



We protect what matters most™

POLYISO INSULATION

Flat Stock and Tapered Boards

gaf.com

EnergyGuard™

POLYISO INSULATION



Description

EnergyGuard™ Polyiso Insulation board is made of glass fiber-reinforced cellulosic felt facers bonded to a core of isocyanurate foam.

Features and Benefits

- EnergyGuard™ Polyiso Insulation board is designed for use in built-up roofs, modified bitumen, or single-ply roofing systems
- High insulation value — polyiso insulation has the highest R-value per inch compared to any other type of non-polyiso insulation of equivalent thickness.
- Because of its light weight, this material is easy to handle on the jobsite and installs quickly. Easy cutting in the field provides the installer with simplified fabricating on the roof deck.
- Manufactured with EPA-compliant blowing agents containing no CFCs or HCFCs; has zero ozone depletion potential (ODP) and negligible global warming potential (GWP)

- Available in a variety of thicknesses from 1.0" (25.4 mm) to 4.6" (116 mm) to best suit your needs
- Available in 4' x 4' (1.21 m x 1.21 m) and 4' x 8' (1.21 m x 2.44 m) boards
- Tapered panels are also available for when the roof design requires improved drainage in slopes of 1/16:12, 3/16:12, 1/8:12, 3/8:12, 1/4:12, and 1/2:12

Codes & Compliance

- Meets the requirements of ASTM C1289 Type II, Class 1, Grade 2 (20 psi), and available in Grade 3 (25 psi)
- FM Approved—consult RoofNav.com for specific assemblies
- Certified by UL. Please visit UL Product iQ for details.
- For additional information, contact GAF at 1-800-766-3411 or technicalquestions@gaf.com



TYPICAL PHYSICAL PROPERTY DATA CHART

PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D1621	≥ 20 psi
Dimensional Stability (Length + Width)**	ASTM D2126	< 2%
Water Absorption	ASTM C209	< 1.5%
Moisture Vapor Transmission	ASTM E96	< 1.5 Perm
Service Temperature		-100° to 250°F (37.8° to 121.1°C)
Flame Spread Index	ASTM E84	< 75*
Smoke Developed Index	ASTM E84	< 200*

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

Flat Stock Physical Characteristics and Shipping Information

Physical Characteristics			Shipping Information (4' x 4') (1.21 m x 1.21 m)					Shipping Information (4' x 8') (1.21 m x 2.44 m)						
Size*	R-Value	Max Flute Span (in)	Bds/Bundle	Bds/Truck	Bundles/Truck	Squares Per Bundle	Sq. Ft. Per Bundle	Sq. Ft. Per Truck	Bds/Bundle	Bds/Truck	Bundles/Truck	Squares Per Bundle	Sq. Ft. Per Bundle	Sq. Ft. Per Truck
1.0" (25.4 mm)	5.7	2 5/8" (66.7 mm)	48	2,304	48	7.68	768	36,864 (2,425 sq. m)	48	1,152	24	15.36	1536	36,864 (2,425 sq. m)
1.1" (27.9 mm)	6.3	2 5/8" (66.7 mm)	43	2,064	48	6.88	688	33,024 (3,068 sq. m)	43	1,032	24	13.76	1376	33,024 (3,068 sq. m)
1.2" (30.5 mm)	6.8	2 5/8" (66.7 mm)	38	1,824	48	6.08	608	29,184 (2,711 sq. m)	38	912	24	12.16	1216	29,184 (2,711 sq. m)
1.3" (33 mm)	7.4	2 5/8" (66.7 mm)	36	1,728	48	5.76	576	27,648 (2,568 sq. m)	36	864	24	11.52	1152	27,648 (2,568 sq. m)
1.4" (35.6 mm)	8.0	4 3/8" (111 mm)	34	1,632	48	5.44	544	26,112 (2,426 sq. m)	34	816	24	10.88	1088	26,112 (2,426 sq. m)
1.5" (38.1 mm)	8.6	4 3/8" (111 mm)	32	1,536	48	5.12	512	24,576 (2,283 sq. m)	32	768	24	10.24	1024	24,576 (2,283 sq. m)
1.6" (40.6 mm)	9.1	4 3/8" (111 mm)	30	1,440	48	4.8	480	23,040 (2,140 sq. m)	30	720	24	9.60	960	23,040 (2,140 sq. m)
1.7" (43.1 mm)	9.7	4 3/8" (111 mm)	28	1,344	48	4.48	448	21,504 (1,998 sq. m)	28	672	24	8.96	896	21,504 (1,998 sq. m)
1.75" (44.5 mm)	10.0	4 3/8" (111 mm)	27	1,296	48	4.32	432	20,736 (1,926 sq. m)	27	648	24	8.64	864	20,736 (1,926 sq. m)
1.8" (45.7 mm)	10.3	4 3/8" (111 mm)	25	1,200	48	4	400	19,200 (1,784 sq. m)	25	600	24	8.00	800	19,200 (1,784 sq. m)
1.9" (48.3 mm)	10.8	4 3/8" (111 mm)	25	1,200	48	4	400	19,200 (1,784 sq. m)	25	600	24	8.00	800	19,200 (1,784 sq. m)
2.0" (51 mm)	11.4	4 3/8" (111 mm)	24	1,152	48	3.84	384	18,432 (1,712 sq. m)	24	576	24	7.68	768	18,432 (1,712 sq. m)
2.1" (53 mm)	12.0	4 3/8" (111 mm)	22	1,056	48	3.52	352	16,896 (1,570 sq. m)	22	528	24	7.04	704	16,896 (1,570 sq. m)
2.2" (56 mm)	12.6	4 3/8" (111 mm)	21	1,008	48	3.36	336	16,128 (1,498 sq. m)	21	504	24	6.72	672	16,128 (1,498 sq. m)
2.3" (58 mm)	13.2	4 3/8" (111 mm)	20	960	48	3.2	320	15,360 (1,427 sq. m)	20	480	24	6.40	640	15,360 (1,427 sq. m)
2.4" (61 mm)	13.8	4 3/8" (111 mm)	20	960	48	3.2	320	15,360 (1,427 sq. m)	20	480	24	6.40	640	15,360 (1,427 sq. m)
2.5" (64 mm)	14.4	4 3/8" (111 mm)	19	912	48	3.04	304	14,584 (1,356 sq. m)	19	456	24	6.08	608	14,584 (1,356 sq. m)
2.6" (66 mm)	15.0	4 3/8" (111 mm)	18	864	48	2.88	288	13,824 (1,284 sq. m)	18	432	24	5.76	576	13,824 (1,284 sq. m)
2.7" (69 mm)	15.6	4 3/8" (111 mm)	17	816	48	2.72	272	13,056 (1,213 sq. m)	17	408	24	5.44	544	13,056 (1,213 sq. m)
2.8" (71 mm)	16.2	4 3/8" (111 mm)	17	816	48	2.72	272	13,056 (1,213 sq. m)	17	408	24	5.44	544	13,056 (1,213 sq. m)
2.9" (74 mm)	16.8	4 3/8" (111 mm)	16	768	48	2.56	256	12,288 (1,142 sq. m)	16	384	24	5.12	512	12,288 (1,142 sq. m)
3.0" (76 mm)	17.4	4 3/8" (111 mm)	16	768	48	2.56	256	12,288 (1,142 sq. m)	16	384	24	5.12	512	12,288 (1,142 sq. m)
3.1" (79 mm)	18.0	4 3/8" (111 mm)	15	720	48	2.4	240	11,520 (1,070 sq. m)	15	360	24	4.80	480	11,520 (1,070 sq. m)
3.2" (81 mm)	18.6	4 3/8" (111 mm)	15	720	48	2.4	240	11,520 (1,070 sq. m)	15	360	24	4.80	480	11,520 (1,070 sq. m)
3.25" (83 mm)	18.9	4 3/8" (111 mm)	14	672	48	2.24	224	10,752 (999 sq. m)	14	336	24	4.48	448	10,752 (999 sq. m)
3.3" (84 mm)	19.2	4 3/8" (111 mm)	14	672	48	2.24	224	10,752 (999 sq. m)	14	336	24	4.48	448	10,752 (999 sq. m)
3.4" (86 mm)	19.9	4 3/8" (111 mm)	14	672	48	2.24	224	10,752 (999 sq. m)	14	336	24	4.48	448	10,752 (999 sq. m)
3.5" (89 mm)	20.5	4 3/8" (111 mm)	13	624	48	2.08	208	9,984 (928 sq. m)	13	312	24	4.16	416	9,984 (928 sq. m)
3.6" (91 mm)	21.1	4 3/8" (111 mm)	13	624	48	2.08	208	9,984 (928 sq. m)	13	312	24	4.16	416	9,984 (928 sq. m)
3.7" (94 mm)	21.7	4 3/8" (111 mm)	12	576	48	1.92	192	9,216 (856 sq. m)	12	288	24	3.84	384	9,216 (856 sq. m)
3.8" (97 mm)	22.3	4 3/8" (111 mm)	12	576	48	1.92	192	9,216 (856 sq. m)	12	288	24	3.84	384	9,216 (856 sq. m)
3.9" (99 mm)	23.0	4 3/8" (111 mm)	12	576	48	1.92	192	9,216 (856 sq. m)	12	288	24	3.84	384	9,216 (856 sq. m)
4.0" (102 mm)	23.6	4 3/8" (111 mm)	12	576	48	1.92	192	9,216 (856 sq. m)	12	288	24	3.84	384	9,216 (856 sq. m)
4.1" (104 mm)	24.2	4 3/8" (111 mm)	11	528	48	1.76	176	8,448 (785 sq. m)	11	264	24	3.52	352	8,448 (785 sq. m)
4.2" (106 mm)	24.8	4 3/8" (111 mm)	11	528	48	1.76	176	8,449 (785 sq. m)	11	264	24	3.52	352	8,449 (785 sq. m)
4.3" (109 mm)	25.4	4 3/8" (111 mm)	11	528	48	1.76	176	8,450 (785 sq. m)	11	264	24	3.52	352	8,450 (785 sq. m)
4.4" (112 mm)	26.0	4 3/8" (111 mm)	10	480	48	1.6	160	7,680 (713 sq. m)	10	240	24	3.20	320	7,680 (713 sq. m)
4.5" (114 mm)	26.6	4 3/8" (111 mm)	10	480	48	1.6	160	7,680 (713 sq. m)	10	240	24	3.20	320	7,680 (713 sq. m)
4.6" (116 mm)	27.1	4 3/8" (111 mm)	10	480	48	1.6	160	7,680 (713 sq. m)	10	240	24	3.20	320	7,680 (713 sq. m)

Tapered Physical Characteristics and Shipping Information

Physical Characteristics				Shipping Information (4' x 4') (1.21 m x 1.21 m)			
Slope	Thickness	Avg. R-Value	Size*	Bds/Bundle	Bds/Truck	Bundles/Truck	Sq. Ft. Per Truck
1/8:12	5"-1" (12.7 mm - 25.4 mm)	4.3	AA	64	3,072	48	49,152 (4,566 sq. m)
	1"-1.5" (25.4 mm - 38.1 mm)	7.1	A	38	1,824	48	29,184 (2,711 sq. m)
	1.5"-2" (38.1 mm - 51 mm)	10	B	26	1,248	48	19,968 (1,855 sq. m)
	2"-2.5" (51 mm - 64 mm)	12.9	C	20	960	48	15,360 (1,427 sq. m)
	2.5"-3" (64 mm - 76 mm)	15.9	D	16	768	48	12,288 (1,142 sq. m)
	3"-3.5" (76 mm - 89 mm)	18.9	E	14	672	48	10,752 (999 sq. m)
	3.5"-4" (89 mm - 102 mm)	22	F	12	576	48	9,216 (856 sq. m)
1/4:12	5"-1.5" (12.7 mm - 38.1 mm)	5.7	X	48	2,304	48	36,864 (3,425 sq. m)
	1.5"-2.5" (38.1 mm - 64 mm)	11.4	Y	24	1,152	48	18,432 (1,712 sq. m)
	2.5"-3.5" (64 mm - 89 mm)	17.4	Z	16	768	48	12,288 (1,142 sq. m)
	1"-2" (25.4 mm - 51 mm)	8.6	G	32	1,536	48	24,576 (2,283 sq. m)
	2"-3" (51 mm - 76 mm)	14.4	H	19	912	48	14,592 (1,356 sq. m)
	3"-4" (76 mm - 102 mm)	20.5	I	12	576	48	9,216 (856 sq. m)
1/2:12	5"-2.5" (12.7 mm - 64 mm)	8.6	Q	32	1,536	48	24,576 (2,283 sq. m)
	1"-3" (25.4 mm - 76 mm)	11.4	XX	22	1,056	48	16,896 (1,570 sq. m)

*Other sizes available upon request