OPTIMA® Blow-In Insulation System

The OPTIMA® system of fiberglass blow-in insulation is designed for installation in sidewalls, cathedral ceilings, floored attics, midfloors and other closed cavity applications. It is pneumatically installed behind non-woven OPTIMA fabric (or equivalent).

OPTIMA fiberglass blowing insulation is used in residential and commercial construction as a thermal and acoustical insulation.

This product is also approved for use in reinsulation of sidewalls, commonly known as dense packing.

Features & Benefits

This product is noncombustible, non corrosive and odor free. In addition, OPTIMA won't settle, contains no chemicals to cause mildew and fungus growth, contains no formaldehyde, provides no sustenance for vermin, contains no asbestos, won't rot or decay and won't absorb moisture.

Composition & Materials

OPTIMA is unbonded, white, virgin fiberglass.

Limitations

The product is designed for use at ambient temperatures in interior, weather-protected locations. Pneumatic equipment must have an effective shredding section, a uniform control feed system and adequate material/air flow capabilities. Product should be kept dry during shipping, storage and installation. Not recommended for open blow applications.

Installation

Installation procedures and techniques must be as recommended by CertainTeed, using blowing machines approved for fiberglass insulation. Refer to OPTIMA Installation Guide.

Availability & Cost

Distributed and sold throughout the United States. For availability and cost contact your local contractor or distributor, or call CertainTeed Sales Support Group at 800-233-8990.

Warranty

Refer to CertainTeed's Lifetime Limited Insulation Warranty for Blowing Insulation. Full warranty information can be found at certainteed.com/warranty.

Maintenance

No maintenance required

Technical Services

Technical assistance can be obtained either from the local CertainTeed sales representative, or by calling CertainTeed Sales Support Group at 800-233-8990.

Quality Assurance

CertainTeed's commitment to quality and environmental management has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001:2008 and ISO 14001:2004 standards.











APPLICABLE STANDARDS, CODE COMPLIANCE

Model Building Codes:

- ICC
- California quality standards

Material Standards:

- ASTM C764, Mineral Fiber Loose-Fill Thermal Insulation Type 1 - Pneumatic Application Properties:

 - Thermal resistance ASTM C518 and C687 Critical radiant flux ASTM E970 Combustion characteristics ASTM E136

- Water vapor sorption ASTM C1104 Odor emission ASTM C1304 Corrosiveness ASTM C764 Fungi resistance ASTM C1338
- GreenGuard Gold Certified

FIRE RESISTANCE

Fire Hazard Classification:

ASTM E84 and CAN/ULC S102.2 Max. Flame Spread Index: 25 Max. Smoke Developed Index: 50

Noncombustibility:

· ASTM E136 / Meets requirements

PHYSICAL/ACOUSTICAL **PROPERTIES**

Thermal Performance:

 Based on 31 lb bag weight, the following thermal performance is achieved at a design density (as noted on coverage chart) at the weights and coverages specified in the table on the other side. The net coverage per bag should be adjusted in order to compensate for framing.

Thermal Resistance:

In accordance with ASTM C687, the stated R-Values in the table are achieved at weights and coverages specified when insulation is installed with pneumatic equipment in accordance with CertainTeed recommendations.

Sound Transmission Loss Ratings:

Adding OPTIMA loose-fill fiberglass insulation to your assembly can increase the STC rating by 4-10 points.



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Thermal Performance — (Based on a nominal 31 lb. bag)

OPTIMA Loose Fill Insulation is manufactured for closed cavity application installed behind OPTIMA Fabric or equivalent. It should not be used for open blow applications.

Sidewalls, Cathedral Ceilings and Other Closed Cavities that are Compression Filled.

| | BAG WEIGHT 31 LBS | | | | |
|---------------------------------------|----------------------|-----------------------------|---------------------------------|------------------------------|---------------------------------|
| CAVITY FRAMING INSTALLED THICKNESS | INSTALLED R-VALUE | INSTALLED DESIGN DENSITY | MAXIMUM COVERAGE PER PACKAGE | MINIMUM PACKAGES PER AREA | MINIMUM WEIGHT PER UNIT AREA |
| IN | (hr•ft²•°f)/Btu | LBS./FT ³ | NET SQ. FT. | #/1,000 SQ. FT. | LBS./SQ. FT. |
| 3-1/2" (2x4) | 14 | 1.2 | 88.6 | 11.3 | 0.350 |
| 3-1/2" (2x4) | 15 | 1.5 | 70.9 | 14.1 | 0.438 |
| 5-1/2" (2x6) | 21 | 1.2 | 56.4 | 17.7 | 0.550 |
| 5-1/2" (2x6) | 24 | 1.8 | 37.6 | 26.6 | 0.825 |
| 7-1/4" (2x8) | 29 | 1.2 | 42.8 | 23.4 | 0.725 |
| 7-1/4" (2x8) | 31 | 1.6 | 32.1 | 31.2 | 0.967 |

Floored Attics — Closed Cavities that are Compression Filled.

| | BAG WEIGHT 31 LBS | | | | |
|-----------------|--------------------------------|----------------|---------------------------------|---------------------------------|------------------------------|
| R-VALUE | MINIMUM INSTALLED THICKNESS | DESIGN DENSITY | MAXIMUM COVERAGE PER PACKAGE | MINIMUM WEIGHT PER UNIT AREA | MINIMUM PACKAGES PER AREA |
| (hr•ft²•°f)/Btu | IN | LBS./FT³ | NET SQ. FT. | LBS./SQ. FT. | #/1,000 SQ. FT. |
| 40 | 9.5 | 1.6 | 24.5 | 1,267 | 40.9 |
| 50 | 11.875 | 1.6 | 19.6 | 1,583 | 51.1 |
| 59 | 14 | 1.6 | 16.6 | 1,867 | 60.2 |
| 68 | 16 | 1.6 | 14.5 | 2,133 | 68.8 |

MidFloor — Closed Cavities that are not Compression Filled.

| | OPTIMA MIDFLOOR APPLICATION COVERAGE CHART | | | | |
|-----------------|--|----------------------|---------------------------------|---------------------------------|------------------------------|
| R-VALUE | MINIMUM INSTALLED THICKNESS | DESIGN DENSITY | MAXIMUM COVERAGE PER PACKAGE | MINIMUM WEIGHT PER UNIT AREA | MINIMUM PACKAGES PER AREA |
| (hr•ft²•°f)/Btu | IN | LBS./FT ³ | NET SQ. FT. | LBS./SQ. FT. | #/1,000 SQ. FT. |
| 28 | 8 | 0.8 | 58.1 | 0.53 | 17.2 |
| 32 | 9 | 0.8 | 51.7 | 0.60 | 19.4 |
| 35 | 10 | 0.8 | 46.5 | 0.67 | 21.5 |
| 39 | 11 | 0.8 | 42.3 | 0.73 | 23.7 |
| 42 | 12 | 0.8 | 38.8 | 0.80 | 25.8 |
| 46 | 13 | 0.8 | 35.8 | 0.87 | 28.0 |
| 49 | 14 | 0.8 | 33.2 | 0.93 | 30.1 |
| 53 | 15 | 0.8 | 31.0 | 1.00 | 32.3 |
| 56 | 16 | 0.8 | 29.1 | 1.07 | 34.4 |
| 60 | 17 | 0.8 | 27.4 | 1.13 | 36.6 |
| 63 | 18 | 0.8 | 25.8 | 1.20 | 38.7 |
| 67 | 19 | 0.8 | 24.5 | 1.27 | 40.9 |
| 71 | 20 | 0.8 | 23.3 | 1.33 | 43.0 |
| 74 | 21 | 0.8 | 22.1 | 1.40 | 45.2 |
| 78 | 22 | 0.8 | 21.1 | 1.47 | 47.3 |
| 81 | 23 | 0.8 | 20.2 | 1.53 | 49.5 |
| 85 | 24 | 0.8 | 19.4 | 1.60 | 51.6 |

Machine Settings:

Engine Speed 1150 RPM, or full throttle for gas powered engines

For challenging spaces use settings: Gate opening of 8", transmission set in 2nd gear, and air pressure of 1.4-1.6 psi

Pro Installers use settings

Gate opening of 11", transmission set in 3rd gear, and air pressure of 2.4-2.6 psi

Hose transition sleeves when necking down in hose size

R-Values are determined in accordance with ASTM C687. Complies with ASTM C764 as Type 1 insulation. "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 the insulation is installed properly following the recommendations of CertainTeed, LLC

