

## 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 014533 - Code-Required Special Inspections and Procedures
- B. Section 054000 - Cold-Formed Metal Framing
- C. Section 072500 - Weather Barriers: Water-resistive barrier over sheathing.
- D. Section 072700 - Air Barriers: Air barrier over sheathing.
- E. 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 F1667/F1667M - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- F. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- G. PS 1 - Structural Plywood.
- H. PS 20 - American Softwood Lumber Standard.

#### 1.4 SUBMITTALS

- A. See Section 013000 - Administrative Requirements 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. ABAA Field Quality Control Submittals: Submit third-party reports of testing and inspection required by ABAA QAP.
- D. ABAA Manufacturer Qualification: Submit documentation of current evaluation of proposed manufacturer and materials.
- E. ABAA Installer Qualification: Submit documentation of current contractor accreditation and current installer certification. Keep copies of all contractor accreditation and installer certification on site during and after installation. Present on-site documentation upon request.
- F. 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. Air Barrier Association of America (ABAA) Quality Assurance Program (QAP); [www.airbarrier.org/#sle](http://www.airbarrier.org/#sle):
  - 1. Installer Qualification: Use accredited contractor, certified installers, evaluated materials, and third-party field quality control audit.
  - 2. Manufacturer Qualification: Use evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture. Use secondary materials approved in writing by primary material manufacturer.
- B. 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.

## 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](http://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](http://www.certainteed.com/#sle).
  - b. Georgia-Pacific Gypsum; DensGlass Sheathing: [www.gpgypsum.com/#sle](http://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](http://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](http://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 ACCESSORIES

- A. Metal and Finish of Fasteners:
  1. 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. Water-Resistive Barrier: See Section 072500.
- F. 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. Coordination of ABAA Tests and Inspections:
  - 1. Provide testing and inspection required by ABAA QAP.
  - 2. Notify in ABAA writing of schedule for air barrier work. Allow adequate time for testing and inspection.
  - 3. Cooperate with ABAA testing agency.
  - 4. Allow access to air barrier work areas and staging.
  - 5. Do not cover air barrier work until tested, inspected, and accepted.
- C. Air barriers will be considered defective if they do not pass tests and inspections.
- D. 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