



Data Sheet

CI-MBI-DS | 5-17

# **Metal Building Insulation**

NAIMA 202-96 (Rev. 2000)

*with ECOSE® Technology*



# Metal Building Insulation NAIMA 202-96 (Rev. 2000) with ECOSE® Technology

## DESCRIPTION

Knauf Insulation Metal Building Insulation NAIMA 202-96 (Rev. 2000) is a resilient, flexible unfaced blanket insulation made from inorganic fibers bonded by with ECOSE Technology. The blanket is suitable for application of facings and has sufficient tensile and bond strength for normal handling by the laminator and contractor. The blanket may also be used unfaced as additional insulation to fill voids in walls and roofs of metal buildings. NAIMA 202-96 (Rev. 2000) is required to meet NIA Certified Faced Insulation Standard.

## ECOSE® TECHNOLOGY

ECOSE Technology is a revolutionary binder chemistry that enhances the sustainability of our products. The “binder” is the bond that holds our glass mineral wool product together and gives the product its shape and brown color. ECOSE Technology is a plant-based, sustainable chemistry that replaces the phenol/formaldehyde (PF) binder traditionally used in glass mineral wool products. Products using ECOSE Technology are formaldehyde-free and have reduced global warming potential when compared to our products of the past.

## APPLICATION

When Knauf Insulation Metal Building Insulation NAIMA 202-96 (Rev. 2000) is faced with a suitable vapor retarder, it can be installed in exterior wall and roof surfaces of pre-engineered buildings. The product may be used unfaced to fill voids in walls and roof cavities of pre-engineered buildings.

## PRODUCT FEATURES

### Energy Conservation

- Excellent thermal properties and reduces the building’s operating costs for heating and air conditioning

### Durability

- Will not rot, mold or deteriorate and will not provide sustenance for vermin, rodents or insects

## SUSTAINABILITY

Knauf Insulation’s products used for thermal insulating purposes recover the energy that it took to make them in just hours or days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.

Glass mineral wool insulation with ECOSE Technology contains three key ingredients:

- Recycled glass content, verified every 6 months by UL Environment
- Sand, one of the world’s most abundant resources
- Our green chemistry initiative ECOSE Technology, which is validated to be formaldehyde-free

## INDOOR AIR QUALITY

- UL Environment
  - GREENGUARD Certified
  - GREENGUARD GOLD Certified
  - Validated to be formaldehyde free

## SPECIFICATION COMPLIANCE

- ASTM C553; Type I, II (Max. operating temp. 350° F)
- ASTM C991; Type I
- NAIMA Standard 202-96 (Rev. 2000)

## CAUTION

If Knauf Insulation Metal Building Insulation NAIMA 202-96 (Rev. 2000) is compressed beyond a 5:1 ratio during or after lamination, the product’s recovered thickness may be affected.

## GLASS MINERAL WOOL AND MOLD

Glass mineral wool insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced.

## NOTES

The chemical and physical properties of Knauf Insulation Metal Building Insulation NAIMA 202-96 (Rev. 2000) represent average values determined in accordance with accepted test methods. The data is subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Knauf Insulation Territory Manager to ensure information is current.

## Forms Available

R-Value	Out of Package R-Value	Thickness	Width	Length
R-10	R-10.8	3 ¼" (83 mm)	36" (914 mm)–72" (1824 mm)	100' (30.5 m)
R-11	R-11.9	3 ½" (89 mm)	48" (1219 mm)–96" (2438 mm)	100' (30.5 m)
R-13	R-14	4 ¼" (108 mm)	36" (914 mm)–96" (2438 mm)	75' (22.9 m)
R-19	R-20.6	6" (152 mm)	36" (914 mm)–96" (2438 mm)	50' (15.2 m)
R-25	R-27	8" (203 mm)	48" (1219 mm)–96" (2438 mm)	35' (12.2 m)
R-30	R-32.5	9 ¼" (235 mm)	36" (914 mm)–72" (1824 mm)	25' (7.6 m)

Please contact your Territory Manager for availability.

## Technical Data

Property (Unit)	Test	Performance
Corrosiveness	ASTM C665	Does not accelerate corrosion of steel
Corrosion	ASTM C1617	Pass
Combustibility	ASTM E136	Non-combustible
Odor Emission	ASTM C1304	Pass
Maximum Service Temperature	ASTM C411	350° F (177° C)
Mold Growth	ASTM C1338	Pass
Water Vapor Sorption (by weight)	ASTM C1104	5% or less
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, NFPA 255, UL 723	25/50

## Sound Absorption Coefficients | ASTM C423, Type A Mounting

Thickness	½ Octave Band Center Frequency (cycles/sec.)						NRC
	125	250	500	1000	2000	4000	
3"	0.36	0.76	1.04	0.94	0.98	1.00	0.95
4"	0.59	1.01	0.97	0.96	1.06	1.08	1.00
6"	1.18	1.36	1.02	1.02	1.12	1.07	1.15



# KNAUFINSULATION



Knauf Insulation, Inc.  
One Knauf Drive  
Shelbyville, IN 46176

Sales (800) 825-4434, ext. 8485

Technical Support (800) 825-4434, ext. 8727

Information [info.us@knaufinsulation.com](mailto:info.us@knaufinsulation.com)

Website [www.knaufinsulation.us](http://www.knaufinsulation.us)

© 2016 Knauf Insulation, Inc.



#### UL Environment GREENGUARD Certification Program

Metal Building Insulation NAIMA 202-96 (Rev. 2000) certified to UL Environment GREENGUARD standards for low chemical emissions into indoor air during product usage.

#### UL Environment GREENGUARD Gold

Knauf Insulation has achieved UL Environment GREENGUARD Gold Certification for Metal Building Insulation NAIMA 202-96 (Rev. 2000).

For more information, visit [ul.com/spot](http://ul.com/spot)



#### LEED Eligible Product

Use of this product may help building projects meet green building standards as set by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

#### LEED v2009

MR Credit 4.1 - 4.2 Recycled Content  
MR Credit 5.1 - 5.2 Regional Materials

#### LEED v4

Knauf Insulation offers several products for both envelope and mechanical systems that have ingredient disclosure and transparency. Please contact [transparency@knaufinsulation.com](mailto:transparency@knaufinsulation.com) for products that currently contribute to MR credits.



Versions of this product have surface burning characteristics that are classified by Underwriters Laboratories and therefore subject to auditing for fire performance compliance.



This product has been tested and is certified to meet the EUCEB requirements.