



Data Sheet

BW-DS-08 08-10

ECOFILL™

Nx

Glasswool Blowing
Insulation for
Weatherizing Attics and Sidewalls

EcoFill™ Wx Glasswool Insulation for Weatherizing Attics and Sidewalls

Description

Knauf EcoFill™ Wx Glasswool 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

EcoFill™ Wx Glasswool 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 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 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 is used instead of cellulosic products.

Better Coverage than Cellulose

- More than 2x the coverage per bag

Sustainability

- Over 40% post-consumer recycled content.
- Each bag contains the equivalent of 30 recycled bottles.

Improves Crew Productivity

- With EcoFill Wx, installers spend less time handling bags.
- In a 2000 square foot home, about 46 bags of EcoFill Wx 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 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

- Greenguard™ Certified for Children and SchoolsSM to meet the toughest indoor air quality standards in the industry.

Non-combustible

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

Resists Microbial Growth

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

Specification Compliance

- ASTM C 764; Type I
- HH-I-1030B; Class B
- Greenguard Indoor Air Quality Certified®
- Greenguard For Children and SchoolsSM Certified
- Knauf EcoFill Wx Glasswool Blowing Insulation is manufactured with a minimum of 40% post consumer recycled glass.
- Meets the Quality Standards of the State of California.

Technical Data

Air Infiltration Resistance

- When tested against three cellulose products using ASTM C 522, EcoFill Wx showed 20 to 100% better air flow resistance than three leading brands. (See Table, right)

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 E 84 and CAN/ULC S102-M88.

Critical Radiant Flux (ASTM E 970)

- Greater than 0.12 W/cm².

Moisture Vapor Sorption (ASTM C 1104)

- 5% maximum by weight.

Corrosion (ASTM C 764)

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

Microbial Growth (ASTM C 1338)

- Does not support microbial growth.

Non-Combustibility (ASTM E 136)

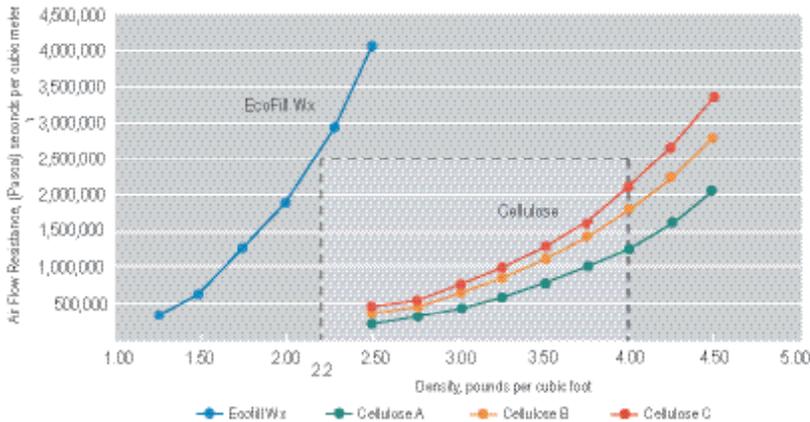
- No temperature rise above 54° F (30° C).

Thermal Performance

The stated thermal performance of EcoFill Wx 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



Air Flow Resistance vs. Density



In attic applications, EcoFill Wx 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 1/4" 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.

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

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 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 sales representative to assure information is current.

Open Attic Application

R-Value*	Bags/1,000 SF	Maximum Coverage	Minimum Weight	Initial Installed Thickness	Minimum Settled Thickness**
To obtain an insulation resistance (R-value) of:	The number of bags/1,000 SF of net area should not be less than:	Contents of this bags 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"

Bag Net Weight - Nominal 30 lbs., Minimum 29 lbs.

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 this 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.

See back page for Cavity Wall Applications

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Cavity Wall Application

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.	56.5 bags	17.7 sq. ft.	1.70 lbs.



Knauf EcoFill™ Wx Glasswool Blowing Insulation is certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute™ to both the GREENGUARD Certification Program™ and the more stringent GREENGUARD For Children and Schools™ standard.
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

