
Partie 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 06 10 00 – Rough Carpentry.
- .2 Section 06 20 00 – Finish Carpentry.
- .3 Section 08 03 14 – Historic – Repairs to Wood Doors.
- .4 Section 08 11 00 – Metal Doors and Frames.
- .5 Section 08 71 00 – Door Hardware.
- .6 Section 08 80 50 – Glazing.
- .7 Section 08 87 53 – Security Film.
- .8 Section 09 21 16 – Gypsum Board Assemblies.
- .9 Section 09 22 16 – Non-structural Metal Framing.
- .10 Section 09 91 13 – Exterior Painting.
- .11 Section 09 91 23 – Interior Painting.

1.2 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
 - .1 Quality Standards for Architectural Woodwork 1998.
- .2 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-71.19-M88, Adhesive, Contact, Sprayable.
 - .2 CAN/CGSB-71.20-M88, Adhesive, Contact, Brushable.
- .3 Canadian Standards Association (CSA)/CSA International.
 - .1 CSA A440.2-CSA A440.2-98(R2003), Energy Performance of Windows and Other Fenestration Systems.
 - .2 CSA O115-M1982(R2001), Hardwood and Decorative Plywood.
 - .3 CAN/CSA O132.2-90(C1998) series, Flush Wood Doors.
 - .4 CAN/CSA-O132.5-M1992(R1998), Stile and Rail Wood Doors.
 - .5 CAN/CSA-Z808-F96, A Sustainable Forest Management System: Guidance Document.
 - .6 CSA Certification Program for Windows and Doors 2000.
- .4 Environmental Choice Program (ECP).
 - .1 DCC-045-92, Sealants and Caulking Compounds.
 - .2 DCC-046-92, Adhesives.
- .5 National Fire Protection Association (NFPA).
 - .1 NFPA 80-1999, Standard for Fire Doors and Fire Windows.

- .2 NFPA 252-1999, Standard Method of Fire Tests of Door Assemblies.
- .6 Underwriters' Laboratories of Canada (ULC).
 - .1 CAN4-S104M-80(C1985), Fire Tests of Door Assemblies.
 - .2 CAN4-S105-1985(C1992), Fire Door Frames Meeting the Performance Required by CAN4-S104.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's:
 - .1 For caulking materials during application and curing.
 - .2 For door materials and adhesives.
- .2 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Indicate door types and cutouts for lights, louvres, sizes, core construction, transom panel construction and cutouts.

1.4 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit one 300 x 300 mm corner sample of each type wood door.
- .3 Show door construction, core, glazing detail and faces.
- .4 Manufacturer's Instructions:
 - .1 Submit manufacturer's installation instructions.

1.5 PERFORMANCE CRITERIA

- .1 Soundproof wood doors must have an STC of 46 when tested to ASTM E90, ASTM E413, ASTM E1332 and ASTM 2235. Test door must measure 915 x 2135 mm and be equipped with seals, sill, cylinder lock and three hinges.

1.6 QUALITY ASSURANCE

- .1 Regulatory Requirements:
 - .1 Wood fire rated doors: labelled and listed by an organization accredited by Standards Council of Canada.
- .2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

1.7 DELIVERY, STORAGE, AND HANDLING

- .1 Storage and Protection:
 - .1 Protect doors from dampness. Arrange for delivery after work causing abnormal humidity has been completed.
 - .2 Store doors in well ventilated room, off floor, in accordance with manufacturer's recommendations.
 - .3 Protect doors from scratches, handling marks and other damage. [Wrap] [Crate] doors.
 - .4 Store doors away from direct sunlight.

1.8 WASTE MANAGEMENT AND DISPOSAL

- .1 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .2 Dispose of corrugated cardboard, polystyrene, plastic packaging material in appropriate on-site bin for recycling in accordance with site waste management program.
- .3 Unused or damaged glazing materials are not recyclable and must not be diverted to municipal recycling programs.

1.9 ACCEPTABLE PRODUCTS AND MATERIALS

- .1 Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products

Partie 2 Products

2.1 FIRE RATED WOOD DOORS

- .1 Wood doors: tested in accordance with CAN4-S104 and NFPA 252 to achieve rating as scheduled.
 - .1 Face panels: HDF.

2.2 WOOD FLUSH DOORS

- .1 Solid core: to CAN/CSA-O132.2.1.
 - .1 Construction:
 - .1 Regular flush doors, 45 mm thick.
 - .2 Solid wood core:
 - .1 Non-certified: particleboard or agglomerated wood particles, 500 kg/m³ minimum density; incorporated into mullion/transom frame; with wood lock blocks; 5 ply.
 - .2 45 minute fire rated doors: mineral core incorporated into stile/rail frame; with wood lock blocks; 5 ply.
 - .2 Stiles and rails:
 - .1 SCL rails, minimum 36 mm thick.
 - .1 Top rails: 85 mm.

- .2 Bottom rails: 36 mm for non-certified and 51 mm for 45 minute fire rated doors.
- .2 Stiles: 11 mm veneer (selected by manufacturer), longitudinally laminated by hot pressing with Type 1 structural doors, to ASTM D5456, SCL panel 25 mm minimum.
- .3 Coordinate sizes of doors with windows with door elevations on drawings.
- .3 Face Panels:
 - .1 HDF.
- .4 Adhesive: type I (waterproof), for interior doors, urea-formaldehyde free.
- .2 Soundproof flush doors:
 - .1 Soundproof doors must meet performance criteria listed on drawings and to ASTM D5456-09, ASTM E90-04 and ASTM E413-87.
 - .2 Core: acoustic certified, to manufacturer's standards, glued to stile and rail frame.
 - .3 Stiles and rails:
 - .1 Composite wood 57 mm thick, longitudinally laminated by hot pressing with Type 1 structural doors, to ASTM D5456. Top and bottoms rails 75 mm minimum.
 - .2 Stiles, hardwood, 24 mm glued to 102 mm composite wood, longitudinally laminated by hot pressing with Type 1 structural doors, to ASTM D5456.
 - .3 Glue wood lock blocks to core and stiles.
 - .4 5-ply construction.
 - .4 Face panels:
 - .1 HDF.
 - .5 Adhesive: type I (waterproof), for interior doors, urea-formaldehyde free.

2.3 DUTCH DOORS

- .1 Construction: as for standard flush doors, HDF panels to be painted.
- .2 Joint between doors: flat.
- .3 Butler shelf on top of door.

2.4 GLAZING

- .1 Glass and accessories: to Section 08 80 50 – Glazing.
- .2 Accessories: Provide required glazing bead.

2.5 TRANSOM AND SIDE PANELS

- .1 Construction: to match adjacent door, including fire rating if applicable.
- .2 Meeting edges of doors and transom panels: stiles equipped with heat expanding strip.
- .3 Veneer of doors and transom panels: as flush doors.

2.6 FABRICATION

- .1 Vertical edge strips to match face veneer.
- .2 Prepare doors for glazing. Provide to match face veneer glazing stops with mitred corners.
- .3 Bevel vertical edges of single acting doors 3 mm in 50 mm on lock side and 1.5 mm in 50 mm on hinge side.
- .4 Radius vertical edges of double acting doors to 60 mm radius.

2.7 FINISH

- .1 Paint or varnish exposed surfaces as indicated on drawings.

Partie 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 INSTALLATION

- .1 Unwrap and protect doors in accordance with CAN/CSA-O132.2 Series, Appendix A.
- .2 Install labelled fire rated doors to NFPA 80.
- .3 Install doors and hardware in accordance with manufacturer's printed instructions and CAN/CSA-O132.2 Series, Appendix A.
- .4 Adjust hardware for correct function.
- .5 Install glazing in accordance with Section 08 80 50 - Glazing.
- .6 Install louvres and stops.
- .7 Secure transom and side panels by means of stops.

3.3 ADJUSTMENT

- .1 Re-adjust doors and hardware just prior to completion of building to function freely and properly.

3.4 CLEANING

- .1 Perform cleaning as soon as possible after installation to remove construction and accumulated environmental dirt.
- .2 Remove traces of primer, caulking; clean doors and frames.
- .3 Clean glass and glazing materials with approved non-abrasive cleaner.
- .4 On completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION