

## 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	
<b>ROOFS</b>							
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
<b>WALLS</b>							
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.



### CertainTeed Corporation

CEILING • DECKING • FENCE • GYPSUM • INSULATION • RAILING • ROOFING • SIDING • TRIM

20 Moores Road Malvern, Pa 19355 Professional: 800-233-8990 Consumer: 800-782-8777 certainteed.com