

SECTION 06 16 43

GYPSUM SHEATHING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section includes exterior gypsum wall sheathing, fasteners, and accessories at Parking Structure elevator override and stair roof structures.
- B. Related Sections:
 - 1. Sheathing paper is specified in Section 06 13 73.
 - 2. Gypsum board is specified in Section 09 29 00.

1.02 SUBMITTALS

- A. Product Data: Manufacturer' s descriptive literature indicating material composition, thickness, size and fire resistance. Include manufacturer' s certification that gypsum sheathing complies with specified fire-resistance requirements.
- B. Shop Drawings: Show fastener patterns and installation details.

1.03 QUALITY ASSURANCE

- A. Fire Resistance Ratings: Gypsum sheathing shall have a flame spread of 0 and smoke developed of 0 when tested in accordance with ASTM E84 and be non-combustible when tested in accordance with ASTM E136.
- B. Gypsum sheathing shall comply with ICC-ES ER-4305.
- C. Gypsum sheathing shall be manufactured to conform to the physical requirements of ASTM C79 for gypsum sheathing board and shall have the following performance characteristics.

	1/2" thick Sheathing	5/8" thick Sheathing
Thickness	1/2" +/- 1/32"	5/8" +/- 1/32"
Weight, lbs/sq. ft.	1,900	2,500
Width, nominal	4 feet +/- 1/8"	4 feet +/- 1/8"
Length, standard	8 feet and 10 feet, +/- 1/4"	8 feet and 10 feet, +/- 1/4"
Edges	Square	Square
Core	Water resistant	Water resistant
Permeance, ASTM E96	23.1 perms	12.4 perms

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Each bundle or package of sheathing shall bear the manufacturer' s name and/or trademark, the NES logo and evaluation report number (ER-4305) for field identification.
- B. Keep materials under cover and dry. Protect against exposure to weather and contact with wet or damp surfaces.
- C. Stack gypsum sheathing and provide for air circulation within and around stacks and under temporary coverings.

PART 2 - PRODUCTS

2.01 GYPSUM SHEATHING

- A. Gypsum Wall Sheathing: Georgia Pacific " Dens-Glass Exterior Guard Gold" or approved equal panel with glass mat faced water-resistant treated core, 1/2-inch thick, complying with ASTM C1177.
 - 1. Gypsum wall sheathing shall be resistant to mold and mildew when tested in accordance with ASTM D3273.

2. Where required for fire-rated walls, provide Georgia Pacific " Dens-Glass Gold Fireguard" or approved equal glass mat faced water-resistant treated core panel, 5/8-inch thick, with Type X rating as defined in ASTM C1396.
- B. Fire Resistance:
1. Noncombustible when tested in accordance with ASTM E136.
 2. Flame spread 10, smoke developed 0, when tested in accordance with ASTM E84.
- C. When tested in accordance with ASTM E119, 1/2-inch thick sheathing demonstrated that it met the code requirements for use as a 15-minute thermal barrier for protecting foam plastics which might be installed as a part of an exterior wall covering assembly.
- E. When Tested in accordance with ASTM E119, 5/8-inch sheathing applied to a partition in a single-layer nail application on each face of load-bearing wood framing members provided a one-hour fire resistance, qualifying it for the " Type X" designation of ASTM C79.

2.02 MISCELLANEOUS MATERIALS

- A. Fasteners: Provide bugle or wafer head, self-tapping, corrosion-resistant, fine thread fasteners as recommended by gypsum sheathing manufacturer. Fasteners shall have a minimum 2,000-hour resistance to salt spray when tested in accordance with ASTM B117.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Cut and fit gypsum sheathing accurately. Install members plumb and true to line and level.
- B. Securely attach to substrate by anchoring and fastening as required.
- C. Use fasteners of appropriate type and length.

3.02 GYPSUM WALL SHEATHING

- A. Fasten to exterior face of stud framing in accordance with manufacturer's instructions, applicable instructions in GA-253 and ASTM C1280, and ICC-ES ER-4305.
- B. Use maximum lengths possible to minimize number of joints.
- C. Fasten with screws of appropriate type and length.
- D. Attach sheathing to metal framing with screws spaced 8-inches o.c. at perimeter where there are framing supports and 8-inches o.c. along intermediate framing in field.
- E. Drive fasteners to bear tight against and flush with surface of sheathing. Do not counter sink.
- F. Locate fasteners minimum 3/8-inch from edges and ends of sheathing panels, tight against and flush with surface of sheathing.
- G. For transverse wind load resistance, comply with the requirements specified in ICC-ES ER-4305.

END OF SECTION