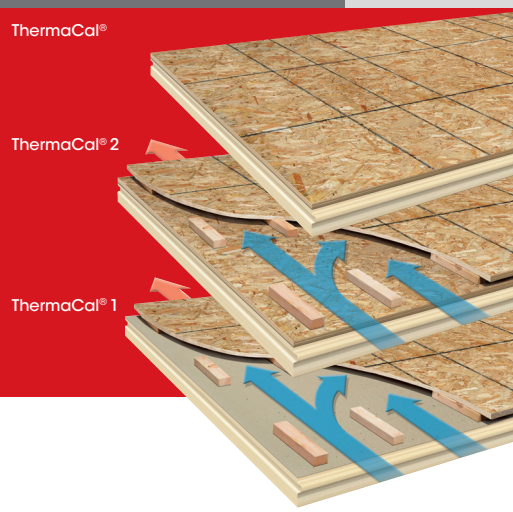
Nail Base Roof Insulation Panels

GAF ThermaCal®
Nail Base Roof Insulation Panels



Description:

ThermaCal® Nail Base Roof Insulation Panels are factory-assembled panels consisting of a top surface of sheathing (which serves as a nailable base), built-in ventilation space (ventilated versions only), and GAF EnergyGuard™ Polyiso Insulation. They're manufactured in our Statesboro, Georgia, plant using the latest technology in manufacturing to provide a product of the highest quality and performance.

Features and Benefits:

- Designed for use on structural wood and steel sloped roof decks (contact GAF for other acceptable roof decks), and are ideal for cathedral ceilings, glue lam, post & beam structures, and buildings with conditioned attic spaces
- Insulate to help reduce heat drive into the living/conditioned space below; ventilated versions also exhaust excess moisture to reduce the risk of condensation in the roofing system
- Nominal 4' x 8" (1.21 m x 2.44 m) panels feature premium-quality GAF EnergyGuard™ Polyiso Insulation
- Tongue-and-groove ISO foam provides a tight fit to help minimize heat loss through panel joints
- Top sheathing layer is cut back for sheathing expansion clearance and easy installation
- Solid wood spacer blocks, which are positioned 12" (305 mm) or less apart in all directions, are arranged in a unique pattern that maximizes airflow and reduces hot spots

Codes & Compliance

Polyiso insulation complies with ASTM C1289, Type II, Class I, Grade 2.

Classified under ANSI/UL 790 as a Shingle Decking Accessory for use with Class A, B, or C asphalt shingle or metal shingle roof coverings. Also classified under ANSI/UL 1256 for Insulated Metal Deck Assemblies, Constructions No. 120 and No. 123.

State of Florida approved.

Miami-Dade County Product Control Approved.

May contribute toward LEED® credits.

For technical information, contact **GAF Technical Support** at 1-800-766-3411 or email technicalquestions@gaf.com. For assistance with specifications, contact **GAF Architectural Information Services** at 1-800-522-9224 or email AIS@gaf.com.

GAF ThermaCal®1
Ventilated Roof Insulation Panels

For Asphalt Shingles and Metal Roofing Systems

- Single Layer of Sheathing: $^{7}/_{16}$" (11.1 mm) OSB (standard); $^{5}/_{8}$" and $^{3}/_{4}$" (15.9 mm & 19.1 mm) OSB or plywood; fire-treated options are also available.
- Polyiso Insulation Thicknesses Available: 1.0" – 5.5" (25.4 mm – 140 mm)
- R-Values Available: 5.70 – 32.50
- Air Space: 1" (25.4 mm) (standard) – 10 sq. in. of NFA per ft. (21,163 sq. mm/m) run. 1.5" (38.1 mm) and 2" (51 mm) options available.

GAF ThermaCal®2
Ventilated Roof Insulation Panels

For Slate, Tile, and Maximum Loading Roofing Systems

- Two Layers of Sheathing: Top Layer - $^{7}/_{16}$" (11.1 mm) OSB (standard); $^{5}/_{8}$" and $^{3}/_{4}$" (15.9 mm & 19.1 mm) OSB or plywood; fire-treated options are also available. Bottom Layer - $^{7}/_{16}$" (11.1 mm) OSB
- Polyiso Insulation Thicknesses Available: 1.5" – 4.5" (38.1 mm – 114 mm)
- R-Values Available: 9.20 – 27.20
- Air Space: 1" (25.4 mm) – 10 sq. in. of NFA per ft. (21,163 sq. mm/m) run. 1.5" (38.1 mm) and 2" (51 mm) options available.

GAF ThermaCal®
Non-Ventilated Roof Insulation Panels

For Metal Roofing Systems

- Single Layer of Sheathing: $^{7}/_{16}$" (11.1 mm) OSB (standard); $^{5}/_{8}$" and $^{3}/_{4}$" (15.9 mm & 19.1 mm) OSB or plywood.
- Polyiso Insulation Thicknesses Available: 1.0" – 6.5" (25.4 mm – 165 mm)
- R-Values Available: 6.30 – 39.0

Also Available:

GAF ThermaCal® Wall
Exterior Wall Insulation Panels

Contact GAF for more information.

ThermaCal® 1 Ventilated Roof Insulation Panels

Approx. **Overall Panel** Thickness[1]		Nominal **Polyiso Insulation** Thickness		Approx. Weight		LTTR R-Value[2]
in.	mm	in.	mm	lb./sq. ft.	kg/sq.m	
2.5"	64 mm	1.0"	25 mm	1.8	8.82	5.70
3.0"	75 mm	1.5"	38 mm	1.9	9.29	8.60
3.5"	89 mm	2.0"	51 mm	2.0	9.76	11.40
4.0"	102 mm	2.5"	64 mm	2.1	10.25	14.40
4.5"	114 mm	3.0"	76 mm	2.2	10.74	17.40
5.0"	127 mm	3.5"	89 mm	2.3	11.23	20.50
5.5"	140 mm	4.0"	102 mm	2.4	11.72	23.60
6.0"	152 mm	4.5"	114 mm	2.5	12.21	26.60
6.5"	165 mm	5.0"	127 mm	2.6	12.69	29.50
7.0"	178 mm	5.5"	140 mm	2.7	13.18	32.50

ThermaCal® 2 Ventilated Roof Insulation Panels

Approx. **Overall Panel** Thickness[3]		Nominal **Polyiso Insulation** Thickness		Approx. Weight		Total System R-Value[4]
in.	mm	in.	mm	lb./sq. ft.	kg/sq.m	
3.5"	89 mm	1.5"	38 mm	3.3	16.11	9.20
4.0"	102 mm	2.0"	51 mm	3.4	16.60	12.00
4.5"	114 mm	2.5"	64 mm	3.5	17.09	15.00
5.0"	127 mm	3.0"	76 mm	3.6	17.58	18.00
5.5"	140 mm	3.5"	89 mm	3.7	18.06	21.10
6.0"	152 mm	4.0"	102 mm	3.8	18.55	24.20
6.5"	165 mm	4.5"	114 mm	3.9	19.04	27.20

ThermaCal® Non-Ventilated Roof Insulation Panels

Approx. **Overall Panel** Thickness[5]		Nominal **Polyiso Insulation** Thickness		Approx. Weight		Total System R-Value[4]
in.	mm	in.	mm	lb./sq. ft.	kg/sq.m	
1.5"	38 mm	1.0"	25 mm	1.6	7.81	6.30
2.0"	51 mm	1.5"	38 mm	1.7	8.30	9.20
2.5"	64 mm	2.0"	51 mm	1.8	8.79	12.00
3.0"	76 mm	2.5"	64 mm	1.9	9.29	15.00
3.5"	89 mm	3.0"	76 mm	2.0	9.76	18.00
4.0"	102 mm	3.5"	89 mm	2.1	10.25	21.10
4.5"	114 mm	4.0"	102 mm	2.2	10.74	24.20
5.0"	127 mm	4.5"	114 mm	2.3	11.23	27.20
5.5"	140 mm	5.0"	127 mm	2.4	11.72	30.10
6.0"	152 mm	5.5"	140 mm	2.5	12.21	33.10
6.5"	165 mm	6.0"	152 mm	2.6	12.69	36.00
7.0"	178 mm	6.5"	165 mm	2.7	13.18	39.00

[1] Approx. overall panel thickness and weight based on the polyiso insulation, one layer of 7/16" (11.1 mm) OSB, and 1" (25 mm) spacer height.
[2] LTTR R-value refers to polyiso insulation. LTTR R-value calculations are based on ASTM C1289-17.
[3] Approx. overall panel thickness and weight based on the polyiso insulation, two layers of 7/16" (11.1 mm) OSB, and 1" (25 mm) spacer height.
[4] Total system R-value includes the LTTR R-value of the polyiso insulation and .55 R-value of the 7/16" (11.1 mm) OSB attached to the polyiso. LTTR R-value calculations are based on ASTM C1289-17.
[5] Approx. overall panel thickness and weight based on the polyiso insulation and one layer of 7/16" (11.1 mm) OSB.

Visit **gaf.com/ThermaCal**

We protect what matters most™

GAF