Building Insulation with ECOSE® Technology

Submittal Date

Product Provided

• Unfaced Batts and Blankets

EcoBatt[®] Insulation with ECOSE[®] Technology Glass mineral wool insulation is designed to friction fit between framing members. Specifier permitted choice of warm side vapor retarders, including foil backed gypsum board or polyethylene film. Unfaced glass mineral wool insulation is also an excellent sound control insulation, designed for installation in floor systems and in partition walls between rooms or dwellings.

High density glass mineral wool insulation is specifically designed for sidewall, cathedral ceiing and floor applications where optimal thermal performance is required, and space for insulation is limited. Knauf Insulation High Density (HD) Ecobatt products offer a superior thermal value per inch as compared to standard building insulation products.

R-15-31/2" High Density EcoBatt batts are designed for use in 2 x 4 framed wall sections. R-21-51/2" and R-23-51/2" High Density batts are designed for use in 2 x 6 framed sidewalls and floor assemblies. where air spaces are neither required nor desired. R-30-81/4" High Density Cathedral Ceiling batts are designed for use in 2 x 10 framed cathedral ceiling or floor assemblies where a 1" air space is required. R-38-101/4" High Density Cathedral Ceiling batts are designed for use in 2 x 12 framed cathedral ceiling or floor assemblies where a 1" air space is required. When tested in accordance with ASTM E 84, material has a Fire Hazard Classification of 25/50 or less.

Complies with the requirements of the applicable ASTM and cancelled federal specifications: (ASTM C 665, Type I, Class A) (HH-I-521F, Type I, Class A) (ASTM E 136)

0	21⁄2" R-8	0	51⁄2" R-23 HD
0	31⁄2" R-11	0	8" R-25
0	31⁄2" R-13	0	8¼" R-30 HD
0	31⁄2" R-15 HD	0	10" R-30
0	6¼" R-19	0	10¼" R-38 HD
0	51⁄2" R-20	0	12" R-38
0	51⁄2" R-21 HD	0	13¾" R-49

○ 6½" R-22

Kraft Faced Batts and Blankets

EcoBatt[®] Insulation with ECOSE[®] Technology Glass mineral wool insulation with asphalted kraft paper with or without stapling flanges. Kraft vapor retarder has vapor transmission (permeance) rating of 1.0 or less. Kraft Faced glass mineral wool insulation has excellent sound control properties, designed for installation in floor systems and in partition walls between rooms or dwellings. Kraft facing will burn and should not be left exposed. Install kraft facing in contact with approved finish material.



Complies with the requirements of the applicable ASTM and cancelled federal specifications: (ASTM C 665, Type II, Class (C) (HH-I-521E Type II Class (C)

	1033 0) (1111 02 11, 19pc 11, 01033 0)		
0	31⁄2" R-11	0	51⁄2" R-23 HD
0	31⁄2" R-13	0	8" R-25
0	31⁄2" R-15 HD	0	8¼" R-30 HD
0	6¼" R-19	0	10" R-30
0	51⁄2" R-20	0	10¼" R-38 HD
0	51⁄2" R-21 HD	0	12" R-38
	C1/# D 00		403/" D 40

o 6¹/₂" R-22 ○ 13¾" R-49

○ Foil Faced Batts

EcoBatt® Insulation with ECOSE® Technology Glass mineral wool foil insulation with asphalted-

coated kraft/foil facing with flanges. Foil vapor retarder has vapor transmission (permeance) rating of .05 or less. Insulation should not be left exposed. Cover with fire rated finishing surface.

Complies with the requirements of the applicable ASTM and cancelled federal specifications: (ASTM C 665, Type III, Class B) (HH-I-521F. Type III. Class B)

			,	
0	31⁄2" R-11	0	5½" R-21	HD
0	31⁄2" R-13	0	10" R-30	

0	6¼" R-19	○ 12" R-38
0	0/4 11-13	0 12 11-30

○ FSK-25 Foil Faced Batts

EcoBatt® Insulation with ECOSE® Technology Glass mineral wool foil insulation with flanged reinforced foil/scrim/kraft facing with an average vapor transmission (permeance) rating of .04. When tested in accordance with ASTM E 84, material has a Fire Hazard Classification of 25/50 or less. Complies with the requirements of the applicable ASTM and cancelled federal specifications: (ASTM C 665, Type III, Class A) (HH-I-521F, Type III, Class A)

0	31⁄2" R-11	0	8" R-25
0	31⁄2" R-13	0	10" R-30
0	6¼" R-19	0	12" R-38

○ 5½" R-21 HD

○ Specialty Insulation

Sill Sealer with ECOSE® Technology

A flexible unfaced glass mineral wool insulation designed for use between the sill plate and the foundation wall to provide an air infiltration barrier. When tested in accordance with ASTM E 84, material has a Fire Hazard Classification of 25/50 or less

Complies with the requirements of the applicable ASTM and cancelled federal specifications: (ASTM C 665, Type I, Class A) (HH-I-521F, Type I, Class A)

○ 1¼" x 6"



ECOSE® Technology Description

ECOSE Technology is a revolutionary binder chemistry that makes Knauf Insulation products even more sustainable than ever. It is based on rapidly renewable bio-based materials rather than non-renewable petroleum-based chemicals traditionally used in glass mineral wool insulation products. ECOSE Technology reduces binder embodied energy and does not contain phenol, formaldehyde, acrylics or artificial colors.

Sustainability

Knauf Insulation products used for thermal insulating purposes recover the energy that it took to make them in just hours or a few days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place (carbon negative).

Glass mineral wool insulation with ECOSE Technology contains three primary ingredients:

- · Sand, one of the world's most abundant resources.
- · Recycled bottle glass.
- ECOSE Technology, which reduces binder embodied energy by up to 70% and total product embodied energy by approximately 4%.

Thermal Performance

Thermal resistance (R-value) of the blanket insulation only is certified to be as represented above when measured at a mean temperature of 75°F (24°C) and subject to manufacturing and testing tolerances.

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. If it shows signs of facing degradation from wetting, it should be replaced.

Quality Assurance

On-line production is periodically tested to ensure that Knauf Insulation products delivers the stated thermal performance or better when properly installed at the label thickness

See Knauf Insulation Commercial Building Insulation Submittal for additional products.

UL Environment GREENGUARD Gold

Knauf Insulation achieved UL Environment GREENGUARD Gold Certification and is validated 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/gg.



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

www.knaufinsulation.us

Knauf Insulation LLC One Knauf Drive. Shelbvville. IN 46176 Tel: (800) 825-4434 ext. 8485 FAX: (317) 398-3675

ENVIRONMENTAL PRODUCT DECLARATION UL.COM/EPDCERTIFIED © 2015 Knauf Insulation LLC