

THERMACAL® NON-VENTED NAIL BASE ROOF INSULATION SPECIFICATION



1361 Alps Rd. Wayne, NJ 07470
Tele: (800)766-3411 Fax: 877-271-6588

ThermaCal® Non-Vented Nail Base Roof Insulation Panels. See company literature or website www.gaf.com and www.cornellcorporation.com. This spec is usually placed in Section 07 22 00 under the heading Composite Roof Panels and is a component of the shingle system spec.

1. General

1.01. WORK INCLUDES

- A. The work shall consist of covering all areas shown on the drawings with nail base roof insulation

1.02. RELATED WORK

- A. Specified elsewhere:
Section 07 --- Asphalt shingles, metal roofing or other roofing system over the nail base insulation.

1.03. SYSTEM DESCRIPTION

- A. Description of system:
 - 1. The insulated sheathing shall be a preassembled panel consisting of one layer of 7/16" oriented strand board top surface (FSC or standard) bonded to _____ thick isocyanurate foam.
~ Architect's option for top surface: 5/8" or 3/4" OSB or Plywood. FSC or Standard
 - 2. **The Long Term Thermal Resistance (LTTR) R-Value of the non-vented roof insulation shall be no less than _____.**
 - 3. Wood panel edges shall be rabbetted to allow the foam edges to fit together while providing clearance between the wood sheathing on adjoining panels.
 - 4. Foam sides and ends shall have a machined tongue and groove profile to reduce heat loss at the joints.
- B. Performance Requirements:
 - 1. The foam insulation shall have a Flame Spread Rating of 40-60.

1.04. QUALITY ASSURANCE

- A. The nail base insulation shall be classified by Underwriters Laboratories Inc. as a shingle decking accessory for use with any Class A, B or C asphalt glass mat or asphalt organic shingles. Each bundle of insulation panels shall bear an UL label. If applicable FSC Chain-of-Custody procedures will apply.

1.05. SUBMITTALS

- A. The following will be submitted to the architect for approval:

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Copies of the manufacturer's product information and installation instructions.
A sample with the edge profile specified.

- B. The nail base insulation must be classified under UL as a roof covering accessory (TGDY) per ANSI/UL 790 (ASTM E180) and as a Building Unit (TIAR) per UL 1256 for Construction No. 120 and No. 123.

1.06. DELIVERY AND STORAGE

- A. The nail base insulation shall be protected in the transit by plastic covers and by truck tarps. When material is stored at the jobsite, a reasonably level, drained storage area shall be provided. The insulation shall rest on firm blocking and shall be covered with tarps.

1.07. SEQUENCING/SCHEDULING

- A. Erection of the nail base insulation shall be coordinated with the roofing subcontractor so the roofing is applied as soon as possible after insulation is in place.

2. PRODUCT

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

- A. **ThermaCal® Non-Ventilated Roof Insulation Panels** by GAF Cornell, Tele: (800)766-3411 (800)522-9224, Fax: 877-271-6588
www.cornellcorporation.com and gaf.com
- B. **ThermaCal® Fasteners** as required per the appropriate fastener pattern.

3. EXECUTION

3.01. PREPARATION

- A. The Structural roof deck shown in the plans shall be smooth and level and free of water or debris before the nail base insulation is installed. Apply vapor retarder if required.
NOTE: Cornell recommends that the designer carefully considers the need for a vapor/air retarder.

3.02. SUBSTRATE INSTALLATION

- A. Installation shall follow the manufacturer's written installation instructions.
- B. Fasten with ThermaCal® Fasteners to the supporting roof deck shown in the plans.
- C. Protect nail base insulation work from exposure to moisture damage and deterioration, primarily by prompt installation of the roofing, sheet metal and waterproofing work.