

CHANGING ROOMS AND PUBLIC TOILETS

**Forres Field Victoria Avenue
Swanage BH19 1AR**

Architectural Specification

Prepared by:

GA Architects

E251.7 Riverside Business Centre
Haldane Place
London SW18 4UQ
Tel: 020 8960 4418

ga architects

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GENERAL SPECIFICATION

ELEMENT	DESCRIPTION	MANUFACTURER + CONTACT DETAILS	PRODUCT + SPECIFICATION	NOTES	DRAWING REFERENCE
GROUND FLOOR CONSTRUCTION	Concrete slab		Specified by structural engineer		
	Screed		Sand and cement: <ul style="list-style-type: none"> Reinforced to give a compressive strength greater than 35N/mm² Thickness: 60mm 		830/T/13 830/T/16
INSULATION	Insulation	Celotex Ltd Lady Lane Industrial Estate Hadleigh Ipswich Suffolk IP7 6BA Tel: 01473 822093 Tel: 01473 822093 (Technical)	Provisional specification to be confirmed by Celotex when SBEM calculations are available <ul style="list-style-type: none"> Cavity wall insulation: 50mm Floor insulation below screed and turned up at perimeter: 50mm 		830/T/16 830/T/17 830/T/18 830/T/19 830/T/20
EXTERNAL WALL	Stone facings	Aggregate Industries North End Ashton Keynes Wiltshire SN6 6QX Tel: 01285 646900	<ul style="list-style-type: none"> Facing masonry Split Size: 440x215mm Thickness: 100mm Strength: 10.4 N/mm² Colour: Buff Split 		830/T/12 830/T/16 830/T/17
	Blockwork	Aggregate Industries North End Ashton Keynes Wiltshire SN6 6QX Tel: 01285 646900	Type 1 <ul style="list-style-type: none"> Masterdenz 440x215mm Standard 100 mm thick Strength: 10 N/mm² 		830/T/12 830/T/16 830/T/17

INTERNAL PARTITIONS	Blockwork	Aggregate Industries North End Ashton Keynes Wiltshire SN6 6QX Tel: 01285 646900	<p>Type 2</p> <ul style="list-style-type: none"> • MasterDenz 440x215mm Paintgrade • 100 mm thick • Strength: 10 N/mm² <p>Type 3</p> <ul style="list-style-type: none"> • MasterDenz 440x215mm Paintgrade • 100 mm thick • Strength: 7.3N/mm² 		830/T/12
ROOF	Pitched roof	Marley Eternit Lichfield Road Branston Burton on Trent DE14 3HD Tel: 08705 626400	<ul style="list-style-type: none"> • Corrugated sheet roofing Profile 3 • Pitch: 18° • End lap: 150mm • Sheet size: • Adjustable two-piece plain wing ridge cover • Roll top bargeboard • Colour: Blue BS 18-B-29 		830/T/06 830/T/07 830/T/17 830/T/18
	Flat roof	County Flat Roofing (UK) Ltd Unit 5 Sunnyside Road North Weston-Super-Mare Somerset BS23 3PZ Tel: 0117 205 0074	Single layer polymeric sheet roof covering <ul style="list-style-type: none"> • Alwitra Evalon (product of ICB Ltd • Thickness: 1.2mm +1.5mm backing and self-adhesive coating 		830/T/06 830/T/07 830/T/19 830/T/20
	Fascias and Soffits	iwood Unit 1C Airfield Industrial Estate Hixon Stafford ST18 0PF Tel: 01889 597281	English oak boarding to be supplied only by iwood and fixed by main contractor to architect's detail <ul style="list-style-type: none"> • 120x26mm thick sawn • Kiln dried to 15% moisture content 		830/T/09 830/T/10 830/T/17

EXTERNAL CLADDING	High Level Cladding to Elevations A and C	iwood Unit 1C Airfield Industrial Estate Hixon Stafford ST18 0PF Tel: 01889 597281	English oak cladding to be supplied only by iwood and fixed by main contractor to architect's detail <ul style="list-style-type: none"> • 120x26mm thick sawn to size with rebate both ends for lap • Kiln dried to 15% moisture content • Where boards are in excess of 3m in length, joints to be agreed with architect before fixing • Sample required for approval prior to manufacture 		830/T/09 830/T/10 830/T/20
	Cladding to stud wall either side of flat roof	Marley Eternit Lichfield Road Branston Burton on Trent DE14 3HD Tel: 08705 626400	Cedral Click horizontal cladding: <ul style="list-style-type: none"> • Fixed on 70x28m vertical softwood timbers as manufacturer's instructions • Allow for all clips, starter profiles, soakers at head, base and ends • Colour: C05 Grey • 		830/T/07 830/T/18 830/T/19
RAINWATER GOODS	Guttering	Dales Fabrications Ltd Crompton Road Industrial Estate Ilkeston Derbyshire DE7 4BG Tel: 0115 930 1521	Concealed gutter: <ul style="list-style-type: none"> • 311 Aluminium gutter 205x125mm • 14 gauge • Milled Finish 		830/T/06 830/T/17
	Rainwater pipes		PVC to contractor's choice		830/T/04
ROOFLIGHT	2 no. rooflights	Sterlingbuild Unit 14 Barnfield Road Folkestone Kent CT19 5SU Tel: 01304 898568	Opening square domed flat glass window: <ul style="list-style-type: none"> • Code WH160160ODGS • 1600x1600 mm • Electric wall switch • Double skin • Clear • 150 mm kerb • Trickle vent 2 sides WHV 		830/T/06 830/T/07 830/T/19

WINDOWS	Perimeter windows and window to kitchen	PJ Aluminium 78 Crayford High Street Crayford Kent DA1 4EF Tel: 0845 600 8342	High level double-glazed fixed windows and single-glazed sliding window to kitchen: <ul style="list-style-type: none"> • Powder coated aluminium to RAL colour to be advised • High level windows to be obscured, kitchen window to be clear • Obscured glass: Pilkington Stippolyte level 4 obscuration (both layers of high level) • All windows to be toughened or laminated glass (double glazed windows to be toughened or laminated both layers) • 		830/T/04 830/T/05 830/T/09 830/T/10 830/T/15 830/T/15A 830/T/15B 830/T/17 830/T/22
EXTERNAL DOORS	Sliding and hinged doors and frames	iwood Unit 1C Airfield Industrial Estate Hixon Stafford ST18 0PF Tel: 01889 597281	English oak boards to be supplied only by iwood and fixed by main contractor to architect's detail <ul style="list-style-type: none"> • 120x15mm thick sawn oak to size with rebate both ends for lap • 120x60mm sawn to size vertical end frames • 30x50mm softwood framing • Boards to be air dried • Where boards are in excess of 3m in length, joints to be agreed with architect before fixing • Sample required for approval prior to manufacture 		830/T/04 830/T/14 830/T/14A 830/T/14B
INTERNAL DOORS	D06-DO8, D10-D13, D15 and D16	Travis Perkins Local Stockist Order Line: 0330 1233 846	<ul style="list-style-type: none"> • Moulded Suffolk FD30 Internal Fire Door • 1981x836x44mm thick • Code:907031 • To be painted 		830/T/04 830/T/14 830/T/14C
	D09		<ul style="list-style-type: none"> • 2x Moulded Suffolk FD30 Internal Fire Door • 1981x836x44mm thick • Code:907031 • To be painted 		830/T/04 830/T/14 830/T/14D

	D14 (plantroom doors)	Britannia Metador Britannia House John Boyle Road Middlesburgh TS6 6TY Tel: 01642 337119	<ul style="list-style-type: none"> • 400 Series: 1800x2100 double door with outside active lever and double panic • Polyester powder coated to RAL colour to be advised • 3 keys 		830/T/04 830/T/14 830/T/14E
	Sliding Gear	Hafele UK Ltd Brownsover Road Swift Valley Industrial Estate Rugby Warwickshire CV21 1RD Tel: 01788 548811	<p>Sliding gear x2 for two pairs of sliding doors</p> <ul style="list-style-type: none"> • Straightaway 720 Bottom Rolling System • To include all fittings: guide channel, fixing brackets, bottom track and roller all complete • Contractor to confirm weight of door (maximum 400kg) before ordering sliding gear • For ironmongery and locks see Ironmongery Schedule 		830/T/14A 830/T/20 830/T/21
WC AND SHOWER CUBICLES	WC and shower cubicles and vanity units	Decra Ltd 34 Forest Business Park Argall Avenue London E10 7FB Tel: 020 8520 4371	<p>All from the Senator Freestyle Range to include:</p> <ul style="list-style-type: none"> • Cubicle doors, dividing partitions, accessible duct panels • Ironmongery and all fittings complete • Vanity units for hand washing <p>Male WC</p> <ul style="list-style-type: none"> • 2 no. wc cubicles (one for ambulant with outward opening door), coat hook on back of doors • 4 no. urinal stalls • Vanity unit with 4 no. hand-washing positions • Access panels behind wc cubicles and above vanity unit with recesses for mirrors and locations for fixing taps and soap dispensers • Colour: F917 Blue Stipple 	<p>Main Contractor to fix:</p> <ul style="list-style-type: none"> • Mirrors • Soap dispensers • Hand dryers 	830/T/04 830/T/23 830/T/24 830/T/25 830/T/26 830/T/27

			<p>Female WC</p> <ul style="list-style-type: none"> • 5 no. wc cubicles (one for ambulant with outward opening door), coat hook on back of doors • Vanity unit with 4 no. hand-washing positions • Access panels behind wc cubicles and above vanity unit with recesses for mirrors and locations for fixing taps and soap dispensers • Colour: F919 Pink Stipple <p>Wheelchair access WC</p> <ul style="list-style-type: none"> • Access panels behind wc and basin to underside of window with capping at top and recess for mirror and location for soap dispenser • Coat hook on back of door • Colour: F918 Green Stipple <p>Officials (x2 – opposite hands)</p> <ul style="list-style-type: none"> • 1 no. wc cubicle with coat hook on back of door • 1 no. shower cubicle • Access panels behind wc, basin and shower unit • 3 no. coat hooks on timber batten on wall opposite shower • Timber slatted benching (beech) and coat hooks above • Colour: F918 Green Stipple <p>Changing rooms and toilets 1 (x2 opposite hands)</p> <ul style="list-style-type: none"> • 4 no. shower cubicles • 2 no. wc cubicles • Colour: F018 Green Stipple • Vanity unit with 2 no. hand-washing positions • Access panels behind showers, wc cubicles and above vanity unit with recesses for mirrors and locations for fixing taps and soap dispensers • Timber slatted benching (beech) and coat hooks above 	<p>Main Contractor to supply and fix:</p> <ul style="list-style-type: none"> • Mirrors • Soap dispensers • Hand Dryers <p>Main Contractor to supply and fix:</p> <ul style="list-style-type: none"> • Mirror • Soap dispenser • Hand dryer <p>Main Contractor to supply and fix:</p> <ul style="list-style-type: none"> • Mirror • Soap dispenser • Hand dryer <p>Main Contractor to supply and fix:</p> <ul style="list-style-type: none"> • Mirrors • Soap dispensers • Hand dryer 	
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			<p>Specification for Levada Vanity Trough with hand-washing positions as above</p> <ul style="list-style-type: none"> • Trough: 13mm thick Corian solid surfacing fabricated to form a vanity trough to Decra's standard detail • Colour: to be advised • Substrate: 18mm MR MDF 600mm deep overall • Front apron: 250mm • Upstand: 300mm • Front edge: pencil-round detail, arrases removed to all other edges • Bottom thermoformed for falls to waste • Support: PAR softwood ladder frames constructed to support panels and flush gap (floor-mounted powder-coated mild steel cantilever brackets) • Under-panels: 19mm overall high-pressure laminate on moisture-resistant core, square edged to suit • Colour to be advised • Wastes: Dome wastes to be supplied 		
SANITARY FITTINGS	WC pans, showers, urinals and hand-washing etc	The Sanitaryware Company Chartwell Court West Mill Imperial Business Park Gravesend Kent DA11 0DL Tel: 01474 338300	<p>See separate sanitaryware schedule</p> <p>Male and Female WC</p> <ul style="list-style-type: none"> • SanCeram Chartham back to wall pan CHWC 103 • Ambulant cubicles (2 no.) to have SanSeram Chartham 480mm rimless WC CHWC104 and grab rails to match Doc M pack in blue • Seat: SanCeram Chartham ring seat white CHWC 112 • Cistern: Thomas Dudley Miniflo concealed sensor cistern CIST 109 with transformer to convert to mains power CIST 110 • Urinals (male only): SanCeram Langley concealed trap LLUR 109 with sensor URIN 109 		830/T/04 830/T/23 830/T/24 830/T/25 830/T/26 830/T/27

			<ul style="list-style-type: none"> • Taps for basin: DVS Aquarius wall mounted straight AT02-001 with in total 6 no. two station mains powered control kit AT00-003 (each control box needs 3 amp spur) • Soap dispenser: Soap dispenser stainless steel 0302525 • Toilet roll holder: Jumbo toilet roll holder stainless steel 0302527 • Hand dryer: Stainless steel warm air hand dryer 0302019 <p>Changing</p> <ul style="list-style-type: none"> • Shower head: SanCeram anti-ligature fixed shower head SHWR 118 • Shower valve: SanCeram sequential lever operated concealed shower valve SHWR 112 • WC pan, seat and cistern: as male and female wc above • Soap dispensers, hand dryers and toilet roll holders: as male and female wc above <p>Officials</p> <ul style="list-style-type: none"> • WC pan, seat, cistern: as male and female wc above • Soap dispensers, hand dryers and toilet roll holders: as male and female wc above • Basin: SanCeram Chartham 380 basin LHTH CHWB 101 • Basin tap: DVS Aquarius A45 AT 03-011 with single station mains powered control kit AT00-002 <p>Wheelchair Access WC (WA)</p> <ul style="list-style-type: none"> • SanCeram Doc M BTW LH Blue SCDMBTWLB • Soap dispenser, hand dryers and toilet roll holder: as male and female wc above 		
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ACCESSORIES	Soap dispensers, hand dryers, toilet paper holders etc		See NBS specification prepared by the Sanitaryware Company		830/T/04 830/T/23 830/T/24 830/T/25 830/T/26 830/T/27
BABY CHANGING STATION	Wall fixed baby changing station	Seton Wildmere Industrial Estate Banbury Oxfordshire OX16 3JU Tel: 0800 316 9700	Male and Female and Wheelchair Access WC: <ul style="list-style-type: none"> Horizontal baby changing station JAN132 457x870mm Colour: white 		830/T/04 830/T/23 830/T/24 830/T/25
KITCHEN UNITS	Cabinets	Tough Furniture Ltd Stokewood Road Craven Arms Business Park Craven Arms Shropshire SY7 8NR Tel: 01588 674340	<ul style="list-style-type: none"> 1 no 600mm wide drawer stack x 540mm deep 2 no. 1200 mm wide Hiline base units 2 no 1200mm wide wall cupboards 720mm high Worktop to be Omega/melamine with bullnose edge 600mm deep 		830/T/28
	Kitchen Sink	Taps UK Unit 2, Prior Wharf Waterside Harris Business Park Hanbury Road Stoke Prior Bromsgrove Worcestershire B60 4FG Tel: 08443 7130200	<ul style="list-style-type: none"> Schock Lithos D150 1.5 Bowl Granite Croma Grey Kitchen Sink Litd150cr 		
	Mixer Taps		<ul style="list-style-type: none"> Ultra Cruciform Dual Lever Chrome Kitchen Sink Mixer Tap KA304 		

SUSPENDED CEILING	There will be no suspended ceiling as such as the plywood, acting as a plate, will be fixed to the underside the timber trusses. The plywood will be spray painted	The Spray Shop Unit 23 Silver Birches Business Park Aston Road Bromsgrove Worcestershire B60 3EU Tel: 01527 877129	Sprayed stone finish on elasticated primer to thickness of 250 DFT <ul style="list-style-type: none"> • Colour to be advised 		830/T/13 830/T/17 830/T/20 830/T/21
FLOOR FINISHES	Vinyl flooring in: changing rooms, wcs, wheelchair access wc, officials, internal store, kit store and kitchen	Polyflor Ltd PO Box 3 Radcliffe New Road Whitefield Manchester M45 7NR Tel: 0161 767 1111	<ul style="list-style-type: none"> • Polyflor: Ultima 2.5mm thick with welded joints and 150mm cove all round in all areas to be laid on levelling screed • Colour: Green 		830/T/13 830/T/16
	Circulation area and plant room	Ronacrete Ltd Ronac House Flex Meadow Harlow CM19 5TD Tel: 01279 638700	<ul style="list-style-type: none"> • RonaFloor Epoxy Floor Mortar • Cove up to a height of 150mm • Thickness: 5mm • Seal: RonaFloor EWB 		
INTERNAL PAINTING	Blockwork walls	Dulux Trade Wexham Slough Berkshire SL2 5DS Tel: 0870 242 1100	<ul style="list-style-type: none"> • Dulux Trade Diamond Eggshell • 2 mist coats • 1 top coat 		830/T/12
	Virendeel	Galvanised structural steelwork	Where visible from inside building only <ul style="list-style-type: none"> • 1 coat metal primer • 2 coats Dulux Quick Dry undercoat • 1 coat Dulux Quick Dry Gloss • Colour to match powder coated windows 		See structural drawings
	Doors, frames and architraves		<ul style="list-style-type: none"> • Apply de-knotting to any knots • 2 coats Dulux Quick Dry wood primer and undercoat • 2 coats Dulux Quick Dry Gloss 		

<p>EXTERNAL DECKING and PATHS</p>	<p>Decking</p>	<p>Dura Composites Ltd Dura House Telford Road Clacton-on-Sea Essex CO15 4LP Tel: 01255 423601</p>	<ul style="list-style-type: none"> • Dura Deck Type 225 hollow • 6mm gap • Dura Composites Fascia Board 140x10mm to entire perimeter of decking and paths • Colour: Teak 		<p>830/T/11 See structural drawings</p>
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F10 BRICK/ BLOCK WALLING

TYPES OF WALLING

110 FACING BRICKWORK: None

110 350 CONCRETE COMMON BLOCKWORK: To New External Partially Filled Cavity Walls

- Internal Skin: 2x100mm above DPC (tied together see manufacturer's specification or structural engineer's instructions) – Masterdenz Standard and Paintgrade (Types 1 and 2)

- Internal walls: 100mm above DPC – Masterdenz Paintgrade (Type 3)

- Blocks: To BS EN 771-3.

- Manufacturer: Aggregate Industries (Tel: 01285 646900)

- Product reference: 100mm thick

- Location as shown on drawings.

- **Compressive strength**: Types 1 and 2: Minimum 10N/mm². Minimum Density of Minimum 1200 kg/m³, Type 3: Minimum 7.3N/mm²

- Category: D1.

- Thermal properties: Not less than 0.67 sq m K/W at 3% moisture content for cavity walls and 0.13 sq m K/W at 3% moisture content for internal walls.

- Work sizes (length x width x height): 440mm long x 100mm wide x 215mm high.

- Special shapes: None.

- Additional requirements: None.

- Mortar: As section Z21.

- Mix: 1:1:6 Portland cement (PC 42.5):Lime:Sand Mortar

- Bond: Half Lap Stretcher Bond.

- Note: Blockwork to be laid properly bonded and fully toothed into existing work. All work to comply with BS 5628: Part 1 and BS:5628: Part 3.

400 BRICKWORK: BELOW DPC

- Bricks: To BS EN 771-1
 - Manufacturer: IBSTOCK BRICK LIMITED or similarly approved.
 - Product reference: New brickwork below DPC to be frost resistant clay brick to trade contractor's choice for architect's approval.
 - Mean **compressive strength**: 20N/mm² (minimum).
- Mortar: As section Z21.
 - Mix: 1:0.25:3 cement : lime : sand mortar.
- Bond: Half lap stretcher.
- Joints: Flush.
- Note: Brickwork to be laid properly bonded and fully toothed into existing work.

All work to comply with BS 5628: Part 1 and BS:5628: Part 3.

500 BASIC WORKMANSHIP

- Bond where not specified: Stretcher.
- Mortar joints: Fill all vertical joints. Lay bricks, solid and cellular blocks on a full bed.
- Quoins and advance work: Rack back.
- Locations for equal leveling of cavity wall leaves:
 - Every course containing vertical twist type ties or other rigid ties.
 - Every third tie course for double triangle/ butterfly ties.
 - Courses in which lintels are to be bedded.
- Lift height (maximum): 1.2 m above any other part of work at any time.
- Daily lift height (maximum): 1.5 m for any one leaf.

550 FACEWORK

- Commencement of facework: Not less than 150 mm below finished level of adjoining ground or external works level.
- Brick/ block selection: Do not use units with damaged faces or arrises.
- Colour Mixing: The trade contractor shall mix from different packs (minimum 3) and deliveries to avoid patches, horizontal banding and racking back marks in the finished work.
- Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.
- Coursing: Evenly spaced using gauge rods. To produce satisfactory junctions and joints with built-in elements and components.

600 ALTERATIONS/ EXTENSIONS

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

650 FIRE STOPPING

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

F30 ACCESSORIES/ SUNDRY ITEMS FOR BRICK/ BLOCK/ STONE WALLING

CAVITIES

- 110 CONCRETE FILL TO BASE OF CAVITY
- Concrete fill to base of cavity: As shown on drawings
 - Concrete generally: To BS EN 206-1 and BS 8500-2.
 - Designated concrete: GEN1 or Standard mix ST2 with high workability.
 - Extent: Maintain 75 mm between top of fill and external ground level and a minimum of 225 mm between top of fill and ground level dpc.
 - Cleanliness: Keep cavity faces, ties and dpcs free from mortar and debris.
- 130 PERPEND JOINT WEEP HOLES
- Form: Open clear perpend joint.
 - Locations: Through outer leaf, immediately above base of cavity, at cavity trays, stepped dpcs and over openings. 75 mm above top of cavity fill at base of cavity.
 - Provision: At not greater than 1000 mm centres and not less than two over openings.
- 132 PERPEND JOINT PLASTICS WEEP HOLES
- Manufacturer: Cavity Trays. (Tel: 01935 474769)
 - Product reference: Beak Weep
 - Colour: Glass clear polypropylene
 - Locations: Through outer leaf, immediately above base of cavity at cavity trays, stepped dpcs and external openings. 75 mm above top of cavity fill at base of cavity.
 - Provision: At not greater than 1000 mm centres and not less than two over openings.
- 151 PARTIAL FILL CAVITY INSULATION: To New External Partially Filled Cavity Wall
- Insulation: Celotex tuff-R CW3000.
 - Manufacturer: Celotex Ltd (Tel: 01473 822093).
 - Thickness (nominal): 60mm.
 - Placement: Secure against face of inner leaf.
 - Residual cavity: 15mm Clear and unobstructed.
 - Joints between boards, at closures and penetrations: No gaps and free from mortar and debris.
 - The external cavity wall construction is to be a total of 292.5 mm thick with a U value of at least 0.30W/m²K
- 160 AIR BRICKS IN EXTERNAL WALLING
- Standard: To BS 493, class 1.
 - Manufacturer: Red Bank Manufacturing Company Ltd (0800 3285243)
 - Product reference: Red Bank Air Bricks. (List number 374).
 - Work sizes: 215mm x 215mm x 50mm. (Minimum Free Air Space per unit 10250mm²).
 - Material/ colour: To be advised subject to sample approval.
 - Placement: Built in with no gaps at joints.

- 165 GRATINGS/ VENTILATORS IN INTERNAL WALLING
- Refer to M&E Consultant's specification.
- 171 VENTILATION DUCTS IN EXTERNAL WALLING
- Refer to M&E Consultant's specification.
- 180 CAVITY CLOSERS: To New External Partially Filled Cavity Wall
- Manufacturer: Cavity Trays. (Tel: 01935 474769)
- Product reference: Type V Cavicloser for 750mm cavity.
- Accessories: as per manufacturer's recommendation.

REINFORCING / FIXING ACCESSORIES

- 210 CAVITY WALL TIES USED WITH PARTIAL INSULATION: To New External Partially Filled Cavity Wall
- Type: Staifix HRT4-200.
- Manufacturer: Ancon Building Products (Tel: +44 (0) 114 275 5224)
- Material/ finish: Stainless Steel.
- Sizes: For 750mm cavity
- Tie mounted insulation retaining clips: As recommended by tie manufacturer (Staifix Universal Retaining Clips)
- 230 HEAD RESTRAINT: FOR BLOCKWORK WALLS
- Standard: To be installed strictly in accordance with the manufacturer's instructions.
- Type: Ancon FHR Head Restraint with Fixing. Refer to Structural Engineer's Specification.
- Manufacturer: Expamet (Tel: 01429 866611).
- Material/ finish: SS.
- 233 FIXING TIES IN MASONRY CAVITY WALLS WITH PARTIAL FILL CAVITY INSULATION
- Embedment in mortar beds (minimum): 50 mm.
- Placement: Sloping downwards towards outer leaf without bending. Drip centred in the cavity and pointing downwards.
- Spacing: Evenly spaced in non staggered horizontal and vertical rows:
- Horizontal centres: 900mm (unless specified otherwise).
- Vertical centres: 450mm (unless specified otherwise).
- Spacing centres of top (eaves) row of ties: 450mm.
- Provision of additional ties: Within 225 mm of reveals of unbonded openings.
- 241 WALL STARTERS/ CONNECTORS:
- Manufacturer: Ancon Building Products (Tel: +44 (0) 114 275 5224)..
- Product reference: Stairfix Universal Wall Starter System . Refer to Structural Engineer's Specification.
- Material/ finish: SS.
- Sizes: Refer to Structural Engineer's Specification..
- Sealant to external vertical joint: Soudal Silirub 2 .
- Manufacturer: AB Sealant Ltd (Tel:01264 359984)
- Colour: Buff or Portland Stone . To be advised subject to sample approval.
Joint preparation and sealant application: As section Z22.

- 242 MESHWORK JOINT REINFORCEMENT
- Standard: Refer to Structural Engineer's Specification.

DAMP PROOF COURSE

- 310 DAMP PROOF COURSE
- Manufacturer: Timloc Building Products (Tel: 01405 765567).
- Product reference: Timloc System 6000 High performance housing grade damp proof coursing polymeric DPC with joint supports as recommended..
- Placement: Seal all laps with dpcs and/ or cavity trays to provide a free draining and watertight installation.
- Installation: To be installed strictly in accordance with the manufacturer's instructions

- 370 PREFORMED CAVITY TRAYS:
- Manufacturer: Cavity Trays. (Tel: 01935 474769).
- Product references and locations: Type C Cavitrays for use with proprietary lintels.
- Product references and locations: Type Q Arresting Barrier for use with facing brick lining to courtyard area outside Bar room LG12 .

- 390 SITE FORMED DPC/ CAVITY TRAY JUNCTIONS/ STOP ENDS
- Three dimensional changes in shape: Form to provide a free draining and watertight installation.
- Alternative use of preformed cloaks/ stop ends: Submit proposals.

INSTALLATION OF DPCS / CAVITY TRAYS

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

- 475 CAVITY TRAYS FORMED IN SITU: Dpcs which span cavities to prevent the downward ingress of water to be:
- Accurately formed to the profiles shown on drawings, and firmly secured.
- In unjointed lengths wherever possible, otherwise lapped at least 100 mm and sealed using adhesive/mastic/torching in accordance with manufacturer's recommendations to ensure a fully watertight installation.
- Fully supported over the cavity, when horizontal, by a cavity closer.

- Prevented from sagging when stepped up towards the inner leaf.
 - Carefully cleaned to remove debris and mortar droppings before they set.
 - Carefully protected from perforation and other damage.
- 485 CAVITY TRAYS OVER OPENINGS AND OTHER CAVITY BRIDGINGS to extend not less than 150 mm beyond ends of lintels/bridgings.
- 495 INSTALLATION OF GAS RESISTANT DPCS/ CAVITY TRAYS
- Joint treatment: Use unjointed wherever possible, otherwise lap at least 150 mm and seal to form gas and watertight installation.
 - Joint with damp proof membrane: Overlap dpc/ cavity tray not less than 150 mm.
- 560 INSTALLATION OF VERTICAL DPCS
- Form: In one piece wherever possible.
 - Joints: Upper part overlapping lower not less than 100 mm.
 - Dpcs to jambs of openings: Fully lap behind cavity tray/ lintel at head and over horizontal dpc at sill. Project not less than 25 mm into cavity and maintain full contact with frames.
 - Fixing of jamb dpcs to back of built in timber frames: Secure using galvanized clout nails or staples.
- 570 JAMB DPCS: Ensure that dpcs to jambs of openings:
- Fully lap behind cavity tray/lintel at head and over horizontal dpc at sill.
 - Project not less than 25 mm into cavity.
 - Are in full contact with frames.
- 780 JAMB DPCS TO BUILT IN TIMBER FRAMES: Fix to back of timber frames which are to be built in, using galvanized clout nails or staples.
- 561 COLD WEATHER WORKING: In cold weather warm dpc rolls before unrolling, to avoid cracking.
- 562 GROUND LEVEL DPCS: Ensure continuity of dpc with damp proof membrane.
- 563 STEPPED DPCS: Where dpcs are installed in external walls on sloping ground, ensure that they are never less than 150 mm above finished ground level.
- 564 SILL DPCS to be in one piece and turned up at the back if the sill is in contact with any part of the inner leaf.

JOINTS

- 615 MOVEMENT JOINTS WITHOUT SEALANT
- Filler: Flexel or similar approved
 - Build in as the work proceeds, completely filling the joint but without projecting into cavities. Thickness of filler to match design width of joint.

LINTELS

- 750 PREFABRICATED STEEL LINTELS:
- Standard: To BS EN 845-2.
- Refer to Structural Engineer's specifications.
- 751 STEEL WIND POSTS/BRICKWORK/BLOCKWORK REINFORCEMENT
- Note that cavity walling will need reinforcement to resist horizontal windloading.
Reference should be made to the structural engineer's drawings for details

Z21 MORTARS

To be read with Preliminaries/ General conditions.

CEMENT GAUGED MORTARS

110 CEMENT GAUGED MORTAR MIXES

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

120 SAND FOR SITE MADE CEMENT GAUGED MASONRY MORTARS

- Standard: To BS EN 13139.
- Grading: 0/2 (FP or MP).
 - Fines content where the proportion of sand in a mortar mix is specified as a range

(e.g. 1:1:

5-6):

Lower proportion of sand: Use category 3 fines.

Higher proportion of sand: Use category 2 fines.

- Sand for facework mortar: Maintain consistent colour and texture. Obtain from one source.

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

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

135 SITE MADE LIME:SAND FOR CEMENT GAUGED MASONRY MORTARS

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

160 CEMENTS FOR MORTARS

- Cement: To BS EN 197-1 and CE marked.
 - Types: Portland cement, CEM I.
Portland limestone cement, CEM II/A-L or CEM II/A-LL.
Portland slag cement, CEM II/B-S.
Portland fly ash cement, CEM II/B-V.
 - Strength class: 32.5, 42.5 or 52.5.
- White cement: To BS EN 197-1 and CE marked.
 - Type: Portland cement, CEM I.
 - Strength class: 52.5.
- Sulfate resisting Portland cement:
 - Types: To BS 4027 and Kitemarked.
To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - Strength class: 32.5, 42.5 or 52.5.
- Masonry cement: To BS EN 413-1 and CE marked.
Class: MC 12.5.

180 ADMIXTURES FOR SITE MADE CEMENT GAUGED MORTARS

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

190 RETARDED READY TO USE CEMENT GAUGED MASONRY MORTARS

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

210 MAKING CEMENT GAUGED MORTARS

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

LIME: SAND MORTARS

310 LIME: SAND MORTAR MIXES

- Manufacturer: Telling Lime Products Ltd (01902 789 777).
 - Product reference: Unilit 35M.
- Specification: Mortar will be pre-mixed. Storage, preparation and application to be strictly in accordance with manufacturer's recommendation.

320 SAND FOR LIME:SAND MASONRY MORTARS

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

345 ADMIXTURES FOR HYDRAULIC LIME: SAND MORTARS

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

360 MAKING LIME: SAND MORTARS GENERALLY

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
- Contamination: Prevent intermixing with other materials, including cement.

400 MAKING HYDRAULIC LIME: SAND MORTARS

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

J42 SINGLE LAYER POLYMERIC SHEET ROOF COVERINGS

To be read with Preliminaries/ General conditions.

TYPES OF ROOF COVERING

110A WARM DECK ROOF COVERING New Build

- Note: The proposed new build must be checked for compliance with the current Part L of the Building Regulations, Approved Documents:
 - Conservation of fuel and power in new dwellings (ADL1A)
 - Conservation of fuel and power in new buildings other than dwellings (ADL2A)
- Substrate: Plywood
- Preparation: as clause 610
- Roof covering: Alwitra, Product of ICB (International Construction Bureau) Ltd.
 - Unit 9-11 Fleets Industrial Estate, Willis Way, Poole, BH15 3SU
 - Tel: 01202 785200
 - Contact: Mike Williams 07770 660998
 - Web: www.icb.uk.com.
- Lower protection layer (loose laid): Not required.
- Vapour control layer: Self Adhesive as clause 395.
 - Laying as clause 675
- Insulation: Rigid PIR Foam roofboard as clause 420.
 - Attachment: Fully Bonded or Mechanically fixed as clause 680
- Separating layer (loose laid): Not required.
- Waterproof membrane: Alwitra Evalon® VSK .
 - Thickness: 1.2 mm + 1.5mm backing and self adhesive backing .
 - Width: 1.05m .
 - Roll length: 25 m .
 - Colour: Light Grey .
- Accessories:
 - ICB Primer SK as clause 320
 - Alwitra Standard As Clause 470
 - Barrial As Clause As Clause 481
 - Evalon/Evalastic Walkway Tiles As Clause 484/(Evalon Only) 847
 - Lightning Conductor Clips As Clause 493
 - ICB Capping As Clause 778 .

PERFORMANCE

210 ROOF PERFORMANCE

- Roof covering: Secure, free draining and weathertight.

220 AVOIDANCE OF INTERSTITIAL CONDENSATION: WARM AND INVERTED ROOFS

- Determine: Interstitial condensation risk of roof construction as recommended in BS 6229.
- Basic design data:
 - Outdoor notional psychrometric conditions, winter:
 - Temperature: -5°C.
 - Relative humidity: 90%.
 - Vapour pressure: 0.36 kPa.
 - Duration: 60 days.
 - Outdoor notional psychrometric conditions, summer:
 - Temperature: 18°C.
 - Relative humidity: 65%.
 - Vapour pressure: 1.34 kPa.
 - Duration: 60 days.
 - Indoor notional psychrometric conditions:

Temperature: TBC.
Relative humidity: TBC.
Vapour pressure: TBC.

- Winter interstitial condensate (warm roof):
 - Calculated amount (maximum): 0.35 kg/m².
 - Calculated annual net retention: Nil.
- Vapour control layer: If necessary, provide a suitable membrane or sealed deck so that damage and nuisance from interstitial condensation do not occur.

225 AVOIDANCE OF INTERSTITIAL CONDENSATION: WARM AND INVERTED ROOFS

- Determine: Interstitial condensation risk of roof construction as recommended in BS 5250, annex D.
- Vapour control layer: If necessary, provide a suitable membrane so that damage and nuisance from interstitial condensation do not occur.

PRODUCTS

310 ANCILLIARY PRODUCTS AND ACCESSORIES

- Types: Recommended by waterproof membrane manufacturer.

320 PRIMER to warm roof

- Type: Adhesive primer.
- Manufacturer: ICB (International Construction Bureau) Ltd.
 - Product reference: VSK - Primer.

345A PERIMETER TRIMS AND FLASHINGS

- Manufacturer: Alwitra, Product of ICB (International Construction Bureau) Ltd.
 - Web: www.icb.uk.com.
 - Email: info@icb.uk.com.
 - Product reference: Trims and flashings
- Type: ICB Capping profile.

395 VAPOUR CONTROL LAYER

- Type: Self Adhesive Bituminous membrane .
- Manufacturer: Product of I.C.B (International Construction Bureau) Ltd.
 - Product reference: EvaVap.
- Thickness: 0.6mm.
- Vapour resistance: 11,800 MN s/g.

400A WATERPROOF MEMBRANE

- Manufacturer: Alwitra, Product of ICB (International Construction Bureau) Ltd.
 - Web: www.icb.uk.com.
 - Email: info@icb.uk.com.
 - Product reference: Alwitra Evalon® VSK.
- Thickness: 1.2 mm + 1.5mm backing & self adhesive coating.
- Width: 1.05m.
- Roll length: 25 m.
- Colour: Light grey.

420A RIGID PIR FOAM WARM DECK ROOF INSULATION

- Standard: Rigid polyisocyanurate foam (PIR) roofboard to BS EN 13165.
- Manufacturer: Product of I.C.B (International Construction Bureau) Ltd.
 - Product reference: EvaTherm A.
- Grade: 150 kPa.
- Edges: Square.
- Thickness: TBA.
- Facing: Glass tissue.

470 RAINWATER OUTLETS

- Manufacturer: ALWITRA® Roofing Systems
- Ref: Standard Outlet with Vertical/Horizontal Spigot and Top Element
- Diameter: 100mm or 125mm
- Outlet Body manufactured from injection moulded rigid polyurethane, with a factory fused EVALON® connecting flange and complete with flat grating. Allow to supply and install outlet including all connections to down pipes, and to hot air weld connecting flange to main EVALON® field sheet.

481 ROOF SAFETY RAILING SYSTEM

- Supply roof safety system.
- Supplier: ICB (International Construction Bureau) Ltd.
 - Ref: TBC
 - Post Type: TBC
 - Shoe Type: Z
 - Method Fixing: TBC
 - Colour: TBC
- Minimum Height from walking surface. 1100mm
- Skirting. Obligatory if Parapet is less than 150mm high.
- Fixings should be stainless steel and must be compliant with loading.

484 WALKWAY TILES

- Supply and lay
- Ref: Walkway Tiles
- Size: 600mm x 800mm
- Supplier: ICB (International Construction Bureau) Ltd, Poole, Tel: 01202 785200.
- Colour: Grey
- Fixing: Use 50mm wide edge weld/bond as below:
 - To Evalon field sheet: Use EvaStick and adhere to field sheet.

493 LIGHTNING CONDUCTOR ATTACHMENT

- Supply and install lightning conductor clips, solvent welded to clean membrane surface.
- Manufacturer: ICB (International Construction Bureau) Ltd.
- Ref: ICB Lightning Conductors Clip for Flat Bars.
- Fixing Centres: 1000mm C/cs on Horizontal surfaces, 500mm C/cs on Vertical Surfaces.

EXECUTION GENERALLY

510 ADVERSE WEATHER

- General: Do not lay membrane at temperatures below 5°C or in wet or damp conditions unless effective temporary cover is provided over working area.
- Unfinished areas of roof: Keep dry and protect edges of laid membrane from wind action.

520 INCOMPLETE WORK

- End of working day: Provide temporary seal to prevent water infiltration.
- On resumption of work: Cut away tail of membrane from completed area and remove from roof.

530 APPLYING PRIMERS

- Coverage per coat (minimum): to be advised.
- Surface coverage: Even and full.
- Coats: Fully bonded. Allow volatiles to dry off thoroughly between coats.

SUBSTRATES/ VAPOUR CONTROL LAYERS/ WARM DECK ROOF INSULATION

610 SUITABILITY OF SUBSTRATES

- Surfaces to be covered: Secure, clean, dry, smooth, free from frost, contaminants, voids and protrusions.
- Preliminary work: Complete, including
 - Grading to correct falls.
 - Formation of upstands, kerbs, box gutters, sumps, grooves, chases and expansion joints.
 - Fixing of battens, fillets and anchoring plugs/ strips.
- Moisture content and stability of substrate: Must not impair integrity of roof.

675 BITUMEN VAPOUR CONTROL LAYER SINGLE SIDED SELF ADHESIVE

- Sweep all areas of roof to remove any debris, all moisture needs to be dried. Remove anything which may impair adhesion. Remove any nibs or protrusions which may puncture the VCL.
- Apply cut back bitumen primer to roof substrate. Wait for primer to dry.
- VCL is to be laid without wrinkles, do not stretch. Lay over roof area, cut to size. (Remembering to go up the upstand to the height of the insulation). Peel underside protective paper whilst applying pressure to the VCL with a soft broom or rag.

680 LAYING WARM DECK ROOF INSULATION

- Setting out:
 - Long edges: Fully supported and running at right angles to structure.
 - End edges: Adequately supported.
 - Joints: Butted together.
 - End joints: Staggered.
- Attachment: Adhesive.
- Mechanical fixing: As drawing.
- Completion: Boards must be in good condition, well fitting and secure.

WATERPROOF MEMBRANES/ ACCESSORIES

719 ALWITRA EVALON® VSK (VET TYPE) POLYMERIC SELF ADHESIVE MEMBRANE AS THE MAIN FIELD SHEET AND EVALON® FOR ALL DETAIL WORK

- VET Terpolymer type single Ply Membrane.
- British Agrément Certificate No. 96/3293
- Factory Mutual Approval for the system No. 1D6A2.AM Class 4470
- Dated 28-8-98
- EMMAQUA Natural Accelerated Outdoor Weathering Test Carried out successfully.
- Fully bitumen compatible
- Fully tested to meet and exceed all current European Design and Performance Standards.
- Thickness: 1.2mm + adhesive (0.8mm)
- Weight: 1.5kg/sqm
- Tensile force: 500N/50mm

720A SELF ADHESIVE BONDING OF WATERPROOF MEMBRANE

- Laying membrane:
 - Do not wrinkle or stretch.
 - Condition at completion: Fully bonded with no air pockets.
 - Surface: Smooth.

730 WELDED JOINTING OF WATERPROOF MEMBRANE

- Side and end joints:
 - Laps (minimum): 40 mm.
 - Preparation: Clean and dry surfaces beyond full width of joint.
 - Sealing: Weld together.
- Seam sealant: Not required.
- Condition at completion: Fully sealed, smooth, weatherproof and free draining.

778 PERIMETER DETAILS

- Supply and install free-floating mill finish aluminium wall capping.
- Manufacturer: ICB (Fabrications) Ltd.
- Ref: ICB Capping
- Width: To be advised
- Allow for all brackets, holders, joint cover plates.
- Extra over for Polyurethane RAL Coating.
- Colour to be RAL: To be advised

SURFACING

847 WALKWAY TILES

- Fixing: Adhered with EvaStick to ICB (International Construction Bureau) Ltd's instructions
- Leaving expansion gap of at least 50mm between each tile.
- Tiles to be laid in accordance with the manufacturer instructions.

COMPLETION

910 INSPECTION

- Interim and final roof inspections: Submit reports.

940 COMPLETION

- Roof areas: Clean.
 - Outlets: Clear.
- Work necessary to provide a weathertight finish: Complete.
- Storage of materials on finished surface: Not permitted.
- Completed membrane: Do not damage. Protect from traffic and adjacent or high level working.

942 SITE VISITS

A visual inspection can be carried out by an ICB Quality Control Engineer to ensure compliance with the Specification and the Manufacturer's recommendations.

Once ICB is satisfied that all works have been carried out correctly and all terms and conditions have been complied with, a warranty can be applied for.

943 WARRANTY

- On satisfactory completion of the contract, the following Warranty options are available:
- 10, 15 or 20 year Product Warranty for the roof covering, available upon application to ICB (International Construction Bureau) Ltd.
- 10, 15 or 20 year Insurance backed Warranty available upon application to Building & Land Guarantee Ltd, BLG House, High Street, Whetstone, Leice

PROFILED SHEETING SPECIFICATION

Fibre cement profiled sheet roofing

System Type:	Warm roof construction
Supports:	150 x 75mm timber purlins at 925mm maximum centres
Roof pitch:	18°
External Sheets:	Semi-compressed fibre cement sheets manufactured to BS EN 494, class A1X. Sheets and fittings are CE marked.
Profile	Profile 3
Manufacturer:	Marley Eternit Ltd, Lichfield Road, Branston, Burton-on-Trent, DE14 3HD
Cover width:	651mm
Colour:	Factory applied heat cured acrylic coating, colour reference
Fittings:	2 piece plain wing ridge Universal ridge roll Eaves comb fillers Plain wing bargeboards Disc finials
Fasteners:	6.5 x 90mm Topfix fasteners for timber.
Quantity:	2 per sheet per purlin
Fixed through:	Crest of profile
End laps:	Minimum 150mm
Sealing:	End laps sealed.
Sealant:	6mm diameter butyl strip
Unsupported overhang:	Maximum 250mm

L10 WINDOWS/ ROOFLIGHTS/ SCREENS/ LOUVRES

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.
- 120 SITE DIMENSIONS AND DRAWINGS
- Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
 - The Trade Contractor's shop drawings showing the exact profiles and detailing of the windows including sash boxes, cill, glazing bars, jamb and head details are to be submitted to the architect electronically and in hard copy (two copies) for comment prior to manufacture.
 - Designated items:
See Scope of Work
- 140 CONTROL SAMPLES
- Procedure:
 - Provide sample of typical aluminium sections to be used for the windows
 - Provide sample of obscured glass specified

PRODUCTS

- 210 ALUMINIUM WINDOWS – FIXED SHUT (high level)
- Manufacturer: PJ Aluminium (Tel: 0845 600 8342)
 - Design wind load: 1kN/m²
 - Powder Coated to RAL number to be advised
 - Glazing: 4mm / 16mm void /4mm double glazed toughened or laminated glass Pilkington Stippolyte level 4 obscured
 - Fixing: Allow for fixing to existing structure. New windows to be fixed in traditional way with at least 1 no. fixing point every 400 mm both vertically and horizontally.
- 211 ALUMINIUM WINDOWS - SLIDING (Kitchen W08)
- Manufacturer: PJ Aluminium (Tel: 0845 600 8342)
 - Design wind load: 1kN/m²
 - Powder Coated to RAL number to be advised
 - Glazing: 4mm / 16mm / 4mm double glazed toughened or laminated clear
 - Fixing: Allow for fixing to existing structure. New windows to be fixed in traditional way with at least 1 no. fixing point every 400 mm both vertically and horizontally.
- 212 ROOFLIGHTS
- Manufacturer: Sterlingbuild (Tel: 01304 898568)
 - 1600mm x 1600mm opening square domed flat glass window
 - Code: WH160160ODGS
 - Electric wall switch
 - Clear
 - 150mm kerb
 - Trickle vent 2 sides WHV

EXECUTION

- 710 PROTECTION OF COMPONENTS
- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry floored and covered storage.
 - Stored components: Stack vertical or near vertical on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.
- 750 FIXING
- General: Windows to be fixed from inside the building
 - Brace and protect components to prevent distortion and damage during construction of adjacent structure.
 - Standard: To BS 8213-4.
- 765 WINDOW INSTALLATION GENERALLY
- Installation: Into prepared openings.
 - Gap between frame edge and surrounding construction: Trade Contractor to show on drawings for approval prior to manufacture.
 - Distortion: Install windows without twist or diagonal racking.

L20 DOORS/ SHUTTERS/ HATCHES

PRELIMINARY INFORMATION/ REQUIREMENTS

- 110 EVIDENCE OF PERFORMANCE
- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.
- 115 FIRE RESISTING DOORS/ DOORSETS/ ASSEMBLIES
- 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 set/ assembly supplied will comply with the specified requirements for fire resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.
- 150 SITE DIMENSIONS
- Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
- 170 CONTROL SAMPLES
- Procedure:
- Finalize component details.
- Supply and fix typical internal door complete with overhead door closer and ironmongery and fix in its frame as part of the quantity required for the project. This is to ensure client approval and that the door closer is suitable for the weight of door
- Obtain approval of appearance, performance and quality before proceeding with purchase of the remainder of the order
- 175 SOUND INSULATION
- No specific requirement

TYPES OF DOORS

230 INTERNAL DOORS: Refer to GA Architects Specification document GA/830/CB/019 dated 08 October 2015 for internal door specification

EXTERNAL DOORS: Refer to GA Architects Specification document GA/830/CB/019 dated 08 October 2015 for external door specification

DOOR FRAMES

330 DOOR FRAMES: See GA Architects drawings 830/T/14 -14F for door details and ironmongery

INSTALLATION

- 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.
- 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 AND/ OR SMOKE CONTROL DOORS/ DOORSETS
- 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 AND/ OR SMOKE CONTROL DOORS/ DOORSETS
- 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:
 - 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.
 - Note that D09 is a pair of doors requiring parliament hinges so that the doors can be folded against the wall and hooked back. Before hanging the doors the contractor should check that the geometry will be compatible with this requirement and advise the architect if not
 - 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 FD 60 doors: 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 in accordance with ironmongery schedule.
- Hinges for fire resisting doors: Positioned in accordance with door leaf manufacturer's recommendations.

851 MASTER KEYS: The following master keys (to pass all doors) should be provided and handed over to the client on completion:

All internal doors: 6 master keys

All external doors: 2 master keys

Notes:

1. The above master keys will be required in addition to the standard provision of two unique keys to each door
2. No master key is required to D14 (plantroom) but 2 unique keys will be required

K32 PANEL CUBICLES

K32 DUCT PANEL ASSEMBLY

Manufacturer: Decra Ltd: 32 – 34 Forest Business Park, Leyton, London E10 7FB
Telephone: 020 8520 4371 sales@decra ltd.co.uk

FREESTYLE DUCT ABOVE VANITIES.

- Panels - 12mm solid laminate with machined black edges.
- Quantity - 3 lift-off panels in height.
- Height - 2400mm nominal ceiling height, with allowance for skirting of 100m.
- Joints - 15mm horizontal gaps between panels 50-100mm vertical gaps
- Flash gap - Laminate strips supplied, to form flash gap to suit.
- Fixings - Lift-off secret-fixing clips, to suit Decra system.
- Colour - Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
-
- **Other requirements:** None

FREESTYLE DUCT WHEELCHAIR ACCESS WC

- Panels - 12mm solid laminate with machined black edges.
- Quantity - 3 lift-off panels in height.
- Height - 2400mm nominal ceiling height, with allowance for skirting of 100m.
- Joints - 15mm horizontal gaps between panels 50-100mm vertical gaps
- Flash gap - Laminate strips supplied, to form flash gap to suit.
- Fixings - Lift-off secret-fixing clips, to suit Decra system.
- Colour - Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
-
- **Other requirements:** None

FREESTYLE STD SGL SHOWER CUBICLE RANGE

- **Divisions**
 - Height (overall): 2100mm nominal above finished floor level.
 - Partitions: 13mm solid laminate.
 - Colour: Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
 - Edge treatment: Machined black crescent safety edge and radiused corners.

- **Pilasters & Doors**
 - Pilasters: 13mm solid laminate.
 - Doors: 13mm solid laminate.
 - Height (overall): 2100mm nominal above finished floor level.
 - Floor clearance: 150mm.
 - Colour: Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
 - Edge treatment: Machined black crescent safety edge and radiused corners.
- **Fittings Generally**
 - Ironmongery: Satin anodised foot, rotary latch, hinges, coat hooks, cleats and headrail.
- **Other requirements:** None

FREESTYLE STD SGL TOILET CUBICLE RANGE MALE AND FEMALES.

- **Divisions**
 - Height (overall): 2100mm nominal above finished floor level.
 - Partitions: 13mm solid laminate.
 - Colour: Single choice of colours from the Decra standard colours for washroom systems- Colour as specified on the specification.
 - Edge treatment: Machined black crescent safety edge and radiused corners.
- **Pilasters & Doors**
 - Pilasters: 13mm solid laminate.
 - Doors: 13mm solid laminate.
 - Height (overall): 2100mm nominal above finished floor level.
 - Floor clearance: 150mm.
 - Colour: Single choice of colours from the Decra standard colours for washroom systems- Colour as specified on the specification.
 - Edge treatment: Machined black crescent safety edge and radiused corners.
- **Fittings Generally**
 - Ironmongery: Satin anodised foot, rotary latch, hinges, coat hooks, cleats and headrail.
- **Other requirements:** None

FREESTYLE DUCT G14 SGL PANELS

- Panels - 12mm solid laminate with machined black edges.
 - Quantity - 3 lift-off panels in height.
 - Height - 2400mm nominal ceiling height, with allowance for skirting of 100m.
 - Joints - 15mm horizontal gaps between panels 50-100mm vertical gaps
 - Flash gap - Laminate strips supplied, to form flash gap to suit.
 - Fixings - Lift-off secret-fixing clips, to suit Decra system.
 - Colour - Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
- **Other requirements:** None

FREESTYLE DUCT PANELS FOR WCS AND SHOWERS

- Panels - 12mm solid laminate with machined black edges.
 - Quantity - 3 lift-off panels in height.
 - Height - 2400mm nominal ceiling height, with allowance for skirting of 100mm.
 - Joints - 15mm horizontal gaps between panels 50-100mm vertical gaps
 - Flash gap - Laminate strips supplied, to form flash gap to suit.
 - Fixings - Lift-off secret-fixing clips, to suit Decra system.
 - Colour - Single choice of colours from the Decra standard colours for washroom systems- Colours Specified per area as on the specification.
 -
- **Other requirements:** None

LEVADA VANITY TROUGH

Trough - 13mm thickness Corian solid surfacing, fabricated to form a vanity trough to Decra's standard detail. (To architect's drawing)

Colour - to be advised

Substrate - 18mm MR MDF substrate.

Depth - 600mm approx overall.

Front apron - 250mm.

Upstand - 300mm

Edge - front edge with pencil-round detail. All other edges - arrises removed

Falls - bottom thermoformed for falls to wastes

Support - PAR softwood ladder frames, constructed to support panels and flash gap. (Wall-mounted powder-coated mild steel cantilever brackets) (Floor-mounted powder-coated mild steel cantilever brackets)

Underpanels -19mm o/a, high-pressure laminate on moisture-resistant core, square edged to suit. (Colour to be advised)

Wastes - dome wastes supplied. *Traps etc by others*

N10 BENCHING AND COAT HOOK RAIL

BENCHING AND COAT HOOK RAILS

Manufacturer: Decra Ltd: 32 – 34 Forest Business Park, Leyton, London E10 7FB
Telephone: 020 8520 4371 sales@decraltd.co.uk

- Material - Hardwood seating slats mounted on galvanised steel, freestanding system.
- Colour - Standard hardwood colour.
- **Other requirements:** Coat Hooks will be mounted onto hardwood slats as same specification as the benching.

N13 SANITARY APPLIANCES AND FITTINGS

To be read with Preliminaries/General conditions.

300/01

WCS AND CISTERNS

- WC STANDARD: To DEFRA WC suite performance specification and approved by relevant water company
- Type: Back to wall, concealed cistern
 - Pan:
 - Standards: To BS EN 997 and BS 3402
 - Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Chartham rimless comfort height (425mm to rim) btw wc ref CHWC103
 - Material: Vitreous china, white.
- Seat and Cover:
 - Standard: BS1254
 - Manufacturer: SanCeram.
 - Product Reference: Chartham seat, no cover with stainless steel hinges, white ref CHWC112
 - Material: Plastic
- Pan Connector:
 - Standard: To BS 5627
 - Manufacturer: Contractor's choice
 - Product Reference: Contractor's choice
 - Colour: White.
- Cistern:
 - Standard: To comply with DEFRA performance specification
 - Manufacturer: Dudley
 - Product Reference: Sensor Dual flush cistern ref CIST109
 - Material: Plastic
 - Colour and finish: Not applicable
- Flushing Arrangement:
 - Manufacturer: SanCeram
 - Operating control: Sensor flush
 - Water supply connection: As recommended by manufacturer
- Flush pipe: Concealed
 - Manufacturer: Contractor's choice
 - Product Reference: Contractor's choice
 - Material: Plastic
- Accessories:
 - Floor fixing kit supplied by manufacturer
 - Transformer to convert sensor flush to mains powered Ref: CIST110

300/02

WCS AND CISTERNS FOR AMBULENT CUBICLES

- WC STANDARD: To DEFRA WC suite performance specification and approved by relevant water company
- Type: Back to wall, concealed cistern
 - Pan:
 - Standards: To BS EN 997 and BS 3402
 - Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Chartham rimless raised height (450mm to rim) back to wall WC Ref: CHWC104
 - Material: Vitreous china, white.
 - Seat and Cover:
 - Standard: BS1254
 - Manufacturer: SanCeram.
 - Product Reference: Chartham seat, no cover with stainless steel hinges, white Ref: CHWC112
 - Material: Plastic
 - Pan Connector:
 - Standard: To BS 5627
 - Manufacturer: Contractor's choice
 - Product Reference: Contractor's choice
 - Colour: White.
 - Cistern:
 - Standard: To comply with DEFRA performance specification
 - Manufacturer: Dudley
 - Product Reference: Sensor Dual flush cistern Ref: CIST109
 - Material: Plastic
 - Colour and finish: Not applicable
 - Flushing Arrangement:
 - Manufacturer: SanCeram
 - Operating control: Sensor flush
 - Water supply connection: As recommended by manufacturer
 - Flush pipe: Concealed
 - Manufacturer: Contractor's choice
 - Product Reference: Contractor's choice
 - Material: Plastic
 - Accessories:
 - Floor fixing kit supplied by manufacturer
 - Transformer to convert sensor flush to mains powered Ref: CIST110

311/01

DOCUMENT M PACKAGES

- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product Reference: SanCeram left handed Back to wall WC Doc M pack with Blue seat and rails Ref: SCDMBTWLB
- Type approval certificate: Submit

315/01

URINALS AND AUTO FLUSHING CISTERNS

- Urinals:
 - Standards: To BS 3402, BS EN 13407
 - Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Langley concealed trap urinal Ref: LLUR101
 - Material: Vitreous china, white.
- Waste:
 - Standards: To BS EN 274-1, 2 & 3
 - Manufacturer: SanCeram
 - Product Reference: URIN116
 - Size 1 ½"
 - Material: Plastic
 - Tail: Unslotted
- Traps:
 - Standards: To BS EN 274-1, 2 & 3
 - Manufacturer: McAlpine
 - Product Reference: P trap Ref: L10 and elbow Ref: URIN117
 - Size: 1 ½"
 - Material: Plastic
 - Depth of seal: 75mm
- Flush:
 - Operating control: Dudley Electroflo urinal sensor kit, mains control kit with sensor Ref: URIN109
 - Flush pipe: Contractor's choice
 - Product Reference: Contractor's choice
 - Material: Contractor's choice
- Accessories:
 - Langley back inlet spreader ref: LLUR102
 - Langley Urinal fixings ref: LLUR103

- 335/01 WASH BASINS FOR OFFICIALS AREA
- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Chartham 380mm wall hung basin, right hand tap hole, no overflow or chainhole Ref: CHWB102
 - Size 380mm x 300mm
 - Material: Viterous china, white
 - Tap/Chainstay/Overflow holes:
 - Water supply fittings:
 - Manufacturer: DVS
 - Product reference: Aquarius A45 sensor Tap Ref: AT03-011
 - Operation: Sensor
 - Waste:
 - Standards: To BS EN 274-1, 2 & 3
 - Manufacturer: SanCeram
 - Product Reference: Strainer waste Ref: TSWC102
 - Size 1 ¼"
 - Material: Chrome plated
 - Tail: Unslotted
 - Traps:
 - Standards: To BS EN 274-1, 2 & 3
 - Manufacturer: McAlpine
 - Product Reference: Resealing plastic bottle trap Ref: A10R
 - Size: 1 ¼"
 - Material: Plastic
 - Depth of seal: 75mm:
 - Accessories:
 - Thermostatic mixing valve Ref: SCBW113
 - Supplied with Fischer wall fixings
 - Single Station mains powered tap control box Ref: AT00-002
- 335/02 TROUGH TAPS FOR CHANGING ROOMS & PUBLIC WC AREAS
- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: *Trough Supplied by others*
 - Size: n/a
 - Material: n/a
 - Tap/Chain stay/Overflow holes:
 - Water supply fittings:
 - Manufacturer: Dart Valley Systems
 - Product reference: Aquarius wall mounted straight 150mm projection sensor tap Ref: AT02-001
 - Operation: Sensor
 - Accessories
 - Mains operation Two station mains powered control kit Ref: AT00-003

- 375/01 SHOWER UNITS
- Shower fittings:
 - Manufacturer: The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Operating control:
 - Manufacturer: SanCeram
 - Product Reference: Concealed sequential lever operated thermostatic shower valve Ref: SHWR112
 - Finish: Chrome plated
 - Head:
 - Manufacturer: SanCeram
 - Product Reference: Anti-vandal, anti-ligature fixed shower head Ref: SHWR118
 - Material: Chrome plated
 - Accessories:
- 429/01 COAT HOOKS
- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 335430 Fax: 01474 335435 www.theswc.co.uk
 - Product: Stainless steel coat hook with integral rubber buffer and concealed fixing in brush satin finish.
 - Product Ref: 0397094
 - Materials: Stainless steel
 - Dimensions: 50mm Ø faceplate x 65mm hook length
- 436/01 HANDRAILS AND GRAB BARS FOR AMBULANT CUBICLE
- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 335430 Fax: 01474 335435 www.theswc.co.uk
 - Product: Straight grab rail designed to meet all Document M Building Regulation and Health Technical Memorandum (HTM) requirements.
 - Product Code: SanCeram Grab Rail 600mm Blue – Ref: GRAB105
 - Materials: Powder coated aluminium
 - Dimensions: 35mm Ø tube x 600mm
- 458/01 SOAP DISPENSER
- Liquid soap dispenser:
 - Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Wall mounted liquid soap dispenser Ref: 0302525
 - Material: Stainless Steel
 - Finish: brushed
 - Accessories:
- 472/01 WARM-AIR HAND DRIERS
- Warm air driers:
 - Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court, West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 338300 Fax: 01474 338301 www.theswc.co.uk
 - Product reference: Warm air hand dryer Ref 0302019
 - Material: Stainless Steel
 - Finish: Brushed

462/01

TOILET PAPER HOLDERS

- Manufacturer: SanCeram, The Sanitaryware Company, Chartwell Court West Mill, Imperial Business Park, Gravesend, Kent, DA11 0DL. Tel: 01474 335430 Fax: 01474 335435 www.theswc.co.uk
- Product: Jumbo toilet roll dispenser, brushed stainless steel front with viewing window.
- Product Ref: 0302527
- Dimensions: 308H x 298W x 114Dmm
- Weight: 1.7kg
- Paper: Un-perforated jumbo rolls with a maximum width of 100mm and 60mm core.
- Maximum roll diameter: 240mm
- Materials: Stainless steel
- Finish: Brushed stainless steel

M60 PAINTING/ CLEAR FINISHING

To be read with Preliminaries/ General Conditions.

COATING SYSTEMS

150 INTERNAL BLOCK WALLS

- Manufacturer: Dulux Trade (Tel: 0870 242 1100)
 - Product reference: Dulux Trade Diamond Eggshell
- Surfaces: Paintgrade blockwork
- Location: All internal block wall surfaces
- Preparation: To be strictly in accordance with Manufacturer's instructions
- Initial coats: 2 mist coats
- Finishing coats: 1 full top coat

151 DOORS FRAMES AND ARCHITRAVES

- Manufacturer: Dulux Trade (Tel: 0870 242 1100)
- Product reference: Dulux Trade Quick Dry
- Location: All internal doors, frames and architraves
- No painting to be carried out with door ironmongery in place
- Preparation: To be strictly in accordance with Manufacturer's instructions;
- Initial coat: 2 coats wood primer and undercoat
- Finishing coats: 2 coats Dulux Quick Dry Gloss

152 VIRENDEEL

- Manufacturer: Dulux (Tel: 0870 242 1100)
- Product reference:
 - Location: All visible surfaces of high level galvanized virendeel (high level steelwork on all four sides of the building)
- Preparation: To be strictly in accordance with Manufacturer's instructions;
- Initial coat: 1 coat metal primer
- Undercoat: 2 coats Dulux Quick Dry undercoat
- Finishing coats: 1 coat Dulux Quick Dry Gloss

PREPARATION

400 PREPARATION GENERALLY

- Standard: In accordance with BS 6150.
- 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, 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
- Replacement: Refurbishment as necessary, refit when coating is dry.

425 IRONMONGERY

- Removal: Before commencing work remove ironmongery from surfaces to be coated.
- Replacement: Refurbish 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.
 - Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
 - Significant rot, corrosion or other degradation of substrates.
- 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 timber.

- 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.
- 490 PREVIOUSLY COATED STEEL
- Defective paintwork: Remove to leave a firm edge and clean bright metal.
 - Sound paintwork: Provide key for subsequent coats.
 - Corrosion and loose scale: Take back to bare metal.
 - Residual rust: Treat with a proprietary removal solution.
 - Bare metal: Apply primer as soon as possible.
 - Remaining areas: Degrease.
- 500 PREPRIMED STEEL
- Areas of defective primer, corrosion and loose scale: Take back to bare metal. Reprime as soon as possible.
- 580 UNCOATED PLASTER
- Nibs, trowel marks and plaster splashes: Scrape off.
 - Over trowelled 'polished' areas: Key lightly.
- 590 UNCOATED PLASTERBOARD
- Depressions around fixings: Fill with stoppers/ fillers.
- 601 UNCOATED PLASTERBOARD – TO RECEIVE TEXTURED COATING
- Joints: Fill, tape and feather out with materials recommended by textured coating manufacturer.
- 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.

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.
 - Over painting: 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.

RONAFLOOR EPOXY FLOOR MORTAR

Epoxy floor screed and floor repair mortar

FEATURES

- good workability for small and large areas
- can be installed from 5mm
- extremely hard wearing
- good surface finish
- resistant to mechanical and chemical attack
- can be left with a slip resistant finish
- rapid grade can be trafficked after only 4 hours at 20°C
- range of colours available

DESCRIPTION

-RonaFloor Epoxy Floor Mortar Standard and Rapid are high performance epoxy resin mortars for repairing existing floors and providing new wearing surfaces in light and heavy traffic areas. Its formulation allows thin section application down to 5mm.

-RonaFloor Epoxy Floor Mortar offers good mechanical resistance and will resist attack from most industrial chemicals including acids, alkalis, oils, fats, solvents and foodstuffs.

-The rapid strength gain properties of RonaFloor Epoxy Floor Mortar Rapid shortens the pot life and working time of the mixed mortar. Whilst it is suitable for floor repairs its short pot life makes it unsuitable for laying floor screeds. Surfaces repaired with RonaFloor Epoxy Floor Mortar Rapid can be accessed by foot and heavy traffic after 4 hours (at 20°C).

PHYSICAL PROPERTIES @ 20°C (STANDARD GRADE)

Volume solids	100%
Min/max thickness	5mm / 50mm
Min / max application temperature	10°C / 25oC
Pot life (approx).	30-45 minutes
Hard dry/foot traffic	10-12 hours
Full traffic	16 hours
Shelf life	12 months unopened
Full chemical resistance	6 days
Compressive strength	
1 day	49N/mm ²
28 days	70N/mm ²
Flexural strength	
28 days	30N/mm ²

PHYSICAL PROPERTIES (RAPID GRADE)

Volume solids	100%
Min/max thickness	5mm / 50mm
Min / max application temperature	10°C / 25°C
Pot life (approx).	12—15 minutes
Hard dry/foot traffic	3—4 hours
Full traffic	4 hours
Shelf life	12 months unopened
Full chemical resistance	6 days
Compressive strength	
1 day	26N/mm ²
28 days	84N/mm ²
Flexural strength	
28 days	25N/mm ²

CHEMICAL RESISTANCE

10% Acetic Acid	Spillage only
10% Lactic Acid	Spillage only
10% Nitric Acid	Spillage only
10% Teepol	Resistant
16% Bleach	Spillage only
25% Ammonia	Spillage only
30% Chromic Acid	Resistant
30% Hydrochloric Acid	Spillage only
50% Phosphoric Acid	Spillage only
50% Sodium Hydroxide	Spillage only
Acetone	Not recommended
Animal Fats	Resistant
Engine Oil	Resistant
Methanol	Spillage only
High Octane Petrol	Resistant
Skydrol	Spillage only
Tap Water	Resistant
Toluene	Spillage only
White Spirit	Resistant
Xylene	Spillage only

YIELD AND COVERAGE

A 5kg pack of RonaFloor Epoxy Floor Mortar (and Rapid) yields approximately 2.1 litres. The coverage rate is approximately 0.21m² @ 10mm.

A 25kg pack of RonaFloor Epoxy Floor Mortar (and Rapid) yields approximately 10.4 litres. The coverage rate is approximately 1.04m² @ 10mm.

A 2.25kg pack of RonaFloor Epoxy Primer will cover approximately 12.5m² and a 4.5kg pack will cover approximately 25m².

INSTRUCTIONS FOR USE

Priming

Add the total contents of Part B (hardener) to Part A (resin) and mix well. Apply at a coverage rate of 0.18kg/m².

Mixing

RonaFloor Epoxy Floor Mortar Standard and Rapid are supplied as a three component materials in a plastic container. Remove all materials from the container; pour the base and activator into the container and mix.

When thoroughly mixed slowly add the supplied aggregate and mix until homogeneous. The product has been designed to be used as a full pack; do not part mix.

Mix with a drill and paddle or similar. Mixing time should be approximately 3-4 minutes by machine and 5-6 minutes by hand. The Standard grade will have a pot life of approximately 30-45 minutes at 20°C; Rapid grade has a pot life of 15 minutes at 20°C.

Application

Place the mixed material onto the wet primer. If the primer has dried it must be scabbled and reapplied. Spread and smooth the material with either a wood or steel float. Working the material will bring resin to the surface to allow it to be finished; avoid overworking the surface.

Day joints should be at 90° to the floor. Feather edging can be used at ramps and doorways etc but is not recommended for day joints. RonaFloor Epoxy Floor Mortar should not be used at temperatures lower than 10°C. Ideally store materials at 15°C to 20°C for 24 hours before use.

Working time - Rapid grade

Note that the working time of the Rapid grade is limited to only 15 minutes at a material, air and substrate temperature of 20°C (Standard 30 - 45 minutes) and within this time it must be transported to the point of application, laid and finished. After this time the mortar will lose workability.

Working Temperatures

RonaFloor Epoxy Floor Mortar Standard or Rapid can be used in most weather conditions and in a wide temperature range, typically from +5°C to 25°C The minimum working temperature is +5°C. Note that at high ambient temperatures the working time of the mix will be reduced; it will be increased at lower

INSTRUCTIONS FOR USE (CONTINUED)

temperatures. Ideally store materials between 10°C and 20°C before use. In areas exposed to sunlight, the substrate can be hotter than the air and material temperature. Work must stop if material, air or substrate temperature exceeds 25°C.

COLOUR RANGE

RonaFloor Epoxy Floor Mortar is available in grey (standard colour), red, green, brown, blue, yellow and charcoal. Note that colour consistency cannot be guaranteed and differences in colour and shading should be expected.

CLEANING

Clean all tools and equipment immediately with RonaFloor Epoxy Floor Mortar Cleaner. RonaFloor Epoxy Floor Mortar is a hardwearing, durable, epoxy floor screed and repair mortar for medium and heavy duty industrial and commercial floors. Its design provides texture and grip for dry and wet environments. As with all flooring of this type there is a compromise between slip resistance and ease of

cleaning. In areas where ease of cleaning and hygiene are important such as laboratories, kitchens and food processing areas, RonaFloor Epoxy Floor Mortar may not be suitable and the Ronacrete Technical Department should be consulted. To ensure the suitability of any product, a sample area should be laid and its performance and ease of cleaning assessed. For additional information please refer to FeRFA publications on the selection and cleaning of resin flooring.

SHELF LIFE AND STORAGE

RonaFloor Epoxy Floor Mortar should be stored unopened between 10°C and 20°C in dry warehouse conditions and out of direct sunlight. In these conditions shelf life is approximately 12 months.

HEALTH AND SAFETY

Wear protective clothing to protect skin and eyes. In case of skin contact wash with soap and water. In case of eye contact flush immediately with clean water. In case of ingestion drink milk or water, do not induce vomiting. Seek medical attention. This product contains no volatile solvents and should cause no problems due to inhalation during use. Although non-flammable RonaFloor Epoxy Floor Mortar will burn in the event of a fire. Extinguish with foam, water mist, CO₂ or dry powder. Breathing apparatus should be worn.

SITE ATTENDANCE

When on site Ronacrete representatives are able, if asked, to give a general indication of the correct method of installing a Ronacrete product. It is important to bear in mind that Ronacrete Ltd is a manufacturer and not an application contractor and it is therefore the responsibility of the contractor and his employer to ensure he is aware of and implements the correct practices and procedures to ensure the correct installation of the product and that liability for its correct installation lies with the contractor and not with Ronacrete Ltd.