

METAL BUILDING INSULATION

MATERIAL SPECIFICATION SHEET

Product Description

Basic Use

Fiber Glass Metal Building Insulation 202-96 is a flexible blanket insulation furnished in rolls and intended to be laminated on one side with a suitable vapor retarder. It is used as a thermal and acoustical insulation in the roofs and sidewalls of pre-engineered metal buildings and post frame construction.

Benefits

Metal Building Insulation 202-96 reduces transmission of exterior sound to the interior of the building and absorbs reverberating sounds within the building.

Composition and Materials

The product is composed of tan, uniformly textured, inorganic fibrous glass and formed with a formaldehyde-free binding agent.

Limitations

This product is designed for use in interior (weather protected) walls and roofs of pre-engineered metal buildings. It should be laminated on a first-in, first-out basis and should always be kept dry during processing and end use. After lamination, packaging should not exceed a 5.5:1 compression ratio.



TECHNICAL DATA

Applicable Standards

- Model Building Codes: ICC
- Material Standards:
 - ASTM C991, Type I
 - NAIMA 202-96 (Rev. 2000)

Fire Resistance

- Fire Hazard Classification:
 - UL 723, ASTM E84, NFPA 255
Max. Flame Spread Index: 25
Max. Smoke Developed Index: 50
 - CAN/ULC-S102-M88
- Non-combustible: ASTM E136

Physical/Chemical Properties

- Thermal Resistance:
 - ASTM C518 and/or ASTM C177
at 75°F (24°C) mean temperature:
see table
- Acoustical Performance: see tables
- Water Vapor Sorption:
 - ASTM C1104 / No greater than
5.0% by weight
- Corrosiveness:
 - ASTM C665 / Meets requirements
for steel, copper and aluminum
- Odor Emission: ASTM C1304
- Fungi Resistance: ASTM C1338





SINGLE & DOUBLE TRUSS
GABLE, STRAIGHT WALL, & QUONSET STYLE

Thermal Performance

Nominal Thickness (in.)	Width (in.)	Length (ft.)	R-Value	Pre-Lamination	Post-Lamination	RSI
3 3/8	36, 48, 60, 72	100	10	10.8	10	1.76
3 3/4	36, 48, 60, 72	100	11	11.9	11	1.94
4 3/8	36, 48, 60, 72	75	13	14.0	13	2.29
5 1/4	36, 48, 60, 72	50	16	17.3	16	2.82
6 3/8	36, 48, 60, 72, 96	50	19	20.5	19	3.35

Sound Absorption (Unfaced)

R-Value	Nominal Thickness (in.)	Absorption Coefficients @ Octave Band Frequencies (Hz)						NRC
		125	250	500	1000	2000	4000	
10	3 3/8	0.29	0.82	1.02	0.94	0.96	0.98	0.95
11	3 3/4	0.39	0.91	1.01	0.92	0.93	0.98	0.95
13	4 3/8	0.53	0.97	1.04	0.90	0.95	0.98	0.95
16	5 1/4	0.67	1.05	1.02	0.92	0.98	0.99	1.00
19	6 3/8	0.89	1.22	1.02	0.98	1.01	1.00	1.05

Sound absorption tested in accordance with ASTM C423 using Type A mounting per ASTM E795.

Installation

The vapor retarder on *Metal Building Insulation 202-96* should be installed toward the conditioned spaces in the building. The insulation is normally applied over or between the structural members of the building and held in place by the covering sheets or insulation support system. When using high R-Value systems, it is recommended that the cavity between the exterior metal sheet and the faced fiber glass insulation should be filled.

Maintenance

An inspection and preventative maintenance program for the insulation and vapor retarder system is recommended to ensure optimum performance.

Warranty

In as much as Weather All Shelters has no control over installation design, installation workmanship, accessory materials or conditions of application, we do not warrant the performance or results of any installation containing its products.

If you have any questions or need more information, please contact us!