



Quiet Therm[®] Acoustical/Thermal Batt Insulation

QuietTherm® Acoustical/Thermal Batt Insulation

Description

Knauf QuietTherm® Acoustical/Thermal Insulation 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.

Application

Knauf 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.

Specification Compliance

Unfaced

- ASTM C665 Type I, Class A
- HH-I-521F* Type I, Class A
- Greenguard Environmental Institute™
- Greenguard For Children and Schools™

Kraft Faced

- ASTM C 665 Type II, Class C
- HH-521F* Type II, Class C
- Greenguard Environmental Institute™
- Greenguard For Children and Schools™

*Federal Specification HH-I-521F has been cancelled and replaced by ASTM C 665.

Packaging

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

Knauf's unitized packaging combines four batt bags in one convenient banded package, requiring less space for storage.

Thermal Data

Thermal Value

- Thermal resistivity (R-value) is determined using industry standard test method ASTM C 518 and NVLAP accredited testing facilities.

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'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 QuietTherm acoustical/thermal 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 QuietTherm acoustical/thermal insulation compared to no insulation.

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 with organic materials. 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 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 sales representative to assure information is current.



STC Ratings*

| | QuietTherm | No insulation | QuietTherm | No insulation |
|---|--|---------------|--|---------------|
| Wood Frame (3½" - 4" Batt) | (with ½" gypsum wallboard both sides) | | (with ⅝" gypsum wallboard both sides) | |
| 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 |
| Steel Frame (2½" studs) (2½" - 2¾" Batt) | (with ½" gypsum wallboard both sides) | | (with ⅝" gypsum wallboard both sides) | |
| 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 |
| Steel Frame (3⅝" studs) (3½" - 4" Batt) | (with ½" gypsum wallboard both sides) | | (with ⅝" gypsum wallboard both sides) | |
| 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 2-2½" batts.

Forms Available

| Batts | Size | Unfaced | Kraft |
|--------|------------------|---------|-------|
| R-8QT | 2½" x 16" x 96" | • | — |
| | 2½" x 24" x 96" | • | — |
| R-11QT | 3½" x 15¼" x 94" | • | — |
| | 3½" x 23¼" x 94" | • | — |
| | 3½" x 16" x 96" | • | • |
| | 3½" x 24" x 96" | • | • |
| | 3½" x 24" x 48" | • | • |
| R-13QT | 3½" x 16" x 96" | • | • |
| | 3½" x 24" x 96" | • | • |
| R-19QT | 6¼" x 16" x 96" | • | • |
| | 6¼" x 24" x 96" | • | • |
| | 6¼" 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.com

KNAUF INSULATION



Knauf Insulation GmbH
One Knauf Drive
Shelbyville, IN 46176

Sales and Marketing (800) 825-4434, ext. 8300

Technical Support (800) 825-4434, ext. 8212

Fax (317) 398-3675

Information info.us@KnaufInsulation.com

World Wide Web www.KnaufInsulation.com

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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



Knauf QuietTherm 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

