

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 08 71 00 – Door Hardware
- .2 Section 28 13 01 – Electronic Security and Intrusion System Rough In.

1.2 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
 - .1 Quality Standards for Architectural Woodwork [2009].
- .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 International).
 - .1 CSA A440.2-[98], Energy Performance of Windows and Other Fenestration Systems.
 - .2 CSA O115-[M1982(R2001)], Hardwood and Decorative Plywood.
 - .3 CAN/CSA O132.2 Series-[90(R1998)], Wood Flush Doors.
 - .4 CAN/CSA-O132.5-[M1992(R1998)], Stile and Rail Wood Doors.
 - .5 CAN/CSA-Z808-[96], A Sustainable Forest Management System: Guidance Document.
 - .6 CSA Certification Program for Windows and Doors [00].
- .4 Environmental Choice Program (ECP).
 - .1 CCD-045-[92], Sealants and Caulking Compounds.
 - .2 CCD-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 CAN-4S104M-[80(R1985)], Fire Tests of Door Assemblies.
 - .2 CAN4-S105M-[85 (R1992)], Fire Door Frames Meeting the Performance Required by CAN4-S104.

1.3 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, sizes, core construction.

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: Submit manufacturer's installation instructions.

1.5 **REGULATORY REQUIREMENTS**

- .1 Wood fire rated doors: labelled and listed by an organization accredited by Standards Council of Canada.

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.
 - .4 Store doors away from direct sunlight.

1.8 **WARRANTY**

- .1 Provide a written guarantee, signed and issued in the name of The City, covering the wood doors for both material and workmanship for a period of 10 (ten) years from the date of Substantial Completion.
- .2 Areas which prove to be defective in any way shall be repaired or replaced and any damage to other work as a result of such defects shall be repaired at no cost to The City.

Part 2 Products

2.1 FIRE RATED WOOD DOORS

- .1 FRR Wood doors: tested in accordance with CAN4-S104/NFPA 252 to achieve rating as scheduled exceeding 45 minutes shall have an incombustible mineral core (asbestos free).
 - .1 Face panels:
 - .1 Hardwood: Grade I Premium
 - .2 Paint grade: Douglas fir G1S, custom AWMAC
 - .2 Ratings:
 - .1 Provide UL label in accordance with fire rating noted in door schedule.

2.2 WOOD DOORS

- .1 Solid core: to CAN/CSA-O132.2.1.
 - .1 Construction:
 - .1 Solid particleboard core: stile and rail frame bonded to particleboard core with wood lock blocks 7-ply construction.
 - .2 Solid wood core:
 - .1 Glued block core with wood edge band.
 - .2 Framed block glued core.
 - .3 Framed block nonglued core.
 - .4 Stile and rail core.
 - .5 7-ply construction.
 - .2 Face Panels:
 - .1 Hardwood; veneer grades: Grade I (Premium)
 - .2 **Paint grade: Douglas fir G1S, custom AWMAC**
 - .3 Adhesive: Type II (Water resistant) For interior doors.
- .2 Hollow core: to CAN/CSA-0132.2.2.
 - .1 Construction:
 - .1 Ladder core with lock blocks, 7-ply construction.
 - .2 Face Panels:
 - .1 Hardwood: Grade I (Premium)
 - .2 **Paint grade: Douglas fir G1S, custom AWMAC**
 - .3 Adhesive: Type II (water resistant) for interior exterior doors.

2.3 DOORS TYPES

- .1 Refer to Door and Door Frame Schedule in drawings for further information.

2.4 GLAZING

- .1 Glass: in accordance with Section 08 80 00 - Glazing.
- .2 All glass in doors to be tempered unless otherwise noted.

2.5 FABRICATION

- .1 Vertical edge strips to match face veneer.
- .2 Prepare doors for glazing. Provide hardwood birch species 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.
- .5 Provide waterproof non-staining membrane at cutouts on exterior doors to exclude moisture from core.

2.6 DOOR SECURITY

- .1 Door security hardware to be flush mounted on all frames
- .2 Refer to Section 28 13 01 – Electronic Security and Intrusion System Rough-In for door rough-in provisions. Security devices to be provided by The City and installed by others.

Part 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 00 - Glazing.
- .6 Install louvres and stops.
- .7 Secure transom and side panels by means of concealed fasteners or countersunk screws concealed by means of wood plugs matching panel in grain and colour.
- .8 Coordinate installation of door security hardware in accordance with Section 28 13 01 – Electronic Security and Intrusion System Rough In and manufacturer's instructions.

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.
- .5 On completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION