

## SECTION 06200

### FINISH CARPENTRY

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

##### 1.02 SUMMARY

- A. This Section includes the following:
  - 1. Exterior standing and running trim.
  - 2. Exterior lumber siding.
  - 3. Interior standing and running trim for field finish.
  - 4. Reinforced fiberglass wall protection systems.
- B. Related Sections include the following:
  - 1. Division 6 Section "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
  - 2. Division 6 Section "Architectural Woodwork" for shop-fabricated custom casework and interior woodwork not specified in this Section.
  - 3. Division 9 Section "Painting" for priming and backpriming of finish carpentry.

##### 1.03 DEFINITIONS

- A. Lumber grading agencies, and the abbreviations used to reference them, include the following:
  - 1. NeLMA - Northeastern Lumber Manufacturers Association.
  - 2. NHLA - National Hardwood Lumber Association.
  - 3. WCLIB - West Coast Lumber Inspection Bureau.
  - 4. WWPA - Western Wood Products Association.

##### 1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01300.
- B. Product Data: For each type of process and factory-fabricated product. Include construction details, material descriptions, dimensions of individual components and profiles, textures, and colors. Include construction and application details.
- C. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

##### 1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed finish carpentry similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

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

- A. Keep materials under cover, off ground, and dry. Protect materials against weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels flat with spacers between each bundle to

provide air circulation. Provide for air circulation within and around stacks and under temporary coverings.

- B. Deliver interior finish carpentry materials only when environmental conditions meet requirements specified for installation areas. If finish carpentry materials must be stored in other than installation areas, store only where environmental conditions meet requirements specified for installation areas.

#### 1.07 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install interior finish carpentry until building is enclosed and weatherproof, wet work in space is completed and nominally dry, and provisions are made to maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit work to be performed according to manufacturer's written instructions and warranty requirements and at least one coat of specified finish to be applied without exposure to rain, snow, or dampness.
- C. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.
  - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
  - 2. Products: Subject to compliance with requirements, provide one of the products specified.

#### 2.02 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable grading rules of inspection agencies certified by the American Lumber Standards' Committee Board of Review.
  - 1. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
  - 2. For exposed lumber, mark grade stamp on end or back of each piece.

#### 2.03 EXTERIOR STANDING AND RUNNING TRIM

- A. Lumber Trim for Clear Finish:
  - 1. Species and Grade: Western red cedar, Grade A Clear (all heartwood); NLGA, WCLIB, or WWPA. Provide kiln dried lumber.
  - 2. Face Surface: Surfaced (smooth).

#### 2.04 SIDING

- A. Lumber Siding: Kiln-dried lumber siding complying with DOC PS 20.
  - 1. Species and Grade: Grade A Clear, all heartwood western red cedar; NLGA, WCLIB, or WWPA.
  - 2. Size: 1- by 4-inches nominal; smooth surface all four sides.

## 2.05 INTERIOR STANDING AND RUNNING TRIM

- A. Hardwood Lumber Trim for Transparent Finish (Stain or Clear Finish):
1. Species and Grade: White maple ; A finish; NHLA.
  2. Maximum Moisture Content: 13 percent.
  3. Finger Jointing: Not allowed.
  4. Gluing for Width: Not allowed.
  5. Veneered Material: Not allowed.
  6. Face Surface: Surfaced (smooth).
  7. Matching: Selected for compatible grain and color.

## 2.06 WALL PROTECTION SYSTEM

- A. Fiberglass Reinforced Wall Panel (FRP): Kemlite Fire-X Glasboard with surfaseal, 0.090 inch by 4 foot wide by full height panels. PVC inside and outside corners, and H-molding not less than 1-inch wide. Use adhesive and caulking as specified by manufacturer. Color for panel and molding shall match.
1. Color: White.
- B. Adhesive: Comply with paneling manufacturer's recommendations for adhesives.

## 2.07 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: Provide nails or screws, in sufficient length to penetrate minimum of 1-1/2 inches into substrate, unless otherwise recommended by manufacturer:
1. For face-fastening siding and trim, provide Type 316 stainless steel ringed-shank siding nails with small heads, minimum 6d.
  2. For applications not otherwise indicated, provide stainless-steel fasteners.
- B. Flashing for Exterior Finish Carpentry: Comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim" for flashing materials installed in exterior finish carpentry.
- C. 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.
- D. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.
- E. Multipurpose Construction Adhesive: Formulation complying with ASTM D 3498 that is recommended for indicated use by adhesive manufacturer.

## 2.08 FABRICATION FOR WOOD PRODUCTS

- A. Quality Standards: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" for grades, construction, finishes, and other requirements as follows:
1. Standing and Running Trim: Section 300, Custom Grade.
- B. Wood Moisture Content: Comply with requirements of specified inspection agencies and with manufacturer's written recommendations for moisture content of finish carpentry at relative humidity conditions existing during time of fabrication and in installation areas.
- C. Back out or kerf backs of the following members, except members with ends exposed in finished work:
1. Exterior standing and running trim wider than 5 inches, except members with ends exposed in finished work.
  2. Interior standing and running trim, except shoe and crown molds.
- D. Ease edges of lumber less than 1 inch in nominal thickness to 1/16-inch radius and edges of lumber 1 inch or more in nominal thickness to 1/8-inch radius.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine finish carpentry materials before installation. Reject materials that are wet, moisture damaged, and mold damaged.
- C. Confirm that the two specified prime coats have been applied to exterior wood trim and siding prior to installation of materials.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours, unless longer conditioning is recommended by manufacturer.
- C. Prime lumber and siding for exterior applications, including both faces and edges. Cut to required lengths and prime ends. Comply with requirements in Division 9 Section "Painting."

### 3.03 INSTALLATION, GENERAL

- A. Do not use materials that are unsound, warped, improperly treated or finished, inadequately seasoned, or too small to fabricate with proper jointing arrangements.
- B. Install finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
  - 1. Scribe and cut finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
  - 2. Where face fastening is unavoidable on interior finish carpentry, countersink fasteners, fill surface flush, and sand.
  - 3. Install to tolerance of **1/8 inch in 96 inches** for level and plumb. Install adjoining finish carpentry with **1/32-inch** maximum offset for flush installation and **1/16-inch** maximum offset for reveal installation.
  - 4. Coordinate finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate exposed surfaces of finish carpentry.
  - 5. Finish according to specified requirements.

### 3.04 EXTERIOR STANDING AND RUNNING TRIM INSTALLATION

- A. Install flat grain lumber with bark side exposed to weather.
- B. Install trim with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than **24 inches** long except where necessary.
  - 1. Use scarf joints for end-to-end joints.
  - 2. Stagger end joints in adjacent and related members.
- C. Fit exterior joints to exclude water. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Plane backs of casings to provide uniform thickness across joints, where necessary for alignment.

- D. Unless otherwise indicated, countersink fasteners, fill surface flush, and sand where face fastening is unavoidable.

### 3.05 HORIZONTAL LUMBER SIDING INSTALLATION

- A. Install lumber siding with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches long except where necessary.
  - 1. Use scarf joints for end-to-end joints, and locate over furring.
  - 2. Stagger end joints in adjacent and related members not less than 3 joints vertically and not less than 2 furring bays horizontally.
  - 3. Miter corners to produce tight-fitting joints with full-surface contact throughout length of joint.
  - 4. Dip all cut ends in Sikkens Cetol 1, used for primer, thoroughly saturating end grain.
- B. Fasten lumber siding at each furring strip with 2 fasteners per piece aligned vertically and heads flush to siding surface.
- C. Align tops and bottoms of lumber siding with adjacent design features as indicated. Maintain uniform gap between ends and edges of the siding and the perimeter break metal flashing. Maintain the same gap for all locations.
- D. Flashing: Install metal flashing as indicated on Drawings.
- E. Finish: Coordinate with painter to have finish applied within two weeks of installation.

### 3.06 INTERIOR STANDING AND RUNNING TRIM

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches long, except where necessary. 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 backs of casings to provide uniform thickness across joints where necessary for alignment.
  - 1. Match color and grain pattern of trim for transparent finish (stain or clear finish) across joints.
  - 2. Install trim after gypsum board joint finishing operations are completed.
  - 3. Drill pilot holes in hardwood before fastening to prevent splitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.

### 3.07 FRP INSTALLATION

- A. Install according to manufacturer's recommendations. Set fiberglass reinforced panel edges in silicone sealant. Perimeter and H-moldings shall be fastened through the wallboard to studs or blocking back-up. Provide continuous cove base molding at the bottom of fiberglass panels, set in sealant. Apply wall panels with adhesive, allowing proper clearance for expansion and contraction. Brace wall panels to assure even contact to wall until adhesive has cured.

### 3.08 ADJUSTING

- A. Replace finish carpentry that is damaged or does not comply with requirements. Finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.

### 3.09 CLEANING

- A. Clean finish carpentry on exposed and semiexposed surfaces.

### 3.10 PROTECTION

- A. Protect installed products from damage from weather and other causes during remainder of the construction period.

- B. Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.
  - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.
  
- C. Provide final protection and maintain conditions that ensure finish carpentry is without damage or deterioration at the time of Substantial Completion.

END OF SECTION