

SECTION 06200 - FINISH CARPENTRY**PART 1 - GENERAL****A. RELATED DOCUMENTS**

1. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
2. Architectural Woodwork Institute's (AWI's) "Architectural Woodwork Quality Standards", latest edition.

B. SUMMARY

1. This Section includes the following:
 - a. Exterior standing and running trim including custom fabricated wood columns.
 - b. All interior standing and running trim and rails.
 - c. Interior shelving and casework not specified as part of kitchen or bath cabinetry, including vinyl coated wire mesh.
2. Related Work specified elsewhere in this Project Manual:
 - a. Blocking and preparation of wood support structure for finish carpentry is specified in 06100 – Rough Carpentry.
 - b. Finishing of finish carpentry is specified in Section 09900 – Painting.
 - c. Exterior rails and balusters are specified in Section 05521 – Pipe & Tube Railings.
 - d. Factory fabricated cabinetry and countertops are specified in Division 12.

C. SUBMITTALS

1. Submit manufacturer's product data for all items specified.
2. Submit list of projects or installations performed by proposed installer that are of similar scale and complexity for review and approval by Architect and Agencies.

D. DELIVERY, STORAGE, AND HANDLING

1. Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels. Provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.
2. Do not deliver interior finish carpentry until environmental conditions meet requirements specified for installation areas. If finish carpentry must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified for installation areas.

E. QUALITY ASSURANCE

1. Capability of Finish Carpenters: Employ only installer(s) of finish carpentry who have a proven track record and history of 5 years experience with work of similar scale and complexity. Capability, capacity of output and possession of appropriate equipment are all considered critical to the acceptability of installer.

2. Workmanship: All finish work shall be compared with the referenced Quality Standards where applicable. Where none apply or are referenced, work shall be performed in professional and most workmanlike manner as can be expected of experienced finish carpenters.

F. PROJECT CONDITIONS

1. Environmental Conditions: Obtain and comply with finish carpentry manufacturer's and installer's coordinated advice for optimum temperature and humidity conditions for finish carpentry during its storage and installation.
2. Weather Conditions: Proceed with finish carpentry only when existing and forecasted weather conditions will permit exterior finish carpentry to be installed in compliance with manufacturer's recommendations and when substrate is completely dry.

PART 2 - PRODUCTS

A. MATERIALS, GENERAL

1. Lumber Standards: Comply with PS 20 "American Softwood Lumber Standard" for lumber and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.
2. Inspection Agencies: Inspection agencies and the abbreviations used to reference them with lumber grades and species include the following:
 - a. NELMA: New England Lumbermen's Association.
 - b. AWI: Architectural Woodwork Institute.
3. Grade Stamps: Provide lumber with each piece factory-marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
 - a. For exposed lumber furnish pieces with grade stamps applied to ends or back of each piece, or omit grade stamps entirely and provide certificates of grade compliance issued by inspection agency.

B. EXTERIOR STANDING AND RUNNING TRIM, RAILS AND COLUMNS

1. Softwood Trim: Species and grade shall be No. 1 or Better, Pine or Poplar. Finger-jointed materials are NOT acceptable.
2. Panel Products: Provide Medium Density Overlay (MDO) plywood, marine grade, void free, 7-ply panel products for all exterior finish carpentry applications requiring face widths greater than 8 inches.
 - a. Exposed edges shall be banded with fir or filled and sanded smooth with exterior, high strength, waterproof, 2-part filler compound.
3. Turned Wood Columns: Provide turned wood, dimensionally accurate Ionic style, tapered, loadbearing columns and split column covers in dimensions and locations indicated on Drawings.

- a. Manufacture: Columns shall be fabricated with treated, No. 1 or better, tight grained softwood; either white pine, cypress, or fir, using staved construction. Units turned by Saco Manufacturing, Schwerd, or Somerset are acceptable.
 - (1) Where required to cover other structural members, provide units with shafts split in equal halves prior to turning.
 - (2) Provide manufacturer's standard vented plinth base and cap of cast aluminum or wood.
 - (3) Factory prime with alkyd wood primer after filling and sanding smooth all irregularities prior to delivery.
 4. Preservative Wood Treatment by Pressure Process: Where lumber or plywood is indicated as preservative-treated wood or as specified herein to be treated, comply with applicable requirements of AWPB Standards C2 (Lumber) and C9 (Plywood). Mark each treated item with the AWPB or SPIB Quality Mark Requirements.
 - a. Pressure-treat above ground items with water-borne preservatives to a minimum retention of 0.25 pcf. Treat indicated items and the following:
 - (1) All exterior trim including standing and running trim, and column wraps, wood rails and balusters
 - b. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces to comply with AWPB M4. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.
- C. INTERIOR STANDING AND RUNNING TRIM AND RAILS
1. Trim and Rails: For trim and rails in form of boards and worked products, provide lumber complying with the following requirements.
 - a. Species: No. 1 Pine or Poplar. Paint Grade, finger-jointed materials are acceptable. Match existing species for stained wood.
 - b. Profiles: Provide profiles of trim and rails as indicated on Drawings.
 - c. Factory prime: Lumber which has been factory primed is acceptable provided primer is compatible with specified finish system.
 - (1) Factory priming does not relieve the Contractor from proper preparation of sapwood and knots for final finishing.
 2. Panel Products: Provide solid hardwood veneer panels, with nosings on exposed edges of 3/4 inch x thickness of panel in same species; to be applied to all exposed edges.
- D. MISCELLANEOUS MATERIALS
1. Stair Parts (interior stair to 3rd floor):
 - a. Treads: Provide Red Oak treads and raisers. Stair shall be "closed" style.
 2. Wall and Continuous Rails (Fire Stairs and stair to 3rd floor): 1-3/4 inch hardwood railing, smooth and knot free, bracket mounted, equal to C6040 by Coffman. Finger jointed railing stock is not acceptable. Miter outside and inside corners and return all ends to wall.
 - a. Wall Rail Brackets: Provide brackets equal to Coffman C-3601-B (brass) or equal by Blum as indicated on Drawings. Brackets and railing installation must be able to sustain BOCA specified loading.

- (1) Maximum bracket spacing to be 4'-0" on center.
3. Shelving Systems:
 - a. Closet Shelf with Pole: vinyl coated wire shelving, rod and brackets system equal to Closet Maid. Provide all supports and mounting hardware required for a finished installation.
 - b. At Contractor's option; provide and install melamine clad particleboard shelf on metal brackets with integral pole support. Closet pole shall be 1 inch diameter Fir for natural finishing.
4. Fasteners for Exterior Finish Carpentry: Stainless steel, in sufficient length to penetrate minimum of 1-1/2 inches into substrate unless recommended otherwise by manufacturer.
 - a. Countersink nails and fill surface where face nailing is unavoidable.
5. 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.
 - a. Countersink nails, fill surface flush, and sand where face nailing is unavoidable.
 - b. Where finish carpentry materials are exposed in areas of high humidity, provide fasteners and anchorages with hot-dip galvanized coating complying with ASTM A 153.

E. FABRICATION

1. Wood Moisture Content: Comply with requirements of specified inspection agencies and manufacturer's recommendations for moisture content of finish carpentry in relation to relative humidity conditions existing during time of fabrication and in installation areas. Provide finish carpentry with moisture content that is compatible with Project requirements.
2. Fabricate finish carpentry to dimensions, profiles and details indicated. Ease edges to radius indicated for the following:
 - a. Lumber less than 1 inch in nominal thickness: 1/16 inch.
 - b. Lumber 1 inch or more in nominal thickness: 1/8 inch.
3. Fabricate Utility Shelving to comply with AWI Section 600, Custom Grade.

PART 3 - EXECUTION

A. EXAMINATION

1. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting installation and performance of finish carpentry. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. PREPARATION

1. Clean substrates of projections and substances detrimental to application.
2. Condition finish carpentry to average prevailing humidity conditions in installation areas before installation for a minimum of 24 hours unless longer conditioning recommended by manufacturer.

C. INSTALLATION, GENERAL

1. Do not use finish carpentry materials that are unsound, warped, bowed, twisted, improperly treated or finished, not adequately seasoned, or too small to fabricate with proper jointing arrangements.
2. Do not use manufactured units with defective surfaces, sizes, or patterns.
3. Install finish carpentry plumb, level, true, and aligned with adjacent materials. Use concealed shims where required for alignment.
4. Scribe and cut finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
5. Install to tolerance of 1/8 inch in 8 feet for plumb and level. Install adjoining finish carpentry with 1/16 inch maximum offset for flush installation and 1/8 inch maximum offset for reveal installation.
6. Coordinate finish carpentry with materials and systems that may be in or adjacent to standing and running trim and rails. Provide cutouts for mechanical and electrical items that penetrate exposed surfaces of trim and rails.
7. Finish in accordance with specified requirements.

D. STANDING AND RUNNING TRIM AND RAILS

1. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Stagger joints in adjacent and related standing and running trim and rails. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints. Plane back of casings to provide uniform thickness across joints if required.
2. Install trim after drywall joint finishing operations are completed.
3. Fit exterior joints to exclude water. Apply flat grain lumber with bark side exposed to weather.

E. ADJUSTING

1. Repair damaged or defective finish carpentry where possible to eliminate functional or visual defects. Where not possible to repair, replace finish carpentry. Adjust joinery for uniform appearance.

F. CLEANING

1. Clean finish carpentry on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

G. PROTECTION

1. Provide final protection and maintain conditions that ensure finish carpentry is without damage or deterioration at time of Substantial Completion.

END OF SECTION 06200