

1 GENERAL

1.1 Scope of Work

- .1 Supply and installation of fiber reinforced water resistant sheathing over the new steel deck roof.

1.2 REFERENCES

- .1 ASTM International (ASTM):
 - .1 ASTM C472 Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete.
 - .2 ASTM C473 Standard Test Methods for Physical Testing of Gypsum Panel Products.
 - .3 ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
 - .4 ASTM C840 Standard Specification for Application and Finishing of Gypsum Board.
 - .5 ASTM C1177 Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
 - .6 ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials.
 - .7 ASTM E661 Standard Test Method for Performance of Wood and Wood-Based Floor and Roof Sheathing Under Concentrated Static and Impact Loads.

1.3 SUBMITTALS

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

1.4 QUALITY ASSURANCE

- .1 Regulatory Requirements: Provide products that comply with the following limits for surface burning characteristics when tested per ASTM E84:
 - .1 Flame spread: 15, maximum.
 - .2 Smoke developed: 0.

2 PRODUCTS

2.1 MANUFACTURERS

- .1 Georgia-Pacific Gypsum LLC:
- .2 Fiberglass-Mat Faced Gypsum Roof Board:
 - .1 DensDeck.
- .3 Fiberglass-Mat Faced Gypsum Roof Board:
 - .1 Thickness: 1/2 inch.
 - .2 Width: 4 feet.
 - .3 Length: 8 feet.
 - .4 Weight: 1.95 lb/sq. ft.
 - .5 Surfacing: Fiberglass mat.
 - .6 Flexural Strength, Parallel (ASTM C473): 80 lbf, minimum.
 - .7 Flute Span (ASTM E661): 5 inches.
 - .8 Permeance (ASTM E96): Not more than 35 perms.
 - .9 R-Value (ASTM C518): Not less than 0.56.
 - .10 Water Absorption (ASTM C1177): Less than 10 percent of weight.

- .11 Compressive Strength (Applicable Sections of ASTM C472): 500 - 900 pounds per square inch.
- .12 Surface Water Absorption (ASTM C473): Not more than 2.5 grams.
- .13 Acceptable Products:
 - .1 DensDeck, Georgia-Pacific Gypsum.

2.2 AIR, WATER AND VAPOUR BARRIER

- .1 Torch-On SBS modified bitumen membrane, continuously bonded to the sheathing.

2.3 ACCESSORIES

- .1 Screws, metal framing:
 - .1 Bugle or wafer head, self-tapping, black coloured, corrosion resistant, fine thread for heavy-steel gauge; No. 14 c/w minimum 1" penetration into metal flute c/w 2" plate washers.

3 EXECUTION

3.1 PREPARATION

- .1 Examine subframing; verify that surface of framing and furring members to receive sheathing does not vary more than 1/8" from the placement of faces of adjacent members.

3.2 SHEATHING

- .1 Provide Dens Deck Sheathing throughout roof deck, curbs and parapets as specified and where indicated on drawings. Install sheathing in accordance with manufacturer's instructions and applicable instructions in GA-253 and ASTM C 1280.
- .2 Use maximum lengths possible to minimize number of joints. Panels to butt tight but ensure all butt joints have a maximum 1/8" gap.
- .3 Attach sheathing in accordance with Global FM I-90 requirements; 8 fasteners per board, increasing to 12 at corners and perimeters.
- .4 Drive fasteners to bear tight against and flush with surface of sheathing. Do not counter sink.
- .5 Locate fasteners minimum 3/8" from edges and ends of sheathing panels, tight against and flush with surface of sheathing.
- .6 Air/Vapour barrier membrane:
 - .1 Entire exterior face of sheathing will be covered with Torch-On air/vapour barrier membrane.

END OF SECTION