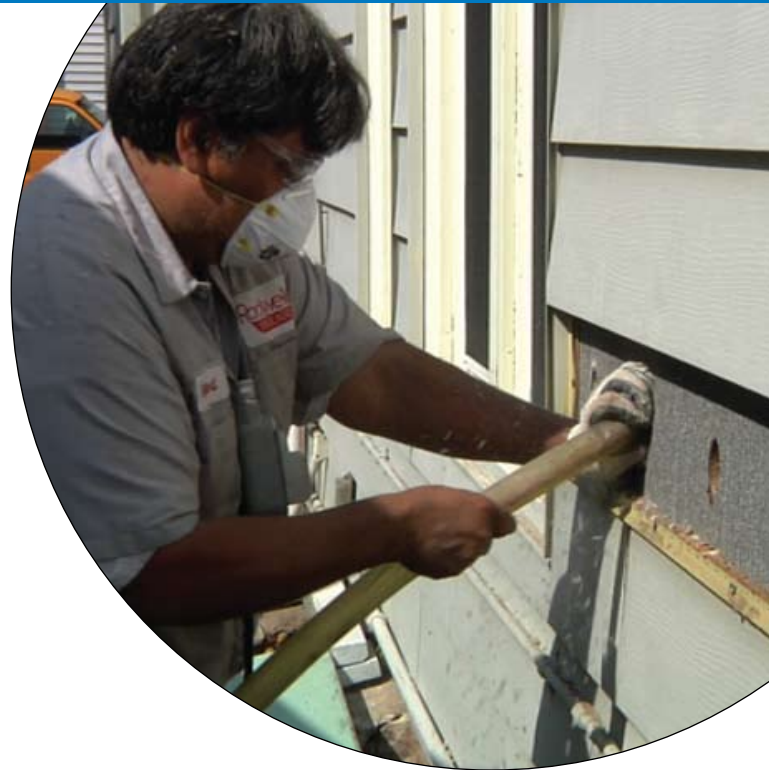


# CertainTeed Dense Packing

## Fiber Glass Insulation

# InsulSafe<sup>®</sup> SP OPTIMA<sup>®</sup>



**InsulSafe<sup>®</sup> SP and OPTIMA<sup>®</sup> offer many additional benefits when compared to cellulose**

Historically, cellulose has been promoted as the only choice for dense pack applications. However, CertainTeed InsulSafe SP and OPTIMA loose-fill fiber glass insulation provides the same reductions in air permeance\* as cellulose while delivering a number of other significant benefits.

- Fewer packages needed — less labor, handling and jobsite trash
- Higher R-Value per inch — higher wall R-Values
- EPA and BPI approved for weatherization programs and retrofit applications
- GREENGUARD<sup>®</sup> Children and Schools Certified for indoor air quality
- High recycled glass content — exceeds EPA's Recovered Materials Advisory Notice
- Won't absorb moisture or support mold growth
- Naturally non-combustible; no fire-retardant chemicals added
- Doesn't settle
- Less dust

\* BPI-102, "Standard for Air Resistance of Thermal Insulation Used in Retrofit Cavity Applications — Material Specification," is BPI's approved technical standard for insulation used in air sealing, and requires that such products limit maximum air permeance to 3.5 cfm/ft<sup>2</sup> (as measured using ASTM C522). InsulSafe SP achieves this permeance rating at a density of 2.2 lbs/ft<sup>3</sup> and OPTIMA at 2.5 lbs/ft<sup>3</sup>. This compares to 3.5 lbs/ft<sup>3</sup> for cellulose.

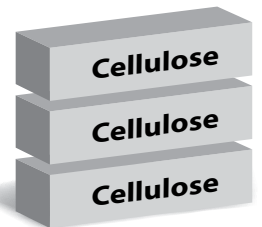
### InsulSafe<sup>®</sup> SP vs. Cellulose

**To insulate a 1,000 sq. ft. attic:  
15 packages vs. 46 packages**

**Fiber Glass:  
Less waste &  
easy to transport**



1 package of  
CertainTeed InsulSafe<sup>®</sup> SP  
at R-30 covers 67.1 sq. ft.



It can take up to 3 packages of  
cellulose to cover 65.1 sq. ft. at R-30

**Based on 22 lb. package**

In wall applications, 1 bag of InsulSafe SP = approximately 2 bags of cellulose.  
In attic applications, 1 bag of InsulSafe SP = approximately 3 bags of cellulose.

# CertainTeed

SAINT-GOBAIN

# Dense Packing Installation Guidelines for InsulSafe SP® and OPTIMA®

CertainTeed Fiber Glass Insulation Dense Pack Coverage Charts											
INSULSAFE® SP						OPTIMA®					
Framing	Cavity Depth (inches)	R-Value	Coverage (max. ft <sup>2</sup> /pkg.)	Weight (min. lbs/ft <sup>2</sup> )	Packages (min. /1,000 ft <sup>2</sup> )	Framing	Cavity Depth (inches)	R-Value	Coverage (max. ft <sup>2</sup> /pkg.)	Weight (min. lbs/ft <sup>2</sup> )	Packages (min. /1,000 ft <sup>2</sup> )
2 x 4	3½	15	48.3	0.642	20.7	2 x 4	3½	15	38.4	0.729	26.0
2 x 4	3⅝	15	46.6	0.665	21.4	2 x 4	3⅝	15	37.1	0.755	27.0
2 x 4	4	17	42.3	0.733	23.7	2 x 4	4	17	33.6	0.833	29.8
2 x 6	5½	23	30.7	1.008	32.5	2 x 6	5½	23	24.4	1.146	40.9
2 x 8	7¼	30	23.3	1.329	42.9	2 x 8	7¼	30	18.5	1.510	53.9
2 x 10	9¼	39	18.3	1.696	54.7	2 x 10	9¼	39	14.5	1.927	68.8
Package Net Weight: 31 lbs. / Min. Density: 2.2 lbs/ft <sup>3</sup>						Package Net Weight: 28 lbs. / Min. Density: 2.5 lbs/ft <sup>3</sup>					

**Blowing Machine:** Required — Fiber agitation and conditioning with air pressure control

1. Machine speed — per manufacturer's recommendation
2. Slide gate — start with 1/3 to 1/2 open
3. Air pressure — 2.0 to 2.4 psi (55" to 66" of H<sub>2</sub>O) (machine back pressure end of insert tube)
4. Transmission (if applicable) — 2nd gear

**Blowing Hose:**

1. Internally corrugated hose required (except for wall insert tube)
2. Smooth transition reducers
3. 10' cavity insert tube:
  - a. 1¼" ID w/ 1/8" wall thickness clear vinyl/plastic tube
  - b. 1½" ID w/ 1/8" wall thickness for larger cavities (2 x 6 or larger)
  - c. 1½" or 2" blow hose inserted into floor/ceiling cavities or large sidewall cavities from the attic

Blowing Hose Assembly									
Machine Outlet Dia.	1st Section	Reduce to	2nd Section	Reduce to	3rd Section	Reduce to	4th Section	Reduce to	5th Section
4"	4" x 0 - 25' then reduce to 3" follow 3" machine outlet set up								
3½"	3½" x 0 - 25' then reduce to 3" follow 3" machine outlet set up								
3"	3" x 50' min.	2½"	2½" x 50'	2"	2" x 50'	1½"	1½" x 10 - 25'	Insert Tube	10'
2½"	2½" x 100' min.	2"	2" x 50'	1½"	1½" x 10 - 25'	Insert Tube	10'		

**Techniques:**

1. Preferred — 1 hole w/ tube inserted upwards
2. Alternative — 1 hole w/ tube inserted downwards or 2 holes with insert tube

**NOTE:** Please ensure you are in compliance with applicable OSHA and EPA regulations on all job sites.

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