

EnergyGuard™ Tapered Polyiso Insulation 20 & 25 PSI

Updated: 7/17



*Quality You Can Trust...From
North America's Largest Roofing Manufacturer!™*



ENERGYGUARD™

TAPERED POLYISO INSULATION, 20 & 25 PSI (1 of 2)

Description

EnergyGuard™ Tapered Polyiso Insulation has a thermally efficient polyisocyanurate core bonded between glass fiber-reinforced cellulosic felt facers. It is readily available in various slopes profiles such as the most popular and efficient tapers, 1/8:12 (1%), 1/4:12 (2%), and 1/2:12 (4%).

Uses

- EnergyGuard™ Tapered Polyiso Insulation is designed for use over structural roof decks to provide slope to drain and to provide thermally efficient insulation.
- When properly installed, it is suitable for use under built-up, modified bitumen, and most single-ply roofing systems.
- Refer to the application specifications in the current membrane manufacturer's application and specifications manual for proper installation procedures.

Advantages

- Properly designed and installed EnergyGuard™ Tapered Polyiso Insulation Systems virtually eliminate ponding water.
- High thermal efficiency.
- Easily installed with mechanical fasteners, low-rise foam, hot asphalt, or loose-laid in a ballasted system.
- Low point and letter codes are designated on each board.
- Engineering design board layouts are available from your plans and field-verified dimensions.

Limitations and Potential Fire Hazard

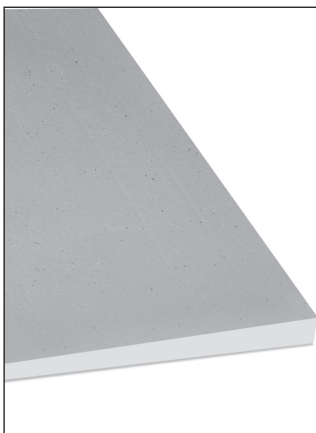
- EnergyGuard™ Tapered Polyiso Insulation is a non-structural, non-load-bearing board. It is not designed for direct traffic usage unless adequately protected.
- EnergyGuard™ Tapered Polyiso Insulation should be stored dry and be protected from the elements. Once properly loaded at the job site, remove factory wraps and cover with a breathable tarp.
- As an unprotected polyisocyanurate will burn, **fire safety precautions must be observed** wherever any insulation products are used.

Limitations and Potential Fire Hazard (Continued)

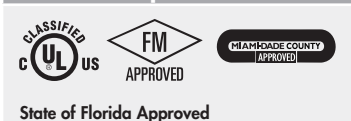
- Direct torching of modified bitumen roofing to EnergyGuard™ Tapered Polyiso Insulation will present a **fire hazard**. A properly installed fiberglass base sheet **MUST** be used over the insulation.
- These tapered systems are designed to provide a top surface of slope. Each board is manufactured to exact thickness specifications. GAF cannot be held responsible for field conditions such as actual building dimensions and deck deflection.

WARNING: DO NOT EXPOSE TO OPEN FLAME OR EXCESSIVE HEAT. MAY SMOLDER IF IGNITED. IF IGNITED, EXTINGUISH COMPLETELY.

EnergyGuard™
Tapered Polyiso
Insulation



Code Compliance



Tapered Physical Characteristics

TAPERED PANELS - 4' X 4'				
BOARD STYLE	DIMENSIONS IN INCHES	AVERAGE THICKNESS	BD FEET PER PANEL	
1/8	AA	0.5" - 1"	0.75"	12
	A	1" - 1.5"	1.25"	20
	B	1.5" - 2"	1.75"	28
	C	2" - 2.5"	2.25"	36
	* D	2.5" - 3"	2.75"	44
	* E	3" - 3.5"	3.25"	52
	* F	3.5" - 4"	3.75"	60
1/4	* FF	4" - 4.5"	4.25"	68
	X	0.5" - 1.5"	1"	16
	Y	1.5" - 2.5"	2"	32
	* Z	2.5" - 3.5"	3"	48
	* ZZ	3.5" - 4.5"	4"	64
	G	1" - 2"	1.5"	24
	H	2" - 3"	2.5"	40
1/2	* I	3" - 4"	3.5"	56
	Q	0.5" - 2.5"	1.5"	24
	* QQ	2.5" - 4.5"	3.5"	56
	* XX	1" - 3"	2"	32
	* JJ	0.5" - 1.25"	0.875"	14
	* KK	1.25" - 2"	1.625"	26
	* LL	2" - 2.75"	2.375"	38
3/16	* MM	2.75" - 3.5"	3.125"	50
	* J	1" - 1.75"	1.375"	22
	* K	1.75" - 2.5"	2.125"	34
	* L	2.5" - 3.25"	2.875"	46
	* M	3.25" - 4"	3.625"	58
	* SS	0.5" - 2"	1.25"	20
	* TT	2" - 3.5"	2.75"	44
3/8	* S	1" - 2.5"	1.75"	28
	1	0.5" - .75"	0.625"	10
	2	.75" - 1"	0.875"	14
	3	1" - 1.25"	1.125"	18
	4	1.25" - 1.5"	1.375"	22
	5	1.5" - 1.75"	1.625"	26
	6	1.75" - 2"	1.875"	30
1/16	* 7	2" - 2.25"	2.125"	34
	* 8	2.25" - 2.5"	2.375"	38

*Availability for these tapered panel systems may vary for each region.
Note: All sizes are nominal.



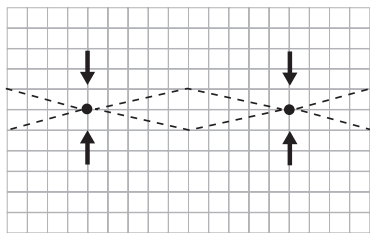
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TAPERED POLYISO INSULATION, 20 & 25 PSI (2 of 2)

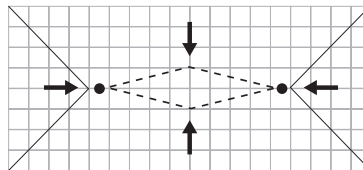
Installation Suggestions: Although each tapered system is different, here are some suggested methods for installing a Tapered Polyiso Insulation system efficiently.

1. Verify building dimensions and drain locations with the Tapered Polyiso Insulation Shop Drawing. Discrepancies should be reported to GAF prior to shipment.
2. Verify that the proper number of truckloads and piece quantities have been received on the job site.
3. Determine the area to be completed that day.
4. Measure the distance from the drain to the perimeter where the shop drawing indicates full 4 feet x 4 feet (1.22 m x 1.22 m) insulation boards. Verify that the system will meet the drain piece.
5. Start installing the tapered system utilizing full 4 feet x 4 feet (1,220 mm x 1,220 mm) boards. Work from the drain and finish the area where the shop drawing indicates field cutting.
6. When more than one layer of insulation is utilized, all vertical board joints should be staggered, preferably by 1/2 board.
7. Cover the insulation with the complete membrane system the same day.

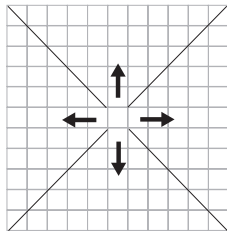
Typical Tapered Layouts



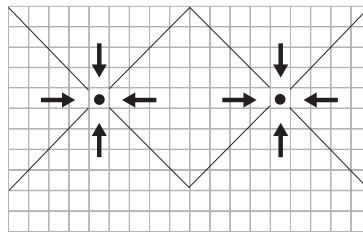
Two-Way Tapered System (Crickets Optional)



Modified Two-Way Tapered System with Constant Edge Thickness (Crickets Optional)



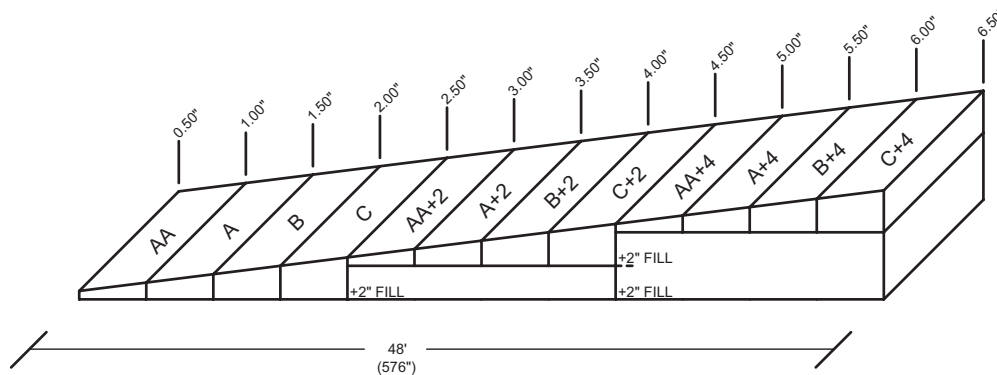
Four-Way Tapered System with Perimeter Drain



Four-Way Tapered System with Variable Edge Thickness

Typical Cross Section

1/8 Slope Tapered Iso (4' x 4' [1.22 m x 1.22 m] Panels)



NOTE: Consult FM Loss Prevention Data Sheets 1-29, 1-49 for specific perimeter and corner fastening details. Due to ongoing testing programs and changes in FM Global requirements, the number of fasteners and their placement are subject to change without notice. Consult current FM Approvals Guide and Loss Prevention Data Sheets 1-28, 1-29, and 1-29R for approved fastener density for Isotherm Roof Insulation.