



# ENERGYGUARD™

## PERLITE TAPERED ROOF INSULATION (1 of 2)

### Description

- EnergyGuard™ Perlite Tapered Roof Insulation is factory-fabricated from EnergyGuard™ Perlite rigid insulation board.
- Tapered roof insulation systems are supplied in 2' x 4' (610 mm x 1.22 m) boards, custom cut and tapered to 1/8":12 (1%), 1/4":12 (2%), and 1/2":12 (4%) slope depending on the need. Custom sizes are available.
- Quality EnergyGuard™ Perlite insulation is used as fill insulation to complete the systems.

### Uses

- To create positive drainage on new roofs and reroofs.
- To eliminate trouble spots on roofs where and when ponding is a problem.
- Properly installed, EnergyGuard™ Perlite Tapered Roof Insulation is suitable for use under built-up and modified bitumen roofing systems.
- Refer to the application specifications in the current membrane manufacturer's application and specifications manual for proper installation procedures for EnergyGuard™ Perlite Tapered Roof Insulation.

### Advantages

- Better for the environment — The average recycled content is 29% by weight. Complies with the Environmental Protection Agency Regulation 40 CFR Part 248, "Guideline for Federal Procurement of Building Insulation Products Containing Recovered Materials, as a recycled product approved for use on any project using federal funds.

### Limitations

- EnergyGuard™ Perlite Tapered Roof Insulation is a non-structural, non-load-bearing material.
- EnergyGuard™ Perlite Tapered Roof 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.
- No more insulation should be applied than can be completely covered with finished roofing on the same day.
- Do **NOT** use under fully adhered single-ply systems or with direct torch application of modified bitumen.
- If torch-grade modified bitumen roofing is to be installed over EnergyGuard™ Perlite, a fiberglass base sheet **MUST** be installed.

EnergyGuard™ Perlite Tapered Roof Insulation



### Installation Suggestions for Tapered Systems

Although each tapered system is different, here are some suggested methods for installing a tapered insulation system efficiently:

1. Verify building dimensions and drain locations with the tapered roof 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 insulation boards. Verify that the system will meet the drain piece.
5. Start installing the tapered system utilizing full 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.

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

EnergyGuard™ Perlite Tapered Roof Insulation Values			
Average Thickness		Nominal	
Inches	mm	"C" Values*	"R" Values**
1"	25.4	.36	2.78
* BTU/(hr • ft <sup>2</sup> • °F)		** (hr • ft <sup>2</sup> • °F)/BTU	

Note: All sizes are nominal.

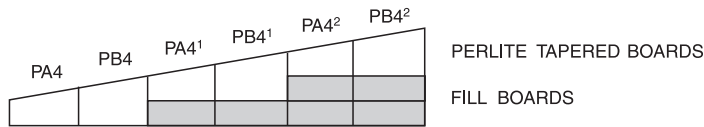
Typical Physical Properties		
Property	Value	Test Method
Water Absorption, % by Volume — 2 hours	1.5 max.	ASTM C209
Compression Resistance 5% Consolidation— psi (kPa)	30 (207) nom.	ASTM C165
Laminar Tensile Strength — psi (kPa)	8 (55)	ASTM C209
Flexural Strength — psi (kPa)	65 (448)	ASTM C203
Product Density — pcf (kg/m <sup>3</sup> )	8 (128)	ASTM C209
Dimensional Stability	0.5%	ASTM C209
Flame Spread	25	ASTM E84
Smoke Developed	10	ASTM E84



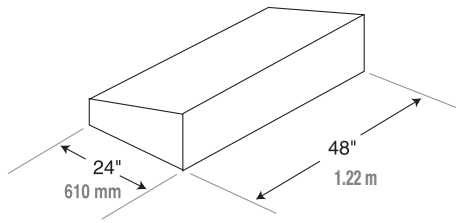
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### Typical EnergyGuard™ Perlite Tapered System

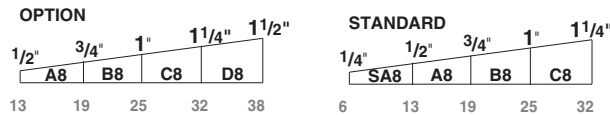


### Typical EnergyGuard™ Perlite Tapered Panel Size

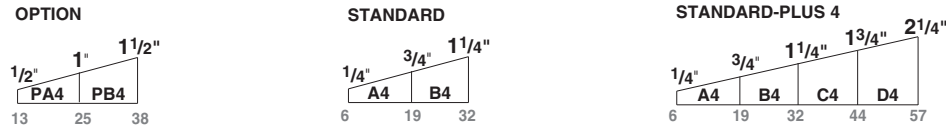


### EnergyGuard™ Perlite Tapered Roof Insulation Systems (NOTE: Measurements in GRAY are in millimeters)

#### 1/8" Per Foot 1%



#### 1/4" Per Foot 2%



#### 1/2" Per Foot 4%



Note: Other sizes and special laminations are available on a made-to-order basis.