within zones to be filled with sealant.

670 Pelleted countersunk screw fixing

1. **Finished level of countersunk screw heads:** Minimum 6 mm below timber surface.
2. **Pellets:** Cut from matching timber, match grain and glue in to full depth of hole.
3. **Finished level of pellets:** Flush with surface.

680 Plugged countersunk screw fixing

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

690 Using powder actuated fixing systems

1. **Powder actuated fixing tools:** To BS 4078-2 and Kitemark certified.
2. **Operatives:** Trained and certified as competent by tool manufacturer.

700 Applying adhesives

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

Ω End of Section

Z20

Fixings and adhesives

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Z21 Mortars

Cement gauged mortars

110 Cement gauged mortar mixes

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

120 Sand for site made cement gauged masonry mortars

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

131 Ready-Mixed lime:sand for cement gauged masonry mortars

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

135 Site made lime:sand for cement gauged masonry mortars

1. Permitted use: Where a special colour is not required and in lieu of factory made ready-mixed material.
2. Lime: Nonhydraulic to BS EN 459-1.
 - 2.1. Type: CL 90S.
3. Mixing: Thoroughly mix lime with sand, in the dry state. Add water and mix again. Allow to stand, without drying out, for at least 16 hours before using.

160 Cements for mortars

1. Cement: To BS EN 197-1 and CE marked.
 - 1.1. Types: Portland cement, CEM I.
2. Portland limestone cement, CEM II/A-L or CEM II/A-LL.
3. Portland slag cement, CEM II/B-S.
4. Portland fly ash cement, CEM II/B-V.
 - 4.1. Strength class: 32.5, 42.5 or 52.5.
5. White cement: To BS EN 197-1 and CE marked.
 - 5.1. Type: Portland cement, CEM I.
 - 5.2. Strength class: 52.5.

6. Sulfate resisting Portland cement
 - 6.1. Types: To BS EN 197-1 Sulfate resisting Portland cement, CEM I/SR and CE marked.
7. To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - 7.1. Strength class: 32.5, 42.5 or 52.5.
8. Masonry cement: To BS EN 413-1 and CE marked.
 - 8.1. Class: MC 12.5.

180 Admixtures for site made cement gauged mortars

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

190 Retarded ready to use cement gauged masonry mortars

1. Standard: BS EN 998-2.
2. Lime for cement:lime:sand mortars: Nonhydraulic to BS EN 459-1.
 - 2.1. Type: CL 90S.
3. Pigments for coloured mortars: To BS EN 12878.
4. Time and temperature limitations: Use within limits prescribed by mortar manufacturer.
 - 4.1. Retempering: Restore workability with water only within prescribed time limits.

210 Making cement gauged mortars

1. Batching: By volume. Use clean and accurate gauge boxes or buckets.
 - 1.1. Mix proportions: Based on dry sand. Allow for bulking of damp sand.
2. Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
 - 2.1. Mortars containing air entraining admixtures: Mix mechanically. Do not overmix.
3. Working time (maximum): Two hours at normal temperatures.
4. Contamination: Prevent intermixing with other materials.

Lime:sand mortars

310 Lime:sand mortar mixes

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

320 Sand for lime:sand masonry mortars

1. Type: Sharp, well graded.
 - 1.1. Quality, sampling and testing: To BS EN 13139.
 - 1.2. Grading/ Source: As specified elsewhere in relevant mortar mix items.

360 Making lime:sand mortars generally

1. Batching: By volume. Use clean and accurate gauge boxes or buckets.

2. **Mixing:** Mix materials thoroughly to uniform consistency, free from lumps.
3. **Contamination:** Prevent intermixing with other materials, including cement.

400 Making hydraulic lime:sand mortars

1. **Mixing hydrated hydraulic lime:sand:** Follow the lime manufacturer's recommendations for each stage of the mix.
 - 1.1. **Water quantity:** Only sufficient to produce a workable mix.
2. **Working time:** Within limits recommended by the hydraulic lime manufacturer.

Ω End of Section

Z21

Mortars

12-12-2023

Z22 Sealants

Products - Not Used

Execution

610 Suitability of joints

1. Presealing checks
 - 1.1. Joint dimensions: Within limits specified for the sealant.
 - 1.2. Substrate quality: Surfaces regular, undamaged and stable.
2. Joints not fit to receive sealant: Submit proposals for rectification

620 Preparing joints

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

630 Applying sealants

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

Ω End of Section

