

**Park House Isles of Scilly
Conversion of Care Home to flats
For Tender Purposes**

Issue 01 August 2025

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GENERAL NOTES

To be read in conjunction with M&E, Structural, Fire Report, Acoustic reports, and associated drawings. The reports contain further guidance, particularly the acoustic report.

Preliminaries and preambles are described in the tender documentation prepared by Currie Brown. These shall prevail over this specification in case of discrepancy. The contractor shall draw discrepancies to the contract administrator and the Architect.

THE PROJECT

The existing building comprises and 2 storey care home. Proposals are to convert this to three self-contained flats at ground floor, one self-contained flat at first floor and a 4-bedroom flat share. The building will on completion, provide accommodation (including short term) for key workers.

THE EXISTING BUILDING

As the existing building has been in occupation during design stage and the contractor is advised that opening-up work shall be required prior to removal of walls and any anomalies shall be reported back to the contract administrator for review by the engineer and architect.

Accordingly, the notes below describe the building as it is **believed** to be constructed. These notes arise from current consultant site visits and local builder observations in the recent refurbishment of the building in 2023.

The existing building is believed to be constructed c1970 and comprises traditional cavity walls of concrete block rendered with a granite faced elevation onto Parade Street. The Cavity is believed to be uninsulated.

The ground floor is understood to comprise 100mm ground bearing slab with 50mm screed. The first floor is believed to be concrete, construction unknown but a pot and beam system common around 1970 may be a possibility.

Internal ground floor walls inspected by the engineer suggest these are solid loadbearing running lengthwise. First floor partitions are solid and not loadbearing.

The roof structure is timber truss/cut roof, sarking felt and tiled. Cold roof vented at eaves.

Existing windows and doors are UPVC d/glazed and believed to be circa 1990's with external glazing beads. These are not Part Q PAS 24 compliant for a change of use. A handful are new in 2023.

STATUTORY APPROVALS

Planning – The project has planning approval with Conditions reference P25/026/COU.

Building Regulations – The project has been submitted to Cornwall Council. Prior discussions with Building Control have confirmed the following parts of the Building Regulations Approved Documents shall apply arising from this material change of use.

The design and construction of the development will be carried out in accordance with the current Building Regulations, British Standards and Codes of Practice.

A – Structure	G1- Cold water supply
B1- Means of warning and escape	G2- Water efficiency
B2- Internal fire spread (linings)	G3 (1 AND 3)- Hot water supply and systems
B3- Internal fire spread (structure)	G4- Sanitary conveniences and washing

	facilities
B4(2) Roofs- External fire spread	G5- Bathrooms
B5- Access and facilities for the fire service	G6- Food preparation areas
C1(2)-Resistance to contaminants	H1- Foul drainage
C2(C)-Resistance to moisture (interstitial)	H6-Solid waste storage
E1-Protection against sound from other parts of the building and adjoining buildings	L1- Conservation of fuel and power
E2-Protection against sound within a dwelling house	P1-Electrical safety- dwellings
E3-Reverberation in the common internal parts of buildings containing flats or rooms for residential purposes	Q1-Security -dwellings
F1- Means of ventilation	S2-EV Charging. Dwellings resulting from a material change of use

Fire Strategy

Compliance with AD Part B1 is described in the accompanying fire strategy report prepared by Steve Robinson Fire Consultant and illustrated on the proposed floor plans.

Acoustics

A fuller acoustic inspection and sound testing shall be undertaken in November 2025 when Park House is understood to be vacant. The proposals herein may be subject to change through a post tender addendum.

Principal Designer

KTA Architects shall act as PD under CDM 2015 and for building regulations under BSA 2022.

MATERIALS AND WORKMANSHIP- GENERALLY

This is a general clause that applies to all the works executed. The contractor shall for all individual work sections undertake works in accordance with manufacturers recommendations. The work shall be executed in accordance with the relevant current British and European Standards (where EN standards still prevail) and Codes of Practice whether named in this document and unless stated otherwise. In the absence of an appropriate Code of Practice, the work shall be required to conform to current good practice.

All materials shall comply with all relevant British and European Standards (where EN standards still prevail) current at the time of development and are to be incorporated into the works in accordance with the manufacturer's written recommendations. The works shall comply with but not be limited to, the latest edition of:

Building Regulations
CDM and BSA Regulations
Relevant CIBSE guidance
IEE Wiring Regulations

Prohibited new materials in the works

- High alumina cement in structural elements.
- Wood wool slabs in permanent formwork to concrete or in structural elements
- Calcium chloride in admixtures for use in reinforced concrete
- Asbestos or asbestos containing products
- Naturally occurring aggregates for use in reinforced concrete which do not comply with BS 8110:1985 and naturally occurring aggregates for use in concrete which do not comply with the provisions of BS 882:1992
- Calcium silicate bricks or tiles

- g) Lead or any products containing lead for use in connection with drinking water
- h) Urea formaldehyde foam or materials which may release formaldehyde in quantities which may be hazardous or an irritant. Reference should be made to the limits set from time to time by the Health and Safety Executive
- i) Materials which are generally comprised of mineral fibres, either man-made or naturally occurring, which have a diameter of 3 microns or less and a length of 200 microns or less or which contain any fibres not sealed or otherwise stabilized to ensure that fibre migration is prevented
- j) Polyisocyanurate or polyurethane foam (used as principal insulation materials) unless a fire consultant deems acceptable in relation to combustibility or surface spread of flame if part of a thermal drylining plasterboard product. (Note – PIR insulated drylining has been approved for use provided it is over clad with a staggered layer of plasterboard.
- k) Polytetrafluoroethylene (PTFE), except the use of PTFE tape on threaded joints to pipework
- l) Glass-reinforced cement
- m) Galvanised wall ties, fixings, angles or supports where used in structural elements exposed externally.
- n) Other substances or materials, which prior to specification for use in a project have been publicised by the Building Research Establishment as being deleterious to health and safety or the durability of buildings or environmentally hazardous in the circumstances in which they are used.

DEMOLITION AND STRIP OUT WORK

Comprehensive strip out to shell is shown on the demolition drawings. This includes but shall not be limited to the removal off-site of existing masonry/knock outs of plasterboard partitions, removal of all internal door sets and linings, carpets (to be set aside for reuse), sheet floor finishes, suspended lay in grid ceilings, ground floor ceilings, all wiring and fire detection(full rewire), some limited reuse of electric radiant wall heaters, removal of all existing wet plumbing and wastes, (SVPs retained), removal of all kitchens, tiling, sanitaryware and all loose goods and FF&E. Refer to drawing for door and window replacements/alterations and retentions.

Stairs

Existing stairs to be unchanged but carpets stripped. The proposals will place the existing stair within a fire protected shaft and should not require underlining with fireline board. This is subject to opening up on site to inspect the stair.

SUBSTRUCTURE

No new foundation works in scope other than localised concrete bases for cycle hops and post boxes

Other below ground works comprise

New foul drainage to ground floor Flat 3 Bathroom. This requires chase out of floor slab to install foul connect to main. Refer to engineers' proposals.

Other below ground works:

Radon sump to be created by sub floor pocket excavation to create radon sump for installation of external radon mitigation fan (Monsoon UT150 or similar) connected to 110mm diam upvc vent pipe via reducers and permanently wired to internally located switch fused spur. Location – two options externally or internally to base of existing service riser venting up through roof. External fan to be low noise 230V, IP65 rated, 450m3/hr extraction and all cabling to be routed in weather-proof plastic securely surfaced fixed to building face conduit (Planning matter - as not shown). Unit to be mounted on anti-vibration connectors and come complete kit with mounting brackets, condensation trap, and cowling terminal.

SPECIFICATION

Code	Section	Revision	Dated
F10	Brick/ block walling		
F30	Accessories/ sundry items for brick/ block/ stone walling		
G20	Carpentry/ timber framing/ first fixing		
H65	Single lap roof tiling		
J40	Flexible sheet waterproofing/ damp proofing		
K10	Gypsum board dry linings/ partitions/ ceilings		
K11	Rigid sheet flooring/ sheathing/ decking/ sarking/ linings/ casings		
L10	Windows/ Roof lights/ Screens/ Louvres		
L20	Doors/ shutters/ hatches		
L40	General glazing		
M10	Cement based levelling/ wearing screeds		
M20	Plastered/ Rendered/ Roughcast coatings		
M40	Stone/ concrete/ quarry/ ceramic tiling/ mosaic		
M50	Floor sheeting		
M51	Edge fixed carpeting		
M60	Painting/clear finishing		
N10	General fixtures/ furnishings/ equipment		
N11	Domestic kitchen fittings, furnishings and equipment		
N13	Sanitary appliances and fittings		
P10	Sundry insulation/ proofing work		
P12	Fire stopping systems		
P20	Unframed isolated trims/ skirtings/ sundry items		
P21	Door/ window ironmongery		
Z10	Purpose made joinery		
Z11	Purpose made metalwork		
Z12	Preservative/ fire retardant treatment		
Z20	Fixings and adhesives		
Z21	Mortars		
Z22	Sealants		
Z31	Powder coatings		

F10 Brick/ block walling

To be read with Preliminaries/ General conditions.

100 SCOPE OF WORK

Rendered infill to existing door/window combination – infill with matching blockwork and existing cavity. Cavity fill with Supafill 34 such that it forms part of the cavity upgrade in tandem with the thermal upgraded internal wall lining. Set render face back from adjacent by 10mm and float to match existing accent finish. Decorate with proprietary Sandtex (or similar) smooth masonry paint. Coats to obliterate render. Render to be two coat work, scratch coat then finishing coat. Scratch coat to be 4:1 sand/cement, finishing coat to be weaker 5:1. Plasticiser (Feb or sim) may be used in both coats to aid workability to manufacturer's instructions. Ensure the scratch coat is sufficiently cured and damp before applying the finishing coat. Observe weather conditions during application and curing to avoid cracking and provide adequate protection from the same.

TYPES OF WALLING

356 CONCRETE COMMON BLOCKWORK MEDIUM DENSE BLOCK INFILL TO EXISTING CAVITY WALL ABOVE DPC LEVEL TO REPLACE EXISTING DOOR TO FLAT 2 GROUND FLOOR AND GENERAL INFILL INTERNALLY TO EXISTING BLOCKWORK PARTITIONS

- Blocks: To BS EN 771-3.
- Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
- Configuration: Group 1 -solid.
- Compressive strength:
Mean value: 7.3 N/mm².
Characteristic value: 7.3 N/mm².
Category: II.
- Freeze/ Thaw resistance: Frost resistant.
- Recycled content: Submit proposals.
- Work sizes (length x width x height): 440 x 100 x 215 mm.
Tolerance category: D1.
- Special shapes: None.
- Additional requirements: To receive either a render system or stone facing.
- Mortar: As section Z21.
 - Standard: To BS EN 998-2.
 - Mix: 1:3 masonry cement:sand 6 N/mm² (class M6) Note mortar strength must not be stronger than block strength.
 - Additional requirements: None.
- Bond: Half lap stretcher.

TESTING

415 FRESH MORTAR CEMENT CONTENT

- Test method: BREMORTEST in accordance with Building Research Establishment Information Paper 8/89 .
- Test specimens: Test mortar for the following wall types: F10/ all block wall types noted above .
- Results: Submit.

WORKMANSHIP GENERALLY

440 CONDITIONING OF CONCRETE BLOCKS

- Autoclaved concrete bricks/ blocks delivered warm from manufacturing process: Do not use.
- Age of non-autoclaved concrete bricks/ blocks: Do not use until at least four weeks old.
- Avoidance of suction in concrete bricks/ blocks: Do not wet.
 - Use of water retaining mortar admixture: Submit details.

460 MORTAR GROUPS

- Mix proportions: For a specified group select a mix design from the following:
 - Group 1:
 - 1:0–0.25:3 (Portland cement:lime:sand with or without air entraining additive). 1:3 (Portland cement:sand and air entraining additive).
 - Group 2:
 - 1:0.5:4–5 (Portland cement:lime:sand with or without air entraining additive).
 - 1:3 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1:2.5–3.5 (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1:3–4 (Portland cement:sand and air entraining additive.)
 - Group 3:
 - 1:1:5–6 (Portland cement:lime:sand with or without air entraining additive).
 - 1:3.5–4 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1:4–5 (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1:5–6 (Portland cement:sand and air entraining additive).
 - Group 4:
 - 1:2:8–9 (Portland cement:lime:sand with or without air entraining additive).
 - 1:4.5 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1:5.5–6.5 (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1:7–8 (Portland cement:sand and air entraining additive).
- Batching: Mix proportions by volume.
- Mortar type: Continuous throughout any one type of masonry work

500 LAYING GENERALLY

- Mortar joints: Fill vertical joints. Lay bricks, solid and cellular blocks on a full bed.
- Bond where not specified: Half lap stretcher.
- Vertical joints in brick and concrete block facework: Even widths. Plumb at every fifth cross joint.

520 ACCURACY

- Courses: Level and true to line.
- Faces, angles and features: Plumb.
- Permissible deviations:
 - Position in plan of any point in relation to the specified building reference line and/ or point at the same level ± 10 mm.
 - Straightness in any 5 m length ± 5 mm.
 - Verticality up to 3 m height ± 10 mm.
 - Verticality up to 7 m height ± 14 mm.
 - Overall thickness of walls ± 10 mm.
 - Level of bed joints up to 5 m (brick masonry) ± 11 mm.
 - Level of bed joints up to 5 m (block masonry) ± 13 mm.

545 LEVELLING OF SEPARATE LEAVES

- Locations for equal levelling of cavity wall leaves: As follows:
 - Every course containing vertical twist type ties or other rigid ties.
 - Every third tie course for double triangle/ butterfly ties.
 - Courses in which lintels are to be bedded.

560A COURSING BLOCKWORK

- Gauge: Two block courses including bed joints to 450mm

595 LINTELS- REFER TO ENGINEER DRAWINGS

- Bearing: Ensure full length masonry units occur immediately under lintel ends.

610 SUPPORT OF EXISTING WORK

- Joint above inserted lintel or masonry: Fully consolidated with semidry mortar to support existing structure.

635 JOINTING

- Profile: Consistent in appearance.

645 ACCESSIBLE JOINTS NOT EXPOSED TO VIEW

- Jointing: Struck flush as work proceeds.

671 FIRE STOPPING

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

690 ADVERSE WEATHER

- General: Do not use frozen materials or lay on frozen surfaces.
- Air temperature requirements: Do not lay bricks/ blocks:
 - In cement gauged mortars when at or below 3°C and falling or unless it is at least 1°C and rising.
- Temperature of walling during curing: Above freezing until hardened.
- Newly erected walling: Protect at all times from:
 - Rain and snow.
- Drying out too rapidly in hot conditions and in drying wind.

F30 Accessories/ sundry items for blockwork to external infill

To be read with Preliminaries/ General conditions.

CAVITIES

120 CLEANLINESS

- Cavity, ties, insulation and exposed dpcs: Free from mortar and debris.

132 PERPEND JOINT PLASTICS WEEP HOLES (IF REQUIRED SUBJECT TO OPENING UP ON SITE)

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Locations: Through outer leaf immediately above base of cavity, at cavity trays, stepped dpcs and external openings.

156 FULL RETRO FILL CAVITY INSULATION TO EXISTING ENVELOPE

To be thermally upgraded to achieve U value 0.30 W/m²K – to comprise cavity infill comprising Knauf Supafill 34. Prior to filling, the contractor shall engage the approved installer to inspect the existing cavity with a boroscope to This shall be installed only by approved installers and must fill the entirety of the cavity in the external envelope. It should only be undertaken after any new windows and doors are installed and preferable service penetrations (grille etc) to avoid loss/displacement of fill. Thermal imaging (or shall be undertaken after installation to establish the fill is adequately placed and installation certificates provided.

171 VENTILATION DUCTS IN EXTERNAL WALLING – refer to M&E Spec and plans for locations

- Manufacturer: Refer M&E specifications
- Placement: Across cavity, sloping away from inner leaf. Full mortar joints to seal cavity.
- Protection from water penetration to inner leaf: Where barrier is not integral to duct, form stepped dpc cavity tray with stop ends above duct where practical, extending 150 mm on each side or expanding PU foam cut back and mortared over.

180 CAVITY CLOSERS TO NEW WINDOWS RETRO FIT

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Accessories: To include integral dpc/insulation.

REINFORCING/ FIXING

- 215 CAVITY WALL TIES FOR INFILL WALL IN EXTERNAL LEAF
- Standard: To BS EN 845-1.
 - Masonry general purpose for 50mm cavity work
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Material/ finish: Austenitic stainless steel - material/ coating reference 1.
 - Sizes: 225 mm min.
 - End types: Contractor's choice.
 - Design embedment length (minimum): 50 mm.
 - Additional requirements: Resistance to water crossing cavity

FLEXIBLE DAMP PROOF COURSES/ CAVITY TRAYS (IF REQUIRED SUBJECT TO OPENING UP ON REMOVAL OF EXISTING WINDOWS)

- 320 DAMP PROOF COURSE - POLYETHYLENE
- Standard: To BS 6515.
 - Manufacturer: Cavity Trays of Yeovil or similar to contractor's choice.
 - Product reference: Caviroll premium or similar to courings not affected by radon.
- 370 PREFORMED CAVITY TRAYS
- Manufacturer: Cavity Trays of Yeovil or similar.
 - Product references and locations: Contractor's choice in accordance with manufacturer's guidance, compatible with adjacent materials.
 - Placement: To provide a free draining and watertight installation.
- 380 PREFORMED DPC/ CAVITY TRAY JUNCTION CLOAKS/ STOP ENDS
- Manufacturer: Cavity Trays of Yeovil.
 - Product references and locations: Contractor's choice in accordance with manufacturer's guidance, compatible with adjacent materials.
 - Placement: To provide a free draining and watertight installation. Seal laps with dpc and/ or cavity trays.

INSTALLATION OF DPCS/ CAVITY TRAYS

- 415 HORIZONTAL DPCS
- Placement: In continuous lengths on full even bed of fresh mortar, with 100 mm laps at joints and full laps at angles.
 - Width: At least full width of leaf unless otherwise specified. Edges of dpc not covered with mortar or projecting into cavity.
 - Overlying construction: Immediately cover with full even bed of mortar to receive next masonry course.
 - Overall finished joint thickness: As close to normal as practicable.
- 425 GROUND LEVEL DPCS
- Joint with damp proof membrane: Continuous and effectively sealed.
- 445 SILL DPCS
- Form and placement: In one piece and turned up at back when sill is in contact with inner leaf.

455 COPING/ CAPPING DPCS

- Placement: Bed in one operation to ensure maximum bond between masonry units, mortar and dpc.
- Dpcs crossing cavity: Provide rigid support to prevent sagging.

475 SITE FORMED CAVITY TRAYS

- Requirements to prevent downward ingress of water:
 - Profiles: To match those shown on drawings. Firmly secured.
 - Joint treatment: Use unjointed wherever possible, otherwise lap at least 100 mm and seal to produce a free draining and watertight installation.
 - Horizontal cavity trays: Support using cavity closer.
 - Sloping cavity trays: Prevent sagging.
 - Cleanliness: Free from debris and mortar droppings.

485 CAVITY TRAYS OVER OPENINGS AND OTHER CAVITY BRIDGINGS

- Length: To extend not less than 150 mm beyond ends of lintels/ bridgings.

560 VERTICAL DPCS GENERALLY

- Form: In one piece wherever possible.
 - Joints: Upper part overlapping lower not less than 100 mm.

570 JAMB DPCS AT OPENINGS

- Joint with cavity tray/ lintel at head: Full underlap.
- Joint with sill/ horizontal dpc at base: Full overlap.
- Projection into cavity: Not less than 25 mm.
- Relationship with frame: In full contact

650 POINTING IN FLASHINGS

- Joint preparation: Free of debris and lightly wetted.
- Pointing mortar: As for adjacent walling.
- Placement: Fill joint and finish flush.

G20 Carpentry/ timber framing/ first fixing

To be read with Preliminaries/ General conditions.

GENERAL

105 TIMBER PROCUREMENT

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

150 STRENGTH GRADING OF TIMBER

- Grader: A company currently registered under a third party quality assurance scheme operated by a certification body approved by the UK Timber Grading Committee.

160 GRADING AND MARKING OF SOFTWOOD

- Timber of a target/ finished thickness less than 100 mm and not specified for wet exposure: Graded at an average moisture content not exceeding 20% with no reading being in excess of 24% and clearly marked as 'DRY' or 'KD' (kiln dried).
- Timber graded undried (green) and specified for installation at higher moisture contents: Clearly marked as 'WET' or 'GRN'.
- Structural timber members cut from large graded sections: Regraded to approval and marked accordingly.

PRODUCTS

210 STRUCTURAL SOFTWOOD (GRADED DIRECT TO STRENGTH CLASS) FOR STRUCTURAL USE GENERALLY

- Grading standard: To BS 4978, BS EN 14081-1, or other national equivalent and so marked.
- Strength class to BS EN 338: C16/24.
- Treatment:
 - Preservative treatment: Organic solvent impregnation to NBS section Z12 and Wood Protection Association Commodity Specification C8.
Design service life: 30 years.
 - Fire retardant treatment: Fire retardant impregnation to NBS section Z12 and Wood Protection Association Commodity Specification FR2, Type DI where used as counterbattening on facing gables on boundary conditions.

270 UNGRADED SOFTWOOD TO GENERAL CARCASE FRAMING INTERNALLY TO SVP PIPE CASINGS

- Quality of timber: Free from decay, insect attack (except pinhole borers) and with no knots wider than half the width of the section.
- Surface finish: Planed all round.
- Treatment:
 - Preservative treatment: None required.
 - Design service life: Not applicable.
 - Fire retardant treatment: None required.

311 WBP PLYWOOD BATHROOM RAISED DECKS TO ENABLE WASTE/TRAP SPACE

- Standard: To an approved national standard.
- Thickness: 18.
- Appearance class to BS EN 635: III.
- Use class to BS EN 335: Use class 2-where there is a risk of wetting or humid conditions.
- Bonding quality to BS EN 314-2: Class 2.
- Finish: Unsanded.
- Edges: Square.

WORKMANSHIP GENERALLY

401 CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD AND HARDWOOD

- Dimensions: Dimensions in this specification and shown on drawings are target sizes as defined in BS EN 336.
- Tolerances: The tolerance indicators (T1) and (T2) specify the maximum permitted deviations from target sizes as stated in BS EN 336, clause 4.3:
 - Tolerance class 1 (T1) for sawn surfaces.
 - Tolerance class 2 (T2) for further processed surfaces.

402 CROSS SECTION DIMENSIONS OF NONSTRUCTURAL SOFTWOOD

- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.
- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-1, clause 6 for sawn sections.

430 SELECTION AND USE OF TIMBER

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

440 PROCESSING TREATED TIMBER

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

450 MOISTURE CONTENT

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

451 MOISTURE CONTENT TESTING

- Procedure: When instructed, test timber sections with an approved electrical moisture meter.
- Test sample: Test 5% but not less than 10 lengths of each cross-section in the centre of the length.
- Test results: 90% of values obtained to be within the specified range. Provide records of all tests.

510 PROTECTION

- Generally: Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.
- Timber and components: Store under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack.
- Trussed rafters: Keep vertical during handling and storage.

520 EXPOSED END GRAIN PROTECTION

- Components: Seal exposed end grain of the following before delivery to site: External framing/counter battens.
- Sealer: Clear end grain sealer.

JOINTING TIMBER

570 JOINTING/ FIXING GENERALLY

- Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with section Z20.

670 ANTI-CORROSION FINISHES FOR FASTENERS

- Galvanizing: To BS 7371-6, with internal threads tapped and lightly oiled following treatment.
- Sherardizing: To BS 7371-8, Class 1.
- Zinc plating: To BS EN ISO 4042 and passivated.
-

ERECTION AND INSTALLATION

726 HAMMER-IN FASTENERS

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Obtain instructions if specified spacing or edge distance cannot be achieved.
- Installation holes: Drilled to diameter and depth recommended by manufacturer. Clean and free from dust.

770 ADDITIONAL SUPPORTS

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

H65
Single lap roof tiling

H65 Single lap roof tiling

115A CONCRETE TILE FOR WORKS TO FORM AOV IN EXISTING ROOF SLOPE

- Manufacturer: To match existing
- Colour: Brown to match existing
- Accessories: - Vent tiles to new svp/service terminations

TILING GENERALLY

210 BASIC WORKMANSHIP

- General: Fix tiling and accessories to make the whole sound and weathertight at earliest opportunity.
- Setting out: match existing
- Fixings for accessories: As recommended by tile manufacturer.
- Gutters and pipes: Keep free of debris. Clean out at completion.

240 UNDERLAY REINSTATEMENT/OPENING UP TO AOV INSTALLATION

- Handling: Do not tear or puncture.
- Laying: Maintain consistent tautness.
- Vertical laps (minimum): 100 mm wide, coinciding with supports and securely fixed.
- Fixing: copper clout head nails.
- Penetrations: Use proprietary underlay seals or cut underlay to give a tight, watertight fit around pipes and components.
- Ventilation paths: Do not obstruct.

245 BATTENS/ COUNTERBATTENS - TREATED

- Timber: Sawn softwood.
 - Species: In accordance with BS 5534, clause 4.11.1.
 - Permissible characteristics and defects: Not to exceed limits in BS 5534, Annex D.
 - Grading: Fully factory pre-graded in accordance with BS 5534 .
 - Moisture content at time of fixing and covering (maximum): 22%.
- Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C8.
 - Type: Contractor's choice .

265 BATTEN FIXING

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

275 TILE FIXING

- Setting out: Lay each course with tails aligned.
- Ends of courses: Use special tiles to maintain bond and to ensure that cut tiles are as large as possible.
- Fixing: Mechanically fix all tiles or as recommended by manufacturer to match existing
 - Nail fixed tiles: Use nails recommended by tile manufacturer. Fix through every hole.
 - Clip fixed tiles: Use clips recommended by tile manufacturer.

280 LOCAL AND GENERAL FIXING AREAS

- Definitions:
 - Local areas: Bands of tiling around edges or obstructions of each plane of the roof. Calculate extent of each band in accordance with BS 5534, section 5 and Annex H.
 - General areas: Remaining areas of roof tiling.

290 MORTAR BEDDING/ POINTING

- Mortar: As section Z21, 1:3 cement:sand, with plasticizing admixtures permitted.
 - Bond strength providing resistance to uplift: In accordance with BS 5534.
- Weather: Do not use in wet or frosty conditions or when imminent.
- Preparation of tiles and accessories to be bedded: Wet and drain surface water before fixing.
- Appearance: Finish neatly as work proceeds and remove residue.

EDGES/ JUNCTIONS/ FEATURES

305 GENERALLY

- Fittings and accessories: As recommended by tile manufacturer. Do not improvise.
 - Exposed fittings and accessories: To match tile colour and finish.
- Cut tiles: Cut only where necessary, to give straight, clean edges.
- Flashings: Fix with or immediately after tiling. Form neatly.

325 FIRE SEPARATING WALLS IN ROOF SPACE ON LINE OF COMPARTMENT WALLS BELOW AND AROUND STAIR CORE

- Separating walls: Completely fill space between top of wall and underside of tiles with mineral wool quilt to provide fire stopping.
- 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 to provide fire stopping.

Wall Type WT-08. Fire compartmentation required in roof space above line of new/existing party walls and stair enclosure below. To comprise double layer system of 25mm wire reinforced Rockwool Fire Barrier EN to provide not less than 60Ei, complete with all accessories including clamping and fixing plates and installed strictly to manufacturers recommendations as set out in the Rockwool Fire Barrier EN Contractors Guide.

850 ROOF SLOPE TERMINALS

- Ventilator tiles to SVPs
Manufacturer: Contractors
choice

861 PHOTVOLTAIC MODULES REFER TO M&E SPECIFICATION

Existing modules currently serve entire building and shall be split between flats – refer to M&E specification/proposals.

J40

Liquid applied roofing

J40 Liquid applied roofing system

Existing liquid applied system to be overlaid with Bauder LiquiDEK system. Refer to the attached specification summary below prepared in 2023 for the refurbishment of Park House by Currie Brown to the existing flat roof. The work was not undertaken at the time.

CLIENT: CURRIE AND BROWN

REF No: B232186/1

PROJECT NAME: PARK HOUSE

ROOF AREA NAME: (TERRACE) FIRE ESCAPE

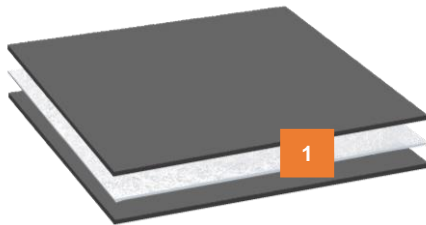
DATE: 02.05.2023

SPECIFICATION SUMMARY

System	LiquiTEC Roof / Terrace – LiquiDEK System
Project plan	Refurbishment
Applicable Structural decks	Overlay existing Liquid waterproofing system
Roof construction	Uninsulated Roof
Surface Finish	Exposed

Liquid applied uninsulated roof covering system - cold applied

Cold applied liquid roof system suitable for new build, refurbishment and green roof applications. A range of colour finishes are available and can also be used in warm and inverted roof scenarios.



Product	Description	thickness	weight
1 Bauder LiquiDEK (Approx RAL 7031)	Cold liquid applied, fast curing Waterproofing resin, for the main roof area; applied in 2 coats 'wet-on-wet', with Bauder 110g reinforcement fleece between them.	2.0mm	3.11Kg/m ²
System Build up		2.0mm	3.11Kg/m²

SYSTEM OPTIONS

LIQUIFINISH COLOURS	
Blue grey RAL 7031	
Stone grey RAL 7030	
Traffic grey RAL 7043	

CLIENT: CURRIE AND BROWN

REF No: B232186/1

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DATE: 02.05.2023

IMPORTANT NOTE

Please note that changes made to the content of this document, outside of the available choices may impact technical suitability and eligibility to meet Bauder Limited's requirements for guarantee. For additional items to be added, not already included, please contact your local Area Technical Manager.

Design Information and Supporting Documents

This specification is to be read in conjunction with the supporting Specification-Appendix, Torch Free Report (where available), Calculations (where available), Bauder Installation Guides and Standard Detail Drawings.

This specification has been produced based on the information supplied at the time of writing and is deemed to apply subject to the conditions outlined below unless additional calculations proving otherwise have been completed by Bauder **Ltd** or an approved supplier.

Windloads: Suitable for roofs where the design load does not exceed 3.2KN. Should the site be situated in a location subject to increased windloads or have a Design Windload Pressure exceeding this, Bauder Ltd must be informed and a site specific windload calculation must be completed.

U-Values: U-Values quoted are based on the Bauder waterproofing system construction including insulation and underlying deck material only, this may not include the supporting structure and/or any other materials within the **construction** below the deck. Refer to the project specific U-Value Calculation for additional information.

Drainage: Where Bauder Ltd have produced supporting **drainage** calculations based on the data supplied, and the resulting calculation states that 1 drainage outlet will be sufficient, Bauder Ltd additionally recommends the use of overflows on all roofs and that there should always be at least 2 outlets and/or overflows per drainage area.

Safe2Torch Advice: The application of torch-on materials to or in the vicinity of combustible deck materials does not conform to the recommendations of BS8217:2005, clause 7.3.2.1, **paragraph 3**, or the advice given in the 'Safe2Torch' document produced by the National Federation of Roofing Contractors.

'Safe2Torch' advice:

Follow LRWA Guidance Note No.13 for safe drying of damp substrates. Particular care should be taken in areas deemed to be "Torch Free". The application of a torch-on underlayer to or in the vicinity of combustible materials does not conform to the recommendations and the advice given in the 'Safe2Torch' document produced by the National Federation of Roofing Contractors. Care should be taken if torch drying damp substrates.

It is always the responsibility of the contractor to carry out a risk assessment on all aspects of the contract. The 'Safe2Torch' checklist is solely to provide assistance in the assessment of the risks where the use of a gas torch is being considered.

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This document must be read in conjunction with the project specific survey report. In particular the 'Safe2Torch' roofplan and photographs highlighting 'Torch-Free' & 'Safe to Torch' zones.

SYSTEM CONSTRUCTION

Waterproofing System: Bauder LiquiTEC Cold Roof / Terrace – LiquiDEK System

Substrate: Overlay Existing Liquid Waterproofing

Roof Fall:

Existing fall estimated to be (1°) **1:60**.

It is imperative that should this information change for whatever reason, then Bauder should be contacted so that the specification can be amended accordingly.

Always refer to the Bauder LiquiTEC System Installation Manual for preparation methods, storage requirements and the application of each product.

Where there are any doubts as to adhesion, carry out an adhesion test, in accordance with the instructions given or consult the Bauder Technical Department on 01473 257671.

TEMPERATURE LIMITATIONS

Product Storage: Bauder LiquiTEC products should not be stored in direct sunlight or in ambient temperatures above 25°C and must be protected from frost.

Product Application Temperatures: Please refer to the **Bauder LiquiTEC** Technical Installation Manual for details of ambient and substrate temperature limitations. All substrates to be tested with an appropriate Infrared non-contact digital temperature gauge before and during installation.

It is imperative that should this information change for whatever reason, then **Bauder** should be contacted so that the specification can be amended accordingly.

OVERLAY EXISTING WATERPROOFING SYSTEM

Overlay existing waterproofing system: Carefully remove all surface items (including chippings, pavers, pebbles, inverted insulation, debris etc) (where relevant) from the surface of the existing waterproofing. Any vertical areas which are unsound or showing signs of degradation should be removed or repaired as necessary.

REFLECTIVE CRACKING FOR TRAFFICKED SYSTEMS

Due to the nature of the construction and anticipated continued movement, reflective cracking may occur in the aggregate filled wearing layer of the system. Where cracks, dayjoints, movement zones etc. have been treated in accordance with the treatment for Dynamic Cracks and Dayjoints, any reflective cracking will be aesthetic only and where the system has been applied in accordance with this specification will not compromise the waterproofing integrity of the system.

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PROJECT NAME: PARK HOUSE

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DATE: 02.05.2023

IMPORTANT NOTES:

- The Bauder approved contractor is to inspect the existing waterproofing and report any issues that may have a detrimental effect upon the proposed attachment/installation of the new waterproofing system to both the Client's representative and Bauder Limited.
- An adequate provisional sum should be set aside to cover for any unforeseen issues related to the removal of the existing waterproof covering that may necessitate localised repairs to the existing deck. If it is discovered that the deck is degraded in any way and is beyond localised repair, it is imperative that the Bauder approved roofing contractor informs both the client and Bauder Limited immediately in order that the problem be addressed prior to the waterproofing works to be carried out.
- An adequate provisional sum should be set aside to cover for any unforeseen issues related to remedial works that may be required to either the existing waterproofing or existing roof falls.

IMPORTANT NOTE: Proposals to overlay to the existing waterproofing system are submitted on the basis that we cannot accept responsibility for the quality of the multi-layers of attachment of the existing waterproofing system or the structural integrity and condition of the roof deck. Due to the existing waterproofing being in-situ, we can only make a limited evaluation of what exists and offer our best assessment based on the information available, therefore the decision to overlay must be by the Specifier. Should an adhesion test be unsuccessful, a full strip of the area will be required. Bauder should be contacted first, to ensure the correct course of action is undertaken.

Exposed Waterproofing: The existing waterproofing should be examined and then prepared by removing any rough edges and/or defects in its surface, loose or flaking solar reflective paint, liquid overlays (where relevant), surface chippings etc., repairing any localised damaged areas. Any paints or sealers should also be removed, unless site adhesion tests determine their suitability to receive an overlay. Waterproofing generally should be secure and properly attached to the sub-structure, clean, dry, smooth, free from frost, contaminants, loose material, voids, protrusions, and organic growths. Dust, dirt, debris, moss, plants and grease must be removed.

IMPORTANT NOTE - Blisters / Detached bitumen membrane: Repair, re-adhere and protect with additional layer of matching bitumen membrane if necessary.

All new materials and accessories: Must be compatible with existing.

Preparation Notes: Rub down thoroughly with **Bauder PMMA Cleaner** (approx. consumption 0.1L/m²), and abrade to achieve a roughened surface. Where large areas are to be treated, test areas to be carried out to ensure ruckling does not occur.

Preparation Notes: Scrape and sweep away contamination and clean by power washing (with or without approved detergent) as required and allow to dry thoroughly before priming/waterproofing.

IMPORTANT NOTE:

- Where it has not been possible to ascertain whether there is existing insulation below the deck; should it be discovered that existing insulation is found within the ceiling void space, there may be a requirement for this to be removed to prevent interstitial condensation forming. Any existing ventilation openings must be sealed for the warm roof to perform, regardless of whether the insulation in the void remains or is removed. Please contact Bauder in order that the build-up and proposals are assessed before works commence/continue.

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PRIMER

Before application: All surfaces must be dry, clean and free from dust, laitance, dirt, oil, grease, loose material and any other contaminants.

DETAILS AND UPSTANDS – To be primed FIRST

All Details and Upstands receiving the new Liquid Applied Waterproofing System are to be thoroughly primed with the relevant **Bauder LiquiTEC Primer**.

The following primers must be used as required:

- **Bauder LiquiPRIME 1:** For Timber, Plywood or OSB/3 or CLT, Asphalt, Exposed Bitumen, Bitumen Bleed
- **Bauder LiquiPRIME 2:** For Non-Porous Concrete, Screed and Blockwork
- **Bauder Metal Primer:** For large areas of Metal
- **Cryl Primer 287:** For New/Porous Concrete, Screed, Blockwork
- **Special Primer 610:** For EPDM
- **No Primer Required:** For small areas of metals, Hard Plastics, PVC-P and existing Liquid Waterproof coatings (Subject to adhesion testing).

Application: Add catalyst to the primer at the rate indicated on the container (except Pox R103 & Special Primer 610). Apply catalysed primer using a synthetic deep pile roller to upstands and details first, before applying to the main area. **Ensure that primer is applied into the joints between panels to fill the gaps.**

Note: When using **Bauder LiquiPRIME** on upstand details in excess of 250mm high, add 1% (by weight) Liquid Thixo to the catalysed resin and stir thoroughly prior to application.

For other substrates, consult the Bauder Technical Department on 01473 257671 for required preparation methods and priming.

SUBSTRATE REPAIRS AND FILLING

To be applied after priming:

- **Bauder LiquiPASTE:** Minor indentations, cracks and voids
- **Bauder LiquiPASTE Mortar:** Larger indentations
- **Cryl RS 240:** Cementitious substrates and Asphalt substrates

Application: Add catalyst at the rate indicated on the container (excluding RS 240). In the case of **Bauder LiquiPASTE Mortar**, catalyst must be added before adding the filler.

Apply catalysed resin using a suitable smoothing trowel and allow to cure for a minimum of 1 hour.

MINOR MOVEMENT JOINTS IN SUBSTRATE – MINIMUM 75MM EITHER SIDE OF THE JOINT

Any movement joints are to be identified prior to commencement of coating works in order to allow for the appropriate detail to be designed. This detail must be agreed by all relevant parties, again prior to commencement of coating works.

Debonding Tape: If required, apply centred over movement joints.

Bauder LiquiDEK, Blue grey (Approx. RAL 7031) two layer 'wet-on-wet' liquid applied cold roof covering system, with encapsulated **Bauder 110g Reinforcement Fleece**.

Reinforcement Strip: Add catalyst to the **Bauder LiquiDEK/Bauder LiquiDETAIL** at the rate indicated on the container. Apply an even layer, minimum 2 kg/m², of the catalysed **Bauder LiquiDEK/Bauder LiquiDETAIL** with a synthetic deep pile roller, directly over the joints. Embed a

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strip of **Bauder 110g Reinforcement Fleece** (min. 150mm wide), into the wet resin, centred over the joint to extend a minimum 75mm either side of the joint/crack. Ensure the **Bauder 110g Reinforcement Fleece** is always fully saturated before applying a further coat of catalysed **Bauder LiquiDEK/Bauder LiquiDETAIL** (1.0Kg/m²) wet on wet.

- **Joints:** Lap in length a minimum 50mm.

- **Bond:** Continuous over whole surface.

- **Condition at completion:** Smooth.

Rainproof Times: After approx. 30 minutes.

Next Coat / Subject to Stress: Can be walked on/next coat applied after approx. 45 minutes.

WATERPROOFING TO UPSTANDS AND DETAILS

IMPORTANT NOTE

The minimum recommended height for constructing waterproofing details is 150mm from the top of the waterproofing. Special attention should be paid to all structures, such as rooflights, counter-flashings, window and door cills, etc. These may have to be raised to enable a 150mm high waterproofing detail to be formed. Bauder cannot take responsibility for water ingress over waterproofing details insufficiently high.

Bauder LiquiDETAIL incorporating **Bauder 110g Reinforcement Fleece** must be used wherever it is practical to incorporate a reinforcement fleece. **Bauder LiquiFIBRE** may only be used for waterproofing complex shapes or in areas where the use of a fleece is impractical.

GENERAL AREAS: Linear Upstands / Details

Bauder LiquiDETAIL, Blue grey (approx. RAL 7031) two layer 'wet-on-wet' liquid applied cold roof covering system, with encapsulated **Bauder 110g Reinforcement Fleece**, to be used wherever it is practical to incorporate a reinforcement fleece.

Application: Add catalyst to the **Bauder LiquiDETAIL** at the rate indicated on the container. Apply catalysed **Bauder LiquiDETAIL** (2.0 kg/m² min.) with a synthetic deep pile roller. Roll a strip of **Bauder 110g Reinforcement Fleece** into the wet resin, pressing trapped air free using the synthetic deep pile roller, ensuring a minimum 50mm overlap between adjacent sections of **Bauder 110g Reinforcement Fleece**. Ensure the **Bauder 110g Reinforcement Fleece** is always fully saturated before applying a further coat of catalysed **Bauder LiquiDETAIL** (1.0 kg/m² min.) wet on wet.

Rainproof Times: After approx. 30 minutes.

Next Coat / Subject to Stress: Can be walked on/next coat applied after approx. 45 minutes.

COMPLEX AREAS: Complex NON Linear Details ONLY

Bauder LiquiFIBRE, Blue grey (approx. RAL 7031), may **ONLY** be used for waterproofing complex shapes or in areas where the use of a fleece is impractical.

Application: Add catalyst to the **Bauder LiquiFIBRE** at the rate indicated on the container. Apply catalysed **Bauder LiquiFIBRE** (1.5 kg/m² min.) with a brush and allow to cure for a minimum of 45 minutes.

Apply a further layer of catalysed **Bauder LiquiFIBRE** (1.5 kg/m² min.) by brush, using brush strokes at 90° to the first layer.

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Rainproof Times: After approx. 30 minutes.

Next Coat / Subject to Stress: Can be walked on/next coat applied after approx. 45 minutes.

WATERPROOFING TO MAIN FLAT AREA

Bauder LiquiDEK, Blue grey (approx. RAL 7031) two layer 'wet-on-wet' liquid applied cold roof covering system, with encapsulated **Bauder 110g Reinforcement Fleece**.

Gutters Only: Installed as above, otherwise (gutter widths less than 500mm), apply **Bauder LiquiDETAIL** to the gutter sole.

Application: Add catalyst to the **Bauder LiquiDEK** at the rate indicated on the container. Apply an even layer of catalysed **Bauder LiquiDEK** (2.0 Kg/m² min) with a synthetic deep pile roller. Roll **Bauder 110g Reinforcement Fleece** into the wet resin, pressing trapped air free using the synthetic deep pile roller, ensuring a minimum 50mm overlap between adjacent sections of **Bauder 110g Reinforcement Fleece**.

Ensure the **Bauder 110g Reinforcement Fleece** is always fully saturated before applying a further coat of catalysed **Bauder LiquiDEK** (1.0Kg/m² min) wet on wet.

Rainproof Times: After approx. 30 minutes.

Subject to Stress: Can be walked upon after approx. 45 minutes. Able to withstand stress after approx. 2 hours.

IMPORTANT NOTE

There may be a difference in colour pigmentation between **Bauder LiquiDETAIL**, **Bauder LiquiFIBRE** and **Bauder LiquiDEK**. If aesthetic appearance is considered important then it will be necessary to incorporate a separate coat of **Bauder LiquiFINISH** to ensure that the finished colour is even across all areas.

HEAVY DUTY WEARING COURSE

Bauder LiquiDEK incorporating **Bauder quartz** (0.4-1.2mm)

Location: TO WHOLE ROOF

Application: Add catalyst to the **Bauder LiquiDEK** at the rate indicated on the container. Apply catalysed **Bauder LiquiDEK** to the designated areas (1.5Kg/m² min) with a synthetic deep pile roller. Embed into the liquid layer a full cover of **Bauder quartz** (0.4-1.2mm) (7.0Kg/m² approx). Allow to dry for a minimum of 1 hour, sweep away excess aggregate and vacuum clean. Do not re-use aggregate.

Next Coat / Subject to Stress: Can be walked upon/next coat applied after approx. 45 minutes. Able to withstand stress after approx. 2 hours.

FINISH COAT TO WHOLE ROOF

Bauder LiquiFINISH Stone grey (approx. RAL 7030)

Application: Add catalyst to the **Bauder LiquiFINISH** at the rate indicated on the container and apply using a synthetic deep pile roller at the rates indicated below.

Upstands & Details: Apply **Bauder LiquiFINISH** (0.5kg/m² min). For upstand details in excess of 250mm high, add 1% Liquid Thixo to the catalysed resin and stir thoroughly prior to application.

Main Area: Apply **Bauder LiquiFINISH** (0.65kg/m² min).

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Rainproof Times: After Approx. 30 minutes.

Subject to Stress: Can be walked upon after approx. 1 hours. Able to withstand stress after approx. 3 hours.

ADDITIONAL ITEMS

Provision should be made by the contractor to:-

- **New Chase & Suitable Flashing to Rendered Upstand (A03)**

Cut new chases into rendered upstands, a minimum of 25mm deep, & 150mm above the finished surface level of the new waterproofing. The chase is to be brushed clean and primed with **Bauder LiquiPRIME 2** in accordance with the preparation and priming schedule. **Bauder LiquiDETAIL** is to be dressed into the new chase. Install suitable counter-flashing, this is to be base clipped and suitably plugged at 300mm centres. Lengths should not exceed 1.5 linear metres and laps should be not less than 150mm. All chases should be brushed clean and sealed using **Bauder Sealant Primer** prior to the application of **Bauder Sealant**. All work should be carried out by competent tradesmen in accordance with current British Codes of Practice and Lead Contractors Association.

A new render stop is to be installed above the new waterproofing, re-rendered to match the existing and re-decorated according to any specific instruction by the client.

- **Raise Door Cill (A12)**

Raise all door cills to ensure that a minimum upstand height of 150mm is achievable above the finished surface level. The method of raising the cill should be determined and specified by the client.

- **BauderPVC ABL-R 75, 110 or 160 Vertical Outlet (I5)**

Internal rainwater outlet/s (also suitable for PVC membranes) of the correct size is to be installed through the system and deck after creation of a suitable size diameter opening. The outlet should be secured using suitable fasteners. Connection to the rainwater waste pipe should be made by others, details for this connection can be found in the product data pages. The outlet is designed to be connected into the standard spigot end connector on the rainwater waste pipe. The outlet spigot is universal length (300mm) to cope with differing insulation thicknesses and will require cutting down to the correct length. The LiquiTEC waterproofing membrane should be sealed on to the body of the outlet. Available separately is the Bauder Leaf Guard for Rigid PVC Outlets.

Product sizes/ reference:

- **BauderPVC ABL-R Vertical Outlet DN75**
- **BauderPVC ABL-R Vertical Outlet DN100**
- **BauderPVC ABL-R Vertical Outlet DN150**
- **Suitability:**
 - **DN75mm Outlet** is suitable for installation into a downpipe size of 75mm
 - **DN100mm Outlet** is suitable for installation into a downpipe size of 110mm
 - **DN150mm Outlet** is suitable for installation into a downpipe size of 160mm

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- **Flow rate:**
 - **DN75mm Outlet** has a flow rate of 4.6l/s
 - **DN100mm Outlet** has a flow rate of 5.5l/s
 - **DN150mm Outlet** has a flow rate of 6.6l/s

GUARANTEE

A 15 year **Bauder LiquiTEC** system product and workmanship guarantee is to be provided upon completion following a satisfactory Final Inspection by **Bauder**. Details regarding the full terms and conditions are available separately from **Bauder Ltd** upon request. This system must installed by a **Bauder** Approved Contractor, to be eligible for guarantee.

IMPORTANT NOTE

It is imperative that the contractor conforms with the workmanship criteria as listed above. Any deviation from this will result in the contract being considered unguaranteeable by our insurers.

CONTACT INFORMATION

For further information contact Bauder Limited.

Head office: T: 01473 257671 E: technical@bauder.co.uk

Area Technical Manager: Liam Rose, T: 07771 666200

Site Technician: Rob Curtis, T: 07436 246294

Bauder reserves the right to amend information and product specifications without prior notice. All reasonable care has been taken to ensure that the information is current and correct at the time of issue. Please note that any future regulation changes could result in this specification requiring an update. In the case of a previous roof survey a new survey will be necessary to establish if the condition has further deteriorated and therefore if the specification requires amendment. The specifier is responsible for ensuring that this specification information is still current prior to issue, as Bauder Ltd can accept no liability for any resulting errors or omissions. Any deviation or modification to this specification without Bauder's consent may result in the system not achieving the stated Fire Performance or Guarantee Requirements.

K10

Gypsum board dry linings/ partitions/ ceilings

K10 Gypsum board dry linings/ partitions/ ceilings- ACOUSTIC/FIRE/THERMAL UPGRADES (refer to drawings)

To be read with Preliminaries/ General conditions.

TYPES OF CEILINGS

220A TYPE CT03 SUSPENDED CEILING SYSTEM TO FIRST FLOOR TO CEILING JOISTS

- Standard: To BS EN 13964.
- Lining board: 2 layers 12.5mm BG soundbloc plasterboard on MF5 frame or similar support grid.
 - Finishing: Skim coat plaster.
 - Primer/ Sealer: Primer to painted areas.
 - Accessories: Metal beads/ stops recommended by lining board manufacturer.
- Insulation: Existing insulation in loft to be removed off site and replaced with new Knauf Loft Roll 44 or similar or better thermal conductivity of 0.044W/mK and Euroclass A1 quilt laid as 100mm between ceiling joists and 170mm overlaid at across joists. To achieve U value 0.16W/m2K.
- Access units: Refer L20 for hatches to loft
- Other: Use MR board over bathrooms

220B TYPE CT02 SUSPENDED CEILING SYSTEM TO SINGLE STORY FLAT AT GROUND FLOOR- METAL DECK SOFFIT

- Manufacturer: British Gypsum.
 - Product reference: BG MF suspended ceiling system
- Suspension system:
 - Hanger type: Gypframe strap hangers/MF5
 - Top fixings: Straps fixed to metal soffit
 - Primary grid centres: min 900 mm. Hanger centres: min 900mm.
 - Secondary grid centres: min 330mm.
- Linings: 1 x 15 mm Gyproc FireLine.

Insulation: Thermal upgrade to comply with AD Part L to provide a U value of 0.16 – subject to further site inspection but proposed to be insulated from the underside with Durathem OS spray foam sprayed directly onto the underside of the metal deck at an average thickness of 150mm. Bostik Indenden ET150 sprayable/paintable Vapour Barrier Coating to be applied prior to the metal deck underside and also a spray coating applied to the Durathem OS to act as a water retardant and Class O fire spread. Underline with 15mm fireline board and skim on MF hangars which must be fixed to the metal soffit prior to spraying. Spray foam and vapour barrier must be applied by an approved installer and strictly to manufacturers instructions to create an airtight coat.
- Access Units: Not required.
- Finishing: Skim coat plaster finish.
- Primer/ Sealer:
 - Type: One coat of Gyproc Drywall Primer.
- Other: Use MR board over bathrooms

**220C TYPE CT01 SUSPENDED CEILING SYSTEM TO GENERAL GROUND FLOOR CEILINGS
(NOT FLAT 3 GROUND)**

- Manufacturer: British Gypsum.
 - Product reference: BG MF suspended ceiling system
- Suspension system:
 - Hanger type: Gypframe strap hangers/MF5
 - Top fixings: Straps fixed to metal soffit
 - Primary grid centres: min 900 mm. Hanger centres: min 900mm.
 - Secondary grid centres: min 330mm.
- Linings: 1 x 15 mm Gyproc FireLine.
- Access Units: Not required.
- Finishing: Skim coat plaster finish.
- Primer/ Sealer:
 - Type: One coat of Gyproc Drywall Primer.
 - Other: Use MR board over bathrooms

TYPES OF DRYLINING/PARTITIONS

**230 WT01 INTERIOR THERMAL LINING TO EXTERNAL ENVELOPE (improve to U-value at least 0.3.
This builds up provides value of 0.29)**

2.5mm Plaster skim finish
 15mm BG Gyproc Soundbloc
 38mm BG Gyproc Thermaline PIR
 25 x 50mm Treated Sawn Battens at max 600mm ccs. All board edges must be supported
 Laid on Existing External Wall
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services

231 WT01A MOISTURE RESISTANT TILE FACED INTERIOR THERMAL LINING

5mm Ceramic Tile Finish
 2.5mm Tile Adhesive
 10mm Tile backer board Marmox Multiboard
 15mm BG Gyproc Soundbloc MR
 38mm BG Gyproc Thermaline PIR
 25 x 50mm Treated Sawn Batten at max 600mm ccs. All board edges must be supported
 Laid on Existing External Wall
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services

232 WT02 FR60 WALL LININGS- FIRE LINING UPGRADE OF EXISTING

2.5mm Plaster skim finish
 15mm BG Gyproc Soundbloc
 15mm BG Gyproc Soundbloc
 25 x 50mm Treated Sawn Batten at max 600mm ccs. All board edges must be supported
 Laid on Existing Internal Wall
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services

- 233 WT03 ACOUSTIC LINING UPGRADE (PROVIDED BY HA ACOUSTICS – TO BE CONFIRMED IN SOUND TEST BY HA ACOUSTIC PLANNED IN NOVEMBER)
 2.5mm Plaster skim finish
 12.5mm BG Gyproc Soundbloc
 12.5mm BG Gyproc Soundbloc
 38 x 89mm CLS Timber Studs max 600ccs infilled with 25mm Mineral Wool (10kg/m3)
 10mm Offstand from face
 Laid on Existing Internal Wall
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services
234. WT03A MOISTURE RESISTANT TILE FACED ACOUSTIC LINING (PROVIDED BY HA ACOUSTICS – TO BE CONFIRMED IN SOUND TEST BY HA ACOUSTIC PLANNED IN NOVEMBER)
 5mm Ceramic Tile Finish
 2.5mm Tile Adhesive
 2.5mm Plaster skim
 12.5mm BG Gyproc Soundbloc MR
 12.5mm BG Gyproc Soundbloc MR
 38 x 89mm CLS Timber Studs max 600ccs Infilled with 25mm Mineral Wool (10kg/m3)
 10mm Offstand from face
 Laid on Existing Internal Wall
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services
 All board edges must be supported
- 235 WT04 LW ACOUSTIC TIMBER PARTY WALL (FR60) (PROVIDED BY HA ACOUSTICS – TO BE CONFIRMED IN SOUND TEST BY HA ACOUSTIC PLANNED IN NOVEMBER)
 2.5mm Plaster skim finish
 12.5mm BG Gyproc Soundbloc
 12.5mm BG Gyproc Soundbloc
 16mm BG Gypframe RB1 Resilient Bars
 75 x 38mm CLS Timber Stud max 600ccs Infilled with 50mm Isover Acoustic Partition Roll
 12.5mm BG Gyproc Soundbloc
 12.5mm BG Gyproc Soundbloc
 2.5mm Wet Plaster Finish
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services
 All board edges must be supported
- 236 WT05 TIMBER PARTITION WALL
 2.5mm Wet Plaster Finish
 12.5mm BG Gyproc Soundbloc
 89 x 38mm CLS Timber Studs max 600ccs Infilled with 50mm Isover Acoustic Partition Roll
 12.5mm BG Gyproc Soundbloc
 2.5mm Wet Plaster Finish
 Accessories: Metal beads/ stops recommended by board manufacturer
 Other requirements: Fire stopping around services
 All board edges must be supported

- 237 WT06 INFILL TIMBER PARTITION WALL
2.5mm Plaster skim finish
12.5mm BG Gyproc Soundbloc
89 x 38mm CLS Timber Studs max 600ccs Infilled with 50mm Isover Acoustic Partition Roll
12.5mm BG Gyproc Soundbloc
2.5mm Wet Plaster Finish
Accessories: Metal beads/ stops recommended by board manufacturer
Other requirements: Fire stopping around services
All board edges must be supported
- 238 WT07 TILE FACE LINING
5mm Ceramic Tile Finish
2.5mm Tile Adhesive
10mm Tile backer board Marmox Multiboard mechanically fixed to existing wall
- 239 WT08 ROOF SPACE FR60 COMPARTMENTATION PARTITION (DOUBLE LAYER)
50mm Rockwool Fire Barrier EN
25mm Air Gap
50mm Rockwool Fire Barrier EN
To be installed as per Rockwool's installation instructions, to include a 1500mm horizontal overlap (refer to drawing 0272)
To be hung from the roof trusses to the top of compartment walls system complete with metal clamping plates and 25mm Rockwool RWA45
Accessories: Metal clamp plates recommended by manufacturer
Other requirements: Fire stopping around services using EN barrier as recommended by manufacturer.
- 275 ENCASEMENTS GENERALLY TO VERTICAL SVP/SERVICE PIPES THROUGH BATHROOMS AND LIVING/BED SPACES
Timber framework: generally 44 x 44 mm with noggings at 600 mm maximum centres..
 - Linings: 2 layers 12.5mm acoustic MR plasterboard. Wrap all SVPs with Rockwool 25mm thick, minimum density 25Kg/m3.
 - Fixing: Drywall Screws.
 - Finishing: Skim coat plaster/or other finish to suit location as per drawings.
 - Primer/ Sealer: Not required.
 - Accessories: Metal beads/ stops recommended by board manufacturer.
 - Other requirements: n/a.
- 276 LOW LEVEL ENCASEMENTS TO SVP/WASTE BOXINGS TO BATHROOMS WITHIN FLATS
 - Timber framework: generally 44 x 44 mm with noggings at 600 mm maximum centres.
Casing: 18mm MR MDF or 18mm WBP Ply. Top lid to be 18mm bullnose MR MDF primed, undercoated and sation paint finish.
 - Fixing: Drywall Screws.
 - Finishing: Skim coat plaster/or other finish to suit location as per drawings.
 - Primer/ Sealer: Not required.
 - Accessories: Metal beads/ stops recommended by board manufacturer.
 - Other requirements: n/a.

- 277 HIGH LEVEL ENCASEMENTS TO KITCHEN/BATHROOM EXTRACT DUCT/PIPES WITHIN A FLAT
- Timber framework: generally 44 x 44 mm with noggings at 600 mm maximum centres.
Casing: 2x 12.5mm acoustic plasterboard. Wrap pipe/ducts Rockwool 25mm thick, minimum density 25Kg/m³
 - Fixing: Drywall Screws.
 - Finishing: Skim coat plaster/or other finish to suit location as per drawings.
 - Primer/ Sealer: Not required.
 - Accessories: Metal beads/ stops recommended by board manufacturer.
 - Other requirements: n/a.

GENERAL/ PREPARATION

- 325 PREPARATION OF MASONRY TO RECEIVE WALL LININGS
- General: Suitable to receive lining system. Redundant fixtures and services removed. Cutting, chasing and making good completed.
 - Holes, gaps, service penetrations, perimeter junctions and around openings: Seal.
 - Adhesive fixings: Prepare substrate to achieve effective bonding.
 - Contaminants: Remove loose material, dirt, grease, oil, paper, etc.
 - Absorption: Control by dampening, priming or applying bonding agents as necessary.
- 335 ADDITIONAL SUPPORTS
- Framing: Accurately position and securely fix to give full support to:
 - Partition heads running parallel with, but offset from main structural supports.
 - Fixtures, fittings and service outlets. Mark framing positions clearly and accurately on linings.
 - Board edges and lining perimeters, as recommended by board manufacturer to suit type and performance of lining.

COMPONENTS

- 400 GYPSUM BOARDS GENERALLY
- Standard:
 - Gypsum plasterboard to BS EN 520.
 - Gypsum fibre board to BS EN 15283-2.
 - Evidence of compliance: All sheets to be CE marked. Submit Declaration of Performance (DoP).
- 401 GYPSUM PLASTERBOARD
- Type: To BS EN 520, type A.
 - Core density (minimum): 650 kg/m³.
 - Reaction to fire: Manufacturer's standard.
 - Water vapour resistance factor: Manufacturer's standard.
 - Thermal conductivity: Manufacturer's standard.
 - Other BS EN 520 characteristics: None.
 - Recycled content: n/a.
 - Exposed surface and edge profiles: Suitable to receive specified finish.

- 402 GYPSUM PLASTERBOARD (VAPOUR CONTROL) TO CEILINGS BELOW COLD ROOFS
- Type: To BS EN 520, type A.
 - Core density (minimum): 650 kg/m³.
 - Reaction to fire: Manufacturer's standard.
 - Water vapour resistance factor: Manufacturer's standard.
 - Thermal conductivity: Manufacturer's standard.
 - Other BS EN 520 characteristics: None.
 - Recycled content: n/a.
 - Moisture vapour resistance of backing layer (minimum): 60 MNs/g.
 - Exposed surface and edge profiles: Suitable to receive specified finish.
- 403 GYPSUM PLASTERBOARD (MOISTURE RESISTANT)
- Type: To BS EN 520, type H1.
 - Core: Moisture resistant.
 - Density (minimum): 710 kg/m³.
 - Paper facings: Moisture resistant.
 - Reaction to fire: Manufacturer's standard.
 - Water vapour resistance factor: Manufacturer's standard.
 - Thermal conductivity: Manufacturer's standard.
 - Other BS EN 520 characteristics: None.
 - Recycled content: n/a.
 - Exposed surface and edge profiles: Suitable to receive specified finish this can include tiling in lieu of tile backer board -Gypsum Glasroc H or sim. Also use MR board to ceilings in bathrooms..
- (Revised - K10 revision P2 - 7th May 2020)
- 427 TILE BACKER
- Type: Marmox
 - Thickness: 10mm
- 431 ACCESS PANELS TO SVP/Risers
- Type: MDF
 - Sizes: To suit location and accessibility on site .
 - Frame: Bead for taping and jointing-shadow gap .
 - Panel: Painted mdf .

INSTALLATION

- 435 DRY LININGS GENERALLY
- General: Use fixing, jointing, sealing and finishing materials, components and installation methods recommended by board manufacturer.
 - Cutting gypsum boards: Neatly and accurately without damaging core or tearing paper facing.
 - Cut edges: Minimize and position at internal angles wherever possible. Mask with bound edges of adjacent boards at external corners.
 - Fixings boards: Securely and firmly to suitably prepared and accurately levelled backgrounds.
 - Finishing: Neatly to give flush, smooth, flat surfaces free from bowing and abrupt changes of level.

445 CEILINGS

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

505 INSTALLING MINERAL WOOL INSULATION

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

510 SEALING GAPS AND AIR PATHS

- Location of sealant: To perimeter abutments and around openings.
 - Pressurized shafts and ducts: At board-to-board and board-to-metal frame junctions.
- Application: To clean, dry and dust free surfaces as a continuous bead with no gaps.
 - Gaps greater than 6 mm between floor and underside of gypsum board: After sealing, fill with jointing compound.

555 FIRE STOPPING AT PERIMETERS OF DRY LINING SYSTEMS

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

560 JOINTS BETWEEN BOARDS

- Tapered edged gypsum boards:
 - Bound edges: Lightly butted.
 - Cut/ unbound edges: 3 mm gap.
- Square edged plasterboards: 3 mm gap.
- Square edged gypsum fibre boards: 5 mm gap.

565 VERTICAL JOINTS

- Joints: Centre on studs.
 - Partitions: Stagger joints on opposite sides of studs.
 - Two layer boarding: Stagger joints between layers.

570 HORIZONTAL JOINTS

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

590 FIXING GYPSUM BOARD TO METAL FRAMING/ FURRINGS

- Partitions/ Wall linings: Fix securely and firmly at the following centres (maximum):
 - Single layer boarding: To all framing at 300 mm centres. Reduce to 200 mm centres at external angles.
 - Multi-layer boarding: Face layer at 300 mm centres, and previous layers around perimeters at 300 mm centres.

-
- Ceilings: 230 mm. Reduce to 150 mm at board ends and at lining perimeters.
- Position of screws from edges of boards (minimum): 10 mm.
 - Screw heads: Set in a depression. Do not break paper or gypsum core.

592 FIXING INSULATION BACKED PLASTERBOARD TO METAL FURRINGS/TIMBER BATTENS

- Fixing to furrings: In addition to screw fixings apply continuous beads of adhesive sealant to furrings.

610 FIXING GYPSUM BOARD TO TIMBER

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

620 FIXING GYPSUM BOARD WITH ADHESIVE DABS (IF CONTRACTOR SELECT THIS METHOD)

- Setting out boards: Accurately aligned and plumb.
- Fixing to substrates: Securely using adhesive dabs.
- Adhesive dab spacings for each board:
 - Horizontally: One row along top edge and one continuous dab along bottom edge.
 - Vertically: One row along each edge and thereafter at intermediate spacings to suit size of board:

Thickness (mm)	Width (mm)	Dab centres (mm)
9.5	1200	400
9.5/12.5	900	450
12.5	1200	600
- Adhesive dab dimensions (width x length): At least 50-75 mm x 250 mm.
 - Position of dabs from edges/ ends of boards (minimum): 25 mm.

FINISHING

650 LEVEL OF DRY LINING ACROSS JOINTS

- Sudden irregularities: Not permitted.
- 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.
 - Tapered edge joints:
 - Permissible deviation (maximum) across joints when measured with feet resting on boards: 3 mm.
 - External angles:
 - Permissible deviation (maximum) for both faces: 4 mm.
 - Internal angles:
 - Permissible deviation (maximum) for both faces: 5 mm.

670 SEAMLESS JOINTING TO GYPSUM BOARDS

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

680 SKIM COAT PLASTER FINISH

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

692 RIGID BEADS/STOPS

- Internal: To BS EN 13658-1.
- External: To BS EN 13658-2.

695 INSTALLING BEADS/ STOPS

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

725 REPAIRS TO EXISTING GYPSUM BOARD

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

K11

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

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

To be read with Preliminaries/ General conditions.

TYPES OF FLOORING/ SHEATHING/ DECKING/ SARKING/ LINING/ CASINGS

110 WOOD-BASED SHEETS GENERALLY

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

270 GROUND FLOORS (ASSUMED UNINSULATED AND GAS BARRIER UNKNOWN)

Existing ground bearing concrete floor slab (thickness believe approx. 100mm plus 50mm screed)

SAP calculations will allow for exclusion of thermal upgrade of the floor as it is not practical to add insulation to it as all existing door heads and stairs would be impacted. Ground floors shall (except bathroom and kitchen areas) be laid with thermal underlay

275 ACOUSTICS UPGRADE TO SEPARATING FIRST FLOOR

Existing construction of upper floor to be confirmed through opening up ceiling. Believed to comprise 50mm screed on 150mm 1970's pot and beam system. Accordingly, subject to practical testing being undertaken (in November 2025 when the property is vacant), floor and ceiling recommendations may be revised and downgraded, or alternative specifications may be provided at a later date.

Acoustic upgrade to satisfy AD Part E1 over the existing concrete first floor to be provided with a resiliently backed platform floor system as Collecta DECKfon 17T or similar with associated perimeter flanking strip.

Acoustic upgrade to satisfy AD Part E1 below existing party/separating ceiling - in newly created flats with 2x 12.5mm acoustic plasterboard (Gyproc SoundBloc or Fireline) suspended on MF frame fixed to the underside of the concrete floor above, providing a minimum 150mm clear void (subject to concrete floor depth), finished with plaster skim. Plasterboard shall be foil backed above bathrooms and to top floor ceiling. Completion testing of separating floors (and walls) will be required by an accredited test body (either UKAS accredited, or ANC registered) of a representative sample to confirm that the in-situ requirements have been met.

AD Part B compliance to separating /party floor will be 60 mins provided by the 2x 12.5mm acoustic plasterboard (Gyproc SoundBloc or Fireline) noted above.

280 UPPER FLOOR LIFT VOID INFILL

Existing lift to be removed entirely and floor void made good with structural grade C24 timber joists and 18mm ply deck to engineers detail. Full acoustic treatment to be confirmed by acoustician as will be subject to on-site testing when the building is vacant in November 2025.

WORKMANSHIP

910 INSTALLATION GENERALLY

- Timing: Building to be weathertight before fixing boards internally.
- Moisture content of timber supports (maximum): 18%.
- Joints between boards: Accurately aligned, of constant width and parallel to perimeter edges.
- Methods of fixing, and fasteners: As section Z20 where not specified otherwise.

940 BOARD MOISTURE CONTENT AND CONDITIONING

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

960 FIXING GENERALLY

- Boards/ sheets: Fixed securely to each support without distortion and true to line and level.
- Fasteners: Evenly spaced in straight lines and, unless otherwise recommended by board manufacturer, in pairs across joints.
 - Distance from edge of board/ sheet: Sufficient to prevent damage.
- Surplus adhesive: Removed as the work proceeds.

L10
Windows/Rooflights(AOV)

L10 WINDOWS/ ROOFLIGHTS (AOV)

New and Replacement casement/framed UPVC windows are noted on the plans and schedules. Windows to ground floor and those accessible and being replaced from the flat roof must comply with Part Q (PAS 24) and Part L of building regulations.

All windows being replaced MUST copy the configuration of the window being replaced for Planning purposes.

To be read with Preliminaries/ General conditions.

GENERAL

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

PRODUCTS

380A PVC-U WINDOWS

- Standard: Agrément certified and PAS24 compliant.
- Colour/ Texture: White -no wood grain effect.
- Exposure category to BS 6375-1/ Design wind load: 2000 Pa.
- Operation and strength characteristics: To BS 6375-2.
- Reinforcement: Austenitic stainless steel.
- Thermal performance (U-value maximum): 1.4 W/m²K whole window notional U value subject to SAP calculation.
- Glazing details: Upvc Bead-fixed insulating glass units as section L40.
 - Beading: Internal.
- Ironmongery/ Accessories: Weather stripping; stainless steel friction stays with opening restrictors to all casement opening lights; security locks to all opening lights; trickle vents to heads of all units.
- Fixing: Through frame fixing as manufactures recommendations
- Cross reference with EDP Thermal Modelling Report.

390 AOV TO ROOF OVER STAIR WELL

Refer to M&E Specification for controls.

Product: Contractors choice to approval of architect.

AOV to be powder coated aluminium insulated hatch and insulated aluminium low profile upstand frame to provide 1sqm venting all certified to EN12102-2 actuator powered and linked to fire alarm system. To be complete with flashing kit suitable for the existing concrete tiles.

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry floored and covered storage.
- Stored components: Stack vertical or near vertical on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

765 WINDOW INSTALLATION GENERALLY

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
 - Maximum: 10mm.

770 DAMP PROOF COURSES IN PREPARED OPENINGS

- Location: Ensure correct positioning in relation to window frames. Do not displace during fixing operations.

783 FIXING OF PVC-U FRAMES

- Standard: As section Z20.
- Fasteners: As recommended by the window manufacturer.

810 SEALANT JOINTS

- Sealant:
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Colour: Externally - to match surrounding construction. Internally to be white.
 - Application: As section Z22 to prepared joints. Finish triangular fillets to a flat or slightly convex profile.

820 IRONMONGERY

- 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.
- Checking/ Adjusting/ Lubricating: Carry out at Completion and ensure correct functioning.

L20 Doors/ shutters/ hatches

To be read with Preliminaries/ General conditions.

GENERAL

SITE MEASUREMENT

There shall be new doorsets placed in existing openings and new doorsets placed in new partitions/walls. All structural opening sizes for internal doorsets after drylining has been undertaken must be measured prior to fabrication to ensure fit.

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

112 TIMBER PROCUREMENT

- Timber (including timber for wood-based products): Obtained from well-managed forests and/ or plantations in accordance with:
 - The laws governing forest management in the producer country or countries.
 - International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- Documentation: Provide either:
 - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
 - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.
- Certification scheme: UK Timber procurement policy Category A evidence certification scheme..
 - Other evidence: UK Timber procurement policy Category B evidence: Completed supply chain information within attached proforma.

115 FIRE RESISTING DOORS/ DOOR ASSEMBLIES/ DOORSETS

- Door products: As defined in BS EN 12519.
- Evidence of fire performance: Provide certified evidence, in the form of a product conformity certificate, directly relevant fire test report or engineering assessment, that each door/ door assembly/ doorset supplied will comply with the specified requirements for fire or smoke resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.
- Components, assemblies or sets will be marked to the relevant product standard and/ or third party certification rating.

120 NON FIRE RESISTING DOORS/ DOOR ASSEMBLIES/ DOORSETS

- Provide certified evidence, in the form of a product conformity certificate or engineering assessment, that each door/ doorset/ assembly supplied will comply with

the specified requirements to BS EN 14351-1. Such certification must cover door and

-
-
- frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.
- Components and assemblies will be marked to the relevant product standard and/ or third party certification rating.

PRODUCTS

410 WOOD DOORSETS INTERNAL FLUSH PAINTED NON FIRE RATED

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Door leaf:
 - Facings: Interior grade plywood.
 - Lippings: Exposed lippings to long edges.
 - Finish as delivered: Full factory finish.
- Frame and architraves:
 - Wood species: Hardwood.
 - Finish as delivered: Full factory finish.
- Preservative treatment: Not required.
- Glazing/ Infill details: Not applicable.
 - Manifestation: Not applicable.
 - Beading: Not required.
- Ironmongery: As ironmongery schedule.
- Perimeter seals: Not required.
- Thermal performance (U-value maximum): N/A.
- Other requirements: None.
- Fixing: Plugged and screwed.

411 WOOD DOORSETS INTERNAL FLUSH PAINTED FIRE RATED TO 3 STOREY PROPERTIES- FD30S

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Door leaf:
 - Facings: Interior grade plywood.
 - Lippings: Exposed lippings to long edges.
 - Finish as delivered: Full factory finish.
- Frame and architraves:
 - Wood species: Hardwood.
 - Finish as delivered: Full factory finish.
- Preservative treatment: Not required.
- Glazing/ Infill details: Not applicable.
 - Manifestation: Not applicable.
 - Beading: Not required.
- Ironmongery: As ironmongery schedule.
- Perimeter seals: Fire and smoke seal. Doorset to provide 30mins fire resistance .
- Thermal performance (U-value maximum): N/A.
- Other requirements: None.
- Fixing: Plugged and screwed.

480 DOORSETS COMPOSITE EXTERNAL FRONT ENTRANCE PAS24

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Door leaf: Composite construction.
 - Finish as delivered: Factory finish-Colours TBC.
- Frame and architraves: Anthracite Grey to match windows. White internally.
 - Finish as delivered: Factory applied .
- Glazing/ Infill details: Clear double glazing.
 - Manifestation: Toughened glass to side lights where shown on drawings.
 - Beading: Internal.
- Ironmongery: As ironmongery schedule.
- Perimeter seals: EPDM weatherseal.
- Thermal performance (U-value maximum): 1.8 W/m²K .
- Other requirements: Double glazed side panels with safety glazing to certain doorsets as drawings.
All thresholds to be max 15mm height for accessibility.

630 HATCHES TO ROOF SPACES

Manufacturer: Contractor choice.
 Product reference: Contractor choice.
 Size: 562x726mm standard.
 Performance: FD30 fire rated.
 Operation: Manual key/lockable
 Other requirements: Power coated metal hatch and frame. RAL9010 white.
 Installation to manufacturers recommendations.

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry, floored and covered storage.
- Stored components: Stacked on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

730 PRIMING/ SEALING

- Wood surfaces inaccessible after installation: Primed or sealed as specified before fixing components.

750 FIXING DOORSETS

- Timing: After associated rooms have been made weathertight and the work of wet trades is finished and dried out.

790A FIXING OF WOOD FRAMES

- To manufacturers recommendations for doorsets

800 FIXING OF LOOSE THRESHOLDS

- Spacing of fixings: Maximum 150 mm from each end and at 600 mm maximum centres.

820 SEALANT JOINTS

- Sealant:
 - Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice
 - .
 - Colour: White .
 - Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.

830 FIXING IRONMONGERY GENERALLY

- Fasteners: Supplied by ironmongery manufacturer.
 - Finish/ Corrosion resistance: To match ironmongery.
- Holes for components: No larger than required for satisfactory fit/ operation.
- Adjacent surfaces: Undamaged.
- Moving parts: Adjusted, lubricated and functioning correctly at completion.

840 FIXING IRONMONGERY TO FIRE RESISTING DOOR ASSEMBLIES

- General: All items fixed in accordance with door leaf manufacturer's recommendations ensuring that integrity of the assembly, as established by testing, is not compromised.
- Holes for through fixings and components: Accurately cut.
 - Clearances: Not more than 8 mm unless protected by intumescent paste or similar.
 - Lock/ Latch cases for fire doors requiring ≥ 60 minutes integrity performance: Coated with intumescent paint or paste before installation.

850 LOCATION OF HINGES

- Primary hinges: Where not specified otherwise, positioned with centre lines 250 mm from top and bottom of door leaf.
- Third hinge: Where specified, positioned on centre line of door leaf .
- Hinges for fire resisting doors: Positioned in accordance with door leaf manufacturer's recommendations.

L20 DOOR & WINDOW IRONMONGERY

QUANTITIES AND LOCATIONS

- Quantities and locations of ironmongery are for doors **Ironmongery** – To be scheduled by specialist ironmonger – SouthWest Supplies or similar.

GENERAL

120 IRONMONGERY RANGE SELECTED BY CONTRACTOR

- Source: Single co-ordinated range. D Handles
- Notification: Submit details of selected range, manufacturer and/ or supplier.
- Principal material/ finish: SSS
- Items unavailable within selected range: Submit proposals.

140 SAMPLES

- General: Before placing orders with suppliers submit labelled samples of the following: Internal door handle set .
- Conformity: Retain samples on site for the duration of the Contract. Ensure conformity of ironmongery as delivered with labelled samples.

170 IRONMONGERY FOR FIRE DOORS

- Relevant products: Ironmongery fixed to, or morticed into, the component parts of a fire resisting door assembly.
- Compliance: Ironmongery included in successful tests to BS 476-22 or BS EN 1634-1 on door assemblies similar to those proposed.
- Certification: Submit CERTIFIRE certificates .
- Melting point of components (except decorative non-functional parts): 800°C minimum.

180 STRENGTH CLASS OR CATEGORY OF DUTY FOR DOOR IRONMONGERY

- Requirement: To BS EN 1192, Class 3..
- General: Durability of ironmongery components to be compatible with stated category of duty of each door leaf.
- Exclusions: Ironmongery with specific duty or 'category of use' defined elsewhere.
- Documentation: Before placing orders with suppliers submit documentation showing product compliance with stated category of duty

DOOR IRONMONGERY

Contractors choice on:

- Single axis hinges: To BS EN 1935.
- Door closers and floor springs: To BS EN 1154.
- Electromagnetic hold-open devices: To BS EN 1155.
- Thief resistant door locks: To BS 3621 and Kitemarked.
- Door locks and latches: To BS EN 12209.
- Emergency exit devices: To BS EN 179.
- Panic exit devices: To BS EN 1125.
- Door bolts: To BS EN 12051.
- Lever handles and door knobs: To BS EN 1906.
- Pull handles: To BS 8424.
- Letter plates: To BS EN 13724

L40
General glazing

L40 General glazing

To be read with Preliminaries/ General conditions.

GENERAL REQUIREMENTS

111 PREGLAZING

- Preglazing of components: Permitted.
- Prevention of displacement: Submit details of precautions to be taken to protect glazing and compound/ seals during delivery and installation.
- Defective/ displaced glazing/ compound/ seals: Reglaze components in situ.

150 WORKMANSHIP AND POSITIONING GENERALLY

- Glazing generally: In accordance with BS 6262 series.
- Integrity: Glazing must be wind and watertight under all conditions with full allowance made for deflections and other movements.
- Dimensional tolerances: Panes/ sheets to be within ± 2 mm of specified dimensions.
- Materials:
 - Compatibility: Glass/ plastics, surround materials, sealers, primers and paints/ clear finishes to be used together to be compatible. Avoid contact between glazing panes/ units and alkaline materials such as cement and lime.
 - Protection: Keep materials dry until fixed. Protect insulating glass units and plastics glazing sheets from the sun and other heat sources.

152 PREPARATION

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

155 GLASS GENERALLY

- Standards: To BS 952 and relevant parts of:
 - BS EN 572 for basic soda lime silicate glass.
 - BS EN 1096 for coated glass.
 - BS EN 1748-1 for borosilicate glass.
 - BS EN 1748-2 for ceramic glass.
 - BS EN 1863 for heat strengthened soda lime silicate glass.
 - BS EN 12150 for thermally toughened soda lime silicate safety glass.
 - BS EN 12337 for chemically strengthened soda lime silicate glass.
 - BS EN 13024 for thermally toughened borosilicate safety glass.
 - BS EN ISO 12543 for laminated glass and laminated safety glass.
- Panes/ sheets: Clean and free from obvious scratches, bubbles, cracks, rippling, dimples and other defects.
 - Edges: Generally undamaged. Shells and chips not more than 2 mm deep and extending not more than 5 mm across the surface are acceptable if ground out.

165 HEAT SOAKING OF THERMALLY TOUGHENED GLASS

- Standard: To BS EN 14179.

- Holding period (minimum): 2 hours.
- Mean glass temperature: $290^{\circ} \pm 10^{\circ}\text{C}$.
- Certified evidence of treatment: Submit.
- Designated locations: To all glazed zones requiring safety glazing.

TYPES OF GLAZING

370A BEAD FIXED INSULATING GLASS UNITS GENERALLY

- IGU: As clause 655.
 - Perimeter taping: Do not use.
- Surround/ bead: PVC-U.
Glazing system: Preformed gasket sections supplied by window manufacturer.
- Thermal performance (U-value maximum): $1.2 \text{ W/m}^2\text{K}$.
- Glazing installation:
 - Insulating unit: Located centrally in surround using setting and location blocks.
 - Gaskets and beads: Installed as recommended by frame manufacturer.
Gasket fit at corners: Tight, without gaps.
 - Drainage and ventilation holes: Unobstructed.

656 INSULATED GLASS UNITS GENERALLY

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Standard: BS EN 1279.
- Thermal performance (centre pane): $1.1 \text{ W/m}^2\text{K}$ subject to SAP calcs.

M10
Cement based levelling screeds

M10 Cement based levelling screed

To be read with Preliminaries/General conditions.

TYPES OF SCREED

131 PROPRIETARY LATEX SELF LEVELLING SCREED TO GROUND FLOOR

- Substrate: Concrete screed
- Screed manufacturer: Mapei renovation 3240 or similar
- .
 - Reinforcement for crack control: As directed by manufacturer specific to the product.
- Thickness: 3mm min
 - To receive: Vinyl sheet and/or Carpet - Refer to M50/M51.
 - Mix and application in strict accordance with manufacturers instructions

GENERALLY/ PREPARATION

210 SUITABILITY OF SUBSTRATES

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

255 PIPE DUCTS/ TRUNKING

- Preformed access ducts: Before laying screed, fix securely to substrates and level accurately in relation to finished floor surface.

LAYING

345 LEVEL OF SCREED SURFACES

- Permissible deviation: (allowing for thickness of coverings) ± 5 mm from datum.

355 FLATNESS/ SURFACE REGULARITY OF FLOOR SCREEDS

- Standard: In accordance with BS 8204-1, Table 5.
- Test: In accordance with BS 8204-1, Annex C.
- Sudden irregularities: Not permitted

405 JOINTS IN LEVELLING SCREEDS GENERALLY

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

440 CRACK INDUCING GROOVES IN LEVELLING SCREEDS

- Groove depth: At least half the depth of screed.
- Cutting grooves: Straight, vertical and accurately positioned. Select from the following:
 - Trowel cut as screed is laid.
 - Saw cut sufficiently early after laying to prevent random cracking.

FINISHING/CURING

510 FINISHING GENERALLY

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

540 FINISH TO LEVELLING SCREEDS

- Floating: To an even texture with no ridges or steps.

650 CURING

- 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.
- Curing period (minimum): Keep polyethylene sheeting in position for: period recommended by screed manufacturer.
- 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.

M20

Plastered/ Rendered/ Roughcast coatings

M20 Plastered/ Rendered/ Roughcast coatings

To be read with Preliminaries/ General conditions.

TYPES OF COATING

160 RENDER EXTYERNALLY TO INFILL WALL

- Set render face back from adjacent by 10mm and float to match existing accent finish. Decorate with proprietary Sandtex (or similar) smooth masonry paint. Coats to obliterate render. Render to be two coat work, scratch coat then finishing coat. Scratch coat to be 4:1 sand/cement, finishing coat to be weaker 5:1. Plasticiser (Feb or sim) may be used in both coats to aid workability to manufacturer's instructions.
- Accessories: PVC angle and stop beads

210A THISTLE HARDWALL FOR INTERNAL MASONRY BACKGROUNDS

- Manufacturer: British Gypsum, or similar to Contractors choice
 - Web: www.british-gypsum.com.
 - Email: bgtechnical.enquiries@bpb.com.
 - Product reference: Thistle Hardwall

280 GYPSUM PLASTER SKIM COAT ON PLASTERBOARD

- Plasterboard: Genarally 12.5/15 mm .
 - Preparation: Bonding agent recommended by plaster manufacturer .
- Plaster: Board finish/ finish plaster to BS EN 13279-1.
 - Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice
 - .
 - Thickness: 2-5mm .
 - Finish: Smooth.
- Accessories: Beads and stops .

MATERIALS AND MARKING OF MORTAR

430 READY-TO-USE CEMENT GAUGED RENDER MORTARS

- Time and temperature limitations: Use within limits prescribed by mortar manufacturer
 - Retempering: Restore workability with water only within prescribed time limits.

438 CEMENTS FOR MORTARS

- Cement: To BS EN 197-1.
 - Types: Portland cement, CEM I.
Portland slag cement, CEM II.
Portland fly ash cement, CEM II.
 - Strength class: 32.5, 42.5 or 52.5.
- White cement: To BS EN 197-1.
 - Type: Portland cement, CEM1.
 - Strength class: 52.5.
- Sulfate resisting Portland cement: To BS EN 197-1.
 - Strength class: 42.5.
- Masonry cement: To BS EN 998-1 and Kitemarked.

440 SAND FOR CEMENT GAUGED MORTARS

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

445 PIGMENT FOR COLOURED MORTARS

- Standard: To BS EN 12878.

449 ADMIXTURES FOR CEMENT GAUGED MORTARS

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

495 MIXING

- Render mortars (site prepared):
 - Batching: By volume. Use clean and accurate gauge boxes or buckets.
 - Mix proportions: Based on damp sand. Adjust for dry sand.
 - Lime:sand: Mix thoroughly. Allow to stand, without drying out, for at least 16 hours before using.
- Mixes: Of uniform consistence and free from lumps. Do not retemper or reconstitute mixes.
- Contamination: Prevent intermixing with other materials.

497 COLD WEATHER

- General: Do not use frozen materials or apply coatings on frozen or frost bound substrates.
- External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising. Maintain temperature of work above freezing until coatings have fully hardened.
- Internal work: Take precautions to enable internal coating work to proceed without detriment when air temperature is below 3°C.

PREPARING SUBSTRATES

510 SUITABILITY OF SUBSTRATES

- Soundness: Free from loose areas and significant cracks and gaps.
- Cutting, chasing, making good, fixing of conduits and services outlets and the like: Completed.
- Tolerances: Permitting specified flatness/ regularity of finished coatings.
- Cleanliness: Free from dirt, dust, efflorescence and mould, and other contaminants incompatible with coatings.

530 ROUGHENING FOR KEY

- Substrates: Roughen thoroughly and evenly.
 - Depth of surface removal: Minimum necessary to provide an effective key.

541 BONDING AGENT APPLICATION

- General: Apply evenly to substrate to achieve effective bond of plaster/ render coat. Protect adjacent joinery and other surfaces.

BACKINGS/ BEADS/ JOINTS

600 ADDITIONAL FRAMING SUPPORTS FOR BACKINGS

- Framing: Accurately position and securely fix to give full support to fixtures, fittings and service outlets.
- Support board edges and perimeters: As recommended by board manufacturer to suit type and performance of board.

610 FIXING PLASTERBOARD BACKINGS TO TIMBER

- Fixings, accessories and installation methods: As recommended by board manufacturer.
- Fixing: At the following centres (maximum):
 - Nails: 150 mm.
 - Screws to partitions/ walls: 300 mm. Reduce to 200 mm at external angles.
 - Screws to ceilings: 230 mm.
- Position of nails/ screws from edges of boards (minimum):
 - Bound edges: 10 mm.
 - Cut/ unbound edges: 13 mm.
- Position of nails/ screws from edges of supports (minimum): 6 mm.
- Nail/ screw heads: Set below surface. Do not break paper or gypsum core.

612 JOINTS IN PLASTERBOARD BACKINGS

- Ceilings:
 - Bound edges: At right angles to supports and with ends staggered in adjacent rows.
 - Two layer boarding: Stagger joints between layers.
- Partitions/ walls:
 - Vertical joints: Centre on studs. Stagger joints on opposite sides of studs. Two layer boarding: Stagger joints between layers.
 - Horizontal joints: Two layer boarding: Stagger joints between layers by at least 600 mm. Support edges of outer layer.

- Joint widths (maximum): 3 mm.

630 BEADS/ STOPS FOR INTERNAL USE

- Standard: In accordance with BS EN 13914-2, Table 2.
- Material: Galvanized steel to BS EN 13658-1.

636 BEADS/ STOPS FOR EXTERNAL USE

- Standard: In accordance with BS EN 13914-1, Table 4.
- Material: Plastics/ PVC or stainless to contractors choice.

640 BEADS/ STOPS GENERALLY

- Location: External angles and stop ends except where specified otherwise.
- Corners: Neat miters at return angles.
- Fixing: Secure, using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.
 - Beads/ stops for external render: Fix mechanically.
- Finishing: After coatings have been applied, remove surplus material while still wet, from surfaces of beads/ stops exposed to view.

659 PLASTERBOARD JOINTS

- Joints and angles (except where coincident with metal beads). Reinforce with continuous lengths of jointing tape.

673 PLASTERING OVER CONDUITS/ SERVICE CHASES

- General: Prevent cracking over conduits and other services.
- Services chased into substrate: Isolate from coating by covering with galvanized metal lathing, fixed at staggered centres along both edges.

INTERNAL PLASTERING

710 APPLICATION GENERALLY

- Application of coatings: Firmly and in one continuous operation between angles and joints. Achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - Accuracy: Finish to a true plane, to correct line and level, with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
- Drying out: Prevent excessively rapid or localized drying out.

715 FLATNESS/ SURFACE REGULARITY

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

725 UNDERCOATS GENERALLY

- General: Rule to an even surface. Cross scratch to provide a key for the next coat.
- Undercoats on metal lathing: Work well into interstices to obtain maximum key.
- Undercoats gauged with Portland cement: Do not apply next coat until drying shrinkage is substantially complete.

742 THIN COAT PLASTER

- Preparation for plasters less than 2 mm thick: Fill holes, scratches and voids with finishing plaster.

777 SMOOTH FINISH

- Appearance: A tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks. Avoid water brush, excessive trowelling and over polishing.

EXTERNAL RENDERING

810 APPLICATION GENERALLY

- Application of coatings: Firmly and in one continuous operation between angles and joints. Achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - Accuracy: Finish to a true plane, to correct line and level, with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
- Drying: Prevent excessively rapid or localized drying out.

840 UNDERCOATS GENERALLY

- General: Rule to an even surface. Comb to provide a key for the next coat. Do not penetrate the coat.
- Undercoats on metal lathing: Work well into interstices to obtain maximum key.

856 FINAL COAT - PLAIN FLOATED FINISH

- Finish: Even, open texture free from laitance.

880 CURING AND DRYING

- General: Prevent premature setting and uneven drying of each coat.
- Curing coatings: Keep each coat damp by covering with polyethylene sheet and/or spraying with water.
 - Curing period (minimum): As the render manufacturer's recommendations.
 - Final coat: Hang sheeting clear of the final coat.
- Drying: Allow each coat to dry thoroughly, with drying shrinkage substantially complete before applying next coat.
- Protection: Protect from frost and rain.

M40
Ceramic tiling

M40 Stone/ concrete/ quarry/ ceramic tiling/ mosaic

To be read with Preliminaries/ General conditions.

TYPES OF TILING/ MOSAIC

- 110 TILING TO BATHROOM/WCS/KITCHENS - AS SPLASHBACKS and FULL HEIGHT TO BATH/SHOWERS
 Tiles: Ceramic modular.
 - Manufacturer/ Supplier: Contractor's choice. Product reference: Contractor's choice.
 - Colour: TBC.
 - Finish: Satin finish
 - Size: 150x150.
 - Thickness: contractors choice.
 - Slip potential:
 Slip resistance value (SRV) (minimum)/ Pendulum test value (PTV) (minimum) to BS 7976-1, -2, -3 or BS EN 14231 (natural stone only): Not applicable.
 Surface roughness (Rz) (minimum) to BS 1134: Not applicable.
 Ramp test class: Not applicable.
 - Recycled content: Not applicable. Background/ Base: Tile grade board to drylining .
 - Preparation: As recommended by tiling manufacturer to suit background. Intermediate substrate: Not required.
 Bedding: Adhesive bed - notched trowel method, as clause M40/650.
 - Reinforcement: Not applicable.
 - Adhesive to BS EN 12004: Contractor's choice. Joint width: nominal 3 mm.
 Grout: Proprietary to contractors choice.
 - Type/ classification: CG2W.
 - Admixture: None. Movement joints: n/a. Accessories: pvc edge trims.

GENERAL

- 210 SUITABILITY OF BACKGROUNDS/ BASES
 Background/ base tolerances: To permit specified flatness/ regularity of finished surfaces given the permissible minimum and maximum thickness of bedding.
 New background drying times (minimum):
 - Concrete walls: 6 weeks.
 - Brick/ block walls: 6 weeks.
 - Rendering: 2 weeks.
 - Gypsum plaster: 4 weeks.
 New base drying times (minimum):
 - Concrete slabs: 6 weeks.
 - Cement:sand screeds: 3 weeks.
- 250 SAMPLES
 General: Submit representative samples of the following: Each type of tile.

PREPARATION

380 NEW PLASTER

Plaster: Dry, solidly bedded, free from dust and friable matter. Plaster primer: Apply if recommended by adhesive manufacturer.

390 PLASTERBOARD BACKGROUNDS

Boards: Dry, securely fixed and rigid with no protruding fixings and face to receive decorative finish exposed.

400 BACKGROUNDS TILE BACKER BOARDS TO BATHROOMS

Boards: Dry, securely fixed and rigid with no protruding fixings.
Surfaces to be tiled: Seal or prime if recommended by adhesive manufacturer.

FIXING

510 FIXING GENERALLY

Colour/ shade: Unintended variations within tiles for use in each area/ room are not permitted.

- Variegated tiles: Mix thoroughly.

Adhesive: Compatible with background/ base. Prime if recommended by adhesive manufacturer.

Use of admixtures with cementitious adhesives: Only admixtures approved by adhesive manufacturer.

Cut tiles: Neat and accurate.

Fixing: Provide adhesion over entire background/ base and tile backs.

Final appearance: Before bedding material sets, make adjustments necessary to give true, regular appearance to tiles and joints when viewed under final lighting conditions.

Surplus bedding material: Clean from joints and face of tiles without disturbing tiles.

531 SETTING OUT

Joints: True to line, continuous and without steps.

- Joints on walls: Horizontal, vertical and aligned round corners.

- Joints in floors: Parallel to the main axis of the space or specified features.

Cut tiles: Minimize number, maximize size and locate unobtrusively. Joints in adjoining floors and walls: Align.

Joints in adjoining floors and skirtings: Align.

Movement joints: Where locations are not indicated, submit proposals.

550 FLATNESS/ REGULARITY OF TILING/ MOSAICS

Sudden irregularities: Not permitted.

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 and no gap should be greater than 6 mm, i.e. a tolerance of + 3 mm.

560 LEVEL OF TILING ACROSS JOINTS

Deviation (maximum) between tile surfaces either side of any type of joint:

- 1 mm for joints less than 6 mm wide.

- 2 mm for joints 6 mm or greater in width.

650 ADHESIVE BED - NOTCHED TROWEL METHOD (WALLS)

Application: By 3 mm floated coat of adhesive to dry background in areas of approximately 1 m². Comb surface.

Tiling: Press tiles firmly onto float coat.

MOVEMENT JOINTS/ GROUTING/ COMPLETION

875 GROUTING

Sequence: Grout when bed/adhesive has set sufficient to prevent disturbance of tiles. Joints: 6 mm deep (or depth of tile if less). Free from dust and debris.

Grouting: Fill joints completely, tool to profile, clean off surface. Leave free from blemishes. -

Profile: Flush.

Polishing: When grout is hard, polish tiling with a dry cloth.

865 COLOURED GROUT

Staining of tiles: Not permitted

Evaluating risk of staining: Apply grout to a few tiles in a small trial area. If discoloration occurs apply a protective sealer to tiles and repeat trial.

M50
Floor sheeting

M50 Floor sheeting

To be read with Preliminaries/ General conditions.

TYPES OF COVERING

150 SHEETING VINYL

- Location: To all flats in bathrooms/wcs/kitchens/dining rooms.
- Base: Latex levelling screed and Deckfon 17D(to upper floor)
- Flooring roll: Heterogeneous PVC to BS EN ISO 10582.
 - Manufacturer: Altro or Contractor's choice. Product reference: Altro Classic 25 or Contractors choice.
 - BS EN ISO 10874 class: 34/43.
 - Slip potential:
 - Slip resistance value (SRV) (minimum)/ Pendulum test value (PTV) (minimum) to BS 7976-1, -2 and -3: 36 dry/ 36wet.
 - Surface roughness (Rz) (minimum) to BS 1134: 20 micrometres.
 - Recycled content: Contractor's choice.
 - Width: 2000 mm.
 - Thickness: min 2.5mm.
 - Colour/ pattern: to be confirmed by client.
- Adhesive (and primer if recommended by manufacturer): As clause 640.
- Seam welding: Hot welding with complimentary coloured rod.
- Accessories: transition strips to thresholds- silicone mastic to perimeter seal to skirting.
- Finishing: as manufacturers recommendations.
- Other requirements: Must be slip resistant in bathrooms/wcs/cloaks.
- To all bathrooms – skirtings shall be coved 100mm rise finished with stop bead. This includes coving up face of low level boxings of pipe work.

GENERAL REQUIREMENTS

210 WORKMANSHIP GENERALLY

- Base condition after preparation: Rigid, dry, sound, smooth and free from grease, dirt and other contaminants.
- Finished coverings: Accurately fitted, tightly jointed, securely bonded, smooth and free from air bubbles, rippling, adhesive marks and stains.

220 SAMPLES

- Covering samples: Before placing orders, submit representative sample of each type.

250 LAYOUT - SEAMS IN ROLL MATERIALS

- Setting out: Minimise occurrences of seams and cross seams.
- Cross seams: Not permitted in following locations: Preference is that seams should be discrete.

270 EXTRA MATERIAL

- Provision of extra material: At completion, hand to Employer extra material of each type of covering to extent of to be agreed with client.

330 COMMENCEMENT

- Required condition of works prior to laying materials:
 - Building is weathertight and well dried out.
 - Wet trades have finished work.
 - Paintwork is finished and dry.
 - Conflicting overhead work is complete.
 - Floor service outlets, duct covers and other fixtures around which materials are to be cut are fixed.
- Notification: Submit not less than 48 hours before commencing laying.

340 CONDITIONING

- Prior to laying: Condition materials by unpacking and separating in spaces where they are to be laid. Maintain resilient flooring rolls in an upright position. Unroll carpet and keep flat on a supporting surface.
- Conditioning time and temperature (minimum): As recommended by manufacturer with time extended by a factor of two for materials stored or transported at a temperature of less than 10°C immediately prior to laying.

350 ENVIRONMENT

- Temperature and humidity: Before, during and after laying, maintain approximately at levels which will prevail after building is occupied.
- Ventilation: Before during and after laying, maintain adequate provision.

PREPARING BASES

410 NEW BASES

- Suitability of bases and conditions within any area: Commencement of laying of coverings will be taken as acceptance of suitability.

430 NEW WET LAID BASES

- Base drying aids: Not used for at least four days prior to moisture content testing.
- Base moisture content test: Carry out in accordance with BS 5325, Annex A or BS 8203, Annex A.
 - Locations for readings: In all corners, along edges, and at various points over area being tested.
- Commencement of laying coverings: Not until all readings show 75% relative humidity or less.

440 SUBSTRATES TO RECEIVE THIN COVERINGS

- Trowelled finishes: Uniform, smooth surface free from trowel marks and other blemishes. Abrade suitably to receive specified floor covering material.

460 SMOOTHING/ LEVELLING UNDERLAYMENT COMPOUND

- Type: Latex cement.
- Manufacturer: Contractor's choice/Mapei 3240

LAYING COVERINGS

620 COLOUR CONSISTENCY

- Finished work in any one area/ room: Free from banding or patchiness.

640 ADHESIVE FIXING GENERALLY

- Adhesive type: As specified, as recommended by covering/ underlay, manufacturer or as approved.
- Primer: Type and usage as recommended by adhesive manufacturer.
- Application: As necessary to achieve good bond.
- Finished surface: Free from trowel ridges, high spots caused by particles on the substrate, and other irregularities.

650 SEAMS

- Patterns: Matched.
- Joints: Tight without gaps.

680 SEAM WELDING COVERINGS

- Commencement: At least 24 hours after laying, or after adhesive has set.
- Joints: Neat, smooth, strongly bonded, flush with finished surface.

M51
Edge fixed carpeting

M51 Edge fixed carpeting

To be read with Preliminaries/ General conditions.

TYPES OF CARPETING

110 CARPETING

- Location: TO ALL FLOORS EXCEPT KITCHEN/BATHROOMS/WCS/STAIRS
- Base: Trowelled latex screed/Deckphon 17T (Upper floors)
 - Preparation: Thin self levelling latex screed to contractors choice/Mapei 3240.
- Carpet and underlay to be installed to all upper and lower floors flats, stairs and common entrance hall. Underlay shall be Plushwalk 10mm memory foam or similar, with integral dpm, A+ low VOC, 45dB soundproofing. **Application:** Lay black side down, logo backing face upwards. Use Allrounder Fix Spray Adhesive to glue the corners. Tape the joins with Wilsons Bonding Tape.
- Overlaid with 80/20 contract grade carpet – Burmatex or Heckmondwicke. Colour to be confirmed.
- Method of fixing: Carpet gripper.
- Methods of fixing at openings/ free edges: Edging strip at junctions with plastics flooring.

GENERAL/ PREPARATION

210 WORKMANSHIP GENERALLY

- Finished carpeting: Tightly seamed, accurately fitted, neatly and securely fixed, smooth and evenly tensioned.

220 SAMPLES

- Carpet samples: Before placing orders, submit representative sample of each type of carpet.
 - Size (minimum): 500x500mm.

251 CARPET LAYOUT

- Setting out: Keep seams and cross seams to a minimum.
- Cross seams: Not permitted in following locations: Corridors-trip hazard.

270 EXTRA MATERIAL

- Provision of extra material: At completion hand to Employer.
 - Quantity: 25sqm of each type .

290 CONDITIONING CARPET

- Requirements: As recommended by manufacturer.

310 CONDITION OF WORKS PRIOR TO LAYING

- General requirements:
 - Building weathertight and well dried out.
 - Wet trades complete.
 - Paintwork complete and dry.
 - Floor service outlets, duct covers and other fixtures around which carpet is to be cut, fixed.

320 ENVIRONMENT

- Temperature and humidity: Before, during and after laying, maintain approximately at levels which will prevail after building is occupied.

330 SUITABILITY OF BASES

- General: Commencement of laying carpeting will be taken as acceptance of suitability of bases.

340 NEW WET LAID BASES

- Base drying aids: Not used for at least four days prior to moisture content testing.
- Base moisture content test: Carry out in accordance with BS 5325, Annex A.
 - Locations for readings: In all corners, along edges, and at various points over area being tested.
- Commencement of laying carpeting: Not until all readings show 75% relative humidity or less.

LAYING CARPETING

410 CARPET GRIPPER

- Types and method of fixing: As recommended by gripper manufacturer to suit specified carpet, base and conditions of use.
- Fixing: Secure to form continuous length along all edges adjacent to vertical surfaces leaving a 'gully width' of approximately three quarters the thickness of carpet. Do not place across openings.

430 UNDERLAY ON FLOORS

- Setting out: Seams not to coincide with those in carpet.
- Placement: Cut to size, butted to grippers and secured at perimeter by stapling or adhering to base.
 - Surface of installed underlay: Flat, smooth and free from wrinkles or bubbles.
- Seams: Butt joints secured with staples, adhesive or top-taped with no shadow shown through carpet.

440 UNDERLAY ON STAIRS

- Extent: Underlay pads to cover tread and riser in one piece to full width of carpet (except where edges will be exposed).
- Placement: Butted to grippers and secured to prevent movement and wrinkling.

450 CARPET SEAMS/ JOINTS

- General: Straight, flat, evenly tensioned and butted, with no surface pile trapped between edges.
- Method and materials: Compatible with carpet and as recommended by manufacturers.
- Bond strength: Consistent for full length of seam, sufficient to withstand stretching without opening up and to last the life of carpet.
- Pattern matching: (where applicable): Accurately matched for full length of seam.

470 LAYING CARPET GENERALLY

- Appearance of laid carpet: Pieces of the same carpet type capable of being seen together to be of consistent appearance with pile lying in the same direction.
- Carpet perimeter: Accurately and closely fitted leaving no gaps. Edges turned down and secured to grippers.
- Carpet tension: Even, and such that carpet lies flat and will not ruck, ripple or become slack.
- Doorways and recesses: Cut carpet in. Do not piece in without prior approval.

480 POWER STRETCHING

- General: Power stretch carpets greater than 5 metres in any dimension.
-

530 LAYING STAIR CARPET WITH GRIPPER

- Shifting allowance: Provide a minimum additional length of carpet equivalent to one tread and riser. Conceal by substituting for underlay at top or bottom of stairs.
- Gripper locations:
 - One on each tread and each riser, close to intersection.
 - To edge of each winder over 300 mm deep and abutting a wall.
 - Along a landing over 300 mm deep and abutting wall.
- Pile direction: Towards bottom of stairs and perpendicular to nosings.

540 LAYING STAIR CARPET WITH ADHESIVE

- Placement: Fit carpet after fixing nosings. Bond to base with a suitable permanent bond adhesive. Achieve a smooth flat finish with no trapped air.

570 COMPLETION

- Debris: Remove stay tacks and cut away partly loose warp and face yarns.
- Surface irregularities and tension: Check and make necessary tension adjustments.

580 WASTE

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

M60
Painting/clear finishing

M60 Painting/clear finishing

To be read with Preliminaries/General conditions.

COATING SYSTEMS

110 EMULSION PAINT TO INTERNAL PLASTERED SURFACES GENERALLY

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Surfaces: Plastered blockwork and plaster skim to plasterboard..
 - Preparation: Generally as clauses within this section.
- Initial coats: As recommended by manufacturer.
 - Number of coats: One diluted as manufacturer recommendations.
- Undercoats: As recommended by manufacturer.
 - Number of coats: As recommended by manufacturer.
- Finishing coats: Matt vinyl generally and washable.
 - Number of coats: Two full. Allow for third full coat where recommended by the coating manufacturer for strong colours..

130 GLOSS PAINT TO INTERNAL JOINERY

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Surfaces: Generally as clauses M60/ 400, 420, 425, 440, 471, 481..
 - Preparation: Ensure surfaces are clean and dry and Remove all loose and defective coatings.
- Initial coats: Sealer - or as recommended by manufacturer.
 - Number of coats: 1.
- Undercoats: As recommended by manufacturer.
 - Number of coats: 2 or as recommended by manufacturer.
- Finishing coats: Full gloss.
 - Number of coats: As recommended by manufacturer.

171 MASONRY COATING PAINTING OF RENDER

Sandtex smooth masonry paint to new areas of render on wall infills.

GENERALLY

215 HANDLING AND STORAGE

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

220 COMPATIBILITY

- Coating materials selected by contractor:
 - Recommended by their manufacturers for the particular surface and conditions of exposure.
 - Compatible with each other.
 - Compatible with and not inhibiting performance of preservative/fire retardant pretreatments.

280 PROTECTION

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

PREPARATION

400 PREPARATION GENERALLY

- Standard: In accordance with BS 6150.
- Refer to any pre-existing CDM Health and Safety File when sanding older paint finishes..
- Refer to CDM Construction Phase Plan where applicable.
- Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Substrates: Sufficiently dry in depth to suit coating.
- Dirt, grease and oil: Remove. Give notice if contamination of surfaces/ substrates has occurred.
- Surface irregularities: Remove.
- Joints, cracks, holes and other depressions: Fill flush with surface, to provide smooth finish.
- Dust, particles and residues from preparation: Remove and dispose of safely.
- Water based stoppers and fillers:
 - Apply before priming unless recommended otherwise by manufacturer.
 - If applied after priming: Patch prime.
- Oil based stoppers and fillers: Apply after priming.
- Doors, opening windows and other moving parts:
 - Ease, if necessary, before coating.
 - Prime resulting bare areas.

420 FIXTURES AND FITTINGS

- Removal: Before commencing work remove: Coverplates, grilles, wall clocks, and other surface mounted fixtures.
- Replacement: Refurbish as necessary, refit when coating is dry.

425 IRONMONGERY

- Removal: Before commencing work: Remove ironmongery from surfaces to be coated.
- Hinges: Remove or mask out.
- Replacement: Refurbishment as necessary; refit when coating is dry.

440 PREVIOUSLY COATED SURFACES GENERALLY

- Preparation: In accordance with BS 6150, clause 11.5.
- Contaminated or hazardous surfaces: Give notice of:
 - Coatings suspected of containing lead.
 - Substrates suspected of containing asbestos or other hazardous materials.
 - Significant rot, corrosion or other degradation of substrates.
- Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
- Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
- Alkali affected coatings: Completely remove.
- Retained coatings:
 - Thoroughly clean to remove dirt, grease and contaminants.
 - Gloss coated surfaces: Provide key.
- Partly removed coatings:
 - Additional preparatory coats: Apply to restore original coating thicknesses.
 - Junctions: Provide flush surface.
- Completely stripped surfaces: Prepare as for uncoated surfaces.

471 PREPRIMED WOOD

- Areas of defective primer: Take back to bare wood and reprime.

481 UNCOATED WOOD

- General: Provide smooth, even finish with arrises and moulding edges lightly rounded or eased.
- Heads of fasteners: Countersink sufficient to hold stoppers/fillers.
- Resinous areas and knots: Apply two coats of knotting.

511 GALVANIZED, SHERARDIZED AND ELECTROPLATED STEEL

- White rust: Remove.
- Pretreatment: Apply one of the following:
 - Mordant solution to blacken whole surface.
 - Etching primer recommended by coating system manufacturer.

580 UNCOATED PLASTER

- Nibs, trowel marks and plaster splashes: Scrape off.
- Overtrowelled 'polished' areas: Key lightly.

590 UNCOATED PLASTERBOARD

- Depressions around fixings: Fill with stoppers/ fillers

APPLICATION

711 COATING GENERALLY

- Application standard: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality during application and drying.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing of coatings: Not permitted unless recommended by manufacturer.
- Overpainting: Do not paint over intumescent strips or silicone mastics.
- Priming coats:
 - Thickness: To suit surface porosity.
 - Application: As soon as possible on same day as preparation is completed.
- Finish:
 - Even, smooth and of uniform colour.
 - Free from brush marks, sags, runs and other defects.
 - Cut in neatly.
- Doors, opening windows and other moving parts: Ease before coating and between coats.

720 PRIMING JOINERY

- Preservative treated timber: Retreat cut surfaces with two flood coats of a suitable preservative before priming.
- End grain: Coat liberally allow to soak in and recoat.

730 WORKSHOP COATING OF CONCEALED JOINERY SURFACES

- General: Apply coatings to all surfaces of components.

N10

General fixtures/ furnishings/ equipment

N10 General fixtures/ furnishings/ equipment

To be read with Preliminaries/General conditions.

PRODUCTS

110A CYCLE HOOPS/RACKS

Location as drawings.

Contractors choice for standard galvanized Sheffield cycle hoops, to be set into concrete bases. Rapid set postcrete or similar.

Contractors choice or vertical bike racks by

<https://thebikestoragecompany.co.uk/product/vertical-bike-rack/>

110B POST BOXES

Location as drawings. Flats 1/2/5

Contractors choice or <https://www.safetyletterbox.com/mailboxes/ts009> wall mounted and mechanically fixed to existing wall adjacent to entrance door under window. Secure by Design approved.

110C BAT BOXES

Location as drawings. End gable high to verge. 2No.

Type to be confirmed by Ecologist IOS Ecology.

EXECUTION

720A INSTALLATION GENERALLY

- General: In accordance with manufacturer instructions

COMPLETION

910A GENERAL

- Accurately aligned, and securely fixed. All factory labels removed and cleaned

N11

Domestic kitchen fittings, furnishings and equipment

N11 Domestic kitchen fittings, furnishings and equipment

To be read with Preliminaries/ General conditions. PRODUCTS

310 FITTED BASE UNITS GENERALLY

- Standard: To BS 6222 -2 and -3, and BS EN 14749.
- Manufacturer: Symphony or Howdens or similar.
 - Product reference: Contractor's choice.
- Structural performance: To BS 6222-2, test level H.
- Dimensions: To BS EN 1116.
- Surface finishes: To BS 6222-3.
- Doors and drawer fronts:
 - Material: Plastics laminate.
 - Finish and colour: TBC.
 - Edges: Plastics strip.
 - Other requirements: None.
- Side panels, plinths and shelves:
 - Material: Plastics laminate.
 - Finish and colour: TBC.
 - Edges: Plastics strip.
- Accessories: Legs and plinths.

320 FITTED WALL UNITS GENERALLY

- Standard: To BS 6222 -2 and -3, and BS EN 14749.
- Manufacturer: Symphony or Howdens or similar.
 - Product reference: Contractor's choice.
- Structural performance: To BS 6222-2, test level H.
- Dimensions: To BS EN 1116.
- Surface finishes: To BS 6222-3.
- Doors and drawer fronts:
 - Material: Plastics laminate.
 - Finish and colour: TBC.
 - Edges: Plastics strip.
 - Other requirements: None.
- Side panels and shelves:
 - Material: Plastics laminate.
 - Finish and colour: TBC.
 - Edges: Plastics strip.
- Accessories: Luminaires.

340 WORKTOPS GENERALLY

- Standard: To BS 6222-3.
- Manufacturer: Symphony or Howdens or similar.
 - Product reference: TBC.
- Material: Laminate covered particle board.
- Dimensions: 600 to 620mm range subject to manufacturer selected.
- Exposed edges: Laminate type 2 to BS 6222-3.
- Support: to be provided by the base units.
- Other requirements: none.

350 SINKS, TAPS, TRAPS AND WASTES GENERALLY

- Sinks:
 - Standard: To BS EN 13310.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Configuration: Sink and a half with single drainer.
 - Overall size: 1000 x 500.
 - Material: Stainless steel .
Colour and finish: Brushed steel.
- Tap/ chainstay/ overflow holes:
 - One tap hole,
 - No chainstay hole,
 - Overflow hole..
- Taps: Mixer.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Operation: Lever.
 - Material: Chromed steel.
- Wastes: Drainer basket plug - no chain.
 - Standard: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Size: To fit sink .
 - Material: Chromed steel.
 - Tail: to suit overflow.
- Traps: Tubular, P type.
 - Standard: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Size: To fit waste.
 - Material: Plastic.
 - Depth of seal (minimum): 75 mm.
- Accessories: None.

360A APPLIANCES

- Cooker, washing machine loose fit supplied by Client. Dishwasher to be integrated.

390 SEALANT

- Standard: To BS EN ISO 11600, class F20 HM.
- Type: High Modulus One part silicone.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
- Colour: TBC.

EXECUTION

- 610 MOISTURE CONTENT OF WOOD AND WOOD BASED BOARDS
- Control and monitoring:
 - Method statement: Submit.
- 620 INSTALLATION GENERALLY
- Fixings and adhesives: As section Z20.
 - Services: As Engineering Services specification.
- 630 INSTALLING UNITS AND WORKTOPS
- General: Well fitting, stable and secure.
- 640 INSTALLING APPLIANCES
- Connections: Provide to electric, gas, and hot and cold water services.
- 650 INSTALLING SINKS, TAPS AND WASTES
- Water supply: To BS EN 806-2 and -4.
 - Taps:
 - Fixing: Secure, watertight seal with the appliance.
 - Positioning: Hot tap to left of cold tap as viewed by the user of the appliance.
 - Wastes:
 - Bedding: Waterproof jointing compound.
 - Fixing: With resilient washer between appliance and backnut.
- 660 SEALANT BEDDING AND POINTING
- Application: As section Z22.
 - Bedding: Sink to top of worktop.
 - Pointing: Between units and splash backs.
- 670 INSTALLING TRIMS AND MOULDINGS
- Lengths: Un-jointed between angles or ends of runs.
 - Angle joints: Mitred.

COMPLETION

- 910 GENERAL
- Doors and drawers: Accurately aligned, not binding. Adjusted to ensure smooth operation.
 - Ironmongery: Checked, adjusted and lubricated to ensure correct functioning.
- 920 APPLIANCE COMMISSIONING
- Appliance operation, functions and controls: Verify.
 - Documentation: Submit guarantees, instruction manuals, etc.

N13 Sanitary appliances and fittings

To be read with Preliminaries/ General conditions.

PRODUCTS

300 WCS AND CISTERNS TO ALL FLATS

- WC standard: To Defra WC suite performance specification or equivalent approved by relevant water company.
- Type: Close coupled cistern with push flush button.
- Pan:
 - Standards: To BS EN 33 and BS EN 997, Class 2.
 - Manufacturer: Contractor's choice.
Product reference: Ideal Standard Sandringham 21 suite
 - Material: Glazed fireclay, white.
- Seat and cover:
 - Standard: To BS 1254.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Material: Plastics.
 - Finish/ Colour: White.
 - Soft close: Required.
 - .
- Flushing arrangement: Cistern manufacturer's standard.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's choice.
 - Operating control: Button
 - Flush volume: Dual flush 6 or 4 L.
- Flush pipe: Concealed.
 - Manufacturer: Not applicable.
Product reference: Contractor's choice.
 - Material: Not applicable.
- Accessories: None.

335 WASH BASINS PEDESTAL TYPE TO FLATS

- Standard: To BS EN 14688.
 - Overflow class: Contractors Choice.
- Manufacturer: Ideal Standard
 - Product reference: Sandringham 21 500mm and Corner basin to Flat 4 small bathroom
- Size: At least 500 x 400 mm.
- Material: Vitreous china, white.
- Configuration: Pedestal.
- Tap/ Chainstay/ Overflow holes: Contractors Choice.
- Water supply fittings: Contractors Choice.
 - Water supply temperature (maximum): 43°C.
 - Flow rate (maximum): 6 L/ min. at 3 bar.
 - Manufacturer: Contractor's choice.
Product reference: Contractor's

choice.

- Operation: Manual.
- Wastes: Contractors Choice.
 - Standards: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Size: Contractors Choice.
 - Material: Plastics, self colour.
 - Tail: Contractors Choice.
- Traps: Contractors Choice.
 - Standards: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractors Choice.
 - Product reference: Contractors Choice.
 - Size: Contractors Choice.
 - Material: Plastics, self colour.
 - Depth of seal (minimum): 75 mm.
- Accessories: None.

355 BATHS RECTANGULAR

- Standard: To BS EN 14516, Class 1.
- Manufacturer: Ideal Standard
 - Product reference: Contractor's choice.
- Size: 1700 x 700 mm.
- Volume to overflow (maximum): Manufacturer's standard.
- Material: Cast acrylic, white.
- Tap/ Chainstay/ Overflow holes: Contractor's choice.
- Water supply fittings: Bath mixer tap with shower hose and handspray.
 - Water supply temperature (maximum): 43°C.
 - Flow rate (maximum): 6 L/ minute at 3 bar.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Wastes: Contractor's choice.
 - Standards: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Size: DN 40.
 - Material: Brass, chrome plated.
 - Tail: Contractor's choice.
- Traps: Contractor's choice.
 - Standards: To BS EN 274-1, -2 and -3.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor choice.
 -
 - Size: DN 40.
 - Material: Plastics, self colour.
 - Depth of seal (minimum): 50 mm.
- Accessories: Side and end panels to suit location.

375A SHOWER TRAYS

Ideal Standard range Sizes as drawings. Generally 800mm depth except quadrant tray to small bathroom in Flat 4. All trays raised on ply deck to 150mm to enable waster and run to nearest SVP via low level boxing.

All showers to be provided with glazed doors and side panels to suit tray from the same system.

438 MIRRORS TO ALL BATHROOMS

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Material: 6mm silvered mirror toughened glass. Rectangular generally 700x500mm portrait.
- Finish/ Colour: as above.

441 PAPER ROLL DISPENSERS

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Material: Contractor's choice.
 - Width: Contractor's choice.
 - Finish/ Colour: Contractor's choice.

465 TOWEL RAILS TO ALL BATH ROOMS -UNLESS PROVIDED AS HEATED RAILS

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Material: Stainless steel and zinc alloy base.
- Finish/ Colour: durable chrome finish.

EXECUTION

610 INSTALLATION GENERALLY

- Assembly and fixing: Surfaces designed to falls to drain as intended.
- Fasteners: Nonferrous or stainless steel.
- Supply and discharge pipework: Fix before appliances.
- Fixing: Fix appliances securely to structure. Do not support on pipework.
- Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes being jointed or bedded.
- Appliances: Do not use. Do not stand on appliances.
- On completion: Components and accessories working correctly with no leaks.
- Labels and stickers: Remove.

613 COMPATIBILITY OF COMPONENTS

- General: Each sanitary assembly must consist of functionally compatible components, preferably obtained from a single manufacturer.
 - Exceptions: Water supply fittings, wastes and traps.

620 NOGGINGS AND BEARERS

- Noggings, bearers, etc. to support sanitary appliances and fittings: Position accurately. Fix securely.

630 TILED BACKGROUNDS OTHER THAN SPLASHBACKS

- Timing: Complete before fixing appliances.
- Fixing appliances: Do not overstress tiles.

650 INSTALLING WC PANS

- Floor mounted pans: Screw fix and fit cover caps over screw heads. Do not use mortar or other beddings.
- Seat and cover: Stable when raised.

670 INSTALLING CISTERNS

- Cistern operating components: Obtain from cistern manufacturer.

- Inlet and flushing valves: Match to pressure of water supply.
- Internal overflows: Into pan, to give visible warning of discharge.
- External overflows: Fix pipes to falls and locate to give visible warning of discharge. Agree location where not shown on drawings.
-

710 INSTALLING TAPS

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

720 INSTALLING WASTES AND OVERFLOWS

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

755A SEALANT BEDDING AND POINTING

- Pointing: Joints between appliances and splashbacks. .

P10 Sundry insulation/ proofing work

SUNDRY INSULATION/ PROOFING WORK

To be read with Preliminaries/ General conditions.

TYPES OF INSULATION

- 125 INSULATION LAID BETWEEN/OVER CEILING TIES/ JOISTS
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Material: Mineral wool to BS EN 13162.
 - Recycled content: as manufacturer .
 - Thickness: min 100 overlaid by 170mm to achieve no worse than U Value 0.16 as best starting point (fabric).
 - Installation requirements:
 - Installation standard: Not applicable.
 - Joints: Butted, no gaps.
 - Insulation at perimeter: Carried over wall plates.
 - Eaves ventilation: Unobstructed.
 - Service holes: Sealed, and debris removed before laying insulation.
 - Electric cables overlaid by insulation: Sized accordingly.
 - Water cistern platforms: Not applicable.

P12
Fire stopping systems

P12 Fire stopping systems

To be read with Preliminaries/ General conditions.

GENERALLY

FIRE STOPPING SYSTEMS TO SERVICES PENETRATIONS BY M&E

- 200 OPEN STATE CAVITY FIRE BARRIERS
- 222 RETROFIT OPEN STATE FIRE CAVITY BARRIERS TO EXIST TILE HANGING ON TIMBER FRAME AND MASONRY DWELLINGS
Manufacturer; Tenmat www.tenmat.com or similar, 3rd Party certified, UKAS accredited.
Product: FF102/50 type, Ventilated Cavity Fire Barrier for up to 50mm wide cavities providing up to 120mins of integrity and insulation, tested to BSEN 1363-1 following ASFP TGD 19 guidance.
Location: intumescent horizontal barriers at the foot and head of tiles. Vertical sides of tile bedded in mortar and sides flushed off as existing.
- 230 TIMBER BATTENS (IF REPLACEMENT REQUIRED)
General: Regularized softwood free from decay, insect attack (except ambrosia beetle damage) and with no knots wider than half the width of the section.
Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C6.
- Type: Contractors choice.
Moisture content at time of fixing (maximum): 19%.
- 240 TREATED TIMBER
Exposed cut and drilled surfaces: Treat with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

Unframed isolated trims/ skirtings/ sundry items

P20 Unframed isolated trims/ skirtings/ sundry items

To be read with Preliminaries/ General conditions

110 MDF SKIRTINGS, TRIMS GENERALLY

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Standard: To BS EN 622-5.
 - Type: MDF.MR
 - Formaldehyde class: To BS EN 622-1, Class E1.
- Fire rating: Class 0 as defined in Building Regulations.
- Thickness: 18mm min. x 95mm Edges: bullnose.
- Finish: Prepare and prime and painted as M60.
- Recycled content: n/a.
- Support/ Fixing: contractors choice.
- Fire rating: Not applicable.
- Finished size: refer drawings- min 18 thk to skirtings.

200 MEDIUM DENSITY FIBREBOARD WINDOW BOARDS GENERALLY WHERE NEW

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Standard: To BS EN 622-5.
 - Type: MDF. MR
 - Formaldehyde class: To BS EN 622-1, Class E1.
- Fire rating: Class 0 as defined in Building Regulations.
- Thickness: 18mm min.
Edges: bullnose.
- Finish: Prepared and primed and painted as M60.
- Recycled content: n/a.
- Support/ Fixing: contractors choice.

EXECUTION

510 INSTALLATION GENERALLY

- Joinery workmanship: As section Z10.
- Metal workmanship: As section Z11.
- Methods of fixing and fasteners: As section Z20 where not specified.
- Straight runs: To be in one piece, or in long lengths with as few joints as possible.
- Running joints: Location and method of forming to be agreed where not detailed.
- Joints at angles: Mitre, unless shown otherwise.
- Position and level: To be agreed where not detailed.

P21 Door/ window ironmongery

To be read with Preliminaries/ General conditions.

GENERAL

120 IRONMONGERY RANGE SELECTED BY CONTRACTOR

- Source: Single co-ordinated range.
- Notification: Submit details of selected range, manufacturer and/ or supplier.
- Principal material/ finish: Polished stainless steel, grade 1.4301 (304) .
- Items unavailable within selected range: Submit proposals.

140 SAMPLES

- General: Before placing orders with suppliers submit labelled samples of the following:
Internal door handle set .
 - Conformity: Retain samples on site for the duration of the Contract. Ensure conformity of ironmongery as delivered with labelled samples.

170 IRONMONGERY FOR FIRE DOORS

- Relevant products: Ironmongery fixed to, or morticed into, the component parts of a fire resisting door assembly.
- Compliance: Ironmongery included in successful tests to BS 476-22 or BS EN 1634-1 on door assemblies similar to those proposed.
 - Certification: Submit evidence of successful testing by UKAS accredited laboratory .
- Melting point of components (except decorative non-functional parts): 800°C minimum.

180 STRENGTH CLASS OR CATEGORY OF DUTY FOR DOOR IRONMONGERY

- Requirement: To BS EN 1192, Class 3..
- General: Durability of ironmongery components to be compatible with stated category of duty of each door leaf.
 - Exclusions: Ironmongery with specific duty or 'category of use' defined elsewhere.
 - Documentation: Before placing orders with suppliers submit documentation showing product compliance with stated category of duty.

DOORS - GENERALLY: REFER TO L20 FOR DOOR SPECS

Contractors choice on:

- Single axis hinges: To BS EN 1935.
- Door track and running gear: To BS EN 1527.
- Door closers and floor springs: To BS EN 1154.
- Electromagnetic hold-open devices: To BS EN 1155.
- Door co-ordinators: To BS EN 1158.
- Thief resistant door locks: To BS 3621 and Kitemarked.
- Door locks and latches: To BS EN 12209.
- Emergency exit devices: To BS EN 179.
- Panic exit devices: To BS EN 1125.
- Door bolts: To BS EN 12051.
- Lever handles and door knobs: To BS EN 1906.
- Pull handles: To BS 8424.
- Letter plates: To BS EN 13724.

WINDOW FURNITURE REFER TO L10

Z10

Purpose made joinery

Z10 Purpose made joinery

To be read with Preliminaries/ General conditions.

110 FABRICATION

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

120 CROSS SECTION DIMENSIONS OF TIMBER

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

130 PRESERVATIVE TREATED WOOD

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

140 MOISTURE CONTENT

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

210 LAMINATED PLASTICS VENEERED BOARDS/ PANELS

- Fabrication: To British Laminated Plastics Fabricators Association Ltd (BLF) fabricating standards.
- Balancing veneer: From decorative veneer manufacturer and of similar composition. Applied to reverse side of core material.
- Finished components: Free from defects, including bow, twist, scratches, chipping, cracks, pimpling, indentations, glue marks, staining and variations in colour and pattern.
- Joints visible in completed work: Tight butted, true and flush.

220 WOOD VENEERED BOARDS/ PANELS

- Core material and veneers: Conditioned before bonding.
- Setting out: Veneer features and grain pattern aligned regularly and symmetrically unless instructed otherwise.
- Balancing veneer: Applied to reverse side of core material.
 - Moisture and temperature movement characteristics: As facing veneer.
- Veneer edges: Tight butted and flush, with no gaps.
- Tolerance of veneer thickness (maximum): ± 0.5 mm.
- Finished components: Free from defects, including bow, twist, scratches, chipping, splits, blebs, indentations, glue marks and staining.
- Surface finish: Fine, smooth, free from sanding marks.

250 FINISHING

- Surfaces: Smooth, even and suitable to receive finishes.
 - Arrises: Eased unless shown otherwise on drawings.
- End grain in external components: Sealed with primer or sealer as section M60 and allowed to dry before assembly.

Z11 Purpose made metalwork

To be read with Preliminaries/ General conditions.

310 MATERIALS GENERALLY

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

320 STEEL LONG AND FLAT PRODUCTS

- Hot rolled structural steels (excluding structural hollow sections and tubes): To BS EN 10025-1.
- Fine grain steels, including special steels: To BS EN 10025-3 and -4.
- Steels with improved atmospheric corrosion resistance: To BS EN 10025-5.

330 STEEL PLATE, SHEET AND STRIP

- Plates and wide flats, high yield strength steel: To BS EN 10025-6.

340 HOT ROLLED STEEL PLATE, SHEET AND STRIP

- Flat products, high yield strength for cold forming: To BS EN 10149-1, -2 and -3.
- Carbon steel sheet and strip for cold forming: To BS EN 10111.
- Narrow strip, formable steel and steel for general engineering purposes: To BS 1449-1.8 and BS 1449-1.14.

350 COLD ROLLED STEEL PLATE, SHEET AND STRIP

- Steel sections: To BS EN 10162.
- Flat products, high yield strength micro-alloyed steels for cold forming: To BS EN 10268.
- Carbon steel flat products for cold forming: To BS EN 10130 and BS EN 10131.
- Uncoated carbon steel narrow strip for cold forming: To BS EN 10139 and BS EN 10140.
- Narrow strip steel for general engineering purposes: To BS EN 10132-1, -2, and -3.
- Carbon steel flat products for vitreous enamelling: To BS EN 10209.

360 COATED STEEL FLAT PRODUCTS

- Hot dip zinc coated carbon steel sheet and strip for cold forming: To BS EN 10346 and BS EN 10143.
- Hot dip zinc coated structural steel sheet and strip: To BS EN 10143 and BS EN 10346.
- Hot dip zinc-aluminium (za) coated sheet and strip: To BS EN 10346.
- Hot dip aluminium-zinc (az) coated sheet and strip: To BS EN 10346.
- Organic coated flat products: To BS EN 10169.

370 STEEL STRUCTURAL HOLLOW SECTIONS (SHS)

- Non alloy and fine grain steels, hot finished: To BS EN 10210-1 and -2.
- Non-alloy and fine grain steels, cold formed welded: To BS EN 10219-2.
- Weather resistant steels, hot finished: To BS 7668.

380 OTHER STEEL SECTIONS

- Equal flange tees: To BS EN 10055.
- Equal and unequal angles: To BS EN 10056-1 and -2.
- Wire, carbon steel for general engineering purposes: To BS 1052.
- Wire and wire products, general: To BS EN 10218-2.
- Tubes:
 - Seamless circular: To BS EN 10297-1.
 - Seamless cold drawn: To BS EN 10305-1.
 - Welded and cold sized square and rectangular: To BS EN 10305-5.
 - Welded circular: To BS EN 10296-1.
 - Welded cold drawn: To BS EN 10305-2.
 - Welded cold sized: To BS EN 10305-3.

400 STAINLESS STEEL PRODUCTS

- Chemical composition and physical properties: To BS EN 10088-1.
- Sheet, strip and plate: To BS EN 10088-2.
- Semi-finished products bars, rods and sections: To BS EN 10088-3.
- Wire: To BS EN 1088-3.
- Tubes:
 - Welded circular: To BS EN 10296-2.
 - Seamless circular: To BS EN 10297-2.

410 ALUMINIUM ALLOY PRODUCTS

- Designations:
 - Designation system, chemical composition and forms: To BS EN 573-1, -2, -3 and -5.
 - Temper designations: To BS EN 515.
- Sheet, strip and plate: To BS EN 485-1 to -4.
- Cold drawn rods, bars and tubes: To BS EN 754-1 and -2.
- Extruded rods, bars, tubes and profiles: To BS EN 755-1 and -2.
- Drawn wire: To BS EN 1301-1, -2 and -3.
- Rivet, bolt and screw stock: To BS 1473.
- Structural sections: To BS 1161.

420 COPPER ALLOY PRODUCTS

- Sheet, strip, plate and circles for general purposes: To BS EN 1652.
- Sheet and strip for building purposes: To BS EN 1172.
- Rods: To BS EN 12163.
- Profiles and rectangular bars: To BS EN 12167.
- Wire: To BS EN 12166.
- Tubes: To BS EN 12449.

FABRICATION

515 FABRICATION GENERALLY

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

520 COLD FORMED WORK

- Profiles: Accurate, with straight arrises.

525 ADHESIVE BONDING

- Preparation of surfaces of metals to receive adhesives:
 - Degrease.
 - Abrade mechanically or chemically etch.
 - Prime: To suit adhesive.
- Adhesive bond: Form under pressure.

528 WELDING STEEL and STAINLESS STEEL.

- Welding procedures:
 - Method and standard: TIG or MIG welding to BS EN 1011-4.
 - Welding Procedure Specification (WPS): Submit 1 copy to main contractor before commencement of welding.
- Preparation:
 - Joint preparation: Clean thoroughly.
 - Surfaces of materials that will be self-finished and visible in the completed work: protect from weld splatter.
- Jointing:
 - Joints: Fully bond parent and filler metal throughout with no inclusions, holes, porosity or cracks.
 - Dissimilar metals: Welding not permitted.
 - Strength requirements: Welds to achieve design loads.
 - Heat straightening: Not permitted.
 - Complex assemblies: Agree priority for welding members to minimize distortion caused by subsequent welds.
 - Tack welds: Use only for temporary attachment.
 - Jigs: Provide to support and restrain members during welding.
 - Filler plates: Not permitted.
 - Lap joints: Minimum 5 x metal thickness or 25 mm, whichever is greater.
 - Weld terminations: Clean and sound.

555 BRAZING

- Standard: To BS EN 14324.
- Testing:
 - Destructive testing: To BS EN 12797.
 - Nondestructive testing: To BS EN 12799.

610 TESTING BALUSTRADING TO DECKED AREAS.

- Testing standard: Main Contractor to confirm preferred method of testing house - UKAS approved or TWI Certification .
- Welding records and test results: Submit 2 copies.

FINISHING

710 FINISHING WELDED AND BRAZED JOINTS VISIBLE IN COMPLETE WORK

- Standard: To BS EN ISO 8501-3.
 - Preparation grade: P1.
- Butt joints: Smooth, and flush with adjacent surfaces.
- Fillet joints: Neat.
- Grinding: Grind smooth where indicated on drawings.

745 PREPARATION FOR APPLICATION OF COATINGS

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

780A GALVANIZING

- Standard: To BS EN ISO 1461.
- Preparation:
 - Vent and drain holes: Provide in accordance with BS EN ISO 14713-1 and -2. Seal after sections have been drained and cooled.
 - Components subjected to cold working stresses: Heat treat to relieve stresses before galvanizing.
 - Welding slag: Remove.
 - Component cleaning: To BS EN ISO 8501-3.
 - Grade: Coating thickness to suit environment/locality and to BS EN ISO 1461.

COMPLETION

910 DOCUMENTATION

- Submit:
 - Manufacturer's maintenance instructions.
 - Guarantees, warranties, test certificates, record schedules and log books.

920 COMPLETION

- Protection: Remove.
- Cleaning and maintenance: Carry out in accordance with procedures detailed in fabricators' guarantees.

Z12 Preservative treatment

To be read with Preliminaries/ General conditions.

110 TREATMENT APPLICATION

- Timing: After cutting and machining timber, and before assembling components.
- Processor: Licensed by manufacturer of specified treatment solution.
 - Operatives: WPA certified.
- Certification: For each batch of timber provide a certificate of assurance that treatment has been carried out as specified.

120 COMMODITY SPECIFICATIONS

- Standard: In accordance with the Wood Protection Association (WPA) publication 'Industrial wood preservation specification and practice'.

130 PRESERVATIVE TREATMENT SOLUTION STRENGTHS/ TREATMENT CYCLES

- General: Select to achieve specified service life and to suit treatability of specified wood species.

140B COPPER-ORGANIC PRESERVATIVE TREATMENT GENERALLY

- Solution:
 - Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice.
 - Colour: Contractor's choice.
 - Application: High pressure impregnation.
- Moisture content of wood:
 - At time of treatment: Not more than 28%.
 - After treatment: Timber to be surface dry before using.

Z20 Fixings and adhesives

To be read with Preliminaries/ General conditions.

PRODUCTS

310 FASTENERS GENERALLY

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

320 PACKINGS

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

330 NAILED TIMBER FASTENERS

- Nails:
 - Steel: To BS 1202-1 or BS EN 10230-1.
 - Copper: To BS EN 1202-2.
 - Aluminium: To BS 1202-3.

340 MASONRY FIXINGS

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

350 PLUGS

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

360 ANCHORS

- Types:
 - Expansion: For use in substrate strong enough to resist forces generated by expansion of anchor.
 - Adhesive or chemical:
 - For use in substrate where expansion of anchor would fracture substrate.
 - For use in irregular substrate where expansion anchors cannot transfer load on anchor.
 - Cavity: For use where the anchor is retained by toggles of the plug locking onto the inside face of the cavity.

370 WOOD SCREWS

- Type:
 - Wood screws (traditional pattern).
 - Standard: To BS 1210.
 - Wood screws.
 - Pattern: Parallel, fully threaded shank or twin thread types.
- Washers and screw cups: Where required are to be of same material as screw.

380 MISCELLANEOUS SCREWS

- Type: To suit the fixing requirement of the components and substrate.
 - Pattern: Self-tapping, metallic drive screws, or power driven screws.
- Washers and screw cups: Where required to be of same material as screw.

390 ADHESIVES GENERALLY

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

EXECUTION

610 FIXING GENERALLY

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

620 FIXING THROUGH FINISHES

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

630 FIXING PACKINGS

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

640 FIXING CRAMPS

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

650 NAILED TIMBER FIXING

- Penetration: Drive fully in without splitting or crushing timber.
- Surfaces visible in completed work: Punch nail heads below wrot surfaces.
- Nailed timber joints: Two nails per joint (minimum), opposed skew driven.

660 SCREW FIXING

- Finished level of countersunk screw heads:
 - Exposed: Flush with timber surface.
 - Concealed (holes filled or stopped): Sink minimum 2 mm below surface.

670 PELLETED COUNTERSUNK SCREW FIXING

- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.

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- Pellets: Cut from matching timber, match grain and glue in to full depth of hole.
- Finished level of pellets: Flush with surface.

680 PLUGGED COUNTERSUNK SCREW FIXING

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

700 APPLYING ADHESIVES

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

Z21 Mortars

To be read with Preliminaries/ General conditions.

CEMENT GAUGED MORTARS

110 CEMENT GAUGED MORTAR MIXES

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

131 READY-MIXED LIME:SAND FOR CEMENT GAUGED MASONRY MORTARS

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

160 CEMENTS FOR MORTARS

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

190 RETARDED READY TO USE CEMENT GAUGED MORTAR

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

200 STORAGE OF CEMENT GAUGED MORTAR MATERIALS

- Sands and aggregates: Keep different types/ grades in separate stockpiles on hard, clean, free-draining bases.
- Factory made ready-mixed lime:sand/ ready to use retarded mortars: Keep in covered containers to prevent drying out or wetting.
- Bagged cement/ hydrated lime: Store off the ground in dry conditions.

Z22 Sealants

To be read with Preliminaries/General conditions.

PRODUCTS

310 JOINTS TO MOVEMENT JOINTS/WINDOW AND DOOR SURROUNDS/GENERAL SEALING TO FLOOR PERIMETER/BATHS/BASINS ETC INTERNALLY

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

EXECUTION

610 SUITABILITY OF JOINTS

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

620 PREPARING JOINTS

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

630 APPLYING SEALANTS

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

Z31

Powder coatings

Z31 Powder coatings

To be read with Preliminaries/ General conditions.

120 POWDER COATING MATERIALS

- Manufacturer: Obtain from one only of the following: Contractors choice.
- Selected manufacturer: Submit details before commencement of powder coating including:
 - Name and contact details.
 - Details of accreditation schemes.
 - Technical data of product including current Agrément certificates.

210 WORKING PROCEDURES

- Comply with the follow following standards.
 - Aluminium components: To BS 6496 or BS EN 12206-1.
 - Steel components: To BS EN 13438.
 - Safety standards: To British Coatings Federation 'Code of safe practice - Application of thermosetting powder coatings by electrostatic spraying'.

220 POWDER COATING APPLICATORS

- Applicator requirements:
 - Approved by powder coating manufacturer.
 - Currently certified to BS EN ISO 9001.
 - Comply with quality procedures, guarantee conditions, standards and tests required by powder coating manufacturer.
 - Applicator to use only one plant.
 - Selected applicator: Submit details before commencement of powder coating including: Name and contact details.
 - Details of accreditation schemes.

225 GUARANTEES

- Powder coating manufacturer and applicator guarantees:
 - Submit sample copies before commencement of powder coating.
 - Submit signed project specific copies on completion of work.

230 CONTROL SAMPLES

- Sequence: Prior to ordering materials for the works, obtain approval of appearance for:
 - Powder coated samples: Of various grades and forms of background metal to be used, showing any colour, texture and gloss variation.
 - Fabrication samples: Showing joint assembly, how powder coating is affected and how any cut metal edges are finished and protected.
- Samples to include the following information:
 - Product reference.
 - Colour.
 - Reference number.
 - Name.
 - Gloss level.

240 QUALITY ASSURANCE SYSTEM

- Requirement: Powder and coating application to the following designated components is to be tested and approved in accordance with the Qualicoat system.
 - Designated components: Perimeter metal cill to head of stonework.

250 COMPONENT DESIGN

- Condition of components to be powder coated:
 - To comply with relevant recommendations of BS 4479-1, -3, and -4.
 - Of suitable size to fit plant capacity.
 - Of suitable thickness to withstand oven curing.

310 PRETREATMENT OF ALUMINIUM COMPONENTS

- Condition of components to be pretreated:
 - Free from corrosion and damage.
 - All welding and jointing completed and finish off as specified.
 - Free from impurities including soil, grease, oil.
 - Suitable for and compatible with the pretreatment process.
- Conversion coating requirements:
 - Chromate system: To BS 6496 or BS EN 12206-1.
 - Chromate-free system: To BS EN 12206-1. Submit details before using.
- Rinsing requirements: Use demineralized water. Drain and dry.

320 PRETREATMENT OF STEEL COMPONENTS

- Condition of components to be pretreated:
 - Free from corrosion and damage.
 - All welding and jointing completed and finish off as specified.
 - Free from impurities including soil, grease, oil.
 - Suitable for and compatible with the pretreatment process.
- Conversion coating requirements: To BS EN 13438.
- Rinsing requirements: Use demineralized water. Drain and dry.

430 EXTENT OF POWDER COATINGS

- Application: To visible component surfaces, and concealed surfaces requiring protection. Coated surfaces will be deemed 'significant surfaces' for relevant BS 6496 or BS EN 13438 performance requirements.

435 APPLICATION OF POWDER COATINGS

- Surfaces to receive powder coatings: Free from dust or powder deposits.
- Powder colours: Obtain from one batch of one manufacturer.
- Commencement of powder coating: To be continuous from pretreatment.
- Jig points: Not visible on coated components.
- Curing: Controlled to attain metal temperatures and hold periods recommended by powder coating manufacturer.
- Stripping and recoating of components: Only acceptable by prior agreement of powder coating manufacturer. Stripping, pretreatment and powder coating are to be in accordance with manufacturer's requirements.
- Overcoating of components: Not acceptable.

440 PERFORMANCE AND APPEARANCE OF POWDER COATINGS

- For aluminium components:
 - Standard: To BS 6496 or BS EN 12206-1.
- For steel components:
 - Standard: To BS EN 13438.
- Visual inspection after powder coating: Significant surface viewing distances to be as specified in the relevant Standard, unless specified otherwise.
- Colour and gloss levels: To conform with approved samples.

450 ALUMINIUM ALLOY FABRICATIONS

- Units may be assembled:
 - Before powder coating.
 - From components powder coated after cutting to size.
 - Where approved, from components powder coated before cutting to size.
- Exposure of uncoated background metal: Not acceptable.
- Assembly sealants: Compatible with powder coatings. Obtain approval of colour if sealants are visible after fabrication.

460 STEEL FABRICATIONS

- Unit assembly: Wherever practical, before powder coating.
- Exposure of uncoated background metal: Not acceptable.
- Assembly sealants: Compatible with powder coatings. Obtain approval of colour if sealants are visible after fabrication.

470 FIXINGS

- Exposed metal fixings: Powder coat together with components, or coat with matching repair paint system applied in accordance with the powder coating manufacturer's recommendations.

480 DAMAGED COMPONENTS - REPAIR/ REPLACEMENT

- Before delivery to site: Check all components for damage to powder coatings. Replace damaged components.
- Site damage: Submit proposals for repair or replacement.

510 PROTECTION

- Powder coated surfaces of components: Protect from damage during handling and installation, or by subsequent site operations.
- Protective coverings: Must be:
 - Resistant to weather conditions.
 - Partially removable to suit building in and access to fixing points.
- Protective tapes in contact with powder coatings: Must be:
 - Low tack, self adhesive and light in colour.
 - Applied and removed in accordance with tape and powder coating manufacturers' recommendations. Do not use solvents to remove residues as these are detrimental to the coating.
- Inspection of protection: Carry out monthly. Promptly repair any deterioration or deficiency.

535 DOCUMENTATION

- Submit the following information for each batch of powder coated components:
 - Supplier.
 - Trade name.
 - Colour.
 - Type of powder.
 - Method of application.
 - Batch and reference number.
 - Statutory requirements.
 - Test certificates.
 - Maintenance instructions.

540 COMPLETION

- Protection: Remove.
- Cleaning and maintenance of powder coatings: Carry out in accordance with procedures detailed in powder coating manufacturer and applicator guarantees.