

## **SECTION 06 10 53 – MISCELLANEOUS ROUGH CARPENTRY**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes furnishing and installing:
  - 1. Wood furring, grounds, nailers and blocking.
  - 2. Equipment mounting boards
  - 3. Treated wood roof curbs and cants.

#### **1.3 RELATED WORK**

- A. Related Work of Other Sections:
  - 1. Division 05 Section – Metal Fabrications.
  - 2. Division 06 Section – Architectural Woodwork.
  - 3. Division 07 Section – SBS Modified Bitumen Membrane Roofing.
  - 4. Division 07 Section – Roof Specialties and Accessories.
  - 5. Division 09 Section – Gypsum Board Assemblies.
  - 6. Divisions 21, 22, 23, 26 Sections – Rooftop mounted HVAC fans and vents. electrical, data, and telephone equipment and distribution.

#### **1.4 ENVIRONMENTAL PERFORMANCE REQUIREMENTS:**

- A. Provide structural sheathing and underlayment manufactured without a formaldehyde-based binding resin or that has a formaldehyde emission below 0.05 ppm.
- B. Do not use woods listed by CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), [www.cites.org](http://www.cites.org).
- C. Preservative treatments shall be waterborne, free of arsenic and chromium.
- D. Fire retardant treatment shall not contain halogens, sulfates, chlorides, or ammonium phosphates. Treatment shall be non-hygroscopic and non-corrosive per ASTM D-3201.

#### **1.5 DELIVERY, STORAGE, AND PROTECTION**

- A. Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces.
- B. 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.

## **PART 2 - PRODUCTS**

### **2.1 DIMENSION LUMBER**

- A. Provide lumber manufactured to comply with DOC PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review. Provide dressed lumber, S4S, air seasoned with maximum 19 percent maximum moisture content, "S-DRY," 2-inch (50 mm) or less in nominal thickness. Provide graded and grade-marked lumber as follows, complying with the association grading rules, under whose rules the material was produced. In the event Contractor wishes to use lumber of other species or grades, submit pertinent data for Architect's approval prior to placing orders.
1. Blocking, Furring, and Similar Rough Lumber Not Otherwise Specified: Douglas Fir - Larch No. 2 (WWPA) or Southern Pine No. 2 (SPIB).
  2. Pressure preservative treated wood roof curbs, nailers, and wood cants.

### **2.2 CONSTRUCTION PANELS**

- A. Provide plywood panels complying with DOC PS1 "US Product Standard for Construction and Industrial Plywood." Factory-mark each panel with APA trademark indicating compliance with grade requirements. Provide the following:
1. Plywood Wall Sheathing: APA RATED SHEATHING, EXTERIOR or EXPOSURE 1, 32/16, minimum 1/2" thick, veneer plywood only, preservative treated as specified.
  2. Exposed Plywood (Equipment Mounting Panels): Exterior type, APA A-C, EXTERIOR, 3/4" thick, fire retardant treated as specified.

### **2.3 PRESERVATIVE TREATMENT**

- A. Micronized Copper Quaternary (MCQ): Pressure impregnate preservative to net retention of 0.15 lbs./cu.ft., in plant licensed by manufacturer in accordance with AWPA Standard Specification P-5 and as follows:
1. Above Ground Use Waterborne Dry Salt Retention: 0.25 lb./cu. ft.
  2. Provide Quality Mark Stamp or end tag identifying third party inspection agency on treated wood for identification.
  3. Kiln dry members after treatment to 15% MC. Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.
  4. Peel and Stick Separation Layer Between Treated Lumber in contact with steel Decks: Polyguard Products "High Temperature Deck Guard," or Henry "Blueskin PE200HT," or W. R. Grace "Grace Ultra," or GAF "MetalMate," York Deck Shield 366, or equivalent approved by Architect.
  5. Re-grade and re-stamp lumber after kiln drying in accordance with lumber producer's grading rules.
  6. ACQ and CCA preservatives are not permitted.
  7. Acceptable Manufacturers: Osmose "MicroPro" Smart Sense; or equivalent approved by Architect.

### **2.4 FASTENERS**

- A. Fasteners and Anchors: Provide size and type suited to application shown.
1. Nails: ASTM F 1667. Staples are not an acceptable substitute.

2. Bolts, Nuts, and Washers: ASTM A 307 (Grade A; ASTM F 568, Property Class 4.6), with ASTM A 563 hex nuts and flat washers.
3. Fasteners Exposed to Moisture: For nails, washers, nuts, and bolts in contact with treated wood, cast into concrete, or permanent exposure to weather, or high humidity, or ground contact, provide fasteners with hot-dip zinc coating per ASTM A 153, G90 minimum zinc coating, or of AISI Type 304 stainless steel.
4. Power Driven Nails: CABO NER-272.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. General: Set rough carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted.
  1. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by the Nailing Schedule requirements of local codes of authorities having jurisdiction.
  2. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not penetrate members where opposite side will be exposed or covered with finish materials. Make tight connections between members. Install fasteners without splitting of wood; pre-drilled wood members as required.
  3. Do not use materials with defects that might impair quality of rough carpentry or pieces that are too small to use with minimum joints or optimum joint arrangement.
  4. Except as otherwise specified, use hot-dip galvanized nails for all exterior work.
- B. Plywood: Follow applicable recommendations contained in Form No. E30L, "APA Design/Construction Guide-Residential & Commercial," for plywood product types and applications shown.
  1. Use full sheets of sheathing to the greatest extent possible; do not use scraps to fill in areas.
  2. Provide 1/8" space between long edges of panels and 1/8" space between panel ends. Locate wall sheathing panel long dimension edges over support framing members.

**END OF SECTION 06 10 00**