



Knauf Data Sheet

BI-DS-3e 08-12

EcoBatt® QuietTherm® Insulation

with ECOSE® Technology



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Description

Knauf Insulation EcoBatt® QuietTherm® Insulation with ECOSE® Technology is a flexible fiber glass batt insulation designed for use in both residential and commercial wall and ceiling applications to reduce airborne sound transmission. The product is available unfaced or with kraft facing.

ECOSE Technology

ECOSE Technology is a revolutionary binder featuring rapidly renewable bio-based materials rather than non-renewable petroleum-based chemicals such as phenol, formaldehyde or acrylics. ECOSE Technology reduces Knauf Insulation's binder embodied energy and contains no phenol, formaldehyde, acrylics or artificial colors found in traditional fiber glass insulation.

Application

Knauf Insulation QT® batts are produced in full 16" and 24" widths for friction fit installation between studs. Since all QT products are R-value labeled, they can be used in thermal applications as well as acoustical applications.

Indoor Air Quality

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

Sustainability

- Carbon negative: meaning Knauf Insulation products used for thermal insulating purposes recover the energy that it took to make them in just hours or days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.
- Earthwool fiber glass insulation contains three primary ingredients:
 - More than 60% recycled post-consumer glass content verified every 6 months by UL Environment.
 - Sand, one of the world's most abundant resources.
 - Our green chemistry initiative ECOSE Technology, which reduces binder embodied energy by up to 70%.
 - It is anticipated to reduce its Global Warming Potential (GWP) by approximately 4%, a significant reduction in our carbon footprint

Specification Compliance

Unfaced

- ASTM C665 Type I, Class A
- GREENGUARD Indoor Air Quality Certified®
- GREENGUARD Children & Schools CertifiedSM and verified to be formaldehyde free

Kraft Faced

- ASTM C 665 Type II, Class C
- HH-521F* Type II, Class C
- GREENGUARD Indoor Air Quality Certified®
- GREENGUARD Children & Schools CertifiedSM and verified to be formaldehyde free

Packaging

QuietTherm batts are packaged in a strong, white poly bag that offers excellent protection from abuse, dust and moisture.

Knauf Insulation's unitized packaging combines multiple batt bags in one convenient master bag, requiring less space for storage.

Thermal Data

Thermal Value

- Thermal resistivity (R-value) is determined using industry standard test method ASTM C 518.

Surface Burning Characteristics (ASTM E 84)

- Unfaced batts do not exceed 25 Flame Spread, 50 Smoke Developed.
- Kraft facing will burn and should not be left exposed.

Moisture Permeance (ASTM E 96)

- Kraft faced products have a moisture permeance of 1.0 or less.

Water Vapor Sorption (ASTM C 1104)

- Less than 5% by weight.

Corrosion (ASTM C 665)

- No greater than sterile cotton.

Microbial Growth (ASTM C 1338)

- Does not support microbial growth.

Noncombustible (ASTM E 136)

- Unfaced insulation is non-combustible.

Acoustical Performance

Knauf Insulation's commercial insulation provides excellent acoustical properties and will reduce sound transmission when properly installed in partition walls and acoustical ceiling and floor systems. Knauf Insulation EcoBatt QuietTherm Insulation can improve STC ratings in wood stud construction by 3 to 5 points and metal stud construction by 8 to 10 points depending upon the complexity of the wall configurations, R-values and layers of insulation.

The STC Ratings table to the right illustrates the improved STC Ratings using Knauf Insulation EcoBatt QuietTherm Insulation compared to no insulation.



STC Ratings*

	QuietTherm	No insulation	QuietTherm	No insulation
	(with 1/2" gypsum wallboard both sides)		(with 5/8" gypsum wallboard both sides)	
Wood Frame (3 1/2" - 4" Batt)				
Single studs/Single layer gypsum	38	35	38	34
Single studs/Resilient channel	47	39	52	40
Staggered studs/Single layer gypsum	49	39	51**	43
Double stud walls/Single layer gypsum	57	46	56	45
	(with 1/2" gypsum wallboard both sides)		(with 5/8" gypsum wallboard both sides)	
Steel Frame (2 1/2" studs) (2 1/2" - 2 3/4" Batt)				
Single layer gypsum	45	36	47	39
Double layer gypsum one side/ Single layer gypsum other side	50	39	52	44
Double layer both sides	56	45	57	48
	(with 1/2" gypsum wallboard both sides)		(with 5/8" gypsum wallboard both sides)	
Steel Frame (3 5/8" studs) (3 1/2" - 4" Batt)				
Single layer gypsum	47	39	50	39
Double layer gypsum one side/ Single layer gypsum other side	52	42	55	47
Double layer both sides	56	50	58	52

* See NAIMA publication B1405 for additional information.

**Uses 2-2 1/2" batts.

Forms Available

Batts	Size	Unfaced	Kraft
R-8QT	2 1/2" x 16" x 96"	•	—
	2 1/2" x 24" x 96"	•	—
R-11QT	3 1/2" x 15 1/4" x 94"	•	—
	3 1/2" x 23 1/4" x 94"	•	—
	3 1/2" x 16" x 96"	•	•
	3 1/2" x 24" x 96"	•	•
	3 1/2" x 24" x 48"	•	•
R-13QT	3 1/2" x 16" x 96"	•	•
	3 1/2" x 24" x 96"	•	•
R-19QT	6 1/4" x 16" x 96"	•	•
	6 1/4" x 24" x 96"	•	•
	6 1/4" x 24" x 48"	•	•



- Reduces airborne sound transmission in residential and commercial wall and ceiling applications.



- Designed to be used for acoustical as well as thermal insulation.



- Easy to cut and install.

For more information call (800) 825-4434, ext. 8300

or visit us online at www.knaufinsulation.us



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Fiber Glass and Mold

Fiber glass 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.

Notes

The chemical and physical properties of Knauf Insulation EcoBatt QuietTherm Insulation represent typical average values determined in accordance with accepted test methods. 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.



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



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



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The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.

ECOBATT®

