

SECTION 09 81 00
ACOUSTICAL INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish and install: Acoustical insulation as scheduled and where indicated.

1.2 RELATED REQUIREMENTS

- A. Section 06 10 00 - ROUGH CARPENTRY: Wood blocking.
- B. Section 09 22 16 - NON-STRUCTURAL METAL FRAMING: Framing cavities to receive acoustical insulation.
- C. Section 09 29 00 - GYPSUM BOARD: Installation of wallboard over acoustical insulation.
- D. Division 23 - HEATING, VENTILATING AND AIR CONDITIONING: Ductwork and piping insulation.

1.3 REFERENCES

- A. Comply with applicable requirements of the following standards and those others referenced in this Section, under the provisions of Section 01 42 00 - REFERENCES. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.
 - 1. ASTM C 518 - Thermal Transmission Properties by Means of the Heat Flow Meter.
 - 2. ASTM C 553 - Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications.
 - 3. ASTM C 665 - Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
 - 4. ASTM E 84 - Surface Burning Characteristics of Building Materials.
 - 5. ASTM E 96 - Water Vapor Transmission of Materials.

1.4 SUBMITTALS

- A. Information and Review Submittals: Submit the following under provisions of Section 01 33 00 - SUBMITTAL PROCEDURES:
 - 1. Product Data: Manufacturer's product data sheets, specifications, performance data, physical properties for each item furnished hereunder.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Delivery and Acceptance Requirements:
 - 1. Deliver materials in original packages, containers or bundles bearing brand name and identification of manufacturer or supplier.
 - 2. Do not deliver items to the site, until all specified submittals have been submitted to, and approved by, the Architect.
- B. Storage and Handling Requirements:
 - 1. Store materials under cover and in manner to keep them dry, protected from

weather, direct sunlight and damage from construction traffic and other causes.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers: Subject to compliance with the requirements specified herein, manufacturers offering similar products include the following:
 - 1. Acoustical glass fiber insulation:
 - a. CertainTeed Corporation, Valley Forge, PA.
 - b. Johns Manville Building Insulation, Denver, CO
 - c. Owens Corning Fiberglas Corp., Toledo, OH.
 - d. (Goldline brand) Schuller International, Inc., Denver, CO.
 - e. USG Corp./ USG Interiors Inc., Chicago, IL.
 - 2. Acoustical mineral fiber insulation:
 - a. Fibrex Insulations Inc., Sarnia, Ontario
 - b. Thermafiber Inc., Wabash, IN.
 - c. Roxul, Inc., Milton, Ontario.

2.2 MATERIALS

- A. Acoustical batt insulation at rated partitions: Mineral wool fiber insulation batts, conforming to ASTM C665 Type 1, and ASTM C553 with a nominal density of 2.5 pounds per cubic foot, nominally 3-1/2 inches thick.
 - 1. Flame Spread Classification: Class A (less than 25, per testing by NFPA 255, ASTM E-84 or UL 723).
 - 2. Recycled content of slag in mineral wool insulation: Use maximum available percentage of material (slag). Mineral wool insulation products incorporated into the work shall contain not less than 75 percent of recycled material (slag) by weight.
 - 3. Acceptable products include:
 - a. Fibrex Insulations Inc. product: "Fibrex Sound Attenuation Fire Batt (SAFB)"
 - b. Roxul, Inc., product "Roxul AFB".
 - c. Thermafiber, Inc. product "Thermafiber SAFB".
- B. Acoustical batt insulation at non-rated partitions: Unfaced glass fiber insulation nominal 3- 1/2 inches [89mm] thick conforming to ASTM C-665 Type I, of width appropriate for spacing of framing or furring members with which used.
 - 1. Flame Spread Classification: Class A (less than 25, per testing by NFPA 255, ASTM E-84 or UL 723).
 - 2. Recycled content of glass in glass-fiber insulation: Use maximum available percentage of recycled glass. Fiber glass insulation products incorporated into the work shall contain not less than 20 percent of recycled glass cullet.

2.3 ACCESSORIES

- A. Staples, tape, adhesives and fasteners required for the proper and complete installation for work of this Section shall be as recommended by each respective manufacturers of each insulation type.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Acoustical insulation:

1. Install insulation in accordance with insulation manufacturer's instructions.
2. Install in interior walls, and ceiling spaces where indicated. Trim insulation neatly to fit spaces. Fit insulation tight in spaces. Leave no gaps or voids.

END OF SECTION