

## SECTION 09253 - EXTERIOR SHEATHING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Glass-mat or Core Treated gypsum sheathing board.
  - 2. Fluid Applied Air/moisture Barrier
    - a. Sheathing joint-and-penetration treatment.
    - b. Secondary water resistant coating.
- B. Related Sections include the following:
  - 1. Division 7 Section "Sheet Metal Flashing and Trim" for flashing installed with gypsum sheathing.
  - 2. Division 7 Section "Joint Sealants" for sealants applied with gypsum sheathing.
  - 3. Division 7 Section "EIFS".

#### 1.2 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.

#### 1.3 SUBMITTALS

- A. Procedures - Refer to Specifications Section 1330 and the General Conditions for all submittal procedures and substitutions.
- B. Product Data: For each type of product indicated.
- C. Certification of fluid applied air/moisture barrier compatibility with EIFS system.

#### 1.4 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 the state fire marshall.
  - 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory."

## 1.5 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.
- B. Glass-Mat Gypsum Sheathing Board:
  - 1. Do not leave exposed to weather for more than 180 days.

## PART 2 - PRODUCTS

### 2.1 EXTERIOR SHEATHING

- A. Manufacturer: Subject to compliance with requirements, provide one of the following:
  - 1. Glass-Mat Gypsum Sheathing Board: ASTM C 1177/C 1177M.
    - a. Product: :
      - 1) "Dens-Glass Gold" by G-P Gypsum Corporation
      - 2) "GlasRoc Sheathing" by BPB.
  - 2. Core Treated Gypsum Sheathing Board: ASTM C 79
    - a. "Fiberock" by USG.
- B. Properties:
  - 1. Thickness: 5/8" thick.
  - 2. Size: 48" x 120" for vertical installation.

### 2.2 FLUID APPLIED AIR/MOISTURE BARRIER

- A. A non-cementitious, polymer based, water resistant, protective coating system used as a secondary weather barrier and air barrier for use over approved exterior substrates, in conjunction with tape joint treatment.
- B. Manufacturers:
  - 1. Dryvit Systems, Inc.; Backstop coating and tape system.
  - 2. Sto Corp.; Sto Guard Mesh 4.25", Sto Gold Fill - 266, and Sto Gold Coat - 265
- C. Components:
  - 1. Sealing and Tape System:
    - a. Silicone Emulsion Sealant: ASTM C 834, compatible with sheathing tape and sheathing, recommended by tape and sheathing manufacturers for use with glass-fiber sheathing tape and for covering exposed fasteners.
    - b. Glass-Fiber Sheathing Tape: Self-adhering glass-fiber tape, minimum 2 inches wide, 10 by 10 threads/inch , of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat gypsum sheathing board and with a history of successful in-service use.
  - 2. Secondary Barrier Coating:
    - a. Apply 10 mil coating over prepared sheathing per manufacturer's recommendations.

### 2.3 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 EXTERIOR 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 3/8-inch setback where non-load-bearing construction abuts structural elements.
  - 2. 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.

### 3.2 FLUID APPLIED AIR/MOISTURE BARRIER

- A. Seal sheathing joints according to sheathing manufacturer's written recommendations.
  - 1. Apply glass-fiber sheathing tape to glass-mat gypsum sheathing board joints, and apply and trowel silicone emulsion sealant to embed sealant in entire face of tape. Apply sealant to exposed fasteners with a trowel so fasteners are completely covered. Seal other penetrations and openings.

2. Avoid contact with dirt and debris which will cling to self-adhesive side of mesh.
- B. Apply coating to the prepared substrate using spray equipment, or with the appropriate size nap roller in a single, uniform coating at a wet thickness of 10 mils.

END OF SECTION 09253