

Sloped TCPP-Free NH Polyiso with CGF Facers which Maintains Low Temperature R-Value per ASTM C518



EnergyGuard™ **NH UltraTapered** Polyiso Insulation



Description:

EnergyGuard™ NH Ultra Tapered Polyiso Insulation is a sloped panel made of durable coated glass facers (CGF) bonded to a core of non-halogenated polyisocyanurate foam.

Features and Benefits:

- **EnergyGuard™ NH Ultra Tapered Polyiso Insulation is TCPP-Free, using a non-halogenated flame retardant and is Red List Free**
- **Maintains the same R-value when tested according to ASTM C1289 standard using the C518 test method at both a mean temperature of 40° F (4.4° C) and 75° F (24° C)**
- Achieves ANSI/UL 790 (and ASTM E108) Class A fire resistance ratings without the use of halogenated flame retardants. Refer to UL Product iQ (and other agency listings) for specific assemblies
- Prevents ponding water when properly installed on a low-slope roof by providing slope via a series of both tapered and flat polyiso fill boards
- Highest R-value per inch of any rigid board insulation
- Meets the requirements of D3273 for resistance to mold growth*
- Easy to install — lightweight, easy to cut, easy to handle
- Versatile — approved component in single-ply, BUR, modified bitumen, and ballasted systems, with a variety of attachment methods: mechanically attached, fully adhered, loose laid

Panel Characteristics:

Sizes: 4' x 4' (1.22m x 1.22m) – 4' x 8' (1.22m x 2.44m) available upon request

Thickness: ½" – 4½" (12.7 mm – 114.3 mm) in a single layer

Slope: 1/16" (1.6 mm), 1/8" (3.2 mm), 3/16" (4.8 mm), 1/4" (6.35 mm), 3/8" (9.5 mm), 1/2" (12.7 mm)

Codes and Compliance:

- Meets the requirements of ASTM C1289 Type II, Class II, Grade 2 (20 psi) or Grade 3 (25 psi)
- FM Approved — consult RoofNav.com for specific assemblies
- Classified by UL in accordance with ANSI/UL 1256, UL 790, and UL 263. Refer to UL Product iQ for specific assemblies
- UL Evaluation Report ER1306-03
- Miami-Dade County Product Control Approved
- State of Florida Approved
- For additional information contact GAF at 877-423-7663 or designservices@gaf.com



Tapered Design Team:

Our Tapered Design Group specialists are available within your region to assist you in all aspects of pre-planning, design, and training. Reach out at tdg@GAF.com.

Our services include:

- Conceptual design assistance
- Quote review and comparison
- Plan and spec review
- Alternate design recommendations
- Job startups, trainings, presentations

Sustainability:

- EnergyGuard™ NH Ultra Tapered Polyiso board holds the polyiso industry's only specific Environmental Product Declaration (EPD) for non-halogenated products.
- Can contribute towards sustainable certifications under a green building rating system such as LEED v4, or Living Building Challenges
- Manufactured with EPA-compliant blowing agents containing no CFCs or HCFCs; has zero ozone depletion potential (ODP) and negligible global warming potential (GWP)
- Potential LEED Credits for Polyiso Use
- Living Building Challenge Red List Approved
- GREENGUARD Gold
- Where sold compliant with State HFC regulations. More information available at www.polyiso.org

For more information go to gaf.com/green

Declare.



* GAF warranties and guarantees do not provide coverage against mold or other biological growth. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.



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TYPICAL PHYSICAL PROPERTY DATA CHART

Property	Test Method	Values
Compressive Strength	ASTM D1621	Grade 2 – 20 psi min (138 kPa) Grade 3 – 25 psi min (172 kPa)
Dimensional Stability Change (length + width) *	ASTM D2126	< 2% linear change
Flexural Strength	ASTM C203	40 psi min (275 kPa)
Tensile Strength	ASTM C209	500 psf max (24 kPa)
Water Absorption (percent by volume)	ASTM C209	1.5% max
Water Vapor Permeance	ASTM E96 Procedure A	1.5 perm max (85.8ng/Pa·s·m²)
Service Temperature		-100° to 250 ° F (-73.3° to 121.1° C)
Flame Spread Index†	ASTM E84	< 75†
Smoke Developed Index	ASTM E84	< 200†
Resistance to Mold §	ASTM D3273	Pass (10)

* Stated dimensional stability tolerance: thickness shall not diminish by more than 4% max.

† These numerical ratings are not intended to reflect hazards presented by these or any other material under actual fire conditions.

‡ Foam Core

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TAPERED POLYISO PHYSICAL CHARACTERISTICS AND SHIPPING INFORMATION

Physical Characteristics				Shipping Information (4' x 4') (1.22 m x 1.22 m) 4'x8' (1.22 m x 2.44 m) available upon special request†				
Slope	Thickness (Inches/Millimeters)	Size*	Average Thickness (Inches/Millimeters)	Board Feet Per Panel	Boards/ Bundle	Boards/ Truck	Bundle/ Truck	Sq. Ft. Per Truck
1/16" (1.6 mm) (.5%)	0.5 – 0.75 (12.7 – 19.1)	1	0.625 (15.9)	10	76	3,648	48	58,368 (5,422 sq. m)
	0.75 – 1.0 (19.1 – 25.4)	2	0.875 (22.2)	14	54	2,592	48	41,472 (3,853 sq. m)
	1.0 – 1.25 (25.4 – 31.8)	3	1.125 (28.6)	18	42	2,016	48	32,256 (2,997 sq. m)
	1.25 – 1.5 (31.8 – 38.1)	4	1.375 (34.9)	22	34	1,632	48	26,112 (2,426 sq. m)
	1.5 – 1.75 (38.1 – 44.5)	5	1.625 (41.3)	26	28	1,344	48	21,504 (1,998 sq. m)
	1.75 – 2.0 (44.5 – 51.0)	6	1.875 (47.6)	30	24	1,152	48	18,432 (1,712 sq. m)
	2.0 – 2.25 (51.0 – 57.2)	7	2.125 (54.0)	34	22	1,056	48	16,896 (1,570 sq. m)
1/8" (3.2 mm) (1%)	2.25 – 2.5 (57.2 – 64.0)	8	2.375 (60.3)	38	20	960	48	15,360 (1,427 sq. m)
	0.5 – 1.0 (12.7 – 25.4)	AA†	0.75 (19.1)	12	64	3,072	48	49,152 (4,566 sq. m)
	1.0 – 1.5 (25.4 – 38.1)	A†	1.25 (31.8)	20	38	1,824	48	29,184 (2,711 sq. m)
	1.5 – 2.0 (38.1 – 51.0)	B†	1.75 (44.5)	28	26	1,248	48	19,968 (1,855 sq. m)
	2.0 – 2.5 (51.0 – 64.0)	C†	2.25 (57.2)	36	20	960	48	15,360 (1,427 sq. m)
	2.5 – 3.0 (64.0 – 76.2)	D	2.75 (70.0)	44	16	768	48	12,288 (1,142 sq. m)
	3.0 – 3.5 (76.2 – 89.0)	E	3.25 (82.6)	52	14	672	48	10,752 (999 sq. m)
3/16" (4.8 mm) (1.5%)	3.5 – 4.0 (89.0 – 102.0)	F	3.75 (95.3)	60	12	576	48	9,216 (856 sq. m)
	4.0 – 4.5 (102.0 – 114.3)	FF	4.25 (108.0)	68	10	480	48	7,680 (713 sq. m)
	0.5 – 1.25 (12.7 – 31.8)	JJ	0.875 (22.2)	14	54	2,592	48	41,472 (3,853 sq. m)
	1.25 – 2 (31.8 – 51.0)	KK	1.625 (41.3)	26	28	1,344	48	21,504 (1,998 sq. m)
	2.0 – 2.75 (51.0 – 70.0)	LL	2.375 (60.3)	38	20	960	48	15,360 (1,427 sq. m)
	2.75 – 3.5 (70.0 – 89.0)	MM	3.125 (79.4)	50	14	672	48	10,752 (999 sq. m)
	1.0 – 1.75 (25.4 – 44.5)	J	1.375 (34.9)	22	34	1,632	48	26,112 (2,426 sq. m)
1/4" (6.35 mm) (2%)	1.75 – 2.5 (44.5 – 64.0)	K	2.125 (54.0)	34	22	1,056	48	16,896 (1,570 sq. m)
	2.5 – 3.25 (64.0 – 82.6)	L	2.875 (73.0)	46	16	768	48	12,288 (1,142 sq. m)
	3.25 – 4.0 (82.6 – 102.0)	M	3.625 (92.1)	58	12	576	48	9,216 (856 sq. m)
	0.5 – 1.5 (12.7 – 38.1)	X†	1.0 (25.4)	16	48	2,304	48	36,864 (3,425 sq. m)
	1.5 – 2.5 (38.1 – 64.0)	Y†	2.0 (51.0)	32	24	1,152	48	18,432 (1,712 sq. m)
	2.5 – 3.5 (64.0 – 89.0)	Z†	3.0 (76.2)	48	16	768	48	12,288 (1,142 sq. m)
	3.5 – 4.5 (89.0 – 114.3)	ZZ	4.0 (102.0)	64	12	576	48	9,216 (856 sq. m)
3/8" (9.5 mm) (3%)	1.0 – 2.0 (25.4 – 51.0)	G	1.5 (38.1)	24	32	1,536	48	24,576 (2,283 sq. m)
	2.0 – 3.0 (51.0 – 76.2)	H	2.5 (64.0)	40	18	864	48	13,824 (1,284 sq. m)
	3.0 – 4.0 (76.2 – 102.0)	I	3.5 (89.0)	56	12	576	48	9,216 (856 sq. m)
	0.5 – 2.0 (12.7 – 51.0)	SS	1.25 (31.8)	20	38	1,824	48	29,184 (2,711 sq. m)
	2.0 – 3.5 (51.0 – 89.0)	TT	2.75 (69.9)	44	16	768	48	12,288 (1,142 sq. m)
	1.0 – 2.5 (25.4 – 64.0)	S	1.75 (44.5)	28	26	1,248	48	19,968 (1,855 sq. m)
	0.5 – 2.5 (12.7 – 64.0)	Q†	1.5 (38.1)	24	32	1,536	48	24,576 (2,283 sq. m)
1/2" (12.7 mm) (4%)	2.5 – 4.5 (64.0 – 114.3)	QQ	3.5 (89.0)	56	12	576	48	9,216 (856 sq. m)
	1.0 – 3.0 (25.4 – 76.2)	XX	2.0 (51.0)	32	24	1,152	48	18,432 (1,712 sq. m)

* Availability for these tapered panel systems may vary for each region.

† 4' x 8' tapered panels are made upon special request at all GAF Polyiso Manufacturing facilities in all EnergyGuard products. Certain run minimums will apply. The piece count per bundle remains the same as in a 4' x 4' bundle. The boards per truck and bundles per truck would be half the numbers reflected above for.



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