

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

SECTION – 07211

EXTERIOR WALL SHEATHING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work in this section includes, but is not limited to: wall, ceiling and soffit sheathing and shaftwalls, and area separation walls.
 - 1. Related work specified elsewhere:
 - 2. Brick masonry
 - 3. Metal Siding
 - 4. Joint sealers
 - 5. Cold-formed metal framing
 - 6. Light-gauge metal framing
 - 7. Rough carpentry
 - 8. Painting
 - 9. Finish carpentry

1.02 SUBMITTALS

- A. Product data: Submit manufacturer's descriptive literature indicating material composition, thickness, sizes and fire resistance.
- B. Certificates: If applicable for shaftwall, stairwells and area separation wall liners submit manufacturer's written certification that product meet specified requirements.

1.03 QUALITY ASSURANCE

- A. Fire-resistance ratings: Where applicable, provide materials and construction that are identical to those of assemblies whose fire-resistance ratings are indicated.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to the job site in manufacturer's original packaging, containers and bundles with manufacturer's brand name and identification intact and legible.
- B. Storage and handling: Store level and handle materials to protect against contact with damp and wet surfaces, exposure to weather, breakage and damage to edges. Provide air circulation under covering and around stacks of materials.

1.05 LIMITATIONS

- A. Sheathing is not intended for immersion in water. Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.
- B. The use of forced air heaters creates volumes of water vapor which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of the manufacturer. Consult heater manufacturer for proper use and ventilation. Avoid any condition that will create moisture in the air and condensation on the exterior walls during periods when the exterior temperature is lower than the interior.
- C. When sheathing panels are used in slanted wall applications, that portion of the wall must be temporarily

protected from the elements by the use of a weather resistant barrier prior to application of the cladding. Do not allow water to pond or settle on sheathing. Also, exposed wall ends such as those that may be found in parapets must be covered to prevent water from infiltrating the cavity.

- D. The suitability and compatibility of the sheathing system is the responsibility of the system manufacturer or design authority.
- E. Do not laminate sheathing to masonry surfaces; use furring strips or framing.
- F. Sheathing is not intended for roof applications.
- G. Sheathing is not intended for tile applications.
- H. Sheathing should not be used in lieu of plywood where required.
- I. Do not apply sheathing below grade.
- J. For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed. Failure to do so will void the warranty.
- K. Do not use sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the face of the board, not counter sunk.

PART 2 - PRODUCTS

2.01 SHEATHING BOARD

- A. Acceptable products but not limited to the following upon proof that product meets the following specifications:
 - 1. 1/2" DensGlass Gold Exterior Sheathing
 - 2. 5/8" DensGlass Gold Fireguard Exterior Sheathing
- B. Characteristics:
 - 1. Size:
 - a. DensGlass Gold Exterior Sheathing: 1/2" (12.7mm) thick by 4' by 8', 9' or 10' (1.9 lb. per square foot).
 - b. DensGlass Gold Fireguard Exterior Sheathing: 5/8" (15.9mm) thick x 4' x 8', 9' or 10' (2.5 lb. per square foot).
 - 2. Composition:
 - a. Gypsum sheathing manufactured in accordance with ASTM C 1177 with glass mats both sides and long edges, water-resistant treated core.
 - 3. Fire resistance:
 - a. Noncombustible when tested in accordance with ASTM E 136.
 - b. 1/2" or 5/8" DensGlass Gold Exterior Sheathing: Flame spread 10, smoke developed 0, when tested in accordance with ASTM E 84.
 - c. 5/8" DensGlass Gold Fireguard® Exterior Sheathing is rated Type X as defined in ASTM C 36 when tested according to ASTM E 119 and can be used as a replacement to any other generic assembly utilizing a 5/8" Type X gypsum board (see GA-600 for numeric assemblies). DensGlass Gold Fireguard Exterior Sheathing is UL classified, Type DGG, in UL designs N501, N502, N505, U301, U302, U305, U309, U337, U342, U354, U355, U365, U411, U425, U467, U473, U475, U617, V417, V419, X508, X516.

2.02 BUILDING PAPER FOR SHEATHING APPLICATION

- A. If required by local building code, #15, nonperforated, asphalt saturated felt complying with ASTM D 226, Type 1 or equivalent building wraps.

2.03 ACCESSORIES FOR BUILDING SHEATHING

- A. Joint tape: 2" wide 10 x 10 glass mesh tape.
- B. Joint compound: Tough Rock setting-type joint compound.
- C. Nails, wood framing: Hot dip, 11-gauge galvanized nails with 7/16" head, 1 1/2" min. length.
- D. Screws, metal framing:
 - 1. Bugle head, self-tapping, rust-resistant, fine thread for heavy-steel gauge.
 - 2. Bugle head, rust-resistant sharp point, fine thread for light-gauge metal framing or furring.
- E. Screws, metal or wood framing:
 - 1. Rust-resistant, bugle head, coarse thread, sharp point for wood; or wafer head, rust-resistant screws, drill or sharp point.
 - 2. Hot dip 11-gauge, galvanized 7/16" head nail or equivalent to wood framing.
- F. Sealants, caulk and tape:
 - 1. Dow Corning 795 or equivalent; Pecora 895 or equivalent.
 - 2. Pecora AC-20 acrylic latex sealant; GE Silicone Silpruf Sealant; Tremco Dymonic or equivalent
 - 3. 2" wide 10 x 10 fiberglass mesh

PART 3 - EXECUTION

3.01 PREPARATION

- A. Examine subframing: verify that surface of framing and furring members to receive sheathing does not vary more than 1/4" from the placement of faces of adjacent members.

3.02 SHEATHING

- A. Provide Exterior Sheathing where indicated on drawings. Install sheathing in accordance with manufacturer's instructions and applicable instructions in GA-253 and ASTM C 1280.
- B. Install Exterior Sheathing with manufacturer's recommended side out.
- C. Use maximum lengths possible to minimize number of joints.
- D. Wood framing: Attach Exterior Sheathing to wood framing with nails spaced 4" o. c. at perimeter for racking shear resistance; 8" o. c. at perimeter where there are framing supports and where racking shear resistance is not required; and 8" o. c. along intermediate framing in field for both conditions.
- E. Metal framing: Attach Exterior Sheathing to metal framing with screws spaced 8" o. c. at perimeter where there are framing supports; and 8" o. c. along intermediate framing in field.
- F. Drive fasteners to bear tight against and flush with surface of sheathing. Do not countersink.
- G. Locate fasteners minimum 3/8" from edges and ends of sheathing panels.

- H. Weather-resistant barrier: If a weather barrier is required by the local building code, design professional, owner or cladding manufacturer over sheathing, one of the following procedures may be used. Consult building code designing authority for proper application selection.
1. Entire exterior face of gypsum sheathing covered with asphalt impregnated felt or synthetic fiberwrap such as Tyvek® Commercial Wrap.
 2. Joints and fasteners covered using Dow Corning 795 Building Sealant, Pecora 895 or equivalent.
 3. Joints covered with 2" wide fiberglass mesh tape and Pecora AC20+ Silicone, GE Silicone Silpruf Sealant, Tremco Dymonic or equivalent.
 4. Fasteners covered with sealant.
 5. Entire exterior face of gypsum sheathing covered with a "peel and stick" self adhesive type membrane or liquid applied membranes.
- I. Precaution: This product contains continuous filament fiberglass. Fiberglass release during normal handling of this product can cause skin, eye and respiratory irritation. Avoid breathing dust and contact with skin and eyes. Follow standard work practices:
1. Wear long-sleeved, loose-fitting clothing, gloves and eye protection.
 2. Use a respirator, such as a 2M Model 9900 or equivalent.
 3. Wash exposed areas with soap and warm water after handling.
 4. Wash work clothes separately from other clothing; rinse washer thoroughly. Operations that generate high airborne fiber concentrations (over 10 fibers/cc) require additional respiratory protection.

3.03 CEILINGS AND SOFFITS

- A. Joint treatment and finish preparation:
1. Painted ceilings and soffits
 - a. Apply fiberglass mesh joint tape over joints and embed in setting-type joint compound specified.
 - b. Skim coat surface with setting-type joint compound for smooth finish.
 - c. Prime and paint with exterior grade, good quality paint.

END OF SECTION - 07211