

CURTAIN WALL INSULATION - SECTION 07200-A

Use this guide specification to specify THERMAFIBER Brand Curtain Wall Insulation systems, including Safing Insulation and smoke sealing behind exterior wall panels of aluminum, granite, spandrel glass and other curtain wall materials. Review a copy of USG Interiors publication SA-707 before editing specification.

PART 1 GENERAL

1.01 GENERAL DOCUMENTS

General and Supplementary Conditions of Contract as well as Drawings and general provisions of Contract and Division 1 Specification section, apply to work of this section.

1.02 DESCRIPTION OF WORK:

Extent of curtain wall insulation work is shown on drawings. Types of work included are:

- Exterior curtain wall insulation for thermal and fire containment applications
- Safing insulation from edge of concrete slab to back of curtain wall panel
- Smoke seal systems at exterior wall envelope.

Coordinate with all trades required to install work on or into work of this section.

- Related Work Specified Elsewhere
- Concrete - Section 03310
- Insulation - Section 07200
- Metal Fabrications - Section 05500
- Glazed Aluminum Curtain Walls - Section 08920

Include additional related sections as pertinent.

1.03 QUALITY ASSURANCE:

Standards:

- ASTM C-612 Standard Specification for Mineral Fiber Block and Board Thermal Insulation

ASTM C-665 Standard Specification for Mineral-Fiber Blanket Insulation for Light Frame Construction and Manufactured Housing

ASTM C-553 Standard Specification for Mineral Fiber Blanket and Felt Insulation (Industrial Type)

Federal Specification HH-I-521F Insulation Blankets, Thermal (Mineral Fiber, For Ambient Temperatures)

Federal Specification HH-I-558B Insulation, Blocks, Boards, Blankets, Felts, Sleeving (Pipe and Tube Covering), and Pipe Fitting Covering, Thermal (Mineral Fiber, Industrial Type)

Fire-Containment Rating: Where fire containment rating is required, provide materials and installation which are identical with those of applicable assemblies tested under the fire exposure conditions of ASTM E-119.

Unit Responsibility: Obtain curtain wall insulation, safing insulation materials and smoke seal compound from a single manufacturer.

1.04 SUBMITTALS:

Product Data: Submit manufacturer's product specifications and installation instructions for systems used.

Certificates: Submit certification of compliance with fire containment requirements indicated.

Copies of actual fire test reports can be specified for submittal. Include requirement for shop drawings if necessary.

1.05 DELIVERY, STORAGE AND HANDLING:

Handling: Handle materials to avoid damage. When installing or otherwise handling these insulation products, wear a NIOSH approved dust mask or respirator, gloves and long sleeved, loose fitting clothing closed at the neck and wrists. Wear safety glasses when installing.

Delivery: Deliver materials to the jobsite in original packages, containers, or bundles bearing the brand name and manufacturer's identification.

Storage: Store materials in dry locations with adequate ventilation, free from water, and in such a manner to permit easy access for inspection and handling.

1.06 PROJECT CONDITIONS:

Protect adjacent work of other trades from damage. Clean substrates of substances harmful to insulation or vapor retarders, including removal of projections which might puncture vapor retarders. In cold weather during installation of smoke seal compound, temperatures within the building shall be maintained above 55°F. Provide adequate ventilation to carry-off excess moisture.

PART 2 PRODUCTS

2.01 MANUFACTURER:

Subject to compliance with requirements, provide Curtain Wall and Safing Insulation and all related components, as manufactured or supplied by USG Interiors or United States Gypsum Co.

2.02 MATERIALS:

- A. Curtain Wall Insulation:
THERMAFIBER Brand Mineral Fiber Curtain Wall Insulation, (CW-40) (CW-70) (CW-90), () thick, () wide, () long, (regular) (dark) (unfaced) (FSP, scrim-poly reinforced foil facing vapor retarder).
- B. Safing Insulation: THERMAFIBER Brand Mineral Fiber Safing Insulation, regular color, (unfaced) (foil-faced).
- C. Safing Clips: Z-shaped, galvanized steel.
- D. Impaling pins and clinch shields: as required for insulation thickness, mechanical attachment type only - no adhesive application allowed.
- E. Support Angles: (1/8" x 1-1/4" x 1-1/4", aluminum) (1-1/2" x 1-1/2", 20 ga. galvanized steel).
- F. Sealing Compound: THERMAFIBER Brand Smoke Seal Compound.
- G. Vapor retarder tape: Compatible with foil facing with comparable perm rating.

PART 3 EXECUTION

3.01 CURTAIN WALL INSULATION:

Install a horizontal curtain wall support angle between mullions, located approximately one-inch above the floor and fastened to the mullions. Mechanically attach Curtain Wall Insulation to inside of spandrel panels with appropriate pins or screws and clinch shields spaced not more than 12" on center. Install insulation across the face of aluminum mullions and secure

thereto.

Insulation may be recessed by first installing support angles to the mullion sides and securing the insulation to the angles. Provide one-inch thick by six-inch wide CW-90 mullion cover over the mullion face.

3.02 SAFING INSULATION:

Install THERMAFIBER Brand Safing Insulation of proper size in safe-off area between THERMAFIBER Curtain Wall Insulation and floor slabs, on safing clips spaced 24" o.c. maximum, leaving no voids. Cut safing insulation 1/2" wider than opening to insure compression fit. Fasten safing clips to slab with power activated fasteners or other positive fastening devices when installing the Safing Insulation from the bottom of the slab.

When safe-off area is less than 2" wide safing insulation may be friction-fitted and topped with 1" of smoke seal compound in lieu of clips.

3.03 SMOKE SEAL SYSTEM:

Utilize foil faced Curtain Wall and Safing Insulation. Apply vapor retarder tape over all joints in Curtain Wall Insulation and where Curtain Wall Insulation abuts framing. Apply THERMAFIBER Smoke Seal Compound at junction of Safing Insulation and Curtain Wall Insulation, at junction of Safing Insulation and floor slab, and at joints in Safing Insulation.

3.04 VAPOR RETARDER INSTALLATION:

Seal all joints in Curtain Wall Insulation with vapor retarder tape. Apply vapor retarder tape at intersection of Curtain Wall Insulation with curtain wall framing, floor slab, and similar intersections to insure a vapor tight seal. Repair all tears in curtain wall insulation foil facing with vapor retarder tape.

3.05 CLEAN-UP:

At the completion of curtain wall and safing insulation work remove all related rubbish, excess material, scaffolding, tools and equipment from the site. Dispose of waste material in a manner approved by applicable jurisdictions.

End of Section 07200A
