

**SECTION 06 20 00**  
**FINISH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. All finish carpentry Work as indicated on the Drawings and as specified herein.

**1.02 SUSTAINABILITY REQUIREMENTS**

- A. Sustainability requirements included in the Section are as follows:
  - 1. Restrictions on the use of urea-formaldehyde containing materials.
- B. The Contractor shall implement practices and procedures to meet the Project's sustainable requirements. The Contractor shall ensure that the requirements related to these goals, as defined in Specification Section S01352, Sustainability Requirements, and as specified in this Section, are implemented to the fullest extent. Substitutions or other changes to the work shall not be proposed by the Contractor or their sub-contractors if such changes compromise the stated Sustainable Design Performance Criteria.

**1.03 REFERENCE STANDARDS**

- A. References and industry standards listed in this Section are applicable to the Work. Unless more restrictive criteria or differing requirements are explicitly stated in the Specifications, or mandated by governing codes or regulations, the recommendations, suggestions, and requirements described in the referenced standards shall be deemed mandatory and applicable to the Work.
- B. ANSI A208.1 - American National Standard for Particleboard; 2009.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- D. AWI (QCP) - Quality Certification Program; current edition at [www.awiqcp.org](http://www.awiqcp.org).
- E. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- F. Underwriter's Laboratory, Inc. (UL)

**1.04 SUBMITTALS**

- A. Product Data
  - 1. Submit manufacturer's or supplier's product data for each product and process specified as work of this Section and incorporated into items of finish carpentry.
- B. Quality Certification
  - 1. Submit woodwork Manufacturer's (Fabricator's) certification, stating that fabricated woodwork complies with AWI quality grades and other requirements indicated herein.
- C. Wood Treatment Data
  - 1. Submit chemical treatment manufacturer's instructions for handling, storing, installation, and finish of treated material.
- D. Fire-Retardant Treatment
  - 1. Provide certification by treating plant that treated materials comply with requirements. Submit certification of approval by NYC Board of Standards and Appeals (BSA) or Materials and Equipment Acceptance (MEA).
- E. Shop Drawings
  - 1. Submit Shop Drawings showing location of each fabricated item, dimensioned plans and elevations, large scale details and profiles, attachment devices and other components.
    - a. Identify woodwork item using same identification system shown on Architectural Drawings.
    - b. Coordinate details and cut-outs to accommodate accessories specified under other Sections.
- F. Samples:

1. Wood Trim: 12" length of each type and finish (e.g., base, casings, stools, aprons, chair rail, exercise barre).
  2. Plywood Paneling: 12" x 12" for each type and finish.
- G. Low Emitting Materials Compliance Submittals
1. Provide documentation for each adhesive and glue to be used on site, indicating that the adhesives comply with low V.O.C. requirements as stated in Specification Section G01600.
- H. Sustainability Submittals
1. Submit manufacturer's documentation that composite wood products, including plywood, that are used are manufactured without the use of any added urea-formaldehyde. This requirement includes binders, and laminating adhesives used in the field or shop. Submit manufacturer's documentation of the resin(s).

### **1.05 QUALITY ASSURANCE**

- A. AWI Quality Standard
1. Comply with applicable requirements of the AWI "Architectural Woodwork Quality Standards", except where indicated otherwise.
- B. Fabrication and Installation Qualifications
1. Firm which can demonstrate a minimum of 5 years of successful experience in fabricating and installing woodwork items similar in type and quality to those required for this project.
- C. Submit name of firm to the Authority for approval.
- D. Regulatory Agencies:
1. NYC Board of Standards and Appeals (BSA)
  2. NYC Materials and Equipment Acceptance (MEA)
- E. **All plywood, composite wood products and laminating adhesives used shall contain no added urea-formaldehyde.**

### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Do not deliver woodwork until operations which could damage, soil or deteriorate woodwork have been completed in installation areas. If woodwork must be stored, store only in areas meeting requirements and conditions specified for installation areas.

### **1.07 PROJECT CONDITIONS**

- A. Conditioning
1. Woodwork Installer shall advise the Authority's Representative of temperature and humidity requirements, in writing for woodwork installation and storage areas. Do not install woodwork until required temperature and relative humidity have been stabilized.
- B. Maintain temperature and humidity conditions in installation area as required to maintain moisture content of installed woodwork within 1.0 percent of optimum moisture content as follows:
1. Optimum moisture content of wood: 5-10%
  2. Relative humidity required to be maintained in installation and storage areas: 25-55%

## **PART 2 PRODUCTS**

### **2.01 MATERIAL**

- A. General
1. All interior wood finish shall be made up of thoroughly seasoned, kiln dried woods of the kinds specified.
  2. All material shall be clear on all exposed faces and edges, free from checks, cracks or other blemishes that would mar the appearance of the finished wood.

3. In assembling interior woodwork, arrange so that variations in grain pattern are kept to a minimum.
  4. All material shall be product of one mill.
  5. All plywood and laminating adhesives used shall contain no added urea- formaldehyde.
- B. Species and Grades (Lumber)
1. Plain Sawn Appalachian Red Oak, AWI Grade A1 (for transparent finish): interior wood finish as indicated on drawings.
  2. Red or White Birch, AWI Grade B2, (for opaque finish): interior wood finish as indicated on drawings.
    - a. Option: Maple, Yellow Poplar, or Basswood: AWI Grade B2.: interior wood finish as indicated on drawings.
  3. White Birch, AWI Grade A1 (for transparent finish): interior wood finish as indicated on drawings.
- C. Species, Grades, Types (Plywood)
1. Veneer: Oak and White Birch, as specified herein, AWI Grade A1.
  2. Grain Appearance: Running Match.
  3. Core: Particleboard or fiberboard, medium density M-1 grade, fire-retardant.

## 2.02 FABRICATION, GENERAL

- A. Wood Moisture Content
1. Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication and for relative humidity in installation areas. (See Art. 1.07).
- B. Fabricate woodwork to dimensions, profiles, and details indicated.
- C. Complete fabrication, assembly, finishing, and other work before shipment to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary, provide ample allowance for scribing, trimming, and fitting.
- D. Pre-Cut Openings
1. Provide woodwork with pre-cut openings, where possible, for hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutouts.
- E. Measurements
1. Before fabrication of woodwork to be fitted to other construction, obtain field measurements and verify dimensions and shop drawings detail as required for accurate fit.
    - a. Where field measurements before fabrication would delay the project, fabricate without field measurements and provide ample borders and edges to allow for scribing and trimming of woodwork.

## 2.03 FIRE-RETARDANT MATERIALS

- A. Where fire-retardant treated lumber, plywood, and panel products are required by Building Code or indicated on the drawings, provide materials which are pressure impregnated with fire-retardant chemicals and comply with the following requirements:
1. Fire-Retardant Chemicals: Use chemicals which do not bleed through or otherwise adversely affect adhesives or finishes. Do not use colorants to distinguish treated lumber and panels from untreated lumber and panels.
- B. Fire-Performance Characteristics
1. Provide materials which are identical to those tested in accordance with ASTM methods and time periods indicated, are listed for fire performance characteristics by Underwriter's Laboratories, Inc., or other testing agency acceptable to authorities having jurisdiction.
    - a. Marking: Identify treated lumber with separable paper classification marking of inspecting and testing agency.

- b. Surface Burning Characteristics: Not exceeding values indicated below, tested in accordance with ASTM E84 for 30 minutes which no evidence of significant combustion.
  - 1) Flame Spread: 25.
  - 2) Smoke Developed: 50.
- C. Kiln-dry woodwork after treatment to levels required for non-fire-retardant woodwork materials. Maintain moisture content required by kiln drying, before and after treatment. Do not use treated lumber which does not comply with requirements of referenced woodworking standard.
- D. Where fire-retardant particleboard and fiberboard are used, provide panels with fire-retardant chemicals to achieve surface-burning characteristics of 20 for flame spread and 25 for smoke developed when tested in accordance with ASTM E84.
  - 1. Comply with ANSI A208.1 for Grade M-1 panels. Minimum density 40 lbs./cu. ft.
  - 2. Linear expansion: Maximum average 0.35%.

#### **2.04 LUMBER THICKNESS**

- A. Finish thicknesses of members, and tolerances permitted:
  - 1. Comply with AWI Section 3, 4.2.1.

#### **2.05 GLUING**

- A. Gluing for wood member thickness and for wood member width
  - 1. Comply with AWI- Section 3, 4.2a.
- B. All glues shall comply with V.O.C. requirements specified in Section G01600.

#### **2.06 WINDOW TRIM**

- A. Trim wood windows in accordance with Drawing Details.
- B. Secure stop beads on all double-hung windows with screws and slotted washers set 3" from the ends and not more than 16" on centers.

#### **2.07 SHOP FINISHING**

- A. Finishing shall be as specified in Section 09000 - Painting

### **PART 3 EXECUTION**

#### **3.01 CONDITION OF SURFACES**

- A. Examine all grounds, stripping and blocking, to secure paneling and other items provided under this Section.
- B. Do not install until all defects are corrected.

#### **3.02 INSTALLATION**

- A. Install woodwork plumb and level without distortion.
- B. Shim as necessary with concealed shims.
- C. Accurately scribe and closely fit all face plates, filler strips and trim strips to irregularities of adjacent surfaces.
- D. Do all Work in strict accordance with the details for the various portions of the Work.
- E. For adjoining pieces of hardboard, carefully select to match the color and grain as closely as possible.
- F. Interior finish
  - 1. High-speed machine work, free from planing machine marks, sandpapered smooth, ready to receive paint or varnish.
- G. Carefully fit woodwork and secure with finishing nails; countersink nails.
- H. Do not allow kerfing on faces of trim or moldings.
- I. Properly house stiles and rails into framework and properly nail and glue all parts together.
- J. Miter, with miters doweled or clamped, all trim joints except window trim.

- K. For joining of window trim, see Details.
- L. Round base and all other moldings on walls at all salient angles; where columns occur in partitions, follow contour.
- M. Carefully cut and fit wood trim at convectors.
- N. Install all trim, when applied to a surface less than 13 feet in length, in one length: no piecing will be accepted. Provide bevel joints, where joints are required; no butt joints will be accepted.
- O. In addition to machine sanding, sand all interior woodwork by hand with 00 sandpaper to give trim a smooth surface for finishing.

### **3.03 APPLYING HARDWARE**

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
  - 1. Where finish carpentry materials are exposed in areas of high humidity, provide fasteners and anchorages with hot-dip galvanized coating complying with ASTM A153/A153M.
- B. Apply all miscellaneous hardware not specified to be installed under Section 08710, Section 06410 and other Sections.

**END OF SECTION**