

Specification

Nos. 55-56 Gordon Square
Nursery Refurbishment
for UCL



Kendall Kingscott

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Job No. 190775

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Specification of Works

Table of Contents



Section	Title
a	Materials & Workmanship
b	Schedule of Work
	Appendix A: Schedule of Tender Information
	Appendix B: Kendall Kingscott Drawings
	Appendix C: Electrical Specification & Drawings
	Appendix D: Mechanical Specification & Drawings
	Appendix E: Structural Engineer's Specification & Drawings
	Appendix F: Wall Mounted Shelf - Data Sheet
	Appendix G: HCE Kitchen Specification and Drawings
	Appendix H: Cubicle Systems (Washroom Package)
	Appendix I: Asbestos R&D Survey
	Appendix J - External Doorset
	Appendix K - Leisure Grass Quotation
	Appendix L - EDPM Wet Pour Quotation
	Appendix M - UCL Fire Standards
	Appendix N - Security Bars
	Appendix O - Abloy Electric Lock

Section a: Materials and Workmanship

Table of Contents

Title		Page
C	Demolition/ Alteration/ Renovation	3
C20	Demolition	5
K	Linings/Sheathing/Dry partitioning	8
K10	Gypsum board dry linings/ partitions/ ceilings	10
L	Windows/Doors/Stairs	14
L20	Doors/ shutters/ hatches	16
M	Surface finishes	21
M50	Rubber/ plastics/ cork/ lino/ carpet tiling/ sheeting	23
M60	Painting/clear finishing	27
N	Furniture/Equipment	32
N10	General fixtures/ furnishings/ equipment	34
N13	Sanitary appliances and fittings	36
P	Building fabric sundries	37
P12	Fire stopping systems	39
P20	Unframed isolated trims/ skirtings/ sundry items	43
P21	Door/ window ironmongery	45
R	Disposal systems	48
R12	Below ground drainage systems	50
Z	Building fabric reference specification	52
Z10	Purpose made joinery	54
Z11	Purpose made metalwork	57
Z12	Preservative/ fire retardant treatment	62
Z20	Fixings and adhesives	64
Z22	Sealants	68
Z31	Powder coatings	70

C

Demolition/ Alteration/ Renovation

C20
Demolition

C20 Demolition

To be read with Preliminaries/ General conditions

GENERAL REQUIREMENTS

110 DESK STUDY/ SURVEY

- Scope: Before starting deconstruction/ demolition work, examine available information, and carry out a survey of:
 - the structure or structures to be deconstructed/ demolished,
 - the site on which the structure or structures stand, and
 - 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 KKL Demolition and Alterations Plan .
 - Type, location and condition of features of historical, archaeological, geological or ecological importance.
 - Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures, or by noise, vibration and/ or dust generated during deconstruction/ demolition.
 - Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.
 - Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.
 - Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
 - Proposed programme of work, including sequence and methods of deconstruction/ demolition.
 - Details of specific pre-weakening required.
 - Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
 - Arrangements for control of site transport and traffic.
 - Special requirements: Site waste management plan development and proposals .
- Format of report: Contractors standard Pro-forma to be .

120 EXTENT OF DECONSTRUCTION/ DEMOLITION

- General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to as shown on Kendall Kingscott drawing 190775-1210 Demolition and Alterations Plan.

150 FEATURES TO BE RETAINED

- General: Keep in place and protect the following: As shown on Kendall Kingscott Demolition and Alterations Plan.

SERVICES AFFECTED BY DECONSTRUCTION/ DEMOLITION

210 SERVICES REGULATIONS

- Work carried out to or affecting new and/ or existing services: Carry out in accordance with the byelaws and/ or regulations of the relevant Statutory Authority.

220 LOCATION OF SERVICES

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

232 SERVICES DISCONNECTION ARRANGED BY EMPLOYER AND CONTRACTOR

- Responsibility: The Employer will arrange with the appropriate authorities for disconnection of services and removal of fittings and equipment owned by those authorities prior to deconstruction/ demolition, as follows: See Mechanical and Electrical services specification.
- Disconnection of remaining services: Arrange with the appropriate authorities. Remove fittings and equipment not owned by those authorities.
- Timing: Do not start deconstruction/ demolition until disconnections are completed.

240 DISCONNECTION OF DRAINS

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

250 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: Post completion camera survey.

260 SERVICE BYPASS CONNECTIONS

- General: Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction/ demolition is taking place and to adjoining sites/ properties.
- Minimum notice to adjoining owners and all affected occupiers: 72 hours, if shutdown is necessary during changeover.

270 SERVICES TO BE RETAINED

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

DECONSTRUCTION/ DEMOLITION WORK

310 WORKMANSHIP

- Standard: Demolish structures in accordance with BS 6187.
- Operatives:
 - Appropriately skilled and experienced for the type of work.
 - Holding, or in training to obtain, relevant CITB Certificates of Competence.
- Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction/ demolition to be used.

320 GAS OR VAPOUR RISKS

- Precautions: Prevent fire and/ or explosion caused by gas and/ or vapour from tanks, pipes, etc.

330 DUST CONTROL

- General: Reduce airborne dust by periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
- Lead dust: Submit method statement for control, containment and clean-up regimes.

340 HEALTH HAZARDS

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

380 DANGEROUS OPENINGS

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

390 ASBESTOS-CONTAINING MATERIALS – KNOWN OCCURRENCES

- General: Materials containing asbestos are known to be present in: As shown within the R&D survey provided by Lucion.
- Removal: Removal works to be completed by UCL prior to the commencement of works on site.

391 ASBESTOS-CONTAINING MATERIALS – UNKNOWN OCCURRENCES

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

410 UNFORESEEN HAZARDS

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

MATERIALS ARISING

510 CONTRACTOR'S PROPERTY

- Components and materials arising from the deconstruction/ demolition work: Property of the Contractor except where otherwise provided.
- Action: Remove from site as work proceeds where not to be reused or recycled for site use.

511 EMPLOYER'S PROPERTY

- Components and materials to remain the property of the Employer: See specification section C90.
- Protection: Maintain until these items are removed by the Employer or reused in the Works, or until the end of the Contract.
- Special requirements: See specification section C90.

520 RECYCLED MATERIALS

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

K

Linings/Sheathing/Dry partitioning

K10

Gypsum board dry linings/ partitions/ ceilings

K10 Gypsum board dry linings/ partitions/ ceilings

INSTALLATION

435 DRY LININGS GENERALLY

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

455 METAL FRAMING FOR PARTITIONS/ WALL LININGS

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

465 STAGGERED STUD PARTITIONS

- Horizontal frame members (noggins, bearers, etc.) and boards: Fix between alternate studs and not touching adjacent offset studs.

475 METAL FURRINGS FOR WALL LININGS

- Setting out: Accurately aligned and plumb.
 - Vertical furring positions: Equal vertical centres to suit specified linings, maintaining sequence across openings. Position adjacent to angles and openings.
 - Additional vertical furrings: To support vertical edges of boards and at junctions with partitions.
 - Horizontal furring positions: To provide continuous support to edges of boards.
- Adhesive bedding to furrings:
 - Dabs: Length 200 mm (minimum). Located at ends of furrings and thereafter at 450 mm (maximum) centres.
 - Junctions with partitions: Continuous bed with no gaps across cavity.

505 INSTALLING MINERAL WOOL INSULATION

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

510 SEALING GAPS AND AIR PATHS

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

530 CAVITY FIRE BARRIERS WITHIN PARTITIONS/ WALL LININGS

- Metal framed systems:
 - Material: Plasterboard 12.5 mm thick.
 - Installation: Form accurately and fix securely with no gaps to provide a complete barrier to smoke and flame.
- Adhesive fixed wall lining systems:
 - Material: Adhesive compound.
 - Installation: Form in a continuous line with no gaps to provide a complete barrier to smoke and flame.

545 CAVITY FIRE BARRIERS WITHIN SUSPENDED CEILINGS

- Type: As recommended by board manufacturer to meet specification.
- Fire resistance: To BS 476-20, 60/60 minutes (Integrity/ Insulation).
- Ceiling void subdivision: Fix barriers on line of partitions and not more than 40 m apart in any direction.
- Fixing at perimeters and joints: Secure, stable and continuous with no gaps, to provide a complete barrier to smoke and flame.
- Service penetrations: Cut and pack to maintain barrier integrity. Sleeve flexible materials. Adequately support services passing through barrier.
- Ceiling systems for fire protection: Do not impair fire resisting performance of ceiling system.

555 FIRE STOPPING AT PERIMETERS OF DRY LINING SYSTEMS

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

560 JOINTS BETWEEN BOARDS

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

565 VERTICAL JOINTS

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

570 HORIZONTAL JOINTS

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

590 FIXING GYPSUM BOARD TO METAL FRAMING/ FURRINGS

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

595 DEFLECTION HEADS

- Fixing boards: Do not fix to head channels.

FINISHING**650 LEVEL OF DRY LINING ACROSS JOINTS**

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

670 SEAMLESS JOINTING TO GYPSUM BOARDS

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

692 RIGID BEADS/STOPS

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

695 INSTALLING BEADS/ STOPS

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

725 REPAIRS TO EXISTING GYPSUM BOARD

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

L

Windows/Doors/Stairs

L20

Doors/ shutters/ hatches

L20 Doors/ shutters/ hatches

To be read with Preliminaries/ General conditions.

GENERAL

110 EVIDENCE OF PERFORMANCE

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

112 TIMBER PROCUREMENT

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

115 FIRE RESISTING DOORS/ DOOR ASSEMBLIES/ DOORSETS

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

120 NON FIRE RESISTING DOORS/ DOOR ASSEMBLIES/ DOORSETS

- Provide certified evidence, in the form of a product conformity certificate or engineering assessment, that each door/ doorset/ assembly supplied will comply with the specified requirements to BS EN 14351-1. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.
- Components and assemblies will be marked to the relevant product standard and/ or third party certification rating.

150 SITE DIMENSIONS

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

PRODUCTS

- 411 HIGH PERFORMANCE DOORSETS - INTERNAL DOOR ELEVATION - TYPE 1
- Drawing reference (s): 190775 5200 Proposed Internal Door Schedule and Elevations
Note: All fire doors are to comply with UCL Standards, including but not limited to the following:
 - BSEN1634-1:2014+A1:2018 & BS476-20&22 - By a third party, certified Independent UKAS accredited organisation with written certification provided.
 - Refer to Appendix M for the UCL Fire Door Standard - All guidance must be followed.
Manufacturer: Contractor to provide proposals.
 - Product reference: High performance interior doorset.
 - Brief Description: Door to provide 30 minutes fire rating, single leaf, single swing with vision panel.
 - Door Type: Internal Door Elevation Type 1.
 - Ironmongery Set Type: Refer to 'Ironmongery Sets' contained on the Proposed Internal Door Schedule and Elevations drawing.
 - Sustainability: All timber products to be certified FSC 100% full chain of custody.
 - Fire performance:
 - 30 Minutes.
 - Smoke Control: Required (brush type only)
 - Certification: Required
 - Clearance: Where a fire rated door is to be installed allow to fill the gap between the frame and wall with a intumescent mastic on backing rod as recommended by the manufacturer, to ensure overall fire integrity is maintained. Filled as necessary in accordance with requirements for certification.
 - Door leaf:
 - Core: 'Heavy Duty' solid block, lightweight core. - Facings: Painted
 - Glazing details:
 - System: Flush timber beads, colour matched to door face.
 - Size and position of aperture: Refer to Internal Door Schedule for size and setting out of vision panel.
 - Glass: 6.4mm laminated clear glass.
 - Frame and architraves:
 - Frame: 3-piece softwood postformed split frame with 18mm planted stop.
 - Architraves: 42x18mm integral.
 - Facings: Painted
 - Moisture content on delivery: 10 to 12%.
 - Preparation: Factory morticed by doorset manufacturer.
 - Hinges: Grade 304 stainless steel lift off hinge with rounded corners.
 - Locks: Factory morticed, supplied and fixed by doorset manufacturer.
 - Fire Seals: Standard type for this doorset, with intumescent seals fitted in door edge.
Fixing: Fully concealed frame fixings.
 - Fire Discs: Not required on this door type. Refer to the internal door elevations contained on the Proposed Internal Door Schedule and Elevations drawing.
 - Clearance between frames and supporting construction: Filled as necessary in accordance with requirements for certification and / or door / doorset manufactures instructions.
 - Door clearance audit: Full site audit of clearnace/gaps below each newly installed door to be carried out by the contractor on completion of the works. Recordings to be presented to the CA for approval. No excessive gaps/clearance allowed.

- 412 HIGH PERFORMANCE DOORSETS - INTERNAL DOOR ELEVATION - TYPE 1
- Drawing reference (s): 190775 5200 Proposed Internal Door Schedule and Elevations
 Manufacturer: Contractor to provide proposals.
 Product reference: High performance interior doorset.
 Brief Description: Single leaf, single swing.
 Door Type: Internal Door Elevation Type 1.
 Ironmongery Set Type: Refer to 'Ironmongery Sets' contained on the Proposed Internal Door Schedule and Elevations drawing.
 Sustainability: All timber products to be certified FSC 100% full chain of custody.
 Fire performance: Not required
 Door leaf:
 - Core: 'Heavy Duty' solid block, lightweight core.
 Glazing details:
 - System: Flush timber beads, colour matched to door face.
 - Size and position of aperture: Refer to Internal Door Schedule for size and setting out of vision panel.
 - Glass: 6.4mm laminated frosted glass.
 Facings:
 - Frame and architraves:
 - Frame: 3-piece softwood postformed split frame with 18mm planted stop.
 - Architraves: 42x18mm integral.
 - Facings: Painted
 - Moisture content on delivery: 10 to 12%.
 - Preparation: Factory morticed by doorset manufacturer.
 - Hinges: Grade 304 stainless steel lift off hinge with rounded corners.
 - Locks: Factory morticed, supplied and fixed by doorset manufacturer.
 Fire Seals: Not required.
 Fire Discs: Not required on this door type. Refer to the internal door elevations contained on the Proposed Internal Door Schedule and Elevations drawing.
 Clearance between frames and supporting construction: Filled as necessary in accordance with requirements for certification and / or door / doorset manufactures instructions.
 Door clearance audit: Full site audit of clearnace/gaps below each newly installed door to be carried out by the contractor on completion of the works. Recordings to be presented to the CA for approval. No excessive gaps/clearance allowed.

EXECUTION

- 710 PROTECTION OF COMPONENTS
- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry, floored and covered storage.
 - Stored components: Stacked on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.
- 730 PRIMING/ SEALING
- Wood surfaces inaccessible after installation: Primed or sealed as specified before fixing components.
- 750 FIXING DOORSETS
- Timing: After associated rooms have been made weathertight and the work of wet trades is finished and dried out.
- 760 BUILDING IN
- General: Not permitted unless indicated on drawings.

- 770 DAMP PROOF COURSES ASSOCIATED WITH BUILT IN WOOD FRAMES
- Method of fixing: To backs of frames using galvanized clout nails.
- 780 DAMP PROOF COURSES IN PREPARED OPENINGS
- Location: Correctly positioned in relation to door frames. Do not displace during fixing operations.
- 790 FIXING OF WOOD FRAMES
- Spacing of fixings (frames not predrilled): Maximum 150 mm from ends of each jamb and at 600 mm maximum centres.
- 800 FIXING OF LOOSE THRESHOLDS
- Spacing of fixings: Maximum 150 mm from each end and at 600 mm maximum centres.
- 809 FIRE RESISTING/ SMOKE CONTROL DOORS/ DOORSETS/ ROLLER SHUTTERS/ CURTAINS
- 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.
- 810 FIRE RESISTING/ SMOKE CONTROL DOORS/ DOORSETS/ ROLLER SHUTTERS/ CURTAINS
- Gaps between frames and supporting construction: Filled as necessary in accordance with requirements for certification and/ or door/ doorset manufacturer's instructions.
- 820 SEALANT JOINTS
- Sealant:
 - Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice .
 - Colour: White .
 - Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.
- 830 FIXING IRONMONGERY GENERALLY
- Fasteners: Supplied by ironmongery manufacturer.
 - Finish/ Corrosion resistance: To match ironmongery.
 - Holes for components: No larger than required for satisfactory fit/ operation.
 - Adjacent surfaces: Undamaged.
 - Moving parts: Adjusted, lubricated and functioning correctly at completion.
- 840 FIXING IRONMONGERY TO FIRE RESISTING DOOR ASSEMBLIES
- General: All items fixed in accordance with door leaf manufacturer's recommendations ensuring that integrity of the assembly, as established by testing, is not compromised.
 - Holes for through fixings and components: Accurately cut.
 - Clearances: Not more than 8 mm unless protected by intumescent paste or similar.
 - Lock/ Latch cases for fire doors requiring \geq 60 minutes integrity performance: Coated with intumescent paint or paste before installation.

850 LOCATION OF HINGES

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

860 INSTALLATION OF EMERGENCY EXIT DEVICES

- Standard: Unless specified otherwise, install panic bolts/ latches in accordance with BS EN 1125.

M

Surface finishes

M50

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

M50 Rubber/ plastics/ cork/ lino/ carpet tiling/ sheeting

To be read with Preliminaries/ General conditions.

TYPES OF COVERING

GENERAL REQUIREMENTS

210 WORKMANSHIP GENERALLY

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

220 SAMPLES

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

253 LAYOUT - ROLL MATERIALS

- Setting out of seams: Agree setting out for sheeting types M50/ 151 .

330 COMMENCEMENT

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

340 CONDITIONING

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

350 ENVIRONMENT

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

PREPARING BASES

420 EXISTING BASES

- Notification: Before commencing work, confirm that existing bases will, after preparation, be suitable to receive coverings.
- Suitability of bases and conditions within any area: Commencement of laying of coverings will be taken as acceptance of suitability.

440 SUBSTRATES TO RECEIVE THIN COVERINGS

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

460 SMOOTHING/ LEVELLING UNDERLAYMENT COMPOUND

- Type: Water based smoothing underlayment.
- Manufacturer: Ardex.
 - Product reference: K15-HB with associated floor primer used to suit the existing concrete subfloor construction.

465 SMOOTHING/ LEVELLING UNDERLAYMENT COMPOUND - RESIDUE FROM EXISTING FLOOR FINISHES

- Type: Water based smoothing underlayment.
- Manufacturer: Ardex.
 - Product reference: K11 with associated floor primer used to suit the existing concrete subfloor construction.

470 BASES FROM WHICH EXISTING FLOOR COVERINGS HAVE BEEN REMOVED

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

LAYING COVERINGS

620 COLOUR CONSISTENCY

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

640 ADHESIVE FIXING GENERALLY

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

650 SEAMS

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

670 BORDERS/ AND FEATURE STRIPS IN SHEET MATERIAL

- Curl: Not acceptable.
- Corners: Mitre joints.

680 SEAM WELDING COVERINGS

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

720 DOORWAYS

- Joint location: On centre line of door leaf.

740 EDGINGS AND COVER STRIPS

- Manufacturer: Gradus .
 - Product reference: Submit proposals suitable for floor finishes .
- Material/ finish: Satin Stainless Steel .
- Fixing: Secure with edge of covering gripped. Use matching fasteners where exposed to view

COMPLETION

820 FINISHING PLASTICS FLOORING

- Cleaning operations:
 - Wash floor with water containing neutral (pH 6-9) detergent. If necessary, lightly scrub heavily soiled areas.
 - Rinse with clean water, removing surplus to prevent damage to adhesive. Allow to dry.
- Emulsion polish: Two coats of a type recommended by covering manufacturer.

861 SLIP RESISTANCE TESTING

- Testing authority: A UKAS accredited laboratory.
- Floor covering(s) to be tested: All above.
- Test: To BS 7976-1, -2 and -3.
 - Floor covering condition: Dry and wet.
 - Witnessing/ Certification: Arrange for tests to be witnessed/ certified by: Contract Administrator.
- Report: Submit.

880 WASTE

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

M60

Painting/clear finishing

M60 Painting/clear finishing

To be read with Preliminaries/General conditions.

COATING SYSTEMS

- 135 WATER-BASED INTERIOR GLOSS [To Joinery.]
- Manufacturer: Dulux Trade, brand of AkzoNobel.
 - Web: www.duluxtrade.co.uk.
 - Email: john.ashford@akzonobel.com.
 - Product reference: Ecosure Water-Based Gloss
 - System code: D1286S - Non-resinous softwood, hardwood, etc. Previous coating: Solvent-based painted.
 - Colour: To be confirmed.
- 140 WATER-BASED UNDERCOAT [To Joinery.]
- Manufacturer: Dulux Trade, brand of AkzoNobel.
 - Web: www.duluxtrade.co.uk.
 - Email: john.ashford@akzonobel.com.
 - Product reference: Ecosure Water-Based Undercoat
 - System code: D1286S - Non-resinous softwood, hardwood, etc. Previous coating: Solvent-based painted.
 - Colour: To be confirmed.
- 150 EGGSHELL/ SATIN PAINT To walls and ceilings.
- Manufacturer: Crown Paint.
 - Product reference: Acrylic Eggshell. Allow for a variety of contrasting adjacent colours.
 - Surfaces: Preprimed and sealed.
 - Preparation:
 - Degrease and provide key;
 - Ensure surfaces are clean and dry; and
 - Remove all loose and defective coatings.
 - Initial coats: As recommended by manufacturer - mist coat to view standard of existing partitions.
 - Number of coats: 1.
 - Undercoats: As recommended by manufacturer.
 - Number of coats: 1.
 - Finishing coats: As recommended by the manufacturer.
 - Number of coats: at least 2, certain colours may require additional coats to remove any grinning through.
- 155 METALWORK PAINT [To Metalwork.]
- Manufacturer: Dulux Trade, brand of AkzoNobel.
 - Web: www.duluxtrade.co.uk.
 - Email: john.ashford@akzonobel.com.
 - Product reference: Dulux Trade Metalshield Gloss
 - Surface suitability: Non-Ferrous Metal, Ferrous Metals, Metal.
Surfaces: Preprimed and sealed.
 - Colour: To be confirmed.
 - Number of coats: As recommended by the manufacturer.

GENERALLY

215 HANDLING AND STORAGE

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

220 COMPATIBILITY

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

280 PROTECTION

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

320 INSPECTION BY COATING MANUFACTURERS

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

322 INSPECTION OF WORK STAGES

- Programme for inspections: Submit as follows:
 - Types of coating
 - Inspection at completion of M60/ 150 . Mist coat to inspect standard of wall finishing prior to final decorations to allow for any additional making good works by the contractor to bring to an acceptable standard .
 - Inspection: Give prior notice when each stage is ready for inspection.

PREPARATION

400 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.
- Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Substrates: Sufficiently dry in depth to suit coating.
- Efflorescence salts: Remove.
- Dirt, grease and oil: Remove. Give notice if contamination of surfaces/ substrates has occurred.
- Surface irregularities: Remove.
- Joints, cracks, holes and other depressions: Fill flush with surface, to provide smooth finish.
- Dust, particles and residues from preparation: Remove and dispose of safely.
- Water based stoppers and fillers:
 - Apply before priming unless recommended otherwise by manufacturer.
 - If applied after priming: Patch prime.
- Oil based stoppers and fillers: Apply after priming.
- Doors, opening windows and other moving parts:
 - Ease, if necessary, before coating.
 - Prime resulting bare areas.

420 FIXTURES AND FITTINGS

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

425 IRONMONGERY

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

430 EXISTING IRONMONGERY

- Refurbishment: Remove old coating marks. Clean and polish.

- 440 PREVIOUSLY COATED SURFACES GENERALLY
- Preparation: In accordance with BS 6150, clause 11.5.
 - Contaminated or hazardous surfaces: Give notice of:
 - Coatings suspected of containing lead.
 - Substrates suspected of containing asbestos or other hazardous materials.
 - Significant rot, corrosion or other degradation of substrates.
 - Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
 - Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
 - Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
 - Alkali affected coatings: Completely remove.
 - Retained coatings:
 - Thoroughly clean to remove dirt, grease and contaminants.
 - Gloss coated surfaces: Provide key.
 - Partly removed coatings:
 - Additional preparatory coats: Apply to restore original coating thicknesses.
 - Junctions: Provide flush surface.
 - Completely stripped surfaces: Prepare as for uncoated surfaces.
- 461 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.
- 471 PREPRIMED WOOD
- Areas of defective primer: Take back to bare wood and reprime.
- 481 UNCOATED WOOD
- General: Provide smooth, even finish with arrises and moulding edges lightly rounded or eased.
 - Heads of fasteners: Countersink sufficient to hold stoppers/fillers.
 - Resinous areas and knots: Apply two coats of knotting.
- 560 UNCOATED CONCRETE
- Release agents: Remove.
- 570 UNCOATED MASONRY/ RENDERING
- Loose and flaking material: remove.
- 580 UNCOATED PLASTER
- Nibs, trowel marks and plaster splashes: Scrape off.
 - Overtrowelled 'polished' areas: Key lightly.
- 590 UNCOATED PLASTERBOARD
- Depressions around fixings: Fill with stoppers/ fillers
- 622 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.

645 SEALING OF INTERNAL MOVEMENT JOINTS

- General: To junctions of walls and ceilings with architraves, skirtings and other trims.
- Sealant: Water-borne acrylic.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Preparation and application: As section Z22.

APPLICATION

711 COATING GENERALLY

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

720 PRIMING JOINERY

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

730 WORKSHOP COATING OF CONCEALED JOINERY SURFACES

- General: Apply coatings to all surfaces of components.

N
Furniture/Equipment

N10

General fixtures/ furnishings/ equipment

N10 General fixtures/ furnishings/ equipment

To be read with Preliminaries/General conditions.

EXECUTION

- 710 MOISTURE CONTENT OF WOOD AND WOOD-BASED BOARDS
- Standard: To BS EN 942.
 - Moisture content on delivery: 6-10%.
 - Temperature and humidity: During delivery, storage, fixing and to handover maintain conditions to suit specified moisture contents of timber components.
- 720 INSTALLATION GENERALLY
- General: As Preliminaries section A33.
 - Fixing and fasteners: As section Z20.
 - Services: As Mechanically and Electrical drawings.
- 760 SEALANT BEDDING AND POINTING
- Application: As section Z22.
 - Bedding: Sinks to top of worktop.
 - Pointing: Joints between units and floor finish.
- 770 TRIMS
- Lengths: Wherever possible, unjointed between angles or ends of runs.
 - Running joints: Where unavoidable, obtain approval of location and method of jointing.
 - Angle joints: Mitred.

COMPLETION

- 910 GENERAL
- Doors and drawers: Accurately aligned, not binding. Adjusted to ensure smooth operation.
 - Ironmongery: Checked, adjusted and lubricated to ensure correct functioning.
- 920 APPLIANCES
- Test: Run for a full cycle, ensure that all functions and features work correctly.
 - Documentation: Submit guarantees, instruction manuals, etc.

N13

Sanitary appliances and fittings

N13 Sanitary appliances and fittings

To be read with Preliminaries/ General conditions.

EXECUTION

- 610 INSTALLATION GENERALLY
- Assembly and fixing: Surfaces designed to falls to drain as intended.
 - Fasteners: Nonferrous or stainless steel.
 - Supply and discharge pipework: Fix before appliances.
 - Fixing: Fix appliances securely to structure. Do not support on pipework.
 - Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes being jointed or bedded.
 - Appliances: Do not use. Do not stand on appliances.
 - On completion: Components and accessories working correctly with no leaks.
 - Labels and stickers: Remove.
- 613 COMPATIBILITY OF COMPONENTS
- General: Each sanitary assembly must consist of functionally compatible components, preferably obtained from a single manufacturer.
 - Exceptions: None.
- 620 NOGGINGS AND BEARERS
- Noggings, bearers, etc. to support sanitary appliances and fittings: Position accurately. Fix securely.
- 710 INSTALLING TAPS
- Fixing: Secure against twisting.
 - Seal with appliance: Watertight.
 - Positioning: Hot tap to left of cold tap as viewed by user of appliance.
- 720 INSTALLING WASTES AND OVERFLOWS
- Bedding: Waterproof jointing compound.
 - Fixing: With resilient washer between appliance and backnut.
- 755 SEALANT BEDDING AND POINTING
- Bedding: Bed and point basins to underside of vanity units.
 - Pointing: Joints between appliances and splashbacks.

P

Building fabric sundries

P12

Fire stopping systems

P12 Fire stopping systems

To be read with Preliminaries/ General conditions.

GENERAL

- 125 GENERAL SOUND STOPPING TO ALL SERVICES PENETRATING OPENINGS IN NON-FIRE RESISTING PARTITIONS/MINERAL WOOL INSULATION FOR GENERAL USE
- Manufacturer & Reference: ROCKWOOL Ltd. Tel. 01656 862621, Ref: ROCKWOOL Roll Batts.
 - Size: 50/100mm as detailed.
 - Fixing: Strapped/tied into position as detail or mineral wool tightly packed between service and wall as manufacturers recommendations.
 - Accessories: Provide acoustic mastic sealant.
- 131 FIRE STOPPING SYSTEM TO INDIVIDUAL SERVICES PENETRATIONS [COLLARS TO PLASTIC PIPEWORK LARGER THAN 40MM DIAMETER]
- Manufacturer: PFC Corofil Firestop Products, tel 0208 391 0533.
 - Joint filler: PFC Corofil Intumescent Firestop Collars fixed in accordance with manufacturers recommendations.
 - Size or thickness: [55mm to 355mm diameter].
 - Pipe outside diameter: Varies.
 - Sealant: Smoke stop remaining annular space with intumescent mastic. Colour: Submit proposals.
- 135 FIRE STOPPING SYSTEM TO INDIVIDUAL SERVICES PENETRATIONS [SILICONE SEAL SMALL GAPS AROUND SERVICES PENETRATIONS]
- Manufacturer: PFC Corofil Firestop Products, tel 0208 391 0533.
 - Standard: To BS 5889 Type A.
 - Joint filler: PFC Corofil C144 firestop strip.
 - Size or thickness: 12mm max gap size.
 - Pipe outside diameter: Varies.
 - Sealant: PFC Corofil Acoustic Intumescent sealant applied in accordance with manufacturers recommendations.
 - Colour: White.
- 141 FIRE STOPPING SYSTEM TO MULTIPLE SERVICES PENETRATIONS [THROUGH WALLS]
- Manufacturer: PFC Corofil Firestop Products, tel 0208 391 0533.
 - Panel material: PFC COROFIL COATED PANEL SYSTEM.
 - Thickness: As required by manufacturer to achieve fire resistance, see L(6) Series.
 - Number of layers: As required by manufacturer to achieve fire resistance.
 - Framing: Frame and trim openings and support in accordance with stopping manufacturers recommendations.
 - Finish: PFC COROFIL Fire Rated Coating.
 - Sealant: PFC COROFIL Acoustic Intumescent Sealant.
 - Colour: White.

- 145 FIRE STOPPING TO MULTIPLE SERVICES PENETRATIONS [THROUGH FLOORS]
- Manufacturer: PFC Corofil Firestop Products, tel 0208 391 0533.
 - Fixing: Provide 12mm Promat Supalux permanent formwork around the services or Corofil Shuttering Slabs fixed to the underside of the floor slab and cast 100mm minimum thickness of PFC compound in accordance with the manufacturers recommendations.
 - Reinforcement in the form of 12.5mm dia. reinforcing bars at max 200mm centres supported on galvanised steel angles to detail and as recommended by the subcontractor and verified by the structural engineer and manufacturer to withstand foot traffic loading.
 - NB: Firestop Collars will still be required around large diameter plastic pipework.
- 155 FIRE RATED ACOUSTIC HOODS FOR DOWNLIGHTERS
- Manufacturer: Contractor to submit proposals
 - Fire Resistance:
 - 60 minutes rating to BS476-23
 - 60 minutes rating to BS EN 1365-2
 - Fire rated hoods to be suitable for insertion into existing ceilings. Fire rated hoods to be ventilated to avoid heat build up.
- 170 EXTERNAL WALLS
- Panel material or joint filler: Select materials to maintain integrity of existing inner lining to external walls.
 - Sealant: PFC COROFIL Acoustic Intumescent Sealant.
 - Colour: White.

PRODUCTS

- 310 BOARDS - CALCIUM SILICATE FIBRE REINFORCED
- Manufacturer: Promat TEL: 01344 381300.
 - Product reference: Supalax.
- 346 INTUMESCENT PILLOWS
- Composition: Sealed polyethylene bags containing graphite and vermiculite granules treated with fire activated chemicals.
 - Integral reinforced eyelets: Required.
 - Linking cable: Non-corrosive cotton-coated wire.
 - Length: 300mm.
 - Manufacturer: PFC Corofil Firestop Products, tel 0208 391 0533.
 - Product reference: C300P – Intumescent Pillows.

EXECUTION

- 620 WORKMANSHIP GENERALLY
- Gaps: Seal gaps between building elements and services, to provide fire resistance and resist the passage of smoke.
 - Adjacent surfaces: Prevent overrun of sealant or mortar on to finished surfaces.
- 660 APPLYING INTUMESCENT FOAM
- New joints: Remove builder's debris, mortar droppings, grease, and other contaminants.
 - Old joints: Clean and remove existing sealant from each joint.
 - Priming: Lightly moisten substrate with water.
 - Application: Fill joint to approximately half its depth, and allow foam to expand to face of joint.
 - Trimming: Do not trim or cut the face of the cured foam.

- 670 APPLYING INTUMESCENT MORTAR
- Sequence: Install mortar after services are permanently installed.
 - Loose dust and combustible materials: Remove from the opening.
 - Shuttering: Install suitable shuttering panels to the faces of the opening.
 - Temperature: Do not apply mortar when it could be damaged by frost.
 - Powder:water ratio: As recommended by manufacturer.
 - Mortar cure: Do not disturb mortar before final set has taken place.
 - Shuttering: Remove after mortar has cured.
- 680 INSTALLING INTUMESCENT PILLOWS
- Number of pillows (per m² of opening): Number necessary to achieve fire resistance.
 - Orientation of bags: Lay perpendicular to plane of element containing opening.
- 690 APPLYING INTUMESCENT PUTTY
- Sequence: Install putty after services are permanently installed.
 - Loose dust and combustible materials: Remove from the opening.
- 710 INSTALLING MINERAL WOOL BATTS
- Installing batts: Fit tight into void between the penetrating services and the surrounding construction to form a solid barrier.
 - Brackets: Not applicable.
Bracket fixing: Flush with surface of wall, floor or soffit.
 - Face of batts: Flush with the surface of wall, floor or soffit.
 - Joints between batts: Sealed with acoustic intumescent sealant.
 - Gaps between services and barrier: Seal with fire resisting sealant.
- 730 FIXING PIPE COLLARS
- Collar fixing: To collar manufacturers recommendations.
 - Gap around collar: Seal with joint filler and sealant.
 - Length of wraps: To collar manufacturers recommendations.
- 745 APPLYING SEALANTS GENERALLY
- Application: As section Z22.
- 755 APPLYING SEALANT TO JOINTS
- De-greasing: Cleaner by sealant manufacturer.
 - Priming: Primer by sealant manufacturer.
 - Depth of sealant: To sealant manufacturers recommendations.
 - Temperature: Do not apply water based sealants when they could be damaged by frost.

COMPLETION

- 910 CLEANING
- Masking tapes: Remove.
 - Cleaning: Clean off splashes and droppings. Wipe down finishes.
- 920 INSPECTION
- Notice for inspection (minimum): 5 working days.

P20

Unframed isolated trims/ skirtings/ sundry items

P20 Unframed isolated trims/ skirtings/ sundry items

To be read with Preliminaries/ General conditions

- 110 SOFTWOOD SKIRTINGS GENERALLY
- Quality of wood and fixing: To BS 1186-3.
 - Species: Contractor's choice.
 - Class: 1.
 - Moisture content at time of fixing: 9-13%.
 - Preservative treatment: Not required.
 - Fire rating: Not applicable.
 - Profile: To match existing.
 - Finished size: 19 x 120 mm.
 - Finish as delivered: Prepared and primed, as section M60.
 - Fixing: Plugged, screwed and pelleted at 450mm centres.

EXECUTION

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

P21

Door/ window ironmongery

P21 Door/ window ironmongery

To be read with Preliminaries/ General conditions.

GENERAL

140 SAMPLES

- General: Before placing orders with suppliers submit labelled samples of the following: Lever handles, D handles roses and escutcheons .
 - Conformity: Retain samples on site for the duration of the contract. Ensure conformity of ironmongery as delivered with labelled samples.

170 IRONMONGERY FOR FIRE DOORS

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

180 STRENGTH CLASS OR CATEGORY OF DUTY FOR DOOR IRONMONGERY

- Requirement: to DD 171.
- General: Durability of ironmongery components to be compatible with stated category of duty of each door leaf.
 - Exclusions: Ironmongery with specific duty or 'category of use' defined elsewhere.
 - Documentation: Before placing orders with suppliers submit documentation showing product compliance with stated category of duty.

DOOR HANGING DEVICES

330 DOOR HINGES

- Manufacturer: Contractor's Choice
- Product: Satin stainless steel, grade 304 ball bearing butt hinges to suit the door thickness and unit weight.
- Other requirements: To be installed in strict accordance with the manufacturers details.

DOOR OPERATING DEVICES

410 OVERHEAD DOOR CLOSERS As noted on the Fire Strategy Drawing

- Standard: To BS EN 1154.
 - Door closing devices to fire/ smoke control doors: CE marked.
- Manufacturer: DORMA UK Ltd .
 - Product reference: TS 99 Door Closer System .
- Type: Face fixed .
- Power size: As M&E .
- Other functions: Mechanical hold open .
- Casing finish: As schedule .
- 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.

- 411 OVERHEARD DOOR CLOSERS
Manufacturer: DORMA UK Ltd.
- Web: www.dorma.com.
- Email: info@dorma-uk.co.uk.
- Product reference: TS 92 door closer system
Closer:
- Type: [TS 92 B].
- Spring strength: [EN 5–7].
- Finish: [Stainless steel].
Slide channel: [none].
Accessories: [none].

- 413 IRONMONGERY FROM SINGLE PROPRIETARY RANGE
Item: Contractor is to supply and install all door ironmongery items to complete the door installation.
Contractors choice door architectural ironmongery specialist to provide a full schedule for all door ironmongery requirements in accordance with general door set information on 180202-5000 Proposed Internal Door Schedule.
All ironmongery components to be supplied by a single manufacturer and range. All items to match. Ironmongery to be suitable for hospital use.

DOOR SECURING DEVICES

- 515 DOOR LOCKS To locations as shown on Proposed Internal Door Schedule.
- Standard: To BS EN 12209.
 - Manufacturer: Contractor's choice .
 - Product reference: Submit proposals .
 - Type: Cylinder mortice lock .
 - Backset: As schedule .
 - Material/ finish: To be confirmed .
 - Keying: Lock suiting requirements to be suited to UCL standards/requirements. All locks to be provided with 2 keys. .
- 586 PRIVACY INDICATOR BOLTS to Staff WC
- Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice .
 - Type: Rotary, internal throw over lever .
 - Material/ finish: Satin anodized aluminium .
 - Emergency release facility: Required.

DOOR FURNITURE

- 610 LEVER HANDLES To locations as shown on Proposed Internal Door Schedule.
- Standard: To BS EN 1906.
 - Manufacturer: Dorma .
 - Product reference: 8100 Safety round bar return with rose .
 - Style: Round pattern with return to door .
 - Size: 22mm .
 - Material/ finish: Satin aluminium, with contrasting rose .
 - Mounting: As required by manufacturer .
 - Additional requirements: Premier series lock options including: Mortice Latch, Mortice Bathroom Lock, Mortice Deadlock, Sash Lock. Standard Euro Profile Cylinder is to be changed in line with the Trust's lock suiting policy .

- 611 DOOR INDICATOR
Manufacturer: Contractor's choice.
Product: Submit proposals.
Material: Stainless steel.
Finish: Satin stainless steel.
- 690 KICK PLATES To locations as shown on Proposed Internal Door Schedule.
- Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice .
 - Size: 800 x 250 mm .
 - Material/ finish: Polished stainless steel, grade 1.4301 (304) .
 - Mounting: Face fix .
 - Additional requirements: Rounded edges and radiused corners .
- 710 ESCUTCHEONS Generally
- Manufacturer: Dorma .
 - Product reference: To suit ironmongery system specified .
 - Material/ finish: Satin anodized aluminium .
 - Keyhole type: Euro profile cylinder .
 - Usage: To cylinder locks where no handle backplate is specified to be fitted .
- 720 DOOR STOPS
- Manufacturer: Contractor's choice .
 - Product reference: To suit ironmongery system specified .
 - Type: Floor mounted black rubber centre fixing .
 - Usage: To doors opening against walls other than those fitted with closers with a back check facility .

R

Disposal systems

R12

Below ground drainage systems

R12 Below ground drainage systems

- 2 EXISTING DRAINS
- Setting out: Before starting work, check levels and positions of existing drains, inspection chambers and manholes against drawings. Report discrepancies.
- 4 IN SITU CONCRETE FOR USE IN DRAINAGE BELOW GROUND
- Standard: To BS 8500-2.
 - Concrete: Designated, GEN1, as section E10 .
- 14 PLASTICS PIPELINES
- Pipes, bends and junctions: PVC-U to BS EN 1401-1.
 - Manufacturer: Contractor's choice .
 - Product reference: Contractor's choice .
 - Recycled content: 10% (minimum) to BS EN ISO 14021.
 - Sizes: DN 110 .
 - Type of subsoil: Gravel, sand .
 - Bedding class: P .
 - Warning marker tape: Not required .
- 19 EXCAVATING PIPE TRENCHES
- Trench from bottom up to 300 mm above crown of pipe: With vertical sides.
 - Width: As small as practicable but not less than external diameter of pipe plus 300 mm.
 - Type of subsoil: Where the type of subsoil at the level of the crown of the pipe differs from that stated for the type of pipeline, give notice.
 - Timing: Excavate to formation immediately before laying beds or pipes.
 - Mud, rock projections, boulders and hard spots: Remove. Replace with bedding material, well consolidated.
 - Local soft spots: Harden by tamping in bedding material.
- 21 BEDDING AND JOINTING
- Laying pipes: To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.
 - Jointing: Lubricate. Leave gaps at ends of spigots to allow for movement.
- 23 CLASS D NATURAL BED
- Trench bottom: Hand trim to accurate levels, levelling up any overdig with compacted spoil.
 - Pipes: Cut holes for couplings/ sockets and lay pipes resting uniformly on their barrels, adjusting to line and gradient. Do not use hard packings under pipes.
 - Backfilling: After initial testing, backfill to 150 mm above crown of pipe with a protective cushion of selected fill, free from vegetable matter, rubbish and frozen soil and material retained on a 40 mm sieve. Thoroughly hand compact in 100 mm layers.
- 44 BENDS AT BASE OF SOIL STACKS
- Bends: 90° nominal rest bend with a minimum radius of 200 mm to centreline of the pipe.
 - Height of invert of horizontal drain at base of stack below centreline of lowest branch pipe (minimum): 450 mm.
 - Stabilizing bends: Bed in concrete without impairing flexibility of couplings.

- 58 INSTALLATION OF FITTINGS
- Appearance: Square with and tightly jointed to adjacent construction as appropriate.
 - Bedding and surround of fittings, traps, etc: Concrete, 150 mm thick.
 - Permissible deviation in level of gullies: +0 to -10mm.
- 88 FINAL TESTING OF DRAINS
- Before testing:
 - Cement mortar jointing: Leave 24 h.
 - Solvent welded pipelines: Leave 1 h.
 - Standard: In accordance with Building Regulations Technical Guidance Document H .
 - Method: Water .
- 91 BACKFILLING TO PIPELINES GENERALLY
- Backfill from top of surround or protective cushion: Material excavated from trench, compacted in 300 mm layers. Do not use heavy compactors before there is 600 mm of material over pipes.
- 97 CLEANING
- General: Flush out the whole installation and remove silt and debris immediately before handing over.

Z

Building fabric reference specification

Z10

Purpose made joinery

Z10 Purpose made joinery

To be read with Preliminaries/ General conditions.

110 FABRICATION

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

120 CROSS SECTION DIMENSIONS OF TIMBER

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

130 PRESERVATIVE TREATED WOOD

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

140 MOISTURE CONTENT

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

210 LAMINATED PLASTICS VENEERED BOARD/PANELS

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

220 WOOD VENEERED BOARDS/PANELS

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

250 FINISHING

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

Z11

Purpose made metalwork

Z11 Purpose made metalwork

To be read with Preliminaries/ General conditions.

310 MATERIALS GENERALLY

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

320 STEEL LONG AND FLAT PRODUCTS

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

330 STEEL PLATE, SHEET AND STRIP

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

340 HOT ROLLED STEEL PLATE, SHEET AND STRIP

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

350 COLD ROLLED STEEL PLATE, SHEET AND STRIP

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

360 COATED STEEL FLAT PRODUCTS

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

370 STEEL STRUCTURAL HOLLOW SECTIONS (SHS)

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

380 OTHER STEEL SECTIONS

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

400 STAINLESS STEEL PRODUCTS

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

410 ALUMINIUM ALLOY PRODUCTS

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

420 COPPER ALLOY PRODUCTS

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

FABRICATION

515 FABRICATION GENERALLY

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

520 COLD FORMED WORK

- Profiles: Accurate, with straight arrises.

525 ADHESIVE BONDING

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

530 STAINLESS STEEL FABRICATION

- Guillotining or punching: Do not use for metal thicknesses greater than 10 mm.
- Thermal cutting:
 - Carbonation in the heat affected zone: Remove, after cutting.
- Bending:
 - Plates or bars: Cold bending radius not less than material thickness.
 - Tubes: Cold bending radius not less than 2 x tube diameter.
- Welding: In addition to general welding requirements:
 - Protect adjacent surfaces from weld spatter.
 - Pickle all welds before post fabrication treatments.
- Protection: Provide protection to fabricated components during transit and on site.

555 BRAZING

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

FINISHING**710 FINISHING WELDED AND BRAZED JOINTS VISIBLE IN COMPLETE WORK**

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

745 PREPARATION FOR APPLICATION OF COATINGS

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

750 LIQUID ORGANIC COATING FOR ALUMINIUM ALLOY COMPONENTS

- Standard: To BS 4842.

760 ZINC AND CADMIUM PLATING OF IRON AND STEEL SURFACES

- Zinc plating: To BS EN ISO 2081.
- Cadmium plating: To BS EN ISO 2082.

770 CHROMIUM PLATING

- Standard: To BS EN ISO 1456.

780 GALVANIZING

- Standard: To BS EN ISO 1461.
- Preparation:
 - Vent and drain holes: Provide in accordance with BS EN ISO 14713-1 and -2. Seal after sections have been drained and cooled.
 - Components subjected to cold working stresses: Heat treat to relieve stresses before galvanizing.
 - Welding slag: Remove.
 - Component cleaning: To BS EN ISO 8501-3.
 - Grade: St 2½.

790 VITREOUS ENAMELLING

- Standard: To BS EN ISO 28722.
- Substrate metal: Steel to BS EN 10209.

COMPLETION

910 DOCUMENTATION

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

920 COMPLETION

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

Z12

Preservative/ fire retardant treatment

Z12 Preservative/ fire retardant treatment

To be read with Preliminaries/ General conditions.

- 110 TREATMENT APPLICATION
- Timing: After cutting and machining timber, and before assembling components.
 - Processor: Licensed by manufacturer of specified treatment solution.
 - Operatives: WPA certified.
 - Certification: For each batch of timber provide a certificate of assurance that treatment has been carried out as specified.
- 120 COMMODITY SPECIFICATIONS
- Standard: Current edition of the Wood Protection Association (WPA) publication 'Industrial wood preservation specification and practice'.
- 130 PRESERVATIVE TREATMENT SOLUTION STRENGTHS/ TREATMENT CYCLES
- General: Select to achieve specified service life and to suit treatability of specified wood species.
- 150 WATER-BASED ORGANIC PRESERVATIVE TREATMENT
- Solution:
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Application: High pressure impregnation.
 - Moisture content of wood:
 - At time of treatment: Not more than 28%.
 - After treatment: Timber to be surface dry before use.
- 610 MAKING GOOD TO PRESERVATIVE TREATMENT ON-SITE
- Preservative solution: Compatible with off-site treatment.
 - Application: In accordance with preservative manufacturer's recommendations.
- 620 MAKING GOOD TO FIRE RETARDANT TREATMENT ON-SITE
- Fire retardant: Compatible with off-site treatment.
 - Application: In accordance with fire retardant manufacturer's recommendations.

Z20

Fixings and adhesives

Z20 Fixings and adhesives

To be read with Preliminaries/ General conditions.

PRODUCTS

- 310 FASTENERS GENERALLY
- Materials: To have:
 - Bimetallic corrosion resistance appropriate to items being fixed.
 - Atmospheric corrosion resistance appropriate to fixing location.
 - Appearance: Submit samples on request.
- 320 PACKINGS
- Materials: Noncompressible, corrosion proof.
 - Area of packings: Sufficient to transfer loads.
- 330 NAILED TIMBER FASTENERS
- Nails:
 - Steel: To BS 1202-1 or BS EN 10230-1.
 - Copper: To BS EN 1202-2.
 - Aluminium: To BS 1202-3.
- 340 MASONRY FIXINGS
- Light duty: Plugs and screws.
 - Heavy duty: Expansion anchors or chemical anchors.
- 350 PLUGS
- Type: Proprietary types to suit substrate, loads to be supported and conditions expected in use.
- 360 ANCHORS
- Types:
 - Expansion: For use in substrate strong enough to resist forces generated by expansion of anchor.
 - Adhesive or chemical:
 - For use in substrate where expansion of anchor would fracture substrate.
 - For use in irregular substrate where expansion anchors cannot transfer load on anchor.
 - Cavity: For use where the anchor is retained by toggles of the plug locking onto the inside face of the cavity.
- 370 WOOD SCREWS
- Type:
 - Wood screws (traditional pattern).
 - Standard: To BS 1210.
 - Wood screws.
 - Pattern: Parallel, fully threaded shank or twin thread types.
 - Washers and screw cups: Where required are to be of same material as screw.

380 MISCELLANEOUS SCREWS

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

390 ADHESIVES GENERALLY

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

410 POWDER ACTUATED FIXING SYSTEMS

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

EXECUTION

610 FIXING GENERALLY

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

620 FIXING THROUGH FINISHES

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

630 FIXING PACKINGS

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

640 FIXING CRAMPS

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

650 NAILED TIMBER FIXING

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

660 SCREW FIXING

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

680 PLUGGED COUNTERSUNK SCREW FIXING

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

690 USING POWDER ACTUATED FIXING SYSTEMS

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

700 APPLYING ADHESIVES

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

Z22
Sealants

Z22 Sealants

To be read with Preliminaries/General conditions.

PRODUCTS

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

EXECUTION

- 610 SUITABILITY OF JOINTS
- Presealing checks:
 - Joint dimensions: Within limits specified for the sealant.
 - Substrate quality: Surfaces regular, undamaged and stable.
 - Joints not fit to receive sealant: Submit proposals for rectification.
- 620 PREPARING JOINTS
- Surfaces to which sealant must adhere:
 - Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
 - Clean using materials and methods recommended by sealant manufacturer.
 - Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.
 - Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
 - Protection: Keep joints clean and protect from damage until sealant is applied.
- 630 APPLYING SEALANTS
- Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
 - Environmental conditions: Do not dry or raise temperature of joints by heating.
 - Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.
 - Sealant profiles:
 - Butt and lap joints: Slightly concave.
 - Fillet joints: Flat or slightly convex.
 - Protection: Protect finished joints from contamination or damage until sealant has cured.

Z31

Powder coatings

Z31 Powder coatings

To be read with Preliminaries/ General conditions.

120 POWDER COATING MATERIALS

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

210 WORKING PROCEDURES

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

220 POWDER COATING APPLICATORS

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

225 GUARANTEES

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

230 CONTROL SAMPLES

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

250 COMPONENT DESIGN

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

310 PRETREATMENT OF ALUMINIUM COMPONENTS

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

320 PRETREATMENT OF STEEL COMPONENTS

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

430 EXTENT OF POWDER COATINGS

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

435 APPLICATION OF POWDER COATINGS

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

440 PERFORMANCE AND APPEARANCE OF POWDER COATINGS

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

450 ALUMINIUM ALLOY FABRICATIONS

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

460 STEEL FABRICATIONS

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

470 FIXINGS

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

480 DAMAGED COMPONENTS - REPAIR/ REPLACEMENT

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

510 PROTECTION

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

535 DOCUMENTATION

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

540 COMPLETION

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

Section b: Schedule of Work
UCL Day Nursery

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
1.00	GENERAL			
1.01	Note this Schedule must be read in conjunction with Kendall Kingscott drawing nos. 1150, 1151, 1200, 1201, 1410, 2200, 2210, 2400 & 5200 and the supporting information contained in the Appendices. All items must be fully costed and submitted with the tender submission in the allocated column. Where reference has been made to the Materials and Workmanship Specification, this is for guidance purposes only and the document must be considered as a whole.			
1.02	Contractor to note that an Asbestos R&D Survey has been carried out by Lucion Services Ltd and both a copy of this and the Asbestos Management Survey can be found in Appendix I of the Specification and in Appendix 4 of the Pre Construction Information Document.			
2.00	PREPARATION WORKS			
2.01	Please refer to Sections C20 of the Specification for further information.			
2.02	Make safe all power supplies to the work areas ensuring that the surrounding facilities / areas are not interrupted. Where disruption will be caused to other areas of the building, these are to be undertaken at a time to be agreed with the Contract Administrator and UCL.			
2.03	Make safe all water supplies to the works areas ensuring that the surrounding facilities / areas are not interrupted. Where distribution will be caused to other areas of the hospital, these works are to be undertaken at a time to be agreed with the Contract Administrator and UCL.			
2.04	Provide temporary protection to doors and surfaces which are to be retained. Ensure this is adequately protected throughout the course of the works to prevent damage and marks. On completion of the works all temporary protection is to be removed.			
2.05	Allow to remove and reinstate all fixtures, fittings and signage to allow for decoration.			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
2.06	Supply and install temporary hoarding to the locations identified on drawing 1210. Hoarding to achieve a minimum of 60 minutes fire protection. Installation must be compliant with UCL standards - refer to Appendix M for more details.			
3.00	DEMOLITION & ALTERATIONS - INTERNAL			
3.01	Please refer to Sections C20 of the specification for further information.			
3.02	<u>Existing Doors & Surfaces to be Retained</u> Retain and protect existing surfaces and doors for the duration of the site phase.			
3.03	<u>Re Hand Cupboard Door</u> Allow to re-hand storage room door to suit the new swing as noted on drawing no. 1210. Include for all necessary adaptations / alterations to the joinery and ironmongery to facilitate the installation.			
3.04	<u>Remove Internal Doors</u> As indicated on drawing no.1210 remove and dispose of the existing doors, lining/frames, ironmongery, architrave and clear all aiming materials from site. Allow to make good as required all damage to the masonry/studwork and finishes and leave ready for new work.			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
3.05	<p><u>Form New Opening in Party Wall</u></p> <p>Allow to form a new opening in the masonry wall in the location identified on drawing no. 1210. Contractor to note this wall is load bearing and all work must be carried out in strict accordance with the Structural Engineer's specification contained within Appendix E and the following commentary.</p> <p>Contractor to allow for this element to be undertaken outside of normal working hours.</p> <p>Provide all necessary temporary support and cut new door openings where detailed on drawing no. 1210. Carefully cut through the existing masonry party wall to provide opening for the new internal door (D.03). Build over lintel (as specified by the Structural engineer) with a minimum 150mm end bearing. Quoin up jambs and leave ready for new door lining. Include to provide and install new hard wall plaster to reveals before installing door lining. Make good all surfaces affected. Clear all superfluous materials arising from site.</p>			
3.06	<p><u>Remove Partitions</u></p> <p>Demolish existing stud partitions as noted on drawing no. 1210 and clear from site. Make good surfaces arising and leave ready for new work.</p>			
3.07	<p><u>Remove Vinyl Flooring / Carpet Tiles</u></p> <p>Remove and dispose of the existing vinyl and carpet floor coverings in the locations identified on drawing no.1210. Include to remove all flooring, vinyl skirting, up stands and accessories. Ensure all loose adhesive is removed and leave ready to receive new work.</p>			
3.08	<p><u>Remove Fixtures and Fittings</u></p> <p>Take down and clear from site all items indicated on drawing no.1210. Make good affected surfaces and leave ready for new work. Contractor to note this item relates to various fixtures and fittings throughout the building, including fire extinguishers and other equipment. Contractor to note that they are expected to familiarise themselves with the area and include to remove (and reinstate where applicable) all items necessary to facilitate the work.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
3.09	<p><u>Remove Curtain and Blind Tracks</u></p> <p>Take down and clear from site existing curtain and blind tracks together with associated components and clear from site. Make good affected surfaces and leave ready for new work.</p>			
3.10	<p><u>Remove Kitchen Fittings</u></p> <p>Carefully take out all existing kitchen units and fittings as identified on drawing no.1210 including worktops, wall cupboards, shelving, post panels and supports and clear all debris from site. Remove the existing sink, including redundant waste pipes, traps and hot and cold water services from site. Disconnect and remove all existing mechanical and electrical fittings in accordance with Hitek's Specification. Clear all resulting materials from site.</p>			
3.11	<p><u>Remove Sanitaryware / Toilet / Bath / Basins / Shower</u></p> <p>Remove and dispose of existing sanitaryware, sinks, toilets, basins, baths and all associated components indicated on drawing no. 1210 and clear from site. Include to remove shower screens, bath screens, boxing etc necessary to facilitate the installation. Remove redundant waste pipes, traps and services and clear from site. Make good surfaces affected and leave ready for new work.</p>			
3.12	<p><u>Remove Shower Tray / Boxing</u></p> <p>Remove and dispose of existing shower tray, shower, shower screen and boxing as indicated on drawing no. 1210. Make good surfaces and leave ready for new work.</p>			
3.13	<p><u>Remove Wall Cladding</u></p> <p>Strip out and remove existing wall cladding in Staff WC and clear from site, Make good retained surfaces and leave ready for new work.</p>			
3.14	<p><u>Remove Boxing Behind WC</u></p> <p>Remove and dispose of the existing boxing behind the toilet as indicated on drawing no. 1210. Make good surfaces and leave ready for new work.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
3.15	<p><u>Remove Timber Access Panels / Overhead Studwork</u></p> <p>Remove and dispose of overhead stud work, access panels and associated joinery as indicated on drawing no. 1210 and clear from site.</p>			
3.16	<p><u>Remove False Wall</u></p> <p>Take down and clear from site existing stud work false as identified on drawing no. 1210 . Allow to make good retained surfaces behind and leave ready for new work.</p>			
3.17	<p><u>Remove Internal Man Hole Cover</u></p> <p>Remove the existing man hole cover as indicated on drawing no. 1210 including any removable double locking sections and clear from site.</p>			
3.18	<p><u>Remove Tiled Wall Covering</u></p> <p>Hack off tiled wall covering as identified on drawing no.1210 and clear from site. Make good surfaces affected and leave ready for new work.</p>			
3.19	<p><u>Remove Security Bars</u></p> <p>Carefully remove the existing security bars and all associated fixings and clear from site. Make good all surfaces affected and leave ready for new work.</p>			
3.20	<p><u>Remove External Double Doors</u></p> <p>Carefully remove the existing double door set and all associated components including the overhead fan light and clear from site. Contractor to ensure damage to building fabric is kept to a minimum. Note external render has been finished over the frame on each elevation. Damage to render to be minimised as far as practicable. Include to make good existing render and decorate to match existing reveals as required following completion.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
3.21	<p><u>Remove Suspended Ceiling</u></p> <p>Take down existing suspended ceiling grid and all associated components indicated on drawing no. 1210 and clear from site. Make good retained surfaces and leave ready for new work.</p>			
3.22	<p><u>Remove Ductwork Bulkhead</u></p> <p>Take down existing plasterboard bulkhead and all associated components as indicated on drawing no.1210 and clear from site. Make good retained surfaces and leave ready for new work.</p>			
3.23	<p><u>Making Good</u></p> <p>Allow to make good all damage arising from the demolition / strip out and leave all retained surfaces ready to receive new work.</p>			
3.24	<p><u>Drainage</u></p> <p>Include to remove and adapt as necessary all foul drainage to accommodate the proposed layouts. Contractor to note the provisional layouts indicated on drawing no. 1210 and price on this basis. Allow to break out existing slab as required. Refer to item 12.00 which indicates for new foul drainage.</p>			
3.25	<p><u>Blinds</u></p> <p>Take down existing blinds as indicated on drawing no. 1210 and clear from site. Make good retained surfaces and leave ready for new work.</p>			
3.26	<p>Include a provisional sum of £2000.00 for unforeseen drainage work.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
4.00	PARTITIONS			
4.01	Refer to drawing no.1410 and section K10 of the Materials & Workmanship for further information.			
4.02	<p><u>Internal Wall Type 1</u></p> <p>Supply and fit new stud partition as indicated on drawing no. 1410. Include to supply and fit GypWall metal stud partitioning system taken full height above the existing suspended ceiling to meet the ceiling joists. Allow to adapt ceiling as required to facilitate the installation. Gypframe 48 S 50 studs fixed in accordance with the manufacturers instructions. Ensure all new studs are securely fixed at the base and head of the partitions as per the manufacturers requirements.</p>			
4.02 cont...	<p>Supply and fit 50mm Isover Acoustic Partition Roll (APR 1200), butt jointed with no gaps. Supply and fit a 12mm ply lining to both sides of the partition. Ensure this is securely fixed and level. Supply and fit 1no. layer of Gyproc Wall Board to each side of the partition. Provide a skim coat of plaster and leave ready for decoration. Supply and install new timber skirting to match the existing in every respect.</p> <p>NOTE: Existing skirting to be retained wherever possible. New partitions are to be fitted with new painted 18mm MDF Torus Skirting Boards (119mm H). Colour White.</p>			
4.03	<p><u>Internal Wall Type 2 (Infill Voids)</u></p> <p>Supply and fit new stud partition as indicated on drawing 1410. Include to supply and fit GypWall metal stud partitioning system taken full height within each recess. Gypframe 48 S 50 studs fixed in accordance with the manufacturers instructions. Supply and fit 18mm ply lining and 1No. layer of 12.5mm Gyproc WallBoard to the room facing side of the partition. Ensure this is securely fixed and level. Provide a skim coat of plaster to ensure a seamless blend between new and existing partition and leave ready for decoration.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
4.04	<p><u>New Lining (Provisional Item)</u></p> <p>Provisionally allow to install new wall lining system in accordance with manufacturers instructions following the removal of the false wall as noted on drawing no.1410. Lining to be taken full height.</p> <p>Manufacturer: British Gypsum Product Reference: GypLyner Universal Cavity between wall and back of lining: 25mm Framing Centres: 600mm Insulation: None Linings 1 x 12mm Plywood 1 x 15mm British Gypsum Gyproc WallBoard Finishing: Skim coat of plaster and decorated in accordance with the decoration item. Include to supply and install new skirting to match the existing in every respect.</p> <p>NOTE: Existing skirting to be retained wherever possible. New partitions are to be fitted with new painted 18mm MDF Torus Skirting Boards (119mm H). Colour White.</p>			
5.00	NEW INTERNAL DOORS			
5.01	Supply and install new internal timber doors in accordance with section L20 & P21 of the Materials & Workmanship and drawing no 5200. All new doors to be provided with UCL standard suited key set.			
5.02	Provide and fit new aluminium carpet cover strips within the existing internal thresholds to suit the openings.			
5.03	Include a provisional sum of £500.00 for supply and fix of ironmongery to be confirmed by the CA.		500.00	

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
6.00	VINYL FLOORING			
6.01	<p>Supply and install new Altro Stronghold vinyl flooring to the Kitchen and adjacent store as identified on drawing no. 2400.</p> <p>Manufacturer: Altro Limited Web: www.altro.co.uk Product Reference: Stronghold Colour: To be confirmed (allow for 2 different colours throughout) Welding rod: Colour matched to vinyl. Ensure all joints and mitres are welded.</p> <p>All new flooring is to be installed in accordance with the manufacturer's instructions. Colour to be confirmed. Include to supply and fit all necessary adhesives, trims and accessories to complete the installation. Include for new black floor fixed doorstops to all doors. Refer to section M50 of the Materials & Workmanship for further information.</p>			
6.02	<p>Supply and install new Gerflor Premium Comfort vinyl flooring to the areas identified on drawing no. 2400.</p> <p>Manufacturer: Gerflor Web: www.gerflor.co.uk Product Reference: Premium Comfort Colour: 4003 TAO Welding rod: Colour matched to vinyl. Ensure all joints and mitres are welded.</p> <p>All new flooring is to be installed in accordance with the manufacturer's instructions. Colour to be confirmed. Include to supply and fit all necessary adhesives, trims and accessories to complete the installation. Include for new black floor fixed doorstops to all doors. Refer to section M50 of the Materials & Workmanship for further information.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
7.00	MF CEILING			
7.01	<p>Supply and install new MF ceiling to the areas identified on drawing no, 2400 in accordance with the following:</p> <p>Manufacturer: British Gypsum Product Reference: CasoLine MF Suspended Ceiling System Suspension System;</p> <ul style="list-style-type: none"> - Hanger type: MF5 and MF7 as recommended by the manufacturer - note it is the contractors responsibility to ensure components are suitable for the installation. Primary grid and hanger centres to be 900mm. Secondary grid centres to be 400mm. - Lining: 1 x 12.5mm Gyproc WallBoard - Access units - Allow for 2no. metal 600x600mm standard non fire rated lockable access panels in each of the playrooms. Locations to be agreed. - Finishing: Taped Seamless Finish - Primer / Sealer: One coat of Gyproc Drywall Primer <p>Installation to be in strict accordance with the Manufacturers Instructions.</p>			
7.02	Supply and install new British Gypsum Gyproc WallBoard bulkhead around the new and existing ductwork as indicated on drawing 2400 in accordance with the specification noted in 7.01.			
7.03	Supply and install new British Gypsum Gyproc WallBoard bulkhead over existing services as noted on drawing 2400 in accordance with the specification noted in 7.01. Allow to install 1No non fire rated access panel.			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
8.00	FIXTURES AND FITTINGS			
8.01	<p><u>Blinds</u></p> <p>Provide and install new vertical roller blinds as indicated on drawing no.2400.</p> <p>Manufacturer: North Notts Blinds Type: Antimicrobial Vertical Rollers Dimensions: See plan drawings for locations - measure all openings on site to ensure a perfect fit. Material : Fabric from the standard range - colours to be confirmed. Operation: Manual, stainless steel ball chain Accessories / Other requirements: Powder coated steel fixing brackets</p> <p>Installation to be in accordance with the manufacturers instructions.</p>			
8.02	<p><u>Shelving Unit</u></p> <p>Provide and install Wall-Mounted Shelf over the portable Baby Change Unit in the Children's WC.</p> <p>Manufacturer: Community Play Things Product: Wall-Mounted Shelf - G28 Web: www.communityplaythings.co.uk/products/baby-room/g28</p> <p>Refer to Appendix F for data sheets. Installation to be in strict accordance with the manufactures instructions.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
8.03	<p><u>Adjustable Shelving</u></p> <p>Supply and install new adjustable shelving in the areas noted on drawing no. 1410.</p> <p>Manufacturer: Spur Shelvig, Spur House, Otterspur Way, Watford. Tel: 01923226071 (or equal and approved) Product Reference: Spur Steel-Lok, heavy duty, wall mounted adjustable shelving support system. To suit size of shelving as shown on plans. Shelves: - Laminate, polyrey or Formica colour to be confirmed - Other components: Shelving to meet the requirements in BS4965 - - All shelves to be screw fixed to support brackets - Colour to be confirmed - 350 deep shelves</p>			
8.04	<p><u>Stair Gate</u></p> <p>Provide and fit new stair gate to the area noted on drawing no. 1410 in strict accordance with the manufacturers instructions.</p> <p>Manufacturer: Mothercare Product: Safety 1st Securtech Flat Step Metal Gate - White Web: www.mothercare.com</p> <p>Contractor to confirm sizes prior to ordering.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
8.05	<p><u>Hold Open Devices</u></p> <p>Supply and install new hold open devices to new and existing doors as indicated on drawing no. 2200. Drawing reference EMH (Electromagnetic Hold Opens).</p> <p>Manufacturer: Dorma Product Ref: Dorma TS 99 Door Closer.</p> <p>Contractor to refer to the M&E Specification and ensure hold open devices are linked to the fire alarm.</p>			
8.06	<p><u>Shelving Units</u></p> <p>Provide and fit new shelving units in both Playroom as noted on drawing no. 1410 in accordance with the manufacturers instructions:</p> <p>Manufacturer: UK Educational Furniture Product: 20 File Wall Cupboard (with locks) - Ref EF9342 Web: ukeducationalfurniture.co.uk</p>			
9.00	KITCHEN REPLACEMENT			
9.01	<p><u>Kitchen Fittings</u></p> <p>Allow to supply and install new kitchen fittings and appliances as detailed in HCE's Specification and Quotation provided in Appendix G.</p> <p>Main Contractor to allow for liaison with the selected M&E Sub Contractor to ensure all items are included to facilitate the installation.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
10.00	INTERNAL DECORATIONS / WALL FINISHES			
10.01	<p><u>Decorations</u></p> <p>Redecorate all previously decorated internal surfaces throughout the areas noted on drawing no 2400 in accordance with the section M60 of the Specification. Includes all staircases, internal windows, window boards and common corridors, pipework, joinery etc. Colour TBC. Note contractor is to include to remove all radiators and other fixtures to decorate behind. Allow to reinstate on completion.</p>			
10.02	Include a provisional sum of £1500.00 for plaster repairs.		1500.00	
10.03	<p><u>Wall Cladding (White Rock) - to Circulation, Playrooms, & Office</u></p> <p>Provide and install half height white rock hygienic wall cladding to the new Kitchen, Staff WC and Children's WC in strict accordance with the manufacturers instructions. (allow for 1000mm height - to be confirmed before installation).</p> <p>Include to provide splash back to Belfast sink in play room - 450mm height above worktop.</p> <p>Surface finish: Satin</p> <p>Manufacturer: Altro Limited Product Reference: Altro Whiterock Colour: TBC (Allow for 3) Adhesive: AltroFix</p> <p>Refer to Section M50 of the Materials and Workmanship for further information relating to this item.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
10.04	<p><u>Wall Cladding (White Rock) - to Kitchen and WC's</u></p> <p>Provide and install full height white rock hygienic wall cladding to the new Kitchen, Staff WC and Children's WC in strict accordance with the manufacturers instructions.</p> <p>Manufacturer: Altro Limited Product Reference: Altro Whiterock White Colour: White Adhesive: AltroFix</p> <p>Refer to Section M50 of the Materials and Workmanship for further information relating to this item.</p>			
10.05	<p><u>Safety Film to Glazing</u></p> <p>Supply and install new Safety Window Film incorporating Solar Control Film by The Window Company to the windows noted on drawing no. 2400. Include to provide safety film to secondary glazing in addition to external window - all glazing associated with this opening is to receive safety film. Installation to be in strict accordance with the manufacturers instructions. Works to be carried out by a firm approved by the film manufacturer in accordance with their recommendations. Ensure film is fully adhered to the glass with no peeling, free from bubble, wrinkles, cracks and tears.</p>			
11.00	WASHROOM PACKAGE			
11.01	<p>Provide and install new washroom elements within the proposed Kitchen, Staff WC, Children's WC and Playroom. All items, including but not limited to IPS Panels, Cubicles, Vanity Units and Sanitaryware is to be supplied and installed by Cubicle Systems Limited in strict accordance with the Specification and Quotation contained in Appendix H.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
12.00	BELOW GROUND DRAINAGE			
12.01	Undertake all necessary work to facilitate the new sanitary installations as indicated on drawing no. 2210. Contractor is to provide a price based on the assumed existing and proposed drainage runs outlined on drawing no. 2210 and the information contained in section R12 of the Materials & Workmanship, but must allow for all necessary opening up work to inspect the below ground drainage. Allow to reinstate retained and reusable flooring where applicable. Contractor must allow to make good all damage arising to the concrete floor to complete the installation.			
12.02	Allow to lift the existing floor to access all required runs of foul drainage noted on drawing no. 2210. Allow to adapt as required the existing pipework to facilitate the new installation. Where new foul internal runs are required, provide and lay 100mm dia Hepworth Supersleeve or equal and approved PVCu foul drainage pipework to 1:40 fall to pea gravel in trench and connect to existing inspection chambers. Allow for all modifications to the inspection chambers to facilitate the installation. Installation to be in accordance with the specification contained in Section R in the Materials and Workmanship.			
12.03	Provide and install a new double sealed double cover recessed internal man hole cover in accordance with the following specification: <ul style="list-style-type: none"> - Galvanised mild steel with recessed cover to enable screed and vinyl covering - Solid steel base plate - Secondary inner cover - 4No. galvanised steel screws also acting as lifting eyes - Finish: Hot dipped galvanised to BS EN ISO 1461 Include to supply and install a suitable levelling compound / screed to facilitate the installation of the vinyl flooring.			
12.04	Provisionally allow to replace the flooring in the Children's WC and Staff WC with 22mm T&G moisture resistant chip board. Contractor to note that the existing flooring is to be retained wherever possible and removals to facilitate the drainage installation should be kept to a minimum .			
12.05	Include a provisional sum of £3000.00 for additional works to the below ground drainage and flooring following intrusive inspections.		3000.00	

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
13.00	MECHANICAL & ELECTRICAL WORKS			
13.01	Carry out all mechanical & electrical works in accordance with the M&E Specification and Drawings prepared by Hitek Consultants. Allow for all overheads, profit and attendance thereon.			
13.02	Carry out all builders work in connection with the M&E services installation. Main contractor must liaise with their appointed Mechanical & Electrical Services Contractor to determine the precise requirements. Include to lift floorboards/hardboards, access ceiling voids etc as required to facilitate the works.			
13.03	<u>Redundant M&E Services</u> Take down, dismantle as necessary and clear from site all existing redundant mechanical and electrical services equipment, plant and all associated equipment and components as described in Hitek's Specification and make good all surfaces affected. Allow to remove all encasings and boxings enclosing services including all associated framework and clear from site. Make good all surfaces affected and leave ready for new work.			
14.00	EXTERNAL WORKS			
14.01	<u>Repairs to Hardstanding</u> Include a provisional sum of £1000.00 for repairs to the hard standing to facilitate the rubber safety floor installation. Contractor must make adequate allowance in their programme to undertake this work within the given timeframe.		1000.00	
14.02	<u>Re-Bed Paving Slabs</u> Allow to carefully lift and re-bed existing paving slabs to provide a level surface lead to falls to the existing gullies. Contractor to note the flag stones are an important heritage feature and particular care and attention should be taken to minimise damage. Include to carefully break out existing pointing and clear arising materials from site. Carefully lift slabs and clean off for re-use. Break up and remove old mortar as required. Relay slabs on a fresh bed of bed of mortar mixed with four parts sharp sand to one part cement. Ensure slabs are level and compared down to prevent further movement. Fill joints with dry lime mortar mix.			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
14.03	<p><u>EDPM Wet Pour</u></p> <p>Contractor to note that the following items associated with 14.03 are subject to planning and listed building approval, therefore the working method may be subject to change. The following elements must be included in the contractor's tender.</p>			
14.03.1	<p><u>Preparation</u></p> <p>Supply and install Wallbarn Drainage Geotextile 300 gsm High Tenacity (Recycled) Membrane over the 2no, existing gullies / outlets in the lower lightwell, ensuring there is a surplus of 400mm coverage around.</p> <p>Provisionally allow to line the flagstones with Grey Limestone 20mm chippings. Total build up to be circa 20-30mm and must cover the substrate in it's entirety. Existing gullies must be protected at all times the installation process to prevent stones falling through.</p> <p>Supply and install Wallbarn Drainage Geotextile 300 gsm High Tenacity (Recycled) Membrane across the whole area as noted on drawing no. 2400 in strict accordance with manufacturers details.</p> <p>Contractor to note detailing is subject to agreement with the CA and Technical Advisor during the site phase and allowance must be made in the tender return.</p>			
14.03.2	<p><u>Wet Pour Rubber Surface</u></p> <p>Supply and install new EDPM wet pour surface in strict accordance with the quotation contained in Appendix L.</p>			
14.04	<p><u>Leisure Grass</u></p> <p>Supply and install new leisure grass surface in strict accordance with the quotation contained in Appendix K.</p>			
14.04.1	<p>Include a provisional sum of £1500.00 for alterations to detailing during the site phase.</p>		1500.00	

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
14.05	<p><u>Tree Maintenance</u></p> <p>Item TBC following confirmation of the Arborist. Allow a provisional sum of £5000.00 for work to the Fig Tree.</p>		5000.00	
14.06	<p><u>Safety Mesh</u></p> <p>Provide and install new safety mesh to the existing and new railings as noted on drawing no. 1410. Contractor must visit site to inspect existing installation - new to match.</p> <p>Safety mesh to be fabricated to suit on site dimensions and must match the existing safety mesh on site in every respect. Mesh to be galvanised and black satin powder coated fixed to existing railings with stainless steel fixings.</p>			
14.07	<p><u>Railings</u></p> <p>Provide and install new wrought iron railings to the boundary wall and hardstanding as indicated on drawing no. 1410 in strict accordance with manufacturers instructions. Contractor must visit site to inspect existing installation - new to match.</p> <p>Manufacturer: Gates Railings Direct (GRD) (or equal and approved - submit proposals to the CA for review) Web: www.gatesrailingsdirect.co.uk Tel: 01384 392300 Finish: Hot Dip Galvanized and Black Satin Powder Coated Range: the Monroe Colour: Black Dimensions: To match the existing railings in every respect</p> <p>Ensure new railings are securely fixed through the coping stones with suitable stainless steel fixings. Include for all necessary components to facilitate the installation.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
14.08	<p><u>External Gates</u></p> <p>Provide and install new single wrought iron gates to the locations identified on drawing no. 1410.</p> <p>Manufacturer: Gates Railings Direct (GRD) (or equal and approved - submit proposals to the CA for review) Web: www.gatesrailingsdirect.co.uk Tel: 01384 392300 Finish: Hot Dip Galvanized and Black Satin Powder Coated Range: Monroe Single Gate Colour: Black Dimensions: Where gates are to be fitted within existing stair openings, these are to be site measured to ensure a good fit. Where gates are to be installed in new sections of railings, allow for 800mm width.</p> <p>Include to supply and install slide bolt and galvanised steel gate closer on each.</p>			
14.09	<p><u>Tree Surround (Play Area) & Decking</u></p> <p>Design, supply and install new decking and tree surround play area in accordance with the performance requirements noted on Kendall Kingscott Drawing no. 5400.</p>			
14.10	<p><u>Remove Cobbles & Paving</u></p> <p>Carefully remove the cobble surrounds around the fig tree and set aside for reuse (location TBC). Include to clean surrounding concrete and leave ready for new work. Carefully lift paving slabs after the cobble removal and clear from site. Include to make good substrate and leave ready for new work. Ensure minimum 1m clear footpath / paving remains between boundary wall and play structure (item 14.09).</p>			
15.00	EXTERNAL DOORSET			
15.01	Supply and install new timber double doorset in strict accordance with the specification included on drawing no. 5100.			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
15.02	Supply and install new Multi Lock Mini Bar to the new door in accordance with the Specification contained in Appendix N. Allow to coordinate the installation with the selected door manufacturer.			
16.00	FIRE STOPPING			
16.01	Contractor to note that all fire stopping must be in strict accordance with UCL Standards contained in Appendix M.			
16.02	Include a provisional sum of £2000.00 for additional fire stopping.		2000.00	
17.00	WASHING MACHINE / TUMBLE DRYER			
17.01	Supply and install new Miele W1 Front Loading Washing Machine - WCG 125 9kg Series 120 - White - in strict accordance with the manufacturers instructions. Coordinate installation with M&E Specification.			
17.02	Supply and install new Miele T1 Classic Heat Pump Tumble Dryer - WDD230 WP Active Family - in strict accordance with the manufacturers instructions. Coordinate installation with M&E Specification.			
18.00	ELECTRIC LOCK			
18.01	<p>Allow to remove the existing break glass security mechanism currently fixed to the door. Allow to make good surfaces as required and leave ready for new work.</p> <p>Provide and install new electric lock to the emergency escape door indicated on drawing no. 1400. Refer to the information contained in Appendix O for more information.</p> <p>Manufacturer: Abloy Model: EL160</p> <p>Refer to Page 17 in the brochure in Appendix O. Allow to coordinate the installation with the Electrical Specification.</p>			

Specification of Works (V1)

b. Schedule of Works - Nos. 55 - 56 Gordon Square - Nursery Refurbishment



Item	Description	Option	£	P
19.00	CONTINGENCY SUM			
19.01	Include contingency sum of £5000.00 for works of an unforeseen nature to be expended in whole or part at the direction of the CA.		5000.00	