

Heller & Metzger

SECTION 07210

BUILDING INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Description of Work: Work of this Section includes, but is not limited to, the following:
1. Thermal batt insulation.
 2. Thermal semi-rigid insulation.
 3. Thermal rigid insulation.
 4. Accessories.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. See Section 07275 RADIANT ENERGY BARRIER for foil at building perimeter.
- B. See Section 07530 EPDM ROOFING for insulation in conjunction with roofing system.
- C. See Section 07811 FIREPROOFING FOR CONCRETE for fire-rated semi-rigid insulation and special fireproof coating.
- D. See Section 07840 FIRESTOPPING for firestopping sealants, foams, putties, and devices.
- E. See Section 09250 GYPSUM BOARD for sound attenuation blankets.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and installation instructions for each type of insulation and accessory.
- B. Certificates: Submit certification from manufacturer of ~~insulation~~ insulation stating that insulation is manufactured free of, and does not contain, chlorofluorocarbons (CFC) ~~hydrochlorofluorocarbons (HCFC)~~
- C. Submit insulation manufacturer's data showing compliance with EPA's Comprehensive Procurement Guidelines (CPG) for recycled content.

1.4 PERFORMANCE REQUIREMENTS

- A. Interface with Other Work:
1. Coordinate delivery and placement of insulation when installed in conjunction with other Work so as not to delay Work.
 2. Where piping occurs at interior faces of exterior walls, whether concealed or exposed in completed construction, verify that insulation has been installed continuously between piping and face of wall.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Protect insulation from damage and moisture, soil and freezing. Store in dry location.

PART 2 - PRODUCTS

2.1 INSULATION

A. General:

1. Locations specified below are solely for Contractor's general information and shall not limit locations of each insulation type.
2. Provide insulation at locations specified below, and at additional locations indicated on Drawings whether or not such additional locations are specified below.

B. Glass Fiber Batt Insulation - Unfaced

1. Glass fiber batts, unfaced, complying with ASTM C665, Type I, ~~formaldehyde free~~.
2. Thickness: As indicated.
3. Fire resistance: Insulation shall exhibit the following surface burning characteristics when tested in accordance with ASTM E84:
 - a. Flame spread: 25 or less.
 - b. Smoke development: 50 or less.
4. Provide minimum 20% recovered glass cullet per CPG Guidelines.
5. General locations:
 - a. Exterior walls.
 - b. General filling of gaps and joints; thickness as required to fully fill each gap and joint.
 - c. Gaps between window frames and concrete.
 - d. Gaps between fin tube radiators and concrete wall.

C. Semi-Rigid Insulation - Unfaced:

1. Glass fiber semi-rigid board, unfaced, complying ASTM C612, Class 1.
2. Density: 1.5 pcf (24 kg/m³).
3. Thickness: As indicated.
4. Fire resistance: Insulation shall exhibit the following surface burning characteristics when tested in accordance with ASTM E84:
 - a. Flame spread: 25 or less.
 - b. Smoke development: 50 or less.
5. General locations:
 - a. Sound isolation/floating slabs.
 - b. Underside of concrete slabs.

D. Foam Insulation:

1. Two component product capable of being installed through 5/8 - 2 inch holes, ~~without~~ ~~MOCA content~~.
2. Material properties:
 - a. Density: 0.8 - 1.3 lb/ft³
 - b. Compressive Strength: 3 - 10 psi.
 - c. Fire Characteristics:
 - 1) Flame Spread: 5.
 - 2) Smoke development: 0.

SECTION 07210 - BUILDING INSULATION (EXTERIOR)

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes thermal insulation, and fire safing.
- B. Submittals: Product Data for each type of insulation product specified.
- C. Fire-Test-Response Characteristics: Provide insulation and related materials with the fire-test-response characteristics indicated as determined by testing identical products per ASTM E 84, ASTM E 119, or ASTM E 136 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide insulating materials that comply with requirements and with referenced standards. Provide formaldehyde-free building insulation where required for thermal insulation material.

Preformed Units: Sizes to fit applications indicated; selected from manufacturer's standard thicknesses, widths, and lengths.

- B. Thermal Insulation; Faced Mineral-Fiber Blanket Insulation: ASTM C 665, Type III, Class A (blankets with reflective vapor-retarder membrane facing and flame spread of 25 or less); with foil-scrim-kraft, foil-scrim, or foil-scrim-polyethylene vapor-retarder membrane on 1 face.

Mineral-Fiber Type: Fibers manufactured from glass.

- C. Slag-Wool-Fiber Board Safing Insulation: Semirigid boards designed for use as fire stop at openings between edge of slab and exterior wall panels, produced by combining slag-wool fibers with thermosetting resin binders to comply with ASTM C 612, Type IA and IB; nominal density of 4 lb/cu. ft. (64 kg/cu. m); passing ASTM E 136 for combustion characteristics; thermal resistivity of 4 deg F x h x sq. ft./Btu x in. at 75 deg F (27.7 K x m/W at 24 deg C).

Calking Compound: Material approved by manufacturer of safing insulation for sealing joint between foil backing of safing insulation and edge of concrete floor slab against penetration of smoke.

- 2. Provide insulation with gray facing fabric.
- 3. Safing Clips: Galvanized steel safing clips approved by manufacturer of safing insulation for holding safing insulation in place.