L20 DOORS/ SHUTTERS/SCREENS/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).

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/ doorset/ assembly supplied will comply with the specified requirements for fire resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.

120 NON FIRE RESISTING DOORS/ DOORSETS/ ASSEMBLIES
- 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.

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 existing openings/frames to be retained - refer to Internal Openings Schedule 475.S(32).01.

PRODUCTS

240 FIRE RATED WOOD PANELLED DOOR LEAF - TRADITIONAL MOULDINGS
- Locations: new doors in existing fire rated walls typically
- Fire resistance: 30 minutes / 60 minutes - refer to 475.S(32).01 Internal Openings Schedule
- Manufacturer: Early Doors Ltd www.earlydoorltd.com
- Product reference: Victorian Pine Four Panel Fire Door
- Size: 838 x 1981 x 44mm (33 x 78 in.)
- Finish as delivered: factory primed (3 coats) for painting as M60/150.
- Moulded beads: traditional - inset
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01
241 NON FIRE RATED WOOD PANELLED DOOR LEAF - TRADITIONAL MOULDINGS
- Locations: new doors in existing non fire rated walls typically
- Fire resistance: not required
- Manufacturer: Early Doors Ltd   www.earlydoorltd.com
  - Product reference: Victorian Pine Four Panel Door
  - Size: 838 x 1981 x 35mm (33 x 78 in.)
  - Finish as delivered: factory primed (3 coats) for painting as M60/150.
  - Moulded beads: traditional - inset
  - Glazing: none
  - Ironmongery: refer to Ironmongery Schedule 475.S(33).01

242 FIRE RATED WOOD PANELLED REPLACEMENT DOOR LEAF - TRADITIONAL MOULDINGS
- Locations: new replacement door leafs - to be fitted in existing frames (upgraded if necessary as clause 301)
- Fire resistance: 30 minutes / 60 minutes - refer to 475.S(32).01 Internal Openings Schedule
- Manufacturer: Early Doors Ltd   www.earlydoorltd.com
  - Product reference: Victorian Pine Four Panel Fire Door
  - Size: to suit - may require trimming on site (refer to manufacturer’s guidance on limitations). Any trimming to be even to opposing sides.
  - Finish as delivered: factory primed (3 coats) for painting as M60/150.
  - Moulded beads: traditional - inset
  - Glazing: none
  - Ironmongery: refer to Ironmongery Schedule 475.S(33).01

243 NON FIRE RATED WOOD PANELLED REPLACEMENT DOOR LEAF - TRADITIONAL MOULDINGS
- Locations: new replacement door leafs - to be fitted in existing frames
- Fire resistance: not required
- Manufacturer: Early Doors Ltd   www.earlydoorltd.com
  - Product reference: Victorian Pine Four Panel Door
  - Size: to suit - may require trimming on site (refer to manufacturer’s guidance on limitations). Any trimming to be even to opposing sides.
  - Finish as delivered: factory primed (3 coats) for painting as M60/150.
  - Moulded beads: traditional - inset
  - Glazing: none
  - Ironmongery: refer to Ironmongery Schedule 475.S(33).01

250 FIRE RATED WOOD PANELLED DOOR LEAF(S) - NO MOULDINGS
- Locations: new doors in new partition walls typically
- Fire resistance: 30 minutes / 60 minutes - refer to 475.S(32).01 Internal Openings Schedule
- Manufacturer: Early Doors Ltd   www.earlydoorltd.com
  - Product reference: Victorian White Primed Shaker Fire Door
  - Size: 838 x 1981 x 44mm (33 x 78 in.)
  - note: DF16 to be 610 x 1981 x 35mm (24 x 78 in.)
  - Finish as delivered: factory primed (3 coats) for painting as M60/150.
  - Moulded beads: none
  - Glazing: none
  - Ironmongery: refer to Ironmongery Schedule 475.S(33).01

251 NON FIRE RATED WOOD PANELLED DOOR LEAF - NO MOULDINGS
- Locations: new doors in new partition walls typically (exc. DG15)
- Fire resistance: not required
- Manufacturer: Early Doors Ltd   www.earlydoorltd.com
  - Product reference: Victorian White Primed Four Panel Shaker Style Door
- Size: 838 x 1981 x 35mm (33 x 78 in.)
- Finish as delivered: factory primed (3 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01

252 FIRE RATED WOOD PANELLED REPLACEMENT DOOR LEAF - NO MOULDINGS
- Locations: new replacement door leafs - to be fitted in existing frames
- Fire resistance: 30 minutes / 60 minutes - refer to 475.S(32).01 Internal Openings Schedule
- Manufacturer: Early Doors Ltd www.earlydoorltd.com
- Product reference: Victorian White Primed Shaker Fire Door
- Size: to suit.
  Note: metric or imperial sized door selected to suit existing frame opening - may require trimming on site (refer to manufacturer’s guidance on limitations). Any trimming to be even to opposing sides.
- Finish as delivered: factory primed (3 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01

253 NON FIRE RATED WOOD PANELLED REPLACEMENT DOOR LEAF - NO MOULDINGS
- Locations: new replacement door leafs - to be fitted in existing frames
- Fire resistance: not required
- Manufacturer: Early Doors Ltd www.earlydoorltd.com
- Product reference: Victorian White Primed Four Panel Shaker Style Door
- Size: to suit.
  Note: metric or imperial sized door selected to suit existing frame opening - may require trimming on site (refer to manufacturer’s guidance on limitations). Any trimming to be even to opposing sides.
- Finish as delivered: factory primed (2 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01

254 NON FIRE RATED WOOD PANELLED DOOR LEAF - NO MOULDINGS - DG15
- Locations: DG15 - door to ground floor Accessible WC.
- Fire resistance: not required
- Manufacturer: Premdor www.premdor.co.uk
- Product reference: Premium Vertical 5 Panel Moulded
- Core: Safe 'N' Sound Core
- Size: 926 x 2040 x 35mm
- Finish as delivered: factory primed (min. 2 coats) for painting as M60/150.
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01

260 FIRE RATED/NON FIRE RATED FLUSH SINGLE GIB DOOR LEAFS - TO RECEIVE SALVAGED PANELLING TO ONE FACE - OUTWARD OPENING
- Locations: new doors in existing fire rated walls lined with existing decorative panelling - DG21, DG22, DF10 & DF16
- Fire resistance: not required / 30 minutes - refer to 475.S(32).01 Internal Openings Schedule
- Manufacturer: Invisible Doors www.invisibledoors.co.uk
- Product reference: Arriva - Adjustable Concealed Hinges - to suit flush frame as clause 332.
- Size: approx. 1 no. standard 826 x 2040 x 44mm (DG21 & DG22)
1 no. standard 626 x 2040 x 44mm (DF16) & 1 no. bespoke approx. 818 (tbc on site) x 2040 x 44mm (DF10)
- Finish as delivered: factory primed (2 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01
- Additional requirements: salvaged panelling to be applied to flush face as relevant component drawing. Note: contractor to advise manufacturer of panelling weight to establish whether an additional hinge should be provided.

261 NON FIRE RATED Flush DOUBLE GIB Door Leaves - TO RECEIVE SALVAGED Panelling TO ONE FACE - INWARD OPENING
- Locations: new door in existing non fire rated wall lined with existing decorative panelling - DG14
- Fire resistance: not required
- Manufacturer: Invisible Doors www.invisibledoors.co.uk
- Product reference: Innova - door leaves to suit flush frame as clause 333.
- Size: 2 no. approx. 626 x 2040 x 54mm - bespoke to suit site structural opening to be set out as relevant component drawing.
- Finish as delivered: factory primed (2 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01
- Additional requirements: salvaged panelling to be applied to flush face as relevant component drawing. Note: contractor to advise manufacturer of panelling weight to establish whether an additional hinge should be provided.

262 NON FIRE RATED Flush DOUBLE GIB Door Leaves - TO RECEIVE WALL CLADDING TO ONE FACE - OUTWARD OPENING
- Locations: new double doors in proposed non fire rated wall to be lined with tongue and groove timber wall cladding as K21/150 - DF13, DF14, DF18, DF21, DS09, DS14, DS15, DS17, DT08, DT11, DB24, DB27 & DB29.
- Fire resistance: not required
- Manufacturer: Invisible Doors www.invisibledoors.co.uk
- Product reference: Arriva - Adjustable Concealed Hinges - door leaves to suit flush frame as clause 332.
- Size: 2 no. approx. 600 x 2040 x 44mm - bespoke to suit site structural opening to be set out as relevant component drawing.
- Finish as delivered: factory primed (2 coats) for painting as M60/150.
- Moulded beads: none
- Glazing: none
- Ironmongery: refer to Ironmongery Schedule 475.S(33).01
- Additional requirements: timber wall cladding K21/150 to be applied to outer door face - note: requirement for chamfered edges adjacent to hinges.

280 INTERNAL GLAZED Doors WITH SIDELIGHT & FANLIGHT (FD30S)
- Location: DB32 - basement corridor
- Fire resistance: to BS 476-22 FD30S (30 min. integrity / 30 min. insulation)
- Description: glazed door leaf with side & fanlight
- Materials: Generally to BS EN 942.
- Frame:
  - Species: Sapele hardwood - measured density 640 kg/m³
  - Frame size: 120 x 45mm
- Door Stop:
  - Species: Sapele hardwood - measured density 640 kg/m³
  - Frame size: 75 x 20mm
  - Fixing: pinned
- Door Leaf Rails/Stiles:
- Species: Sapele hardwood - measured density 640 kg/m$^3$
- Stile size: 100 x 44mm
- Top rail size: 100 x 44mm
- Bottom rail size: 195 x 44mm
- Door Glazing: 15mm Pyrostop 30-10
  - Manifestation: not required
  - Glazing system:
    - Manufacturer: Hodgson Sealants www.hodgsonsealants.com
    - Product: Firestrip 30
    - Dimensions: 12 x 3mm
    - Colour: off-white
    - Beading: Sapele hardwood - measured density 640 kg/m$^3$
      - Dimensions: 20mm high x 16.5mm deep, with 5 x 5mm bolection return.
      - Fixings: 60mm long wood screws at nominal 150mm centres and 50mm from the corners.
- Side & fanlight glazing: 18mm Pyrostop 30-20
  - Manifestation: not required
  - Glazing system:
    - Manufacturer: Hodgson Sealants www.hodgsonsealants.com
    - Product: Firestrip 30
    - Dimensions: 12 x 3mm
    - Colour: off-white
    - Beading: Sapele hardwood - measured density 640 kg/m$^3$
      - Dimensions: 20mm wide x 48mm deep, square edge & flush with frame.
      - Fixings: 60mm long wood screws at nominal 150mm centres and 50mm from the corners and at 45 degrees to the face of the glass.
- Intumescent seals: rebated in door frame to perimeter of door leaf
  - Manufacturer: Lorient Polyproducts Ltd
  - Product: SS Brush Profile LP1504SS Intumescent Smoke Seal
  - Installation: centrally in frame reveal
  - Other requirements: Dufaylite Interden Strip under hinge blade.
- Hinges:
  - Manufacturer: Royde & Tucker www.ratman.co.uk
  - Product: H101 Hi-Load Hinges
  - Dimension: 100 x 35mm
  - Installation: located at 150mm, 1000 and 1800mm, measured down from head of door leaf.
- Ironmongery: refer to ironmongery schedule
- Assembly:
  - Joinery workmanship: As section Z10.
  - Accuracy: To BS 4787-1.
  - Moisture content on delivery: 9 - 13%.
  - Finish as delivered: primed for painting as M60/150.

**300 FIRE RESISTANCE UPGRADE OF EXISTING DOOR - DOOR LEAFS & FRAMES**
- Locations: existing four panel doors to be retained at ground floor level.
- Preparation: remove existing fire protection over-boarding. Remove existing intumescent smoke seals from perimeter of existing door leaf and fill to make good.
- Fire resisting membrane: to one face of existing door leaf panels - refer to relevant component drawing.
  - Manufacturer: Sealmaster www.sealmaster.co.uk
  - Product: FireFace Plus
  - Thickness: 1.8mm
  - Surface texture: woodgrain
- Membrane application: to both faces of existing flat panels between moulded beads, in accordance with the manufacturer’s recommendations.
  - Locations: refer to door component drawings.
  - Bonding: solvent based contact adhesive as recommended by the membrane
manufacturer.
- Perimeter seals: to existing frames
  - Manufacturer: Sealmaster  www.sealmaster.co.uk
  - Smoke seals (FD30S only): Finseal for 2-3mm gaps, bulbseal for 3-6mm gaps.
- Additional requirements:
  - DG05 - component C(32) 02 - add hardwood section to underside of bottom rail of door leaf to extend rail to within 5mm of highest adjacent flt.
  - DG06 - component C(32) 03 - remove existing applied skirting rail from push face of existing door leaf and make good.

301 FIRE RESISTANCE UPGRADE OF EXISTING DOOR - FRAMES ONLY
- Locations: existing frames retained to receive new fire resisting door leafs.
- Perimeter seals:
  - Manufacturer: Sealmaster  www.sealmaster.co.uk
  - Smoke seals (FD30S only): Finseal

330 NEW WOOD DOOR FRAME / LININGS - FIRE RESISTING/SMOKE CONTROL
- Locations: new openings in new/existing fire rated walls
- Materials: Generally to BS EN 942.
  - Species: softwood as table NA1
  - Appearance class: J30.
- Lining width: to match new/existing wall thickness
- Lining thickness: 32mm
- Assembly:
  - Adhesive: WBP - contractor’s choice
  - Joinery workmanship: As section Z10.
  - Preservative treatment: not required
  - Moisture content on delivery: 9-13%
  - Finish as delivered: factory primed (min. 2 coats) for painting as M60/150
- Perimeter seals: to fire doors only:
  - Manufacturer: Sealmaster  www.sealmaster.co.uk
  - Intumescent seals (FD30 only): IF30 rebated into door frame (head & jambs)
  - Intumescent smoke seals (FD30S only): N30 rebated into door frame (head & jambs)
  - Intumescent smoke seals (FD60S only): N60 rebated into door frame (head and jambs)
- Subframe (where required): allow for 18mm play subframe lining to structural openings in masonry walls only.
- Fixing: screwed and pelleted to timber substrate (new timber studwork or ply subframe in masonry wall openings).
- Additional requirements: apply intumescent sealant as clause 821 to perimeter joints between wall and door frame.

331 NEW WOOD DOOR FRAME / LININGS - NON FIRE RESISTING
- Locations: new openings in new/existing non fire rated walls
- Materials: Generally to BS EN 942.
  - Species: softwood as table NA1
  - Appearance class: J30
- Lining width: to match new/existing wall thickness
- Lining thickness: 32mm
- Assembly:
  - Adhesive: WBP - contractor’s choice
  - Joinery workmanship: As section Z10.
  - Preservative treatment: not required.
  - Moisture content on delivery: 9-13%
  - Finish as delivered: factory primed (min. 2 coats) for painting as M60/150

Refurbishment of 24 Pembridge Gardens, London  Brady Mallalieu Architects
- Subframe (where required): allow for 18mm play subframe lining to structural openings in masonry walls only.
- Fixing: screwed and pelleted to timber substrate (new timber studwork or ply subframe in masonry wall openings).

332 NEW CONCEALED STEEL DOOR FRAME FOR SINGLE GIB DOOR - OUTWARD OPENING
- Locations: DG21, DG22, DF10 & DF16
- Fire resistance: 30 mins. as standard - note: may not be required/applicable - refer to Internal Opening Schedule 475.S(32).01
- Manufacturer: Invisible Doors  www.invisibledoors.co.uk
- Product reference: Arriva - Concealed Hinge
- Material: cold rolled galvaneal steel
- Size: to suit specified door leaf size
- Lining width: to match new/existing wall thickness - tbc on site
- Assembly: factory fabricated to suit site structural opening - refer to drawing relevant component drawing for setting out information
- Finish as delivered: unfinished - requires site application of metal primer then painting as M60/150.
- Subframe: allow for 18mm play subframe lining to structural opening in masonry walls only.
- Fixing: screwed at 200mm centres to timber substrate strictly in accordance with the manufacturer’s recommendations. Mitred corners joined with proprietary alignment insert.
- Other requirements: concealed closer at head.
- Note: requirement to cut return flange from jamb profile in Studio kitchenette locations - substitute exposed capped fixing through jamb lining to behind door stop.

333 NEW CONCEALED STEEL DOOR FRAME FOR DOUBLE GIB DOOR - INWARD OPENING
- Locations: DG14
- Fire resistance: 30 mins. as standard - note: not be required/applicable - refer to Internal Opening Schedule 475.S(32).01
- Manufacturer: Invisible Doors  www.invisibledoors.co.uk
- Product reference: Innova
- Material: cold rolled galvaneal steel
- Size: to suit specified door leaf sizes and structural opening - tbc on site
- Lining width: to match new/existing wall thickness - tbc on site
- Assembly: factory fabricated to suit site structural opening - refer to relevant component drawing for setting out information
- Finish as delivered: unfinished - requires site application of metal primer then painting as M60/150.
- Subframe: allow for 18mm play subframe lining to structural opening in masonry wall.
- Fixing: screwed at 200mm centres to timber substrate strictly in accordance with the manufacturer’s recommendations. Mitred corners joined with proprietary alignment insert.

334 NEW CONCEALED STEEL DOOR FRAME FOR DOUBLE GIB DOORS - OUTWARD OPENING
- Locations:
- Fire resistance: not required
- Manufacturer: Invisible Doors  www.invisibledoors.co.uk
- Product reference: Arriva - Concealed Hinge
- Material: cold rolled galvaneal steel
- Size: to suit specified door leaf size
- Lining width: to match new/existing wall thickness - tbc on site
Assembly: factory fabricated to suit site structural opening - refer to drawing relevant component drawing for setting out information
- Finish as delivered:
  Frame: unfinished - requires site application of metal primer then painting as M60/150.
- Subframe: allow for 18mm play subframe lining to structural opening in masonry walls.
- Fixing: screwed at 200mm centres to timber substrate strictly in accordance with the manufacturer's recommendations. Mitred corners joined with proprietary alignment insert.

550 GLAZED STEEL FRAMED SCREEN - DOUBLE LEAF DOOR WITH SIDELIGHTS & FANLIGHTS
- Location: DG20 - separating Front Entrance Lobby from Main Hallway/Stairwell
- Fire resistance: not required
- Materials and workmanship: As section Z11.
- Structural opening: as existing - site survey to confirm.
- System manufacturer: Crittall  www.crittall-windows.co.uk
  - System product reference: Corporate W20
  - Perimeter frame members: Equal Short Leg Section
  - Door jambs: Anti Finger Trap
  - Door meeting rails: Bullnose (no slave leaf) incorporating brush seal
  - Hinges: Self Aligning
- Finish: factory applied Duralife polyester powder coat
  - Colour: RAL 7015
- Jointing: flush
- Glazing details: bead fixed single glazing
  - Glass: 4mm toughened
- Special features: to incorporate vertical letter plate into sidelight transom panel (RAL to match)
- Fixing: in accordance with the manufacturer’s recommendations and standard details.
- Other requirements: to incorporate access control - call panel and electromagnetic lock.

551 GLAZED STEEL FRAMED SCREEN - SINGLE LEAF DOOR WITH SIDELIGHTS
- Location: DG16 - separating Rear Entrance Lobby from Main Hallway/Stairwell
- Fire resistance: not required
- Structural opening: as existing - site survey to confirm.
- System manufacturer: Geze  www.geze.co.uk
  - System product reference: Patch Fittings for Frameless Glass Pivot Door & Fixed Frameless Sidelight - subject to detailed design by manufacturer.
  - Horizontal frame members: transom section to span between walls to receive concealed door pivot at head.
- Finish: factory applied polyester powder coat
  - Colour: RAL 7015
- Glazing details: single glazing
  - Glass: 12mm, toughened
- Fixing: in accordance with the manufacturer’s recommendations and standard details.
- Other requirements: to incorporate deadlock lever handle and thumb turn operation (stairwell side only).
600 REFURBISHED FRONT ENTRANCE DOOR DG01
- Existing door, including fanlight, to be inspected by the contractor at tender stage. Contractor to allow for the following refurbishment works where required:
  - Repairs and renovations:
    - Strip out existing georgian wired single glazing to door leafs.
    - Prepare painted surfaces by sanding, rubbing and cleaning down.
    - Renovate existing frames. Repair all damage. Replace any rotten timbers.
    - Replace glazing to door leafs with clear laminated safety glass to BS 6206, class A and kitemark certified.
    - Clean all retained stained glass to fanlight.
    - Replace soffit board to fanlight to receive new light fitting - refer to Lighting Schedule 475.S(63).01.
    - Redecorate door as clause M60/180.
  - Weather-sealing/Draught-proofing: all work to be in accordance with Energy Saving Trust recommendations for draught proofing doors.
    - Manufacturer: Exitex www.exitex.com
    - Standard door surround weather stripping to jambs and head and inward opening mobility weather bar to threshold, all installed in accordance with the manufacturer’s guidance.
    - Colour: black
  - Ironmongery/accessories: replace all - refer to Ironmongery Schedule 475.S(33).01.

610 REPLACEMENT REAR ENTRANCE DOOR DG02
- Existing door to be replaced with new to match existing but modified to achieve flush threshold.
  - Standard: to conform to the standards provided by BS 6375-1 (2004) with regard to weather tightness.
  - Exposure category to BS 6375-1: 1600
  - Air permeability: 300 Pa
  - Water tightness: 200 Pa
  - Wind Resistance: 1600 Pa
  - Operation and strength characteristics: To BS 6375-2.
  - Timber: Generally to BS EN 942.
    - Species: Sapele - manufacturer to provide assurances that this timber is appropriate for the proposed use.
    - Appearance class: J2 for glazing beads, drip mouldings and the like. J30 or better for all other members. Finger jointing and knots on arises not permitted where exposed to view.
  - Moisture content on delivery: 12-14%
  - Frame/bead profiles: to match existing.
  - Glazing details: single glazing, installed with bevelled putty finish to match existing
    - Glazing: laminated safety glass to BS 6206 Class A, kitemark certified.
  - Weather-sealing/Draught-proofing: all work to be in accordance with Energy Saving Trust recommendations for draught proofing doors.
    - Manufacturer: Exitex www.exitex.com
    - Aquatex weather seals rebated in door frame at jambs and head and inward opening mobility weather bar to threshold, all installed in accordance with the manufacturer’s guidance.
    - Ironmongery/Accessories: Refer to schedule 433 S(33) 001
    - Fixing: into existing reveals

620 REFURBISHED BASEMENT REAR ENTRANCE DOOR DB04
- Existing door, including fanlight, to be inspected by the contractor at tender stage. Contractor to allow for the following refurbishment works where required:
  - Repairs and renovations:
    - Prepare painted surfaces by sanding, rubbing and cleaning down.
    - Renovate existing frames. Repair all damage. Replace any rotten timbers.
L20 Doors/ Shutters/ Hatches (continued)

- Clean all retained glass and replace any broken panes with single glazing to match existing.
- Redecorate door as clause M60/180.
- Weather-sealing/Draught-proofing: all work to be in accordance with Energy Saving Trust recommendations for draught proofing doors.
  - Manufacturer: Exitex  www.exitex.com
    - Standard door surround weather stripping to jambs and head and inward opening weather bar to threshold, all installed in accordance with the manufacturer’s guidance.
    - Colour: black
- Ironmongery/accessories: replace all - refer to Ironmongery Schedule 475.S(33).01.

630 REFURBISHED BASEMENT SIDE ENTRANCE DOOR DB05
- Existing door, including fanlight, to be inspected by the contractor at tender stage.
  Contractor to allow for the following refurbishment works where required:
- Repairs and renovations:
  - Prepare painted surfaces by sanding, rubbing and cleaning down.
  - Renovate existing frames. Repair all damage. Replace any rotten timbers.
  - Insert clear laminated safety glass to BS 6206, class A and kitemark certified into existing open aperture and fix with bevelled putty.
  - Clean all retained glass to fanlight.
  - Redecorate door as clause M60/180.
- Weather-sealing/Draught-proofing: all work to be in accordance with Energy Saving Trust recommendations for draught proofing doors.
  - Manufacturer: Exitex  www.exitex.com
    - Standard door surround weather stripping to jambs and head and inward opening weather bar to threshold, all installed in accordance with the manufacturer’s guidance.
    - Colour: black
- Ironmongery/accessories: replace all - refer to Ironmongery Schedule 475.S(33).01.

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.

770 DAMP PROOF COURSES ASSOCIATED WITH BUILT IN WOOD FRAMES
- Method of fixing: To backs of frames using galvanised clout nails.

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.

820 SEALANT JOINTS - EXTERNAL
- Sealant:
  - Manufacturer: Adshead Ratcliffe & Co Ltd  www.arbo.co.uk
  - Product reference: Arbomer MP20 or equivalent and approved.
  - Colour: white
  - Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.
821 SEALANT JOINTS - INTERNAL - FIRE RESISTING
- Fire resistance: min. 30 minutes
- Sealant:
  - Manufacturer: Sealmaster  www.sealmaster.co.uk
    Product reference: Intumescent Compound or equivalent and approved.
  - Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.

822 SEALANT JOINTS - INTERNAL - NON FIRE RESISTING
- Fire resistance: not required
- Sealant:
  - Manufacturer: Adshead Ratcliffe & Co Ltd  www.arbo.co.uk
    Product reference: Arbo PDC or equivalent and approved.
  - 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 60 doors requiring > 60 minutes integrity performance: Coated with intumescent paint or paste before installation.

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