

# EcoFill® Wx Blowing Insulation for Weatherization

Submittal Date \_\_\_\_\_



## Description

Knauf **EcoFill® Wx** Glasswool Blowing Insulation is an unbonded, virgin fibrous glass blowing insulation designed with optimal thermal properties and excellent coverage and blowing characteristics.

## Application

**EcoFill Wx** Blowing Insulation is installed in both side-walls and open attics of existing structures. **EcoFill Wx** should be installed by professional installers to ensure the highest quality installed performance.

## Features and Benefits

### Excellent Thermal Properties

- Fills all gaps and voids, creating a thermal barrier against outside air and better temperature control.
- Resists heat flow with an R-value of R-15 in 2 x 4 construction.
- Resists heat flow with an R-value of R-23 in 2 x 6 construction.

### Superior Air Flow Resistance

- Due to fine fiber size, dense-packed glasswool has superior air infiltration resistance.

### Excellent Coverage Per Bag

#### Energy Conservation

- Reduces fuel usage and utility bills for heating and air conditioning.

#### Noise Reduction

- Improves Sound Transmission Class (STC) ratings by 4 to 10 points.

#### Non-Corrosive

- Will not accelerate the corrosion of aluminum, steel or copper.

#### Resists Microbial Growth

- Does not promote the growth of fungi or bacteria.
- Will not rot or sustain vermin, rodents or insects.

#### Installation

- Blows fast and smooth.
- Cleaner than cellulose, virtually dust-free
- Does not require stabilizing.

#### Indoor Air Quality

- GREENGUARD™ Certified for Children and Schools<sup>SM</sup> to meet the toughest indoor air quality standards in the industry.

## Thermal Performance

**EcoFill Wx** Blowing Insulation provides a choice of R-values based on the installed thickness and installed weight per square foot. The tables below show the minimum requirements for obtaining the desired R-value.

The stated thermal resistance (R-value) is provided by installing in accordance with the manufacturer's instructions. Failure to install the required number of bags per 1,000 square feet and exceeding the maximum square feet of coverage per bag as recommended by the label will result in lower installed R-values. Field blending of this product with other loose fill insulations or application of this product with adhesive or binder systems may affect its thermal performance and is not recommended by the manufacturer.

## Specification Compliance

- ASTM C 764; Type I
- HH-I-1030B; Class B
- Greenguard Environmental Institute™
- Greenguard For Children and Schools™ Certified
- Knauf **EcoFill Wx** Glasswool Blowing Insulation is manufactured with a minimum of 60% post consumer recycled glass.
- Meets the Quality Standards of the State of California.

## Technical Data

### Surface Burning Characteristics

- Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84 and CAN/ULC S102-M88.

### Critical Radiant Flux (ASTM E 970)

- Greater than 0.12 W/cm<sup>2</sup>.

### Moisture Vapor Sorption (ASTM C 1104)

- 5% maximum by weight.

### Corrosion (ASTM C 764)

- No greater than sterile cotton.

### Microbial Growth (ASTM C 1338)

- Does not support microbial growth.

### Non-Combustibility (ASTM E 136)

- No temperature rise above 54° F (30° C).

## 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./minute.

The recommended feed rate is 15-35 lbs./minute.

## Packaging

- Knauf **EcoFill Wx** Blowing Insulation is packaged in a strong, poly bag that offers excellent protection from abuse, dust and moisture.
- Knauf packages are lightweight, stack without slipping and are easy to handle and store.

## Glasswool and Mold

Glasswool 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

Knauf Insulation is registered to ISO 9001:2008 in the prevention, detection and correction of problems in production and service areas. The chemical and physical properties of Knauf **EcoFill Wx** 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 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 sales representative to assure information is current.

### Cavity Wall Application Bag Net Weight—Nominal 30 lbs., Minimum 29 lbs.

Framing	Cavity Depth	R-Value* To obtain an insulation resistance of:	Density	Bags per 1000 SF The number of bags per 1,000 square feet of net area should not be less than:	Maximum Coverage per Bag Contents of this bag should not cover more than:	Net Minimum Weight per SF The weight per square feet of installed insulation should not be less than:
2" x 4"	3.50"	R-15	2.2 lbs./cu. ft.	21.4 bags	46.8 sq. ft.	0.64 lbs.
2" x 6"	5.50"	R-23	2.2 lbs./cu. ft.	33.6 bags	29.8 sq. ft.	1.01 lbs.
2" x 8"	7.25"	R-31	2.2 lbs./cu. ft.	44.3 bags	22.6 sq. ft.	1.33 lbs.
2" x 10"	9.25"	R-39	2.2 lbs./cu. ft.	56.6 bags	17.7 sq. ft.	1.70 lbs.

\* 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.



Knauf EcoBatt® Building Insulation is certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute to both the GREENGUARD Certification Program<sup>SM</sup> and the more stringent GREENGUARD For Children and Schools<sup>SM</sup> standard and is verified to be formaldehyde free. [www.greenguard.org](http://www.greenguard.org)

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Open Attic Application Bag Net Weight—Nominal 30 lbs., Minimum 29 lbs.					
R-Value*	Bags/1000 SF	Maximum Coverage	Minimum Coverage	Initial Installed Thickness	Maximum Settled Thickness**
To obtain an insulation resistance (R-value) of:	The number of bags per 1,000 square feet of net area should not be less than:	Contents of bag should not cover more than	The weight /SF of installed insulation should not be less than:	Installed insulation should not be less than:	Installed insulation should not be less than:
R-60	33.2	30.1 SF	.995 lbs.	20.000"	20.000"
R-49	26.4	37.9 SF	.791 lbs.	16.625"	16.625"
R-44	23.3	43.0 SF	.698 lbs.	15.000"	15.000"
R-38	19.8	50.5 SF	.595 lbs.	13.125"	13.125"
R-30	15.3	65.5 SF	.458 lbs.	10.500"	10.500"
R-26	13.2	75.8 SF	.396 lbs.	9.250"	9.250"
R-22	11.0	91.0 SF	.330 lbs.	7.875"	7.875"
R-19	9.4	105.8 SF	.283 lbs.	6.875"	6.875"
R-13	6.3	158.5 SF	.189 lbs.	4.750"	4.750"
R-11	5.2	190.5 SF	.157 lbs.	4.000"	4.000"

Coverage and installation data were determined using a Volu-Matic® II blowing machine in third gear with 13" gate opening, 2.0 psi air pressure. 150' of 3" diameter internally corrugated hose.

\* 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 package.

\*\* Based on 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 thicknesses are effectively the same.

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



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