

**SECTION 06 20 00
FINISH CARPENTRY**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies exterior millwork.
- B. Items specified.
 - Moldings and trim around eave line

1.2 RELATED WORK

- A. Framing, furring and blocking: Section 06 10 00, ROUGH CARPENTRY.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
 - 1. Show construction and installation.
- C. Certificates:
 - 1. Indicating preservative treatment of materials
 - 2. Indicating moisture content of materials

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 weather-tight well ventilated structures. Store at a minimum temperature of 70°F for not less than 10 days before installation.
- C. Pile lumber in stacks in such a 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):
 - A53-07.....Pipe, Steel, Black and Hot-Dipped Zinc Coated,
Welded and Seamless
 - E84-09.....Surface Burning Characteristics of Building
Materials
- C. Hardwood Plywood and Veneer Association (HPVA):
 - HP1-09.....Hardwood and Decorative Plywood
- D. 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
- 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; actual sizes shall match existing historic profiles
 2. Trim and molding: Actual size to exactly match existing
- C. Hardwood: MM-L-736
- D. Softwood: PS-20, exposed to view appearance grades:
1. Use Prime for painted or opaque finish
- E. Use edge grain Wood members exposed to weather.

2.2 PLYWOOD

- A. Match existing adjacent material thickness
- B. Hardwood Plywood:
1. HPVA: HP.1
 2. On Outside of Building:
 - a. Use Type I, (exterior) Sound Grade veneer for paint finish.
 5. Use plain sliced red oak // rotary cut white birch // unless specified otherwise.

2.3 STAINLESS STEEL

ASTM A167, Type 302 or 304.

2.4 ALUMINUM CAST

ASTM B26

2.5 ALUMINUM EXTRUDED

ASTM B221

2.6 HARDWARE**A. Rough Hardware:**

1. Furnish rough hardware with a standard plating, applied after punching, forming and assembly of parts; galvanized, cadmium plated, or zinc-coated by electric-galvanizing process. Galvanize where specified.
2. Use galvanized coating on ferrous metal for exterior work unless non-ferrous metals or stainless is used.
3. Fasteners:
 - a. Bolts with Nuts: FF-N-836.
 - b. Expansion Bolts: A-A-1922A.
 - c. Screws: Fed. Spec. FF-S-111.

2.7 MOISTURE CONTENT**A. Moisture content of lumber and millwork at time of delivery to site.**

1. Interior finish lumber, trim, and millwork 32 mm (1-1/4 inches) or less in nominal thickness: 12 percent on 85 percent of the pieces and 15 percent on the remainder.
2. Exterior treated or untreated finish lumber and trim 100 mm (4 inches) or less in nominal thickness: 15 percent.
3. Moisture content of other materials shall be in accordance with the standards under which the products are produced.

2.8 FIRE RETARDANT TREATMENT

- A. Where wood members and plywood are specified to be fire retardant treated, the treatment shall be in accordance with Mil. Spec. MIL-L19140.
- B. Treatment and performance inspection shall be by an independent and qualified testing agency that establishes performance ratings.
- C. Each piece of treated material shall bear identification of the testing agency and shall indicate performance in accordance with such rating of flame spread and smoke developed.
- D. Treat wood for maximum flame spread of 25 and smoke developed of 25.
- E. Fire Resistant Softwood Plywood:
 1. Use Grade A, Exterior, plywood for treatment.

2. Meet the following requirements when tested in accordance with ASTM E84.
 - a. Flame spread: 0 to 25.
 - b. Smoke developed: 100 maximum

2.9 PRESERVATIVE TREATMENT

Wood members and plywood exposed to weather or in contact with plaster, masonry or concrete, including wood members used for rough framing of millwork items except heart-wood Redwood and Western Red Cedar shall be preservative treated in accordance with AWPA Standards.

- B. Use Grade A, exterior plywood for treatment.

2.10 FABRICATION

A. General:

1. Except as otherwise specified, use AWI Custom Grade for architectural woodwork.
2. Finish woodwork shall be free from pitch pockets.
3. Edges of members in contact with concrete or masonry shall have a square corner caulking rebate.
6. Fabricate members less than 4 m (14 feet) in length from one piece of lumber, back channeled and molded as shown.

PART 3 - EXECUTION

3.1 ENVIRONMENTAL REQUIREMENTS

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

3.2 INSTALLATION

A. General:

1. Set no millwork until primed and back-painted.
2. Use washers under bolt heads where no other bearing plate occurs.
3. Seal cut edges of preservative and fire retardant treated wood materials with a certified acceptable sealer.
4. Secure trim at each blocking, lookout, or other nailer and at intermediate points.
5. Exterior Work: Joints shall be close fitted, mitered, tongue and grooved, rebated, or lapped to exclude water and made up in thick white lead paste in oil.

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