

Part 1 General

1.01 SUMMARY

- .1 Interior door and interior window frames fabricated from solid hardwood lumber. Site finished.

1.02 RELATED SECTIONS

- .1 Section 06 40 00 - Architectural Woodwork.
- .2 Section 08 14 16 - Flush Wood Doors.
- .3 Section 08 71 00 - Door Hardware.
- .4 Section 08 81 00 - Glass Glazing.
- .5 Section 09 91 23 - Painting.

1.03 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI).
 - .1 Architectural Woodwork Standards. (AWS) Second Edition 2014.

1.04 SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Provide product data. Submit manufacturers standard product literature on accessories and hardware. Submit manufacturer's installation instructions.
- .3 Submit shop drawings. Indicate details of construction, profiles, jointing, fastening and other related details.
 - .1 Indicate cross sections and dimensions of all components. Indicate details of construction for all profiles, jointing, fastening and other related details. Indicate all materials, sizes, thicknesses and finishes.
 - .2 Provide details as follows: profiles full size, details half full size. Indicate typical and special installation conditions, all connections, attachments, anchorage and location of exposed fastenings. Indicate shop applied and site applied finishes for each component.
 - .3 Indicate cross section of solid wood door and window frames. Indicate species, grade, cut and finishes. Indicate where frames are to be reinforced to accommodate door hardware.
 - .4 Indicate whether components are standard available stock molding profiles or whether components are custom milled items.
 - .5 Indicate typical and special installation conditions, and connections, attachments, anchorage and location of exposed fastenings.
 - .6 Indicate installation details for all accessories and hardware items. Indicate how hardware will be installed. Indicate recesses, dadoes or modifications required to accommodate hardware.
- .4 Submit duplicate samples for all components. Submit 600 mm lengths unless specified otherwise. Submit full sized samples for hardware and accessory items.
 - .1 Submit samples in all species and grades specified.
 - .2 Submit details and samples for all accessory components.

- .3 Submit 300 x 300 mm sample of door frame including corner construction.
- .4 Submit samples of each solid hardwood component including edging in specified finishes.

1.05 QUALITY ASSURANCE

- .1 Fabricator Qualifications: Company in good standing with AWMAC and specializing in fabricating custom designed, premium grade, finish carpentry items and components specified in this section with minimum 5 years documented experience.
- .2 Submit list of similar projects with description of scope of work for each project to Consultant.

1.06 MOCK-UP

- .1 Construct Mock-Ups in accordance with Section 01 45 00 - Quality Control.
- .2 After approval of Shop Drawings and prior to commencing any fabrication, provide a Mock-Up for approval by the Consultant. Mock-Up consists of one, complete, full size item for each component as follows:
 - .1 Interior wood door and interior wood window frame. Full size. Demonstrate typical installation including trim and mouldings.
 - .2 Apply final finishes to Mock-Ups as specified.
 - .3 Install all operable hardware and accessories.
 - .4 Mock-Up will be used by Consultant to verify final detailing of components and assemblies, confirm final finishes and approve workmanship.
 - .5 Approved Mock-Ups will remain on site where directed by Consultant. When accepted, Mock-Ups will demonstrate minimum standard for this work. Mock-Ups will be used to measure and evaluate quality of all subsequent Millwork components.

1.07 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, handle, store and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Protect materials against dampness and damage during and after delivery.
- .3 Do not schedule delivery until products can be off loaded and installed immediately upon arrival on site.
- .4 Store materials in ventilated areas, protected from extreme changes of temperature or humidity.

1.08 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction / Demolition Waste Management and Waste Reduction Workplan.
- .2 On site, separate wood waste in accordance with Waste Management Plan and place in designated areas for recycling.
- .3 Separate corrugated cardboard in accordance with Waste Management Plan and place in designated areas for recycling.
- .4 Fold up metal banding, flatten, and place in designated area for recycling.

Part 2 Products

2.01 LUMBER MATERIAL

- .1 Hardwood Lumber: to AWS. Section 3. Birch Yellow, natural grade. S4S, plain sawn and rift sawn pieces. Well matched and selected for uniform colour and grain. Kiln dried to a maximum average moisture content 6 - 8 % at time of fabrication. No knots, pinholes, sap pockets or other visible defects. Selected for application of opaque finishes.

2.02 DOOR AND WINDOW FRAMES

- .1 Fabricate wood door and window frames to custom sizes, profiles and details as indicated. Fabricate from single section of solid yellow birch. No end splices, built up widths or laminated thickness sections are permitted. To avoid potential for cracking, laminated lumber is permissible when wood components greater than 8/4 thickness are required.
- .2 Reinforce frames to accommodate door hardware as recommended by hardware manufacturer.

2.03 ACCESSORIES

- .1 Fasteners: size and type to suit. Utilize fasteners that are 100% concealed in final assembly.
 - .1 Nails and staples: to AWS recommendations. Hot dip galvanized finish.
 - .2 Wood screws: brass or galvanized steel.
 - .3 Splines: solid hardwood.
 - .4 Concealed Joint Fasteners: Threaded steel.
- .2 Adhesive: Type recommended by AWMAC to suit application. Waterproof.
- .3 Caps and plugs: same material and grade as material being fastened. Manufacture tapered plug from same material in appropriate sizes.

2.04 FABRICATION

- .1 Fabricate all components to AWS Section 6. Premium grade.
- .2 Shop assemble work as much as is practical for delivery to site in size easily handled and to ensure passage through building openings.
- .3 Prepare door frames for wood doors as specified in Section 08 14 16 - Flush Wood Doors. Accommodate door hardware as specified in Section 08 71 00 - Door Hardware.
- .4 Prepare window frames to accommodate glass as specified in Section 08 81 00 - Glass Glazing. Prepare frames with removable solid wood glass stops as detailed.

2.05 JOINERY

- .1 Fabricate with traditional rabbet and dado joinery techniques. No pocket hole, dowels, biscuit joinery will be permitted.
- .2 Where screws are required in final assembly, counterbore and insert matching wood plugs. Orient to match grain and pattern. Sand flush so plugs are invisible in final assembly.

2.06 FINISHING

- .1 Remove all handling marks or effects of exposure to moisture from all woodwork with a thorough, final sanding over all surfaces using appropriate grit sandpaper. After sanding, remove all sanding dust and leave surfaces clean ready to receive finish.
- .2 Finish: site applied paint finish as specified in Section 09 91 23 - Painting.

Part 3 Execution

3.01 INSTALLATION

- .1 Do architectural woodwork to AWS manual, Premium Grade except where specified otherwise.
- .2 Obtain governing dimensions before fabricating all components. Factory assemble all components to maximum practical extent.
- .3 Scribe and cut as required, fit to abutting walls, and surfaces, fit properly into recesses and to accommodate projecting, intersecting or penetrating objects.
- .4 Position and install work plumb, true and square, neatly scribed to adjoining surfaces.
- .5 Form joints to conceal shrinkage.
- .6 Fastening.
 - .1 Position items accurately, level, plumb, true and fasten or anchor securely.
 - .2 Design and select fasteners to suit size and nature of components being joined. Use proprietary devices as recommended by manufacturer.
 - .3 Set finishing nails to receive filler. Where screws are used to secure members, countersink screw in round cleanly cut hole and plug with wood plug to match material being secured. Apply wood filler in exposed nail indentations. Use wood filler which matches surrounding surfaces and of types recommended for applied finishes.
- .7 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.
- .8 Site Finishing: sand work smooth and set exposed nails. Field repairs and touch up of finishes to be made invisible in the final assembly to the approval of the Consultant. Prepare for final paint finish as specified in Section 09 91 23 - Painting.

3.02 SITE QUALITY CONTROL

- .1 Consultant will conduct inspection of final installation of finish carpentry components.
- .2 Inspection and review of all interior carpentry items will be carried out in accordance with AWS Compliance Rules as follows
 - .1 Installation: AWS Section 6.

3.03 ADJUSTING AND CLEANING

- .1 Clean all surfaces and protect from damage until final inspection.

END OF SECTION