



# **Metal Building Insulation**

### **Metal Building Insulation**

#### **Description**

Knauf Metal Building Insulation is a resilient, flexible unfaced blanket insulation made from inorganic fibers bonded by thermosetting resin. 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 wall and roofs of metal buildings.

#### **Application**

When Knauf Metal Building Insulation 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.

#### **Features**

- · Low thermal conductivity
- · Superior acoustical performance
- · Fire-resistant, non-corrosive, tough and resilient

#### **Benefits**

- · Energy conservation
- · Better temperature control
- · Lower operating costs
- · Noise control
- Withstands damage from normal handling and shop abuse
- Condensation control

#### **Technical Data**

#### **Surface Burning Characteristics**

 Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84, NFPA-255 and UL 723.

#### **Odor (ASTM C 1304)**

· No objectionable odor emission.

#### Water Vapor Sorption (ASTM C 1104)

· Less than 0.2% by volume or 5% by weight.

#### Corrosiveness (ASTM C 665)

Does not accelerate corrosion on steel, copper or aluminum.

## Resistance to Microbial Growth (ASTM C 1338)

· Does not promote microbial growth.

#### Temperature Range (ASTM C 411)

 The unfaced blanket will not deteriorate up to 350°F (177°C).

#### Noncombustibility (ASTM E 136)

· Noncombustible.

#### **Specification Compliance**

- ASTM C 553 Type I, II
- ASTM C 991 Type I
- HH-I-558C Form B, Class 6
- NAIMA Standard 202-96 (REV.2000)
- ASTM E 136

#### **Fiber Glass and Mold**

Fiber glass insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated with organic materials. 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. Air handling insulation used in the air stream must be discarded if exposed to water.

#### **Notes**

The chemical and physical properties of Knauf Metal Building Insulation represent typical average values determined in accordance with accepted test methods. 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.

#### Caution

If Knauf Metal Building Insulation is compressed beyond a 5:1 ratio during or after lamination, the product can be damaged.

Check with your Knauf sales representative to assure information is current.



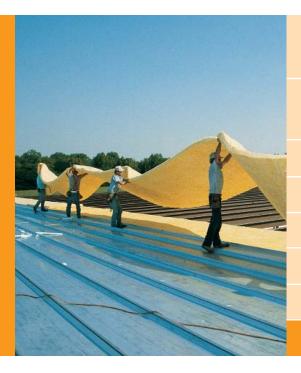
Sound Absorption Coefficients (ASTM C 423, Type A Mounting)									
1/3 Octave Band Center Frequency (cycles/sec.)									
	125	250	500	1000	2000	4000	NRC		
3"	.36	.76	1.04	.94	.98	1.00	.95		
4"	.59	1.01	.97	.96	1.06	1.08	1.00		
6"	1.18	1.36	1.02	1.02	1.12	1.07	1.15		

Forms Available									
Thickness			Width	Length					
3¼"*	(83 mm)	36"-60"	(915-1524 mm) (1829-2438 mm)	100'	(30.48 m)				
3½"*	(89 mm)	72"-96"		100'	(30.48 m)				
4¼"*	(108 mm)	12 -90		75'	(22.86 m)				
5"*	(127 mm)	72"-96"	(1829-2438 mm)	50'	(15.24 m)				
6"*	(152 mm)	24" 40"	(915-1524 mm) (1829-2438 mm)	50'	(15.24 m)				
8"*	(203 mm)	36"-60" 72"-96"		40'	(12.19 m)				
9½"*	(241 mm)	12 -90		25'	(7.62 m)				

R-Value (ASTM C 518) Mean Temperature 75°F					
Thickness	R-Value				
3¼"	10				
3½"	11				
41⁄4"	13				
5"	16				
6"	19				
8"	25				
9½"	30				

<sup>\*</sup> Meets NAIMA Standard 202-96 (REV. 2000)

# **KNAUFINSULATION**



Knauf Insulation GmbH One Knauf Drive Shelbyville, IN 46176

**Sales and Marketing** (800) 825-4434, ext. 8283

**Technical Support** (800) 825-4434, ext. 8212

**Customer Service** (866) 445-2365

Fax (317) 398-3675

World Wide Web www.KnaufInsulation.com

©2006 Knauf Insulation GmbH.



Knauf Metal Building Insulation products are certified for indoor air quality by The GREENGUARD Environmental Institute™, a global, non-profit organization, providing the world's leading guide to certified low emitting interior products and building materials through independent, indoor air quality laboratory testing. www. greenguard.org



#### **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. Credit 4.1 - 4.2 Recycled Content

Credit 5.1 - 5.2 Regional Materials