

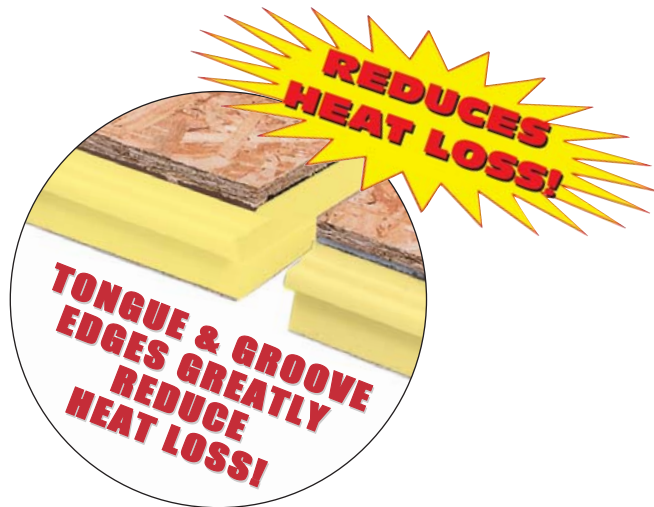
EXtruded Polystyrene Nail Base Roof Insulation



For Slate, Tile or Metal Roofing

- Single layer of sheathing

- Fully machined composite panel
- Sheathing pre-spaced for thermal expansion
- 7/16" OSB standard; 5/8" or 3/4" OSB/plywood optional



- Very low moisture absorption rate
- Excellent R Value retention!

DATA TABLE

Nom. Size 4' x 8' (32 s.f./panel)
1215 mm x 2430mm (2.95M²)

APPROX. OVERALL THICKNESS	WEIGHT P.S.F.	LTR R-VALUE*
2.0"	51 mm	1.7
2.5"	64 mm	1.8
3.0"	75 mm	1.9
3.5"	89 mm	2.0
4.0"	102 mm	2.1
4.5"	114 mm	2.2
5.0"	127 mm	2.3
5.5"	140 mm	2.4
6.0"	152 mm	2.5
6.5"	165 mm	2.6
7.0"	178 mm	2.7
7.5"	190 mm	2.8
8.0"	203 mm	2.9

*For comparison with Long Term Thermal Resistance (LTR) values used in the Polystyrene Foam Association (OCF, Dow and Pactiv) provided foam aged R values generated per CAN/ULC S770 by a third party laboratory. The nominal thickness is 1/2" less than the overall panel thickness.

CORNELL CORPORATION

Performance Roofing Products

www.cornellcorporation.com



Product Specifications

CODE ACCEPTABILITY CERTIFICATION

CODES - O.S.B. is approved by CABO, ICBO, BOCA, SBC, ARMA and the APA as roof sheathing. The foam used in ThermaCal®X has a Flame Spread Rating of 5.

Plastic foam must be protected from flame on the inside by a suitable barrier. Generally, wood decking or drywall is acceptable and plywood or metal decking are allowed in certain roofing applications. CHECK LOCAL CODES.

UNDERWRITERS LABORATORIES

The foam used complies with ASTM C578 and UL Roof Deck Construction #457 for use directly over metal deck.

CODES AND COMPLIANCES

FEDERAL SPECIFICATION - foam meets HUD/FHA use of materials Bulletin No. UM71a, ASTM C578 and AASHTO M230.

MODEL CODES-foam insulation is in compliance with:
BOCA- Section 2603.0
ICBO- Section 2602
SBCCI- Section 2603.2

TECHNICAL SUPPORT

DESIGN CONSIDERATIONS

VAPOR RETARDERS

The designer should determine if a vapor retarder is required between the deck and the insulation. A vapor retarder should always be specified in buildings with high humidity conditions, such as swimming pools.

DRAFT SPECIFICATION

This spec is usually placed in Section 07220.

THERMACAL®X NAIL BASE ROOF INSULATION

1. DESCRIPTION OF SYSTEM

A. The insulated sheathing shall be ThermaCal®X a non-vented nail base roof insulation consisting of a 7/16" oriented strand board top surface (optional 5/8" or 3/4" OSB / plywood-architect to choose) bonded to _____thick extruded polystyrene foam.

B. The Long Term Thermal Resistance (LTTR) R-Value of the non-vented roof insulation shall be not less than _____.

C. Wood panel edges shall be rabbeted to allow the foam edges to fit together while providing clearance between the wood sheathing on adjoining panels.

D. Foam sides and ends shall have a tongue and groove profile to reduce heat loss at the joints.

2. SUBMITTALS

A. The following will be submitted to the architect for approval: Copies of the manufacturer's product information and installation instructions. A sample with the edge profile specified.

3. PRODUCTS

A. Products shown below are acceptable provided they meet the requirements of this specification.

ThermaCal®X
by Cornell Corporation, Cornell, WI
Tele: (715) 239-6411 Fax: (800) 267-8368

OTHER PRODUCTS

If ventilation below the sheathing is required by the roofing manufacturer, we recommend our ventilated roof insulations, Vent-Top ThermaCal®X1 or X2.

CORNELL CORPORATION

Tele: 715-239-6411 (Central Time)
Fax: 800-267-8368

P.O. BOX 338, CORNELL, WISCONSIN 54732

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51 YEARS OF EXPERIENCE!

Cornell Corporation has been a leading roof insulation manufacturer since 1955. In response to the need for nailable insulation above the structural roof deck in cathedral or vaulted ceiling applications, Cornell Corporation introduced ThermaCal® in 1979, which started the nail base roof insulation industry.