

Metal Building Insulation 202-96

PRODUCT DESCRIPTION

Basic Use: CertainTeed Fiberglass 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 be kept dry at all times during processing and end use. After lamination, packaging should not exceed a 5.5:1 compression ratio. For additional information, please refer to the appendix of the NAIMA 202-96 (Rev. 2000) standard.

Sizes: Standard available sizes as noted in table below. Contact CertainTeed for non-standard sizes.

INSTALLATION

The vapor retarder on Metal Building Insulation 202-96 should be installed toward the conditioned spaces

| THERMAL PERFORMANCE | | | | | |
|------------------------------------|-----|---------|----------------|-----------------|------|
| Nominal Thickness (Pre-Lamination) | | R-Value | | | |
| in. | mm | R | Pre-Lamination | Post-Lamination | RSI |
| 3% | 86 | 10 | 10.8 | 10 | 1.76 |
| 3¼ | 95 | 11 | 11.9 | 11 | 1.94 |
| 4% | 111 | 13 | 14.0 | 13 | 2.29 |
| 5¼ | 133 | 16 | 17.3 | 16 | 2.82 |
| 6% | 162 | 19 | 20.5 | 19 | 3.35 |
| 6¼ | 171 | 21 | 22.7 | 21 | 3.70 |
| 8 | 203 | 25 | 27.0 | 25 | 4.40 |
| 9¼ | 235 | 30 | 32.4 | 30 | 5.30 |

| AVAILABLE SIZES | | | | | | |
|-----------------|-------------------|-----|----------------|-----------------------|--------|------|
| R-Value | Nominal Thickness | | Width | | Length | |
| | in. | mm | in. | mm | ft. | m |
| 10 | 3% | 86 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 100 | 30.5 |
| 11 | 3¼ | 95 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 100 | 30.5 |
| 13 | 4% | 111 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 75 | 22.9 |
| 16 | 5¼ | 133 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 50 | 15.2 |
| 19 | 6% | 162 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 50 | 15.2 |
| 21* | 6¼ | 171 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 45 | 13.7 |
| 25* | 8 | 203 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 30 | 9.1 |
| 30* | 9¼ | 235 | 36, 48, 60, 72 | 914, 1219, 1524, 1829 | 25 | 7.6 |

Non-standard widths are available and subject to an upcharge on an individual basis determined by manufacturer's capability, quantity, lead times and packaging availability. *R-21, R-25 and R-30 are made to order.

| | |
|--------------|--|
| Product Name | CertainTeed Metal Building Insulation 202-96 |
| Manufacturer | CertainTeed Corporation |
| Address | 20 Moores Road Malvern, PA 19355 |
| Phone | 800-233-8990 |
| Website | www.certainteed.com/ technicalinsulation |

TECHNICAL DATA

Applicable Standards

- Model Building Codes:
 - ICC
- Material Standards:
 - ASTM C99, 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 / Meets requirements

Physical/Chemical Properties

- Thermal Resistance:
 - ASTM C518 and/or ASTM C177 at 75 °F (24 °C) mean temperature: see table at left
- Acoustical Performance: see tables on other side
- Water Vapor Sorption:
 - ASTM C1104 / No greater than 5.0% by weight
- Corrosiveness:
 - ASTM C665 / Pass
 - ASTM C1617 / Pass
- Odor Emission:
 - ASTM C1304 / Pass
- Fungi Resistance:
 - ASTM C1338 / Pass Test

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 fiberglass insulation should be completely filled.

AVAILABILITY AND COST

Manufactured and sold throughout the United States and Canada. For availability and cost, contact your local distributor or call CertainTeed Sales Support Group in Malvern, PA at 800-233-8990.

WARRANTY

Inasmuch as CertainTeed has no control over installation design, installation workmanship, accessory materials or conditions of application, CertainTeed does not warrant the performance or results of any installation containing its products.

MAINTENANCE

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

TECHNICAL SERVICES

Technical assistance can be obtained either from the local CertainTeed sales representative, or by calling CertainTeed Sales Support Group in Malvern, PA at 800-233-8990.

| SOUND ABSORPTION - UNFACED | | | | | | | | | |
|----------------------------|----------------|-----|---|------|------|------|------|------|------|
| R-Value | Nom. Thickness | | Absorption Coefficients at the Octave Band Frequencies (Hz) | | | | | | NRC |
| | in. | mm | 125 | 250 | 500 | 1000 | 2000 | 4000 | |
| 10 | 3¾ | 86 | 0.29 | 0.82 | 1.02 | 0.94 | 0.96 | 0.98 | 0.95 |
| 11 | 3¼ | 95 | 0.39 | 0.91 | 1.01 | 0.92 | 0.93 | 0.98 | 0.95 |
| 13 | 4¾ | 111 | 0.53 | 0.97 | 1.04 | 0.90 | 0.95 | 0.98 | 0.95 |
| 16 | 5¼ | 133 | 0.67 | 1.05 | 1.02 | 0.92 | 0.98 | 0.99 | 1.00 |
| 19 | 6¾ | 162 | 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.

| SOUND TRANSMISSION | | | | | | | |
|--|---|-----|-----|------|------|------|------------|
| Construction Type | Transmission Loss in dB at the Octave Band Frequencies (Hz) | | | | | | STC Rating |
| | 125 | 250 | 500 | 1000 | 2000 | 4000 | |
| ROOFS | | | | | | | |
| No Insulation | 12 | 13 | 19 | 24 | 30 | 32 | 24 |
| R-10 Faced 202-96 Insulation Over the Purlins | 12 | 16 | 26 | 37 | 45 | 49 | 29 |
| R-19 Faced 202-96 Insulation Over the Purlins | 13 | 20 | 30 | 41 | 49 | 51 | 32 |
| 202-96 Insulation Over & Between the Purlins to Fill the Cavity (R-25 Combined) | 14 | 24 | 34 | 44 | 53 | 56 | 36 |
| WALLS | | | | | | | |
| No Insulation | 12 | 14 | 19 | 19 | 20 | 27 | 21 |
| R-10 Faced 202-96 Insulation Over the Girts | 13 | 16 | 25 | 32 | 37 | 46 | 28 |
| R-13 Faced 202-96 Insulation Over the Girts | 13 | 17 | 26 | 33 | 38 | 47 | 29 |
| R-13 Faced 202-96 Insulation Over the Girts 3¾" Steel Studs on 24" Centers with ½" Gyp. Board on Interior | 26 | 40 | 51 | 60 | 64 | 65 | 50 |
| R-13 Faced 202-96 Insulation Over the Girts 3¾" Steel Studs on 24" Centers with R-11 Batts & ½" Gyp. Board on Interior | 31 | 43 | 55 | 68 | 73 | 75 | 54 |

Sound Transmission Class (STC) in accordance with ASTM E90.
 - Roof construction is 24ga. standing seam roof with 8" Z purlins on 5' centers.
 - Wall construction is 26ga. wall panels screwed to 8" Z girts placed on 7' centers.
 - Interior metal furring wall studs were 3¾" by 25ga. on 24' centers.



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