

SECTION 07 21 16

BATT INSULATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. The provisions of the general Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section.

1.2 SECTION INCLUDES

- A. Batt insulation and vapor retarder in exterior wall and ceiling, roof construction.
- B. Batt insulation for filling perimeter window and door shim spaces and crevices in exterior wall and roof
- C. Acoustical batt insulation for interior partitions

1.3 REFERENCES

- A. ASTM E96/E96M – Standard Test Method for Water Vapor Transmission of Materials
- B. ASTM C665 – Standard Specification for Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing
- C. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials
- D. ASTM E119 – Standard Test Methods for Fire Tests of Building Construction and Materials
- E. ASTM E136 – Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
- F. ASTM C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- G. ASTM C423 – Standard Test Method for Sound Absorption Coefficient by the Reverberation Room Method
- H. NFPA 255 – Standard Method of Test of Surface Burning Characteristics of Building Materials
- I. UL 723 – Standard for Test for Surface Burning Characteristics of Building Materials
- J. Florida Building Code (FBC)

1.4 PERFORMANCE REQUIREMENTS

- A. Materials of this Section: Provide continuity of thermal barrier at building enclosure elements.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
- B. Product Data: Provide data on product characteristics, performance criteria, and limitations.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.6 COORDINATION

- A. Coordinate work under provisions of Section 01 31 00.
- B. Coordinate the work of Section 07 26 00 for installation of vapor barrier.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Thermal Batt: Provide and install ASTM C665, un-faced glass fiber thermal insulation in accordance with ASTM C518, R-Value for insulation only as indicated on drawings.
 - 1. FRK (foil), Type III, Class A
 - 2. PSK (white), Type II, Class A
 - 3. Surfacing Burning Characteristics for both FRK and PSK faced product:
 - 4. Maximum Flame Spread: 25
 - 5. Maximum Smoke Developed: 50
 - 6. Combustion Characteristics: Non-combustible.

The School District of Palm Beach County

Project Name

SDPBC Project No.

7. Dimensional Stability: Linear Shrinkage less than 0.1%
 - B. Acoustical Batt: Provide and install ASTM C665 un-faced glass fiber acoustical insulation, install in areas as shown on the drawings.
 1. Type I
 2. Surfacing Burning Characteristics, max flame spread of 10 and max smoke developed of 10.
 3. Combustion Characteristics: Passes ASTM E136
 4. Fire Resistance Ratings: Passes ASTM E119 as part of a complete fire tested wall assembly
 5. Dimensional Stability: Linear Shrinkage less than 0.1%
- 2.2 ACCESSORIES
- A. Steel wire: electroplated; type and size to suit application.
 - B. Tape: Polyethylene self-adhering type, mesh reinforced.
 - C. Insulation Fasteners: Steel impale spindle and clip on flat metal base, self-adhering backing, length to suit insulation thickness, capable of securely and rigidly fastening insulation in place.
 - D. Wire Mesh: Galvanized steel, hexagonal wire mesh.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify site conditions under provisions of Section 01 31 00
- B. Verify that substrate, adjacent materials, and insulation are dry and ready to receive insulation.

3.2 INSTALLATION

- A. Install insulation in accordance with insulation manufacturer's instructions.
- B. Install in exterior walls, roof, and ceiling spaces without gaps or voids do not compress insulation.
- C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- D. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation.
- E. Install with factory applied membrane facing exterior side of building spaces.
 1. Lap the ends and side flanges of membrane over framing members.
- F. Retain in place with wire mesh secured to framing members.
- G. Tape seal butt ends, lapped flanges, and tears or cuts in membrane.
- H. Metal Framing: If vapor barrier is used, place on exterior side of insulation; lap and seal sheet retarder joints over membrane face.

END OF SECTION