

DIVISION 06 - WOOD, PLASTICS & COMPOSITES

SECTION 0606 - ROUGH CARPENTRY

1.00 GENERAL Division 01 requirements apply to this Section.

1.01 SECTION INCLUDES

- A. Carpentry work included as part of other sections and which generally is not exposed, except as otherwise indicated.
- B. Rough carpentry for:
 1. Wood framing.
 2. Miscellaneous lumber for attachment and support of other work.
 3. Wood framing.
 4. Sheathing.
 5. Construction panels for miscellaneous uses.
 6. Wood blocking and cutting, including:
 - a. Roof curbs and cants.
 - b. Blocking in wall and roof openings.
 - c. Wood framing and grounds.
 - d. Concealed wood blocking for support of load and bath accessories, cabinets, wood trim and Polyurethane Insulation Board.
- C. Preservative treatment.
- D. Fire-retardant treatment.

1.03 QUALITY ASSURANCE

- A. Lumber Standards: Manufacture lumber to comply with PS 20 and with applicable grading rules of inspection agency certified by American Lumber Standards Committee (ALSC) Board of Review.
- B. Inspection Agency: Inspection agencies and the alternatives used with reference to lumber grades and species include the following:
 1. WCLC: West Coast Lumber Inspection Bureau.
 2. Grade Stamp: Factory mark each piece of lumber with grade stamp of inspection agency, evidencing compliance with grading requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
 3. D. Construction Panel Standards: Comply with PS 1 for plywood panels; for products not manufactured under PS 1 provisions, comply with American Plywood Association (APA) Performance Standard PS-100.
 4. Concealed APA Performance Rated Panels: Where construction panels will be used for concealed applications, provide APA Performance rated panels complying with requirements of APA "The Performance Rated Panels" as indicated for grade designation, clear rating, exposure durability classification, edge detail (where applicable), and thickness.
 5. Fire-Retardant: Factory mark each construction panel with APA firemark evidencing compliance with grade requirements.

2.00 PRODUCTS

2.01 DIMENSION LUMBER

- A. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual size as required by PS 20, for moisture content specified for each use.
- B. Surfing: Provide dressed lumber (S4S).
 1. Moisture content: 8 dry or MC19 (18 percent maximum moisture content).
 2. Framing Members: All framing lumber 4" or larger in the least dimension shall be heat-treated, kiln-dried, or otherwise treated to meet the following requirements:
 - a. 2x, 3x, 4x, planks, joists, rafters, and beams, No. 1 (1500F-0), Para. 123-0, unless noted on drawings.
 - b. 2x, 3x, 4x, joists, rafters, and beams, Deno No. 1 (1500F-0), Para. 123-0, unless noted on drawings.
 - c. 4x and larger beams, Deno No. 1 (1500F-0), Para. 123-0b, when beam width is not more than 2" greater than thickness, the member shall conform to Item 2 above. (Deno No. 1, (1200F-0), Para. 131-10b).
 - d. 2x, 3x, 4x, joists, No. 1 (1500F-0), Para. 123-0 unless noted otherwise on the drawings.
 - e. 4x and posts, No. 1 (1200F-0), Para. 123-0 unless noted otherwise on the drawings.
 - f. 4x and larger posts, Deno No. 1, (1200F-0), Para. 131-10b. When post width is more than 2" greater than thickness, the member shall conform to Item 2 above. (Deno No. 1, (1500F-0), Para. 130-10b).
 - g. 2x4, 2x4, studs and blocking, construction grade, (1500F-0), Para. 123-0.
- C. Miscellaneous Lumber: Provide wood for support or attachment of other work. Provide lumber of species indicated, unless otherwise indicated.
 1. Moisture content: 18 percent maximum (8-dry).
 2. Lumber: S4S, No. 1 or construction grade.

2.02 CONSTRUCTION PANELS

- A. Roof Sheathing: See drawings for locations:
 1. 3/4" CDX, I-Bois 4025, Species Group 2 or better.
 2. 3/4" CDX, I-Bois 4025, Species Group 2 or better.
- B. Wall Sheathing:
 1. 1/2" CDX, 0-C, Structural Grade 1 or better.
- C. Construction Details: Miscellaneous uses.
 1. Exposed plywood: A-D interior.
 2. Electrical telephone panel backer: APA rated sheathing, Exposure 1, Treating Grade fire-retardant treated.
 3. Exterior Plywood:
 - a. 1/2" Marine Grade.

2.03 MISCELLANEOUS MATERIALS

- A. Fasteners: Provide size, type, material and finish as required by applicable codes, as indicated, and as recommended by applicable standards.
 1. Comply with applicable Federal Specifications for nails, spikes, and screws of the size and type recommended by the manufacturer for each use.
 2. Provide fasteners with zinc coating (ASTM A153) for treated lumber and where rough carpentry work is either in ground contact, in an area of high relative humidity, or exposed to weather.
- B. Framing Connectors and Supports: Pre-drilled, formed steel, uncoated hot-dip galvanized steel unless otherwise indicated, type and size as required; uncoated by applicable codes.
 1. Manufacturers: Products of the following manufacturers, provided they comply with requirements of the contract documents, will be among those considered acceptable:
 - a. Simpson Strong-Tie Company, Inc.
 - b. United Steel Products Company.

2.04 WOOD TREATMENT BY PRESSURE PROCESS

- A. Pressure-treat above ground items with waterborne preservatives to comply with APA-U1. After treatment, kiln-dry lumber to a maximum moisture content of 19 percent.
- B. Treat indicated items and the following:
 1. Wood members in contact with roofing, flashing, or waterproofing.
 2. Wood framing members less than 10" above grade.
- C. Inspect each piece of treated wood before use and discard damaged or defective pieces.

3.00 EXECUTION

3.01 INSTALLATION - GENERAL

- A. Distribute units of material with uniform quality of work, and units which are not small to use in fabricating work with minimum joints or optimum joint arrangement.
- B. Set carpentry work to required levels and line, with members plumb and true to line and out and level.
- C. Securely attach carpentry work to substrate by anchoring and bolting as shown, as required by applicable codes, and as required by recognized standards.
- D. Connect nailer heads on exposed carpentry work as follows:
 1. Use common wire nails, except as otherwise indicated. Use framing nails for finish work. Select nailers of size that will not penetrate members where open side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without cutting off wood, pry-dry, or as required.

3.02 MISCELLANEOUS CARPENTRY

- A. Provide miscellaneous blocking, nailing, gables, and framing as shown and as required for support of framing materials, rafters, specialty items, and trim. Form to shape as shown and cut as required for true line and level and to be attached. Coordinate locations with other work involved.
- B. Attach to substrate as required to support applied loading. Do not counteract loads and nailing with surfaces, unless otherwise indicated.
- C. Provide permanent blocking, preservative treated, dry-treated lumber not less than 1 1/2" wide and of thickness required to bring face of ground to level thickness of finish material being framed.

3.03 WOOD FURRING

- A. Install plumb and level with close joints at edges and openings. Shim wood as required for installation of finished work.

3.04 WOOD FRAMING - GENERAL

- A. Provide framing members (size and on spacing shown, and frame openings as shown; if not shown, comply with recommendations of AISC "Manual for Wood Frame Construction" Do not splice structural members between supports.
- B. Anchor and nail as shown, and to comply with "Manual of Building Construction" (AWC "Manual for Wood Frame Construction" and AISC Design Specification for Structural Steel Buildings). Where fire stops are not automatically provided by the fire-rated item, use closely fitted wood blocks of nominal 2-inch thickness to the ends of framing members, unless otherwise indicated. Provide fire stops in the following locations, unless otherwise indicated:
 1. Concealed vertical spaces over 10" in height occurring in stud walls.
 2. Stud walls.

SECTION 0607 - WEATHER BARRIERS

1.00 GENERAL Division 01 requirements apply to this Section.

1.01 SECTION INCLUDES

- A. Flashers
- B. Fasteners
- C. Qualifications

1.4 QUALITY ASSURANCE

- A. Qualifications:
 1. Installer shall have experience with installation of similar weather barrier assemblies under similar conditions.
- B. Installation shall be in accordance with manufacturer's installation guidelines and recommendations.
- C. Source Limitations: Provide weather barrier and accessory materials produced by single manufacturer.

2.00 PRODUCTS

2.01 MANUFACTURER

2.2 MATERIALS

2.3 ACCESSORIES

2.4 ADHESIVE

2.5 FASTENERS

2.6 FABRICATORS

2.7 LUMBER MATERIALS

2.8 SHEET MATERIALS

2.9 PLASTIC LAMINATE MATERIALS

2.10 ADHESIVE

2.11 FASTENERS

2.12 PRODUCTS

2.13 FABRICATORS

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2.15 SHEET MATERIALS

2.16 PLASTIC LAMINATE MATERIALS

2.17 ADHESIVE

2.18 FASTENERS

2.19 PRODUCTS

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2.22 SHEET MATERIALS

2.23 PLASTIC LAMINATE MATERIALS

2.24 ADHESIVE

2.25 FASTENERS

2.26 PRODUCTS

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