

## **PART 1- GENERAL**

### **1.1 RELATED REQUIREMENTS**

- .1 Section 06 10 53 Miscellaneous Rough Carpentry: Furring, blocking, nailing strips, grounds and rough bucks and sleepers.
- .2 Section 09 91 99 Painting: Site finishing for finish carpentry.

### **1.2 REFERENCE STANDARDS**

- .1 American National Standards Institute (ANSI)
  - .1 ANSI/HPVA HP-1-10, American National Standard for Hardwood and Decorative Plywood.
  - .2 ANSI/ASME 18.6.1 1981 (R2012) Wood Screws (Inch Series).
- .2 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
  - .1 Architectural Woodwork Quality Standards, 2nd edition, 2014.
- .3 ASTM International
  - .1 ASTM F 1667-13 Standard Specification for Driven Fasteners: Nails, Spikes and Staples.
- .4 CSA International
  - .1 CAN/CSA-Z809-08(R2013), Sustainable Forest Management.
- .5 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS).

### **1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature, data sheets and catalogue pages for specified products. Include product characteristics, performance criteria, dimensions and profiles, finish and limitations on use.
  - .2 Submit two copies of WHMIS MSDS in accordance with Section 01 35 29 - Health and Safety Requirements.
- .3 Shop Drawings:
  - .1 Prepare and submit shop drawings in general accordance with AWMAC AWS manual.
  - .2 Indicate profiles and dimensions, assembly techniques, jointing, methods of fastening, terminations and other related details.
  - .3 Indicate materials, thicknesses, finishes and hardware.
  - .4 Include schedule or key plan.

- .5 Show profiles, elevations and details at scales recommended by AWMAC AWS.
- .6 Where necessary, show location and type of blocking and backing required within supporting assemblies.
- .4 Certifications: submit certificates signed by manufacturer certifying materials comply with specified performance characteristics, physical properties and requirements of referenced standards.
- .5 Test and Evaluation Reports: submit certified test reports for [composite wood] from approved independent testing laboratories, indicating compliance with specifications for specified performance characteristics and physical properties.

#### **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with AWS recommendations and as follows.
- .2 Deliver finish carpentry materials only when area of work is enclosed, plaster and concrete work is dry, area is broom clean and site environmental conditions are acceptable for installation.
- .3 Storage and Handling Requirements:
  - .1 Store materials indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Maintain indoor temperature and humidity within range recommended by AWS for location of the Work.
  - .3 Store products on site as specified for minimum 72 hours prior to installation.
  - .4 Store and protect finish carpentry products from moisture, nicks, scratches, and blemishes.
  - .5 Replace defective or damaged materials with new.

### **PART 2 - PRODUCTS**

#### **2.1 SUSTAINABLE REQUIREMENTS**

- .1 Materials and products in accordance with Section 01 47 15 – Sustainable Requirements

#### **2.2 SUSTAINABILITY CHARACTERISTICS**

- .1 Solid lumber and composite wood products: in accordance with CAN/CSA-Z809 or FSC or SFI.

#### **2.3 QUALITY GRADE**

- .1 Provide all materials and perform all work of this Section in accordance with AWMAC AWS Custom Grade.

- .2 In case of conflict between Contract Documents and AWMAC AWS grade requirements, Contract Documents govern.

## **2.4 MATERIALS**

- .1 Softwood and hardwood lumber: Sound lumber to specified AWS grade requirements, kiln-dried to moisture content recommended for location of the Work.
  - .1 Machine stress-rated lumber is acceptable for all purposes.

## **2.5 MANUFACTURED TRIM**

- .1 Interior Standing and running trim:
  - .1 Material:
    - .1 Paint grade stock for opaque finish: pine species.
  - .2 Door and window casings: Profile: as indicated on drawings.
  - .3 Window aprons: Profile: as indicated on drawings.
  - .4 Window stool: Profile: as indicated on drawings.

## **2.6 MANUFACTURED SHELVING**

- .1 Hardwood plywood:
  - .1 Thickness: 19 mm, unless indicated otherwise.
  - .2 Number of plies: 7
  - .3 Face veneer: birch species, A grade or better, rotary cut.
  - .4 Back veneer: birch species, A grade or better, rotary cut..
  - .5 Core: Multi ply.
  - .6 Bond: Type II.
  - .7 Sanding: no sanding.
- .2 Edge banding: provide 10 mm thick solid matching wood strip on plywood edges 12 mm or thicker, exposed in final assembly. Strips same width as plywood.

## **2.7 FASTENINGS**

- .1 Provide screws, bolts, expansion shields and other fastening devices required for satisfactory installation.
- .2 Exposed fasteners to match finish of hardware.
- .3 Nails and staples: to ASTM F 1677, galvanized to ASTM A 153/A 153M for exterior work, interior humid areas; plain finish elsewhere.
- .4 Wood screws: to ANSI/ASME 18.6.1, countersunk flush type unless indicated otherwise, in sizes to suit application, galvanized to ASTM A 153/A 153M for exterior work, interior humid areas, electroplated steel for other locations.
- .5 Splines: wood.

- .6 Panel adhesive: Type to suit application.
  - .1 VOC limit 50 g/L maximum to SCAQMD Rule 1168.

### **PART 3 - EXECUTION**

#### **3.1 EXAMINATION**

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for wood products installation in accordance with AWS tolerances and requirements of Contract Documents.
  - .1 Visually inspect substrate in presence of Departmental Representative.
  - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
  - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

#### **3.2 PREPARATION**

- .1 Back prime woodwork before installation, to AWS.

#### **3.3 INSTALLATION**

- .1 Install items of finish carpentry in accordance with AWMAC AWS grade specified for respective items.
- .2 In case of conflict between Contract Documents and AWS grade requirements, Contract Documents govern.
- .3 Install items of finish carpentry at locations shown on drawings.
  - .1 Position accurately, level, plumb straight.
  - .2 Fasten and anchor securely.
- .4 Scribe and cut as required, fit to abutting walls, and surfaces, fit properly into recesses and to accommodate piping, columns, fixtures, outlets, or other projecting, intersecting or penetrating objects.
- .5 Form joints to conceal shrinkage.

#### **3.4 CONSTRUCTION**

- .1 Fastening:
  - .1 Position items of finished carpentry work 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 smooth cut hole and plug with wood plug to match material being secured.
- .4 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.
- .2 Shelving:
  - .1 Install shelving on shelf brackets.

### **3.5 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

### **3.6 TOUCHUP AND PROTECTION**

- .1 Fill and retouch all nicks, chips and scratches in factory finishes and substrate materials to AWS standards. Replace damaged items that cannot be repaired to AWS standards.
- .2 Protect installed products and components from damage during construction.
- .3 Repair damage to adjacent materials caused by finish carpentry installation.
- .4 Leave work to be site finished ready for finishing by Section 09 91 99 - Painting.

**END OF SECTION**