

## SECTION 09253

### SHEATHING

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

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

##### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Glass-mat gypsum sheathing board.
  - 2. Portland cement sheathing board.
  - 3. Weather-resistant barrier.

##### 1.3 DEFINITIONS

- A. Gypsum Board Construction Terminology Standard: Refer to ASTM C 11 for definitions of terms for gypsum sheathing board construction not defined in this Section or in other referenced standards.

##### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
  - 1. Building Wrap: For air/moisture-infiltration protection, include data substantiating compliance with building code in effect for Project.

##### 1.5 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: For assemblies with fire-resistance ratings, provide materials and construction identical to those of assemblies tested for fire resistance per ASTM E 119 by a testing and inspecting agency acceptable to authorities having jurisdiction.
  - 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory." GA-600, "Fire Resistance Design Manual."

##### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, or other causes. Stack sheathing flat on leveled supports off the ground, under cover, and fully protected from weather.

##### 1.7 COORDINATION

- A. Glass-Mat Gypsum Sheathing Board:
  - 1. Do not leave exposed to weather for more than 180 days.

#### PART 2 - PRODUCTS

##### 2.1 PORTLAND CEMENT SHEATHING BOARD

- A. Panel Size: Provide in maximum lengths and widths available that will minimize joints in each area and correspond with support system indicated.
- B. Cementitious Backer Units: ANSI A118.9.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Custom Building Products; Wonderboard.
    - b. FinPan, Inc.; Util-A-Crete Concrete Backer Board.

- c. United States Gypsum Co.; DUROCK Cement Board.

## 2.2 GYPSUM SHEATHING

- A. Glass-Mat Gypsum Sheathing Board: ASTM C 1177/C 1177M.
  - 1. Product: Subject to compliance with requirements, provide "Dens-Glass Gold" by G-P Gypsum Corporation.
  - 2. Type and Thickness: Type X, 5/8 inch thick.
  - 3. Size: 48 by 96 inches for vertical installation.

## 2.3 WEATHER-RESISTANT BARRIER

- A. Building Wrap: ASTM E 1677, Type I air retarder; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E 84; and UV stabilized.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. DuPont (E. I. du Pont de Nemours and Company); Tyvek Commercial Wrap.

## 2.4 ACCESSORY MATERIALS

- A. Fasteners: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing board to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117.
  - 1. For steel framing from 0.033 to 0.112 inch thick, attach sheathing with drill screws complying with ASTM C 954.

## PART 3 - EXECUTION

### 3.1 PORTLAND CEMENT BOARD SHEATHING INSTALLATION

- A. Comply with manufacturer's written instructions.
- B. Cut boards at penetrations, edges, and other obstructions of work; fit tightly against abutting construction.
- C. Coordinate 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 exterior wall assembly.
- D. Apply fasteners so screw heads bear tightly against face of sheathing boards but do not cut into facing.
- E. Do not bridge building expansion joints with sheathing; cut and space edges to match spacing of structural support elements.
- F. Vertical Installation: Install board vertical edges centered over flanges of steel studs. Abut ends and edges of each board with those of adjacent boards. Screw-attach boards at perimeter and within field of board to each steel stud.
  - 1. Space fasteners approximately 8 inches o.c. and set back a minimum of 3/8 inch from edges and ends of boards.
  - 2. Where panels abut other types of panels in the same plane, shim surfaces to produce a uniform plane across panel surfaces.

### 3.2 GYPSUM SHEATHING INSTALLATION

- A. Comply with GA-253 and manufacturer's written instructions.
- B. Cut boards at penetrations, edges, and other obstructions of work; fit tightly against abutting construction, unless otherwise indicated.
  - 1. Install boards with a 1/4-inch setback where they abut masonry or similar materials that might retain moisture, to prevent wicking.

- C. Coordinate 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 exterior wall assembly.
- D. Apply fasteners so screw heads bear tightly against face of sheathing boards but do not cut into facing.
- E. Do not bridge building expansion joints with sheathing; cut and space edges to match spacing of structural support elements.
- F. Vertical Installation: Install board vertical edges centered over flanges of steel studs. Abut ends and edges of each board with those of adjacent boards. Screw-attach boards at perimeter and within field of board to each steel stud.
  - 1. Space fasteners approximately 8 inches o.c. and set back a minimum of 3/8 inch from edges and ends of boards.

### 3.3 WEATHER-RESISTANT BARRIER INSTALLATION

- A. Cover sheathing with weather-resistant barrier as follows:
  - 1. Cut back barrier 1/2 inch on each side of the break in supporting members at expansion- or control-joint locations.
  - 2. Apply barrier to cover vertical flashing with a minimum 4-inch overlap, unless otherwise indicated.
- B. Building Wrap: Comply with manufacturer's written installation instructions.

**END OF SECTION 09253**