

EnergyGuard™ Tapered PolyIso Foam Roof Insulation

Data Sheet

Updated: 1/10



*Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™*



ENERGYGUARD™

TAPERED POLYISO FOAM ROOF INSULATION (1 of 2)

Description

EnergyGuard™ Tapered Polyiso Foam Roof Insulation has a thermally efficient polyisocyanurate core bonded between organic/glass facers. It is readily available in the two most popular and efficient tapers, 1/8 inch per foot (1%) and 1/4 inch per foot (2%).

Uses

- EnergyGuard™ Tapered Polyiso Foam Roof 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 Foam Insulation Systems virtually eliminates ponding water.
- High thermal efficiency.
- Easily installed with mechanical fasteners, 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

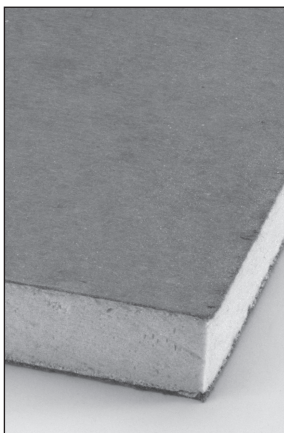
- EnergyGuard™ Tapered Polyiso Foam Roof Insulation is a non-structural, non-load bearing board. It is not designed for direct traffic usage unless adequately protected.
- EnergyGuard™ Tapered Polyiso Insulation should be stored dry and be protected from the elements. Once properly loaded at the job 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 Foam Roof Insulation will present a **fire hazard**. A properly installed fiber glass 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 Materials Corp. 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
Foam Roof Insulation



Tapered Board Label Designations

1/8" (1%) Slope (Tapered 1/8" to the foot) 4'x4' (1220mm x 1220mm)	Label
0.5" to 1.0" (13mm - 25mm)	AA
1.0" to 1.5" (25mm - 38mm)	A
1.5" to 2.0" (38mm - 51mm)	B
2.0" to 2.5" (51mm - 64mm)	C
2.5" to 3.0" (64mm - 76mm)	D
3.0" to 3.5" (76mm - 89mm)	E
3.5" to 4.0" (89mm - 102mm)	F
1/4" (2%) Slope (Tapered 1/4" to the foot) 4'x4' (1220mm x 1220mm)	Label
0.5" to 1.5" (13mm - 38mm)	X
1.5" to 2.5" (38mm - 64mm)	Y
2.5" to 3.5" (64mm - 89mm)	Z
1/2" (4%) Slope (Tapered 1/2" to the foot) 4'x4' (1220mm x 1220mm)	Label
0.5" to 2.5" (13mm - 64mm)	Q

Code Compliance

Listed by Underwriters Laboratories for use under Class A, B, or C Roof Covering. See UL, ULC Inc. Building Materials and Systems Directory for details.

Approved component of *Factory Mutual System Class I, Insulated Steel Deck Construction* when secured to the steel deck with mechanical fasteners (such as DRILL•TEC™ roof insulation fastener system).

Mechanical attachment of roof insulation is the most dependable method of attachment to steel decks since it minimizes lateral movement and wind blow-off.

For details, consult *Factory Mutual Loss Prevention Sheet 1-28, 1-29, 1-28R, 1-29R and Approval Guide*.

Federal Specifications HH-I-1972.



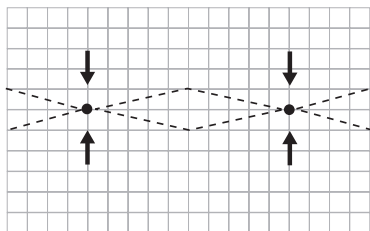
ENERGYGUARD™

TAPERED POLYISO FOAM ROOF INSULATION (2 of 2)

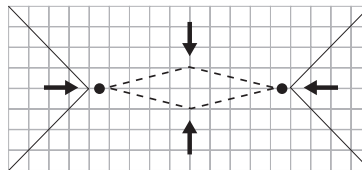
Installation Suggestions: Although each tapered system is different, here are some suggested methods for installing a Tapered Polyiso Foam Roof Insulation system efficiently.

1. Verify building dimensions and drain locations with the Tapered Foam Roof Insulation Shop Drawing. Discrepancies should be reported to GAF Materials Corp. 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 (1220 mm x 1220 mm) insulation boards. Verify that the system will meet the drain piece.
5. Start installing the tapered system utilizing full 4 feet x 4 feet (1220 mm x 1220 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.

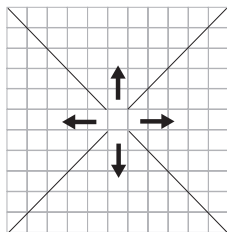
Typical Tapered Layouts



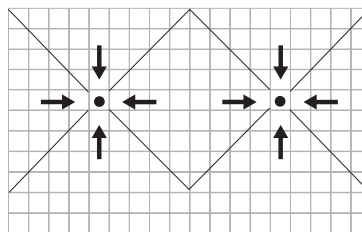
Two Way Tapered System (Crickets Optional)



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

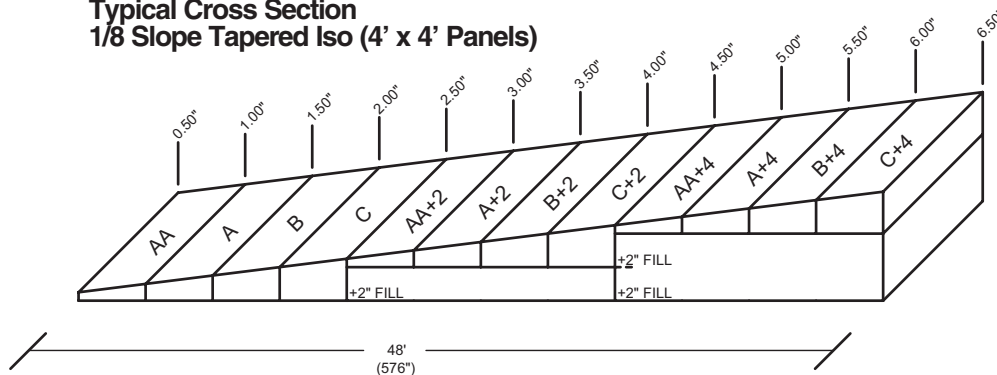


Four Way Tapered System with Perimeter Drain



Four Way Tapered System with Variable Edge Thickness

Typical Cross Section 1/8 Slope Tapered Iso (4' x 4' 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's.

LIMITED WARRANTY: GAF Materials Corp. warrants that, at the time of delivery, the product contained herein shall conform to GAF Materials Corp. specifications therefor. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS AND REPRESENTATIONS, WHETHER BY STATUTE, AT LAW OR IN EQUITY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Recommendations made by GAF Materials Corp. are believed to be reliable, but GAF Materials Corp. makes no warranty of results to be obtained. BUYER'S SOLE AND EXCLUSIVE REMEDY, regardless of the theory on which a claim may be based, including, without limitation, negligence, contract, breach of warranty, strict product liability or misrepresentation, IS THE REPLACEMENT OF THIS PRODUCT. In NO event shall GAF Materials Corp. be liable for INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, OR OTHER SIMILAR PUNITIVE DAMAGES OF ANY KIND, INCLUDING DAMAGE TO THE INTERIOR OR EXTERIOR OF ANY BUILDING.