



Data Sheet

BI-BWE-DS 5-16

ECOFILL®

Blowing Wool Insulation

Nx

EcoFill® Wx Loose Fill Glass Mineral Wool Insulation

Description

Knauf Insulation EcoFill Wx Loose Fill glass mineral wool blowing insulation is an unbonded, virgin fibrous glass blowing insulation having a high degree of post-consumer recycled content, designed for weatherizing and retrofitting existing housing.

Application

Knauf Insulation EcoFill Wx Loose Fill glass mineral wool Blowing Insulation is used to dense-pack sidewalls using the drill and fill technique common in retrofitting homes or in home weatherization activities. EcoFill Wx Loose Fill insulation is also excellent for doing open blows in attics. This means that only one product is needed to complete an insulation retrofit/ weatherization project.

Features and Benefits

Excellent Thermal Properties for Sidewalls

- Fills all gaps and voids in wall cavities, creating a thermal barrier against outside air and better temperature control.
- Has greater resistance to air infiltration than cellulosic materials.
- 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.
- Absolutely will not settle in walls

And Attics

- Will not change from its intended R-value over its lifetime.

Saves Warehouse Space

- EcoFill Wx Loose Fill insulation requires about one-half of the warehouse space of competing cellulosic products.
- Twice as many jobs can be loaded on a truck when EcoFill Wx Loose Fill insulation is used instead of cellulosic products.

Better Coverage than Cellulose

- More than 2x the coverage per bag
- ### Sustainability
- Contains a high degree of recycled glass content and ULE verification every 6 months.

Improves Crew Productivity

- With EcoFill Wx Loose Fill insulation, installers spend less time handling bags.
- In a 2000 square foot home, about 46 bags of EcoFill Wx Loose Fill insulation are required, compared to 145 bags of cellulosic material.
- Installs cleaner than cellulose, virtually dust-free.
- Blows clean and smooth and does not require stabilizing.

Strong Poly Bag Packaging

- EcoFill Wx Loose Fill insulation is 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.

Indoor Air Quality

- Certified for indoor air quality as a low emitting product by The GREENGUARD Environmental to both the GREENGUARD Indoor Air Quality Certification Program and the more stringent GREENGUARD Gold standard and is verified to be formaldehyde free.

Non-combustible

- Glass mineral wool is naturally non-combustible and remains so for the life of the product. Unlike cellulose EcoFill Wx Loose Fill 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.

Specification Compliance

- ASTM C764; Type I
- HH-1030B; Class B Certified
- Greenguard Indoor Air Quality Certified®
- Greenguard Gold Certified
- Knauf Insulation EcoFill Wx Loose Fill glass mineral wool Blowing Insulation is manufactured with a high degree of recycled glass.
- Meets the Quality Standards of the State of California.

Technical Data

Air Infiltration Resistance

- When tested against three cellulose products using ASTM C522, EcoFill Wx Loose Fill insulation showed 20 to 100% better air flow resistance than three leading brands. (See Table, back)

Noise Reduction

- Improves Sound Transmission Class (STC) ratings by 4 to 10 points.
- A 3 point STC change is a noticeable improvement.

Surface Burning Characteristics

- Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E84 and CAN/ULC S102-M88.

Critical Radiant Flux (ASTM E970)

- Greater than 0.12 W/cm².

Moisture Vapor Sorption (ASTM C1104)

- 5% maximum by weight.

Corrosion (ASTM C764)

- No greater than sterile cotton.
- Will not accelerate corrosion of aluminum, steel or copper.

Microbial Growth (ASTM C1338)

- Does not support microbial growth.

Non-Combustibility (ASTM E136)

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

Thermal Performance

The stated thermal performance of EcoFill Wx Loose Fill 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



Open Attic Application

R-Value*	Minimum Bags/ 1,000 ft ²	Maximum Coverage/Bag	Net Minimum Weight/ft ²	Initial Installed Thickness	Minimum Settled Thickness**
To obtain an insulation resistance of:	Number of bags per 1,000 ft ² of net area should not be less than:	Contents of this bag should not cover more than:	Weight per ft ² of installed insulation should not be less than:	Installed insulation should not be less than:	Installed insulation should not be less than:
R-11	5.3	188.4 ft ²	0.152 lb	4"	4"
R-13	6.4	156.6 ft ²	0.183 lb	4¾"	4¾"
R-19	9.4	106.6 ft ²	0.268 lb	6¾"	6¾"
R-22	10.9	91.4 ft ²	0.313 lb	7¾"	7¾"
R-26	13.2	75.9 ft ²	0.377 lb	9⅞"	9⅞"
R-30	15.3	65.5 ft ²	0.437 lb	10⅞"	10⅞"
R-38	19.9	50.2 ft ²	0.569 lb	13"	13"
R-44	23.4	42.7 ft ²	0.670 lb	14⅞"	14⅞"
R-49	26.3	38.0 ft ²	0.753 lb	16⅞"	16⅞"
R-60	33.3	30.1 ft ²	0.952 lb	19¾"	19¾"



In attic applications, EcoFill® Wx insulation blows smooth and fast, providing superior coverage.

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

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 EcoFill® Wx 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 assure information is current.

Cavity Wall Application - Dense Pack

Framing	Cavity Depth	R-Value*	Density	Bags/ 1,000 ft ²	Maximum Coverage/Bag	Net Minimum Weight/ft ²
		To obtain a thermal resistance of:		Number of bags per 1,000 ft ² of net area should not be less than:	Contents of this bag should not cover more than:	Weight per ft ² of installed insulation should not be less than:
2" x 4"	3.50"	R-15	2.2 lb/ft ³	22.4 bags	44.6 ft ²	0.624 lb
2" x 6"	5.50"	R-23	2.2 lb/ft ³	35.3 bags	28.4 ft ²	1.008 lb
2" x 8"	7.25"	R-31	2.2 lb/ft ³	46.5 bags	21.5 ft ²	1.329 lb
2" x 10"	9.25"	R-39	2.2 lb/ft ³	59.3 bags	16.9 ft ²	1.696 lb

Bag Net Weight - 28.6 lb, 27.6 lb minimum.

Coverage and installation data were determined using a Volu-Matic® II blowing machine in 3rd gear with a 13" gate opening, 2.0 psi air pressure and 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 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.

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or visit us online at www.knaufinsulation.us



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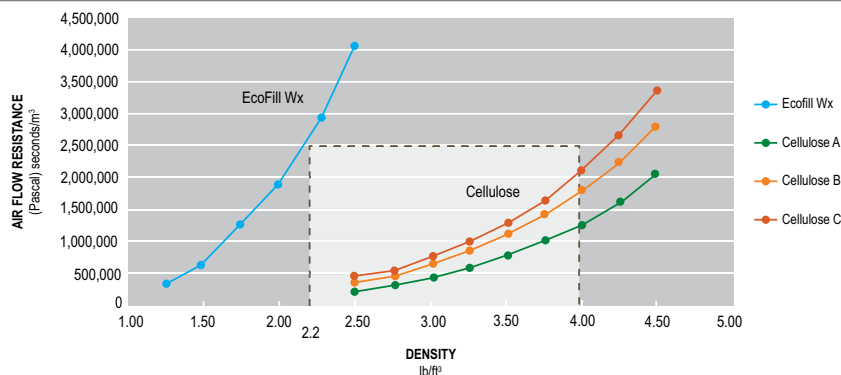
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Air Flow Resistance vs. Density



UL Environment GREENGUARD Gold

Knauf Insulation achieved UL Environment GREENGUARD Gold Certification and is verified to be formaldehyde free.

UL Environment GREENGUARD Certification Program

Products are certified to UL Environment GREENGUARD standards for low chemical emissions into indoor air during product usage.

For more information, visit ul.com/spg.

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.

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

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



This product is covered by one or more U.S. and/or other patents. See patent www.knaufinsulation.us/patents.