Sloped NH Polyiso with GRF Facers which Maintains Low Temperature R-Value per ASTM C518







Description:

EnergyGuard™ NH Tapered Polyiso Insulation is a sloped panel made of glass fiber-reinforced (GRF) cellulosic felt facers bonded to a core of non-halogenated polyisocyanurate foam.

Features and Benefits:

- EnergyGuard™ NH Tapered Polyiso Insulation is better for the environment because it does not contain potentially hazardous flame-retardant chemicals
- 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)
- EnergyGuard[™] NH Tapered Polyiso Insulation holds a Health Product Declaration (HPD), is Green Circle third party recycled content certified and is a Red List Free product with a Declare label designation
- 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
- 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:

Size: 4' x 4' (1.22m x 1.22m) - 4'x8' (1.22m x 2.44m) available upon request

Thickness: $\frac{1}{2}$ " – $\frac{4}{2}$ " (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 1, 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 or 866-207-7123.

Our services include:

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

Sustainability:

- EnergyGuard[™] NH Tapered Polyiso board holds the polyiso industry's only specific Environmental Product Declaration (EPD) for nonhalogenated products.
- Can contribute towards sustainable certifications under a green building rating system such as LEED v4, or Living Building Challenge
- 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











TYPICAL PHYSICAL PROPERTY DATA CHART

Property	Test Methods	Values
Compressive Strength	ASTM D1621	Grade 2 - 20 psi min (138 kPa) or Grade 3 - 25 psi min (172 kPa)
Dimensional Stability Change (length + width) ²	ASTM D2126	< 2% linear change
Flexural Strength	ASTM C203	40 psi min (275 kPa)
Tensile Strength	ASTM C209	500 psf min (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 ³	ASTM E84	< 75 ¹
Smoke Developed Index	ASTM E84	< 2001

¹ Foam Core

TAPERED POLYISO PHYSICAL CHARACTERISTICS AND SHIPPING INFORMATION

Physical Characteristics				Shipping Information (4' x 4') (1.22 m x 1.22 m)					
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)	0.5 – 0.75 (12.7 – 19.1)	1	0.625 (15.9)	10	72	3,456	48	55,296 (5,137 sq. m)	
	0.75 - 1.0 (19.1 - 25.4)	2	0.875 (22.2)	14	52	2,496	48	39,936 (3,710 sq. m)	
	1.0 - 1.25 (25.4 - 31.8)	3	1.125 (28.6)	18	40	1,920	48	30,720 (2,854 sq. m)	
	1.25 - 1.5 (31.8 - 38.1)	4	1.375 (34.9)	22	32	1,536	48	24,576 (2,283 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	20	960	48	15,360 (1,427 sq. m)	
	2.25 - 2.5 (57.2 - 64.0)	8	2.375 (60.3)	38	18	864	48	13,824 (1,284 sq. m)	
1/8" (3.2 mm)	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)	Α	1.25 (31.8)	20	38	1,824	48	29,184 (2,711 sq. m)	
	1.5 - 2.0 (38.1 - 51.0)	В	1.75 (44.5)	28	26	1,248	48	19,968 (1,855 sq. m)	
	2.0 - 2.5 (51.0 - 64.0)	С	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)	Е	3.25 (82.6)	52	14	672	48	10,752 (999 sq. m)	
	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)	
3/16" (4.8 mm)	0.5 - 1.25 (12.7 - 31.8)	JJ	0.875 (22.2)	14	50	2,400	48	38,400 (3,567 sq. m)	
	1.25 - 2 (31.8 - 51.0)	KK	1.625 (41.3)	26	26	1,248	48	19,968 (1,855 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	15	720	48	11,520 (1,070 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)	
	1.75 - 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)	М	3.625 (92.1)	58	12	576	48	9,216 (856 sq. m)	
1/4" (6.35 mm)	0.5 - 1.5 (12.7 - 38.1)	Х	1.0 (25.4)	16	48	2,304	48	36,864 (3,425 sq. m)	
	1.5 - 2.5 (38.1 - 64.0)	Υ	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)	
	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)	Н	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)	
3/8" (9.5 mm)	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	27	1,296	48	20,736 (1,926 sq. m)	
1/2" (12.7 mm)	0.5 - 2.5 (12.7 - 64.0)	Q	1.5 (38.1)	24	32	1,536	48	24,576 (2,283 sq. m)	
	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	22	1,056	48	16,896 (1,570 sq. m)	





² Stated dimensional stability tolerance: Board thickness shall not diminish by more than 4% max.

³ These numerical ratings are not intended to reflect hazards presented by these or any other material under actual fire conditions.