

## Specification Sheet

### OPTIMA®

#### Loose Fill Fiber Glass Insulation for Sidewall Reinsulation

##### 1. PRODUCT NAME

OPTIMA® Fiber Glass  
Loose-Fill Insulation

##### 2. MANUFACTURER

CertainTeed Corporation  
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Valley Forge, PA 19482-0105  
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##### 3. PRODUCT DESCRIPTION

**Basic Use:** OPTIMA® Fiber Glass Loose-Fill Insulation can be pneumatically installed into existing sidewalls and floored attics.

This product is:

- Noncombustible
- Noncorrosive
- Odor free

In addition, OPTIMA:

- Won't settle
- Contains no chemicals to cause mildew and fungus growth
- Provides no sustenance for vermin
- Contains no asbestos
- Won't rot or decay
- Won't absorb moisture

OPTIMA can be used in residential and or commercial construction as a thermal and acoustical insulation.

**Composition and Materials:** An unbonded, white, virgin fiber, fiber glass insulation designed for pneumatic application.

**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 capabilities. Product should be kept dry

during shipping, storage and installation. Not to be used for open blow applications.

##### 4. TECHNICAL DATA

###### Applicable Standards:

- Model Building Codes (BOCA, ICBO and SBCCI)
- New York City—MEA 218-85M
- NYS UFPBC Article 15
- ASTM C 764, Type I

###### Fire Resistance:

- Surface Burning Characteristics: (UL 723, ASTM E 84)  
–Max. Flame Spread Index; 5  
–Max. Smoke Dev. Index; 5
- Noncombustible: (ASTM E 136)  
Meets requirements.

**Thermal Performance:** Based on 28lb. bag weight, the following thermal performance is achieved, at a design density of 1.6 PCF, at the weights and coverages specified below.

To compensate for framing, the net

R-Value*	Bags Per 1000 sq. ft.	Maximum Net Coverage	Minimum Weight/sq.ft.	Minimum Thickness
To obtain a thermal resistance (R) of:	Bags per 1000 sq. ft. of net area	Contents of bag should not cover more than: (sq. ft.)	Weight per sq. ft. of installed insulation should not be less than: (lbs.)	Installed Insulation should not be less than: (in.)
30	34.5	29	0.967	7 1/4
22	26.3	38	0.733	5 1/2
16	18.9	53	0.533	4
15	17.2	58	0.483	3 5/8
14	16.7	60	0.467	3 1/2

coverage per bag should be increased by 14% when framing is 16" O.C. or 11% when framing is 24" O.C. for opaque insulatable wall areas.

**Thermal Resistance:** In accordance with ASTM C 687, the stated "R" values in the sidewall chart above are achieved at weights and coverages specified when insulation



is installed with pneumatic equipment in accordance with CertainTeed recommendations.

###### Sound Transmission Loss Ratings:

The same STC ratings obtained with fiber glass blanket insulation can be estimated for OPTIMA. Refer to CertainTeed's Sound Control Brochure (30-21-1256).

**Quality Assurance:** CertainTeed was the first fiber glass insulation manufacturer to have its manufacturing plants, R&D center and corporate headquarters registered to ISO 9001-2000 standards.

##### 5. INSTALLATION

Installation procedures and techniques must be as recommended by CertainTeed Corporation, using blowing machines approved for fiber glass insulation.

###### Preparatory Work:

- Check structural soundness of wall facings. Facings can be damaged by blowing pressure if they are weak or loosely attached.
- Check for symptoms of moisture problems such as blistering paint, mildew, staining, odor, etc. on interior or exterior wall surfaces. Any such problem should be brought to the owner's attention.

- Check for fire stops. If present, they will be at mid-height and holes must be drilled above and below these obstructions.

- Note and mark all areas that must not be drilled, (location of wall ducts, vents, recessed cabinets, service panels, etc).

- Make certain all wall openings through which insulation could enter the house are sealed.

**Method(s):** Two basic methods are recommended for insulating side-walls with OPTIMA; the directional nozzle method and the insert tube method.

**Method 1–Directional Nozzle:**

- Drill two 1 1/2" or 1 3/4" diameter holes into each stud cavity, one hole 3' up from the base of the wall and one hole 2' down from the top plates. Don't blow more than 3' down or 2' up from any hole.
- Drill holes into cavities below windows and into cavities above windows when there is no solid header.
- Use 200' of internally corrugated hose stepped down in diameter to a 1 1/4" to 1 1/2" I.D. nozzle (50' of 3" to 100' of 2 1/2" to 50' of 2" hose). (The nozzle can be fabricated from a metal electrical conduit elbow).
- Insert nozzle in lower hole first and blow downward, filling cavity up to the level of the hole. Insert

nozzle in upper hole and blow downward and then upward until the cavity is completely filled.

In both methods, air pressure must be reduced substantially compared to the open blow technique to insure that no damage is done to the side-wall. The blowing machine should be equipped with an air relief valve. The actual setting of the equipment will vary depending on the type of hose, equipment limitations and job conditions. When properly filled, wall cavities should have a nominal density of 1.6 lbs. per cubic foot.

**Method 2–Insert Tube:**

- Drill a single 2" hole in each stud cavity at mid-height.
- Drill holes into cavities below windows and into cavities above windows when there is no solid header.
- Use 200' of internally corrugated hose (50' of 3" to 100' of 2 1/2" to 50' of 2" hose). The 2" hose is connected to a reducer and then to a 4' length of 1 1/4" to 1 1/2" I.D. semi-rigid insert tube.
- Push the insert tube downward through the access hole until the length of tube remaining indicates that the end of the tube is a few inches from the bottom of the cavity.
- Begin blowing OPTIMA, gradually withdrawing the insert tube when an increase in back pres-

sure is felt in the tube. Fill the cavity to the level of the hole.

- Push the insert tube upward through the access hole and continue blowing and with-drawing the tube as above.

Alternate: Drill a single hole approximately 6" below the top plates in each cavity and use an 8' length of 1 1/4" to 1 1/2" I.D. insert tube.

**6. AVAILABILITY AND COST**

Manufactured and sold throughout the United States. For availability and cost contact CertainTeed in Valley Forge, PA at (800) 233-8990.

**7. WARRANTY**

Refer to CertainTeed's Limited Lifetime Insulation Warranty for OPTIMA (30-24-271).

**8. MAINTENANCE**

No maintenance required.

**9. TECHNICAL SERVICES**

Technical assistance can be obtained either from the local CertainTeed sales representative, or by calling CertainTeed in Valley Forge, PA at (800) 233-8990.

**10. FILING SYSTEMS**

Additional product information is available upon request.



**CertainTeed**

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