

**SECTION 06 20 00  
FINISH CARPENTRY**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. This section specifies exterior and interior millwork.
- B. Items specified.
  - Chair Rail

**1.2 RELATED WORK: NA**

**1.3 SUBMITTALS**

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
  - 1. Millwork items – Half full size scale for sections and details 1:50 (1/4-inch) for elevations and plans.
  - 2. Show construction and installation.
- C. Samples:

Plastic laminate finished plywood or particleboard, 150 mm by 300 mm (six by twelve inches).
- D. Certificates:
  - 1. Indicating preservative treatment of materials meet the requirements specified.
  - 2. Indicating moisture content of materials meet the requirements specified.
- E. List of acceptable sealers for fire retardant and preservative treated materials.
- F. Manufacturer's literature and data:
  - 1. Finish hardware
  - 2. Sinks with fittings
  - 3. Electrical components

**1.4 DELIVERY, STORAGE AND HANDLING**

- A. Protect lumber and millwork from dampness, maintaining moisture content specified both during and after delivery at site.
- B. Store finishing lumber and millwork in weathertight well ventilated structures or in space in existing buildings designated by Resident Engineer. Store at a minimum temperature of 21°C (70°F) for not less than 10 days before installation.
- C. Pile lumber in stacks in such manner as to provide air circulation around surfaces of each piece.

**1.5 APPLICABLE PUBLICATIONS**

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society of Testing and Materials (ASTM):

A36/A36M-08 ..... Structural Steel

- A53-07 ..... Pipe, Steel, Black and Hot-Dipped Zinc Coated, Welded and Seamless
- A167-99 (R2009) ..... Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
- B26/B26M-09 ..... Aluminum-Alloy Sand Castings
- B221-08 ..... Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- E84-09 ..... Surface Burning Characteristics of Building Materials
- C. American Hardboard Association (AHA):
  - A135.4-04 ..... Basic Hardboard
- D. Builders Hardware Manufacturers Association (BHMA):
  - A156.9-03 ..... Cabinet Hardware
  - A156.11-04 ..... Cabinet Locks
  - A156.16-02 ..... Auxiliary Hardware
- E. Hardwood Plywood and Veneer Association (HPVA):
  - HP1-09 ..... Hardwood and Decorative Plywood
- F. National Particleboard Association (NPA):
  - A208.1-99 ..... Wood Particleboard
- G. American Wood-Preservers' Association (AWPA):
  - AWPA C1-03 ..... All Timber Products – Preservative Treatment by Pressure Processes
- H. Architectural Woodwork Institute (AWI):
  - AWI-99 ..... Architectural Woodwork Quality Standards and Quality Certification Program
- I. National Electrical Manufacturers Association (NEMA):
  - LD 3-05 ..... High-Pressure Decorative Laminates
- J. U.S. Department of Commerce, Product Standard (PS):
  - PS20-05 ..... American Softwood Lumber Standard
- K. Military Specification (Mil. Spec):
  - MIL-L-19140E ..... Lumber and Plywood, Fire-Retardant Treated
- L. Federal Specifications (Fed. Spec.):
  - A-A-1922A ..... Shield Expansion
  - A-A-1936 ..... Contact Adhesive
  - FF-N-836D ..... Nut, Square, Hexagon Cap, Slotted, Castle
  - FF-S-111D(1) ..... Screw, Wood
  - MM-L-736(C) ..... Lumber, Hardwood

## **PART 2 - PRODUCTS**

### **2.1 LUMBER**

#### **A. Grading and Marking:**

1. Lumber shall bear the grade mark, stamp, or other identifying marks indicating grades of material.
2. Such identifying marks on a material shall be in accordance with the rule or standard under which the material is produced, including requirements for qualifications and authority of the inspection organization, usage of authorized identification, and information included in the identification.
3. The inspection agency for lumber shall be approved by the Board of Review, American Lumber Standards Committee, to grade species used.

#### **B. Sizes:**

1. Lumber Size references, unless otherwise specified, are nominal sizes, and actual sizes shall be within manufacturing tolerances allowed by the standard under which product is produced.
2. Millwork, standing and running trim, and rails: Actual size as shown or specified.

#### **C. Hardwood: MM-L-736, species as specified for each item.**

#### **D. Softwood: PS-20, exposed to view appearance grades:**

1. Use C select or D select, vertical grain for transparent finish including stain transparent finish.
2. Use Prime for painted or opaque finish.

#### **E. Use edge grain Wood members exposed to weather.**

### **2.2 FABRICATION**

#### **A. General:**

1. Except as otherwise specified, use AWI Custom Grade for architectural woodwork and interior millwork.
2. Finish woodwork shall be free from pitch pockets.
3. Except where special profiles are shown, trim shall be standard stock molding and members of the same species.
4. Edges of members in contact with concrete or masonry shall have a square corner caulking rebate.
5. Fabricate members less than 4 m (14 feet) in length from one piece of lumber, back channeled and molded as shown.
6. Interior trim and items of millwork to be painted may be fabricated from jointed, built-up, or laminated members, unless otherwise shown on drawings or specified.

#### **B. Wood Chair rail:**

1. Fabricate from Maple or Birch.
2. AWI Premium Grade.
3. Fabricate in one piece and one length when practical.

4. Glue all joints.
5. Fit joints, to produce a hair-line crack.

### **PART 3 - EXECUTION**

#### **3.1 ENVIRONMENTAL REQUIREMENTS**

- A. Maintain work areas and storage areas to a minimum temperature of 21<sup>0</sup>C (70<sup>0</sup>F) for not less than 10 days before and during installation of interior millwork.
- B. Do not install finish lumber or millwork in any room or space where wet process systems such as concrete, masonry, or plaster work is not complete and dry.

#### **3.2 INSTALLATION**

- A. General:
  1. Millwork receiving transparent finish shall be primed and back-painted on concealed surfaces. Set no millwork until primed and back-painted.
  2. Secure trim with fine finishing nails, screws, or glue as required.
  3. Set nails for putty stopping. Use washers under bolt heads where no other bearing plate occurs.
  4. Seal cut edges of preservative and fire retardant treated wood materials with a certified acceptable sealer.
  5. Coordinate with plumbing and electrical work for installation of fixtures and service connections in millwork items.
  6. Plumb and level items unless shown otherwise.
  7. Nail finish at each blocking, lookout, or other nailer and intermediate points; toggle or expansion bolt in place where nails are not suitable.
- B. Chair rails:
  1. Install in one piece and one length when practical.
  2. Where rails change slope or direction, install special curved sections and ends of rails to return to wall, glue all field joints.
- C. Install with butt joints in straight runs and miter at corners.

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