

<b>PRELIMINARIES TOTAL</b>	<b>£</b>	<b>-</b>
----------------------------	----------	----------

**DEMOLITION BUILDING WORKS**General Removals

All demolition works are to be in accordance with the drawings and specification. At tender stage, the contractor is to assess all the items mentioned below and quantity correctly.

All debris is to be carted away and disposed of in the correct manner. All carted away materials will be disposed of off-site and documentation provided for removal in accordance with BS 5906, or amended versions thereafter.

Contractor will give the client notice of intention to remove equipment to ensure that all equipment remaining in the property is removed before commencement work.

Demolition works shall at all times be carried out in accordance with the requirements of the appointed Principal Designer and only after such time as appropriate notice has been forwarded to the Health and Safety Executive, and a Building Act 1984 - Section 81(1) notice has been received from the Building Control Enforcement Authority.

**C10 SITE SURVEYS** - N/A - works are mainly internal

**C20 DEMOLITION** - Refer to drawing: (5087.105 - Demolition Plan)

To be read with preliminaries/ general conditions.

All

Demolition works are to be costed in accordance with the drawings & supplementary documentation.

Demolition works shall be designed and undertaken in accordance with BS6187: 2000 – Code of Practice for Demolitions, and Construction Health and Safety.

The contractor is deemed to have visited the site to determine the full extent of the work and must:-

- a) Allow for full protection of properties affected by the work.
- b) Provide all necessary temporary works to shore up and support adjoining structures.
- c) Restrict and control access to areas of site affected by demolition and site clearance.
- d) Take all necessary precautions when dealing with hazardous materials.
- e) Drainage continuity with direct connections. Safely expose and protect services, as required.

**GENERAL REQUIREMENTS****110 DESK STUDY/ SURVEY**

• **SCOPE:** Before starting deconstruction/ demolition work, examine available information, and carry out a survey of: parts of the building forming the works, (see *dwg 5087.105-Demolition Plan and associated proposed plans* ).

(i) the structure or structures to be deconstructed/ demolished,

(ii) the site on which the structure or structures stand, and

(iii) the surrounding area.

• Report

and method statements: Submit, describing: form, condition and details of the structure or structures, the site, and the surrounding area.

• **EXTENT:** As indicated on

drawings.

(i) Type, location and condition of adjoining or surrounding premises/areas that might be adversely affected by removal of the structure or structures, or by noise, vibration and/ or dust generated during deconstruction/demolition.

(ii) Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.

(iii) Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.

(iv) Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.

(v)

Proposed programme of work, including sequence and methods of deconstruction/ demolition.

(vii)

Details of specific pre-weakening

(viii) Special

requirements: Site waste management plan development and proposals.

(ix) Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.

(x) Arrangements for control of site transport and traffic.

•

**120 EXTENT OF DECONSTRUCTION/DEMOLITION**

General: Subject to retention requirements specified elsewhere, deconstruct/demolish structures down as shown on drawing noted above.

**130 GROUNDWORKS**

1 New workshop delivery ramp (*dwg 5087.313*), boundary fencing posts (*5087.205 Proposed Fence*), Paint store steps & ramp (*dwg 5087.320 series*)

2 Survey condition of nearby buildings and externals before work starts and agree records (see section of car parking/road where works are proposed). Base to car park area: assumed as a nominal build up of brick pavers blinding layer and 200mm MOT type 1 coverage.

3 *Contaminated material: Remove, and carry out remediation required by the Enforcing Authority*

4 Removal of deleterious material: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.

**140 BENCHMARKS**

1 Unrecorded bench marks and other survey information: advise if applicable.

2 Location and marking of services: Services affected by deconstruction/demolition work: Locate and mark positions.

3 Services disconnection arranged by contractor: General: refer to MEP Design and details. Locate and mark positions.

150	<p><b><u>FEATURES TO BE RETAINED</u></b></p> <p>1 General: Keep in place and protect the following: As drawings.</p> <p><b><u>SERVICES REGULATIONS</u></b></p> <p>1 Work carried out to or affecting new and/ or existing services: to be in accordance with the byelaws and/or regulations of the relevant Statutory Authority.</p>	
232	<p><b><u>SERVICES DISCONNECTION ARRANGED BY THE EMPLOYER</u></b></p> <p>1 General: The employer will arrange with the appropriate authorities and responsible private organizations for disconnection of services, and removal of fittings and equipment owned by those authorities prior to deconstruction or demolition, as follows: none known at present.</p> <p>2 Timing: Do not start deconstruction or demolition until disconnections are completed.</p>	
240	<p><b><u>DISCONNECTION OF DRAINS</u></b> - Refer to MEP Design and details</p> <p>1 General: Locate, disconnect and seal disused drain connections. Agree where drains are to be sealed.</p> <p>2 Sealing: Permanent, and within the site</p>	
250	<p><b><u>LIVE FOUL AND SURFACE WATER DRAINS</u></b></p> <p>Drains and associated manholes, inspection chambers, gullies, vent pipes and fittings: Protect and maintain normal flow during deconstruction or demolition</p>	1
260	<p><b><u>SERVICE BYPASS CONNECTIONS</u></b></p> <p>1 General: Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction or demolition is taking place and to adjoining sites and properties</p> <p>2 Minimum notice to adjoining owners and all affected occupiers: 72 hours, if shutdown is necessary during changeover</p> <p>3 Timing: Complete bypass of services before demolition works start</p>	
270	<p><b><u>SERVICES TO BE RETAINED</u></b></p> <p>1 Damage to services: Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction or demolition</p> <p>2 Repairs to services: Complete as directed, and to the satisfaction of the service authority or owner</p>	
310	<p><b><u>WORKMANSHIP</u></b></p> <p>1 Standard: Demolish structures in accordance with BS 6187.</p> <p>2 Operatives: Appropriately skilled and experienced for the type of work.</p> <p>3 Holding, or in training to obtain, relevant Construction Skills certification of competence.</p> <p>4 Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction and demolition to be used.</p>	
330	<p><b><u>DUST CONTROL</u></b></p> <p>1 <b>General:</b> Reduce airborne dust by periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.</p> <p>2 <b>Dust control:</b> Refer to HSE CI sheet no. 36 (Latest revision)</p>	
331	<p><b><u>SITE HAZARDS</u></b></p> <p>1 Precautions: Prevent fire or explosion caused by gas and vapour from tanks, pipes, etc.</p> <p>2 Dust: minimise airborne dust by periodically spraying deconstruction and demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris</p> <p>3 Lead dust: Submit method statement for control, containment and clean-up regimes.</p> <p>4 Site operatives and general public: Protect from health hazards associated with vibration, dangerous fumes and dust arising during the course of the works.</p>	

**332 ADJOINING PROPERTY**

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

**360 STRUCTURES TO BE RETAINED**

- 1 Extent: As drawing As drawing above
- 2 Interface between retained structures and deconstruction or demolition: Cut away and strip out with care to minimise the amount of making good needed

**C20/70 PARTLY DEMOLISHED STRUCTURES**

- 1 General: Leave in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Make secure outside working hours.
- 2 Temporary works: Prevent overloading due to debris.
- 3 Access: Prevent access by unauthorized persons.

**380 DANGEROUS OPENINGS**

- 1 General: Provide guarding at all times, including outside of working hours. Illuminate during hours of darkness.
- 2 Access: Prevent access by unauthorized persons.

**390 ASBESTOS-CONTAINING MATERIALS - KNOWN OCCURANCES**

- 1 General: Materials containing asbestos are known to be present in: Refer to complete Asbestos report, supplied by client including Asbestos Reinspection Survey, **UPRN No/: MA35, Project No:J814205, Date: September 2022 by Environtec (evirontec.com) & dwgs 5087.100 & 200 series Elevations)**

**ASBESTOS** - if asbestos is identified it shall be removed in accordance with the following: -

- (i) all current revisions and amendments to the Approved Code of Practice and Guidance Note 'Work with asbestos insulation, asbestos coating and asbestos insulating board' and all other Guidance Notes from the Health and Safety Executive
- (ii) the Health and Safety at Work Act 1974
- (iii) the Control of Asbestos at Work Regulations 1987 and subsequent amendments
- (iv) the Control of Pollution (Special Waste) Regulations 1996
- (v) Hazardous waste Regulations 2005
- (vi) the Asbestos (Licensing) Regulations 1983 and subsequent amendments
- (vii) The recommendations of the Asbestos Information Centre.

The removal of any materials containing asbestos other than asbestos cement or any article of bitumen, plastic, resin or rubber which contains asbestos, and the thermal or acoustic properties of which are incidental to its main purpose, shall be executed by a firm who is licensed by the Health and Safety Executive. Removal is to take place prior to other works starting in these locations.

The Contractor shall engage the services of an independent specialist laboratory approved by the Employer to carry out air sampling and analysis of samples and shall pay all charges for this work. A clean air certificate must be recorded within the site Health and Safety file before the commencement of Works in any buildings within which Asbestos Materials had been identified and removal works undertaken. A copy of the certificate must be forwarded to the Employers Agent as soon as such is received by the Contractor.

**ASBESTOS-CONTAINING MATERIALS - UNKNOWN OCCURANCES**

- 391** 1 Discovery: Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction and demolition work. Avoid disturbing such materials.
- 2 Removal: Submit statutory risk assessments and details of proposed methods for safe removal.

**410 UNFORESEEN HAZARDS**

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

**411 HEALTH HAZARDS:**

- 1 Precautions: Protect site operatives and general public from hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.

**450 SITE CONDITION AT COMPLETION**

- 1 Debris: Clear away and leave the site in a clean, tidy and secure condition.
- 2 Other requirements:

**510 CONTRACTOR'S PROPERTY:**

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

**511 EMPLOYER'S PROPERTY:**

- 1 Refer to ***Furniture, Fixtures and Equipment - FFE -schedule*** for details of items to be relocated from current Estates Team's workshops)
- 2 Components and materials arising from alterations that are to remain the property of the employer: Items retained on site property left by client
- 3 Protection: Maintain until items listed above are removed by the employer or reused in the works, or until the end of the contract.
- 4 Contractor to allow for carefully collecting all FFE schedule for reuse and arrange for relocation from current Estates workshop to new workshops (CTC).
- 5 Contractor to ensure all items scheduled for relocation/reuse are carefully protected & securely storage.
- 6 Prior to relocation, the contractor is to photograph and notify CA/client if there are any damaged/blemished items

**520 RECYCLED MATERIALS:**

- 1 Materials arising from alterations: May be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification and in accordance with any site waste management plan.
- 2 Evidence of compliance: Submit full details and supporting documentation.
- 3 Verification: Allow adequate time in programme for verification of compliance.

**EXTERNAL WORKS** - As dwg and schedule of works

**EXCAVATION REMOVALS****Locations:**

1. **RAMP & PROTECTION BOLLARDS** - (new) Joinery workshop delivery ramp in part of existing car park/road. Part of road/car park surface to be excavated to allow for the based of new ramp, landing and protections bollards. See drawings **5087.120** for location & **5087.313** for details.
2. **FENCING POSTS< FENCING & GATES** - external plant compound (Dwg **5087.205**-Proposed Fence Elevations).
3. **PAINT STORE** - steps & ramp (see **5087.120**-Setting out Plan & **320 series**).

**VARIATIONS IN GROUND LEVELS:**

- 1 Give notice: If levels encountered are significantly different from levels in the site investigation report or previously measured.

**CLEARANCE****TREE ROOTS - N/A**

1 Protected area: Do not cut roots within precautionary protection area, where applicable.

**FEATURES TO BE RETAINED**

- General: Keep in place and protect the following: As indicated on drawings. Client to advise if any items are to be retained for re-used.

**LIVE FOUL AND SURFACE WATER DRAINS**

- Drains and associated manholes, inspection chambers, gullies, vent pipes and fittings:
- Protect; maintain normal flow during deconstruction/ demolition.
- Make good any damage arising from deconstruction/ demolition work.
- Leave clean and in working order at completion of deconstruction/ demolition work.
- Other requirements: None unless noted otherwise on drawings.

**STRUCTURAL WORK** - Refer to S Eng' information in "Existing O&Ms.

- Structural design forms part of the Contractor's Design Portion (CDP).

**DESIGNATED CODES OF PRACTICE:** To the Eurocodes appropriate to the nature of the structure

Design working life: Category 4 to BS EN 1990

Completed structure generally: To comply with the requirements of the designated codes of practice and the standards referenced therein. Deflections and other structural movements at serviceability limit state to be compatible with requirements of the building fabric, movement joints and weathertightness.

Special requirements: none

**STRUCTURE TO BE RETAINED**

Extent: As demolition drawings parts which are to be kept in place: Protect.

Interface between retained structures and deconstruction/ demolition: Cut away and strip out with care to minimise making good.

**PARTLY DEMOLISHED STRUCTURES**

General: Leave in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Make secure outside working hours. Temporary works: Prevent overloading due to debris.

Access: Prevent access by unauthorized persons.

**ALTERATION SPOT ITEM**

Descriptions

Location of spot item descriptions: As drawings

Employer's property

Components and materials arising from alterations that are to remain the property of the employer: As drawings

Protection: Maintain until items listed above are removed by the Employer or reused in the works, or until the end of the Contract.

Special requirements: None

**CARPENTRY GENERAL****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

**TIMBER PROCUREMENT**

1. Timber (including timber for wood-based products): Obtained from well managed forests/plantations in accordance with:
  - 1.1. The laws governing forest management in the producer country or countries.
  - 1.2. International agreements such as the Convention on International Trade in endangered species of wild fauna and flora (CITES).
2. Documentation: Provide either in accordance with chain of custody certification scheme requirements.
  - 2.1. Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
  - 2.2. Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.
3. Chain of Custody Certification scheme: Contractor's choice in accordance with UK Government timber procurement policy (UKTPP), i.e. FSC, GiB or PEFC
  - 3.1. Other evidence: None

**GRADING AND MARKING SOFTWOOD**

1. 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 'DG' (Dry-Graded).
2. Timber wet-graded and specified for installation at higher moisture contents: graded at an average moisture content above 20% and unmarked.
3. Structural timber members cut from large graded sections: Regraded to approval and marked accordingly.

**UNGRADED SOFTWOOD**

1. Description: **FOR INTERNAL NON - STRUCTURAL USE**
2. Quality of timber: Free from decay, insect attack (except pinhole borers) and with no knots wider than half the width of the section.
3. Surface finish: Planed all round
4. Treatment
  - 4.1. Preservative treatment: Organic solvent impregnation to NBS and wood protection Association Commodity Specification C8
  - 4.2. Design service life: 30 years
  - 4.3. Flame retardant treatment: Flame retardant impregnation to NBS section Z12 and wood protection Association Commodity Specification FR3, Type INT2



**CROSS-SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD** (General timber use)

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

**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

**MOISTURE CONTENT**

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

**MOISTURE CONTENT TESTING**

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

**PROTECTION**

1. Generally: Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.
2. 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.
3. Trussed rafters: Keep vertical during handling and storage.

**CLEAR FINISHES**

1. Structural timber to be clear finished: Keep clean and apply first coat of specified finish before delivery to site.

**EXPOSED TIMBER**

1. Planed structural timber exposed to view in completed work: Prevent damage to and marking of surfaces and arises

**JOINTING/FIXING GENERALLY**

1. Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with manufacturers recommendations or as drawing/fixing section on specification below.

**ANTI-CORROSION FINISHES FOR FASTENERS**

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

**FABRICATION**

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

**PRESERVATIVE TREATED WOOD (General Use)**

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

**MOISTURE CONTENT (General Use)**

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

**LAMINATED PLASTICS VENEERED BOARDS/PANELS (cubicles)**

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

**FINISHING**

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

**CHASING HOLES ETC****FLOOR DUCTING/TRUNKING**

1. Manufacturer: Submit proposals
- 1.1. Product reference: Submit proposals

**ACCESS COVERS/GRATINGS - See MEP drawings for requirements**

1. Description: See M&E Drawings and design for details and location
2. Manufacturer: Submit proposals
- 2.1. Product reference: Submit proposals

**HOLES, RECESSES & CHASES IN IN-SITU CONCRETE**

1. Cast in: Holes larger than 10 mm diameter, recesses and chases.
2. Cutting and drilling
- 2.1. Permitted for holes not larger than 10 mm diameter.
- 2.2. Not permitted for holes larger than 10 mm diameter except as indicated on drawings.

**HOLES, RECESSES IN PRECAST CONCRETE**

1. Cutting and drilling: Not permitted except as indicated on drawings

**HOLES, RECESSES AND CHASES IN MASONRY**

1. Locations: To maintain integrity of strength, stability and sound resistance of construction.
2. Sizes: Minimum needed to accommodate services.
  - 2.1. Holes (maximum): 300 mm<sup>2</sup>.
3. Walls of hollow or cellular blocks: Do not chase.
4. Walls of other materials
  - 4.1. Vertical chases: No deeper than one third of single leaf thickness, excluding finishes.
  - 4.2. Horizontal or raking chases: No longer than 1 m. No deeper than one sixth of the single leaf thickness, excluding finishes.
5. Chases and recesses: Do not set back to back. Offset by a clear distance at least equal to the wall thickness.
6. Cutting: Do not cut until mortar is fully set. Cut carefully and neatly. Avoid spalling, cracking and other damage to surrounding structure.

**INSTALLING PIPE SLEEVES**

1. Sleeves: Fit to pipes passing through building fabric.
2. Material: Match pipeline.
3. Size: One or two sizes larger than pipe to allow clearance.
4. Finish: Install sleeves flush with building finish. In areas where floors are washed down, install protruding 100 mm above floor finish.
5. Masking plates: Fit at visible penetrations, including through false ceilings of occupied rooms.

**K10** **DRY LININGS/PARTITIONS/CEILINGS**  
**Types of dry lining**

- 125** **TYPE A-100mm Standard (TA)** - board partition systems (30mins & 60mins)
1. Description: Standard 100mm partition: ELECTRICAL WORKSHOP (CTC.0.020)/CORRIDOR (CTC 0.009), SERVICE DUCT (CTC.0.018-corner FR 60mins). See dwg **5087.120 – Setting Out Plan**
  2. Manufacturer: James Hardie Building Products Ltd  
 7 The Priory, Old Road, Canwell, Sutton Coldfield, B75 5SH  
Telephone: +44(0)1213113480  
Web: [www.jameshardie.co.uk](http://www.jameshardie.co.uk)  
Email: [info@jameshardie.co.uk](mailto:info@jameshardie.co.uk)
  3. Product reference: fermacell® 1S41 Insulated Partition
  4. System performance: To EN 1364-1 and BS 476-22, 120 minute fire rated partition.
  5. Framing: Metal MS Galvanised
  6. Insulation: Mineral wool insulation – Isover or equal approved.
  7. Linings: Inner layers: 2x12.5 mm fermacell®.  
 Face layer: 2x12.5 mm fermacell®.  
 Fasteners: Inner layer, 30 fermacell® screws; Outer layer, 30 fermacell® screws.
  8. Joint treatment: fermacell® Jointfiller 5–7 mm filled joint.
  9. Finish: fermacell® Fine Surface Treatment (FST).
  10. Metal studs: 50 mm fermacell® studs.
  11. Wall Thickness: 100 mm.
  12. Substructure: 50 x 0.6 mm.
  13. Thickness: 40 mm; 50 kg/m<sup>3</sup>.
  14. Board size: 3000 x 1200 mm.
  15. Density: 1150+50 kg/m<sup>3</sup>.
  16. Water vapour diffusion resistance: 13 μ.

17. Thermal Conductivity: 0.32  $\lambda$ .
18. SpecificHeatCapacity: 1.1 kJ/kgK.
19. Hardness: 30 N/mm<sup>2</sup>.
20. Thickness Swelling: <2%.
21. ThermalExpansionCoefficient: 0.0001% /K.
22. Shrinkage: 0.25 mm/m.
23. Moisture Content: 1.3%.
24. pH value: 7–8.
25. Usage: Type 1 and 2.
26. Sound performance: as designed by manufacturer
27. OTHER: Timber stud insert to support door opening are to the 48x50mm structural softwood timber

**127 TYPE C (TC) - 111mm pattresses wall** - Gypsum board partition systems

1. Description: Heavy Duty Partition with 18mm Plywood: **MECHANICAL WORKSHOP** - as noted (**5087.120 – Setting Out Plan**)
2. Manufacturer: James Hardie Building Products Ltd (as above)
3. Product reference: as Clause 125.
4. Insulation: Mineral wool insulation – Isover or equal approved.
5. Linings: Inner layers: 2x18mm WBP Plywood.  
Face layer: 2x12.5 mm fermacell®.
- Fasteners: Inner layer, 30 fermacell® screws;  
Outer layer, 30 fermacell® screws.
6. Sound performance:

**128 TYPE D (TD) – 100 mm pattresses MR Plywood wall** - Gypsum board partition systems

1. Description: Medium Duty Partition, with 12.5mm MR Plywood: **WET AREAS** - as noted (**5087.120 – Setting Out Plan**)
2. Manufacturer: James Hardie Building Products Ltd (as above)
3. Product reference: as Clause 125
4. Insulation: Mineral wool insulation – Isover or equal approved.
5. Linings: Inner layers: 2x12.5mm WPB Plywood.  
Face layer: 2x12.5 mm fermacell®. Moisture restraint board
- Fasteners: Inner layer, 30 fermacell® screws;  
Outer layer, 30 fermacell® screws.
6. Sound performance:

**GENERAL PREPARATION****325 PREPARATION OF MASONRY TO RECEIVE WALL LININGS**

1. General: Suitable to receive lining system. Redundant fixtures and services removed. Cutting, chasing and making good completed.
2. Holes, gaps, service penetrations, perimeter junctions and around openings: Seal.
3. Adhesive fixings: Prepare substrate to achieve effective bonding.
- 3.1. Contaminants: Remove loose material, dirt, grease, oil, paper, etc.
- 3.2. Absorption: Control by dampening, priming or applying bonding agents as necessary.

**335 ADDITIONAL SUPPORTS**

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

**375 NEW WET LAID BASES**

Location: NEW SCREED AREA - JOINERY WORKSHOP (CTC.0.018) & WET AREA

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

**COMPONENTS****400 BOARDS GENERALLY**

1. Standard
  - 1.1. Gypsum plasterboard to BS EN 520.
  - 1.2. Gypsum fibre board to BS EN 15283-2.
  - 1.3. Evidence of compliance: Submit Declaration of Performance (DoP).

**401 GYPSUM PLASTERBOARD**

1. Type: To BS EN 520, type A
2. Core density (minimum): 650 kg/m<sup>3</sup>.
3. Reaction to fire: Class A2-s1, d0 or better
4. Water vapour resistance factor: Manufacturer's standard
5. Thermal conductivity: Manufacturer's standard
6. Other BS EN 520 characteristics: None
7. Recycled content: Contractor's choice Submit proposals
8. Exposed surface and edge profiles: Suitable to receive specified finish

**406 PLASTERBOARD (IMPROVED FIRE PROTECTION AND MOISTURE RESISTANT)**

1. Type:
2. Core: Moisture-resistant and including fibres and/ or other additives for improved cohesion.
  - 2.1. Density (minimum): 800 kg/m<sup>3</sup>.
3. Paper facings: Moisture-resistant.
4. Reaction to fire: Manufacturer's standard
5. Water vapour resistance factor: Manufacturer's standard
6. Thermal conductivity: Manufacturer's standard
7. Other BS EN 520 characteristics: None
8. Recycled content: Contractor's choice Submit proposals
9. Exposed surface and edge profiles: Suitable to receive specified finish

**408 PLASTERBOARD (IMPACT RESISTANT)**

Location: WORKSHOPS

1. Type: To BS EN 520, type I
2. Core density (minimum): 900 kg/m<sup>3</sup>.
3. Paper facings: Heavy duty.
4. Reaction to fire: Class A2-s1, d0 or better
5. Water vapour resistance factor: Manufacturer's standard

- |            |   |
|------------|---|
|            | <ul style="list-style-type: none"> <li>6. Thermal conductivity: Manufacturer's standard</li> <li>7. Other BS EN 520 characteristics: None</li> <li>8. Recycled content: Contractor's choice. Submit proposals</li> <li>9. Exposed surface and edge profiles: Suitable to receive specified finish</li> </ul>  |
| <b>409</b> | <b>PLASTERBOARD (IMPROVED SOUND INSULATION)</b> <ul style="list-style-type: none"> <li>1. Type: To BS EN 520, type D</li> <li>2. Core density (minimum): 820 kg/m<sup>3</sup>.</li> <li>3. Reaction to fire: Class A2-s1, d0 or better</li> <li>4. Water vapour resistance factor: Manufacturer's standard</li> <li>5. Thermal conductivity: Manufacturer's standard</li> <li>6. Other BS EN 520 characteristics: None</li> <li>7. Recycled content: Contractor's choice, Submit proposals</li> <li>8. Exposed surface and edge profiles: Suitable to receive specified finish</li> </ul>   |
| <b>410</b> | <b>PLASTERBOARD (IMPROVED SOUND INSULATION &amp; MOISTURE RESISTANT)</b> <ul style="list-style-type: none"> <li>1. Type: To BS EN 520, type H1</li> <li>2. Core: Moisture-resistant.               <ul style="list-style-type: none"> <li>2.1. Density (minimum): 820 kg/m<sup>3</sup>.</li> </ul> </li> <li>3. Paper facings: Moisture-resistant.</li> <li>4. Reaction to fire: Class A2-s1, d0 or better</li> <li>5. Water vapour resistance factor: Manufacturer's standard</li> <li>6. Thermal conductivity: Manufacturer's standard</li> <li>7. Other BS EN 520 characteristics: None</li> <li>8. Recycled content: Contractor's choice, Submit proposals</li> <li>9. Exposed surface and edge profiles: Suitable to receive specified finish</li> </ul>     |
| <b>415</b> | <b>PLASTERBOARD</b> <ul style="list-style-type: none"> <li>1. Description: Locations: vary see 5087.300 drawings</li> <li>2. Type: To BS EN 520, type R</li> <li>3. Core density (minimum):</li> <li>4. Reaction to fire: Manufacturer's standard</li> <li>5. Water vapour resistance factor: Manufacturer's standard</li> <li>6. Thermal conductivity: Manufacturer's standard</li> <li>7. Other BS EN 520 characteristics: None</li> <li>8. Recycled content: Contractor's choice, Submit proposals</li> <li>9. Exposed surface and edge profiles: Suitable to receive specified finish</li> </ul>  |
| <b>430</b> | <b>ACCESS PANELS</b> <ul style="list-style-type: none"> <li>1. Description: Refer to MEP proposals for requirements and locations</li> <li>2. Type: 60 minutes fire protection to BS EN 13501-2               <ul style="list-style-type: none"> <li>2.1. Sizes: See MEP design and details c.300 x 300 mm min - tbc with CA</li> <li>2.2. Fire performance                   <ul style="list-style-type: none"> <li>2.2.1. Reaction to fire: To BS EN 13501-1, class B-s3, d2 or better</li> <li>2.2.2. Fire resistance: To BS EN 13501-2. REI 30 or better</li> </ul> </li> </ul> </li> <li>3. Frame: Bead for taping and jointing</li> <li>4. Panel: Metal; primed for site painting</li> <li>5. Lock: Tamper-proof and operated by castellated key</li> </ul> |
| <b>432</b> | <b>METAL STUDS</b> <ul style="list-style-type: none"> <li>1. Manufacturer: Contractor's choice</li> <li>2. Product reference: Contractor's choice, Submit proposals</li> </ul>  |

**ADDITIONAL SUPPORTS:**

Provide or ensure provision of additional framing, accurately positioned and securely fixed:

To give full support to board edges and lining perimeters.

To support fixtures, fittings and services.

To provide fixing points for heads of partitions running parallel with, but offset from main structural supports.

**FINISHING:**

- Fill all joints and gaps and cover with continuous lengths of tape, fully bedded. When set, cover with joint finish, feathered out to give a flush, smooth, seamless surface.

- Fill minor indents and, after joint, angle and spotting treatments have dried, seal surface to even out texture and suction using [dual purpose primer and sealer]

**F10****BRICK AND BLOCK WORK**

Dismantling masonry for reuse

Masonry units to be reused: Remove carefully and in one piece.

Treatment: Clean off old mortar, organic growths and dirt, and leave units in a suitable condition for rebuilding.

Identification: Mark each unit clearly and indelibly on a concealed face, indicating its original position in the construction. Transcribe markings to drawings/ photographs.

**REBUILDING EXTERNAL WALLS**

Description: As drawings

Replacement materials: Bricks, see reuse material or type and engineering brickwork

Mortar: As section Z21 or general mortar designation.

3.Standard: BS EN 998-2

3.Mix: see below specification

3.Sand source/ type: see below specification

Fixings: see below specification

5. Rebuilding: To match previous face and joint lines, joint widths and bonding. Adequately bonded see below specification

to retained work/ backing masonry, as appropriate.

6. Joint surfaces: Dampen, as necessary, to control suction.

7. Laying masonry units: On a full bed of mortar; perpend joints filled.

8. Exposed faces: Remove mortar and grout splashes immediately.

9. Joints: To match existing

10. Other requirements: None

**BRICK/ BLOCK WALLING**

To be read with Preliminaries/ General conditions

**ENGINEERING BRICKWORK PLINTH**

- Bricks: To BS EN 771-
- Manufacturer: Ibstock Bricks Ltd, Leicester Road, Ibstock, Leicestershire LE67 6HS
- t: 01530 261999
- f: 01530 257457
- Email: enquiries@ibstock.co.uk.
- Product reference: To match existing
- Type: HD
- Mean compressive strength: Greater than or equal to 75N/mm<sup>2</sup>
- Category: I
- Water absorption: Equal to or less than. 7.5%.
- Freeze/ thaw category: F
- Active soluble salts content category: S
- Additional requirements: As per brick manufacturers instructions.
- Mortar: As section Z2
- Standard: To BS EN 998-
- Mix: 1:0.25:3 cement:lime:sand.
- Additional requirements: none
- Bond: Half lap stretcher
- Joints: Flush.

**Bricks**

1. Standard: To BS EN 771-1.
2. Manufacturer: To match existing
- 2.1. Product reference: To match existing
3. Size: To match existing
4. Special shapes: To match existing
5. Recycled content: To match existing

**TESTING****HARD LANDSCAPING MATERIALS SPECIFICATION**

- Minimum BRE 'Green Guide to Specification' (online) rating: A

**WORKMANSHIP GENERALLY****CONDITIONING OF CLAY BRICKS AND BLOCKS**

- Bricks and blocks delivered warm from manufacturing process: Do not use until cold.
- Absorbent bricks in warm weather: Wet to reduce suction. Do not soak.



**MORTAR DESIGNATIONS**

- Mix proportions: For a specified designation select a mix from the following:
- Designation (i) (BS EN 998-2 M12 equivalent):
  - 1:0–1/4:3 (Portland cement:lime:sand with or without air entraining additive).
  - 1:3 (Portland cement:sand and air entraining additive).
- Designation (ii) (BS EN 998-2 class M6 equivalent):
  - 1:1/2:4–5 (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 1/2–3 1/2 (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).
- Designation (iii) (BS EN 998-2 class M4 equivalent):
  - 1:1:5–6 (Portland cement:lime:sand with or without air entraining additive).
  - 1:3 1/2–4 (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).
- Designation (iv) (BS EN 998-2 class M2 equivalent):
  - 1:2:8–9 (Portland cement:lime:sand with or without air entraining additive).
  - 1:4 1/2 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
  - 1:5 1/2–6 1/2 (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

**LAYING GENERALLY**

- Mortar joints: Fill vertical joints. Lay bricks, solid and cellular blocks on a full bed.
- AAC block thin mortar adhesive and gypsum block adhesive joints: Fill vertical joints. Lay blocks on a full bed.
- Clay block joints:
  - Thin layer mortar: Lay blocks on a full bed.
  - Interlocking perpend: Butted.
  - Bond where not specified: Flemish bond
- Vertical joints in brick and concrete block facework: Even widths. Plumb at every fifth cross joint.

**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  $\pm 10$  mm.
  - Straightness in any 5 m length  $\pm 5$  mm.
  - Verticality up to 3 m height  $\pm 10$  mm.
  - Verticality up to 7 m height  $\pm 14$  mm.
  - Overall thickness of walls  $\pm 10$  mm.
  - Level of bed joints up to 5 m (brick masonry)  $\pm 11$  mm.
  - Level of bed joints up to 5 m (block masonry)  $\pm 13$  mm.

**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.

**COURSING BRICKWORK**

- Gauge: Four brick courses including bed joints to 300 mm.

**SUPPORT OF EXISTING WORK**

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

**JOINTING**

- Profile: Consistent in appearance.

**ACCESSIBLE JOINTS NOT EXPOSED TO VIEW**

- Jointing: Struck flush as work proceeds.

**POINTING TO BRICKWORK ABOVE DPC**

- Joint preparation: Remove debris. Dampen surface.
- Mortar: As section Z21 or general motor section
- Standard: TO BS EN998-2
- Mix: 1:1:6 cement:lime:sand.
- Additional requirements: none\_\_\_\_\_.
- Profile: flush

**FIRE STOPPING**

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

**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.
- In hydraulic lime:sand mortars when at or below 5°C and falling or below 3°C and rising, or as manufacturer's/ supplier's recommendations.
- In thin layer mortars when outside the limits set by the mortar manufacturer.
- 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 winds.

**THE TERM FACEWORK**

- Definition: Applicable in this specification to brick/ block walling finished fair.
- Painted facework: The only requirement to be waived is that relating to colour.

**MASONRY SAMPLE PANELS**

- Sampling frequency: A panel for each type and delivery of masonry unit.
- Selection of masonry units: A panel for each type and delivery of masonry unit.
- Panel types: see panel type section.

**COLOUR CONSISTENCY OF MASONRY UNITS**

- Colour range: Submit proposals of methods taken to ensure that units are of consistent and even appearance within deliveries.
- Conformity: Check each delivery for consistency of appearance with previous deliveries and with approved reference panels; do not use if variation is excessive.
- Finished work: Free from patches, horizontal stripes and racking back marks

**APPEARANCE**

- Brick/ block selection: Do not use units with damaged faces or arises.
- Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.
- Quality control: Lay masonry units to match relevant reference panels.
- Setting out: To produce satisfactory junctions and joints with built-in features and components.
- Coursing: Evenly spaced using gauge rods.
- Lifts: Complete in one operation.
- Methods of protecting facework: Submit proposals

**GROUND LEVEL**

- Commencement of facework: Not less than 150 mm below finished level of adjoining ground or external works level and match existing build up levels if required.

**CLEANLINESS**

- Facework: Keep clean.
- Mortar on facework: Allow to dry before removing with stiff bristled brush.
- Removal of marks and stains: Rubbing not permitted.

**CONCRETE FILL TO BASE OF CAVITY EO cost only required if cavity is present in existing wall**

- Concrete generally: To BS EN 206 and BS 8500-
- Concrete type: Designated GEN 1
- Workability: High.
- Extent: Maintain (existing) mm between top of fill and external ground level and a minimum of 225 mm between top of fill and ground level dpc.
- Placement: Compact to eliminate voids.

**CLEANLINESS**

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

**PARTIAL FILL CAVITY INSULATION EO cost only required if cavity is present in existing wall**

- Insulation: Polyisocyanurate (PIR) foam boards to BS EN 13165.
- Product certification: N/A.
- Manufacturer: Contractor's choice.
- Product reference: Submit proposals.
- Recycled content: N/A
- Face size (length x width): 1200 x 450mm
- Thickness (nominal): 50mm
- Thermal conductivity: 0.023W/m<sup>2</sup>K
- Reaction to fire class: A1
- Additional requirements: none
- Placement: Secure against face of inner leaf.
- Residual cavity: Clear and unobstructed.
- Joints between boards, at closures and penetrations: No gaps and free from mortar and debris.

**CAVITY WALL TIES USED WITH PARTIAL FILL INSULATION GENERALLY**

- Standard: To BS 1243.
- Type: Galvanized carbon steel.
- Manufacturer: Ancon SD25/150 or similar.
- Product reference: SD25/150.
- Material/ finish: Stainless steel.
- Sizes: 150 mm.

Tie mounted insulation retaining clips: As recommended by the manufacturer.

**WALL TIES GENERAL**

- Manufacturer: Ancon
- Product reference: SD25/150.
- Material/ Finish: Stainless steel.
- Sizes: 150mm

**DAMP PROOF COURSES – BITUMEN BASED**

- Standard: to BS 6398
- Class: A.
- Manufacturer: Visqueen Building Products  
Heanor Gate, Heanor  
Derbyshire  
DE75 7RG  
tel: 0333 202 6800  
fax: 0333 202 6886  
Enquiries@visqueenbuilding.co.uk .
- Product reference: Visqueen TorchOn Tanking Membrane on Visqueen HP Tanking Primer on smooth concrete I cement board.

**INSTALLATION OF HORIZONTAL DPCS**

- Placement: In continuous lengths on full even bed of fresh mortar, with 100 mm laps at joints and full laps at angles.
- Width: At least full width of 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.

**INSTALLATION OF GROUND LEVEL DPCS**

- Joint with damp proof membrane: Continuous and effectively sealed.

**INSTALLATION OF 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

**OPENINGS FOR FRAMES**

- Formation: Use accurate, rigid templates to required size.

**WALL PLATES**

- Placement: On full bed of mortar to correct horizontal level

L10

**WINDOWS****EVIDENCE OF PERFORMANCE**

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

**SITE DIMENSIONS**

- Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
- Designated items: Windows

**CONTROL SAMPLES**

- Procedure:
- Finalise component details.
- Fabricate one of each of the following designated items as part of the quantity required for the project.
- Obtain approval of appearance and quality before proceeding with manufacturer of the remaining quantity.
- Designated items: Frame RAL colour match existing

**POTENTIAL FOR NATURAL VENTILATION**

- fixed panel or re-use of existing window

**WINDOW MATERIALS SPECIFICATION**

- Minimum meeting building regulations - Crittall Window

**ALUMINIUM WINDOWS**

- Manufacturer: Crittall windows corporate W20 or equal approved  
website: [www.crittall-windows.co.uk/products/corporate-w20/](http://www.crittall-windows.co.uk/products/corporate-w20/)  
contact Number: 01376 530 800
- Product reference: Corporate W20
- Finish as delivered: Powder coating as Section Z31, min film thickness 40 microns
- Glazing details: Windows to be internally glazed with EPDM gaskets. External gaskets are to be flush with the top of the rebate
- Beading: as per manufacturer's details
- Thermal performance: 6W/m<sup>2</sup>K
- Ironmongery/ Accessories: none
- Fixing: The AA® 541 steel fixed Window shall be fabricated and installed in complete accordance with the information published by Kawneer, exclusively by authorised dealers
- Other requirements: none

**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.

**PRIMING/ SEALING**

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

**CORROSION PROTECTION**

- Surfaces to be protected: surfaces of aluminium components, which will come into contact with mortar, concrete or plaster, or treated timber. - Protective coating: Two coats of bitumen solution to BS 6949 or an approved mastic impregnated tape.
- Timing of application: Before fixing components

**BUILDING IN**

- General: Not permitted unless indicated on drawings.
- Brace and protect components to prevent distortion and damage during construction of adjacent structure.

**WINDOW INSTALLATION GENERALLY**

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
  - Minimum: 6mm
  - Maximum: 10mm
- Distortion: Install windows without twist or diagonal racking

**DAMP PROOF COURSES IN PREPARED OPENINGS**

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

**FIXING OF STEEL FRAMES**

- Standard: As section Z20 or general fixings
- Fasteners: Stainless steel wood screws.
- Spacing: When not predrilled or specified otherwise, position fasteners not more than 250 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 600 mm centres.

**FIRE RESISTING FRAMES**

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

**SEALANT JOINTS**

- Sealant:
- Manufacturer: to contractor's choice
- Product reference: external quality silicone frame sealant to contractor's choice
- Colour: clear
- Application: As section Z22 to prepared joints. Finish triangular fillets to a flat or slightly convex profile

To be read with Preliminaries/ General conditions.

**Sills**

- Standard: To BS 5642-1.
- Material: To match existing
- Manufacturer: Submit proposals
- Product reference: Submit proposals
- Dimensions: As shown on drawings Existing building drawings.
- Finish: To match existing
- Mortar for bedding/ jointing: Cement gauged as section Z21.
- Standard: To BS EN 998-2
- Additional requirements: Coloured mortar to match existing
- Joints: Flush.
- Bedding one-piece sills: Leave bed joints open except under end bearings and masonry mullions.
- On completion, point to match adjacent work.

**L20****INTERNAL DOORS****EVIDENCE OF PERFORMANCE**

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

**NON-FIRE RESISTING PEDESTRIAN DOORS/ DOOR ASSEMBLIES/ DOORSETS**

- Provide certified evidence, in the form of a product conformity certificate or engineering assessment, that each pedestrian door/ doorset/ assembly supplied will comply with the specified requirements to BS EN 14351-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 CE marking European product standard (hEN), national product standard and/ or third party certification rating.

**SITE DIMENSIONS**

- Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
- Designated items: doors and folding partitions

**CONTROL SAMPLES**

- Procedure:
- Finalize component details.
- Fabricate one of each of the following designated items as part of the quantity required for the project.
- Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.
- Designated items: 1 number sample of each type of door finish for approval prior to Manufacturer.

**NEW DOOR SET SPECIFICATION**

**Evidence of performance**

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

**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.

3. Other evidence: None

**Fire resisting and smoke control pedestrian doors/ door assemblies/ doorsets**

CE marked fire resisting and smoke control pedestrian doorsets: To BS EN 16034 and in conjunction with BS EN 13241 and BS EN 14351-1 (and eventually prEN 14351-2).

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 resisting and/ or smoke control if tested to BS 476-22, BS EN 1634-1, BS EN 1634-3 or is CE marked to BS EN

1603. Specified values should not be a combination of both standards. 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 CE marking European product standard (hEN), national product standard and/ or third party certification rating.

**Site dimensions**

Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.

Designated items: Doors

**Control samples**

Procedure

Finalize component details.

Fabricate one of each of the following designated items as part of the quantity required for the project.

Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.

Designated items: Doors

Certification: Provide evidence, in the form of a product conformity certificate, test report or engineering assessment, that each door/ doorset/ assembly supplied will comply with the specified requirements for fire resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3, BS 8214: 2008. Comply with the requirements for BWF- CERTIFIRE; BM TRADA Q-Mark or other equivalent approved body, certified fire rated doorsets. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges seals and any additional fire stopping.

- All fire resisting door sets to be clearly marked in accordance with the guidance of the certifying authority using plastic plugs or equivalent, discreetly and permanently embedded in the leaf and or frame of the certified doorset.

- All fire resisting glazing to be marked to clearly identify its fire resistance - in accordance with Building Regulations Appendix A, table A4.



# WOOD DOORSETS INTERIOR- LAMINATE FINISH- FDS60S FIRE RATED-LAMINATE FACED

- Manufacturer and reference : Interspec Doorsets by Yannedis or equivalent
- Fire resistance rating: Refer to door schedule.
- Sound insulation rating: Refer to door schedule - contractor to provide evidence of performance where acoustic performance where specified.
- Door leaf:
  - Core: 54mm solid core with timber subframe to accommodate ironmongery fixing, with chipboard surfacing .
  - Facings: 0.9mm colour veneer to match existing Laminate from the Formica PSM Door collection range.
  - Lipping's: 9mm American White Oak Hardwood exposed on all the four edges, factory polished ..
  - Finish as delivered: Self finish laminate
- Frame and architraves:
  - Wood species: match existing
  - Appearance class to BS EN 942: General Classification of timber quality.
  - Finish as delivered: Self finish quality.
- Architraves:
  - Wood species: 45 x 15mm.
  - Finish as delivered: match existing
- Glazing/ infill details: Type 14 (where scheduled) and clear fire glass (unwired).
- Manifestation: Not required.
- Beading: American White Oak bolection bead screw fixed.
- Moisture content on delivery: 10% - 14% on delivery.
- ironmongery: As drawing
- ironmongery used in conjunction with fire resisting door sets, must be accredited for use in conjunction with the specified/ installed door sets.
- Stainless steel or equivalent approved hinges, supplied and fixed by door manufacture.
- Intumescent plugs to be included to hinges if necessary to meet fire certification requirements.
- Appropriate door closer to be used in order to ensure ease of use by reducing the resistance encountered when opening the door and ease of operation required for accessibility.
- Perimeter seals: Where required to achieve the specified level of performance.
- Door manufacturer to select seals as necessary to achieve the required acoustic performance where specified.
- Door manufacturer to select seals to achieve the specified period of fire resistance and provide evidence in accordance with the above. Combined Intumescent and smoke seals rebated into head and jambs of door frame; single or 2 part combined intumescent and smoke seals to leading edges of double doors.
- Fixing: Frames to be counter bored by door manufacturer and supplied with matching pellets for screw fixings.
- planted stops pinned, punched and filled; include packing as required. Fixings to be staggered.
- Gaps between door frame and reveal in fire resisting door sets to be stopped in accordance with BS 8214:2008 table
- Other requirements: Interspec doorsets are to be supplied complete with associated ironmongery.
- Doorset manufacturer to be responsible for the compatibility and certification of the scheduled ironmongery.
- All non projecting ironmongery to be factory fitted: - Hinges, Locks, Look keeps, Flush bolts, Including face drilling where required.
- Doorsets factory prepared for double action ironmongery.
- Frames to be recessed for strike to be fitted.
- Architraves to be mitred.
- Doors to be delivered to site palletized.
- Projecting ironmongery bagged and door numbered.



**FIRE RESISTING AND SMOKE CONTROL DOORS/ DOOR ASSEMBLIES/ DOORSETS – CONTRACTOR INSTALLED**

- Gaps between frames and supporting construction: Filled as necessary in accordance with requirements for certification and/ or door/ doorset manufacturer's instructions.

**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.

**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 certificates
- Melting point of components (except decorative non functional parts): 800°C minimum.

**DOUBLE SWING DOOR HINGES TO INTERNAL DOORS**

- Standard: To manufacturers specification
  - Hinges to doors on escape routes and fire/ smoke control doors: CE marked.
  - Manufacturer: Company insert or equal approved.
  - Product reference: TBC
  - Type: ball bearing butts.
  - Size: 102x76mm.
  - Material/ Finish: satin stainless steel
  - Hinge grade: 13.
  - Other requirements: to manufacturers specification
- All External doors in risk area (mental Health) are to comply with DHF TS001 A4

**OVERHEAD DOOR CLOSERS TO INTERNAL DOORS**

- Standard: To manufacturers specification
- Door closing devices to fire/ smoke control doors: CE marked.
- Manufacturer: Yannedis or equal approved.
- Product reference: TBC
- Type: face fixed.
- Power size: adjustable 2-4.
- Other functions: back check.
- Casing finish: Satin stainless steel
- Operational adjustment:
- Variable power: Matched to size, weight and location of doors.
- Latched doors: Override latches and/ or door seals when fitted.
- Unlatched doors: Hold shut under normal working conditions.
- Closing against smoke seals of fire doors: Positive. No gaps.

All

External doors in risk area (mental Health) are to comply with DHF TS001 A4

**Glazing within Doorset or Accompanying****Pre-glazing**

Pre-glazing 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.

**Removal of glass/ plastics for reuse**

Existing glass/ plastics and glazing compound, beads, etc.: Remove carefully, avoiding damage to frame, to leave clean, smooth rebates free from obstructions and debris.

Deterioration of frame/ surround: Submit report on defects revealed by removal of glazing.

Affected areas: Do not reglaze until instructed.

Reusable materials: Clean glass/ plastics, beads and other components that are to be reused.

**Material samples**

Representative samples of designated materials: Submit before cutting panes.

Sample size (minimum): 300 x 300 mm

**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  $\pm 2$  mm of specified dimensions.

**Materials**

4.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.

4.Protection: Keep materials dry until fixed. Protect insulating glass units and plastics glazing sheets from the sun and other heat sources.

**Preparation**

Surrounds, rebates, grooves and beads: Cleaned and prepared by others.

**Preparation**

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

**Glass generally**

Standards: To BS 952 and relevant parts of:

BS EN 572 for basic soda lime silicate glass.

BS EN 1748-1-1 for borosilicate glass.

BS EN 1748-2-1 for ceramic glass.

BS EN 1863 for heat-strengthened soda lime silicate glass.

5. BS EN 12150 for thermally toughened soda lime silicate safety glass.

6. BS EN 12337 for chemically strengthened soda lime silicate glass.

7. BS EN 13024 for thermally toughened borosilicate safety glass.

8. 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.

**Heat-soaking of thermally toughened glass**

Standard: To BS EN 14179-1 and -

Holding period (minimum): two hours

Certified evidence of treatment: Submit.

**Bead-fixing with pins**

Pin spacing: Regular at maximum 150 mm centres, and within 50 mm of each corner.

Exposed pin heads: Punched just below wood surface.

**Bead-fixing with screws**

Screw spacing: Regular at maximum 225 mm centres, and within 75 mm of each corner.

**Fire rating**

Assessment of capability: Submit proposed construction details of designated items to a UKAS/EA accredited laboratory or other approved authority for assessment of capability of achieving specified fire ratings.

Test standard: To BS EN 1364-1

Assessment/ test results and reports: Submit immediately they are available, and before installing glazing.

**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.

**Priming/ Sealing**

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

**Corrosion protection**

Protective coating: Two coats of bitumen solution to BS 6949 or an approved mastic impregnated tape.

Timing of application: Before fixing components.

**Fixing doorsets**

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

**Building in**

General: Not permitted unless indicated on drawings.

**Damp proof courses associated with built-in wood frames**

Method of fixing: To backs of frames using galvanized clout nails.

**Damp proof courses in prepared openings**

Location: Correctly positioned in relation to door frames. Do not displace during fixing operations.

**Fixing of wood frames**

Spacing of fixings (frames not predrilled): Maximum 150 mm from ends of each jamb and at 600mm maximum centres.

**Fixing of loose thresholds**

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

**Fire resisting and smoke control doors/ door assemblies/ doorsets/ roller shutters and curtains – accredited installer**

Installation: By a firm currently registered under a third party accredited fire door installer scheme in accordance with instructions supplied with the product conformity certificate, test report or engineering assessment.

**Fire resisting and smoke control doorsets, industrial, commercial and garage doors**

Installation: By manufacturer or their approved installers, in accordance with requirements of BS EN 16034 and in conjunction with BS EN 13241, including the Declaration of Performance (DoP) certification for the CE marked doorset.

Sealant joints  
 Sealant  
 Manufacturer: Submit proposals  
 Product reference: Submit proposals  
 Colour: To suit finish  
 Application: see sealant section. Triangular fillets finished to a flat or slightly convex profile.

**M60****DECORATION SPECIFICATIONS**

COATING MATERIALS to be obtained from one only of the following manufacturers unless specified otherwise. Inform CA of selected manufacturer before commencement of any coating work..

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

Allow for decorate ceilings where necessary apply the same method of preparation and installation with matt Dulux Diamond matt emulsion with one mist coat and two subsequent finishing coats.

## Timber Preparation

- Abrade to a smooth finish with lightly rounded arises.
- Ensure that any degraded timber substrate has been repaired.
- Ensure that fasteners are countersunk sufficiently to hold stoppers/fillers.
- Apply two coats of knotting to resinous areas and knots.
- Abrade defective pre-primed timber and recoat. Allow for decorate woodwork where necessary with two undercoat and finishing coat Satin Gloss.

## A Eggshell/ satin paint General Areas

Description: Patient Areas Only - Dry Area

Manufacturer: Dulux

Contact Details: See below

Address:: Dulux Customer Care Centre

Wexham Road

Slough

SL2 5DS

United Kingdom

Tel:: 0333 222 717

Web:: [www.dulux.co.uk](http://www.dulux.co.uk)

5. Email: : [duluxcustomerservices@akzonobel.com](mailto:duluxcustomerservices@akzonobel.com)

6. Product reference: Dulux Diamond Eggshell (Washable)

Surfaces: Pre-primed and sealed

3.Preparation: As recommended by manufacturer

Initial coats: As recommended by manufacturer

4.Number of coats: three coats

5. Undercoats: One coat

5.Number of coats: One Coat

6. Finishing coats: one coat

6.Number of coats: Three

## 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.

## 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.

**Protection**

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

**Inspection by coating manufacturers**

General: Permit manufacturers to inspect work in progress and take samples of their materials from site if requested.

**Preparation generally**

Standard: In accordance with BS 6150.

Refer to any pre-existing CDM Health and Safety File.

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.

5. Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.

6. Substrates: Sufficiently dry in depth to suit coating.

7. Efflorescence salts: Remove.

8. Dirt, grease and oil: Remove. Give notice if contamination of surfaces/substrates has occurred.

9. Surface irregularities: Remove.

10. Joints, cracks, holes and other depressions: Fill flush with surface, to provide smooth finish.

11. Dust, particles and residues from preparation: Remove and dispose of safely.

12. Water based stoppers and fillers

12.1 Apply before priming unless recommended otherwise by manufacturer.

12.2 If applied after priming: Patch prime.

13. Oil based stoppers and fillers: Apply after priming.

14. Doors, opening windows and other moving parts

14.1 Ease, if necessary, before coating.

14.2 Prime resulting bare areas.

**Fixtures and fittings**

Removal: Before commencing work remove: Cover plates, grilles, wall clocks, and other surface mounted fixtures.

Replacement: Refurbish as necessary, refit when coating is dry.

**Ironmongery**

Removal: Before commencing work: Remove ironmongery from surfaces to be coated.

Hinges: Remove

Replacement: Refurbishment as necessary; refit when coating is dry.

**Existing ironmongery**

Refurbishment: Remove old coating marks. Clean and polish.

Previously coated surfaces generally  
Preparation: In accordance with BS 6150,  
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.  
5. Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.  
6. Alkali affected coatings: Completely remove.  
7. Retained coatings  
7. Thoroughly clean to remove dirt, grease and contaminants.  
7. Gloss-coated surfaces: Provide key.  
8. Partly removed coatings  
8. Additional preparatory coats: Apply to restore original coating thicknesses.  
8. Junctions: Provide flush surface.  
9. Completely stripped surfaces: Prepare as for uncoated surfaces.

Previously coated wood  
Degraded or weathered surface wood: Take back to provide suitable substrate.  
Degraded substrate wood: Repair with sound material of same species.  
Exposed resinous areas and knots: Apply two coats of knotting.

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

Uncoated wood  
General: Provide smooth, even finish with arises 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.

Previously coated steel Hidden  
Defective paintwork: Remove to leave a firm edge and clean bright metal.  
Sound paintwork: Provide key for subsequent coats.  
Corrosion and loose scale: Take back to bare metal.  
Residual rust: Treat with a proprietary removal solution.  
5. Bare metal: Apply primer as soon as possible.  
6. Remaining areas: Degrease.

Organic growths  
Dead and loose growths and infected coatings: Scrape off and remove from site.  
Treatment biocide: Apply appropriate solution to growth areas and surrounding surfaces.  
Residual effect biocide: Apply appropriate solution to inhibit re-establishment of growths.

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.  
 5. Overpainting: Do not paint over intumescent strips or silicone mastics.  
 6. Priming coats  
 6. Thickness: To suit surface porosity.  
 6. Application: As soon as possible on same day as preparation is completed.  
 7. Finish  
 7. Even, smooth and of uniform colour.  
 7. Free from brush marks, sags, runs and other defects.  
 7. Cut in neatly.  
 8. Doors, opening windows and other moving parts: Ease before coating and between coats.

**Z20****GENERAL FIXING AND ADHESIVE**

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.

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

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

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

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.

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

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.

Fixing through finishes

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

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

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.

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.

## **M60**

### **PLASTER SPECIFICATION**

Skim coat plaster finish where distributed

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.

Rigid beads/stops

Internal: To BS EN 13658-

External: To BS EN 13658-

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.

## **Z20**

### **GENERAL FIXTURE AND FITTINGS**

Sealant

Description: Silicone

Type: To all areas

Manufacturer: Everbuild or equal

Product reference: see sealant section

Colour: to be confirmed

Sealant bedding and pointing

Application: see fixings section.

Sealant

Standard: Contractor choice

Installation generally

Fixings and adhesives: As section sealant



Sealant bedding and pointing  
Application: As section sealants

Appliance commissioning  
Appliance operation, functions and controls: Verify.  
Documentation: Submit guarantees, instruction manuals, etc.

## GENERAL REQUIREMENTS

### 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.

### 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  $\pm 2$  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.

### PREPARATION

- Surrounds, rebates, grooves and beads: Cleaned and prepared by others.

### PREPARATION

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

### 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 1748-1-1 for borosilicate glass.
  - BS EN 1748-2-1 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.

### 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: as per window schedule

**PROPRIETARY QUICK DRYING LEVELLING SCREEDS - AREAS OF DOOR INSTALLATION**

- Substrate: Concrete
- Screed manufacturer: Flowcrete UK Ltd.
- Product reference: Isocrete K Screed.
- Screed construction: Floating screed at ground and first floor.
- Reinforcement for crack control: Isocrete polypropylene fibres as reinforcement and steel mesh resh.
- Thickness:
  - Nominal: 75mm
  - Minimum: 30mm
- Mix:
  - Cement: see cement section
  - Proportions: To manufacturer's recommendations.
  - In situ crushing resistance (ISCR) category: 3/4mm maximum indentation.
  - Mass of test weight: 4 kg
  - Flatness/ Surface regularity class: SR2
  - Finish: Trowelled, see trowling section Z
  - To receive: Floor finishes as Architect's finishes drawings.
- Movement joints: Day joints and structural movement joints to be considered
- Daywork joints: Pointed with a hard setting sealant
- Insulation: rT8 match existing depth
- Other requirements: Include 8mm compressible filler at all perimeter junctions and abutments.

**DESIGN LIFE OF SCREEDS**

- Duration: 30 years
- Subject to reasonable wear and tear.
- Location: all new screeded areas
- Condition of use: Subject to correct loading and traffic usage throughout duration.

**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
  - 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.

**SURFACE HARDNESS OF SUBSTRATES TO RECEIVE POLYMER MODIFIED WEARING SCREEDS**

- General: Substrates must restrain stresses that occur during setting and hardening of wearing screeds.
- Test for surface hardness: To BS EN 12504-2 using a rebound hammer with compliance values as follows:
  - Rebound hammer value (minimum):
    - Screed thickness 15 mm or less: 25.
    - Screed thickness greater than 15 mm: 30.
- Report: Submit details of areas where substrate surface hardness does not comply with these values.

**PROPRIETARY LEVELLING/ WEARING SCREEDS**

- General: Materials, mix proportions, mixing methods, minimum/ maximum thicknesses and workmanship must be in accordance with recommendations of screed manufacturer.
- Standard: To BS 8204-3

**CONTROL SAMPLES**

- General: Complete areas of finished work and obtain approval of appearance before proceeding.
- Screed type: clause 131
- Location/ Size: tbc

Preparation: Generally in accordance with BS 8204-

- Substrate surface: Brushed finish with no surface laitance.
- Texture of surface: Suitable to accept screed and achieve a bond over complete area.
- Bonding coat: Slurry, as clause 275.

**M10****BATCHING/ MIXING****CEMENTS**

- Cement types: In accordance with BS 8204-1, clause 5.3.

**AGGREGATES**

- Sand: To BS EN 13139.
- Grading limits: In accordance with BS 8204-1, Table B.
- Coarse aggregates for fine concrete levelling screeds:
- Standard: To BS EN 12620.
- Designation: 4/10.
- Lightweight aggregates: In accordance with BS 8204-1, Annex A.

**ADMIXTURES**

- Standard: In accordance with BS 8204-1, Table
- Calcium chloride: Do not use in admixtures.

**BATCHING WITH LIGHTWEIGHT AGGREGATES**

- Standard: In accordance with BS 8204-1, Annex A.
- Mix proportions: Specified by volume.
- Batching: Use accurate gauge boxes.

**MIXING**

- Water content: Minimum necessary to achieve full compaction, low enough to prevent excessive water being brought to surface during compaction.
- Mixing: Mix materials thoroughly to uniform consistency. Mixes other than no-fines must be mixed in a suitable forced action mechanical mixer. Do not use a free fall drum type mixer.
- Consistency: Use while sufficiently plastic for full compaction.
- Ready-mixed retarded screed mortar: Use within working time and site temperatures recommended by manufacturer. Do not retemper.

**ADVERSE WEATHER**

- Screeds surface temperature: Maintain above 5°C for a minimum of four days after laying.
- Hot weather: Prevent premature setting or drying out.

**LAYING****LEVEL OF SCREED SURFACES**

- Permissible deviation: (allowing for thickness of coverings)  $\pm 5$  mm from existing level.

**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.

**FLATNESS/ SURFACE REGULARITY OF ROOF SCREEDS**

- Sudden irregularities: Not permitted.
- Deviation of surface: Measure from underside of a 2 m straightedge (between points of contact), placed anywhere on surface.
- Permissible deviation (maximum): 6 mm.

**COMPACTION OF SCREEDS**

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

**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.

**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: 5 days
- 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.

**Z21****Mortars****Cement gauged mortars****110 Cement gauged mortar mixes**

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

**Sand for site made cement gauged masonry mortars**

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

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

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

**Site made lime:sand for cement gauged masonry mortars**

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

**Cements for mortars**

1. Cement: To BS EN 197-1 and CE marked.
  - 1.1. Types: Portland cement, CEM I.
    - 1.1.1. Portland limestone cement, CEM II/A-L or CEM II/A-LL.
  2. Portland slag cement, CEM II/B-S.
  3. Portland fly ash cement, CEM II/B-V.
    - 3.1. Strength class: 32.5, 42.5 or 52.5.
  4. White cement: To BS EN 197-1 and CE marked.
    - 4.1. Type: Portland cement, CEM I.
    - 4.2. Strength class: 52.5.
  5. Sulfate resisting Portland cement
    - 5.1. Type: To BS EN 197-1 Sulfate resisting Portland cement, CEM I/SR and CE marked.
  6. To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
    - 6.1. Strength class: 32.5, 42.5 or 52.5.
  7. Masonry cement: To BS EN 413-1 and CE marked.
    - 7.1. Class: MC 12.5.

**Admixtures for site made cement gauged mortars**

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

**Retarded ready to use cement gauged mortar**

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

**Storage of cement gauged mortar materials**

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

**Making cement gauged mortars**

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

**Z22****Sealants****310 Joints**

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

**Suitability of joints**

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

**Preparing joints****1. Surfaces to which sealant must adhere**

1.1. Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.

1.2. Clean using materials and methods recommended by sealant manufacturer.

2. Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.

3. Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.

4. Protection: Keep joints clean and protect from damage until sealant is applied.

**Applying sealants**

1. Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.

2. Environmental conditions: Do not dry or raise temperature of joints by heating.

3. Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.

**4. Sealant profiles**

4.1. Butt and lap joints: Slightly concave.

4.2. Fillet joints: Flat or slightly convex.

5. Protection: Protect finished joints from contamination or damage until sealant has cured.

6. Material: 109 anti pick mastic to be used

**BUILDER WORKS IN ASSOCATON**

Pipe, duct and cable sleeves through walls, floors, slabs etc. Supply and install all necessary sleeves of a suitable material and fire rating for the application. Cut hole or form/cast hole for sleeves and provide lintel and then "make good" builders work around sleeves (after final positioning) with cement or mastic materials as necessary all to the required fire rating / properties.

Pipe and duct penetrations through the building, Carry out final weatherproof flashing over pipe or duct angle flange, Provide or cut hole. On ducts through roofs provide and fix timber or metal up-stands.

Underground drainage and external drainage, final connection to manhole and trench works. Undertaken as part of contract Works

Conduits and electrical cabling chased into building fabric, Install and test conduits/cabling and protective coating. Prepare wall chase (s) and make good around conduit or cabling after installation and testing of cabling and protective coating by others.

**NOISE AND SOUND INSULATION**

The contractor and design team are to be aware off and comply with the sound levels that are to be achieved, as stated within HTM08. The reports carried out prior to completion are to confirm full compliance with the sound levels stated with legislation

The Contractor should employ an Acoustic Consultant to ensure that the acoustic requirements are achieved throughout, including the specific requirements in the RDS

**N13****IPS AND SANITARY WARE**

**Integrated Parcelled System and Appendix G**

1. Description: See drawings
2. Manufacturer: Trovex Innovations
  - 2.1. Contact Details: See below
  - 2.2. Address: Innova House,  
Rash's Green,  
Dereham  
Norfolk,  
NR19 1JG
  - 2.3. Tel:: 01707 254 170
  - 2.4. Email:: sales@trovex.com
  - 2.5. Web:: www.trovex.com

**Samples**

1. General: Before placing orders submit representative samples of the following: Panel and door material and colours.
2. Delivered materials/ products: To match samples.

**Control samples**

1. General: Complete samples as part of finished work and obtain approval of appearance before proceeding.

**Installation**

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

**Sanitary Ware**

1. Description: Managed Areas
2. Manufacturer: Ideal Spec Armitage Shanks
  - 2.1. Contact Details: See below
  - 2.2. Address: Ideal Standard (UK) Ltd,  
Registered Offices:  
The Bathroom Works,  
National Avenue,  
Kingston upon Hull  
HU5 4HS
  - 2.3. Tel:: 01543 490253
  - 2.4. Email:: productinfo@idealspec.co.uk
  - 2.5. Web:: www.idealspec.co.uk
3. Locations and Specifications: Refer to Schedule of works and drawings/RDS

**Installation generally**

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

**Compatibility of components**

1. General: Each sanitary assembly must consist of functionally compatible components, preferably obtained from a single manufacturer.

1.1. Exceptions: Wastes and traps

**Noggings and bearers**

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

**Tiled backgrounds other than splashbacks**

1. Timing: Complete before fixing appliances.

2. Fixing appliances: Do not overstress UPVC Cladding product

**Installing WC pans**

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

2. Seat and cover: Stable when raised.

**Installing cisterns**

1. Cistern operating components: Obtain from cistern manufacturer

Inlet and flushing valves: Match to pressure of water supply.

3. Internal overflows: Into pan, to give visible warning of discharge.

4. External overflows: Fix pipes to falls and locate to give visible warning of discharge. Agree location where not shown on drawings.

**Installing taps**

1. Fixing: Secure against twisting.

2. Seal with appliance: Watertight.

3. Positioning: Hot tap to left of cold tap as viewed by user of appliance

**Installing wastes and overflows**

1. Bedding: Waterproof jointing compound.

2. Fixing: With resilient washer between appliance and blackout.

**M50****UPVC CLADDING AND FLOOR COVERING**



**PVCu Linings to walls Wet Areas**

1. Description: To wet areas
2. Location: See drawings and appendix G
3. Sheet: Extruded semi-rigid PVCu sheet, EU Grade
4. Maximum Service Temperature: 60°C
5. Fire Rating: BS 476 Part 7 (1987) surface spread of flame - Class 1  
BS 476 Part 6 (1989) fire propagation - Class 0\* (\*when fixed to a non-combustible substrate)  
EN13501-1 B-s3, d0
6. Manufacturer: Altro or equal
- 6.1. Contact Details: See below
- 6.2. Address: Altro Limited or equal and approved.  
Works Road,  
Letchworth Garden City,  
Hertfordshire,  
SG6 1NW
- 6.3. Tel:: +44(0)1462 480480
- 6.4. Email: enquiries@altro.com
- 6.5. Web:: www.altro.co.uk
7. Product Reference: Altro Whiterock hygienic wall cladding
8. Width: 1220mm
9. Length: 3000mm (W104 and W137)
10. Thickness: 2.5mm
11. Surface finish: Satin
12. Colour: see appendix G
13. Light reflectance values: 68-93
14. Adhesive: AltroFix W139

**Workmanship generally**

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

**Samples**

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

**Control samples**

1. General: Complete areas of finished work in approved locations as follows, and obtain approval of appearance before proceeding: Dry Areas, Wet Areas, Carpet Areas to be confirmed with CA .

**Commencement**

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

**Conditioning**

1. 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.
2. 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.

**Environment**

1. 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

**Existing bases**

1. Notification: Before commencing work, confirm that existing bases will, after preparation, be suitable to receive coverings.

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

**Substrates to receive thin coverings**

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

**Colour consistency**

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

**Adhesive fixing generally**

1. Adhesive type: As specified, as recommended by covering/ underlay, manufacturer or as approved.

2. Primer: Type and usage as recommended by adhesive manufacturer.

3. Application: As necessary to achieve good bond.

4. Finished surface: Free from trowel ridges, high spots caused by particles on the substrate, and other irregularities.

**Seam welding coverings**

1. Commencement: At least 24 hours after laying, or after adhesive has set.

2. Joints: Neat, smooth, strongly bonded, flush with finished surface.

**Edgings and cover strips**

1. Manufacturer: Submit proposals

1.1. Product reference: Submit proposals

2. Fixing: Secure with edge of covering gripped. Use matching fasteners where exposed to view

**Waste**

1. Spare covering material: Retain suitable material for patching. On completion submit pieces for selection.

Hand over selected pieces to Employer.

**K10****CEILINGS**

Description: See drawings for areas of works

2. Manufacturer: Rockton

3. Contact details

3.1. Address: 14th Floor

Chiswick Tower

389 Chiswick High Road

London

W4 4AL

3.2. Telephone: +44 (0)208 2227457

3.3. Web: [www.rockfon.co.uk](http://www.rockfon.co.uk)

3.4. Email: [info@rockfon.co.uk](mailto:info@rockfon.co.uk)

4. Product reference: Rockton® Medicare® Standard (Medicare Standard A24 System T24 A/EECR - 600 x 600 x 12 mm)

5. Form: Infill unit.

6. Rigidity: Rigid.

7. Application: Ceiling mounting.

8. Material: Rock wool.

9. Acoustic performance

9.1. Purpose: Absorber.

9.2. Sound absorption: Class A (to ISO 11654: 0.95  $\alpha_w$ ).

10. Fire performance

10.1. Reaction to fire: Class A1 (to BS EN 13501-1).

11. Dimensions

11.1. Size (length x width): 600 x 600 mm.

11.2. Thickness (overall): 12 mm.

12. Profile: Geometric profile.

13. Edges: A15.

14. Finish: Visible side: smooth white painted fleece; rear side: back fleece.

15. Description: To staff and managed areas. See drawings

Compliance with performance requirements

1. Testing/ assessment: Submit UKAS accredited laboratory reports for the following: Fire performance.

2. Materials, components and details: Use those used in the test and identified in the assessment reports. If discrepancies arise, give notice.

Fire performance

1. Description: to suit fire strategy drawing

2. Completed ceiling system: Intended for fire protection

3. Fire resistance

3.1. Overall fire resistance: To BS EN 13501-2, REI 60 or better

3.2. Ceiling resistance: To BS EN 13501-2, EI 60 or better

3.3. Other protection: Structural steel beams - to BS EN 13501-2, R 60 or better

4. Test reports or assessments: Include details of performance related to the particular elements of construction.

4.1. Ceilings with integrated luminaires: Test/ assess with luminaires in place.

Acoustic performance

1. Description: Generally

2. Sound absorption to BS EN ISO 11654: See drawings

3. Sound attenuation: Def., w (minimum) to BS EN ISO 717-1: See drawings MEP.

4. Other acoustic requirements: None

**Standards**

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

**Cavity barriers**

1. Standard: To BS EN 13501-2
2. Manufacturer: Submit proposals
- 2.1. Product reference: Submit proposals
- Fire resistance: To BS EN 13501-2, EI 30
4. Type/ material: Wire-reinforced mineral wool
5. Thickness: 50 mm
6. Density: 45 kg/m<sup>3</sup>
7. Facings/ wrappings: Aluminium foil to back (facing void) and edges, white glass fibre tissue to front

**Setting out**

1. General: Completed ceiling should present, over the whole of its surface exposed to the room below, a continuous and even surface, jointed (where applicable) at regular intervals.
2. Infill and access units, integrated services: Fitted correctly and aligned.
3. Edge/ perimeter infill units size (minimum): Half standard width or length.
4. Corner infill units size (minimum): Half standard width and length.
5. Grid: Position to suit infill unit sizes. Allow for permitted deviations from nominal sizes of infill unit.
6. Infill joints and exposed suspension members: Straight, aligned and parallel to walls, unless specified otherwise.
7. Suitability of construction: Give notice where building elements and features to which the ceiling systems relate are not square, straight or level.

**Bracing**

1. General: Secure, with additional bracing and stiffening to give a stable ceiling system resistant to design loads and pressures.

**Protection**

1. Loading: Do not apply loads for which the suspension system is not designed.
2. Ceiling materials: When necessary, remove and replace correctly using special tools and clean gloves, etc. as appropriate.

**Top fixing**

1. Building structure: Verify suitability.
2. Structural soffit: Refer to existing building O&M manual. Available on request
- 2.1. Suitability to receive specified fixings: Evaluate and confirm.
3. Fixing generally: In accordance with BS EN 13964.
4. Fixing to
  - 4.1. Concrete: Drill and insert suitable expanding anchors.
  - 4.2. Aerated concrete: Fix through from the top of concrete units and provide a system of primary support channels.
  - 4.3. Structural steel: Drill, or use suitable proprietary clips/ adaptors.
  - 4.4. Metal roof decking: Fix to sides of liner tray corrugations.
  - 4.5. Timber: Fix to side of joists at least 50 mm from bottom edge. If ceiling system is intended for fire protection, fix into top third of joists.
  - 4.6. Hollow structural members: Submit fixing proposals.

**Installing hangers**

1. Wire hangers: Straighten and tension before use.

Installation: Install vertical or near vertical, without bends or kinks. Do not allow hangers to press against fittings, services, or insulation covering ducts/ pipes.

3. Obstructions: Where obstructions prevent vertical installation, either brace diagonal hangers against lateral movement, or hang ceiling system on an appropriate rigid sub-grid bridging across obstructions and supported to prevent lateral movement.

4. Extra hangers: Provide as necessary to carry additional loads.

**5. Fixing**

5.1. Wire hangers: Tie securely at top with tight bends to loops to prevent vertical movement.

5.2. Angle/ strap hangers: Do not use rivets for top fixing.

6. Spacings: See drawings

**Installing timber edge battens**

1. Fixing: Firmly to perimeter wall or other building structure.

1.1. Fasteners: Plugged and screwed to walls

1.2. Fixing centres (maximum): See drawings

**perimeter trims**

1. Jointing: Neat and accurate, without lipping or twisting.

1.1. External and internal corners: Mitre joints generally. Overlap joints at internal corners are not acceptable.

1.2. Intermediate butt joints: Minimize. Use longest available lengths of trim. Align adjacent lengths.

2. Fixing: Fix firmly to perimeter wall, edge battens or other building structure.

2.1. Fasteners: See drawings

2.2. Fixing centres: See drawings

**Exposed grids**

1. Grid fixings: Angle hangers

2. Main runners: Install level. Do not kink or bend hangers.

2.1. Spliced joints: Stagger.

2.2. Wire hangers passing through main runners: Use sharp bends and tightly wrapped loops.

2.3. Angle/ strap hangers: Do not use rivets for bottom fixing.

2.4. Angular displacement of long axis of one runner in relation to next runner in line with it: Not visually apparent.

3. Cross members supported by main runners or other cross members: Install perpendicular to intersecting runners.

4. Cross tees: Flat and coplanar with flanges of main runners after panel insertion.

4.1. Cross tees over 600 mm long, cut and resting on perimeter trim: Provide an additional hanger.

5. Holding down clips: Locate to manufacturer's recommendations.

5.1. Fire-protecting/ resisting ceiling systems: Use clip type featured in the fire test/ assessment.

**Installing infill units****1. General**

1.1. Perimeter infill units: Trimmed, as necessary, to fully fill space between last grid member and perimeter trim. Prevent subsequent movement.

1.2. Deeply textured infill units: Minimize variations in apparent texture and colour. In particular, avoid patchiness.

Concealed grids: Install infill units uniformly, straight and aligned. Avoid dimension creep.

2.1. Infill units around recessed luminaires and similar openings: Prevent movement and displacement.

**Openings in ceiling materials**

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

**Integrated services**

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

**Ceiling-mounted luminaires**

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

**Trunking**

1. Recessed trunking: Provide flanges for support of grid and infill units, unless mounted above grid flanges. Retain in position with lateral restraint.

**Mechanical services**

1. Fan coil units
  - 1.1. Inlet/ Outlet grilles: Trim ceiling grid and infill units to suit.
  - 1.2. Space beneath: Sufficient for ceiling system components.
  - 1.3. Suspension and connections: Permit accurate setting out and levelling of fan coil units.
  2. Air grilles and diffusers
  - 2.1. Setting out: Accurate and level.
  - 2.2. Linear air diffusers: Retain in place with lateral restraint. Provide flanges for support of grid and infill units.
  - 2.3. Grille/ Diffuser ceiling joints: Provide smudge rings and edge seals.
- Smoke detectors and PA speakers**
- 3.1. Ceiling infill units: Scribe and trim to suit.
  - 3.2. Independent suspension: Not required
  - 3.3. Flexible connections: Required.
  4. Sprinkler heads: Carefully set out and level.

**Installing insulation Eon where partition can abut structure or mechanical equipment is present**

1. Fitting: Fit accurately and firmly with butted joints and no gaps.
2. Insulation within individual infill units: Fit closely. Secure to prevent displacement when infill units are installed or subsequently lifted.
- 2.1. Dustproof sleeving: Reseal, if cut.
3. Width: Lay insulation in the widest practical widths to suit grid member spacings.
4. Services: Do not cover electrical cables that have not been sized accordingly. Cut insulation carefully around electrical fittings, etc. Do not lay insulation over luminaires.
5. Sloping and vertical areas of ceiling system: Fasten insulation, to prevent displacement.

**Ceiling systems intended for fire protection EO if partition cannot meet structural soffit**

1. Junctions of ceiling systems with perimeter abutments and service penetrations: Seal gaps with tightly packed mineral wool or intumescent sealant to prevent penetration of smoke and flame.
2. Ceiling system/ wall junctions: Maintain protective value of ceiling system.
- 2.1. Fixings and grounds: Non-combustible.
- 2.2. Metal trim: Provide for thermal expansion.
3. Access and access panels: Maintain continuity of fire protection

**Installing cavity fire barriers**

1. Fixing: Secure barrier at head and base using proprietary angle support system
  - 1.1. General: Fix barriers securely to channels or angles at abutments to building structure.
  - 1.2. At perimeters and joints: Provide permanent stability and continuity with no gaps to form a complete barrier to smoke and flame.
2. Joints: Form to preserve integrity in fire.
3. Service penetrations: Cut barriers neatly to accommodate services. Fit fire-resistant sleeves around flexible materials. Fill gaps around services to fire barrier manufacturer's recommendations to maintain barrier integrity. Adequately support services passing through the barrier.
4. Ceiling systems intended for fire protection: Do not impair fire-resisting performance of ceiling system.
5. Ceiling systems not intended for fire protection: Do not mechanically interlink barriers with ceiling system.

**Installing sound barriers**

1. Setting out: Align accurately with partition heads.
2. Fixing: Fix tightly at perimeters and joints using methods recommended by barrier manufacturer, including steel support sections as appropriate. Completed installation to be stable, secure and continuous, with no gaps.
3. Gaps at junctions with partition heads, ceiling system, structural soffit, walls, ducts, pipes, etc.: Seal with mineral wool or suitable sealant.

**Installing air plenum barriers**

1. Fixing: Fix tightly at perimeters and joints using methods recommended by the barrier manufacturer to ensure permanent stability.
2. Edges and joints: Seal effectively to prevent air leakage

**Tools**

1. Access tools: At Completion, supply one set of the following: Suction pad lifters for ceiling K40/115. .

**User instructions**

1. Contents: Include the following:
  - 1.1. Correct methods for removing and replacing infill units and other components.
  - 1.2. Cleaning methods and materials.
  - 1.3. Recommendations for redecoration.
  - 1.4. Ceiling systems intended for fire protection: Limitations placed on subsequent alterations and maintenance procedures, to ensure that their fire performance is not impaired.
  - 1.5. Maximum number, position and value of point loads that can be applied to ceiling system after installation

**Spares**

1. General: At practical completion, supply the following: 50 tiles for ceiling system K40/115.

**External Doorsets and Glazed Curtain Walling**

Contractor to see attached quote from Dorma Koba for the proposed external entrance and glazed curtain walling system

All external elements is to be CE marked fire resisting and smoke control pedestrian doorsets: To BS EN 16034 and in conjunction with BS EN 13241 and BS EN 14351-1 (and eventually prEN 14351-2).

- 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 resisting and/ or smoke control if tested to BS 476-22, BS EN 1634-1, BS EN 1634-3 or is CE marked to BS EN 16034. Specified values should not be a combination of both standards. 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 CE marking European product standard (hEN), national product standard and/ or third party certification rating.

#### FIRE RESISTING AND SMOKE CONTROL DOORS/ DOOR ASSEMBLIES/ DOORSETS – CONTRACTOR INSTALLED

- Gaps between frames and supporting construction: Filled as necessary in accordance with requirements for certification and/ or door/ doorset manufacturer's instructions.

#### 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.

#### 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 certificates

- Melting point of components (except decorative non functional parts): 800°C minimum.

#### SINGLE AXIS DOOR HINGES TO INTERNAL DOORS

- Standard: To BS EN 1935.

- Hinges to doors on escape routes and fire/ smoke control doors: CE marked.

- Manufacturer: Company insert or equal approved.

- Product reference: TBC

- Type: ball bearing butts.

- Size: 102x76mm.

- Material/ Finish: satin stainless steel

- Hinge grade: 13.

- Other requirements: c/w wood screws

All External doors in risk area (mental Health) are to comply with DHF TS001 A4



**OVERHEAD DOOR CLOSERS TO INTERNAL DOORS**

- Standard: To BS EN 1154.
  - Door closing devices to fire/ smoke control doors: CE marked.
  - Manufacturer: Yannedis or equal approved.
  - Product reference: TBC
  - Type: face fixed.
  - Power size: adjustable 2-4.
  - Other functions: back check.
  - Casing finish: Satin stainless steel
  - Operational adjustment:
  - Variable power: Matched to size, weight and location of doors.
  - Latched doors: Override latches and/ or door seals when fitted.
  - Unlatched doors: Hold shut under normal working conditions.
  - Closing against smoke seals of fire doors: Positive. No gaps.
- All External doors in risk area (mental Health) are to comply with DHF TS001 A4

**L37 EXTERNAL STAIRS, RAMPS, HANDRAILS AND BALUSTRADES SYSTEMS**

- 100 Delivery ramp
- 1. As shown on drawing 5087.312
- 2. Handrails/Guarding rails: tbc
- 3. Bollard: to protect ramp from vehicles

**M50 M50 RUBBER/PLASTICS/CORK/LINO/CARPET TILING/SHEETING****TYPES OF COVERING****150 POLYVINYL CHLORIDE PVC SHEETS TYPE A**

- 1 Description: - PVC Heavy-duty Class 34/43 sheet vinyl floor covering with particle enhances slip resistance, speckled design.
- 2 **Location: Workshops, offices, stores, corridors**
- 3 Base: Existing - as site, Trowelled screed M10/REF
- 4 Preparation: Make good existing sub-strait floor finish, contractor to investigate
- 5 Fabricated underlay: As existing
- 6 Flooring roll
- 7 Reaction to fire classification: Class Bfl
- 8 Material: PVC with particle based enhanced slip resistance to BS EN 13845
- 9 Manufacturer: Tarkett
- 10 Contact details
- 11 Address:
- 4th Floor, Connect 38, 1 Dover Place, Ashford, Kent, TN23 1FD, United Kingdom
- Telephone: +44 (0)1233 746020
- Web: [www.tarkett.co.uk](http://www.tarkett.co.uk)
- Email: [uksales@tarkett.com](mailto:uksales@tarkett.com)
- Product reference: Safetred Universal Plus (R11)**
- 12 Standard: To BS EN 14041 and BS EN 13845.
- 13 Use class:
- 14 Slip potential
- 15 Slip resistance value (SRV) (minimum)/ Pendulum test value (PTV) (minimum): > 50.
- 16 Surface roughness (Rz) (minimum): ≥ 35 µm.
- 17 Recycled content: 42%.
- 18 Width: 2000 mm.
- 19 Thickness: 2.0 mm.
- 20 Colour and pattern:
- 21 Total weight (to EN ISO 23997): 3400 g/m².
- 22 Roll length: 20 m.
- 23 Surface treatment: Safety Clean XP.

- 24 Abrasion resistance:  $\leq 10\%$  particle loss after 50 000 cycles.
- 25 Residual indentation (to EN-ISO 24343-1):  $\leq 0.10$  mm.
- 26 Furniture feet: No damage.
- 27 Castor chair continuous use (to ISO 4918 and EN 425): No damage.
- 28 Dimension stability (to EN-ISO 23999):  $\leq 0.40\%$ .
- 29 Reaction to fire (to EN 13501-1): Bfl-s1.
- 30 Ramp slip resistance (to DIN 51130): R11.
- 31 Slip resistance (to EN 13893):  $\mu \geq 0.3$ .
- 32 Impact sound reduction (to EN-ISO 717-2):  $\Delta L_w = 4$  dB.
- 33 Electrostatic charge (to EN 1815):  $\leq 2$  kV.
- 34 Electrical resistance (to EN 1081):  $< 10^9 \Omega$ .
- 35 Technical characteristics to EN 14041: Antistatic on concrete.
- 36 Light fastness (to BS EN ISO 105 B02):  $\geq 7$ .
- 37 Chemical resistance (to EN-ISO 26987): Good resistance to everyday substances.
- 38 Thermal resistance to EN 12524:  $0.01 \text{ m}^2\text{K/W}$ .
- 39 VOC emissions (to ISO 16000-9):  $\leq 100 \mu\text{g}/\text{m}^3$ .
- 40 Accessories: Tarkett ReStart recycling service.
- 41 Adhesive (and primer if recommended by manufacturer):
- 42 Seam welding: Hot welding with complimentary coloured rod
- 43 Accessories: Edging trim for thresholds & coved skirting with trim.
- 44 Finishing: Seal and polish
- 45 Other requirements: None

#### 155 **PVC SHEET FLOORING IN SPECIAL WET AREAS**

- 1 **Location:** Wet rooms, Accessible WC (0.002), Female WC (0.008), Shower Room (0.018), WC (0.017), Lobby (0.015), Cleaners' Cupboard (0.008), CTC Lobby (0.006), Store (0.007)
- 2 Base: Existing as site
- 3 Preparation: Remove existing flooring
- 4 Fabricated underlay:
- 5 Flooring roll: PVC to BS EN 14041 and BS EN 13553.
- 6 Evidence of compliance: Submit.
- 7 Reaction to fire classification: Class Bfl
- 8 **Manufacturer: Tarkett**
- 9 **Product reference: Safetred Universal Plus**
- 10 Identity code:
- 11 BS EN ISO 10874 class:
- 12 Slip potential
- 13 Slip resistance value (SRV) (minimum)/ Pendulum test value (PTV) (minimum) to BS 7976-1, -2 and -3:
- 14 Surface roughness (Rz) (minimum) to BS 1134:
- 15 Recycled content:
- 16 Width:
- 17 Thickness:
- 18 Colour/ pattern:
- 19 Adhesive (and primer if recommended by manufacturer):
- 20 Seam welding: yes
- 21 Accessories:
- 22 Finishing:
- 23 Other requirements: None

420 Existing bases

3. Notification: Before commencing work, confirm that existing bases will, after preparation, be suitable to receive coverings.
4. 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
4. Base drying aids: Not used for at least four days prior to moisture content testing.
5. Base moisture content test: Carry out in accordance with BS 5325, Annexe A or BS 8203, Annexe A.
- 5.1. Locations for readings: In all corners, along edges, and at various points over area being tested.
6. Commencement of laying coverings: Not until all readings show 75% relative humidity or less.
- 440 Substrates to receive thin coverings
2. Trowelled finishes: Uniform, smooth surface free from trowel marks and other blemishes. Abrade suitably to receive specified floor covering material.
- 470 Bases from which existing floor coverings have been removed
4. Substrate: Clear of covering and as much adhesive as possible. Skim with smoothing underlayment compound to give smooth, even surface.
- Laying coverings
- 640 Adhesive fixing generally
2. Adhesive type: As specified, as recommended by covering/ underlay, manufacturer or as approved.
3. Primer: Type and usage as recommended by adhesive manufacturer.
4. Application: As necessary to achieve good bond.
5. Finished surface: Free from trowel ridges, high spots caused by particles on the substrate, and other irregularities.
- 650 Seams
2. Patterns: Matched.
3. Joints: Tight without gaps.
- 670 Borders and feature strips in sheet material
6. Curl: Not acceptable.
7. Corners: Mitre joints.
- 680 Seam welding coverings
3. Commencement: At least 24 hours after laying, or after adhesive has set.
4. Joints: Neat, smooth, strongly bonded, flush with finished surface.
- 720 Doorways
2. Joint location: On centre line of door leaf.
- 740 Edgings and cover strips
11. Manufacturer: Contractor's choice

**N13****N13 SANITARY APPLIANCES AND FITTINGS****To be read with preliminaries/ general conditions.****10 WC PANS AND FLUSHING ARRANGEMENTS**

1. Standard: To Defra WC suite performance specification or equivalent approved by the relevant water company.
2. Type: Close-coupled cistern or equal/similar approved.
- 2.1. Material: Vitreous china, As Pan
- 2.2. Colour: White
3. Pan: Vitreous china, as WC
- 3.1. Standards: To BS EN 33 and BS EN 997, Class 2
- 3.2. Manufacturer: Armitage Shanks
- 3.2.1. Product reference: Armitage Shanks Contour 21, Comfort height, Close coupled toilet with cistern, 750mm projection
4. Material: Vitreous china, white
5. Seat: To BS 1254 and Kitemarked, colour to match pan

- 6. Pan connector: To BS 5627, colour to match pan
- 7. Flushing arrangement: Cistern manufacturer's standard
- 7.1. Manufacturer: As cistern
- 7.1.1. Product reference: Submit proposals
- 7.2. Operating control: Push-buttons, chrome-plated
- 7.3. Flush volume: Dual flush 4 or 2 L
- 8. Accessories: Overflow connector

#### **10 WC CISTERNS TYPE A**

- 1. Standard: To Defra WC suite performance specification or equivalent approved by the relevant water company.
- 2. Type: Close-coupled cistern or equal/similar approved.
- 2.1. Material: As WC pan
- 2.2. Colour: White
- 3. Pan: Vitreous china, as cistern.
- 3.1. Standards: To BS EN 33 and BS EN 997, Class 2
- 3.2. Manufacturer: Armitage Shanks 3.2.1. Contact details
- 3.2.1.1. Address: Armitage Old Road, Rugeley Staffordshire WS15 4BT
- 3.2.1.2. Telephone: +44 (0)870 122 8822
- 3.2.1.3. Web: [www.idealspec.co.uk](http://www.idealspec.co.uk)
- 3.2.1.4. Email: [info@thebluebook.co.uk](mailto:info@thebluebook.co.uk)
- 3.2.2. Product reference: Contour 21 Raised Height Close Coupled Toilet
- 3.3. Standard: To BS EN 997.
- 3.4. Form: Close coupled.
- 3.5. Connecting dimensions: To BS EN 33.
- 3.6. Pan height: 450 mm.
- 3.7. Materials
- 3.7.1. Body: Vitreous china. 3.7.2. Finish and colour: White.
- 3.8. Water supply, outlet and seat holes 3.8.1. Outlet: Horizontal back outlet.
- 3.9. Seat: (01) White.
- 4. Material: Vitreous china, white
- 5. Seat: To BS 1254 and Kitemarked, colour to match pan
- 6. Pan connector: To BS 5627, colour to match pan
- 7. Flushing arrangement: Cistern manufacturer's standard
- 7.1. Manufacturer: As cistern
- 7.1.1. Product reference: Submit proposals
- 7.2. Operating control: Push-buttons, chrome-plated
- 7.3. Flush volume: Dual flush 4 or 2 L
- 8. Accessories: Overflow connector

#### **12 UNISEX ACCESSIBLE WC EQUIPMENT PACKAGES (DOCUMENT M)**

- 1. Description: Unisex accessible WC - Main Entrance Lobby (0.001)
- 2. Manufacturer: Armitage Shanks
- 2.1. Product reference: Armitage Shanks Contour 21 Doc M Pack with Close Coupled Toilet and White Rails - Left Handed or equal/similar approved.
- 3. Type approval certificate: Submit.
- 4. Finish/ colour
- 4.1. Pan: Vitreous china, white
- 4.2. Cistern: Plastics, white (concealed)
- 4.3. Seat: Plastics, white
- 4.4. Basin: Vitreous china, white
- 4.5. Handrails and grab bars: Coated steel, dark grey
- 5. Transfer handing: As drawing 5087.311

6. Water supply fittings (basin): Lever-operated basin mixer tap
7. Water supply temperature (maximum): 43°C
8. Accessories: Clothes hooks, hand dryer, paper towel dispenser , shelves , soap dispenser , toilet tissue dispenser

## **25 SINKS**

1. Description: CLEANERS
2. Type: Belfast, to BS 1206
3. Manufacturer: Armitage Shanks
- 3.1. Product reference: Contractor's choice Submit proposals
4. Size: Contractor's choice, Submit proposals
5. Material: Glazed fireclay
6. Colour: Contractor's choice Submit proposals
- 3.2.1.2. Telephone: +44 (0)870 122 8822
- 3.2.1.3. Web: [www.idealspec.co.uk](http://www.idealspec.co.uk)
- 3.2.1.4. Email: [info@thebluebook.co.uk](mailto:info@thebluebook.co.uk)
- 3.2.2. Product reference: Contour 21 Raised Height Close Coupled Toilet
- 3.3. Standard: To BS EN 997.
7. Tap holes: Contractor's choice Submit proposals
8. Taps: Thermostatic sink mixer
- 8.1. Material: Chromium-plated
- 8.2. Size: ¾ -inch BSP
- 8.3. Water supply temperature (maximum): 43°C - see MEP Design
9. Wastes: Chain and plug
- 9.1. Standards: To BS EN 274-1, -2 and -3.
- 9.2. Manufacturer: Contractor's choice Submit proposals 9.2.1. Product reference: Contractor's choice Submit proposals
- 9.3. Size: DN 40
- 9.4. Material: As manufacturer's recommendation/submit details for approval
- 9.5. Tail: As above
10. Traps: As above
- 10.1. Standards: To BS EN 274-1, -2 and -3.
- 10.2. Manufacturer: Contractor's choice Submit proposals
- 10.2.1. Product reference: Contractor's choice Submit proposals
11. Accessories: Concealed support frame

## **30 WASHBASINS**

1. Type: Wall-hung
2. Manufacturer: Armitage Shanks
- 2.1. Product reference: Armitage Shanks Contour 21 Basin with Overflow No Chain Hole 500mm Wide - 1 Tap Hole
3. Material: Vitreous china to BS EN 14688
4. Colour: White
5. Size: 500 mm
6. Tap holes: One tap hole
7. Taps: Mixer taps
- 7.1. Type: Thermostatic basin mixer
- 7.2. Material: Chromium-plated
- 7.3. Size: ½ -inch BSP
- 7.4. Manufacturer: Contractor's choice Submit proposals 7.4.1. Product reference: Contractor's choice Submit proposals
- 7.5. Water supply temperature (maximum): 43°C
8. Wastes: Grated

9. Traps: DN 30 bottle trap, 75 mm seal

10. Accessories:

#### **41 SHOWER HEADS**

1. Manufacturer: Contractor's choice

1.1. Product reference: Contractor's choice

2. Head: Sliding - tbc

3. Hose: Sliding

4. Slide bar: Chromium-plated

#### **42 SHOWER MIXER VALVES**

1. Manufacturer: Contractor's choice

1.1. Product reference: Contractor's choice. Submit proposals

2. Type: Contractor's choice. Submit proposals

#### **43 SHOWER TRAYS TYPE A**

1. Manufacturer: Ideal Standard (UK) Ltd

1.1. Contact details

1.1.1. Address: The Bathroom Works National Avenue, Hull, HU5 4HS

1.1.2. Telephone: +44 (0)870 122 8822

1.1.3. Web: [www.idealstandard.co.uk](http://www.idealstandard.co.uk) 1.1.4. Email: [ukcustcare@idealstandard.com](mailto:ukcustcare@idealstandard.com)

1.2. Product reference:

2. Type: Simplicity Shower Tray 4 Upstands Inc Waste or equal/similar approved, contractor to submit proposals

3. Size: 1200 x900 mm

4. Material: Ceramic

5. Colour: White

#### **59 PAPER TOWEL DISPENSERS**

1. Manufacturer: Trust to supply or relocate from existing location

1.1. Product reference: Contractor's choice Submit proposals

2. Material: Client to confirm if to match other fittings provided within the building

3. Finish/ colour: As above

#### **60 TOILET PAPER HOLDERS**

1. Description: Located in Accessible WC (1no), Female WC (2no cubicles), Shower WC (1no) Trust to supply or relocate from existing location

2. Manufacturer: Client to confirm if to match other fittings provided within the building

2.1. Product reference: Submit proposals

3. Type: Toilet roll holder, wall-mounted - tbc

4. Size: To match other fittings provided within the building

5. Material: as above

6. Colour: as above

#### **62 SOAP DISPENSERS**

1. Description: Client to advise, if to match other fittings provided within the building

2. Manufacturer: As above

2.1. Product reference: As above for type, size, material and colour

63 Glass mirrors

1. Description: Located in Accessible WC (2no, 1 small, 1 long), Female WC (2no above basins), Shower room (2no, 1 small, 1 long)

2. Manufacturer: Contractor's choice

2.1. Product reference: Contractor's choice. Submit proposals

3. Type: 4 mm clear float glass
4. Size: Submit proposals
5. Protective backing: Mirror backing foil.

#### **64 HAND DRYERS**

1. Description: Client to confirm if require to suit other provided within the building
2. Standard: To BS EN 60335-2-23.
3. Type: High-velocity air - tbc
4. Manufacturer: Client to confirm as above
- 4.1. Product reference:
5. Heater power rating: 2.0 kW tbc
6. Controls: Automatic
7. Enclosure: Tbc
- 7.1. Colour: Tbc

#### **68 SEALANT FOR POINTING**

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

#### **70 INSTALLATION** Generally

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

#### **71 REMOVING SANITARY APPLIANCES AND FITTINGS**

1. Extent: Complete installation
- 1.1. Sanitary appliances: As drawing 5087.105-Demolition Plan 1.1.1. Quantity:
- 1.1.2. Disposal: Remove from site for recycling, where possible
- 1.2. Water supply fittings: As drawing-see above & MEP Design 1.2.1. Quantity: As drawing - see above
- 1.2.2. Disposal: See above
- 1.3. Accessories: As drawing - see above 1.3.1. Quantity: As drawing - see above 1.3.2. Disposal: See above

#### **73 INSTALLING SANITARY APPLIANCES AND FITTINGS**

1. Extent
- 1.1. Sanitary appliances: As drawing - 5087.310-Accessible WC(0.002) & Female WC (0.008) & Shower room (0.016), WC(0.017), Cleaners cupboard (0.006) CTC Store (0.014), Joinery Workshop (0.016), Electrical Workshop (0.020), Paint Store (0.023)
- 1.2. Water supply fittings: See MEP Design
- 1.3. Accessories: See MEP Design & specification above

**75 INSTALLING CISTERNS**

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

**76 INSTALLING TAPS**

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

**77 INSTALLING WASTES AND OVERFLOWS**

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

**78 INSTALLING HAND DRYERS**

1. Fused connection units
  - 1.1. Type: See MEP Design
  - 1.2. Engraving: With 'HAND DRYER' - Tbc.
  - 1.3. Location: Immediately below ceiling - to MEP proposal
2. Final connection: Concealed.
  - 2.1. Containment: See MEP Design

**81 SEALANT BEDDING AND POINTING**

1. Bedding:
2. Pointing:

**Q20****GRANULAR SUB-BASES TO ROADS/PAVINGS**

To be read with preliminaries/ general conditions.

**110 Thicknesses of sub-base/ subgrade improvement layers**

1. Thicknesses: See sections: .....

**120 Checking of subgrades**

1. Anticipated subgrade conditions
  - 1.1. Soil type:
  - 1.2. Plasticity index:
  - 1.3. CBR (minimum):
  - 1.4. Depth below formation level to groundwater table:
2. Subgrade variation: If material appears to vary from anticipated conditions, or if there are extensive soft spots, .....
3. Submit: Results and obtain instructions before proceeding.

**140 EXCAVATION OF SUBGRADES**

1. Final excavation to formation or sub formation level: Carry out immediately before compaction of subgrade.
2. Soft spots and voids: Give notice.
3. Old drainage and service trenches:
4. Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

**150 SUBGRADES FOR VEHICULAR AREAS**

1. Preparation and treatment: To Highways Agency 'Specification for highway works', clauses 616 and 617.



**210 HIGHWAYS AGENCY TYPE 1 UNBOUND MIXTURE FOR SUB-BASE**

1. Material: Type 1 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 803.

1.1. Recycled aggregate:

211 Granular material

1. Quality: Of a known suitability for use in sub-bases, free from excessive dust, well graded, all pieces less than 75 mm in any direction, minimum 10% fines value of 50 kN when tested in a soaked condition to BS 812-111 or a resistance to fragmentation of LA50 for the Los Angeles test to BS EN 1097-2, and in any one layer only one of the following:

1.1. Crushed rock (other than argillaceous rock) or quarry waste with not more binding material than is required to help hold the stone together.

1.2. Crushed concrete, crushed brick or tile, free from plaster, timber and metal.

1.3. Gravel or hoggins with not more clay content than is required to bind the material together, and with no large lumps of clay.

1.4. Natural gravel.

1.5. Natural sand.

2. Filling: Spread and levelled in 150 mm maximum layers, each layer thoroughly compacted.

**230 PLACING GRANULAR MATERIAL** Generally

1. Preparation: Loose soil, rubbish and standing water removed.

2. Structures, membranes and buried services: Ensure stability and avoid damage.

**240 LAYING GRANULAR SUB-BASES FOR VEHICULAR AREAS**

1. General: Spread and levelled in layers. As soon as possible thereafter compact each layer.

2. Standard: To Highways Agency 'Specification for highway works' clause 802.

3. At drainage fittings, inspection covers, perimeters and where local excavation and backfilling has taken place: Take particular care to compact fully.

**310 ACCURACY**

1. Permissible deviation from required levels, falls and cambers (maximum)

1.1. Subgrades

1.1.1. Roads and parking areas: +20 -30 mm. 1.1.2. Footways and recreation areas:  $\pm 20$  mm.

1.2. Sub-bases

1.2.1. Roads and parking areas:

1.2.2. Footways and recreation areas:

**330 COLD WEATHER WORKINGS**

1. Frozen materials: Do not use.

2. Freezing conditions: Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

**340 PROTECTION**

2. Subgrades and sub-bases: Prevent degradation by construction traffic, construction operations and inclement weather.

1.4. Fixings: All components securely fixed.

**720 SETTING POSTS IN CONCRETE**

1. Standard: To BS 8500-2.

2. Mix: Designated concrete not less than GEN1 or Standard prescribed concrete not less than ST2.

3. Alternative mix for small quantities: 50 kg Portland cement to 150 kg fine aggregate to 250 kg 20 mm nominal maximum size coarse aggregate, medium workability.

4. Admixtures: Do not use.

5. Holes: Excavate neatly and with vertical sides.

6. Filling: Position post/ strut and fill hole with concrete to not less than the specified depth, well rammed as filling proceeds and consolidated.
7. Backfilling of holes not completely filled with concrete: Excavated material, well rammed and consolidated.

#### **780 MAKING GOOD GALVANISED SURFACES**

1. Treatment of minor damage (including on fasteners and fittings): Low melting point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to BS 4652.
2. Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer.

#### **Completion 910 Cleaning**

1. General: Leave the works in a clean, tidy condition.
2. Surfaces: Clean immediately before handover.

#### **920 FIXINGS**

1. All components: Tighten.
- 1.1. Timing: Before handover.

#### **930 GATES**

1. Hinges, latches and closers: Adjust to provide smooth operation. Lubricate where necessary.
- 1.1. Timing: Before handover.

Q40

#### **FENCING**

#### **FENCING SYSTEMS**

#### **126 OPEN MESH STEEL PANEL SECURITY FENCING**

1. Manufacturer: Jackson Fencing
- 1.1. Product reference: Contractor's choice
2. Standard: To BS 1722-14, category 3 Security fence - welded fencing.
3. Height: 3000
4. Mesh and wire: Expanded metal mesh, 100 mm vertical x 50 mm horizontal x 3 mm thickness, galvanized or to product on site.
5. Posts: Galvanized rectangular hollow section
6. Maximum centres of posts: 3 m.
7. Method of setting posts: In concrete foundations to comply with the design loading requirements specified by BS 1722-14 for this category of fence. 450 mm square x 750 mm deep holes filled to not less than half the depth of concrete (for a fence 2400 mm high)
8. Bottom of fencing: Anchored to a concrete sill
9. Accessories: None
10. Conformity: Submit manufacturer's and installer's certificates, to BS 1722-14.

#### **126 METAL MESH PANEL FENCING SYSTEMS TYPE A**

1. Manufacturer: Jacksons Fencing
- 1.1. Contact details
- 1.1.1. Address: 209 Stowting Common, Ashford, Kent, TN25 6BN
- 1.1.2. Telephone: 0800 408 4757
- 1.1.3. Web: [www.jacksons-security.co.uk](http://www.jacksons-security.co.uk)
- 1.1.4. Email: [sales@jacksons-fencing.co.uk](mailto:sales@jacksons-fencing.co.uk)
- 1.2. Product reference: Securi-Mesh® Fencing
2. Standard: Can be configured to meet Home Office specifications for prison use.
3. Category: 3.
4. Posts: Manufacturer's standard.
5. Post foundations: Base plated to bolt down onto concrete.

6. Panels: 2440 mm.
7. Fence topping: None.
8. System accessories: Matching gates.
9. Finish/ Colour: Galfan® zinc alloy coated.

#### **710 INSTALLATION** Generally

1. Set out and erect
  - 1.1. Alignment: Straight lines or smoothly flowing curves.
  - 1.2. Tops of posts: Following profile of the ground.
  - 1.3. Setting posts: Rigid, plumb and to specified depth, or greater where necessary to ensure adequate support.
  - 1.4. Fixings: All components securely fixed.

#### **720 SETTING POSTS IN CONCRETE**

1. Standard: To BS 8500-2.
2. Mix: Designated concrete not less than GEN1 or Standard prescribed concrete not less than ST2.
3. Alternative mix for small quantities: 50 kg Portland cement to 150 kg fine aggregate to 250 kg 20 mm nominal maximum size coarse aggregate, medium workability.
4. Admixtures: Do not use.
5. Holes: Excavate neatly and with vertical sides.
6. Filling: Position post/ strut and fill hole with concrete to not less than the specified depth, well rammed as filling proceeds and consolidated.
7. Backfilling of holes not completely filled with concrete: Excavated material, well rammed and consolidated.

#### **780 MAKING GOOD GALVANISED SURFACES**

1. Treatment of minor damage (including on fasteners and fittings): Low melting point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to BS 4652.
2. Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer.

#### **910 CLEANING**

1. General: Leave the works in a clean, tidy condition.
2. Surfaces: Clean immediately before handover.

#### **920 FIXINGS**

1. All components: Tighten.
  - 1.1. Timing: Before handover.

#### **930 GATES**

1. Hinges, latches and closers: Adjust to provide smooth operation. Lubricate where necessary.
  - 1.1. Timing: Before handover.

Q50

#### **SITE/STREET FURNITURE/EQUIPMENT**

Gates, barriers and parking controls

#### **190 CARBON STEEL BOLLARDS TYPE A**

1. Description: Location: Bollard to protect Joinery Workshop Ramp, located within existing side access road and parking area.
2. Manufacturer: Broxap Ltd
  - 2.1. Contact details
    - 2.1.1. Address: Rowhurst Industrial Estate  
Chesterton  
Newcastle-under-Lyme  
Staffordshire

ST5 6BD

2.1.2. Telephone: +44 (0)1782 571700

2.1.3. Web: [www.broxap.com](http://www.broxap.com)

2.1.4. Email: [nbs@broxap.com](mailto:nbs@broxap.com)

2.2. Product reference: Carbon Steel Economy Heavy Duty Bollards (BX14 6501B1-RT - Flat top )

3. Dimensions

3.1. Size and profile:  $\varnothing$ 140 mm.

3.2. Height: 1300 mm.

3.3. Length below ground: 300 mm.

4. Post top:

5. Post base: Standard root.

6. Finishes

6.1. Applied finish: Galvanized and polyester powder coated.

6.2. Colour: RAL 9005 Jet Black.

7. Accessories: Steel inserts for additional strength. Reflective banding.

8. Gauge: 5 mm.

#### **510 CONCRETE FOUNDATIONS Generally**

1. Standard: To BS 8500-2.

2. Concrete: Standard prescribed, not less than ST2

3. Admixtures: Do not use.

4. Foundation holes: Neat vertical sides.

5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

#### **515 SETTING COMPONENTS IN CONCRETE**

1. Holes: 250 x 250 x minimum 300 mm deep

2. Components: Accurately positioned and securely supported.

3. Concrete fill: Fully compacted as filling proceeds.

4. Concrete foundations exposed to view: Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.

5. Temporary component support: Maintain undisturbed for minimum 48 hours.

#### **560 SITE PAINTING**

1. Timing: Prepare surfaces and apply finishes as soon as possible after fixing.

### **R11 ABOVE GROUND FOUL DRAINAGE SYSTEM**

General

#### **115 ABOVE GROUND FOUL DRAINAGE SYSTEM**

1. Sanitary and floor drainage outlets:

2. Waste pipework:

3. Discharge stack and branch pipework:

4. Separate ventilating pipework:

5. Accessories:

6. Disposal:

System performance 210 Design

1. Design: Complete the design of the above ground foul drainage system.

2. Standards: To BS EN 12056-1 and BS EN 12056-2, and in accordance with BS EN 12056-2 National Annexes NA-NG.

2.1. System type to BS EN 12056-2: System III.

3. Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

**315 FLOOR DRAINS**

1. Description:
2. Manufacturer:
  - 2.1. Product reference:
3. Floor finish:
4. Body type:
  - 4.1. Material:
5. Grating/ cover
  - 5.1. Type:
  - 5.2. Material:
6. Outlet: Type and direction to suit pipework.
7. Accessories:

**365 PVC-U PIPEWORK**

1. Description:
2. Standard: To BS EN 1329-1, Kitemark certified.
  - 2.1. Weather resistance, connectors to WC pans, opening dimensions of access fittings, design of swept fittings, stand off dimensions of pipe and fitting brackets and requirements for adaptors and plugs: To BS 4514.
3. Manufacturer:
  - 3.1. Product reference:
4. Nominal sizes:
5. Colour:
6. Brackets:
  - 6.1. Fixings:
    - 6.1.1. Size:
7. Accessories:

**366 PVC-U pipework, 82.4 mm od**

1. Description:
2. Standard: To BS 4514.
3. Manufacturer:
  - 3.1. Product reference:
4. Colour:
5. Brackets:
  - 5.1. Fixings:
    - 5.1.1. Size:
6. Accessories:

**375 AIR ADMITTANCE VALVES**

1. Standard: To BS EN 12380 or Agreement certified.
2. Minimum air flow rate: To BS EN 12056-2.
3. Manufacturer:
  - 3.1. Product reference:

**383 INSULATION TO INTERNAL PIPELINES**

1. Manufacturer:
  - 1.1. Product reference:
2. Material:
3. Thermal conductivity (maximum):
4. Thickness:
5. Fire performance:

**385 MASKING PLATES**

1. Manufacturer:
- 1.1. Product reference:
2. Material and finish:
3. Fixing:

**390 RODDING EYES**

1. Description:
2. Manufacturer:
- 2.1. Product reference:
3. Body material:
4. Cover type:
5. Cover material:

**EXECUTION****601 INSTALLATION** Generally

1. Standard: To BS EN 12056-5.
2. Components: From the same manufacturer for each type of pipework.
3. Electrolytic corrosion: Avoid contact between dissimilar metals where corrosion may occur.
4. Plastics and galvanized steel pipes: Do not bend.
5. Allowance for thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.
6. Concealed or inaccessible surfaces: Decorate before starting work specified in this section.
7. Protection
  - 7.1. Purpose made temporary caps: Fit to prevent ingress of debris.
  - 7.2. Access covers, cleaning eyes and blanking plates: Fit as the work proceeds.

**605 PIPE ROUTS**

1. General: The shortest practical, with as few bends as possible.
  - 1.1. Bends in wet portion of soil stacks: Not permitted.
  - 1.2. Routes not shown on drawings: Submit proposals before commencing work.

**610 FIXING PIPEWORK**

1. Pipework: Fix securely plumb and/ or true to line. Fix discharge stack pipes at or close below socket collar or coupling.
2. Branches and low gradient sections: Fix with uniform and adequate falls to drain efficiently.
3. Externally socketed pipes and fittings: Fix with sockets facing upstream.
4. Additional supports: Provide as necessary to support junctions and changes in direction.
5. Vertical pipes: Provide a load bearing support not less than every storey level. Tighten fixings as work proceeds so that every storey is self supporting.
6. Wall and floor penetrations: Isolate pipework from structure, e.g. with pipe sleeves.
  - 6.1. Masking plates: Fix at penetrations if visible in the finished work.
7. Expansion joint sockets: Fix rigidly to the building.
8. Fixings: Allow the pipe to slide.

**615 FIXING VERTICAL PIPEWORK**

1. Description:
2. Bracket fixings:
3. Distance between bracket fixing centres (maximum):

**625 JOINTING FLOOR CHANNELS**

1. Jointing: Silicone sealant

**630 Jointing pipework – generally**

1. General: Joint with materials, fittings and techniques that will make effective and durable connections.
2. Jointing differing pipework systems: With adaptors intended for the purpose.
3. Cut ends of pipes: Clean and square. Remove burrs and swarf. Chamfer pipe ends before inserting into ring seal sockets.
4. Jointing or mating surfaces: Clean and, where necessary, lubricate immediately before assembly.
5. Junctions: Form with fittings intended for the purpose.
6. Jointing material: Do not allow it to project into bore of pipes and fittings.
7. Surplus flux, solvent jointing materials and cement: Remove from joints.

**630 JOINTING PIPEWORK – Generally**

1. General: Joint with materials, fittings and techniques that will make effective and durable connections.
2. Jointing differing pipework systems: With adaptors intended for the purpose.
3. Cut ends of pipes: Clean and square. Remove burrs and swarf. Chamfer pipe ends before inserting into ring seal sockets.
4. Jointing or mating surfaces: Clean and, where necessary, lubricate immediately before assembly.
5. Junctions: Form with fittings intended for the purpose.
6. Jointing material: Do not allow it to project into bore of pipes and fittings.
7. Surplus flux, solvent jointing materials and cement: Remove from joints.

**660 JOINTING PIPEWORK – ABS, MUPVC, PVC-C and PVC-U**

1. Jointing:

**695 DISCHARGE AND VENTILATING STACKS**

1. Terminations: Perforated cover or cage that does not restrict airflow.
- 1.1. Material: Plastics, as discharge stack

**700 INSTALLING AIR ADMITTANCE VALVES**

1. Position: Vertical, above flood level of highest appliance served and clear of insulation materials (other than the manufacturer's insulating cover).
2. Connection to discharge stack: Allow removal for rodding, e.g. ring seal.
3. Roof spaces and other unheated locations: Fit manufacturer's insulating cover.

**703 FIXING INSULATION TO INTERNAL PIPELINES**

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

**705 ACCESS FOR TESTING AND MAINTENANCE**

1. General: Install pipework with adequate clearance to permit testing, cleaning and maintenance, including painting where necessary.
  2. Access fittings and rodding eyes: Position to avoid obstruction.
- Completion

**900 TESTING Generally**

1. Dates for testing: Give notice.
- 1.1. Period of notice (minimum):
2. Preparation
- 2.1. Pipework: Securely fixed and free from obstruction and debris.
- 2.2. Traps: Filled with clean water.

3. Testing
  - 3.1. Supply clean water, assistance and apparatus.
  - 3.2. Do not use smoke to trace leaks.
4. Records: Submit a record of tests.

#### **905 PIPEWORK AIRTIGHTNESS TEST**

1. Preparation
  - 1.1. Open ends of pipework: Temporarily seal using plugs.
  - 1.2. Test apparatus: Connect a 'U' tube water gauge and air pump to pipework via a plug or through trap of an appliance.
2. Testing: Pump air into pipework until gauge registers 38 mm.
3. Required performance: Pressure of 38 mm is to be maintained without loss for at least three minutes.

#### **910 SIPHONAGE AND BACK PRESSURE TESTS**

1. Method
  - 1.1. WC pans: Test by flushing.
  - 1.2. Other appliances: Test by filling to overflow level, then removing the plug.
2. Number of tests: Test each appliance three times. Recharge traps before each test.
3. Self siphonage testing: Test each appliance individually.
4. Induced siphonage and back pressure testing: Test by discharging the following numbers of appliances simultaneously on each stack:
  - 4.1. WCs:
  - 4.2. Washbasins:
  - 4.3. Sinks:
  - 4.4. Selection of appliances: Submit proposals.

#### **915 PRE-HANDOVER CHECKS**

1. Temporary caps: Remove.
2. Permanent blanking caps, access covers, rodding eyes, floor gratings and the like: Secure complete with fixings.

#### **920 SUBMITTALS**

1. Manufacturer's instructions for grease traps: Handover at completion.

R13

#### **BELOW GROUND DRAINAGE SYSTEMS**

General

#### **110 BELOW GROUND DRAINAGE SYSTEM**

1. Description:

System performance

#### **211 DESIGN – below ground drainage systems**

1. Design: Complete the design of the below ground drainage system in accordance with BS EN 752, BS EN 1295-1 and BS EN 1610.

Execution

#### **610 STRIPPING OUT**

1. Extent of stripping out: Existing drainage
2. Exposed ends of existing drainage to be abandoned: Seal with concrete.

#### **611 Existing drains**

1. Setting out: Before starting work, check invert levels and positions of existing drains, sewers, inspection chambers and manholes against drawings. Report discrepancies.
2. Protection: Protect existing drains to be retained and maintain normal operation if in use.

#### **773 INSTALLING ACCESS COVERS AND FRAMES**



1. Seating:
2. Bedding and haunching of frames: Continuously.
  - 2.1. Material:
  - 2.2. Top of haunching: 30 mm below surrounding surfaces.
3. Horizontal positioning of frames
  - 3.1. Centred over openings.
  - 3.2. Square with joints in surrounding paving.
4. Vertical positioning of frames
  - 4.1. Level; or
  - 4.2. Marry in with levels of surrounding paving.
5. Permissible deviation in level of external covers and frames: +0 to -6 mm.

### **COMPLETION**

#### **901 REMOVAL OF DEBRIS AND CLEANING**

1. Preparation: Lift covers to manholes, inspection chambers and access points. Remove mortar droppings, debris and loose wrappings.
  - 1.1. Timing: Before cleaning, final testing, CCTV inspection if specified, and immediately before handover.
2. Cleaning: Thoroughly flush pipelines with water to remove silt and check for blockages. Rod pipelines between access points if there is any indication that they may be obstructed.
3. Washings and detritus: Do not discharge into sewers or watercourses.
4. Covers: Securely replace after cleaning and testing.

#### **911 Testing and inspection**

1. Dates for testing and inspection: Give notice.
  - 1.1. Period of notice:

#### **921 FINAL TESTING OF PRIVATE GRAVITY DRAINS AND SEWERS UP TO dn 300**

1. Before testing
  - 1.1. Cement mortar jointing: Leave 24 h.
  - 1.2. Solvent welded pipelines: Leave 1 h.
2. Standard: To Building Regulations.
3. Method:

#### **941 WATER TESTING OF MANHOLES AND INSPECTION CHAMBERS**

1. Timing: Before backfilling.
2. Standard
  - 2.1. Exfiltration: To BS EN 1610.
  - 2.2. Method: Testing with water (method W).
  - 2.3. Infiltration: No identifiable flow of water penetrating the chamber.

#### **978 LIFTING KEYS**

1. Lifting keys: Supply suitable keys for each type of access cover.
  - 1.1. Timing: At completion.

#### **980 INSTRUCTIONS**

1. Manufacturer's user instructions:

R13

### **LAND DRAINAGE**

Generally

#### **103 SEQUENCE OF WORK**

1. General:



**106 IN-SITU CONCRETE** (general)

1. Standard: To BS 8500-1 and -2.

1.1. Concrete:

Drains

**225 NARROW SLOT FIN DRAINS****810 INSPECTION OF TRENCHLESS DRAINS****S90 HOT AND COLD WATER SUPPLY SYSTEMS**

General - Refer to MEP design and details

**T90 HEATING SYSTEMS**

General - Refer to MEP design and details

**225 Thermal insulation of building fabric**

1. Heat loss calculations: Base on the following maximum U-values:

1.1. Floors:

1.2. Walls:

1.3. Windows:

1.4. Roofs:

**U90 GENERAL VENTILATION**

General - refer to MEP consultants design and details

**FIRE RESISTING AND SMOKE CONTROL DOORSETS**

1. Installation: By manufacturer or their approved installers, in accordance with requirements of BS EN 16034 and in conjunction with BS EN 13241, including the Declaration of Performance (DoP) certification for the CE marked doorset.

**SEALANT JOINTS**

1. Sealant

1.1. Manufacturer: Submit proposals

1.1.1. Product reference: Submit proposals

1.2. Colour: To suit finish

1.3. Application: see sealant section. Triangular fillets finished to a flat or slightly convex profile.

**PROPOSED EXTERNAL WORKS****CAR PARK/ROAD** (south side of CTC) - **see dwg 5087-**

Locally make good areas affected by the construction of the workshop delivery ramp, bollards, plant screening fencing posts, gates and fencing.

Thicknesses of sub-base/ subgrade improvement layers

1. Thicknesses: See sections: Q20 Granular sub-bases to roads/ paving's (NBS)

**EXCAVATION OF SUBGRADES**

1. Final excavation to formation/ sub formation level: Carry out immediately before compaction of subgrade.

2. Soft spots and voids: Give notice.

3. Old drainage and service trenches: not known investigation on site required

4. Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

**PREPARATION AND COMPACTION OF SUBGRADES**

1. Timing: Immediately before placing sub-base.
2. Soft or damaged areas: Excavate and replace with sub-base material, compacted in layers 300 mm (maximum) thick
3. Compaction: Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ paving's when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

**GRANULAR MATERIAL**

1. Quality: Of a known suitability for use in sub-bases, free from excessive dust, well graded, all pieces less than 75 mm in any direction, minimum 10% fines value of 50kN when tested in a soaked condition to BS 812-111 or a resistance to fragmentation of LA50 for the Los Angeles test to BS EN 1097-2, and in any one layer only one of the following:
  - 1.1. Crushed rock (other than argillaceous rock) or quarry waste with not more binding material than is required to help hold the stone together.
  - 1.2. Crushed concrete, crushed brick or tile, free from plaster, timber and metal.
  - 1.3. Gravel or hoggin with not more clay content than is required to bind the material together, and with no large lumps of clay.
  - 1.4. Natural gravel.
  - 1.5. Natural sand.
2. Filling: Spread and levelled in 150 mm maximum layers, each layer thoroughly compacted.

**PLACING GRANULAR MATERIAL GENERALLY**

1. Preparation: Loose soil, rubbish and standing water removed.
2. Structures, membranes and buried services: Ensure stability and avoid damage.

**PROTECTION**

1. Sub-bases: As soon as practicable, cover with subsequent layers, specified elsewhere.
2. Subgrades and sub-bases: Prevent degradation by construction traffic, construction operations and inclement weather.

**LAYING KERBS, EDGINGS AND CHANNELS**

1. Standard: To BS 7533-6.
2. Cutting: Neat and accurate and without spalling. Form neat junctions.
  - 2.1. Long units' (450 mm and over) minimum length after cutting: 300 mm.
  - 2.2. Short units' minimum length after cutting: The lower of one third of their original length or 50 mm.
3. Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.
4. Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically

**CONCRETE FOR FOUNDATIONS, RACES AND HAUNCHING**

1. Standard: To BS 8500-2.
2. Designated mix: Not less than GEN0 or Standard mix ST1.
3. Workability: Very low

**CEMENT MORTAR BEDDING**

1. General: To section Z21.
2. Mix: (Portland cement: sand): 1:3.
  - 2.1. Portland cement: Class CEM I 42.5 to BS EN 197-1.
  - 2.2. Sand: to BS EN 12620, grade 0/4 or 0/2 (MP).
3. Bed thickness: 12-40 mm.

**ACCURACY**

1. Deviations (maximum)
  - 1.1. Level:  $\pm 6$  mm.
  - 1.2. Horizontal and vertical alignment: 3 mm in 3 m.

**TOOLED MORTAR JOINTS**

1. Jointing: Ends of units buttered with bedding mortar as laying proceeds. Joints completely filled and tooled to a neat flush profile.

1.1. Joint width: 6 mm.

**SEALANT MOVEMENT JOINTS**

1. Joint filler: Compressible cellular rubber or plastics compatible with specified sealant.

2. Filler installation: Built in as work proceeds, extending through haunching and foundation. Filler positioned accurately to fully support sealant at the recommended depth below exposed faces of units.

3. Joint width 4mm

4. Sealant:

4.1. Colour:

5. Sealant application: see sealant section

**ROAD MARKING (LIGHT DUTY)**

1. Manufacturer: Contractor's choice

1.1. Product reference: Contractor's choice

2. Colour: White

3. Surface to receive markings: Clean and dry, loose material removed.

4. Application: Uniform, with no streaks or ragged edges.

**EXECUTION GENERALLY** – concrete block and clay paver paving

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

**COLOUR BANDING**

1. General: Unless premixed by manufacturer, select blocks/ pavers/ setts from at least 3 separate packs in rotation, to avoid colour banding.

**SAMPLES**

1. General: Before ordering, submit samples of clay blocks/ pavers/ setts that are representative of colour and appearance

**CONTROL SAMPLES**

1. General: Carry out sample area of finished work:

1.1. Location: CA to approve

1.2. Size (minimum): 1.5 x 1.5 m

1.3. Features to be included: Kerb

2. Give notice: When ready for inspection.

3. Timing: Obtain approval of appearance before proceeding.

**ADVERSE WEATHER**

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

**TOOLED JOINTS IN MORTAR BEDDED UNITS**

1. Jointing: Butter ends of units with bedding mortar as work proceeds, to fill joints.

1.1. Joint width: 10 mm

1.2. Finish: Tool to a neat flush profile.

**SEALANT MOVEMENT JOINTS IN MORTAR BEDDED UNITS**

1. Spacing: 6.0 m
2. Extent of joints: Through edge units and haunching
3. Joint filler: Compressible cellular rubber or plastics compatible with specified sealant. Build in as work proceeds.
- 3.1. Joint width: 10 mm
4. Barrier (joint breaker): As recommended by sealant manufacturer. Position filler and barrier accurately to fully support sealant at recommended distance from exposed faces of units.
5. Sealant: High performance trafficable joint sealant
- 5.1. Colour: Red
- 5.2. Application: See details section

**LAYING GEOTEXTILE SHEET FOR CONVENTIONAL PAVING**

1. Location: Immediately below laying course.
2. Jointing: Lap by 400 mm
3. Laying: Fit neatly at edge restraints and other features that interrupt the sand laying course, e.g. drainage fittings, channels, manholes and kerbs.
- 3.1. Edge detail: Turn sheet up to form an upstand against features.
- 3.1.1. Height (minimum): Thickness of sand laying course.

Prepared existing and new bound bases (roadbases)

1. Condition before placing laying course: Sound, clean, free from rutting or major cracking and cleared of sharp stones, projections or debris.

**5 LAYING BLOCK/PAVERS/SETTS**

1. Setting out: Start from an edge restraint.
2. Cutting: Cleanly, accurately and vertically, without spalling. Do not mark or damage visible surfaces.
3. Cut edges: Turn inwards where possible; do not position against edge restraints or other features.
4. In situ mortar or concrete infill: Do not use
5. Compaction: Vibrate to produce thoroughly interlocked paving of even overall appearance with regular joints and accurate to line, level and profile. Do not mark or damage paving units, kerbs and adjacent work.
- 5.1. Concrete blocks and clay pavers: In accordance with BS 7533-3, Annex F, to site category required for laying course material.

**IN SITU SURROUNDS TO OBSTRUCTIONS**

1. Locations: Around circular drainage fittings At circular street furniture bases Where agreed on site
2. Material: 3:1 mix of coarse aggregate and mortar in accordance with BS 7533-3, clause 5.4.3.2.
3. Shape and size: Rectangular, 100 mm (minimum) all round obstruction.
4. Thickness (minimum): Combined depth of blocks/ pavers/ setts and sand laying course.
5. Colour: To approval
6. Timing: Lay and allow to cure in advance of laying blocks/ pavers/ setts.

**REGULARITY OF PAVED SURFACES**

1. Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)
  - 1.1. Precast concrete paving blocks and clay pavers for flexible pavements: 10mm.
2. Difference in level between adjacent paving units (maximum): 2 mm.
3. Sudden irregularities: Not permitted.

**REGULARITY OF PAVED SURFACES**

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

**SEALER/STABILISER FOR NEW BLOCKS AND SETTS**

1. Surface preparation: Ensure sand joints are completely dry and free from contamination Fill joints
2. Sealer/ Stabilizer
  - 2.1. Manufacturer: Contractor's choice
    - 2.1.1. Product reference: Contractor's choice
  - 2.2. Application: To dry paving.
    - 2.2.1. Method: Brush
    - 2.2.2. Number of coats: 2
    - 2.2.3. Coverage: 2 m<sup>2</sup>/litre

**GUN APPLIED JOINT SEALER**

1. Manufacturer: Contractor's choice
  - 1.1. Product reference: Contractor's choice
2. Joint preparation: Contractor's choice
3. Application: Contractor's choice

**COMPLETION OF PAVING**

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

Location: Mechanical Plant external unit slab

**STRUCTURAL DESIGN TO BE PROVIDED**

1. Description: As structural engineers drawings
2. Requirements
  - 2.1. Generally: As section B50.
  - 2.2. Additional requirements: None
3. Production/ execution records: In accordance with the designated code of practice

**STRUCTURAL DRAWINGS AND SCHEDULES TO E PROVIDED**

1. Standards
  - 1.1. Drawings: To BS EN ISO 3766.
  - 1.2. Reinforcement schedules: To BS 8666.

**TEMPERATURE RECORDS**

1. Requirement: Throughout period of concrete construction record:
  - 1.1. Daily: Maximum and minimum atmospheric shade temperatures
  - 1.2. Under adverse temperature conditions: Temperature at commencement and end of placing.
2. Equipment: Submit proposals
  - 2.1. Location: In the shade, close to the structure

**OPENINGS, INSERTS AND FIXINGS**

1. Requirement: Collate all information.
2. Submit: Details where openings, inserts and fixings can only be accommodated by adjustments to reinforcement.
3. Locate reinforcement: To ensure specified minimum cover at openings and inserts and to be clear of fixing positions.

**ACCURACY OF CONSTRUCTION**

1. Setting out: To BS 5964-1.
2. Geometrical tolerances: To BS EN 13670, Tolerance Class 1
- 2.1. Conflicts: Notwithstanding tolerances specified elsewhere, do not exceed requirements for compliance with the designated code of practice.

**IN SITU CONCRETE CONSTRUCTION** - supervision/ checking

1. Standard: To BS EN 13670, Execution Class 2

**SPECIFICATION**

1. Concrete generally: To BS 8500-2.
2. Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

**SUBSTITUTION OF STANDARDISED PRESCRIBED CONCRETE FOR DESIGNATED CONCRETE**

1. General: Conform to BS 8500-2, clause 9.
2. Substitution: In accordance with BS 8500-1, Table A.14.
- 2.1. Proposals: Submit for each substitution, stating reasons.
3. Site mixing: Not permitted

**READY-MIXED CONCRETE**

1. Production plant: Currently certified by a body accredited by UKAS to BS EN ISO/IEC 17065 for product conformity certification of ready-mixed concrete .
2. Source of ready-mixed concrete: Obtain from one source if possible . Otherwise, submit proposals .
- 2.1. Name and address of depot: Submit before any concrete is delivered .
- 2.2. Delivery notes: Retain for inspection .
3. Declarations of nonconformity from concrete producer: Notify immediately .

**SITE MIXED CONCRETE**

1. Batching by mass
- 1.1. Restrictions: Maximum pour size 3 m<sup>3</sup>.
- 1.2. Accuracy of measuring devices: To BS EN 206, clause 9.6.2.2.
- 1.2.1. Tolerances for quantity of constituent material: To BS EN 206, Table 27.
2. Batching by volume
- 2.1. Restrictions: None for mix ST1. Otherwise, maximum pour size of 0.5 m<sup>3</sup>.
3. Mixing: To BS 8000-2.1, subsections 2, 3 and 4.

**INFORMATION ABOUT PROPOSED CONCRETE**

1. Submit when requested
- 1.1. Details listed in BS 8500-1, clause 5.2.
- 1.2. Additional information: Data concerning the anticipated rate of strength gain

**CHANGES TO SPECIFICATION**

1. Changes to specification of fresh concrete (outside concrete producer's responsibility): Submit proposals

**ADMIXTURES**

1. Calcium chloride and admixtures containing calcium chloride: Do not use

**PROPERTIES OF FRESH CONCRETE**

1. Adjustments to suit construction process: Determine with concrete producer . Maintain conformity to the specification

**PROJECT TESTING OF CONCRETE - GENERAL**

1. Testing: To BS EN 206, Annex B
  - 1.1. Nonconformity: Obtain instructions immediately.
2. Recording: Maintain complete correlated records including:
  - 2.1. Concrete designation.
  - 2.2. Sampling, site tests, and identification numbers of specimens tested in the laboratory.
  - 2.3. Location of the parts of the structure represented by each sample.
  - 2.4. Location in the structure of the batch from which each sample is taken.

**TESTING LABORATORY**

1. Laboratory: Accredited by UKAS or other national equivalent.
  - 1.1. Name and UKAS reference number: Submit well in advance of making trial mixes or concrete for use in the works.

**TESTS RESULTS**

1. Submission of reports: Within one day of completion of each test.
  - 1.1. Number of copies: Three
2. Reports on site: A complete set, available for inspection.

**BROKEN CUBES FROM FAILED STRENGTH TESTS**

1. Nonconformity: Keep separately the pieces of each cube which fail to meet the conformity requirements for individual results.
2. Period for keeping cubes: Obtain instructions.

**PREMATURE WATER LOSS**

1. Requirement: Prevent water loss from concrete laid on absorbent substrates .
  - 1.1. Underlay: Select from:
    - 1.1.1. Polyethylene sheet: 250 micrometres thick .
    - 1.1.2. Building paper: To BS 1521, grade B1F .
  - 1.2. Installation: Lap edges 150 mm .

**CONSTRUCTION JOINTS**

1. Location of joints: Submit proposals when not shown on drawings
2. Preparation of joint surfaces: Submit proposals

**ADVERSE TEMPERATURE CONDITIONS**

1. Requirement: Submit proposals for protecting concrete when predicted ambient temperatures indicate risk of concrete freezing or overheating.

**INSPECTION OF SURFACES**

1. Notice: Give notice to allow inspections of reinforcement and surfaces before each pour of concrete.
  - 1.1. Period of notice: Obtain instructions.
2. Timing of inspections: To be agreed

**TRANSPORTING**

1. General: Avoid contamination, segregation, loss of ingredients, excessive evaporation and loss of workability . Protect from heavy rain .
2. Entrained air: Anticipate effects of transport and placing methods in order to achieve specified air content .



**PLACING**

1. Records: Maintain for time, date and location of all pours.
  2. Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
  3. Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum), unless otherwise specified. Do not place against frozen or frost covered surfaces.
  4. Continuity of pours: Place in final position in one continuous operation up to construction joints. Avoid formation of cold joints.
  5. Discharging concrete: Prevent uneven dispersal, segregation or loss of ingredients or any adverse effect on the formwork or formed finishes.
  6. Thickness of layers: To suit methods of compaction and achieve efficient amalgamation during compaction.
- Poker vibrators: Do not use to make concrete flow horizontally into position, except where necessary to achieve full compaction under void formers and cast-in accessories and at vertical joints.

**COMPACTING**

1. General: Fully compact concrete to full depth to remove entrapped air. Continue until air bubbles cease to appear on the top surface.
  - 1.1. Areas for particular attention: Around reinforcement, under void formers, cast-in accessories, into corners of formwork and at joints.
2. Consecutive batches of concrete: Amalgamate without damaging adjacent partly hardened concrete.
3. Methods of compaction: To suit consistence class and use of concrete.

**LIGHTWEIGHT AGGREGATE CONCETE**

1. Placing and compacting: Prevent flotation of coarse aggregate and formation of excessive blowholes

**FIRE STOPPING****FIRE-STOPPING SYSTEM**

1. Description: To all individual service penetrations
2. Penetration seal/ Gap filler: As fire-stopping schedule

**FIRE-STOPPING SYSTEM TO INDIVIDUAL SERVICES PENETRATIONS**

1. Description: Service Penetration General
2. Fire resistance: As clause 240
3. Penetration seal: Flexible intumescent gap sealer, as below
  - 3.1. Size: To match wall thickness
4. Gap sealer: Intumescent putty gap sealer, as below
5. Capping sealant: Fire-resisting silicone, as below
  - 5.1. Colour: Not applicable

**MULTIPLE SERVICES PENETRATIONS FIRE-STOPPING SYSTEMS TYPE A**

1. Manufacturer: PFC Corofil Fire Stop Products or equal and approved
2. Contact details
  - 2.1. Address: Units 3 & 4  
King George Trading Estate  
Davis Road  
Chessington  
Surrey  
KT9 1TT
  - 2.2. Telephone: +44 (0)20 8391 0533
  - 2.3. Web: [www.pfc-corofil.com](http://www.pfc-corofil.com)
  - 2.4. Email: [sales@pfc-corofil.co.uk](mailto:sales@pfc-corofil.co.uk)
3. Product reference: PFC Corofil Coated Panel System CCPS
4. Board barrier: PFC Corofil Coated Panel - 50 mm thick.
5. Fire performance: Up to two hours (120 minutes).
6. Acoustic Rating: RW (C:Ctr)= 24 (-2:-3).

**LUMINAIRE SMOKE HOODS TYPE B**

1. Manufacturer: FIREFLY™ TBA
2. Contact details
  - 2.1. Address: Unit 3 Transpennine Trading Estate  
Gorrells Way  
Rochdale, Lancashire  
OL11 2PX
  - 2.2. Telephone: +44 (0) 1706 758817
  - 2.3. Web: [www.tbafirefly.com](http://www.tbafirefly.com)
  - 2.4. Email: [info@tba-pt.com](mailto:info@tba-pt.com)
3. Product reference: FIREFLY™ Fire Hoods and Downlight Covers
4. Standard: To BS 476-23.
5. Smoke hoods and blankets: Match fire performance of building fabric.
6. Execution: Installing smoke hoods.
7. Size:: 300 x 300 x 150 mm. 600 x 300 x 150 mm. 600 x 600 x 150 mm. 1200 x 300 x 150 mm. 1200 x 600 x 150 mm.

**FLEXIBLE INTUMESCENT GAP SEALS TYPE A**

1. Manufacturer: ROCKWOOL Ltd
2. Contact details
  - 2.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
  - 2.2. Telephone: +44 (0)1656 862621
  - 2.3. Web: <https://www.rockwool.com/uk/>
  - 2.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
3. Product reference: ROCKWOOL® FIREPRO® Softseal System
4. Size: 1200 x 200 x 100 mm.
5. Fire performance: To BS EN 1366-3, up to two hours fire resistance.
6. Accessories: Softseal acoustic intumescent sealant.
7. Density: 80 kg/m³.
8. Water permeability (tested to EN 1027): No leakage observed up to 300 Pa.
9. Air permeability (tested to EN 1026 up to 600 Pa): Leakage at 50 Pa 0.1/1.4 m³/m²/h.

**DESIGN**

1. Design: Complete the design of the fire-stopping system.
2. Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

**FIRE PERFORMANCE**

1. Description: 30 minutes compartment or sub compartment lines
2. Resistance to fire: As drawings
3. Reaction to fire: To BS EN 13501-1,
4. Smoke resistance
  - 4.1. Air leakage rate (maximum): 3 m³/m²·hr

**FIRE PERFORMANCE TYPE A**

1. Description: 60 minutes compartment or sub compartment lines
2. Resistance to fire: As drawings
3. Reaction to fire: To BS EN 13501-1,
4. Smoke resistance
  - 4.1. Air leakage rate (maximum): 3 m³/m²·hr

**DESIGN LIFE**

1. Effective design life: 20 years

**PRODUCT CERTIFICATION**

1. Certification: For products specified generically, submit evidence of compliance with the specification.
2. Acceptable evidence: Listing in CERTIFIRE Register or equal

**MINERAL WOOL FIRE-STOPPING**

1. Manufacturer: JCW Acoustic Supplies Limited

- 1.1. Contact details

- 1.1.1.Address: Simon Masson

Specification Development Manager

BL2 2HH

- 1.1.2.Telephone: +44 7833 433335

- 1.1.3.Web: [www.acoustic-supplies.com](http://www.acoustic-supplies.com)

Mineral wool fire-stopping Type A

1. Manufacturer: JCW Acoustic Supplies Limited

- 1.1. Contact details

- 1.1.1.Address: Simon Masson

Specification Development Manager

BL2 2HH

- 1.1.2.Telephone: +44 7833 433335

- 1.1.3.Web: [www.acoustic-supplies.com](http://www.acoustic-supplies.com)

**FLEXIBLE INTUMESCENT GAP SEALS TYPE A**

1. Manufacturer: CSD Sealing Systems Ltd

- 1.1. Contact details

- 1.1.1.Address: Unit 6, Easter Park

Nelson Park West

Cramlington

United Kingdom

NE23 1WQ

- 1.1.2.Telephone: +44 (0)1670 739970

- 1.1.3.Web: [www.csdsealingsystems.co.uk](http://www.csdsealingsystems.co.uk)

- 1.1.4.Email: [enquiries@csdsealingsystems.co.uk](mailto:enquiries@csdsealingsystems.co.uk)

- 1.2. Product reference: CET-A-SIL Glandmod systems (CET-A-SIL Series 15)

2. Size: Various sizes where appropriate to be installed

Intumescent mastic

1. Manufacturer: Contractor's choice compactable with the installed product as per certification

- 1.1. Product reference: Contractor's choice

**INTUMESCENT MORTARS**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: FIREPRO® High Strength Compound
2. Material: Gypsum based.
3. Fire resistance: To EN 1366-3, up to four hours/ EI120.
4. Density: 1750–1900 kg/m<sup>3</sup>.
5. Load-bearing: false
6. Acoustic performance: Rw 57 dB.
7. Maximum unsupported span: 1800 mm.
8. Thermal Conductivity: 0.45 W/mK.
9. Setting expansion: 0.1%.
10. Typical yield: ±6 bags/m<sup>2</sup> at 100 mm depth.
11. Weight: 20 kg.

**INTUMESCENT PILLOWS**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: Intumescent Pillow CE (330 x 50 x 20 mm)
2. General requirements: Insulation products generally.
3. Size: Various see application
4. Fire performance: Up to EI 120 fire resistance.
5. Acoustical Performance: Rw (C,Ctr) = 33 (0,-2).
6. Air permeability: Tested to EN 1026.

**INTUMESCENT PUTTIES**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: ROCKWOOL® FIREPRO® Intumescent Putty Pads
2. Material: Silicone based intumescent polymer putty.
3. Form: Preformed pads.
4. Execution: Applying joint sealants.
5. Fire performance: To BS 476-20:1987 & EN 1366-3, up to two hours fire resistance.
6. Acoustic performance: Up to 67 dB.
7. Application temperature: 0–40°C

**INTUMESCENT PUTTIES**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: FIREPRO® Speedseal (60 mm)
2. Material: Intumescent putty.
3. Form: Freeform.
4. Execution: Applying joint sealants.
5. Fire resistance: Up to 120 minutes fire resistance (E120).
6. Diameter: 60 mm.
7. Density: 1.55–1.6 g/cm<sup>3</sup>.
8. Thickness: 4 mm.
9. Colour: Red.

**MINERAL WOOL SLAB INSULATION**

1. Manufacturer: ROCKWOOL Ltd
  - 1.1. Contact details
    - 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
    - 1.1.2. Telephone: +44 (0)1656 862621
    - 1.1.3. Web: <https://www.rockwool.com/uk/>
    - 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
  - 1.2. Product reference: ROCKWOOL® FIREPRO® Ablative Coated Batt
2. General requirements: Insulation products generally.
3. Thickness: 50 mm.
4. Facing: Ablative coated.
5. Density: 160 kg/m<sup>3</sup>.
6. Fire performance: Euroclass fire rating A1.
7. Width: 600 mm.
8. Accessories: ROCKWOOL Acoustic Intumescent Sealant. ROCKWOOL FirePro Glue. ROCKWOOL FirePro Insulated Fire Sleeves. ROCKWOOL FirePro Insulated Fire Sleeves. ROCKWOOL FirePro Insulated Fire Sleeves. ROCKWOOL FirePro Fire Tube. ROCKWOOL FirePro Pipe Section.
9. Air leakage: 0.8 m<sup>3</sup>/h/m<sup>2</sup>.

**PIPE COLLAR**

1. Manufacturer: ROCKWOOL Ltd
  - 1.1. Contact details
    - 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
    - 1.1.2. Telephone: +44 (0)1656 862621
    - 1.1.3. Web: <https://www.rockwool.com/uk/>
    - 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
  - 1.2. Product reference: FIREPRO® Insulated Fire Sleeve
2. Position: Fitted in hole or opening.
3. Fire performance: To BS 476- 20, up to two hours.
4. Sound insulation rating: Rw 49 dB.
5. Standard: To BS EN 14303; ISO 14001.
6. Insulation thickness (minimum): 25 mm.
7. Length: 300 mm.
8. Diameter: 17–169 mm.

**PIPE COLLAR**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: FIREPRO® Pipe Collar CE (250 x 250 x 30 mm)
2. Position: Surface mounted.
3. Sizes: 250 x 250 x 30 mm.
4. Fire performance: Up to EI240 fire resistance.
5. Application temperature: -5°C to 40°C.
6. Expansion: 20:1.
7. Colour: Red.
8. Fixing: suit application

**PIPE SLEEVES**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: FIREPRO® Pipewrap Roll
2. Form: Manufacturer's standard.
3. Fire performance: To BS 476-20, up to EI240.
4. Density: 1.3 kg/m³.
5. Length: 25 mm.
6. Width: 40 mm.
7. Thickness: 2 mm

**PIPE SLEEVES**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: ROCKWOOL® FIREPRO® Fire Tube
2. Material: Stone wool.
3. Form: Various to suit application
4. Thickness: 50 mm.
5. Width: Various dependant on application
6. Accessories: ROCKWOOL FirePro Glue.
7. Thermal Conductivity:: 0.033 W/mK.
8. Standard: To BS 3958-4 and ISO 14001.

**PIPE SLEEVES TYPE C**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: FIREPRO® Pipewrap Roll
2. Form: Manufacturer's standard.
3. Fire performance: To BS 476-20, up to EI240.
4. Density: 1.3 kg/m³.
5. Length: 25 mm.
6. Width: 40 mm.
7. Thickness: 2 mm.

**PIPE SLEEVES TYPE E**

1. Manufacturer: ROCKWOOL Ltd
- 1.1. Contact details
- 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
- 1.1.2. Telephone: +44 (0)1656 862621
- 1.1.3. Web: <https://www.rockwool.com/uk/>
- 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
- 1.2. Product reference: ROCKWOOL® FIREPRO® Fire Tube
2. Material: Stone wool.
3. Form: Various to suit application
4. Thickness: 50 mm.
5. Width: Various dependant on application
6. Accessories: ROCKWOOL FirePro Glue.
7. Thermal Conductivity:: 0.033 W/mK.
8. Standard: To BS 3958-4 and ISO 14001



**PIPE COLLAR TYPE F**

1. Manufacturer: ROCKWOOL Ltd
  - 1.1. Contact details
    - 1.1.1. Address: ROCKWOOL Ltd  
14th Floor, Chiswick Tower  
389 Chiswick High Road  
London  
W4 4AJ
    - 1.1.2. Telephone: +44 (0)1656 862621
    - 1.1.3. Web: <https://www.rockwool.com/uk/>
    - 1.1.4. Email: [info@rockwool.com](mailto:info@rockwool.com)
  - 1.2. Product reference: ROCKWOOL® Intumescent Pipe Wrap CE
2. Position: Surface mounted.
3. Sizes: 250 mm.
4. Fire performance: Up to EI120 fire resistance.
5. Width: 40 mm.
6. Thickness: 2–12 mm.
7. Density: 1.2 g/cm<sup>3</sup>.
8. Expansion: 20:1.
9. Application temperature: -5 to 40°C.

**SEALANT**

1. Type: Fire-resisting silicone
2. Manufacturer: Contractor's choice
  - 2.1. Product reference: to suit the application manufacturer of the product

**THIRD-PARTY-CERTIFIED INSTALLER**

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

**WORKMANSHIP GENERALLY**

1. Gaps: Seal between building elements and services, to provide effective resistance to fire and the passage of smoke. Allow for capping sealants where required. Finish flush with surrounds.
2. Adjacent surfaces: Prevent overrun of filler, sealant or mortar on to finished surfaces.

**INSTALLING BOARDING**

1. Position of boarding: Across face of opening Within opening
2. Framing: Provide framing to all edges of boarding
3. Bedding: Bed boarding on fire-resisting adhesive/ sealant
4. Multiple board layers: Stagger joints between layers.
  - 4.1. Joints: Seal with board adhesive
5. Fixing: Contractor's choice
6. Other requirements: Finish joint sealant flush with boards

**INSTALLING FLEXIBLE INTUMESCENT GAP SEALER**

1. Fitting of strips: Compress strips and fit into gap so that, as they decompress, the strips wedge themselves in the void.
2. Shrink wrapping: Not applicable
3. Joints
  - 3.1. Ends of strips: Fit intumescent 'end piece' at both ends of run of fire stop laminate.
  - 3.2. Joints between strips: Fit two intumescent 'end pieces' at each butt joint.

**INSTALLING INTUMESCENT PILLOWS**

1. Number of pillows (per m<sup>2</sup> of opening): Number necessary to achieve fire resistance
2. Orientation of bags: Parallel to plane of construction element containing opening, Perpendicular to plane of construction element containing opening

**APPLYING INTUMESCENT PUTTY**

1. Sequence: Install putty after services are permanently installed.
2. Loose dust and combustible materials: Do not disturb putty before final set has taken place.

**FIXING PIPE COLLARS**

1. Collar fixing: Contractor's choice
2. Gap around collar: Seal with gap filler and sealant
3. Length of wraps: Project 50 mm from each side of the element

**INSERTING SEALANT BACKING MATERIAL**

1. Preparation: Removed debris from service penetration.
2. Installation: Insert joint filler to full depth of joint leaving sufficient depth to apply sealant

**APPLYING SEALANTS GENERALLY**

1. Application: As Sealant Section

**APPLYING VAPPING SEALANT**

1. Preparation: De-grease using cleaner recommended by sealant manufacturer
2. Priming: Primer recommended by sealant manufacturer
3. Depth of sealant: 20 mm
4. Temperature: Do not apply water-based sealants when they could be damaged by frost.

**CLEANING**

1. Masking tapes: Remove.
2. Cleaning: Clean off splashes and droppings. Wipe down finishes

**INSPECTION**

1. Notice for inspection (minimum): Five working days

**PRESERVATIVE/FLAME-RETARDANT TREATMENT****TREATMENT APPLICATION**

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

**COMMODITY SPECIFICATIONS** - practice: Industrial Wood Preservation

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

**FLAME RETARDANT TREATMENT**

1. Standard: In accordance with the Wood Protection Association (WPA) publication 'Industrial flame retardant treatment of wood and wood-based panel products'.
2. Solution type: INT 1
  - 2.1. Manufacturer: Contractor's choice
    - 2.1.1. Product reference: Contractor's choice
  - 2.2. Application: Vacuum and pressure impregnation.
3. Moisture content of wood
  - 3.1. At time of treatment: As specified in product classification report.
  - 3.2. After treatment (INT 1 only): Timber to be re-dried slowly at temperatures not exceeding 60°C to minimise distortion and degradation.

**Q41****Barriers/ guardrails**

240 Handrail systems Type A 1. System manufacturer: Dura Composites Ltd or equal 2. Contact details 2.1. Address: Dura House Telford Road Clacton-on-Sea Essex United Kingdom CO15 4LP 2.2. Telephone: +44 (0)1255 423601 2.3. Web: <a href="http://www.duracomposites.com">www.duracomposites.com</a> 2.4. Email: <a href="mailto:info@duracomposites.com">info@duracomposites.com</a> 3. Product reference: Dura Key Clamp Handrailing 4. Handrails: Key Clamp GRP handrail tubes. 5. Fixing to parent structure: M8 hex head set screw. 6. Components: see drawing 7. Colour: Grey, RAL 7043. 8. Accessories: None. Performance/ inspection/ testing
---

Item	Description of Works	Quantity
	<p><b><u>DEMOLITION WORKS</u></b> - (5087.105 - Demolition Plan)</p> <p><b><u>INTERNAL DEMOLITION &amp; STRIP OUT</u></b></p> <p>Generally, where affected by works, contractor is to allow for the removal and to set aside existing fire signage and effective fire compartmentation must be maintained.</p> <p>Generally, all new construction to match existing cavity wall construction to achieve Building Regulations u-value requirements Approved Document L (ADL), Conservation of fuel and power, Volume 2: Buildings other than dwellings, 2021 edition incorporating 2023 amendments</p> <p>Contractor is to allow for the existing intercom system to be retained/modified to allow public and staff access to the other clinical services.</p> <p><b><u>ENTRANCE LOBBY</u></b> (CTC 0.001)</p> <p>Contractor is to allow for the removal of the defunct fixtures and fitting on the wall in preparation for decoration. Defunct services are to be disconnected, capped off and strip out in accordance with MEP design and details. Contractor is to ensure that continuity of service the retained clinical services on part of the ground floor and all of the first floor.</p> <p>Existing stair - no works to the stair. Allow for redecoration of walls on the right hand of stair and landing. Allow for stair and landing floor to be cleaned after works.</p> <p>Contractor to allow to prepare for decoration, all areas affected by the works.</p> <p>Existing flooring - to be retained, protected during works and allow for tiles to be cleaned after works.</p> <p><b><u>ACCESSIBLE WC</u></b> (CTC 0.002)</p> <p>Contractor to allow for capping off and stripping off all defunct sanitaryware, fixtures and fittings. Allow for existing window to be retained, overhauled, repaired decorated and left in good working order.</p> <p>Door - allow for existing door to be retained, overhauled, prepared for redecoration in accordance with door schedule</p> <p>Contractor is to allow for the removal of defunct services in accordance with MEP Design and details.</p> <p>Contractor to allow to prepare for decoration, all areas affected by the works.</p> <p><b><u>CORRIDOR</u></b> (CTC 0.004/CTC 0.009)</p> <p>Allow for stripping out any defunct services/small power (as MEP design). Make good areas affected by works and prepare for redecoration. Allow for installation of new services and connections (as per MEP design).</p>	

Allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Allow for the removal of existing doors as denoted on the demolition plan, make good all surfaces in preparation for either infilling opening or to receive new doorset.

**FEMALE WC** (CTC 0.008)

Contractor to allow for capping off and stripping off all defunct sanitaryware, cubicle panels and doors, fixtures and fittings. Allow for existing windows to be retained, overhauled, repaired decorated and left in good working order.

Contractor is to allow for the removal of defunct services in accordance with MEP Design and details.

Door - allow for existing door and windows to WCs to be retained, overhauled, prepared for redecoration.

Allow for stripping up existing floor finish and associated skirting and prepare for new flooring, with coved skirting.

Contractor to allow to prepare for decoration, all areas affected by the works.

Contractor is to allow for the removal of cubicle system and repair walls in preparation for new cubicles

Contractor to allow for existing boxing to be removed where the pipework is concealed pipework for alteration of connection in accordance MEP specification

**FEMALE WC LOBBY** (CTC 0.005)

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to proposed works

Contractor is to allow for the removal of defunct services in accordance with MEP Design and details.

Door - allow for existing door to WCs to be retained, overhauled, prepared for redecoration.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Contractor to allow to prepare for decoration, all areas affected by the works.

**STORE** (CTC 0.007)

Strip out existing fixtures, shelves and defunct fixtures and fittings. Disconnect/cap off all defunct services as MEP design. Any retained services serving other parts of the building are to be protected and left in good working order throughout works.

Doors - allow for the removal of existing doors as denoted on the demolition plan, make good all surfaces in preparation for either infilling opening or to receive new doorset.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Contractor to allow to prepare for decoration, all areas affected by the works.

**OFFICES** (new room ref: CTC.0.016, CTC.0.017, CTC.006, CTC.0.015)

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new Shower Room and Cleaners' Store sink.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Doors - allow for the removal of existing doors as denoted on the demolition plan, make good all surfaces in preparation for either infilling opening or to receive new doorset.

Contractor is to allow for removal of 1no window as indicated on the demolition plan, contractor is to allow for preparing opening to received new or re-used brickwork.

Allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Contractor to allow to prepare for decoration, all areas affected by the works.

**OFFICE** (new room ref: CTC.0.020)

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new services in accordance with MEP Design.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Remove existing doorset and partially demolish wall to allow for relocation of door into new Workshop space. Make good surrounding areas in preparation for new door opening and blocking up partitioning.

Contractor to allow to prepare for decoration, all areas affected by the works.

**OFFICE** (new room ref: CTC.0.014, CTC.0.013, )

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new services in accordance with MEP Design.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Remove existing doorset and demolish wall to allow for relocation of door into new Workshop space. Make good surrounding areas.

Contractor to allow to prepare for decoration, all areas affected by the works.

**OFFICE** (new room ref: CTC.0.012, CTC.0.010, )

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new services in accordance with MEP Design.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Remove existing doorset and demolish wall to allow for relocation of door into new Workshop space. Make good surrounding areas.

Contractor to allow to prepare for decoration, all areas affected by the works.

**OFFICES** (new room ref: CTC.0.018 )

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new services in accordance with MEP Design.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Remove existing doorset and demolish wall to allow for relocation of door into new Workshop space. Make good surrounding areas.

Contractor to allow to prepare for decoration, all areas affected by the works.

**STORE** (new room ref: CTC.0.019 )

Strip out existing fixtures, shelves and defunct fixtures and fittings. Disconnect/cap off all defunct services as MEP design.

Contractor to allow for capping off and stripping out of defunct services, fixtures and fittings.

Allow for existing windows to be retained, overhauled, repaired decorated and left in good working order.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

**OFFICE** (new room ref: CTC.0.021 )

Strip out existing fixtures, shelves and defunct fixtures and fittings. Disconnect/cap off all defunct services as MEP design.

Contractor to allow for capping off and stripping out of defunct services, fixtures and fittings.

Allow for existing windows to be retained, overhauled, repaired decorated and left in good working order.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

**STORE** (new room ref: CTC.0.023 )

Contractor to allow for stripping off all defunct fixtures and fittings. Existing drainage (on the ground) to be retained and protected ready to receive connections for the new services in accordance with MEP Design.

Strip out existing benching, shelves and defunct fixtures and fitting. Remove existing blinds and secondary glazing.

Flooring - allow for stripping up existing floor finish and associated skirting and prepare for new flooring.

Remove existing doorset and demolish wall to allow for relocation of door into new Workshop space. Make good surrounding areas.

Contractor to allow to prepare for decoration, all areas affected by the works.

**GENERAL DEMOLITION**

Contractor is to allow for any items not mentioned in the schedule of works but indicated on the drawing to be noted and included

**STRUCTURAL ALTERATIONS**

Read in conjunction with dwg 5087.105-Demolition Plan, 5087.120 - Setting Out Plan, Window & Door schedules.

Contractor to note the contract contains Structural Engineer's (SE) design liability to the PC and any design presented in the package involving temporary works or SE design is required to be approved by the PC SE.

**OFFICES** (new room ref: CTC.0.016, CTC.0.017, CTC.006, CTC.0.015)

Form a new door opening (DO.005) in the existing masonry wall between Female WC Lobby (CTC.0.005) and Cleaners' Cupboard (CTC.0.007), width as noted on door schedule. Allow for supply and installation of concrete lintol.



Allow to strip out existing 1no window in existing office, allow for window openings to be infilled as noted in dwg 5087.110.

Window adjacent to shower enclosures to be filled in using brick work salvaged from elsewhere in the building. Where there is a shortfall, contractor to allow for new brickwork, to match existing. Contractor to provide a sample match for Contract Administrator (CA) approval.

Allow for other 2no openings to be partially infilled to form opening for 2no new high level windows (WG.004 & WG.005). Size to match windows in existing Female WC (0.008).

Allow for partial demolition of wall to form new opening to door (DO.0.008) into Lobby (CTC. 0.015). Allow for supply and fit on new door lintel. Size of opening as noted in Door Schedule.

Contractor is to allow for 2no core drill through existing structure @ 70mm for the installation of the new WHB drainage to new external gully, to be read in conjunction with 5087.110 to reflect location of new WHB. Route to be adjacent to the WHB.

Contractor to allow for cutting out screed and slab @ 100mm in width, 100mm in depth and 650mm in length. Contractor to allow for core drill @ 70mm through external wall for new gully to the new external gully. For new gully detail see drawing 5087.300 series

**OFFICE** (new room ref: CTC.0.020)

Allow for partial demolition of wall to form new relocated opening to form door (DO.0.014) into Electrical Workshop (CTC.0.020). Allow for supply and fit on new door lintel. Size of opening as noted in Door Schedule.

Contractor is to allow for 1no core drill through existing structure @ 70mm for the installation of the new WHB/ Janitorial unit drainage to existing external gully, to be read in conjunction with 5087.110 to reflect location of new WHB. Route to be adjacent to the WHB.

**OFFICE** (new room ref: CTC.0.021 )

Allow for partial demolition of existing wall to form new window (WG.008) to AP Office. Allow for supply and fit of new concrete lintel to suit opening. Size of opening as noted in Door Schedule. Make good area around new opening in brickwork/finish to match

**OFFICES** (new room ref: CTC.0.018 )

Allow for demolition of existing masonry wall forming existing lobby to 2no offices (to remove lobby to form new Joinery Workshop. Make good area at walls using blockwork to match adjacent walls.

Allow application of levelling screed to part of new Joinery Workshop (as noted in dwg 5087.110). New level to match adjacent level in Joinery Workshop (0.018)

Allow for demolition of structural wall to form new opening (DO.0.20) into new Joinery Store (CTC.0.019). Make good area at walls in masonry construction to match adjacent walls.

Strip out existing enclosure to corner service riser located in Joinery Workshop. Strip out existing external timber doors in existing Joinery shop.

Strip out existing windows and partially demolish existing external wall to form new double doors structural opening (D0.0.022) - S/O 1920xheight to match adjacent external wall door openings. Size - see Door schedule. Set aside existing window for reuse in new location (see dwg 5087.200 Existing Elevations and 5087.201-Proposed Elevations.

Contractor is to allow for 1no core drill through existing structure @ 70mm for the installation of the new WHB/ Janitorial unit drainage to new external gully, to be read in conjunction with 5087.110 to reflect location of new WHB. Route to be adjacent to the WHB.

Contractor is to allow for 1no core drill through existing structure @ 300mm for the installation of the dust extract system ductworks, to be read in conjunction with 5087.110 to reflect location of duct work.

Allow for demolition of dividing office walls, as noted on dwg 5087.100 & 5087.110.

**OFFICE** (new room ref: CTC.0.012, CTC.0.010, )

Allow for demolition of dividing office walls, as noted on dwg 5087.110.

**STORE** (new room ref: CTC.0.023 )

Contractor is to allow for 1no core drill through existing structure @ 70mm for the installation of the new WHB/ Janitorial unit drainage to existing external gully, to be read in conjunction with 5087.110 to reflect location of new WHB. Route to be adjacent to the WHB.

**OFFICE** (new room ref: CTC.0.012, CTC.0.010, )

Contractor is to allow for 1no core drill through existing structure @ 70mm for the installation of the new WHB/ Janitorial unit drainage to new external gully, to be read in conjunction with 5087.110 to reflect location of new WHB. Route to be adjacent to the WHB.

**CORRIDOR** (CTC 0.004/CTC 0.009)

Strip out existing external doorset and partially demolish existing external wall to form new single doors structural opening (D0.0.009) - S/O 1020mmxheight to match Size - see Door schedule. (see dwg 5087.200 Existing Elevations and 5087.201-Proposed Elevations.

**EXTERNAL DEMOLITION WORKS**

Contractor is to allow for relevant service to identify the locations of services, utilities and drainage service or foul with appropriate depths to avoid clash of excavation works in accordance with the specification

New door opening - contractor it to allow for the removal of both leaves of the external cavity wall by diamond saw cutting brick and blockwork to the extent of the window opening to form new doorway. Contractor is to allow for removing brickwork carefully for re-use in blocking up new openings as noted on dwgs. Contractor is to carefully protect the existing DPC/water proofing when removing the external wall.

Contractor is to insert a figure for any bypass works required to the site that clashes with the proposals

Joinery Workshop ramp - Contractor is to allow for diamond cutting for a clean edge the existing tarmac surface to a depth to enable the formation of new delivery ramp to new Joinery Workshop as denoted on drawing. Excavate 150mm if sub-base material or to virgin ground is not suitable to accommodate the ramp and bollards details. See dwg 5087.313 Ramp detail & specification. All soil is to be removed to a licensed tipping facility.

Contractor is to allow for excavation to formation ramped access to Paint Store (CTC.0.023) door (DO.0.016)

Drainage channel - contractor to allow for excavation of levels as indicated on the plans and as specified to install linear drainage channel Acco or similar at threshold to delivery ramp access door (DO.0.022).

Fencing - contractor to allow for reduced levels in accordance with details (5087.300 series dwgs) for pad foundation to receive new fence posts and relocated fencing from the existing Workshop.

Paint Store ramp & steps - contractor is to allow for diamond cutting for a clean edge the existing tarmac/concrete surface to a depth to enable the formation of new delivery ramp and stepped access to new paint store as denoted on drawing. Excavate 150mm if sub-base material or to virgin ground is not suitable to accommodate the ramp and bollards details. See dwg (5087.300 series dwgs) and specification. All soil is to be removed to a licensed tipping facility.

Dust extractor slab - contractor is to allow for diamond cutting for a clean edge the existing concrete surface to a depth to enable the formation of new of mechanical slab for the dust extract as denoted on drawing. Excavate 150mm if sub-base material or to virgin ground if not suitable to accommodate the ramp and bollards details. See dwg (5087.300 series dwgs) and specification. All soil is to be removed to a licensed tipping facility.

Gulley - Contractor is to excavate to reduce level for external drainage works for new gulley connection with backdrop detail

Shower drainage - contractor is to excavate to reduce level for external drainage works for inspection chamber for new shower connection as per the detail, specification and drawings

Contractor is to consider encasement details & requirements, in accordance with proposed drawings and results of CCTV survey and depth of existing drainage.

Levels round Joinery Workshop ramp - contractor is to allow for reduced levels for new bollards around the external ramp in accordance with the proposed details. Location as noted on drawings.

**PROPOSED INTERNAL WORKS**

The internal proposed works are to be read in conjunction with all plans/details/specification/RDS provided with the tender package.

**ENTRANCE LOBBY** - CTC 0.001

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

**LOBBY** - CTC 0.003

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal wall constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

**LOBBY (ramped corridor)** - CTC 0.004

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal wall constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and installed new doorset DO.0.004 as indicated on door schedule and as per the specification, contractor is to allow for timber H frame section @ 50x50mm timber stud and to apply soundbloc either side of the timber side. contractor is to apply plaster finish as noted above.

Contract is to allow for chasing existing wall for access control equipment and or general service equipment as noted BWIC in accordance with the MEP Design

contractor is to allow for decoration to existing doorset and noted in the door schedule for DO.0.005

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

**LOBBY (female WC)- CTC 0.005**

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal wall constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contract is to allow for chasing existing wall for lighting contole equipment and or general service equipment as noted BWIC in accordance with the MEP Design

**CLEANERS CUPOARD - CTC 0.006**

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow UPVC to be applied to walls in accordance with the RDS and specification.

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and as indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixtures and fittings as indicated on the RDS/ Proposed furniture Layout or Room Elevations.

#### **CLEANER STORE** - CTC 0.007

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contract is to allow for chasing existing wall for lighting control and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixtures and fittings as indicated on the RDS/ Proposed furniture Layout or Room Elevations.

**FEMALE TOILETS** - CTC 0.008

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor is to allow UPVC to be applied to walls in accordance with the RDS and specification.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be covered into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for the supply and install of cubicle system as denoted on the plans and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water and drainage supplies.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for decoration to existing doorset and noted in the door schedule for DO.0.008

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

**CORRIDOR** - CTC 0.009

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for external doorset with lintel above to be installed in accordance with the door schedule/details and specification.

#### **LOBBY** - CTC 0.010

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed



Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

#### **SUPERVISORS OFFICE** - CTC 0.011

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow glazing details to be installed to new blockwork wall as indicated on the detail

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **LOCKSMITHS** - CTC 0.012

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **MECHANICAL WORKSHOP AND STORE** - CTC 0.013/CTC.0.014

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

**LOBBY (new shower area) - CTC 0.015**

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

#### **SHOWER ROOM** - CTC 0.016

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor to allow for blocking up external window opening in accordance with the specification and the detail. Contractor to allow for dot and dab plasterboard to be installed to infill and to be flush with existing internal wall face to allow for a smooth finish

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow UPVC to be applied to walls in accordance with the RDS and specification.

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **WC** - CTC 0.017

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls new or existing constructed finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow UPVC to be applied to walls in accordance with the RDS and specification.

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **JOINERY WORKSHOP AND STORE** - CTC 0.018/CTC.0.019

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal partitions walls new finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details. To note a section of blockwork installation is required to the corridor and cleaners store location that should be taken into consideration with abutment details.

Contractor is to allow for the installation of blockwork in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

**ELECTIRCAL WORKSHOP AND AP OFFICE** - CTC 0.020/CTC.0.021

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow UPVC splash back to sanitary ware covering 500mm to each side of the sanitary ware and is to be applied to walls in accordance with the RDS and specification.

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.



Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

Contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

Contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Contractor is to allow for new fixture and fitting and indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **PAINT SHOP** - CTC 0.022

Contractor is to allow for making good surfaces disturbed by works with multi purpose filler and sanding for a smooth finish as per partition specification.

Allow for plaster 3mm skim with metal corner beads to connect to new internal walls finish in accordance with drawings and specification.

Contractor is to allow for decorations to walls, ceilings and woodwork as denoted on the plan and in accordance with the specification. Colour is to be confirmed

Contractor is to allow UPVC splash back to sanitary ware covering 500mm to each side of the sanitary ware and is to be applied to walls in accordance with the RDS and specification.

Contractor is to allow for the installation of partitioning in accordance with the drawings, specification and details.

Contractor to allow for new flooring with 4mm latex screed finish, prepare floor to receive new Tarkett floor finish or similar approved. Allow for floor finished to be coved into skirting and for trim, as recommended by manufacturer.

Contractor is to allow for cap cove skirting to be installed in association with the vinyl floor covering and in accordance with the specification.

Contractor is to allow for the supply and install of sanitary ware in accordance with the specification and indicated on the drawings.

Contractor is to allow for applying silicone, apply to all abutments to be in accordance with drawings and specification.

Contractor is to allow for new boxing in in conjunction with the drawing details to hide all water/ heating services and drainage supplies in accordance with the MEP design and GAs for drainage runs.

Contractor is to allow for the installation and fire stopping works for MEP and drainage through existing or new walls in accordance with the MEP design and specification

contract is to allow for chasing existing wall for lighting control or extract equipment and or general service equipment as noted BWIC in accordance with the MEP Design

Suspended ceiling - contractor is to allow for the supply and installation of suspended ceiling in accordance with the specification and in accordance with the drawing.

New doorset - contractor is to allow for doorset to be installed in accordance with the door schedule and specification.

Fixtures & fittings - contractor is to allow for new fixtures and fittings as indicated on the RDS/ Proposed furniture Layout or Room Elevations.

Overhauling existing windows -contractor is to allow for overhauling the existing windows to a good working order in accordance with the specification.

#### **GENERAL PROPOSED INTERNAL WORKS**

Contractor is to allow for extending/installing existing access control and fire alarm systems in accordance with the MEP design recommendations in order to serve new Estates Team Workshops and offices.

Contractor is to allow for fire signage to be altered and relocated to suit the changes on the fire escape route.

Contractor is to allow for the appropriate labour resources, over one weekend period, to relocated all furniture, fixtures and fittings (FFE) from the current workshops to the new location, at the end of the contract. See room elevations (series 300 dwgs) and furniture schedule for quantity and sizes.

Contractor is to allow for any items not mentioned in the proposed schedule of works but indicated on the drawing to be noted and included

#### **GENERAL PROPOSED EXTERNAL WORKS**

Contractor is to allow for new Aluminium external double doorset with aluminium/integral level threshold to Joinery Workshop delivery ramp.

Contractor to allow for new aluminium threshold as specifications. See door schedule for sizes and details.

Contractor to allow for EO thermal insulated cavity closers with intergraded DPC to all forms openings and cavities formed if present.

Contractor to allow for the reuse of brickwork where possible, as previously set aside. Contractor is to allow for toothing in brickwork. Construction to be in accordance with detail and specification.

Contractor to allow for EO cost for full fill insulation to meet BR to suit new cavity.

Contractor is to allow for DPC to be retained and kept clean.

Contractor to allow for EO for replacement sections of DPC where new doorway & windows are formed.

Contractor to allow for existing set aside window to be installed to newly formed openings. Installation to be in accordance with specification.

Contractor is to allow for wall construction infill to the window. The wall details is to be define as 9in brickwork. The contractor is to investigate the wall build up before purchasing materials.

Contractor is to allow for pipework lagging to altered radiator pipework to be made good to match existing in accordance with MEP specification.

Joinery Workshop delivery ramp - Contractor is to allow for new external mass concrete delivery ramp & landing to Joinery Workshop (0.018), in accordance with drawing detail - dwg 5087.313-Ramp detail

**Spiral stair ramp** - Contractor is to allow for new external mass concrete ramp below the means of escape spiral stair to replace 3no existing steps. Ramp to be laid to falls in accordance with APM requirements.

**Fencing post for Heras fence** - contractor to excavate and allow for 700x450mm concrete foundations @ 2440mm c/c to receive 60x60mm square hollow section posts (SHS) for permanent enclosing 2515x3000mm Heras fence panels or similar approved installed in accordance with manufacturer's recommendations. Quantity to suit design requirements of enclosures. (**dwg 5087.205 - Fence Elevations**). For extent of fence, see dwg 5087.610-Site Plan and Layout.

**Pedestrian access/MOE** - contractor to allow for double gates within panel width and 1no leaf for pedestrian use with controlled access to MEP design. Gate to be linked to alarm system to enable escape from spiral stair exit to muster area located outside fence; as denoted on drawing.

**Builders holes** - Contractor to allow for builders works to form openings for vents/ducts and services penetrations in accordance with MEP design and details. Where required allow for support lintels for new openings. Allow for making good and decoration (as applicable), to all areas affected by works. Use matching materials for reconstruction.

**Means of escape path** - contractor to allow for resurfacing of area enclosed within Heras fencing and for 900mm wide demarcation of path and "**KEEP CLEAR**" signage leading to access gates in Heras fence - **dwg 5087.612**. Use Toughstrip Floor marking tape or paint by **Toughstrip Floor Marking tape by Seton Tel: 0800 316 9700. Email: sales@seton.co.uk** or similar approved, slip resistant floor health and safety compliant marking product installed in accordance with manufacturer's recommendations.

**Tarmac pathway & surfaces** - contractor is to allow for re-surfacing tarmac pathways and surfaces, as necessary in areas affected by works. Surface finish to match existing path adjacent to means of escape Heras gates.

Contractor is to allow for Extra Over (EO) for 150mm type 1 compactive, as application for making good any areas of paving affected by works.

**Linear drainage at thresholds** - Contractor is to allow for linear drainage across threshold of doorway to delivery ramp, as indicated on the drawing.

**External lighting** - Contractor is to allow for new external lighting in accordance with MEP design and details. Existing lighting to be overhauled and left in working order.

**Locations:** on building brickwork elevations. **NOTE:** proximity to Asbestos, area must be assessed prior to construction.

**Armoured cables for lighting** - Contractor is to allow for armoured cable for lighting connection to a local Distribution board in accordance with specification and drawing. All penetration through structure is to be made good in accordance with MEP specification.

**Lamp posts** - contractor is to allow for base and support to lamp posts in accordance with manufacturers specification. Contract is to allow for reduced levels and foundations and conduit as required.

**Wireway ducting** - contractor is to allow for wireway ducting to locations denoted on the plans between DB and all lights in accordance with the detail and specification.

Contractor is to allow for connection detail between material differences of pathway in accordance with details.

**Levels generally** - contractor is to allow for forming all ancillary level/slopped stepped access points in accordance with the details and plans.

Unit	Rate	Amount (£)





[illegible]



--	--	--	--



--	--	--	--	--



--	--	--	--











--	--	--	--





--	--	--	--



--	--	--	--





--	--	--	--



--	--	--	--



--	--	--	--

£ -
-----