

SECTION 061001 - ROUGH CARPENTRY - ARCHITECTURE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Glass Mat Faced Gypsum Sheathing.
- B. Concealed wood blocking, nailers, and supports.

1.2 RELATED REQUIREMENTS

- A. Section 054000 - Cold-Formed Steel Framing
- B. Section 061000 - Rough Carpentry - Structural - Structural Sheathing.
- C. Section 072700 - Air Barriers: Air barrier over sheathing.
- D. Section 076200 - Sheet Metal Flashing and Trim: Sill flashings.

1.3 REFERENCE STANDARDS

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- B. ASTM C557 - Standard Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing.
- C. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
- D. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- F. ASTM F1667/F1667M - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- G. AWWA M4 - Standard for the Handling, Storage, Field Fabrication and Field Treatment of Preservative-Treated Wood Products.
- H. AWWA U1 - Use Category System: User Specification for Treated Wood.
- I. ICC (IBC) - International Building Code.
- J. ITS (DIR) - Directory of Listed Products.
- K. PS 1 - Structural Plywood.
- L. PS 20 - American Softwood Lumber Standard.

- M. UL (DIR) - Online Certifications Directory.

1.4 SUBMITTALS

- A. See Section 013300 - Submittal Procedures for submittal procedures.
- B. Product Data: Provide technical data for each type of process and factory-fabricated product; wood preservative materials, application instructions, and fire-retardant treatments.
- C. Product Data: Submit technical data on wood treatment.
- D. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

1.7 WARRANTY

- A. See Section 017800 - Closeout Submittals for additional warranty requirements.
- B. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
 - 2. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.2 CONSTRUCTION PANELS

- A. Wall Sheathing: Glass mat faced gypsum, ASTM C1177/C1177M, 5/8 inch Type X fire resistant.

1. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
2. Edges: Square.
3. Products:
 - a. CertainTeed Corporation; GlasRoc Brand: www.certainteed.com/#sle.
 - b. Georgia-Pacific Gypsum; DensGlass Sheathing: www.gpgypsum.com/#sle.
 - c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Fire-Shield Sheathing: www.goldbondbuilding.com/#sle.
 - d. USG Corporation; Securock Brand UltraLight Glass-Mat Sheathing Firecode USGX 5/8 in. (15.9 mm): www.usg.com/#sle.
 - e. Substitutions: See Section 016000 - Product Requirements.
- B. See Section 061600 Wood Sheathing for structural sheathing at corners and other locations indicated on the drawings.
- C. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood; 3/4 inch thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

2.3 FIRE-RETARDANT TREATMENT (FRT)

- A. Factory-treat wood members in accordance with AWWPA U1 and use category indicated.
- B. Kiln-dry after treatment (KDAT) to maximum moisture content of 19 percent for sawn material and 15 percent for plywood.
- C. Fabrication of FRT Wood:
 1. Ripping or milling of boards, lumber, and timber after treatment is not permitted.
 2. Field cutting to length and drilling of holes in boards, lumber, and timber are permitted without additional treatment.
 3. Field cutting and drilling of holes in plywood are permitted.
- D. Label or brand FRT wood with classification mark of UL (DIR) or ITS (DIR) or other approved inspection agency, the treatment plant, name of treatment, species of wood, flame spread and smoke developed index, method of drying after treatment, and treating standard.

2.4 PRESSURE-PRESERVATIVE TREATMENT (PPT)

- A. Factory-treat wood members in accordance with AWWPA U1 and use category indicated.
- B. Applications - Treat the Following:
 1. Sleepers and sills on concrete or masonry in direct contact with earth: .
 2. Wood framing members in direct contact with interior of exterior masonry or concrete walls below grade: Use Category ____.
 3. Lumber and plywood in contact with membrane roofing and flashing: .
 4. Lumber and plywood in contact with waterproofing and flashing: Use Category ____.
- C. Kiln-dry wood after treatment with waterborne preservative to maximum moisture content of 19 percent for lumber and 15 percent for plywood.
- D. Fabricate to maximum extent possible before treatment.

- E. Label preservative-treated wood with marking as required by AWP A U1 and ICC (IBC). Unless otherwise permitted by standard U1 and building code, include the following markings: AWP A U1, accredited inspection agency mark, treating plant identification, type of preservative, preservative retention, and permitted end use.
- F. Field Treatment for Cuts and Holes in Preservative-Treated Wood: Comply with AWP A M4.

2.5 ACCESSORIES

- A. Metal and Finish of Fasteners:
 - 1. Fire-Retardant-Treated Wood:
 - a. Nails, timber rivets, wood screws, and lag screws: Hot-dip galvanized steel complying with ASTM A153/A153M Class D.
 - 2. Preservative-Treated Wood:
 - a. Nails, timber rivets, wood screws, and lag screws - general use: Hot-dip galvanized steel complying with ASTM A153/A153M Class D.
 - 3. Untreated Wood: Unfinished steel.
- B. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
 - 2. Nails, Brads, and Staples: ASTM F1667/F1667M.
- C. Sill Flashing: See Section 076200.
- D. General Purpose Construction Adhesives: Comply with ASTM C557.
- E. Air Barrier: See Section 072700.

PART 3 EXECUTION

3.1 PREPARATION

- A. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.
- B. Coordinate installation of rough carpentry members specified in other sections.

3.2 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

3.3 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

- B. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
- D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
- E. Provide nonstructural framing and blocking to support the following:
 - 1. Cabinets and shelf supports.
 - 2. Wall brackets.
 - 3. Handrails.
 - 4. Grab bars.
 - 5. Towel and bath accessories.
 - 6. Wall-mounted door stops.
 - 7. Chalkboards and marker boards.
 - 8. Joints of rigid wall coverings that occur between studs.
 - 9. Other wall- or ceiling-mounted items indicated on drawings.

3.4 INSTALLATION OF CONSTRUCTION PANELS

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections. Install fasteners without splitting wood.
- D. Coordinate wall and parapet sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- E. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- F. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.
- G. Comply with applicable recommendations in APA Form No. E30, "Engineered Wood Construction Guide," for types of structural-use panels and applications indicated.
- H. Space panels 1/8 inch apart at edges and ends.
- I. Subflooring/Underlayment Combination: Glue and nail to framing; staples are not permitted.

- J. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.
 - 1. See Section 061600 Wood Sheathing for structural sheathing at corners and other locations indicated on the drawings.
 - 2. Place water-resistive barrier horizontally over wall sheathing, weather lapping edges and ends.
- K. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches on center on all edges and into studs in field of board.
 - 1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
 - 2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
 - 3. Install adjacent boards without gaps.

3.5 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Variation from Plane, Other than Floors: 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.6 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements for additional requirements.
- B. Air barriers will be considered defective if they do not pass tests and inspections.
- C. Repair damage to air barriers caused by testing; follow manufacturer's written instructions.

3.7 CLEANING

- A. Do not leave wood, shavings, sawdust, etc. on the ground or buried in fill.
- B. Prevent sawdust and wood shavings from entering the storm drainage system.

3.8 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061001