

DIVISION

07

THERMAL & MOISTURE
PROTECTION

SECTION 07210 - BUILDING INSULATION

1.1 GENERAL:

- A. Thermal resistivity or "r-value" represents the reciprocal of thermal conductivity (k-value), which is the rate of heat flow through a homogenous material exactly 1 inch thick. Thermal resistivities are expressed by the temperature difference in degrees F between the two exposed faces required to cause one BTU to flow through one sq. ft. per hour at mean temperatures indicated.
- B. Fire Performance Characteristics: Provide insulation materials identical to those whose indicated fire performance characteristics have been determined per ASTM E 119, ASTM E 84, and ASTM E 136, as applicable, by UL or other testing and inspecting organizations acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing and inspecting organization.
- C. Submittals: Submit product data for each form and type of insulation indicated.

1.2 PRODUCTS:

- A. General: Provide preformed units in sizes to fit applications indicated, selected from manufacturer's standard thicknesses, widths, and lengths.
- B. Unfaced Mineral Fiber Blanket/Batt Insulation: ASTM C 665 for Type I (blankets without membrane facing); and as follows:
 - 1. Mineral Fiber Type: Fibers manufactured from glass.
 - 2. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25 and 50.
- C. Polyethylene Vapor Retarder: ASTM D 4397, 6.0 mils thick, with a maximum permeance rating of 0.13 perms.

1.3 EXECUTION:

- A. General: Comply with insulation manufacturer's instructions for installation of insulation.
- B. Support insulation units by mechanical anchorage as applicable to location and conditions indicated.

END OF SECTION 07210

SECTION 07901 - JOINT SEALANTS

1.1 GENERAL

- A. Submittals: In addition to product data submit the following:
1. Samples of each type and color of joint sealant required.

1.2 PRODUCTS

- A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions, as demonstrated by testing and field experience.
- B. Colors: Provide color indicated of exposed joint sealants or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors.
- C. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated complying with ASTM C 920 requirements.
1. One-Part, Nonsag Polysulfide Sealant: Type S; Grade NS; Class 12-1/2; Uses T, M, G, A, and O.
 2. One-Part, High-Modulus, Neutral-Curing Silicone Sealant: Type S; Grade NS; Class 25; Uses NT, M, G, A, and O.
 3. One-Part, Mildew-Resistant Silicone Sealant: Type S; Grade NS; Class 25; Uses NT, G, A, and O; formulated with fungicide; intended for sealing interior joints with nonporous substrates exposed to high humidity and temperature extremes.
- D. Acrylic Sealant: One-part, nonsag, solvent-release-curing acrylic terpolymer sealant complying with AAMA 808.3 or FS TT-S-00230, or both, with capability, when tested per ASTM C 719, to withstand the following percentage change in joint width existing at time of application without failing adhesively or cohesively:
1. Maximum cyclic movement capability: plus or minus 7.5 percent.
- E. Butyl Sealant: Manufacturer's standard one-part, nonsag, solvent-release-curing, polymerized butyl sealant complying with ASTM C 1085 and formulated with minimum of 75 percent solids to be nonstaining, paintable, and have a tack-free time of 24 hours or less.
- F. Tape Sealant: Solvent-free, butyl-based tape sealant with a solids content of 100 percent formulated to be nonstaining, paintable, and nonmigrating in contact with nonporous surfaces with or without reinforcement thread to prevent stretch and packaged on rolls with release paper on one side.
- G. Sealant Backings, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
1. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonwaxing, nonextruding strips of plastic foam of material indicated below, and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

