



Data Sheet

BI-BW-DS

11-17

# **Knauf Insulation Blowing Insulation**

# Knauf Insulation Blowing Insulation

## DESCRIPTION

Knauf Insulation Blowing Insulation is an unbonded, virgin fibrous glass blowing insulation having a high degree of post-consumer recycled content.

## APPLICATION

Knauf Insulation Blowing Insulation is used in residential and commercial construction as a thermal and acoustical insulation. It is designed for pneumatic installation in open attic or ceiling plenum areas with flat flooring or up to a maximum slope of 4.5:12.

## PRODUCT FEATURES

### Excellent Thermal Properties

- Fills all gaps and voids in ceilings, creating a thermal barrier against outside air and better temperature control
- Greater resistance to air infiltration than cellulosic materials
- Will not change from its intended R-value over its lifetime
- Will not settle

### Saves Warehouse and Truck Space

- Requires about one-half of the warehouse and truck space of competing cellulosic products

### Better Coverage than Cellulose

- More than 2x the coverage per bag

### Sustainable

- Made from a high degree of recycled content

### Improves Crew Productivity

- Installers spend less time handling bags. In a 2,000 square foot home, about 50 bags of Knauf Insulation Blowing Insulation are required, compared to 100 bags of cellulosic material
- Installs cleaner than cellulose, virtually dust-free
- Blows clean and smooth and does not require stabilizing

### Strong Poly Bag Packaging

- Packaged in a very strong poly bag that prevents bag breakage and jobsite spillage. The bags stack well and have a coefficient of friction sufficient to reduce slippage.

### Non-combustible

- Glass mineral wool is naturally non-combustible and remains so for the life of the product. Unlike cellulose, Knauf Insulation Blowing Insulation requires no additional fire-retardant chemical treatments. Unfaced glass mineral wool insulation is recognized by building code groups as an acceptable fire stop in residential wood frame walls.

### Noise Reduction

- Improves Sound Transmission Class (STC) ratings by 4 to 10 points, with a 3 point STC change being a noticeable improvement

## SPECIFICATION COMPLIANCE

- National Building Code of Canada
- ICC
- CCMC Evaluation Listing: 14070-L
- Complies with CAN/ULC 5702
- ASTM C764; Type I
- HHI-1030B; Class B certified
- Meets the Quality Standards of the State of California

## THERMAL PERFORMANCE

The stated thermal performance of Knauf Insulation Blowing Insulation requires installation in accordance with the manufacturer's instructions. Failure to install the material properly will impact the performance of this product. This product must be installed according to the coverage charts provided.

## EQUIPMENT REQUIRED

To achieve labeled R-value, this product must be applied with a pneumatic blowing machine and a corrugated hose with a minimum ¼" internal corrugation, a minimum length of 150'. Coils in the hose should not be less than 36" in diameter. Acceptable material feed rate is 5–35 lbs./min. The recommended feed rate is 15–35 lbs./min.

## 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.

## NOTES

The chemical and physical properties of Knauf Insulation Blowing Insulation represent typical 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.

## Technical Data

| Property (Unit)  | Test                   | Performance                                       |
|--|------------------------|---|
| Design Density   | CAN/ULC-S702           | 8.65 kg/m <sup>3</sup> (0.54 lb/ft <sup>3</sup> ) |
| Corrosion  | ASTM C764              | Pass  |
| Thermal Resistance   | ASTM C518              | 18.5 (m•k)/W (2.67 °F•ft <sup>2</sup> •hr/Btu•in) |
| Critical Radiant Flux  | ASTM E970              | Greater than 0.12 W/cm <sup>2</sup>               |
| Combustibility   | ASTM E136              | No temperature rise above 54° F (30° C)           |
| Water Vapor Sorption (by weight)                               | ASTM C1104             | 5% maximum  |
| Mold Growth  | ASTM C1338             | Pass  |
| Surface Burning Characteristics (flame spread/smoke developed) | ASTM E84, CAN/ULC S102 | ≤ 25/≤ 50   |
| Smolder Resistance   | ULC-S129               | Pass  |

## Open Attic Application

| Thermal Resistance                               |      | Minimum Thickness                             |     | Minimum Weight/Unit Area  |                   | Maximum Coverage/Bag                             |                | Bags/Unit Area  |                    |
|--|------|---|-----|---|-------------------|--|----------------|---|--------------------|
| To obtain an insulation resistance (R-Value) of: |      | Installed insulation should not be less than: |     | Weight per square foot of installed insulation should not be less than: |                   | Contents of this bag should not cover more than: |                | Number of bags per 1,000 ft <sup>2</sup> of net area should not be less than: |                    |
| R-Value  | RSI  | inches  | mm  | lb/ft <sup>2</sup>  | kg/m <sup>2</sup> | ft <sup>2</sup>                                  | m <sup>2</sup> | 1,000 ft <sup>2</sup>   | 100 m <sup>2</sup> |
| 8  | 1.4  | 3.0   | 76  | 0.13  | 0.65              | 201.4  | 18.71          | 5.0   | 5.3                |
| 12   | 2.1  | 4.5   | 114 | 0.20  | 0.98              | 134.3  | 12.47          | 7.4   | 8.0                |
| 13   | 2.3  | 4.9   | 124 | 0.22  | 1.08              | 122.6  | 11.39          | 8.2   | 8.8                |
| 16   | 2.8  | 6.0   | 151 | 0.27  | 1.31              | 100.7  | 9.35           | 9.9   | 10.7               |
| 19   | 3.3  | 7.0   | 178 | 0.32  | 1.54              | 85.4   | 7.94           | 11.7  | 12.6               |
| 20   | 3.5  | 7.4   | 189 | 0.34  | 1.64              | 80.6   | 7.48           | 12.4  | 13.4               |
| 22   | 3.8  | 8.1   | 205 | 0.36  | 1.78              | 74.2   | 6.89           | 13.5  | 14.5               |
| 24   | 4.2  | 8.9   | 227 | 0.40  | 1.96              | 67.1   | 6.24           | 14.9  | 16.0               |
| 28   | 4.9  | 10.4  | 265 | 0.47  | 2.29              | 57.5   | 5.35           | 17.4  | 18.7               |
| 30   | 5.3  | 11.3  | 286 | 0.51  | 2.48              | 53.2   | 4.94           | 18.8  | 20.2               |
| 32   | 5.6  | 11.9  | 303 | 0.54  | 2.62              | 50.3   | 4.68           | 19.9  | 21.4               |
| 34   | 6.0  | 12.8  | 324 | 0.57  | 2.81              | 47.0   | 4.37           | 21.3  | 22.9               |
| 36   | 6.3  | 13.4  | 341 | 0.60  | 2.95              | 44.8   | 4.16           | 22.3  | 24.1               |
| 38   | 6.7  | 14.3  | 362 | 0.64  | 3.13              | 42.1   | 3.91           | 23.8  | 25.6               |
| 40   | 7.0  | 14.9  | 378 | 0.67  | 3.27              | 40.3   | 3.74           | 24.8  | 26.7               |
| 44   | 7.7  | 16.4  | 416 | 0.74  | 3.60              | 36.6   | 3.40           | 27.3  | 29.4               |
| 48   | 8.4  | 17.9  | 454 | 0.80  | 3.93              | 33.6   | 3.12           | 29.8  | 32.1               |
| 49   | 8.6  | 18.3  | 465 | 0.82  | 4.02              | 32.8   | 3.05           | 30.5  | 32.8               |
| 50   | 8.8  | 18.7  | 476 | 0.84  | 4.12              | 32.0   | 2.98           | 31.2  | 33.6               |
| 52   | 9.1  | 19.4  | 492 | 0.87  | 4.26              | 31.0   | 2.88           | 32.3  | 34.7               |
| 56   | 9.8  | 20.9  | 530 | 0.94  | 4.58              | 28.8   | 2.67           | 34.8  | 37.4               |
| 60   | 10.5 | 22.3  | 568 | 1.01  | 4.91              | 26.9   | 2.49           | 37.2  | 40.1               |

Bag weight 27 lbs. (12.25 kg) | Design density 0.54 lb/ft<sup>3</sup> (8.65 kg/m<sup>3</sup>) | Design thermal resistance 2.67 R/in (18.5 RSI/m)

To obtain thermal resistance values shown on this chart, the applicator must install the correct number of bags to meet both the minimum thickness and minimum mass per unit area listed.

\*\*"R" means resistance to heat flow. The higher the R-value, the greater the insulating power. To get the marked R-value it is essential that this insulation be installed properly. If you do it yourself, get instructions and follow them carefully. Instructions do not come with this package.

\*\*Based on a Third Party 2-year settling study, the predicted settlement over a 20-year period would be 1 percent or less. This amount of settling is thermally insignificant. Therefore, the installed and settled thickness is effectively the same.

Volu-Matic® II is a registered trademark of Unisul.

# 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)

© 2017 Knauf Insulation, Inc.

