



Advanced ThermaCube Plus fiber glass loosefill insulation is an alternative to roll or batt insulation in attics, new construction and retrofit applications.

Compliance

- Advanced ThermaCube Plus fiber glass loosefill insulation conforms to the product requirements of ASTM C764 Type I (pneumatic application).
- R-values are determined in accordance with ASTM C687 and ASTM C518. (See adjacent chart)
- Conforms to Department of Energy material standards.
- Passes the requirements of ASTM E136 and is considered noncombustible by the model building codes.
- The surface burning characteristics of this product have been determined in accordance with ASTM E84*:
 - Flame Spread: 5
 - Smoke Developed: 5
- * This standard is not used to describe or appraise the fire hazard or fire risk of materials, products or assemblies under actual fire conditions. Values are reported to the nearest-five ratings.
- This product is non-corrosive, does not absorb moisture and does not support mold growth.
- Conforms to the quality standards of the State of California.

Thermal Performance

Stated R-value is achieved by installing the minimum required number of bags per 1,000 net sq. ft. at a thickness not less than the label minimum thickness and minimum sq. ft. weight. Failure by the installer to provide both the required number of bags and at least the minimum thickness will result in lower insulation R-value.

Attic/Ceiling Guidelines

R-value	Minimum bags/1000 net sq. ft.	Maximum coverage/bag (sq. ft.)	Minimum weight/sq.ft. (lbs.)	Minimum thickness (inches)
R-49	25.0	40	0.878	19.50
R-44	22.2	45	0.786	17.75
R-38	19.2	52	0.676	15.50
R-30	15.2	66	0.531	12.25
R-26	13.2	76	0.459	10.75
R-22	11.1	90	0.388	9.25
R-19	9.5	105	0.334	8.00
R-11	5.5	182	0.193	4.75

Maximum Gross Coverage Per Bag

To compensate for joists, the following table may be used to determine gross coverage per bag (sq. ft.)

R-value	Joist	16 in. O.C. (sq. ft.)	24 in. O.C. (sq. ft.)
R-49	2 x 4	40.7	40.5
	2 x 6	41.1	40.7
	2 x 8	41.5	41.0
R-44	2 x 4	45.8	45.6
	2 x 6	46.3	45.9
	2 x 8	46.9	46.2
R-38	2 x 4	53.1	52.7
	2 x 6	53.8	53.2
	2 x 8	54.5	53.6
R-30	2 x 4	67.8	67.2
	2 x 6	68.9	67.9
	2 x 8	70.0	68.6
R-26	2 x 4	78.4	77.6
	2 x 6	79.8	78.5
	2 x 8	81.3	79.5
R-22	2 x 4	93.3	92.2
	2 x 6	95.3	93.5
	2 x 8	97.4	94.8
R-19	2 x 4	109.5	108.0
	2 x 6	112.2	109.7
	2 x 8	115.1	111.5
R-11	2 x 4	195.5	190.8
	2 x 6	200.8	194.1
	2 x 8	200.8	194.1

All insulation varies in thermal performance due to factors such as mean temperature, settlement, convection, moisture absorption and installation variation. Convection in fiber glass loosefill insulation installed in open attics can reduce its thermal performance at extreme winter temperatures during the heating season.

Advanced ThermaCube Plus fiber glass loosefill insulation may deliver reduced thermal performance due to convection at low outside temperatures. The product has been designed to anticipate this phenomenon and the labeled R-value reflects the average performance over the winter heating season. The dollar impact to a homeowner's annual heating cost from loosefill convection is estimated to be minimal, if any, when compared to labeled performance.

Installation Specifications

Owens Corning does not recommend or approve blending or adding additional materials or adhesives to this product during installation. Owens Corning will accept no responsibility or liability when the product is not installed in accordance with the product label and installation instructions.

Installation Considerations for Enclosed Cavity Applications

When installing *Advanced ThermaCube Plus* fiber glass loosefill insulation in a thermal or acoustical retrofit application, it is absolutely critical that the "enclosed cavity" crews have a general knowledge of construction and framing principles and a full understanding of the blowing equipment. Additionally, the following items should be considered:

- Check for possible routes that may allow insulation to escape from wall cavities into the living area, basement or crawlspace.

- Check for HVAC ducts or flues that may be present in wall or floor cavities to be insulated.
- Check for cavity surfaces which may not be able to withstand pressures created during the blowing process.
- Check exterior siding for signs of paint peeling or moisture problems. If these problems exist, walls should not be insulated until underlying reasons for the problems have been corrected. Insulating a cavity that does not have an adequate interior vapor retarder substantially increases the potential for exterior and/or interior moisture problems.

Sidewall Guidelines

Thermal Performance of <i>Advanced ThermaCube Plus</i> fiber glass loosefill insulation blown into residential walls					
Cavity thickness (inches)	R-value	Density (lbs./cu. ft.)	Maximum coverage/bag (net sq.ft.)	Minimum (lbs./sq. ft.)	Minimum bags/1,000 sq. ft.
2x4 walls					
3 1/2	R-11	0.97	123	0.284	8.1
3 1/2	R-12	1.19	100	0.348	10.0
3 1/2	R-13	1.48	81	0.432	12.3
3 1/2	R-14	1.86	64	0.543	15.5
3 1/2	R-15	2.40	50	0.699	20.0
2x6 walls					
5 1/2	R-17	0.94	81	0.430	12.3
5 1/2	R-19	1.22	63	0.558	15.9
5 1/2	R-21	1.61	48	0.736	21.0
5 1/2	R-23	2.18	35	0.999	28.5

Underfloor Guidelines

Joint minimum thickness	R-value sq. ft. net area	Bags per 1,000 sq. ft. weight	Minimum net coverage (lbs.)	Maximum
5 1/2 in. (2 x 6)	R-21	20.8	.733	48 sq. ft.
7 1/4 in. (2 x 8)	R-27	27.8	.967	36 sq. ft.
9 1/4 in.	R-35	35.7	1.233	28 sq. ft.



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