
1.0 **GENERAL**

1.1 **DESCRIPTION**

1. Work of this Sectional shall conform to the requirements of the Contract Documents.

1.2 **RELATED WORK SPECIFIED ELSEWHERE**

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| 1. | Rough Carpentry | Section 06100 |
| 2. | Supply of Ironmongery | Section 08700 |
| 3. | Gypsum Board | Section 09250 |

1.3 **WORK INCLUDED**

- .1 The work shall include, but not necessarily be limited to, the supply and installation of complete timber door sets consisting of door, frame and ironmongery (note: the ironmongery will be supplied by others, but installed by this Contractor), including fire rated panel below pedestal foot at doorway with aluminum channel threshold.

1.4 **QUALITY ASSURANCE**

- .1 Execute this work by a firm who as adequate plant, equipment and skilled workers to perform it expeditiously and is know to have been responsible for installation similar to that specified during the immediate past five (5) years.

1.5 **SUBMITTALS**

- .1 Submit for review shop drawings indicating door types, cut-outs for glazing, glazing stops, fastenings, reinforcement, adjacent construction and installation details.
- .2 Submit for approval 600mm x 600mm corner sample of door and frame showing construction, core and face veneer, and finishing.
- .3 Submit a Door Schedule identifying each door by symbol in the Door Schedule on the Architects drawings.
- .4 Submit three (3) copies of maintenance data detailing inspection, care and maintenance instructions. Identify any common causes of damage.

1.6 **DELIVERY, STORAGE AND HANDING**

- .1 Wrap doors and frame sets individually in heavy protective wrapping. All door leaves to be labeled clearly in accordance with Forest research Institute Malaysia (FRIM). All doors to be manufactured to Malaysian Standard

1073:1988, Uniform Building By-Laws 1984. Supplier to submit details of registration. Label shall be fixed to hinge side of door edge, not face.

- .2 Do not deliver doors to site until work of wet trades is complete and moisture reading of surface in proceeds storage area is less than 18%. Door supplier shall confirm in writing that storage facilities on site are in a fit state to receive deliveries. Storage on site to be kept to a minimum.
- .3 Store doors flat on level surface in dry, well ventilated area inside the building.
- .4 Cover top of pile doors with waterproof covering, but allow air circulation at sides. If piled on concrete floor, place 4mm polyethylene vapor barrier under pile.
- .5 Do not pile up doors to cause any damage to any door or part of the building.

1.7 WARRANTY

- .1 Warrant this work in accordance with the General Preamble, but for a period of five (5) years.
- .2 Defects shall include, but not be limited to warping, twisting, telescoping of core, splitting, delimitation, sagging, etc.
- .3 Warranty shall include removal of rejected doors and ironmongery and finishing of new doors and adjacent frame and surround.

2.0 PRODUCT

2.1 MATERIALS

- .1 Manufacture will be required to submit evidence of compliance with Forest Research Institute of Malaysia.
- .2 Frames: solid hardwood frame grade B timber.
- .3 Doors :
 - .1 Solid timber door non-fire rated with spray paint finish.
 - Type a (solid single leaf)
 - Type b (solid single leaf - with waterproof plywood)
 - Type c (solid double equal leaf)
 - Type d (solid single leaf - with veneer finish)
 - a) Jurusanwa Timber Doors Solid door to manufacturers, specification or approved equivalent constructed of internal timber framing and 2 seamless sheet of molded hardboard timber finish.

- b) Internal Framing:
Stiles and rails completion shall solid wood or finger jointed wood MDF is not acceptable. Stiles and top rail should be minimum of 1-1/8". Bottom rails should be a minimum of 2-5/8".
- c) Hardwood:
All hardwood shall be of light density wood fiberboard (940 kg/m³) with moisture content of 5% - 7%.
- d) Door Sizes:
Thickness shall be minimum 37 mm and width varies as per standard size available.
- e) Adhesive:
Urea formaldehyde or approved equivalent.

.2 1 hour and 2 hour rated timber fire door with spray paint finish

- Type a (solid single leaf)
- Type b (solid double unequal leaf)
- Type c (solid double equal leaf)

- a) Jurusanwa single acting, single leaf fully insulated timber 1 hour fire rated doors to manufacturers specification or approved equivalent in accordance to MS 1073:Part 3:1993 (P) - specification for fire resistant sets part 3.
- b) Door leaf consist keranji timber (average fire density 975 kg/m³) and 3mm thick moulded 'Masonite' medium density fibre board (MDF) miner layer of MDF shall be coated with 2 coats of "Albi Guard" fire retardant paint.
- c) Frame: Shall be single rebated Keranji timber frame (average density 975 kg/m³) with sectional sizes of 63mm x 140mm on 1 ½ pairs of multec SUS 304 stainless steel hinges.

2.2 FABRICATOR

.1 Workmanship

- a) The quality of workmanship is to be not less than specified in BS 1186, Part 2, appropriate to type of joinery specified herein. No piecing, lengthening, or unnecessary jointing will be allowed. Timber, where exposed to view, is to be finished with a glass paper surface so that the plane marks do not show and all square arises are to be rounded to a 2mm radius. All glued joints are to be cross-tongued. All frames are to be together with painted joints and pinned.

- b) Pellets for fixings shall be pre-stained where necessary to match the surround.
- c) All woodwork which may show signs of bad workmanship before the end of the Warranty Period is to be removed and replaced with new materials and all work disturbed made good.
- d) Frame joinery shall be carefully selected and shall be prepared to give a perfectly smooth finish, free from all imperfections.
- e) Manufacturer doors with necessary backing to suit ironmongery.
- f) Undercut door to suit clearances of floor covering. Allow for carpet in tenant areas.
- g) All hardwood frames are to be prefinished off site.
- h) All doors are to be prefinished off site.
- i) Doors and frames shall be finished with one coat pre-catalysed sealer and two coats satin matt lacquer and shall be applied by spray in accordance with the supplier's recommendation.
- j) Once the lacquer is perfectly dry, the finish shall be cut back with a fine steel wool and finished with beeswax applied with a soft lint-free-rag and wiped afterwards with a dry lint-free-rag. The decorated finish shall meet the requirements of spread of flame as required by the Malaysian Fire Services Department (Jabatan Perkhidmatan Bomba Malaysia).
- k) After fixing hardwood frames, any pellets and pinholes, including matching filler, shall be touched up to perfectly match the shop stain lacquer and beeswax finish as necessary.
- l) All doors frames shall be prepared to receive electronic security devices. Cooperate with Division 16 in determining requirements.

3.0 **EXECUTION**

3.1 **INSPECTION**

- .1 Inspect the site to verify dimensions prior to commencing fabrication.

3.2 **INSTALLATION**

- .1 All doors which require to be site trimmed, shall be trimmed equally on both edges.
- .2 Trim door height by cutting bottom edge to a maximum of 19mm.

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- .3 Pilot drill screw and bolt holes using templates provided.
 - .4 Machine cut for hinges and closers. Core for handsets and cylinders.
 - .5 Install protruding ironmongery at site when required by schedule.
 - .6 Provide a temporary locking device (non-marking) to all washrooms.
 - .7 Accept delivery of ironmongery and be responsible for its safe storage. Refer to Section 08700 for mounting heights if ironmongery.
 - a) Ironmongery shall be installed by workers skilled in the application of ironmongery.
 - b) Do not modify ironmongery. Set, fit, adjust and clean ironmongery according to manufacturer's written instruction.
 - c) After installation of ironmongery, check opening units for correct fit and uniformity around perimeter of units, or between units. Ensure smoothly operating units, free from binding.
 - .8 After installation, all templates, instruction sheets, and installation details, shall be turned over to the Employer Representative at the project close-out.

3.2 INSTALLATION

- .1 Maximum Diagonal Distortion (Warp): 3 mm measured with straight edge, corner to corner.
- .2 Maximum Vertical Distortion (Bow): 3 mm measured with straight edge, top to bottom.
- .3 Maximum Width Distortion (Cup): 3 mm measured with straight edge, edge to edge.

END OF SECTION 82000