

SECTION 06 16 43 - GYPSUM SHEATHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Fiberglass-mat faced, moisture and mold resistant gypsum sheathing.
- B. Related Sections:
 - 1. Section 05 40 00 Cold-Formed Metal Framing.
 - 3. Section 09 29 00 Gypsum Board.

1.2 REFERENCES

A. ASTM International (ASTM):

1. ASTM C473 Standard Test Methods for Physical Testing of Gypsum Panel Products.
2. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
3. ASTM C1002 Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
4. ASTM C1177 Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
5. ASTM C1280 Standard Specification for Application of Gypsum Sheathing.
6. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
7. ASTM D6329 Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers.
8. ASTM E72 Standard Test Methods of Conducting Strength Tests of Panels for Building Construction.
9. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials.
10. ASTM C1396 Standard Specification for Gypsum Board
11. ASTM E 136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
12. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials

B. Gypsum Association (GA): GA-253 Application of Gypsum Sheathing

1.3 SUBMITTALS

- A. Product Data: Manufacturer's specifications and installation instructions for each product specified.

1.4 WARRANTY

- A. Provide products that offer twelve months of coverage against in-place exposure damage (delamination, deterioration and decay) commencing with the date of installation of the product in such structure.
- B. Manufacturer's Warranty:
 - 1. Five years against manufacturing defects from the date of purchase of the product for installation.
 - 2. 12 years against manufacturing defects when used as a substrate in architecturally specified EIFS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: Georgia-Pacific Gypsum LLC:
 - 1. Fiberglass-Mat Faced Gypsum Sheathing, Type X for Fire Rated Designs: DensGlass Fireguard Sheathing.
- B. American Gypsum
 - 1. Exterior Gypsum Sheathing Type 'X'.
- C. Gold Bond Building Products

2.2 MATERIALS

- A. Basis of Design: Fire-Rated Fiberglass-Mat Faced Gypsum Sheathing ASTM C1177:
 - 0. Fire Rating: Type 'X'
 - 1. Thickness: 5/8 inch.
 - 2. Width: 4 feet.
 - 3. Length: 10 feet.
 - 4. Weight: 2.5 lb/sq. ft.
 - 5. Edges: Square.
 - 6. Surfacing: Fiberglass mat on face, back, and long edges.
 - 7. Racking Strength (Ultimate, not design value) (ASTM E72): Not less than 654 pounds per square foot, dry.
 - 8. Flexural Strength, Parallel (ASTM C1177): 100 lbf, parallel.
 - 9. Humidified Deflection (ASTM C1177): Not more than 1/8 inch.
 - 10. Permeance (ASTM E96): Not less than 17 perms.
 - 11. R-Value (ASTM C518): 0.67.
 - 12. Mold Resistance (ASTM D3273): 10, in a test as manufactured.
 - 13. Microbial Resistance (ASTM D6329, UL Environmental GREENGUARD 3-week protocol): Will not support microbial growth.

2.3 ACCESSORIES

- A. Screws: ASTM C1002, corrosion resistant treated.

PART 3 - PRODUCTS

3.1 EXAMINATION

- A. Verification of Conditions:

- 1. Inspection: Verify that project conditions and substrates are acceptable, to the installer, to begin installation of work on this section.

3.2 INSTALLATION

- A. General: In accordance with GA-253, ASTM C1280 and the manufacturer's recommendations.

3.3 PROTECTION

- A. Protect gypsum board installations from damage and deterioration until date of Final Acceptance.

END OF SECTION 06 16 43