

## SECTION 06200 - FINISH CARPENTRY

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Interior Finish Carpentry Work:
  - 1. Refer to schedule at end of Section.

#### 1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Blocking, bracing and back-up framing.
- B. Section 06410 - Custom Casework.
- C. Section 08212 - Wood Doors.
- D. Section 08710 - Finish Hardware.
- E. Section 09900 - Painting: Field finishing.

#### 1.3 REFERENCES

- A. American National Standards Institute (ANSI):
  - 1. A161.2, Performance Standards for Fabricated High Pressure Decorative Laminate Countertops.
  - 2. A208.1, Mat-Formed Wood Particleboard.
- B. Architectural Woodwork Institute (AWI):
  - 1. Architectural Woodwork Quality Standards, 7<sup>th</sup> Edition, Version 1.2, 1999.
- C. American Plywood Association (APA):
  - 1. E30E Residential Commercial Construction Guide.
- D. American Society for Testing of Materials:
  - 1. E84, Surface Burning Characteristics of Building Materials.
  - 2. American Wood Preserver's Association (AWPA):
  - 3. C20, Structural Lumber Fire Retardant by Pressure Treatment.
  - 4. C27, Structural Plywood Fire Retardant by Pressure Treatment.
- E. American Wood Preserver's Bureau (AWPB):
  - 1. LP-2, Standard for Softwood, Lumber, Timber, Plywood Pressure Treated with Waterborne Preservatives.
- F. Federal Specifications:
  - 1. MM-L-736C, Lumber, Hardwood.
  - 2. MMM-A-130B, Adhesive, Contact.
- G. Product Standards (PS):
  - 1. 1, Construction and Industrial Plywood.
  - 2. 20, American Softwood Lumber Standard.
  - 3. 51, Hardwood and Decorative Plywood.
  - 4. 58, Basic Hardboard.

#### 1.4 SUBMITTALS

- A. General: Submit following items in accordance with Section 01330.
- B. Product Data: Manufacturer's technical literature for factory fabricated items and components.
- C. Shop Drawings
  - 1. Indicate profiles, sections, and views of stock items as well as specially fabricated items for the work, at scale large enough to permit checking for design conformity.
  - 2. Indicate sizes, quantities, markings, materials, wood species, finishes and accessories.
  - 3. Include assembly and installation drawings to show methods of blocking, fastening, bracing, jointing, and connecting to work of other trades.
- D. Samples: Two samples of each type and species of finish lumber specified, complete with applied finish.

## 1.5 QUALITY ASSURANCE

- A. Fabrication Standards: Fabricate items in accordance with AWI standards listed below using custom grade unless noted otherwise.
  - 1. Lumber grades: AWI Section 100.
  - 2. Standing and running trim: AWI Section 300.
  - 3. Shelving: AWI Section 600.
  - 4. Miscellaneous work: AWI Section 700.
  - 5. Door frames: AWI Section 900.
- B. Regulatory Requirements: Conform to applicable code for fire retardant requirements.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, handle, and protect products in accordance with Section 01600.
- B. Protect materials from damage, soiling and deterioration.
- C. Do not deliver finish carpentry materials until job site conditions and operations which could damage, soil or deteriorate work are complete.
- D. Store products and materials in ventilated, interior locations under constant minimum temperature of 60 degrees F. and relative humidity not to exceed 55%.

## 1.7 ENVIRONMENTAL REQUIREMENTS

- A. Install finish carpentry products only when temperature and humidity conditions have been stabilized and will be maintained.
- B. Maintain temperature and moisture conditions as recommended by woodwork fabricator from date of installation through remainder of construction period.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General
  - 1. Comply with quality and grading standards contained herein for each material.
  - 2. Sizes noted on drawings or indicated herein for lumber are nominal unless detailed by specific dimensions of actual size.
  - 3. Plywood and particleboard 3/4 inch thickness unless noted or detailed otherwise.
  - 4. Products surfaced four sides, unless noted otherwise.
- B. Softwood Lumber
  - 1. Quality standard: PS 20.
  - 2. Grading Standard: AWI custom grade.
  - 3. Maximum moisture content: 6% for interior work; 10% for exterior work.
  - 4. Species: Birch.
  - 5. Grain: Mixed.
- C. Hardwood Lumber
  - 1. Quality standard: FS MM-L-736C.
  - 2. Grading standard: AWI custom grade.
  - 3. Maximum moisture content: 6%.
  - 4. Species: Clear white maple.
  - 5. Grain: Quarter sawn.
- D. Softwood Plywood
  - 1. Quality standard: PS 1.
  - 2. Grading standard: AWI custom.
  - 3. Core material: C-D Plugged INT-APA.
  - 4. Face quality: A-B INT-APA.
  - 5. Species: Birch.
  - 6. Ply construction: 3 ply - 3/8 inch; 5 ply-1/2 inch; 7 ply - 3/4 inch.
- E. Hardwood Plywood
  - 1. Quality standard: PS51.

2. Grading standard: AWI custom.
  3. Core material: Fir Veneer Lumber.
  4. Face veneer: Clear white maple.
  5. Grain: Quarter sawn.
  6. Ply construction: 3 ply - 3/8 inch; 5 ply - 1/2 inch; 7 ply - 3/4 inch.
- F. Particleboard
1. Quality standard: ANSI A208.1
  2. Grade: 1M2, sanded both faces.

## 2.2 ACCESSORIES AND TREATMENT

- A. Contact Adhesive: FS MMM-A-130B, of type recommended by millwork manufacturer to suit application.
- B. Wall Adhesive: Solvent release cartridge type, compatible with substrate, capable of achieving durable bond.
- C. Bolts, Nuts, Washers, Lags, Pins, Nails, and Screws: Size and type to suit application.
- D. Nails: Size and type to suit application, plain finish.
- E. Shelf Standards and Brackets: Adjustable type, equivalent to Model No. 85 standards (24 in.) and No. 185 brackets (12 in.) and No. 106 ANO shelf rest by Knap & Vogt Manufacturing Company, Grand Rapids, MI. Finish as selected by Architect.
- F. Wood Filler: Oil base, tinted to match surface finish color.

## 2.3 SHOP FABRICATION

- A. Shop fabricate assemblies in accordance with AWI custom standards.
- B. Shop prepare and identify components for book match grain matching during site erection.
- C. Sanding/Filling
  1. Perform work in accordance with AWI.
  2. Sand work smooth and set exposed nails and screws.
  3. Apply wood filler in exposed nail and screw indentations and leave ready to receive applied finishes.
  4. On items to receive transparent finishes, use wood filler which matches surrounding surfaces and of types recommended for applied finishes.
- D. Prime seal concealed and semi-concealed surfaces. Brush apply only.
- E. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures. Verify locations of cutouts from site dimensions. Seal edge surfaces of cutouts.
- F. Before proceeding with millwork required to be fitted to other construction, obtain measurements and verify dimensions of shop drawings details for accurate fit.
- G. Fabricate woodwork to dimensions, profiles, and details shown.
- H. Route and groove back of flat trim members, kerf backs of other wide flat members except plywood or veneered members.
- I. Assemble in mill in as large of units as practicable to minimize field cutting and fitting.
- J. Miter joints, where required, by joining, splining, and gluing to comply with requirements for specified grade.
- K. Cap exposed plywood and particleboard edges with hardwood trim, 3/8 inch x width of sheet, unless noted or shown otherwise to use plastic or aluminum trim.
- L. Profiles: Stock shapes, and sizes as follows:
  1. Crown Molding: WM45; 11/16" x 5-1/4".
  2. Base: WM-618; 9/16" x 5-1/4".
  3. Casing: WM-361WW; 11/16" x 4-1/2".
  4. Quarter Round: WM-106; 11/16" x 11/16".
  5. Chair Rail: WM-224; 9/16" x 2-1/2".

## 2.4 FINISH

- A. Field Finish: Refer to Sections 09000 - Color Legend and 09900 - painting for field applied stain and paint finish descriptions.



## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that surfaces openings and conditions are ready to receive work of this section. Notify Architect of any existing condition which will adversely affect execution. Beginning of execution will constitute acceptance of existing conditions.
- B. Verify that field measurements are as shown on shop drawings.
- C. Verify that mechanical, electrical, and other items affecting work of this section are in place and ready to receive the work.
- D. Beginning of installation indicates acceptance of existing conditions.

### 3.2 PREPARATION

- A. Prime paint or seal concealed surfaces and items or assemblies which will be in contact with cementitious materials or surfaces.
- B. Make field cuts with extreme care to avoid splintering.

### 3.3 INSTALLATION

- A. Install using skilled workmen in accordance with manufacturer's printed instructions and recommendations.
- B. Install work in accordance with AWI Custom Quality Standards. Handle materials to avoid dents and other damages.
- C. Set and secure materials and components, rigid, plumb, and square.
- D. Shim as required using concealed shims.
- E. Cut to fit to exact size. Where woodwork abuts other finished work, scribe and cut for accurate fit. Where necessary to fit at site, provide ample allowance for cutting and fitting.
- F. Before making cutouts, drill pilot holes at corners.
- G. Distribute defects allowed in quality grade to best overall advantage when installing job assembled woodwork items.
- H. Install trim and molding in unjointed lengths for openings and for runs less than maximum length of lumber available. For longer runs, use only one piece less than maximum length available in straight run. Allow no joints closer than 12 feet apart.
- I. Stagger joints in adjacent members.
- J. Cope moldings at returns and miter at corners.
- K. Attach woodwork securely in place with uniform joints providing for thermal and building movements; blind nail where possible.
- L. Use finishing nails where exposed.
- M. Set exposed heads for filling, except for exterior wood to receive natural finish.
- N. Secure woodwork to anchors, built-in blocking, or directly attach to substrates.
- O. Preparing for Finish
  - 1. Clean woodwork and fill nail holes. Sand to smooth finish.
  - 2. Where woodwork is to receive transparent finish, use matching wood filler.
- P. Install hardware in accordance with manufacturer's recommendations.
- Q. Provide locks on all upper and base cabinets and drawers.
- R. Cover exposed edges of sheet goods used for shelving and other items with 3/8 inch thick hardwood edging unless otherwise noted. Width of edging to match thickness of shelving.

### 3.4 TOLERANCES FOR FIELD ASSEMBLIES/JOINED ITEMS

- A. Maximum Variation from True Position: 1/16 inch.
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

### 3.5 ADJUSTING

- A. Adjust work under provisions of Section 01700.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.6 CLEANING AND PROTECTION

- A. Protect installed millwork from marring, defacement or other damage until final completion.
- B. Clean spaces of debris, vacuum and dust all millwork. Leave in condition ready for use.

3.7 SCHEDULE

- A. Interior:
  - 1. Crown Molding: Birch for paint finish.
  - 2. Base: Clear hard white maple for stain finish, and birch for paint finish.
  - 3. Casing: Birch for paint finish.
  - 4. Quarter Round: Clear hard white maple for stain finish, and birch for paint finish.
  - 5. Chair Rail: Birch for paint finish.
  - 6. Fireplace mantle: Birch for paint finish.
  - 7. Loose Shelving with adjustable standards and brackets: Birch plywood, prepare for paint finish.

END OF SECTION