# **High Density Building Insulation**

Submittal Date



## **Product Provided**

High density fiber glass insulation is specifically designed for sidewall, cathedral ceiling and floor applications where optimal thermal performance is required, and space for insulation is limited. Knauf High Density (HD) products offer a superior thermal value per inch as compared to standard building insulation products. R-15-31/2" High Density batts are designed for use in 2 x 4 framed wall sections. R-21-51/2" 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.

Unfaced HD Batts

Fiber glass insulation is designed to be friction fit between framing members. Specifier permitted choice of warm side vapor retarders, including foil backed gypsum board or polyethylene film. Unfaced High Density fiber glass insulation is also an excellent sound control insulation, designed for installation in partition walls and floor assemblies, it will serve to retard the transmission of airborne noise.

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

○ 8<sup>1</sup>//" R-30

ASTM E 136

O 3<sup>1</sup>/<sub>6</sub>" R-15

$\circ$	0/2 IX-10	0/4 11-00
0	51⁄2" R-21	○ 10¼" R-38

• Kraft Faced HD Batts

Fiber glass insulation with asphalted kraft paper with stapling flanges. Kraft vapor retarder has vapor transmission (permeance) rating of 1.0 or less. Kraft Faced High Density fiber glass insulation is also an excellent sound control insulation, designed for installation in partition walls and floor assemblies, it will serve to retard the transmission of airborne noise. Kraft facing will burn and should be covered with an approved finish material, and should not be left exposed.

Complies with the requirements of the applicable ASTM and cancelled federal specifications: ASTM C 665, Type II, Class C

HH-I-521F, Type II, Class C

0	31⁄2" R-15	0	8¼" R-30
0	51⁄2" R-21	0	10¼" R-38

### 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  $75^{\circ}F$  (24°C) and subject to manufacturing and testing tolerances.

#### Quality Assurance

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

#### 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.





Knauf High Density Building Insulation is certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute<sup>™</sup> to both the GREENGUARD Certification Program<sup>SM</sup> and the more stringent GREENGUARD For Children and Schools<sup>™</sup> standard. www.greenguard.org

www.KnaufInsulation.com

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Knauf Insulation GmbH One Knauf Drive, Shelbyville, IN 46176 Tel: (800) 825-4434 ext. 8300 FAX: (317) 398-3675