

# **OPTIMA®** Loose-Fill **Fiber Glass Insulation for Closed Cavity Applications**

#### PRODUCT DESCRIPTION

Basic Use: The OPTIMA® system of fiber glass 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).

This product is approved for use in the Blow-In-Blanket® System (BIBS®). OPTIMA fiber glass blowing insulation is



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

Benefits: This product is noncombustible, noncorrosive 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 and Materials: OPTIMA is unbonded, white, virgin fiber glass.

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 Corporation, using blowing machines approved for fiber glass insulation. Refer to OPTIMA Installation Guide (30-24-290).

# **AVAILABILITY AND 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 (30-21-1344).

# **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.



OPTIMA® Loose-Fill Fiber Glass **Product Name Insulation for Closed Cavity** 

**Applications** 

Manufacturer CertainTeed Corporation

20 Moores Road **Address** Malvern, PA 19355

Phone 800-233-8990

Website www.certainteed.com/insulation

## TECHNICAL DATA

#### **Applicable Standards**

- ICC Model Building Codes: 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

#### 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

## Thermal / 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 isulation is installed with pneumatic equipment in accordance with CertainTeed recommendations
- · Sound Transmission Loss Ratings:
  - Adding OPTIMA loose-fill fiber glass insulation to your assembly can increase the STC rating by 4-10 points. Refer to CertainTeed's Sound Control Brochure (30-29-121).

## **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.



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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.

OPTIMA Blow-in Blanket Closed Cavity					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./ft3	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.

OPTIMA Closed Cavity for TJI Trusses					Bag Weight 31 lbs
R-VALUE	Minimum Installed Thickness	Density Design	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					Bag Weight 31 lbs
Minimum Installed Thickness	R-VALUE	Design Density	Maximum Coverage Per Package	Minimum Weight Per Unit Area	Minimum Packages Per Area
in.	(hr•ft2•°f)/Btu	lbs./ft3	net sq. ft.	lbs./sq. ft.	#/1,000 sq. ft.
8	28	0.8	58.1	0.53	17.2
9	32	0.8	51.7	0.60	19.4
10	35	0.8	46.5	0.67	21.5
11	39	0.8	42.3	0.73	23.7
12	42	0.8	38.8	0.80	25.8
13	46	0.8	35.8	0.87	28.0
14	49	0.8	33.2	0.93	30.1
15	53	0.8	31.0	1.00	32.3
16	56	0.8	29.1	1.07	34.4
17	60	0.8	27.4	1.13	36.6
18	63	0.8	25.8	1.20	38.7
19	67	0.8	24.5	1.27	40.9
20	71	0.8	23.3	1.33	43.0
21	74	0.8	22.1	1.40	45.2
22	78	0.8	21.1	1.47	47.3
23	81	0.8	20.2	1.53	49.5
24	85	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	Pro Installers use settings		
Gate opening of 8", transmission set in 2nd gear, and air pressure of 1.4-1.6 psi	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 Corporation.











