

D3 Associates Ltd

Chinley, Buxworth & Brownside Parish Council

Chinley Community Centre

Architectural Specification

CHIN-D3A-00-XX-SP-A-0001

D2 - Issued for Tender

P01

Contents

C20 Demolition.....	1
F10 Brick/ block walling	3
F21 Natural stone/ ashlar walling/ dressings.....	4
F30 Accessories/ sundry items for brick/ block/ stone walling	6
H62 Natural slating	9
J40 Flexible sheet waterproofing/ damp proofing	12
J42 Single layer polymeric sheet roof coverings	13
K10 Gypsum board dry linings/ partitions/ ceilings.....	15
K20 Timber board flooring/ sarking/ linings/ casings	22
K32 Panel cubicles/ duct and wall linings/ screens	23
K40 Demountable suspended ceilings	25
L10 Windows/ rooflights/ screens/ louvres	28
L20 Doors/ shutters/ hatches	35
L30 Stairs/ ladders/ walkways/ handrails/ balustrades	40
L40 General glazing.....	42
M10 Cement based levelling/ wearing screeds.....	44
M20 Plastered/ rendered/ roughcast coatings	47
M40 Stone/ concrete/ quarry/ ceramic tiling/ mosaic	49
M50 Rubber/ plastics/ cork/ lino/ carpet tiling/ sheeting.....	52
M60 Painting/ clear finishing	57
N10 General fixtures/ furnishings/ equipment.....	61
N11 Domestic kitchen fittings, furnishings and equipment	62
N13 Sanitary appliances and fittings	65
N91 External signage and interpretation.....	72
P12 Fire-stopping systems	74
P20 Unframed isolated trims/ skirtings/ sundry items	75
P31 Holes, chases, covers and supports for services.....	76
Q10 Kerbs/ edgings/ channels/ paving accessories	77
Q25 Slab/ brick/ sett/ cobble pavings	78
R10 Rainwater drainage systems.....	80
Z10 Purpose-made joinery.....	82
Z11 Purpose-made metalwork.....	83
Z12 Preservative/ flame-retardant treatment.....	84
Z20 Fixings and adhesives	85
Z21 Mortars	87
Z22 Sealants.....	88

C20 Demolition

To be read with preliminaries/ general conditions.

10 Extent of deconstruction/ demolition

1. General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to foundation level, including steps, ramps and handrails. Break up and dig out foundations. Refer to D3A drawing 2301 - Enabling Works for extents.

13 Groundworks

1. Contaminated material: Remove, and carry out remediation required by the Enforcing Authority.

25 Location of services

1. Services affected by deconstruction/ demolition work: Locate and mark positions.
2. Mains services marking: Arrange with the appropriate authorities for services to be located and marked.
 - 2.1. Marking standard: In accordance with National Joint Utilities Group 'Guidelines on the positioning and colour coding of underground utilities' apparatus'.

30 Services disconnection arranged by contractor

1. General: Arrange with the appropriate authorities for disconnection of services and removal of fittings and equipment owned by those authorities prior to starting deconstruction/ demolition.

31 Services disconnection arranged by employer

1. Timing: Do not start deconstruction/ demolition until disconnections are completed.

32 Disconnection of drains

1. General: Locate, disconnect and seal disused foul and surface water drains.
2. Sealing: Permanent, and within the site.

35 Live foul and surface water drains

1. Drains and associated manholes, inspection chambers, gullies, vent pipes and fittings
 - 1.1. Protect and ensure normal flow during deconstruction/ demolition work.
 - 1.2. Make good any damage arising from deconstruction/ demolition work.
 - 1.3. Leave clean and in working order at completion of deconstruction/ demolition work.

45 Services to be retained

1. Damage to services: Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition.
2. Repairs to services: Complete as directed, and to the satisfaction of the service authority or owner.

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 CITB Certificates of Competence.

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

55 Site hazards

1. **Precautions:** Prevent fire and/ or explosion caused by gas and/ or vapour from tanks, pipes, etc.
2. **Dust:** Reduce airborne dust by periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
 - 2.1. **Lead dust:** Submit method statement for control, containment and clean-up regimes.
3. **Site operatives and general public:** Protect from health hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.

60 Adjoining property

1. **Temporary support and protection:** Provide. Maintain and alter, as necessary, as work proceeds. Do not leave unnecessary or unstable projections.
2. **Defects:** Report immediately on discovery.
3. **Damage:** Minimize. Repair promptly to ensure safety, stability, weather protection and security.
4. **Support to foundations:** Do not disturb.

75 Asbestos-containing materials – known occurrences

1. **Removal:** By contractor licensed by the Health and Safety Executive, and prior to other works starting in these locations.

76 Asbestos-containing materials – unknown occurrences

1. **Discovery:** Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ 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/ demolition.
2. **Removal:** Submit details of proposed methods for filling, removal, etc.

85 Site condition at completion

1. **Debris:** Clear away and leave the site in a tidy condition.

Ω End of Section

F10 Brick/ block walling

Clauses

36 Concrete common blockwork

1. Blocks: To [BS EN 771-3](#).
 - 1.1. Manufacturer: Contractor's choice.
 - 1.2. Product reference: Contractor's choice.
 - 1.3. Compressive strength: 7.3 N/mm².
 - 1.4. Freeze/ thaw resistance: Frost resistant.
 - 1.5. Work sizes (length x width x height): 440 x (To suit stone) x 215 mm.
 - 1.5.1. Tolerance category: D1.
 - 1.6. Reaction to fire: Class A1.
2. Mortar: As section Z21.
 - 2.1. Standard: To [BS EN 998-2](#).
 - 2.2. Mix: 1:3 cement:sand.
3. Bond: Half lap stretcher.

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.

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.

66 Fire stopping

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

Ω End of Section

F21

Natural stone/ ashlar walling/ dressings

Types of walling/ dressings

110 Stone

1. Description: Walling to north and west elevations.
2. Manufacturer: Etherow Stone Ltd.
T: 01457 850 718
W: www.etherowstone.co.uk
3. Stone: Local natural stone to [BS EN 771-6](#).
 - 3.1. Petrological family: Etherow Gritstone.
 - 3.2. Finish: Natural. Aged and tumbled.
 - 3.3. Supplier: Etherow Stone Ltd.
T: 01457 850718
sales@etherowstone.co.uk
 - 3.4. Unit dimension tolerances: Length + 1 mm, width (bed) +1 mm, height + 1 mm.
 - 3.5. Size: 100mm on bed, varying courses of 120-200mm TBC.
 - 3.6. Quality: Free from vents, cracks, fissures, discolouration, or other defects deleterious to strength, durability or appearance. Before delivery to site, season thoroughly, dress and work in accordance with shop drawings prepared by supplier.
4. Bond: Half lap stretcher.
5. Joints: Slightly recessed with brushed finish.
 - 5.1. Width: 10 mm.

General/ production

250 Cutting and dressing of stone

1. Timing: After seasoning but before delivery to site.
2. Accuracy
 - 2.1. Exposed and joint surfaces: Square, true planes free from hollow or rough areas.
 - 2.2. Dimensions: Maintain specified joint widths.
3. Orientation for natural bed of stones: Appropriate to properties of stones and positions in walling/ dressings.

260 Identification of stone units

1. Marking: Clearly and indelibly on concealed faces to indicate the natural bed and position in the finished work.

Laying and jointing

300 Reference panels

1. General: Complete areas of specified walling types and obtain approval of appearance before proceeding.
2. Walling type: Sample panel.
 - 2.1. Size: 900x750mm.

315 Adverse weather

1. General: Do not use frozen materials or lay on frozen surfaces.

2. Air temperature: Do not lay stones:
 - 2.1. In cement gauged mortars: At or below 3°C and falling or below 1°C and rising.
 - 2.2. In hydraulic lime:sand mortars: At or below 5°C and falling or below 3°C and rising.
3. Temperature of walling during curing: Above freezing until mortar hardened.
4. Newly erected walling: Protect at all times from:
 - 4.1. Rain and snow.
 - 4.2. Drying out too rapidly in hot conditions and in drying winds.

325 Laying generally

1. Stone selection: Do not use units with damaged faces or arrises.
2. Accuracy
 - 2.1. Courses: Level and true to line.
 - 2.2. Faces, angles and features: Plumb.
 - 2.3. Setting out: Achieve satisfactory junctions and joints with adjoining or built-in elements and components.
3. Absorbent stones: Dampen in warm weather to reduce suction. Do not soak.
4. Mortar joints
 - 4.1. Laying: Full bed of mortar with all joints and voids filled.
 - 4.2. Temporary distance pieces: Lead or stainless steel. Remove when mortar is sufficiently strong.
 - 4.3. Appearance: Neat and consistent.
5. Cleanliness: Keep facework clean. Rubbing and other abrasive or chemical cleaning methods to remove marks and stains not permitted.

330 Walling below ground level

1. Extent of facework below finished level of adjoining ground or external works (minimum): 150 mm.

340 Putlog scaffolding

1. Use: Not permitted.

360 Openings

1. Method of forming: Rigid templates, accurately fabricated to the required size.

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.

8 Perpend joint plastics weep holes

1. Manufacturer: LBS Builder's Merchants.
www.lbsbmonline.co.uk
 - 1.1. Product reference: Cavity Wall Weep Vents.
2. Locations: Through outer leaf, immediately above base of cavity at cavity trays, stepped dpcs and external openings. 75 mm above top of cavity fill at base of cavity.
3. Provision: At not greater than 900 mm centres at floor level and 450mm over lintels. Not less than two over openings.

15 Air bricks in external walling

1. Standard: To [BS 493](#), class 1.
2. Manufacturer: Rytons Building Products Ltd
[+44 \(0\)1536 511874](tel:+44(0)1536511874)
www.vents.co.uk
 - 2.1. Product reference: Rytons Multifix Air Brick.
3. Apertures: Rectangular hole.
4. Work sizes: To suit stone walling.
5. Material/ colour: Buff.
6. Placement: Built in with no gaps at joints.

17 Ventilation ducts in external walling

1. Description: To voids below block and beam floor.
2. Manufacturer: Rytons Building Products Ltd
[+44 \(0\)1536 511874](tel:+44(0)1536511874)
www.vents.co.uk
 - 2.1. Product reference: Periscope Underfloor Ventilator.
3. Location: North, east, west external walls at maximum 2000mm centres.
4. Additional requirements: Internal block dwarf walls to have regular voids to allow cross-ventilation.
5. Accessories: Rytons Multifix Air Brick, Buff.

18 Cavity closers

1. Description: To all openings in external wall, refer to detailed elevations.
2. Manufacturer: Kingspan or other equal approved.
 - 2.1. Product reference: Thermabate Cavity Closer.

26 Wall ties

1. Standard: To [BS 845-1](#).
2. Manufacturer: Leviaat
Home of Ancon, HALFEN, Helifix & Isedio+44 (0) 114 275 5224
www.leviat.com
 - 2.1. Product reference: Ancon Staifix STF6 or other equal approved.
3. Material/ finish: Stainless Steel Type 2 to DD140.
4. Sizes: To suit 50mm cavity.
5. Fixings: 4x30mm stainless steel spax screws.

28 Fixing ties in masonry cavity walls

1. Embedment in mortar beds (minimum): 50 mm.
2. Placement: Sloping slightly downwards towards outer leaf without bending. Drip centred in the cavity and pointing downwards.
3. Spacing: Staggered in alternate courses.
4. Horizontal centres: Below DPC maximum 450mm.
5. Vertical centres: Below DPC maximum 450mm.

37 Fixing ties in masonry cladding to timber frames

1. Embedment in mortar beds (minimum): 50 mm.
2. Placement: Slope downwards away from timber frame without bending.
3. Spacing
 - 3.1. Horizontal centres: To suit stud centres.
 - 3.2. Vertical centres: Maximum 450mm.
4. Provision of additional ties: Within 225 mm of reveals of openings and at not more than 300 mm centres vertically.

48 Damp-proof course

1. Manufacturer: Visqueen or other equal approved.
 - 1.1. Product reference: Contractor's choice.

52 Site formed flexible sheet cavity trays

1. Manufacturer: Visqueen or other equal approved.
 - 1.1. Product reference: Contractor's choice.

62 Site formed dpc/ cavity tray junctions/ stop ends

1. Three dimensional changes in shape: Form to provide a free draining and watertight installation.
2. Alternative use of preformed cloaks/ stop ends: Submit proposals.

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.

74 Installation of vertical dpcs

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

76 Movement joints with sealant

1. Joint preparation and sealant application: As section Z22.
2. Filler: Cellular polyethylene.
 - 2.1. Placement: Build in as work proceeds ensuring no projections into cavities and to correct depth to receive sealant system.
3. Sealant: Sika joint sealant for stone walls or other equal approved.
 - 3.1. Colour: To match adjoining masonry.

80 Coping units

1. Standard: To [BS 5642-2](#).
2. Material: Etherow Sandstone.
3. Manufacturer: Etherow Stone Ltd.
T: 01457 850 718
www.etherowstone.co.uk
 - 3.1. Product reference: Etherow Newland Buff Sandstone.
4. Dimensions: As shown on drawings.
5. Finish: Smooth. Cut to required sizes, refer to details. 2no. profiles (1 to terrace / 1 to south+east elevation)
6. Mortar for bedding/ jointing: Cement gauged as section Z21.

85 Prefabricated steel lintels

1. Standard: To [BS EN 845-2](#).
2. Manufacturer: Catnic or other equal approved.
 - 2.1. Product reference: CTF5 Timber Frame Cavity Wall.
3. Material/ finish: Pre-galvanised mild steel and powder coated black.
4. Sizes: 50-65mm cavity, 102mm outer leaf.
5. Placement: Bed on mortar used for adjacent work.

Ω End of Section

H62

Natural slating

To be read with preliminaries/ general conditions.

3 Roof slating

1. Manufacturer: [SIGA Natural Slate](#)
2. Contact details
 - 2.1. Address: Harding Way
St Ives
Cambridgeshire
PE27 3YJ
 - 2.2. Telephone: [+44 \(0\)1480 466777](tel:+441480466777)
 - 2.3. Web: www.sigaslate.co.uk
 - 2.4. Email: info@sigaslate.co.uk
3. Product reference: [SIGA Natural Slate](#)
4. Type: Blue Grey Textured - Natural, or other equal approved.
5. Size: Dependent upon availability.
6. Headlap: 98mm.
7. Fixing: Nail fixing, two nails each slate or as per manufacturer's recommendation.
8. Substrate: Trussed rafters at 600 mm centres.
9. Pitch: 35° above Main Hall, 30° to lower block.
10. Underlay: Tyvek Supro breather membrane felt underlay or equal approved.
 - 10.1. Direction: Parallel to eaves.
 - 10.2. Head-lap (minimum): 100 mm.
11. Counter battens
 - 11.1. Size: 50 x 25mm.
12. Battens
 - 12.1. Size: 50 x 25 mm.
13. Warranty: 75 years.

25 Underlay

1. Handling: Do not tear or puncture.
2. Laying: Maintain consistent tautness.
3. Vertical laps (minimum): 100 mm wide, coinciding with supports.
4. Fixing: Galvanized steel, copper or aluminium 20 x 3 mm extra large clout head nails.
5. Eaves: Where exposed, use an external grade (UV-resistant) underlay or a proprietary eaves support product.
6. Penetrations: Use proprietary underlay seals or cut underlay neatly.
7. Ventilation paths: Do not obstruct.

30 Battens/ Counterbattens

1. Timber: Sawn softwood.
 - 1.1. Standard: In accordance with [BS 5534](#), Annex D.
 - 1.2. Moisture content at time of fixing and covering (maximum): 22%.

2. **Preservative treatment:** As section Z12 and Wood Protection Association Commodity Specification C8.

32 Batten fixing

1. **Setting out:** Align parallel to ridge in straight horizontal lines to gauge of slates. Align on adjacent areas.
2. **Batten length (minimum):** Sufficient to span over three supports.
3. **Joints in length:** Butt centrally on supports. Joints must not occur more than once in any group of four battens on one support.
4. **Additional battens:** Provide where unsupported laps in underlay occur between battens.

35 Slate fixing

1. **General:** Fix slating and accessories to make the whole sound and weathertight at earliest opportunity.
2. **Setting out:** To true lines and regular appearance. Lay slates with slightly open (maximum 5 mm) butt joints. Align tails.
3. **Slate thickness:** Consistent in any one course. Lay with thicker end as tail.
4. **Ends of courses:** Use extra wide slates to maintain bond and to ensure that cut slates are as large as possible. Do not use slates less than 150 mm wide.
5. **Top course:** Head-nail short course to maintain gauge.
6. **Fixing:** Centre nail each slate twice through countersunk holes 20-25 mm from side edges.
 - 6.1. **Nails:** Copper clout to BS 1202-2 or aluminium clout to BS 1202-3.
 - 6.2. **Nail dimensions:** Determine in accordance with BS 5534 to suit site exposure, withdrawal resistance and slate supplier's recommendations.

42 Fire separating walls

1. **Separating walls:** Completely fill space between top of wall and underside of slates with mineral wool quilt to provide fire-stopping.
2. **Boxed eaves:** Completely seal air paths in plane of separating wall with wire reinforced mineral wool, not less than 50 mm thick, fixed to rafters and carefully cut to shape fire-resisting board and quilt to provide fire-stopping.

47 Eaves

1. **Ventilation components**
 - 1.1. **Manufacturer:** Contractor's choice.
 - 1.1.1. **Product reference:** Contractor's choice.
2. **Underlay support:** Contractor's choice.
 - 2.1. Continuous to prevent water retaining troughs.
3. **Gutter:** Dress underlay or underlay support tray to form drip into gutter.
4. **Undercourse and first course slates:** Fix with tails projecting 50 mm over gutter or to centre of gutter.

50 Dry verges

1. **Manufacturer:** SIG roofing or other equal approved.
2. **Product reference:** Continuous dry verge system for slates.
3. **Material:** PVC - black.

77 Mortar-bedded and mechanically fixed tile ridges

1. **Underlay:** Lay courses over ridge. Overlap (minimum) 150 mm.

2. Ridge tiles
 - 2.1. Manufacturer: SIGA or other equal approved.
 - 2.1.1. Product reference: Blue clay to match roof slates.
 - 2.2. Bedding: On mortar, continuous to edges and solid to joints.
 - 2.3. Fixing: Secure all ridge tiles to ridge boards or ridge tile fixing battens with self-sealing non-ferrous fixings.
 - 2.4. Gable end ridge tiles: Fill ends with mortar and slips of tiles finished flush.

86 Ventilator slates

1. Ventilator slates:
2. Manufacturer: SIGA or other equal approved.
 - 2.1. Product reference: Blue to match roof slates.
 - 2.2. Requirement: To ventilate above insulation.
 - 2.3. Positions: Duo-ridges, both sides, in third top tile course, 8no. total. 4 per pitched roof.
3. Comments: Flush with slating.

Ω End of Section

J40

Flexible sheet waterproofing/ damp proofing

To be read with preliminaries/ general conditions.

40 Self-adhesive bitumen damp proofing/ tanking

1. **Substrate:** Concrete Blockwork, Concrete Beam and Block Floor.
2. **Primer:** Type and application as recommended for purpose by membrane manufacturer - Visqueen Tanking Primer Solution is a bituminous solution for priming concrete, masonry or steel substrates before application of membranes.
3. **Standard:** To [BS EN 13969](#).
4. **Manufacturer:** Visqueen or other equal approved.
 - 4.1. **Product reference:** Visqueen SAM or other equal approved.
5. **Number of layers:** One.
6. **Thickness/ Gauge:** 1.5mm.
7. **Bonding:** Full. Smooth out to exclude air.
8. **Joints**
 - 8.1. **Surfaces to be joined:** Clean and dry beyond full width of joint.
 - 8.2. **Sealing:** Roll to fully adhere. All laps fully taped and sealed.

50 Workmanship generally

1. **Condition of substrate**
 - 1.1. Clean and even textured, free from voids and sharp protrusions.
 - 1.2. **Moisture content:** Compatible with damp proofing/ tanking.
2. **Air and surface temperature:** Do not apply sheets if below minimum recommended by membrane manufacturer.
3. **Condition of membrane at completion**
 - 3.1. Neat, smooth and fully supported, dressed well into abutments and around intrusions.
 - 3.2. Completely impervious and continuous.
 - 3.3. Undamaged. Prevent puncturing during following work.
4. **Permanent overlying construction:** Cover membrane as soon as possible.

Ω End of Section

J42

Single layer polymeric sheet roof coverings

To be read with preliminaries/ general conditions.

10A Warm deck roof covering

1. Description: To flat roof.
2. Substrate: 18mm OSB board on firrings on timber joists.
 - 2.1. Preparation: Joints taped in sheathing board.
3. Roof covering system:
 - 3.1. Manufacturer: [Bauder Ltd](#)
 - 3.1.1. Contact details
 - 3.1.1.1. Address: 70 Landseer Road
Ipswich
Suffolk
IP3 0DH
 - 3.1.1.2. Telephone: [+44 \(0\)1473 257671](tel:+44(0)1473257671)
 - 3.1.1.3. Web: www.bauder.co.uk
 - 3.1.1.4. Email: info@bauder.co.uk
 - 3.1.2. Product reference: [Bauder Single Ply Thermofol Warm Roof Membrane System Adhered](#)
 - 3.2. Primer: Activator-Primer (Canister) APR01 - Black
 - 3.3. Air and vapour control layer: TEC KSD Mica.
 - 3.4. Insulation
 - 3.4.1. Type: PIR FA Flatboard.
 - 3.4.2. Thickness: 120mm to meet u-value of 0.18W/m²k.
 - 3.4.3. Adhesive: As per manufacturer's recommendations.
 - 3.5. Waterproof membrane: Thermofol U15 FB.
 - 3.6. Attachment: As per manufacturer's recommendations.
 - 3.7. Accessories: Edge trims as per d3a details and manufacturer's recommendations.
 - 3.8. Green Roof: Refer to NBS J42/10B.

10B Green Roof

1. Roof covering system:
 - 1.1. Manufacturer: [Bauder Ltd](#)
 - 1.1.1. Product reference: [Bauder XF301 Sedum Blanket Extensive Green Roof System](#).
 - 1.2. Waterproofing (not Inverted Roof Systems): Bauder Single Ply Thermofol PVC Roof system (specified in J42).
 - 1.3. Drainage layer: Bauder SDF Mat Drainage and Protection Layer.
 - 1.4. Vegetation: Bauder XF301 Sedum System.
 - 1.5. Fertilizer: Bauder Xero Flor Organic Fertiliser.
 - 1.6. Maximum Slope: 25°.

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.

30 Joints in rigid board substrates

1. **Cover strip:** Lay centrally over substrate joints before laying air and vapour control layers or coverings. Adhere to substrate with bonding compound along edges only.

35 Laying air and vapour control layer

1. **Laying:** Fully bonded, flat and smooth.
2. **Side and head laps:** Seal using materials and method as membrane manufacturer's/ supplier's recommendations.
3. **Upstands, kerbs and other penetrations:** Enclose edges of insulation. Fully seal at abutment by bonding or taping.

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.

50 Adhesive bonding of waterproof membrane

1. **Setting out:** Perpendicular to the deck direction.
2. **Attachment:** Fully adhered on a continuous even coating of adhesive.
 - 2.1. Do not wrinkle or stretch.
3. **Surface condition at completion:** Fully sealed, smooth, weatherproof and free draining.

60 Perimeter details

1. **General:** Secure membrane at roof edge conditions, changes of plane, curb flashings, upstands to roof lights, etc. with mechanical fasteners.
2. **Upstands, edge trims, drips, kerbs, etc:** Form flashings from waterproof membrane material.
3. **Roof membrane:** Terminate and secure in accordance with manufacturer's/ supplier's recommendations.

Ω End of Section

K10

Gypsum board dry linings/ partitions/ ceilings

To be read with preliminaries/ general conditions.

15A Wall Lining Type A

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc WallBoard Duplex.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: B-s1, d0.
6. Thermal conductivity: 0.19W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.
 - 7.1. Primer/ Sealer: Primer to painted areas.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Other requirements: Taped and jointed.

To receive tiling in accessible WC as per manufacturer's recommendations.

Installed and finished in line with all manufacturer's recommendations.

15B Wall Lining Type B

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc FireLine.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: A2-s1, d0.
6. Thermal conductivity: 0.24W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.
 - 7.1. Primer/ Sealer: Primer to painted areas.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

15C Wall Lining Type C

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc FireLine Duplex.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: B-s1, d0.
6. Thermal conductivity: 0.24W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.

7.1. Primer/ Sealer: Primer to painted areas.

8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

15D Wall Lining Type D

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc WallBoard.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: A2-s1, d0.
6. Thermal conductivity: 0.19W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.
 - 7.1. Primer/ Sealer: Primer to painted areas.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

15E Wall Lining Type E

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc SoundBloc with Rockwool RWS 75mm acoustic quilt between studs.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: A2-s1, d0.
6. Thermal conductivity: 0.25W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.
 - 7.1. Primer/ Sealer: Primer to painted areas.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

15F Wall Lining Type F

1. Manufacturer: British Gypsum or other equal approved.
2. Product Reference: Gyproc Moisture Resistant.
3. Substrate: Timber studs at 600mm centres generally.
4. Board Thickness: 12.5mm.
5. Fire performance
 - 5.1. Reaction to fire: A2-s1, d0.
6. Thermal conductivity: 0.19W/mK.
7. Finishing: Skim coat plaster. Thistle MultiFinish or other equal approved.
 - 7.1. Primer/ Sealer: Primer to painted areas.
8. Accessories: Metal beads/ stops recommended by board manufacturer.

9. Other requirements: Taped and jointed.

Tiled areas to be prepared in line with manufacturer's recommendations.

Installed and finished in line with all manufacturer's recommendations.

50A Gypsum Ceiling Type A

1. Ceiling system manufacturer: British Gypsum or other equal approved.
 - 1.1. Product reference: CasoLine MF.
2. Structural soffit: Refer to details.
3. Ceiling
 - 3.1. Soffit height above finished floor level: 2400mm generally, refer to d3a drawing 3301 for detail on sloped areas.
4. Suspension system
 - 4.1. Hangers: As per manufacturer's recommendations.
5. Type recommended by board manufacturer screwed to sides of joists
 - 5.1. Hanger centres: As per manufacturer's recommendations.
 - 5.2. Primary grid centres: Gypframe MF7 support channel at 1200mm centres.
 - 5.3. Secondary grid centres: Gypframe MF5 ceiling section at 450mm centres.
6. Linings: Two layers 12.5mm Gyproc WallBoard.
7. Access: Access Panels as K10/51B.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Finishing: Skim coat plaster.
 - 9.1. Primer/ Sealer: Primer to painted areas.
10. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

Insulated plasterboard required to sloped sections of hall ceiling. 30mm vent gap required over insulated plasterboard below.

50B Gypsum Ceiling Type B - MR

1. Ceiling system manufacturer: British Gypsum or other equal approved.
 - 1.1. Product reference: CasoLine MF.
2. Structural soffit: Refer to details.
3. Ceiling
 - 3.1. Soffit height above finished floor level: 2400mm generally.
4. Suspension system
 - 4.1. Hangers: As per manufacturer's recommendations.
5. Type recommended by board manufacturer screwed to sides of joists
 - 5.1. Hanger centres: As per manufacturer's recommendations.
 - 5.2. Primary grid centres: Gypframe MF7 support channel at 1200mm centres.
 - 5.3. Secondary grid centres: Gypframe MF5 ceiling section at 450mm centres.
6. Linings: Two layers 12.5mm Gyproc Moisture Resistant Board.
7. Accessories: Metal beads/ stops recommended by board manufacturer.
8. Finishing: Skim coat plaster.
 - 8.1. Primer/ Sealer: Primer to painted areas.

9. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

50C Gypsum Ceiling Type C - FR

1. Ceiling system manufacturer: British Gypsum or other equal approved.
 - 1.1. Product reference: CasoLine MF.
2. Structural soffit: Refer to details.
3. Ceiling
 - 3.1. Soffit height above finished floor level: 2400mm generally.
4. Suspension system
 - 4.1. Hangers: As per manufacturer's recommendations.
5. Type recommended by board manufacturer screwed to sides of joists
 - 5.1. Hanger centres: As per manufacturer's recommendations.
 - 5.2. Primary grid centres: Gypframe MF7 support channel at 1200mm centres.
 - 5.3. Secondary grid centres: Gypframe MF5 ceiling section at 450mm centres.
6. Linings: Two layers 12.5mm Gyproc FireLine with 25mm stone mineral wool slabs (100kg/m3) laid over Gypframe MF5 Ceiling sections.
7. Access: Access Panels as K10/51A.
8. Accessories: Metal beads/ stops recommended by board manufacturer.
9. Finishing: Skim coat plaster.
 - 9.1. Primer/ Sealer: Primer to painted areas.
10. Other requirements: Taped and jointed.

Installed and finished in line with all manufacturer's recommendations.

51A Access Hatch

1. Fit lockable drop down loft access hatch in Kitchen (room 05), approx 562x762mm, Manthorpe GL280F or other equal approved. Fire rated 30 minutes.

51B Access Hatch

1. Supply and fit ceiling access hatch in Changing room (room 19) with drop down aluminium ladder, Youngmans deluxe 3063400 or other equal approved. Fire rated 30 minutes.

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.

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:** All sheets to be CE marked. 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.

69 Installing beads/ stops

1. **Cutting:** Neatly using mitres at return angles.
2. **Fixing:** Securely using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.
3. **Finishing:** After joint compounds/ plasters have been applied, remove surplus material while still wet from surfaces of beads exposed to view.

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.

75 New wet laid bases

1. **Dpcs:** Install under full width of partitions/ freestanding wall linings.
 - 1.1. **Material:** Bituminous sheet or plastics.

85 mineral wool insulation

1. **Fitting insulation:** Closely butted joints and no gaps. Use fasteners to prevent slumping or displacement.
2. **Services**
 - 2.1. **Electrical cables overlaid by insulation:** Size accordingly.
 - 2.2. **Ceilings:** Cut insulation around electrical fittings, etc.

87 Sealing gaps and air paths

1. **Sealing:** Apply sealant to perimeter abutments and around openings as a continuous bead with no gaps.
2. **Application:** To clean, dry and dust free surfaces as a continuous bead with no gaps.
 - 2.1. **Gaps greater than 6mm between floor and underside of gypsum board:** After sealing, fill with joint compound.

88 Fire-stopping at perimeters of dry lining systems

1. **Material:** Tightly packed mineral wool or intumescent mastic/ sealant.
2. **Application:** To perimeter abutments to provide a complete barrier to smoke and flame.

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.
 - 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.

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.

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.

Ω End of Section

K20

Timber board flooring/ sarking/ linings/ casings

To be read with preliminaries/ general conditions.

30 Timber board

1. **Description:** Slats to internal north and south hall walls (room 06) including window linings as drawing 7001.
2. **Manufacturer:** Silva Timber Products, or other equal approved.
3. **Product reference:** 44x20mm Siberian larch slats. SKU: SL SSBOARDS.
4. **Boards**
 - 4.1. **Wood species:** Siberian Larch.
 - 4.2. **Finished thickness:** 20mm.
5. **Treatment**
 - 5.1. **Standard:** To section Z12 and Wood Protection Association Commodity Specification:
 - 5.2. **Preservative treatment:**
 - 5.2.1. **Fire-retardant treatment:** Refer to NBS M60/10D.
 - 5.3. **Finishing:** Refer to NBS M60/10D.
6. **Fixing:** Secret fixings, as per manufacturer's recommendations.

Workmanship

41 Treated timber

1. **Surfaces exposed by minor cutting and/ or drilling:** Treat with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

50 Fixing boards

1. **Protection during and after installation:** Keep boards dry, clean and undamaged.
2. **Boards to be used internally:** Do not install until building is weathertight.
3. **Moisture content of timber supports at time of fixing boards:** Not more than 18%.
4. **Fixing:** Fix boards securely to each support to give flat, true surface free from undulations, lipping, splits and protruding fasteners.
5. **Timber movement:** Position boards and fixings to prevent cupping, springing, excessive opening of joints and other defects.
6. **Heading joints:** Tightly butted, central over supports and at least two boards widths apart on any one support.
7. **Edges:** Plane off proud edges.
8. **Exposed nail heads:** Neatly punch below surface.

Ω End of Section

K32

Panel cubicles/ duct and wall linings/ screens

To be read with preliminaries/ general conditions.

15 Duct/ wall lining panels

1. Description: Half height IPS to WCs 01-05, refer to D3A drawings 5203 and 5204.
2. Manufacturer: [Venesta Washroom Systems Ltd](#)
 - 2.1. Contact details
 - 2.1.1. Address: 1st Floor, Units 19-23
St George's Square
St Georges Centre
Gravesend
Kent
DA11 0TA
 - 2.1.2. Telephone: +44 (0)1474 353333
 - 2.1.3. Web: www.venesta.co.uk
 - 2.1.4. Email: marketing@venesta.co.uk
 - 2.2. Product reference: [FrameDuct ColourCoat](#)
3. Panels
 - 3.1. Panel thickness: 18mm nominal.
4. Edge treatment: 1mm matching or contrasting ABS.
5. Flashgaps: Melamine Faced 660kg/m³ grade moisture resistant Chipboard (MFC). 18mm thick nominal.
6. Panel / Flashgap Colour/Finish: From the Venesta standard colour range. To be agreed.
7. Site framing: Extruded aluminium base and headrail sections and rolled galvanised ultra steel wall channels.
8. Baserail: 100mm high powdercoated 2 part aluminium baserail to secure subframe units.
9. Subframe: Rolled galvanised ultra steel subframe with riveted aluminium bracing bars, fitted to site frame with nylon click-fix locator brackets.

Panel sections fitted to subframe with zinc plated steel clips with butt joints fitted with zinc plated steel dowel clips and mating nylon dowel-docks.
10. Included features: Hinged access panel using riveted linear-bearing hinges in zinc plated steel and nylon with riveted panel ratchets in zinc plated steel allowing 10 different opening heights.

Subframe tie-back system using M8 zinc plated steel tie-back rods and supporting bracketry in zinc plated steel.

Riveted slider brackets in nylon to allow the top panel to rise and fall where a mid-mounted panel is hinged.

Riveted push-pull clips where applicable to allow bottom panels to be removed.
11. Sanitary appliances: As specified in section N13.
12. Additional requirements: Half Height Ducts supplied with a Lid.

18 Samples

1. General: Prior to placing orders, submit representative samples covering all conditions; panels, edges, flashgaps, material and colour.

19 Control samples

1. **General:** Complete samples as part of finished work and obtain approval of appearance before proceeding.
2. **Types:** Duct panels to sample WC.
 - 2.1. **Locations:** Obtain instructions.

20 Installation

1. **Programming:** Do not install duct panels before building is weathertight, wet trades have finished their work, wall and floor finishes are complete, and the building is well dried out.
2. **Accuracy:** Set out to ensure frames and/ or panels and doors are plumb, level and accurately aligned.
3. **Modifications:** Do not cut, plane or sand prefinished components except where shown on drawings.
4. **Fixing:** Secure components using methods and fasteners recommended by the cubicle manufacturer. Prevent pulling away, bowing or other distortions to frames, panels and doors.
5. **Moisture and thermal movement:** Make adequate allowance for future movement.

Ω End of Section

K40

Demountable suspended ceilings

To be read with preliminaries/ general conditions.

10A Unit/ modular suspended ceilings

1. Manufacturer: [Zentia](#)
2. Contact details
 - 2.1. Address: Zentia
Kingsway South
Team Valley
Gateshead
United Kingdom
NE11 0SP
 - 2.2. Telephone: [+44 \(0\)800 371849](tel:+44(0)800371849)
 - 2.3. Web: www.zentia.com
 - 2.4. Email: ats@zentia.com
3. Product reference: [Dune eVo MAX](#)
4. Edge detail: Tegular.
5. Module size (w x l, nominal): 600 x 600 mm.
6. Description: Refer to D3A drawing 3301 for ceiling types and location.
7. Standard: To BS EN 13964.
8. Evidence of compliance: All ceilings kits to be CE marked. Submit Declaration of Performance (DoP).
9. Structural soffits: Timber joists.
10. Fire performance
 - 10.1. Reaction to fire: Euroclass A2-s1, d0.
11. Grid
 - 11.1. Suspension system: Install all hangers, fixings, primary supports, main runners, cross members, perimeter trims, splines, noggings, clips bracing, bridging, etc. necessary to complete the installation.
 - 11.2. Product reference: Prelude 24 XL2 / TLS.

Components - Not Used

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.
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. Mitre joints to corners.
 - 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. **Fasteners:** As manufacturer's recommendation.
 - 2.2. **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.

65 Integrated services

1. **General:** Position services accurately, support adequately. Align and level in relation to the ceiling and suspension system. Do not diminish performance of ceiling system.
2. **Small fittings:** Support with rigid backing boards or other suitable means. Do not damage or distort the ceiling.
 - 2.1. **Reaction to fire rating of additional supporting material:** Not less than ceiling material.
3. **Services outlets**
 - 3.1. **Supported by ceiling system:** Provide additional hangers.
 - 3.2. **Independently supported:** Provide flanges to support ceiling system.

66 Ceiling-mounted luminaires

1. **Support:** By ceiling system. Additional supports as required.
 - 1.1. **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.

67 Mechanical services

1. **Fan coil units**
 - 1.1. **Inlet and outlet grilles:** Trim ceiling grid and infill units to suit.
 - 1.2. **Space beneath:** Sufficient for ceiling system components.
 - 1.3. **Suspension and connections:** Permit accurate setting out and levelling of fan coil units.
2. **Air grilles and diffusers**
 - 2.1. **Setting out:** Accurate and level.
 - 2.2. **Linear air diffusers:** Retain in place with lateral restraint. Provide flanges for support of grid and infill units.
 - 2.3. **Grille/ diffuser ceiling joints:** Provide smudge rings and edge seals.
3. **Smoke detectors and PA speakers**
 - 3.1. **Ceiling infill units:** Scribe and trim to suit.
 - 3.2. **Flexible connections:** Required.
4. **Sprinkler heads:** Carefully set out and level.

Completion - Not Used

Ω End of Section

L10

Windows/ rooflights/ screens/ louvres

To be read with preliminaries/ general conditions.

25A Aluminium Windows Type A

1. Type: Slot, top hung top opening light - refer to external glazing schedule.
2. Manufacturer: Contractor's choice. Submit proposals for approval.
3. Finish as delivered: Polyester powder coating. RAL 7016.
4. Thermal performance (U-value maximum): 1.4 W/m²K.
5. Acoustic performance rating: Manufacturer's standard.
6. Glazing details: Insulating glass units incorporating low emissivity glass, argon filled. Safety glazing.
 - 6.1. Beading: Internal.
 - 6.2. Gaskets: Internal.
 - 6.3. Extrusions: Thermally broken.
7. Ironmongery/ Accessories:
 - Saa Folding Openers
 - Restrictors
 - Friction hinges
 - Locks
 - Non-insulated trickle vents
8. Fixing: Manufacturer's standard.
 - 8.1. Fastener spacing: When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.
9. Lintel: Catnic Timber Frame Cavity Wall CTF5 or other equal approved. Pre-galvanised mild steel and powder coated black.

To be temporarily propped at 1200mm centres until stonework has cured and wall ties have become effective.

25B Aluminium Windows Type B

1. Type: Top hung top opening light - refer to external glazing schedule.
2. Manufacturer: Contractor's choice. Submit proposals. Submit proposals for approval.
3. Finish as delivered: Polyester powder coating. RAL 7016.
4. Thermal performance (U-value maximum): 1.4 W/m²K.
5. Acoustic performance rating: Manufacturer's standard.
6. Glazing details: Insulating glass units incorporating low emissivity glass, argon filled.
 - 6.1. Beading: Internal.
 - 6.2. Gaskets: Internal.
 - 6.3. Extrusions: Thermally broken.
7. Ironmongery/ Accessories:
 - Saa Folding Openers
 - Restrictors
 - Friction hinges
 - Locks

- Non-insulated trickle vents
8. Fixing: Manufacturer's standard.
 - 8.1. Fastener spacing: When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

25C Aluminium Windows Type C

1. Type: Fixed.
2. Manufacturer: Contractor's choice. Submit proposals. Submit proposals for approval.
3. Finish as delivered: Polyester powder coating. RAL 7016.
4. Thermal performance (U-value maximum): 1.4 W/m²K.
5. Acoustic performance rating: Manufacturer's standard.
6. Glazing details: Insulating glass units incorporating low emissivity glass, argon filled.
 - 6.1. Beading: Internal.
 - 6.2. Gaskets: Internal.
 - 6.3. Extrusions: Thermally broken.
7. Ironmongery/ Accessories:
 - Non-insulated trickle vents.
8. Fixing: Manufacturer's standard.
 - 8.1. Fastener spacing: When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

25D Aluminium Windows Type D

1. Type: Fixed side light on left side, right side top hung top opening light, fixed lower panel. Refer to D3A drawing 6201 for layout.
2. Manufacturer: Contractor's choice. Submit proposals. Submit proposals for approval.
3. Finish as delivered: Polyester powder coating. RAL 7016.
4. Thermal performance (U-value maximum): 1.4 W/m²K.
5. Acoustic performance rating: Manufacturer's standard.
6. Glazing details: Insulating glass units incorporating low emissivity glass, argon filled. Safety glazing.
 - 6.1. Beading: Internal.
 - 6.2. Gaskets: Internal.
 - 6.3. Extrusions: Thermally broken.
7. Ironmongery/ Accessories:
 - Saa Folding Openers
 - Restrictors
 - Friction hinges
 - Locks
 - Non-insulated trickle vents
8. Manifestation: Required at heights indicated on D3A drawing 6201, detail to be agreed.
9. Fixing: Manufacturer's standard.
 - 9.1. Fastener spacing: When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.
10. Lintel: Catnic Timber Frame Cavity Wall CTF5 or other equal approved. Pre-galvanised mild steel and powder coated black.

To be temporarily propped at 1200mm centres until stonework has cured and wall ties have become effective.

25E Aluminium Windows Type E

1. **Type:** Top hung opening.

Wi.0.11 to incorporate full width solid panel and extract grille above, refer to elevations and d3a schedule 6201 for detail. Louvre and insulated panel to match window frame visually, PPC RAL 7016. To maintain thermal performance of unit.

2. **Manufacturer:** Contractor's choice. Submit proposals. Submit proposals for approval.
3. **Finish as delivered:** Polyester powder coating. RAL 7016.
4. **Thermal performance (U-value maximum):** 1.4 W/m²K.
5. **Acoustic performance rating:** Manufacturer's standard.
6. **Glazing details:** Insulating glass units incorporating low emissivity glass, argon filled.
 - 6.1. **Beading:** Internal.
 - 6.2. **Gaskets:** Internal.
 - 6.3. **Extrusions:** Thermally broken.
7. **Ironmongery/ Accessories:**
 - Saa Folding Openers
 - Restrictors
 - Friction hinges
 - Locks
 - Non-insulated trickle vents
8. **Fixing:** Manufacturer's standard.
 - 8.1. **Fastener spacing:** When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

25F Aluminium Windows Type F

1. **Type:** Fixed light on right side, left side to include upward opening sliding access hatch. Refer to D3A drawing 6201 for layout.
2. **Manufacturer:** Contractor's choice. Submit proposals. Submit proposals for approval.
3. **Finish as delivered:** Polyester powder coating. RAL 7016.
4. **Thermal performance (U-value maximum):** 1.4 W/m²K.
5. **Acoustic performance rating:** Manufacturer's standard.
6. **Fire performance**
 - 6.1. **Fire resistance:** TBC.
7. **Glazing details:** Insulating glass units incorporating low emissivity glass, argon filled.
 - 7.1. **Beading:** Internal.
 - 7.2. **Gaskets:** Internal.
 - 7.3. **Extrusions:** Thermally broken.
8. **Ironmongery/ Accessories:**
 - Saa Folding Openers
 - Restrictors
 - Friction hinges
 - Locks
 - Non-insulated trickle vents

9. **Fixing:** Manufacturer's standard.
 - 9.1. **Fastener spacing:** When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.
10. **Comments::** Refer to drawing 6201, sill to be level with internal sill for ease of access, passing items through. Detail to be agreed with window manufacturer.

25G Aluminium Windows Type G

1. **Type:** Refer to D3A drawing 6201 for layout.
2. **Manufacturer:** Contractor's choice. Submit proposals. Submit proposals for approval.
3. **Finish as delivered:** Polyester powder coating. RAL 7016.
4. **Thermal performance (U-value maximum):** 1.4 W/m²K.
5. **Acoustic performance rating:** Manufacturer's standard.
6. **Fire performance**
 - 6.1. **Fire resistance:** TBC.
7. **Glazing details:** Insulating glass units incorporating low emissivity glass, argon filled. Safety glazing.
 - 7.1. **Beading:** Internal.
 - 7.2. **Gaskets:** Internal.
 - 7.3. **Extrusions:** Thermally broken.
8. **Ironmongery/ Accessories:**
 - Non-insulated trickle vents
9. **Fixing:** Manufacturer's standard.
 - 9.1. **Fastener spacing:** When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

26 Window Execution

1. **Fixing of aluminium frames:** Fastener type by system manufacturer to suit the requirements of the installation. Fixings must ensure the frame is retained securely within the opening without damage or distortion.

Fastener spacings as manufacturers recommendation, appropriate to suit the frame type, size, installation requirements and substrate.

2. **Workmanship:** Generally.
 - 2.1. **Standard:** In accordance with [BS 8000-7](#) generally.
 - 2.2. **Integrity:** Window opening system installations must be wind and watertight under all conditions with full allowance made for deflections and other movements.
 - 2.3. **Materials: Compatibility:** No contact between glazing panes and/ or units and alkaline materials such as cement and lime.

Protection: Materials dry until fixed. Protect insulating glass units and plastics glazing units from the sun and other heat sources.

3. **Preparation:** Surrounds, rebates, grooves and beads: Clean and prepare safely before installing subframe or window units.

Dpc position: Ensure correct positioning in relation to window frames.

Surfaces inaccessible after installation: Prime or seal before fixing components.

4. **Protection of components:** In accordance with any product or installer warranties, and under conditions to prevent warp, twist, damage to component structure, fittings and surfaces, including

damage caused by exposure to temperature extremes and contact with deleterious materials.

Condition: Free from scratches, edge splits and other defects.

Preparation for use: Peel protective coverings carefully back from edges and trim off to facilitate glazing. Retain remainder in place until completion.

Corrosion protection:

Surfaces to be protected: Aluminium alloy components in contact with preservative-treated timber.

Protective coating: Two coats of bitumen solution, or a mastic-impregnated tape.

Timing of application: Before fixing components.

5. **Installation generally:** Installation: Into prepared openings.

Standard for all windows: In accordance with [BS 8213-4](#).

Aluminium windows: In accordance with [BS 8213-4](#).

Gap between frame edge and surrounding construction

Minimum: To manufacturers requirements to suit window type and surrounding construction.

Maximum: To manufacturers requirements to suit window type and surrounding construction.

Filler: Between window unit and reveal.

Distortion: Windows installed without twist or diagonal racking.

6. **Fixing window hardware:** Assemble and fix carefully and accurately using recommended fasteners and methods. Do not damage hardware and adjacent surfaces.

45B Rooflight To social space

1. **Manufacturer:** [VELUX Commercial](#)

1.1. **Contact details**

1.1.1. **Address:** VELUX Commercial
Woodside Way
Glenrothes
Fife
KY7 4ND

1.1.2. **Telephone:** [+44 \(0\) 1592 778916](tel:+441592778916)

1.1.3. **Web:** www.veluxcommercial.co.uk

1.1.4. **Email:** sales@veluxcommercial.co.uk

1.2. **Product reference:** [VELUX Modular Rooflight Monolight Fixed](#)

2. **Form:** Modular.

3. **Size:** 1500x1000mm.

4. **Product performance**

4.1. **Fire performance**

4.1.1. **Reaction to fire:** To EN 13501-1 Class B, S1 d0.

4.2. **Whole window U-value:** Ug, 1.1 W/m²K / Uw, 1 W/m²K.

5. **Frame**

5.1. **Material:** Aluminium.

5.2. **Finish**

5.2.1. **Coating:** Powder coated.

5.2.2. **Colour:** Manufacturer's standard traffic grey RAL 7043 TBC.

6. Glazing or infill
 - 6.1. Type: Toughened outer glass and laminated inner safety glass solution. Impact resistant as manufacturer's standard.
 - 6.2. Construction: Double glazed.
7. Integral kerb: Prefabricated, built-in wooden upstand.
8. Operation
 - 8.1. Type: HFC, Fixed.
 - 8.2. Control: Not required.
9. Accessories: Not required.
10. Execution: Installation of framed rooflights.

45C Rooflights To hall and multi-purpose

1. Manufacturer: [VELUX Company Ltd](#)
 - 1.1. Contact details
 - 1.1.1. Address: Woodside Way
Glenrothes
Fife
KY7 4ND
 - 1.1.2. Telephone: [+44 \(0\)1592 778225](tel:+441592778225)
 - 1.1.3. Web: www.velux.co.uk
 - 1.1.4. Email: sales@velux.co.uk
 - 1.2. Product reference: Centre-pivot Roof Window, Conservation Style. Impact resistant as manufacturer's standard.
2. Product performance
 - 2.1. Whole window U-value: 1.3 W/m²K.
3. Glazing or infill
 - 3.1. Composition: Argon filled cavity.
4. Hardware: Complete with relevant flashing, insulation and underfelt collars.
5. Operation
 - 5.1. Type: Manually operated.
6. Fixing features: Installation collars e.g. insulation, underfelt, vapour barrier.
7. Accessories: All with electrically operated blackout blinds.

Flashing kits required. EDN CK04 2500, single slate flash, recessed, black, 550x980.
8. Execution: Fixing of wood frames.
9. Internal frame and sash: White painted.
10. External cladding: Black aluminium; colour reference NCS S-9000-N (nearest RAL 9005) - Code 5.
11. Roof pitch: 2no. roof windows in multi-purpose room installed into 30 degree pitch.

2no. roof windows in hall installed into 35 degree pitch.
12. Window size code: CGL CK04 - 550mm wide by 978mm high.
13. Operation: 2no. electronically operated units to hall.

1no. electronically operated unit to hall.

65 Priming/ sealing

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

75 Sealant joints

1. **Sealant**
 - 1.1. **Manufacturer:** Contractor's choice.
 - 1.1.1. **Product reference:** Contractor's choice.
 - 1.2. **Application:** To perimeter of external frame.

Finish triangular fillets to a flat or slightly convex profile.

Where the joint is deep in comparison to its width, a backing strip should be used to fill the inner portion of the joint, leaving the correct joint depth to accommodate the sealant.

The sealant should have a minimum depth of 6 mm.

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.

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:
 - 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.

20A Internal Doors Type A

1. Description: Glazed single with glazed side panels.
2. Manufacturer: Lloyd Worrall Architectural Solutions.
01902 866 564
www.lloydworrall.co.uk/doorsets
enquiries@lloydworrall.co.uk
 - 2.1. Product reference: Solid core oak veneered internal doors and ironmongery as drawing 6001.
3. Facings: Hardwood veneer.
4. Lippings: 10mm hardwood exposed lippings to long edges.
5. Finish as delivered: Full factory finish.
6. Glazing/ Infill details: Toughened clear single glazing.
 - 6.1. Manifestation: Refer to d3a schedule 6001.
 - 6.2. Beading: Oak beading.
7. Ironmongery: Refer to ironmongery schedule.

Thumbturn required for escape in direction of travel to door Di.0.01.

8. Other requirements: Allow for softwood frames and stops for hanging doors and installing all ironmongery.

Lever handles to be 19mm return to door round bar, matte stainless steel finish.

Lloyd Worrall to provide door and ironmongery schedule, to be agreed, ahead of placing any orders.

20B Internal Doors Type B

1. Description: Wood flush single with glazed side panel.
2. Manufacturer: Lloyd Worrall Architectural Solutions.
01902 866 564
www.lloydworrall.co.uk/doorsets
enquiries@lloydworrall.co.uk
 - 2.1. Product reference: Solid core oak veneered internal doors and ironmongery as drawing 6001.

3. **Facings:** Hardwood veneer.
4. **Lippings:** 10mm hardwood exposed lippings to long edges.
5. **Finish as delivered:** Full factory finish.
6. **Glazing/ Infill details:** Toughened clear single glazing.
 - 6.1. **Manifestation:** Not required.
 - 6.2. **Beading:** Oak beading.
7. **Architraves:** MDF, 69x18, Ogee moulded and primed.
8. **Ironmongery:** Refer to ironmongery schedule.
9. **Other requirements:** Allow for softwood frames, stops, architraves etc and for hanging doors and installing all ironmongery.

Lever handles to be 19mm return to door round bar, matte stainless steel finish.

Lloyd Worrall to provide door and ironmongery schedule, to be agreed, ahead of placing any orders.

20C Internal Doors Type C

1. **Description:** Wood flush single.
2. **Manufacturer:** Lloyd Worrall Architectural Solutions.
01902 866 564
www.lloydworrall.co.uk/doorsets
enquiries@lloydworrall.co.uk
 - 2.1. **Product reference:** Solid core oak veneered internal doors and ironmongery as drawing 6001.
3. **Facings:** Hardwood veneer.
4. **Lippings:** 10mm hardwood exposed lippings to long edges.
5. **Finish as delivered:** Full factory finish.
6. **Glazing/ Infill details:** Toughened clear single glazed vision panel to doors Di.0.12 and Di.0.13, refer to schedule 6001.
 - 6.1. **Manifestation:** Not required.
 - 6.2. **Beading:** Oak beading.
7. **Fire resistance:** FD30S to doors Di.0.03, Di.0.06 and Di.0.13. Refer to drawing 6001.
8. **Architraves:** MDF, 69x18, Ogee moulded and primed.
9. **Ironmongery:** Refer to ironmongery schedule.
10. **Other requirements:** Allow for softwood frames, stops, architraves etc and for hanging doors and installing all ironmongery.

Lever handles to be 19mm return to door round bar, matte stainless steel finish.

Lloyd Worrall to provide door and ironmongery schedule, to be agreed, ahead of placing any orders.

20D Internal Doors Type D

1. **Description:** Wood flush double.
2. **Manufacturer:** Lloyd Worrall Architectural Solutions.
01902 866 564
www.lloydworrall.co.uk/doorsets
enquiries@lloydworrall.co.uk
 - 2.1. **Product reference:** Solid core oak veneered internal doors and ironmongery as drawing 6001.

3. **Facings:** Hardwood veneer.
4. **Lippings:** 10mm hardwood exposed lippings to long edges.
5. **Finish as delivered:** Full factory finish.
6. **Glazing/ Infill details:** Not applicable.
 - 6.1. **Manifestation:** Not required.
 - 6.2. **Beading:** Not required.
7. **Fire resistance:** FD30S to doors Di.0.07, Di.0.19 and Di.0.20. Refer to drawing 6001.
8. **Architraves:** MDF, 69x18, Ogee moulded and primed.
9. **Ironmongery:** Refer to ironmongery schedule.
10. **Other requirements:** Allow for softwood frames, stops, architraves etc and for hanging doors and installing all ironmongery.

Lever handles to be 19mm return to door round bar, matte stainless steel finish.

Lloyd Worrall to provide door and ironmongery schedule, to be agreed, ahead of placing any orders.

45A External Doors Type A

1. **Description:** Entrance single with glazed side panels.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.
 - 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Clear double glazed. Safety glazing required.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
5. **Ironmongery:** Refer to ironmongery schedule.

Ensure door is also lockable with key externally.

6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

45B External Doors Type B

1. **Description:** External single plant / store.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.
 - 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Not applicable.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
 - 4.2. **Beading:** Not required.
5. **Ironmongery:** Refer to ironmongery schedule.
6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

45C External Doors Type C

1. **Description:** External single to changing rooms.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.

- 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Toughened clear single glazed vision panel, refer to drawing 6001.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
5. **Ironmongery:** Refer to ironmongery schedule.
6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

45D External Doors Type D

1. **Description:** External single with glazed side panel / top opening light.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.
 - 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Clear double glazed. Safety glazing required.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
5. **Ironmongery:** Refer to ironmongery schedule.
6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

45E External Doors Type E

1. **Description:** Glazed sliding door to hall.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.
 - 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Clear double glazed. Safety glazing required.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
5. **Ironmongery:** Refer to ironmongery schedule.
6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

45F External Doors Type F

1. **Description:** External glazed double door.
2. **Manufacturer:** Contractor's choice to suit preferred supply chain. Submit proposals for approval.
 - 2.1. **Product reference:** Contractor's choice to suit preferred supply chain. Sub-contractor to produce detail drawings and schedules for review and to be agreed with client.
3. **Finish as delivered:** Polyester powder coated, colour RAL 7016 to be agreed.
4. **Glazing/ Infill details:** Clear double glazed. Safety glazing required.
 - 4.1. **Manifestation:** As drawing 6001. In accordance with approved doc K and [BS 8300-2](#).
5. **Ironmongery:** Refer to ironmongery schedule.
6. **Thermal performance (U-value maximum):** 1.4 W/m²K.
7. **Other requirements:** Refer to drawing 6001.

60 Shutter

1. **Description:** To wall between kitchen (room 05) and hall (room 06).
2. **Manufacturer:** Ascot Doors Limited
Britannia Way Industrial Park
Union Road, Bolton BL2 2HE
Tel: 01204 545 801
Fax: 01204 545 800
www.ascotdoors.co.uk
sales@ascotdoors.co.uk
 - 2.1. **Product reference:** Fire Roller Shutter Doors.
3. **Size:** 1500mm wide x1200mm high.
4. **Finish:** RAL paint finish to match wall. To be agreed.
5. **Performance:** Fire resistant and linked to fire alarm.
6. **Additional items:** Oak shelf required to hall side, extending past shutter edges 150mm, rounded corners.

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.

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

L30

Stairs/ ladders/ walkways/ handrails/ balustrades

To be read with preliminaries/ general conditions

10 Wood stairs

1. Description: Timber stair to hall store (room 07) between stud walls as drawing 5301.
2. Manufacturer: [Stairbox UK](#) or to suit contractor's preferred supply chain.
 - 2.1. Product reference: Contractor's choice.
3. Components
 - 3.1. Treads: 22mm MDF.
 - 3.2. Risers: 22mm MDF.
 - 3.3. Strings: 32mm Softwood.
 - 3.4. Newels: Pine (furniture grade).
 - 3.5. Handrails: Refer to d3a drawing 5301.

Wall mounted, 40mm diameter mild steel, primed and painted.

1 coat primer, 1 coat undercoat, 1 coat eggshell.
4. Moisture content at time of installation: 9-13%.
5. Finish as delivered: 1 coat knotting, 1 coat primer, 1 coat undercoat and 1 coat eggshell.
6. Other requirements: Flexible PVC stair edgings in granite as Gradus or other equal approved.

15 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:
 - 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.

55 Proprietary balustrades

1. Description: To Terrace.
2. Manufacturer: Q-railing
[+44 \(0\)1782 711676](#)
[www.q-railing.com](#)
 - 2.1. Product reference: Q-railing, Easy Glass® Prime full glass railing system for various mounting applications, for indoor and outdoor use consisting of channel profile, glass handrail profile, glass and accessories.
3. Loading requirement: 1.5kN/m.
4. Base Channel: Easy Glass Prime Top Mount channel:
 - 16.6960.000.18 (2500mm Length) – Brushed anodised Aluminium
 - 16.6960.500.18 (5000mm Length) – Brushed anodised Aluminium.
5. Glazing Infill: Suitable glazing thickness: 21.52mm toughened laminated, Sentry glass.

6. **Handrail profile:** Circular, grade 304 stainless steel - satin.
7. **Additional Items:** Rubber sets, inlay and Q-disc:
 - 19.6960.822.00 for 21.52mm toughened laminated glass (5 inlays).
8. **Samples:** Prototype mock-up.
9. **Third-party certification:** AbP certification, test certificate number P-2018-3056; Tested to [BS 6180](#) (KM 656489).

75 Priming/ Sealing/ Painting

1. **Surfaces inaccessible after assembly/ installation:** Before fixing components, apply full protective/ decorative treatment/coating system.

80 Installation generally

1. **Fasteners and methods of fixing:** To Section Z20.
2. **Structural members:** Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
3. **Temporary support:** Do not use stairs, walkways or balustrades as temporary support or strutting for other work.
4. **Applied features (finishes, inserts, nosings, etc.):** Substrates to be even, dry, sound and free from contaminants. Make good substrate surfaces and prepare/ prime as applied feature manufacturer's recommendations before application.

Ω End of Section

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.

91 Glass mirrors

1. **Description:** To WCs 01-05.
2. **Standard:** BS EN 1036-2.
3. **Mirror material:** Free from tarnishing, discoloration, scratches and other defects visible in the designed viewing conditions. Reflection undistorted.
 - 3.1. **Thickness:** 6 mm.
 - 3.2. **Backing:** Safety backed glass (EN 12600-2(Class B)2).
 - 3.3. **Edge treatment:** Polished, arrised edge.
4. **Background:** Softwood battens.
5. **Fixing method:** Concealed fixings, number and location as per manufacturer's recommendations. Pattress and sub-battens to be installed behind mirror.
6. **Installation:** Fixed accurately with sides vertical. Fixed securely without overtightening fasteners, to provide a flat surface giving a distortion free reflection.

95 Window manifestation

1. **Description:** To external windows and doors in locations identified on drawing 6201, for protection against impact in line with Approved Document K.
2. **Manufacturer:** Contractor's choice.
3. **Colour:** To be agreed with client.
4. **Design:** To be agreed with client.

5. **Application:** Carried out by a firm approved by the film manufacturer in accordance with manufacturer's recommendations.
6. **Technique:** Applied film.
7. **Installed film:** Fully adhered to the glass with no peeling, and free from bubbles, wrinkles, cracks or tears.
8. **Cleaning and maintenance instructions:** Submit copies.

Ω End of Section

M10

Cement based levelling/ wearing screeds

To be read with preliminaries/ general conditions.

4 Cement:sand levelling screeds

1. Substrate: Beam and block suspended floor.
2. Screed construction: Floating, as clause 40.
3. Thickness
 - 3.1. Nominal: 65mm, adjusted in individual rooms to suit finish thickness and maintain finished floor level.
 - 3.2. Minimum: 65mm.
4. Mix
 - 4.1. Proportions (cement:sand): To BS 8204-1.
5. Finish: Trowelled, as clause 75.
 - 5.1. To receive: Refer to floor finishes drawing and NBS specifications.
6. Other requirements: Include 25mm vertical insulation board at perimeter screed edge.

Underfloor heating pipes laid in screed.

Include movement joints in screed as required by BS 8204:1:2000.

Include for self levelling screed as required under vinyl flooring.

In assisted WC / Shower room 12, allow for dressing screed to fall to shower floor outlet.

Allow for fully recessed double socket floor service boxes:

- 2no. in room 06 Hall
- 1no. in room 09 Multi-purpose.

40 Floating construction

1. Insulation
 - 1.1. Type: 70mm Rigid Insulation, Kingspan K103 Floor Board for suspended beam and block floors, or other equal approved.
 - 1.2. Installation: Lay with tight butt joints. Continue up at perimeter abutments for full depth of screed.
2. Separating layer
 - 2.1. Type: Polyethylene sheet.
 - 2.2. Installation: Lay over insulation and turn up at perimeter abutments. Lap 100 mm at joints.

45 Aggregates and cements

1. Sand: To BS EN 13139.
 - 1.1. Grading limits: In accordance with BS 8204-1, Table B.1.
2. Coarse aggregates
 - 2.1. Standard: To BS EN 12620.
 - 2.2. Lightweight aggregates: In accordance with BS 8204-1, Annex A.
 - 2.3. Designation 4/10.
3. Cement

3.1. **Cement types:** In accordance with BS 8204-1, clause 5.1.3.

50 Mixing

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

55 Joints in levelling screeds

1. **Laying screeds:** Lay continuously using 'wet screeds' between strips or bays. Minimize defined joints.
2. **Daywork joints:** Form with vertical edge.

65 Strip movement joints

1. **Manufacturer:** Sike or other equal approved.
 - 1.1. **Product reference:** Contractor's choice.
2. **Installation:** Set securely into screed to exact finished level of floor. Extend joints through to substrate.
 - 2.1. **Secure fixing to substrate:** To manufacturer's recommendation.

75 Trowelled finish to levelling screeds

1. **Floating:** To an even texture with no ridges or steps.
2. **Trowelling:** To a uniform smooth surface, free from trowel marks and other blemishes, and suitable to receive specified flooring material.

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 period recommended by screed manufacturer..
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

M20

Plastered/ rendered/ roughcast coatings

To be read with preliminaries/ general conditions.

19 Proprietary cement gauged render

1. **Description:** Silicone TC15 onto CP Board - HP12.
2. **Location:** Refer to GA & detailed elevation sheets (36 & 37 series) and strip section D drawing 3902, detailing to soffit.
3. **Substrate:** Cement Particle Board, 12.5mm Knauf Aquapanel external board or other equal approved, onto 75x35mm treated horizontal battens on 50x50mm treated vertical battens.
4. **Manufacturer:** [K Rend \(Kilwaughter Minerals Ltd\)](#)
5. **Contact details**
 - 5.1. **Address:** Kilwaughter Minerals Ltd
9 Starbog Road
Larne
County Antrim
BT40 2TJ
 - 5.2. **Telephone:** +44 (0)28 2826 0766
 - 5.3. **Web:** www.k-rend.co.uk
 - 5.4. **Email:** sales@k-rend.co.uk
6. **Undercoats**
 - 6.1. **Thickness (excluding dubbing out and keys):** 6mm. Whilst the basecoat is still wet K Rend alkali resistant reinforcing mesh is embedded into the top third of the basecoat.

Rule to line and level. Leave with a float finish. Allow to cure for a minimum of 14 days.

7. **Primer:** K Rend Primer TC Applied by brush or roller. Allow to cure for a minimum of 24 hours prior to application of final finish coat.
8. **Final coat**
 - 8.1. **Product reference:** K Rend Silicone TC15 applied by hand.
 - 8.2. **Thickness:** 1.5mm.
 - 8.3. **Colour:** Linen to be agreed with client.
9. **Finish:** Textured.
10. **Total Thickness:** 8mm.
11. **Accessories:** Beads should be adhesively pasted, encapsulating the bead web using HP12 for stability.

Beads required

- K Bead 4mm Angle beads, elevated & set to minimum depth 8mm.
 - K Bead 4mm Movements beads, elevated & set to minimum depth 8mm.
 - K Bead 11mm Bellcast Beads located Dpc, elevated & set 14-16mm to front edge.
12. **Samples:** Provide a 2sqm test panel for inspection. Work should not commence until the appearance of the product is satisfactory. Applicators should be familiar with product water requirement, handling characteristics, setting and hardening times. These may vary according to background temperature and humidity. The test panel should be prepared well in advance of work commencing.
 13. **Comments:** Refer to all manufacturer's relevant literature / specifications.
 14. **Maintenance:** K Pro sealer required to the façade to reduce maintenance cycles.

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.

87 Application method

1. **General:** K Rend HP12 Base and K Rend Silicone TC15 should be applied strictly in accordance with the manufacturer's instructions and specifications and the relevant sections of [BS EN 13914-1:2016](#).
2. **Dubbing out:** All dubbing out coats necessary to correct any surface alignment should be carried out as a first step, prior to beading.
3. **Beading:** All beading should be fixed to the substrate & aligned correctly, prior to the application of render basecoats.
4. **Application:** K Rend HP12 Base, apply either by machine or by hawk and trowel. Recommended & good practice is additional 120 – 150mm wide stripes of K Mesh (alkali reinforcing mesh) adhesively fixed & spanning all perimeter board joints using HP 12. Whilst the HP12 Base is still wet K Rend alkali resistant reinforcing mesh is embedded onto the first 3mm pass of HP 12 basecoat. The sheets of mesh should be overlapped by a minimum of 100mm and diagonal patches (300mm x 200mm) should be installed at the corners of all openings such as windows and doors. Follow immediately with second 3mm pass (wet on wet), rule to line and level. Leave with a float finish. Allow to cure for a minimum 14 days. It is important to ensure that the background is fully dry moisture free and protected from rain, prior to the application of TC Primer.

All scaffold planks should be brushed, free of all cement dust, debris etc, prior to Primer & TC application.

K Rend Primer TC apply by brush or roller. Allow to cure for a minimum 24 hours prior to application of thin coat finish.

K Rend Silicone TC15, apply by hand in a continuous application, always working to a wet edge. Apply to the thickness of the largest aggregate. If possible, entire sections or elevations should be coated in a single operation using the same batch to avoid joint marks in the finish.

5. **Finishing:** Allow Silicone TC15 to take up slightly prior to rubbing up in a circular motion (using a plastic float or steel trowel) to create the final texture.

93 Curing and drying of render coatings

1. **Site Conditions:** K Rend products have a working temperature range of 5°C to 35°C. The product should not be applied in the rain or mist, at temperatures above 35°C or below 5°C or if exposure to frost is likely to occur during curing.

In sunny weather work should commence on the shady side of the building and be continued round following the sun to prevent the render drying out too quickly. In cold weather, if frost is forecast, work should stop in time to allow the material to set sufficiently to prevent frost damage. Curing times will vary accordingly to wind, temperature and humidity.

2. **Curing:** All areas should be protected from rain, mist and cold for at least 48 hours after the application of the product. Care should be taken to protect the completed render from drying out too rapidly due to direct sun or drying wind.

Ω End of Section

M40

Stone/ concrete/ quarry/ ceramic tiling/ mosaic

To be read with preliminaries/ general conditions.

5A Tiling Type A

1. Tiles: Tiling to be full height in accessible WC/Shower and around shower cubicle in shower room (room 13)
 - 1.1. Manufacturer/ Supplier: Domus Ceramics.
www.domusgroup.com
service@domusgroup.com
 - 1.1.1. Product reference: Conceptual.
 - 1.2. Colour: DMRC 01, to be approved by client. Samples required.
 - 1.3. Finish: Natural.
 - 1.4. Size: 450x450mm.
 - 1.5. Thickness: 9mm.
2. Background/ Base: Plasterboard lining.
 - 2.1. Preparation: All surfaces should be sound, clean, and dry, new surfaces must be fully dry. Where necessary, wash the surface to remove dirt, grease and powdery or dusty residues. Rinse with clean water and allow to dry.

Seal surfaces that remain powdery after thorough preparation with an appropriate plaster sealer. Where necessary, rub down and wipe off with a damp, lint free cloth to avoid dust. Any surface defects should be filled with the appropriate filler.
3. Thick bed fixing: Solid.
 - 3.1. Adhesive:
 - 3.1.1. Application: Float coat.
 - 3.1.2. Thickness: 4-6mm.
 - 3.1.3. Surface: Comb.
 - 3.2. Tiling: Generally.
 - 3.2.1. Back of dry tiles: Apply thin even coat of adhesive.
 - 3.2.2. Bond: Full.
4. Joint width: 3mm.
5. Grout: Mapei ULTRACOLOUR PLUS - 111 Silver Grey, to be agreed with client.
 - 5.1. Sequence: Grout when bed / adhesive has set sufficient to prevent disturbance of tiles.
 - 5.2. Joints: Free from dust and debris.
 - 5.3. Generally: Fill joints completely. No gaps.
 - 5.4. Profile: Concave.
 - 5.5. Polishing: When grout is hard, polish tiling with a dry cloth. Leave tile surfaces free from blemishes and residues.
6. Movement joints: Generally centre over joints in background. Extend through tiles and bedding to background.
 - 6.1. Location: Intermediate: At 3m centres.

Perimeter: At all perimeters including door frames.
7. Fixing:
 - 7.1. Setting out: Minimize number of cut tiles, maximize size and locate unobtrusively. Refer to d3a drawings 5201 and 5202 for setting out.

- 7.2. Tile cutting: Neat and accurate.
 - 7.3. Fixing: Fully adhere to substrate.
 - 7.4. Joints in tiling: True to line, continuous and without steps. Horizontal, vertical and aligned round corners.
8. Accessories: Gradus TC48 tile cap in silver to base of wall tiles, above coved vinyl skirting.

5B Tiling Type B

- 1. Tiles: Splashbacks to kitchen wash hand basin and WC 05 sink. Refer to d3a drawings 5001 and 5204.
 - 1.1. Manufacturer/ Supplier: CTD Tiles.
www.ctdtiles.co.uk
 - 1.1.1. Product reference: Metro Brick.
 - 1.2. Colour: White.
 - 1.3. Finish: Matt glazed ceramic tile.
 - 1.4. Size: 200x100mm.
 - 1.5. Thickness: 7mm.
- 2. Joint width: As spacer lugs.
- 3. Grout: White. Contractor's choice.

15 New backgrounds/ bases

- 1. Background drying times (minimum)
 - 1.1. Gypsum plaster: Four weeks.

30 Fixing generally

- 1. Colour/ shade: Avoid unintended variations within tiles for use in each area/ room.
 - 1.1. Variegated tiles: Mix thoroughly.
- 2. Adhesive: Compatible with background/ base.
- 3. Cut tiles: Neat and accurate.
- 4. Fixing: Provide adhesion over entire background/ base and tile backs.
- 5. Final appearance: Before bedding material sets, make adjustments necessary to give true, regular appearance to tiles and joints.
- 6. Deviation of surface: Measure from underside of a 2 m straightedge with 3 mm thick feet placed anywhere on surface. The straightedge should not be obstructed by the tiles/ mosaics and no gap should be greater than 6 mm, i.e. a tolerance of
- 7. Surplus bedding material: Clean from joints and face of tiles/ mosaics.

32 Mortar bedding

- 1. Bedding mix
 - 1.1. Cement: Portland to [BS EN 197-1](#), type CEM I/42.5.
 - 1.2. Sand for walls: Fine aggregate to [BS EN 13139](#).
 - 1.2.1. Grading designation: 0/2 (CP or MP) category 2 fines.
 - 1.3. Sand for floors: Fine aggregate to [BS EN 13139](#).
- 2. Grading designation: 0/4 (MP) category 1 fines and between 20-66% passing a 0.5 sieve.
- 3. Batching: Select from:
 - 3.1. Batch by weight.

- 3.2. **Batch by volume:** Permitted on the basis of previously established weight:volume relationships of the particular materials. Use accurate gauge boxes. Allow for bulking of damp sand.
4. **Mixing:** Mix materials thoroughly to uniform consistence. Use a suitable forced action mechanical mixer. Do not use a free fall type mixer.
5. **Application:** At normal temperatures use within two hours. Do not use after initial set. Do not retemper.

70 Grouting

1. **Sequence:** Grout when bed/ adhesive has set sufficient to prevent disturbance of tiles.
2. **Joints:** 6 mm deep (or depth of tile if less). Free from dust and debris.
3. **Grouting:** Fill joints completely, tool to profile, clean off surface. Leave free from blemishes.
4. **Profile:** Concave.
5. **Polishing:** When grout is hard, polish tiling with dry cloth.

Ω End of Section

M50

Rubber/ plastics/ cork/ lino/ carpet tiling/ sheeting

To be read with preliminaries/ general conditions.

15 Carpet tiling Type

1. Carpet tiles to BS EN 14041 and BS EN 1307
 - 1.1. Manufacturer: [Tarkett Ltd](#)
 - 1.1.1. Contact details
 - 1.1.1.1. Address: 4th Floor - Connect 38
1 Dover Place
Ashford
Kent
United Kingdom
TN23 1FB
 - 1.1.1.2. Telephone: [+44 \(0\)1233 746020](tel:+44(0)1233746020)
 - 1.1.1.3. Web: www.tarkett.co.uk
 - 1.1.1.4. Email: marketing@tarkett.com
 - 1.1.2. Product reference: [Desso Essence Carpet Tiles](#)
 - 1.2. Style: Tufted loop pile.
 - 1.3. Material: Polyamide, polyester fleece.
 - 1.4. Classification
 - 1.4.1. Standard: To [BS EN 1307](#).
 - 1.4.2. Third-party certification: ISO 9001, ISO 14001.
 - 1.4.3. Level of use class: To [BS EN 1307](#), class 33.
 - 1.5. Size: 500 x 500 mm.
 - 1.6. Colour and pattern: AA90 9507, to be agreed.
 - 1.7. Primary backing: Polyester fleece.
 - 1.8. Secondary backing: DESSO ProBase Polyver.
 - 1.9. Backing: Standard.
 - 1.10. Total thickness: 5.5 mm.
 - 1.11. Impact sound reduction: 24 dB.
 - 1.12. Flammability: Bfl-s1 (loose laid tested).

20A Multi-Use Vinyl

1. Flooring roll
 - 1.1. Material: Heterogeneous vinyl.
 - 1.2. Manufacturer: [Tarkett Ltd](#)
 - 1.2.1. Contact details
 - 1.2.1.1. Address: 4th Floor - Connect 38
1 Dover Place
Ashford
Kent
United Kingdom
TN23 1FB
 - 1.2.1.2. Telephone: [+44 \(0\)1233 746020](tel:+44(0)1233746020)
 - 1.2.1.3. Web: www.tarkett.co.uk

- 1.2.1.4. Email: marketing@tarkett.com
- 1.2.2. Product reference: [Omnisport Reference](#)
- 1.3. Colour: Classic Oak. To be agreed with client.
- 1.4. Width: 2m roll. 23m roll length.
- 1.5. Thickness: 6.5mm.

20B Safety Vinyl

- 1. Flooring roll
 - 1.1. Manufacturer: [Forbo Flooring Systems UK Ltd](#)
 - 1.1.1. Contact details
 - 1.1.1.1. Address: PO Box 1
High Holborn Road
Ripley
Derbyshire
DE5 3NT
 - 1.1.1.2. Telephone: [+44 \(0\)800 093 5258](tel:+44(0)8000935258)
 - 1.1.1.3. Web: www.forbo-flooring.co.uk
 - 1.1.1.4. Email: info.flooring.uk@forbo.com
 - 1.1.2. Product reference: [Safestep R12 Safety Vinyl](#)
 - 1.2. Standard: Heterogeneous PVC to [BS EN ISO 10582](#) and [BS EN 13845](#) and [14041](#).
 - 1.3. Use class: Class 34 Commercial very heavy, Class 43 light industrial.
 - 1.4. Slip potential
 - 1.4.1. Slip resistance value (SRV) (minimum)/ Pendulum test value (PTV) (minimum): DIN 51130, R12; [BS EN 13893](#), DS ≥0.30.; PTV Wet slider 96: ≥50.
 - 1.5. Width: 2000 mm.
 - 1.6. Thickness: Total: 2.0 mm; Wear layer: 0.7 mm
 - 1.7. Colour and pattern: 175922 concrete, to be agreed.
 - 1.8. Use in wet areas (to EN 13553): Yes.
 - 1.9. Finish:: PUR pearl surface finish.
 - 1.10. Adhesive: As per manufacturer's recommendations.
 - 1.11. Fabricated underlay: As per manufacturer's recommendations.
- 2. Other requirements: Cover formers for coved skirting to kitchen, WCs 01-05, shower and accessible WC/Shower room.

Gradus CF32P cover former.

Gradus PCS40 capping seal to suit 2mm vinyl thickness. Colour to match vinyl.

20C Studded Safety Vinyl

- 1. Flooring roll
 - 1.1. Manufacturer: [Polyflor Ltd](#)
 - 1.1.1. Contact details
 - 1.1.1.1. Address: PO Box 3
Radcliffe New Road
Whitefield
Manchester
M45 7NR
 - 1.1.1.2. Telephone: [+44 \(0\)161 767 1122](tel:+44(0)1617671122)

- 1.1.1.3. Web: www.polyflor.com
- 1.1.1.4. Email: info@polyflor.com
- 1.1.2. Product reference: [SaarFloor Noppe Stud Tiles \(Sandstone 140\)](#)
- 1.2. Standard: To [BS EN 12199](#).
- 1.3. Use class: To [BS EN ISO 10874](#), class 23, 34 and 43.
- 1.4. Thickness: 4 mm.
- 1.5. Colour and pattern: Sandstone. To be agreed.

25 Entrance Matting

- 1. Carpet underlay to BS 5808 and BS EN 14499
 - 1.1. Manufacturer: [Heckmondwike FB](#)
 - 1.1.1. Contact details
 - 1.1.1.1. Address: Wellington Mills
Huddersfield Road
Liversedge
West Yorkshire
WF15 7FH
 - 1.1.1.2. Telephone: +44 (0)1924 410544
 - 1.1.1.3. Web: www.heckmondwike-fb.co.uk
 - 1.1.1.4. Email: sales@heckmondwike-fb.co.uk
 - 1.1.2. Product reference: [Battleship - Carpet](#)
 - 1.2. Level of use class: To [BS EN 1307](#), class 33.
 - 1.3. Recycled content: 10%.
 - 1.4. Width: 4000 mm.
 - 1.5. Colour and pattern: Slate, to be agreed.
 - 1.6. Thickness: 10.5mm.

40 Laying coverings on new wet laid bases

- 1. Base drying aids: Not used for at least four days prior to moisture content test.
- 2. Base moisture content test: Carry out in accordance with [BS 5325](#), Annexe A or [BS 8203](#), Annexe A.
- 3. Commencement of laying coverings: Not until all readings show 75% relative humidity or less.

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.

70 Edgings and cover strips Type A

1. **Description:** To be used between:

Multi-use vinyl (M50/20A) and carpet tile (M50/15).
Multi-use vinyl (M50/20A) thresholds.
2. **Manufacturer:** [Gradus](#)
 - 2.1. **Contact details**
 - 2.1.1. **Address:** Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 2.1.2. **Telephone:** [+44 \(0\)1625 428922](tel:+441625428922)
 - 2.1.3. **Web:** www.gradus.com
 - 2.1.4. **Email:** imail@gradus.com
 - 2.2. **Product reference:** [Threshold Trim](#)
3. **Profile:** TH382. To be agreed.
4. **Material:** Aluminium.
5. **Colour:** Silver anodized.

70 Edgings and cover strips Type B

1. **Description:** To be used between:

Multi-use vinyl (M50/20A) and safety vinyl (M50/20B).
Safety vinyl (M50/20B) and studded vinyl (M50/20C).
2. **Manufacturer:** [Gradus](#)
 - 2.1. **Contact details**
 - 2.1.1. **Address:** Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 2.1.2. **Telephone:** [+44 \(0\)1625 428922](tel:+441625428922)
 - 2.1.3. **Web:** www.gradus.com
 - 2.1.4. **Email:** imail@gradus.com
 - 2.2. **Product reference:** [Design Clip](#)
3. **Base section**
 - 3.1. **Material:** Aluminium.
 - 3.2. **Size:** 2.70 m.
4. **Top insert**
 - 4.1. **Profile:** KA576. To be agreed.
 - 4.2. **Material:** Aluminium.
 - 4.3. **Finish:** F4 Silver Anodised.
 - 4.4. **Size:** 2.70 m.

70 Edgings and cover strips Type C

1. **Description:** To be used between:

Multi-use vinyl (M50/20A) and matting (M50/25).

2. Manufacturer: [Gradus](#)
 - 2.1. Contact details
 - 2.1.1.Address: Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 2.1.2.Telephone: [+44 \(0\)1625 428922](tel:+441625428922)
 - 2.1.3.Web: www.gradus.com
 - 2.1.4.Email: imail@gradus.com
 - 2.2. Product reference: [Threshold Trim](#)
3. Profile: TH383. To be agreed.
4. Material: Aluminium.
5. Colour: Silver anodized.

70 Edgings and cover strips Type D

1. Description: To be used at:

Multi-use vinyl (M50/20A) edge to screed.
Carpet tile (M50/15) edge to screed.
2. Manufacturer: [Gradus](#)
 - 2.1. Contact details
 - 2.1.1.Address: Chapel Mill
Park Green
Macclesfield
Cheshire
SK11 7LZ
 - 2.1.2.Telephone: [+44 \(0\)1625 428922](tel:+441625428922)
 - 2.1.3.Web: www.gradus.com
 - 2.1.4.Email: imail@gradus.com
 - 2.2. Product reference: [Finishing Trim](#)
3. Material: Aluminium.
4. Finish: Silver anodized.
5. Type: ACT81. To be agreed.

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

M60

Painting/ clear finishing

To be read with preliminaries/ general conditions.

10A Emulsion paint Type A

1. Description: To plasterboard and skim.
2. Manufacturer: [Dulux Trade, brand of AkzoNobel](#)
 - 2.1. Contact details
 - 2.1.1. Address: AkzoNobel Decorative Paints
Wexham Road
Slough
Berkshire
SL2 5DS
 - 2.1.2. Telephone: [+44 \(0\)333 222 7070](tel:+44%20333%2022%207070)
 - 2.1.3. Web: www.duluxtradepaintexpert.co.uk
 - 2.1.4. Email: project.support@akzonobel.com
 - 2.2. Product reference: [Dulux Trade Diamond Matt](#)
3. Composition: Acrylic copolymer.
4. Sheen: Matt.
5. Colour: To be agreed.
6. System code: D282 - New plaster/ plasterboard.
7. Form: Liquid.
8. Surfaces: Generally.
 - 8.1. Preparation: Thoroughly clean down the surfaces to remove all dirt grease and surface contaminants. Ensure surfaces are clean and dry.
9. Initial coats: As recommended by manufacturer, prime with 1 coat of Dulux Trade Diamond Matt of appropriate shade thinned up to 1 part clean water to 10 parts of product as appropriate.
 - 9.1. Number of coats: 1.
10. Finishing coats: Dulux Trade Diamond Matt of selected shade.
 - 10.1. Number of coats: 2 or 3, dependent on colour.

10B Emulsion paint Type B

1. Description: To plywood.
2. Manufacturer: [Dulux Trade, brand of AkzoNobel](#)
 - 2.1. Product reference: [Dulux Trade Quick Dry Satinwood](#)
3. Composition: Modified acrylic.
4. Sheen: Satin.
5. Colour: To be agreed.
6. System code: D1330 – Internal non resinous softwood/ Hardwood.
7. Form: Liquid.
8. Surfaces: Generally.
 - 8.1. Preparation: Thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Carefully remove any plaster or mortar deposits. Remove oils from surface by wiping with White Spirit. Abrade overall to remove any raised grain and round all sharp edges to a 3mm radius and *dust off. Apply two thin coats of an appropriate knotting solution

to all knots and resinous areas and allow to harden. Ensure all surfaces are fully dry before proceeding.

9. Initial coats: Dulux Trade Quick Dry Satinwood thinned up to 1 part clean water to 10 parts of product as appropriate.

9.1. Number of coats: 1.

10. Finishing coats: Dulux Trade Quick Dry Satinwood of selected shade.

10.1. Number of coats: 2.

10C Emulsion paint Type C

1. Description: To floor screed.

2. Manufacturer: [Dulux Trade, brand of AkzoNobel](#)

2.1. Product reference: [Dulux Trade High Performance Floor Paint](#)

3. Colour: Tideway. To be agreed.

4. System code: D8026 - Concrete. Previous coating: None (new).

5. Form: Liquid.

6. Capacity: 5 L.

7. Composition: Epoxy resin.

8. Sheen: Mid-sheen.

9. Surfaces: Generally.

9.1. Preparation: Scrape off any loosely adhering material i.e.; plaster splashes, loose concrete etc. Thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Where necessary, use a 'floor etchant' to remove surface laitance. Before painting, sweep and vacuum the floor to remove any surface dust. Ensure surfaces are clean and dry.

10. Initial coats: Dulux Trade High Performance Floor Paint of selected shade thinned up to 1 part clean water to 10 parts of activated paint as appropriate.

10.1. Number of coats: 1.

11. Finishing coats: Dulux Trade High Performance Floor Paint of selected shade.

11.1. Number of coats: 1.

10D Satin paint Type D - To timber slats

1. Description: To timber slats in hall.

2. Manufacturer: Thermoguard UK

Units B1, B2 Enterprise Park, Wigwam Lane, Hucknall, NG15 7SZ.
01142 768008

www.thermoguard.co.uk

technical@thermoguard.co.uk

2.1. Product reference: Contractor's choice.

3. Initial coats: Thermoguard fireproofing for interior wood (class 0).

3.1. Number of coats: 1.

4. Finishing coats: Thermoguard satin finish for interior wood.

4.1. Number of coats: 1.

10E Emulsion paint Type E

1. Description: To exposed pipework internally, external galvanised tubular handrails and steel handrails to changing room stairs.

2. Manufacturer: [Dulux Trade, brand of AkzoNobel](#)

3. Colour: To be agreed.

4. **Surfaces: Generally.**
 - 4.1. **Preparation:** Scrub the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, oil, grease etc. Rinse off with clean water and allow to dry.
5. **Initial coats:** Dulux Trade Metalshield Zinc Phosphate Primer applied to give a minimum wet film thickness of 80 microns giving a minimum dry film thickness of 40 microns.
 - 5.1. **Number of coats:** 1.
6. **Undercoats:** Dulux Trade Undercoat applied to give a minimum wet film thickness of 45 microns giving a minimum dry film thickness of 25 microns.
 - 6.1. **Number of coats:** 1.
7. **Finishing coats:** Dulux Trade Diamond Eggshell applied to give a minimum wet film thickness of 45 microns giving a minimum dry film thickness of 25 microns.
 - 7.1. **Number of coats:** 1.

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.

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.

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.

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.

Ω End of Section

N10

General fixtures/ furnishings/ equipment

To be read with preliminaries/ general conditions.

26 Benches

1. **Manufacturer:** Thrislington Cubicles
Prince William Avenue
Flintshire
CH5 2QZ
www.thrislingtoncubicles.com
sales@thrislingtoncubicles.com
UK: +44 1244 520 677.
 - 1.1. **Product reference:** Slatted bench seating.
2. **Size:** Corner unit in changing room 22, 3000mm along western wall x 2000mm along northern wall. 450mm high by 400mm deep.
3. **Base:** Wall to floor frame. Framework for wet application. 40mm, 304 grade stainless steel box section, welded construction, epoxy powder coated finish.
4. **Materials:** Slats - 12mm solid grade laminate, polished on all edges, fixed to bench framework using blind stainless fixing. 3 or 4 slats provided as standard dependent on depth.
5. **Colour:** Frame brushed stainless steel, slats in 12mm solid grade white oak laminate veneer from standard colour range TBC with client.

40 Clothes Hooks

1. **Description:** To locations denoted by 'CH' on d3a drawing 3102.
2. **Manufacturer:** Hewi
catalog.hewi.com/en
 - 2.1. **Product reference:** 477.90B060.
 - 2.2. **Material:** Matt polyamide.
 - 2.3. **Colour:** 97 - light grey, to be agreed.
3. **Dimensions:** To provide 12no. coat hooks per changing room. 24no. total.
4. **Carcass or frame**
 - 4.1. **Material:** Softwood rail, 150x22mm.
 - 4.2. **Finish/ Colour:** White painted.

96 Mailboxes

1. **Description:** To office (room 04), western wall. Exact location to be agreed.
2. **Standard:** To [BS EN 13724](#).
3. **Manufacturer:** Supplied by HardwareStore24, or other equal approved.
 - 3.1. **Product reference:** Wall pass-through letterbox.
4. **Size:** 305mm wide, 135mm tall. Depth varies dependent on wall, suitable for depths of 260-420mm.
5. **Material:** Powder-coated steel.
6. **Finish:** RAL 7016 matt.

Ω End of Section

N11

Domestic kitchen fittings, furnishings and equipment

To be read with preliminaries/ general conditions

10 Fitted base units and wall units

1. **Description:** Refer to d3a drawing 5001.
2. **Standard:** To [BS 6222-2](#) and -3, and [BS EN 14749](#).
3. **Manufacturer:** Howdens UK.
 - 3.1. **Product reference:** Clerkenwell gloss in white.
4. **Base units:** Kitchen
 - 3no. 1000mm, 2 drawer base units.
 - 1no. microwave / oven tower unit.
 - 1 no. corner base unit.
 - 1no. 1000mm sink base unit.
 - 1no. 600mm two drawer base unit.
 - 1no. 800mm two drawer base unit.
 - 1no. half height bridging wall units above hob.
 - 1no. 500mm three drawer base unit.
 - 1no. 1000mm three drawer base unit.

Control unit

- 1no. 1000mm 2 cupboard base unit.
5. **Wall units:** Kitchen
 - 3no. 600mm wall units.
 - 3no. 1000mm 2 cupboard wall units.
 - 1no. 500mm wall unit.

Control unit

- 1no. 1000mm 2 cupboard wall unit.
6. **Accessories:** Allow for all end panels, skirtings, corners and hidden lighting beneath wall mounted units.

20 Worktops

1. **Description:**
 - To kitchen - d3a drawing 5001.
 - To control unit - d3a drawing 7002.
2. **Manufacturer:** Howdens UK.
 - 2.1. **Product reference:** Howdens 3m x 22mm Square Edge Grey Oak Effect Laminate Worktop. WHT5260.
3. **Material:** Laminate facing, chipboard core.
4. **Dimensions:** 3000mm length, 616mm depth, 22mm thickness.
5. **Exposed edges:** Square edge.

25A Backboard

1. **Description:** To match kitchen worktop, refer to d3a drawing 5001.
2. **Manufacturer:** Howdens UK.
 - 2.1. **Product reference:** Howdens 3m x 600mm Textured Grey Oak Effect Laminate Backboard. WKP0297.
3. **Material:** Laminate facing, MDF core.
4. **Dimensions:** 3000mm length, 600mm height, 7mm thickness.

25B Splashback

1. **Manufacturer:** Contractor's choice, to suit kitchen design. Refer to d3a drawing 5001.
2. **Material:** Stainless steel.
3. **Dimensions:** 1000mm width to suit gap behind hob. Height, to underside of bridging unit above.

30 Sinks, taps, traps and wastes

1. **Sinks**
 - 1.1. **Standard:** To [BS EN 13310](#).
 - 1.2. **Manufacturer:** Lamona from Howdens UK.
 - 1.2.1. **Product reference:** Lamona Drayton 1.5 Bowl Reversible Inset Stainless Steel Kitchen Sink.
 - 1.3. **Configuration:** Double sink with left hand drainer.
 - 1.4. **Overall size:** 950mm length, 160mm depth, 508mm width.
 - 1.5. **Material:** Stainless steel.
 - 1.5.1. **Colour and finish:** Matt.
2. **Tap/ chainstay/ overflow holes:** One tap hole, centre.
3. **Taps:** Mixer.
 - 3.1. **Manufacturer:** Lamona from Howdens UK.
 - 3.1.1. **Product reference:** Lamona Arno Polished Chrome Swivel Mixer Tap, TAP2421.
 - 3.2. **Operation:** Single lever handle.
 - 3.3. **Material:** Polished chrome.
4. **Wastes:** Plug and chain.
 - 4.1. **Standard:** To [BS EN 274-1](#), -2 and -3.
 - 4.2. **Manufacturer:** Contractor's choice.

40 Appliances

1. **Item:** Refer to d3a drawing 5001:
 - Lamona LAM4607 Built In Electric 60cm Black Double Oven.
 - LAM8675 A Lamona Premium Fully Integrated Dishwasher 60cm.
 - LAMONA HJA6132 Integrated White Fridge.
 - Lamona LAM6251 Integrated 50/50 White Fridge Freezer.
 - Lamona LAM7300 Built In 38cm Stainless Steel Microwave.
 - Lamona LAM1902 80cm Black Electric Induction Hob.
2. **Manufacturer:** Lamona Appliances from Howdens UK.

Execution

65 Installation generally

1. Fixings and adhesives: As section Z20.

70 Installing units and worktops

1. General: Well fitting, stable and secure.

75 Installing appliances

1. Connections: Provide to electric and hot and cold water services.

80 Installing sinks, taps and wastes

1. Water supply: To [BS EN 806-2](#) and [-4](#).
2. Taps
 - 2.1. Fixing: Secure, watertight seal with the appliance.
 - 2.2. Positioning: Hot tap to left of cold tap as viewed by the user of the appliance.
3. Wastes
 - 3.1. Bedding: Waterproof jointing compound.
 - 3.2. Fixing: With resilient washer between appliance and backnut.

90 Installing trims and mouldings

1. Lengths: Un-jointed between angles or ends of runs.
2. Angle joints: Mitred.

Ω End of Section

N13

Sanitary appliances and fittings

To be read with preliminaries/ general conditions.

10A WC pans and flushing arrangements To WC 01-05

1. **Standard:** To Defra WC suite performance specification or equivalent approved by the relevant water company.
2. **Type:** Wall-hung, concealed cistern.
3. **Pan:** Suspended.
 - 3.1. **Standards:** To [BS EN 997](#), Class 2.
 - 3.2. **Manufacturer:** Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
 - 3.2.1. **Product reference:** Concept Freedom Wall Hung Raised Height WC Pan.
4. **Material:** Vitreous china, white.
5. **Seat:** Ideal standard, E7917 Concept, seat and cover, slow close, white plastic.
6. **Pan connector:** To [BS 5627](#), colour to match pan.

E0060 support brackets secured to floor within the duct, WC fixed to support bracket with bolts supplied and bolts screwed to back wall with bracket. Joint sealed with waterproof sealant.

7. **Cistern:** Concealed cistern. Contractor's choice.
8. **Flushing arrangement:** To suit cistern.
 - 8.1. **Manufacturer:** Ideal Standard.
 - 8.1.1. **Product reference:** Conceala modern cistern lever.
 - 8.2. **Operating control:** Lever handle, chrome plated.

10B WC pans and flushing arrangements To Accessible WC

1. **Standard:** To Defra WC suite performance specification or equivalent approved by the relevant water company.
2. **Type:** Close-coupled cistern.
3. **Pan:** Back to wall.
 - 3.1. **Standards:** To [BS EN 997](#), Class 2.
 - 3.2. **Manufacturer:** Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
 - 3.2.1. **Product reference:** S0440(HY) Contour 21+ raised height back-to-wall rimless toilet bowl with raised horizontal outlet and anti-microbial glaze.
4. **Material:** Vitreous china, white.
5. **Seat:** Black plastic.
6. **Pan connector:** Colour to match pan.

7. **Cistern:** S3900(01) Group low level cistern 6 litre single flush syphon side supply and internal overflow, cp lever (fittings reversible).
8. **Flushing arrangement:** Cistern manufacturer's standard.
 - 8.1. **Manufacturer:** Ideal Standard.
 - 8.1.1. **Product reference:** S4516 Spatula lever.
 - 8.2. **Operating control:** Lever handle, chrome-plated.
9. **Accessories:** Refer to d3a drawing 5201:
 - 2no. S6360(AC) Contour 21 hinged support rail 80 x 35mm diameter, Doc M Compliant.
 - 2no. S6454(AC) Contour 21 vertical grab rail straight 60cm long x 35mm diameter.

14 Doc M Shower Package

1. **Manufacturer:** Disabled Toilets UK.
 - 1.1. **Product reference:** Designer Doc M Disabled Electric Shower Pack - DTUK723.
2. **Finish/ colour**
 - 2.1. **Seat, folding:** White slimline with drainage hole. 120kg maximum user weight.
 - 2.2. **Back support:** Manufacturer's standard.
 - 2.3. **Shower curtain rail:** 1200 x 1200mm white shower rail.
 - 2.4. **Shower curtain:** 1800 x 2000mm white shower curtains (pair).
 - 2.5. **Handrails and grab bars:** 3no. chrome 620mm grab rails and 2no. chrome 800mm hinged support arms.
3. **Shower fittings:**
 - 8.5kW electric shower.
 - White 8.5kW push button shower valve.
 - LED illuminated, tactile button controls.
 - WRAS Approved.
 - White handshower with 2m flexible shower hose.
 - White 1066mm riser rail with handshower bracket.

25A Sinks

1. **Description:** To WC 01-05.
2. **Manufacturer:** Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
 - 2.1. **Product reference:** CoE8031(01) Concept Cube Handrinse Washbasin.
3. **Size:** 400mm wide by 360mm deep.
4. **Material:** Fine Fireclay.
5. **Colour:** White.
6. **Tap holes:** One tap hole, centre.
7. **Taps:** Ideal Standard - B8263(AA) Avon 21 Push Button self closing mixer.
 - 7.1. **Material:** Chromium plated.
8. **Traps:** S8950 Trap 1¼" plastic P for use with cloakroom pedestal.
 - 8.1. **Standards:** To [BS EN 274-1](#), [-2](#) and [-3](#).

8.2. **Manufacturer:** Ideal Standard.

9. **Accessories:** E0157 Wall fixing set.

25B Sink

1. **Description:** Wash hand basin to kitchen.
2. **Type:** Stainless steel, wall mounted.
3. **Manufacturer:** Franke Sissons Ltd
Washroom solutions
+44 (0)1246 458900
www.franke.co.uk
 - 3.1. **Product reference:** D20162N Washbasin.
4. **Material:** Satin finish chrome nickel steel.
5. **Tap holes:** Two tap holes.
6. **Taps:** From Franke range to suit wash hand basin.
7. **Traps:**
 - 7.1. **Standards:** To [BS EN 274-1](#), -2 and -3.

25C Sink

1. **Description:** To Accessible WC.
2. **Type:** Adjustable.
3. **Manufacturer:** Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
 - 3.1. **Product reference:** S0641 Care Plus washbasin mounting bracket, manually operated, vertical adjustment.

S2252 Portman 21 washbasin 50cm, 1 taphole, no overflow or chainstay hole.

S0649 Care Plus flexible 70cm feed and 70cm waste system for vertical adjustment only.

A6698 Contour 21+ 1 hole thermostatic basin mixer, single sequential lever with flexible tails.

31 Baby Change

1. **Manufacturer:** Washware Essentials Ltd
Kestrel Court
Harbour Road
Portishead
Bristol
BS20 7AN
Tel: 01275 390603
2. **Product reference:** BCU1 Wall Mounted Baby Changing Table Unit.

40 Shower units

1. **Manufacturer:** Triton Showers
Shepperton Park, Triton Road
Nuneaton
Warwickshire

CV11 4NR
02476 372 222
www.tritonshowers.co.uk

- 1.1. Product reference: Amore electric shower.
- 1.2. Finish: Brushed steel.
- 1.3. Power rating: 8.5 kW.

43 Shower trays

1. Manufacturer: Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
 - 1.1. Product reference: L5090 Simplicity low profile flat top tray inc waste.
 - 1.2. Accessories: L6309 Riser kit for trays up to 1200mm, includes legs and panels.
2. Size: 900x760mm.
3. Material: Acrylic capped ABS lightweight atone resin.
4. Colour: White.
5. Door: L6208EO Ideal Standard Synergy Infold Door to suit 900mm wide tray.

50 Coat Hooks

1. Description.: 2no. to accessible WC + Shower (Room 12).

2no. to WC 01-05 doors.
2. Manufacturer: Contractor's choice.
 - 2.1. Product reference: Door mounted individual coat hook.
3. Material: Brushed stainless steel.

59 Paper towel dispensers

1. Description: To accessible WC + Shower (room 12).
2. Manufacturer: Franke Sissons Ltd
Washroom solutions
+44 (0)1246 458900
www.franke.co.uk
 - 2.1. Product reference: RODX600 - RODAN paper towel dispenser. Wall mounted.
3. Material: Satin finish chrome nickel steel.

60 Toilet paper holders

1. Manufacturer: Franke Sissons Ltd
Washroom solutions
+44 (0)1246 458900
www.franke.co.uk
 - 1.1. Product reference: RODX678 - RODAN toilet roll holder.
2. Type: Wall mounted.
3. Material: Satin finish chrome nickel steel.

61 Towel holders

1. Description: To shower room. Refer to d3a drawing 5202 for locations. 2no.

D3 Associates Ltd
14-01-2022

2. **Manufacturer:** Ideal Standard(UK) Ltd.
The Bathroom Works
National Avenue
Kingston Upon Hull
HU5 4HS
England
01482 346461
2.1. **Product reference:** N1387(AA) Concept towel rail.
3. **Type:** Wall mounted.
4. **Material:** Chromium plated.

62A Soap dispensers

1. **Description:** To WCs 01-05, ensure sufficient space between base of dispenser and sink.
2. **Manufacturer:** Franke Sissons Ltd
Washroom solutions
+44 (0)1246 458900
www.franke.co.uk
2.1. **Product reference:** RODX619 - RODAN soap dispenser.
3. **Type:** Wall mounted, as d3a drawing 5203.
4. **Size:** 200x140x132mm (WxHxD).
5. **Material:** Satin finish chrome nickel steel.

62B Soap dispensers

1. **Description:** To accessible WC + Shower (Room 12).
2. **Manufacturer:** Dolphin Solutions
+44 (0)1424 202224
www.dolphinsolutions.co.uk
2.1. **Product reference:** BC823 - Dolphin Stainless Steel Liquid Soap Dispenser.
3. **Type:** Wall mounted.
4. **Material:** Stainless steel.

63 Glass mirrors

1. **Description:** Full width mirrors to WCs 01-05, refer to d3a drawings 5203 and 5204.
2. **Manufacturer:** [Pilkington](#) or other equal approved.
2.1. **Product reference:** Refer to NBS L40/91.

64 Hand dryers

1. **Manufacturer:** [Intelligent Facility Solutions](#)
 - 1.1. **Contact details**
 - 1.1.1. **Address:** Intelligent Facility Solutions Ltd.
7 Riverside Court
Don Road
Sheffield
South Yorkshire
S9 2TJ
 - 1.1.2. **Telephone:** +44 (0)114 3540047
 - 1.1.3. **Web:** www.intelligenthanddryers.com
 - 1.1.4. **Email:** sales@ihdryers.co.uk
 - 1.2. **Product reference:** DFVP02

2. Electrical supply
 - 2.1. Power rating: 0.6–2 kW.
3. Body
 - 3.1. Ingress protection (minimum): To [BS EN 60529](#), IPX1.

68 Sealant for pointing

1. Standard: To [BS EN ISO 11600](#).
 - 1.1. Class: F20 HM.
2. Type: Silicone.
 - 2.1. Manufacturer: Contractor's choice.
 - 2.1.1. Product reference: Contractor's choice.
3. Colour: White.

69 Support rails and grab bars

1. Description: To locations shown on d3a shower drawing 5202 and accessible drawing 5201.
2. Manufacturer: Ideal Standard.
 - 2.1. Product reference: A9126 IOM Grab rail 300mm.
3. Type: Straight rail.
4. Material: Chrome plated.
5. Colour: Silver.
6. Size: 300mm length.

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: Nonferrous 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.

75 Installing cisterns

1. Cistern operating components: Obtain from cistern manufacturer.
2. Inlet and flushing valves: Match to pressure of water supply.
3. Internal overflows: Into pan, to give visible warning of discharge.
4. External overflows: Fix pipes to falls, and locate to give visible warning of discharge. Agree position.

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

N91

External signage and interpretation

Signage outline

120A Bespoke signage system Perspex Letters

1. **Description:** External, above main entrance.
2. **Function:** Identification, to show 'Community Centre'. Content and colour to be agreed with client prior to ordering.
3. **Sign type:** Individual Perspex letters, refer to detailed and GA elevations, D3A drawing series 36 and 37.
4. **Materials:** Perspex.
5. **Thickness:** 6mm.
6. **Requirements:** Secret fixed to render. Stainless steel fixings.
7. **Electrical supplies:** Not required.

120B Bespoke signage system Wall mounted notice board

1. **Description:** To external wall of office.
2. **Manufacturer / supplier:** Notice Me
T: 0208 581 1067
W: www.noticeme.org.uk
3. **Product reference:** 1000 Professional.
4. **Product dimensions:** 1000(h)x1350(w)x75(d)mm.
5. **Products/ Integral features:**
 - Vandal-resistant glazing
 - Waterproof elastomer seals.
 - Exceptional robust quality and engineering
 - White magnetic display
 - Anti-condensation vents
 - Fully mitred corners
 - Anti-wear, anti-warp door hinge
 - Guaranteed for 5 years
6. **Materials:** Silver anodised aluminium frame.
7. **Electrical supplies:** To be agreed, allow for lighting as electrical engineer's drawings / specification.
8. **Additional requirements:** Form wall recess in external render and provide head and base PPC aluminium RAL 7016 drip flashings as required.
9. **Installation requirements:** The board should be mounted on a solid wall or wood board. The board has a pre-drilled back board. Screws are not supplied. Use screws of the appropriate type & length to the wall type.

System performance - Not Used

Products - Not Used

Materials - Not Used

Fabrication

505 Signage samples

1. Sign type: External perspex letters.
 - 1.1. Action: Submit sample.
 - 1.1.1. Timing: Prior to ordering and to be signed off by client.

Execution/ erection/ installation - Not Used

Completion - Not Used

Ω End of Section

P12

Fire-stopping systems

General

10 Fire-stopping to individual services penetrations:

1. **Resistance to fire:** All penetrations through walls, partitions, ceilings and floors to be suitably fire-stopped to maintain integrity of system.

Products - Not Used

Execution

61 Third-party-certified installer

1. **Certification:** For the technical competency of the installer of the evidence of compliance with a third-party installation certification scheme.
2. **Acceptable evidence:** FIRAS Installer Certification.

62 Workmanship generally

1. **Gaps:** Seal gaps between building elements and services, to provide fire resistance and resist the passage of smoke.
2. **Adjacent surfaces:** Prevent overrun of sealant or mortar on to finished surfaces.

Completion - Not Used

Ω End of Section

P20

Unframed isolated trims/ skirtings/ sundry items

To be read with preliminaries/ general conditions.

35A Medium-density fibreboard SK01 & SK02

1. Description: SK01 & SK02. Refer to D3A drawing 3401.
2. Manufacturer: Contractor's choice.
3. Standard: To BS EN 622-5.
 - 3.1. Type: MDF.
 - 3.2. Formaldehyde class: To BS EN 622-1, Class E1.
4. Height: 144mm.
5. Thickness: 18mm.
6. Edges: Pencil round.
7. Finish: 1 coat primer, 1 coat undercoat and 1 coat eggshell. White painted.

35B Medium-density fibreboard SK03

1. Description: SK03. Refer to D3A drawing 3401.
2. Manufacturer: Contractor's choice.
3. Standard: To BS EN 622-5.
 - 3.1. Type: MDF.
 - 3.2. Formaldehyde class: To BS EN 622-1, Class E1.
4. Height: 144mm.
5. Thickness: 15mm.
6. Edges: Square edge.
7. Finish: 1 coat primer, 1 coat undercoat and 1 coat eggshell. White painted.

80 Installation generally

1. Joinery workmanship: As section Z10.
2. Methods of fixing and fasteners: As section Z20 where not specified.
3. Straight runs: To be in one piece, or in long lengths with as few joints as possible.
4. Running joints: Location and method of forming to be agreed where not detailed.
5. Joints at angles: Mitre, unless shown otherwise.
6. Position and level: To be agreed where not detailed.

Ω End of Section

P31

Holes, chases, covers and supports for services

Clauses

20 Notches and holes in structural timber

1. **General:** Avoid if possible.
2. **Sizes:** Minimum needed to accommodate services.
3. **Position:** Do not locate near knots or other defects.
4. **Notches and holes in same joist:** Minimum 100 mm apart horizontally.
5. **Notches in joists**
 - 5.1. **Position:** Locate at top. Form by sawing down to a drilled hole.
 - 5.2. **Depth (maximum):** 0.15 x joist depth.
 - 5.3. **Distance from supports:** Between 0.1 and 0.2 x span.
6. **Holes in joists**
 - 6.1. **Position:** Locate on neutral axis.
 - 6.2. **Diameter (maximum):** 0.25 x joist depth.
 - 6.3. **Centres (minimum):** 3 x diameter of largest hole.
 - 6.4. **Distance from supports:** Between 0.25 and 0.4 of span.
7. **Notches in roof rafters, struts and truss members:** Not permitted.
8. **Holes in struts and columns:** Locate on neutral axis.
 - 8.1. **Diameter (maximum):** 0.25 x minimum width of member.
 - 8.2. **Centres (minimum):** 3 x diameter of largest hole.
 - 8.3. **Distance from ends:** Between 0.25 and 0.4 of span.

30 Pipe sleeves

1. **Material:** Match pipeline.
2. **Sleeves:** Extend through full thickness of wall or floor. Position accurately.
 - 2.1. **Clearance around service (maximum):** 20 mm or diameter of service, whichever is the lesser.
 - 2.2. **Installation:** Bed solid.

40 Sealing around services

1. **Sealing material:** Expanding foam or Intumescent sealant dependent on location. Refer to D3A fire strategy.
2. **Method:** .Completely fill gaps with sealant and finish neatly.
3. **Requirements:** Moisture vapour and airtight, fire resistance where required.

Ω End of Section

Q10

Kerbs/ edgings/ channels/ paving accessories

To be read with preliminaries/ general conditions.

35 Drainage channel systems with gratings

1. Manufacturer: [ACO Technologies plc](#)
 - 1.1. Contact details
 - 1.1.1.Address: ACO Technologies plc
ACO Business Park
Hitchin Road
Shefford
Bedfordshire
SG17 5TE
 - 1.1.2.Telephone: [+44 \(0\)1462 816666](tel:+441462816666)
 - 1.1.3.Web: www.aco.co.uk
 - 1.1.4.Email: technical@aco.co.uk
 - 1.2. Product reference: [Deckline 125](#)
2. Channel: Contractor's choice from Aco range to complete design.
3. Grating: Heelsafe channel grating to suit system. Galvanised. Load class C250.

40 Laying kerbs, edgings and channels

1. Standard: To [BS 7533-101](#).
2. Cutting: Neat and accurate and without spalling. Form neat junctions.
 - 2.1. Long units' (450 mm and over) minimum length after cutting: 300 mm.
 - 2.2. Short units' minimum length after cutting: The lower of one third of their original length or 50 mm.
3. Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.
4. Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

80 Regularity of paved surfaces

1. Maximum undulation of (non-tactile) paving surface: 3 mm.
 - 1.1. Method of measurement: Under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface).
2. Difference in level between adjacent units (maximum)
 - 2.1. Joints flush with the surface: Twice the joint width (with 5 mm max difference in level).
 - 2.2. Recessed, filled joints: 2 mm.
 - 2.2.1.Recess depth (maximum): 5 mm.
 - 2.3. Unfilled joints: 2 mm.
3. Sudden irregularities: Not permitted.

Ω End of Section

Q25

Slab/ brick/ sett/ cobble pavings

To be read with preliminaries/ general conditions

11 Laying pavings – general

1. Appearance: Smooth and even with regular joints and accurate to line, level and profile.
2. Falls: To prevent ponding.
3. Bedding of paving units: Firm so that rocking or subsidence does not occur or develop.
 - 3.1. Bedding/ Laying course: Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
4. Slopes: Lay paving units upwards from the bottom of slopes.
5. Paving units: Free of mortar and sand stains.
6. Cutting: Cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

16 Levels of paving

1. Permissible deviation from specified levels (generally)
 - 1.1. Generally: ± 6 mm.
2. Height of finished paving above features
 - 2.1. At gullies: +6 to +10 mm.
 - 2.2. At drainage channels and kerbs: +3 to +6 mm.

18 Regularity of paved surfaces

1. Maximum undulations in the surface of pavings (except tactile paving surfaces) under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface): 3 mm.
2. Joints between paving units or utility access covers
 - 2.1. Joints flush with the surface: difference in level between adjacent units to be no more than twice the joint width (with a 5mm max difference in level).
 - 2.2. Recessed, filled joints: difference in level between adjacent units to be no greater than 2 mm; the recess to be no deeper than 5 mm.
 - 2.3. Unfilled joints: difference in level between adjacent units to be no greater than 2 mm.
3. Sudden irregularities: Not permitted.

21 Protection

1. Cleanliness: Keep paving clean and free from mortar droppings, oil and other materials likely to cause staining.
2. Materials storage: Do not overload pavings with stacks of materials.
3. Handling: Do not damage paving unit corners, arrises, or previously laid paving.
4. Mortar bedded pavings: Keep free from traffic after laying:
5. Access: Restrict access to paved areas to prevent damage from site traffic and plant.

52 Concrete flags

1. Standard: To [BS EN 1339](#).
 - 1.1. Manufacturer: [Tobermore](#)
 - 1.1.1. Contact details

- 1.1.1.1. Address: 2 Lisnamuck Road
Tobermore
Co L'derry
BT45 5QF
- 1.1.1.2. Telephone: +44 (0)844 800 5736
- 1.1.1.3. Web: www.tobermore.co.uk
- 1.1.1.4. Email: NBSdataplatfrom@tobermore.co.uk
- 1.1.2. Product reference: [Mayfair Paving Flags](#)
- 1.2. Physical properties
 - 1.2.1. Colour: Silver. To be agreed.
 - 1.2.2. Finish: Hard wearing surface layer with a minimum layer of 4 mm and >390 kg/m³ cement.
 - 1.2.3. Dimensions and associated tolerances
 - 1.2.3.1. Nominal sizes: 600 x 600 x 50 mm.
- 1.3. Granite content: Not less than 57% of granite aggregate in surface layer for Silver and Graphite.
- 1.4. Efflorescence: Minimum 12 hour vapour curing to significantly reduce the possibility of efflorescence.
- 1.5. Slip resistance: Extremely low (>75 USRV).

74 Laying flag and slab paving – sand/ fine aggregate laying course and jointing

- 1. Standard: In accordance with [BS 7533-4](#).
- 2. Laying course
 - 2.1. Nominal thickness after compaction: 70mm. Refer to BDN drawing 200.
- 3. Joint width: 2-5 mm.

Ω End of Section

R10

Rainwater drainage systems

To be read with preliminaries/ general conditions.

11 Galvanised steel gutters

1. Manufacturer: [Lindab Ltd](#)
 - 1.1. Contact details
 - 1.1.1.Address: Units 9 & 10 Carousel Way
Riverside Business Park
Northampton
NN3 9HG
 - 1.1.2.Telephone: +44 (0)1604 788350
 - 1.1.3.Web: www.lindab.co.uk
 - 1.1.4.Email: sales@lindab.co.uk
 - 1.2. Product reference: [Rainline Magestic Galvanised Gutters \(Half-round - 100 mm.\)](#)
2. Profile: Half round.
3. Size (nominal): 100mm.
4. Construction
 - 4.1. Upper skin
 - 4.1.1.Material: Steel.
 - 4.1.2.Finish: Galvanized.
 - 4.2. Core
 - 4.2.1.Material: Steel to [BS EN 12056-3](#).
5. Integral accessories: Selection of brackets, joints, outlets, stop ends and overflow protectors are available dependent on gutter size and shape.
6. Type: 100 mm, half-round, 2 m length (R2100MG). 100 mm, half-round, 3 m length (R3100MG). As required to complete design.
7. Joints: RSK gutter joint with rubber seal, 100 mm (RSK100MG).
8. Outlets (snap fit): OMV/OK gutter outlet, 100 x 75 mm (OMVA100MG), to suit downpipes.
9. Angles: As required to complete design.
10. Stop ends: RG self-locking stop end, 100 mm (RG100MG).
11. Brackets: As per manufacturer's recommendations.

31 Galvanised steel pipework

1. Manufacturer: [Lindab Ltd](#)
 - 1.1. Product reference: [Rainline Magestic Galvanised Rainwater Downpipe \(Rainwater Downpipe - 75 mm.\)](#)
2. Material: Steel.
3. Section: Round.
4. Size (nominal): 75mm.
5. Finish and colour
 - 5.1. Finish: Galvanized.
 - 5.2. Colour: Self-coloured.
6. Integral accessories: Selection of brackets, sliding pipes, diverters, hoppers, shoes, connectors, branches, access pipes, offsets and intermediate pipes are available dependent on size.

7. **Shoes:** BUTK drain shoes, 75 mm (BUTK75MG).
8. **Brackets:** As manufacturer's recommendations.

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.

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.

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

Ω End of Section

Z11

Purpose-made metalwork

Products

310 Materials generally

1. **Grades of metals, section dimensions and properties:** To appropriate British Standards. When not specified, select grades and sections appropriate for the purpose.
2. **Prefinished metal:** May be used if methods of fabrication do not damage or alter appearance of finish, and finish is adequately protected.
3. **Fasteners:** To appropriate British Standards and, unless specified otherwise, of same metal as component being fastened, with matching coating or finish.

Fabrication

515 Fabrication generally

1. **Contact between dissimilar metals in components:** Avoid.
2. **Finished components:** Rigid and free from distortion, cracks, burrs and sharp arrises.
 - 2.1. **Moving parts:** Free moving without binding.
3. **Corner junctions of identical sections:** Mitre.

520 Cold formed work

1. **Profiles:** Accurate, with straight arrises.

527 Welding

1. **Preparation**
 - 1.1. **Joint preparation:** Clean thoroughly.
 - 1.2. **Surfaces of materials that will be self-finished and visible in the completed work:** Protect from weld splatter.
2. **Jointing**
 - 2.1. **Joints:** Fully bond parent and filler metal throughout with no inclusions, holes, porosity or cracks.
 - 2.2. **Strength requirements:** Welds to achieve design loads.
 - 2.3. **Complex assemblies:** Agree priority for welding members to minimize distortion caused by subsequent welds.
 - 2.4. **Tack welds:** Use only for temporary attachment.
 - 2.5. **Jigs:** Provide to support and restrain members during welding.
 - 2.6. **Lap joints:** Minimum 5 x metal thickness or 25 mm, whichever is greater.
 - 2.7. **Weld terminations:** Clean and sound.

Finishing

745 Preparation for application of coatings

1. **General:** Complete fabrication, and drill fixing holes before applying coatings.
2. **Paint, grease, flux, rust, burrs and sharp arrises:** Remove.

Ω End of Section

Z12

Preservative/ flame-retardant treatment

To be read with preliminaries/ general conditions.

110 Treatment application

1. **Timing:** After cutting and machining timber, and before assembling components.
2. **Processor:** WPA Benchmark-accredited for the specified treated components.

120 Commodity specifications

1. **Standard:** In accordance with the Wood Protection Association (WPA) publication 'Code of practice: Industrial Wood Preservation'.

210 Flame-retardant treatment

1. **Description:** To timber slats in hall.
2. **Standard:** In accordance with the Wood Protection Association (WPA) publication 'Industrial flame retardant treatment of wood and wood-based panel products'.
3. **Solution type:** INT 1.
 - 3.1. **Manufacturer:** Thermoguard or other equal approved.
 - 3.1.1. **Product reference:** Thermoguard fireproofing (class 0) and 1 coat Thermoguard Satin Finish.
4. **Moisture content of wood**
 - 4.1. **At time of treatment:** As specified for the timber/ component at time of fixing.
 - 4.2. **After treatment (INT 1 only):** Timber to be re-dried slowly at temperatures not exceeding 60°C to minimize distortion and degradation.

620 Making good to flame-retardant treatment on site

1. **Flame-retardant:** Compatible with off-site treatment.
2. **Application:** In accordance with flame-retardant manufacturer's recommendations.

Ω End of Section

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](#).

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.

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.

640 Fixing cramps

1. **Cramp positions:** Maximum 150 mm from each end of frame sections and at 600 mm maximum centres.
2. **Fasteners:** Fix cramps to frames with screws of same material as cramps.
3. **Fixings in masonry work:** Fully bed in mortar.

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.

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

Z21 Mortars

Cement gauged mortars

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.

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 - Not Used

Ω End of Section

Z22 Sealants

Products

310 Joints

1. **Description:** Movement Joint to Stone.
2. **Primer, backing strip, bond breaker:** Types recommended by sealant manufacturer.

Execution

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



Specification created using NBS Chorus