

# **Advantage Vented Nailable Base-3**

WALL

# Insulation for Above the Deck

**SPECIALTY** 

#### PRODUCT DESCRIPTION

Rmax Advantage Vented Nailable Base-3 is an energy-efficient thermal insulation board composed of a two-step system with polyisocyanurate (polyiso) foam insulation and a separate OSB nailing surface with furring strips attached. The insulation portion of this product is Rmax's rigid, closed cell polyiso foam with glass fiber/organic mat facers on both sides. When FSC® Chain of Custody is required (or upon request), the insulation portion will be made with inorganic polymer coated glass fiber mat facers. Advantage Vented Nailable Base-3 utilizes a CFC-, HCFC- and HFC-free blowing agent that has zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP). This insulation is superior for use in residential or commercial steep slope roofing applications where a vented assembly is desired. Advantage Vented Nailable Base-3 is applied to the roof structure in order to provide a layer of thermal insulation and a suitable substrate for the application of a variety of shingles available in today's market.



The standard nailing surface of Advantage Vented Nailable Base-3 is 7/16" OSB (APA rated). However, alternate nailing surfaces are available upon request, see table below. Nailing surfaces that include a radiant barrier are also an acceptable alternative upon request.

Description (Nominal Thickness)	Actual Thickness		
7/16" OSB (default)	7/16" (default)		
15/32" OSB	15/32"		
1/2" OSB	1/2"		
5/8" OSB	5/8"		
3/4" OSB	3/4"		
1/2" Plywood	31/64"		
5/8" Plywood	19/32"		
3/4" Plywood	23/32"		

The venting pattern includes five (5) solid wood furring strips for straightline venting from the soffit to the ridge. The desired thickness of furring strips or venting space shall be specified upon ordering. Recommended vent spacing can be determined, based on the roof design, through online tools such as <a href="https://www.metalera.com">www.metalera.com</a>. Below is a table of various thicknesses and corresponding calculations for net free area per linear foot.

Vent Blocks/True Spacing Height	Net Free Area per Linear Foot (sqft)	
3/4"	7.4	
1"	9.8	
1 1/2"	14.7	
2"	19.6	

A wide variety of insulation thicknesses, manufactured on a made to order basis, are available from Rmax to more closely match insulation values (thermal resistances) to project requirements.

Contact Rmax Sales at your Regional Customer Service Center for information, pricing and availability of Rmax Nail Board Fasteners.

### **CONSTRUCTION APPLICATIONS**

Asphalt shingles

#### **INCENTIVE OPPORTUNITIES**

- · Reduces energy costs
- Reduces material and labor costs
- · Contributes toward LEED® credits
- · Offers tax credits, where applicable

#### **COMPLIANCES**

- · ASTM C1289 Type V
- International Building Code (ICC) Chapter 26 Section 2603, Foam Plastic
- ASHRAE 90.1
- · California Code of Regulations, Title 24

To help achieve additional LEED credits, the wood components in this product can be ordered to comply with Forest Stewardship Council's (FSC) Chain of Custody requirements.



## **Advantage Vented Nailable Base-3**

#### THERMAL PROPERTIES / PRODUCT DATA

"R" means resistance to heat flow. The higher the R-value, the greater the insulating power.

Nominal Thickness <sup>1</sup>		Thermal Per	Weight Per Sq.	Per Sq. (48"	e Data k 96")	Truckload Data (48" x 96")		
Inches	Foam	Resistance <sup>2</sup>	Resistance <sup>2</sup>	Resistance <sup>2</sup> (lbs) <sup>3</sup>	Pieces	Sq. Ft.	Pieces	Sq. Ft.
2.50	1.00	5.7	17	19	608	456	14,592	
3.00	1.50	8.6	25	16	512	384	12,288	
3.50	2.00	11.4	33	13	416	312	9,984	
4.00	2.50	14.4	42	12	384	288	9,216	
4.50	3.00	17.4	50	10	320	240	7,680	
5.00	3.50	20.5	58	9	288	216	6,912	
5.50	4.00	23.6	67	8	256	192	6,144	

<sup>1</sup>Includes 7/16" OSB nailing surface and 1" airspace (furring strips).

<sup>2</sup>LTTR values are determined in accordance with CAN/ULC-S770. LTTR predicts a 15-year, time-weighted average. The values shown are for the foam portion only.

<sup>3</sup>Weight is based strictly on the foam component. OSB/furring strips weight per square is 219 lbs.

Visit www.rmax.com for a complete list of thicknesses and packaging information.

#### TYPICAL PHYSICAL PROPERTIES

Physical properties shown are for the insulation layer only, are based on data obtained under controlled conditions and are subject to normal manufacturing tolerances.

Property	Test Method	Results		
Density, Overall, Nominal	ASTM D1622	2.0 pcf		
Compressive Strength	ASTM D1621	20 psi		
Flame Spread, Core <sup>1</sup>	ASTM E84	25 - 60		
Smoke Developed, Core <sup>1</sup>	ASTM E84	75 - 160		
Water Vapor Transmission	ASTM E96	< 1.5 perm		
Water Absorption	ASTM C209	< 1% Vol.		
Dimensional Stability	ASTM D2126, 7 days, 158°F, 98% RH	< 2% Linear Change		
Service Temperatures		-40°F to +250°F		

<sup>1</sup>Flame Spread and Smoke Developed Indexes are used to measure and describe the properties of this material in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of this material and other related roofing components under actual fire conditions.

#### **PACKAGING**

The insulation panel portion of this two component system is packaged in bundles approximately 48 inches high and wrapped in plastic. The OSB nailing surface portion is packaged in nested bundles that are wrapped in plastic. The number of furred OSB panels will equal the number of insulation panels shipped.

#### **APPLICATION / INSTALLATION**

**General** - Advantage Vented Nailable Base-3 is applied to the roof deck in order to provide a continuous layer of thermal insulation and a suitable substrate for a variety of shingles within steep slope applications, while minimizing thermal short circuits.

No more insulation shall be laid than can be covered with the completed roofing system by the end of the work for the day. Refer to PIMA Technical Bulletin #109 for storage and handling recommendations.

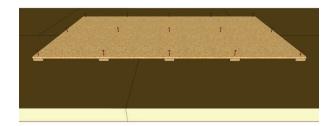
Rmax strongly recommends that the decision to use or not use a vapor retarder in any insulated roofing assembly be guided by the recommendations of the National Roofing Contractors Association (NRCA) in the latest edition of the "NRCA Roofing and Waterproofing Manual."

Designers and installers are referred to Rmax publications "General Notes for Use of Rmax Roofing Insulations in Steep Slope Roofing Applications," for specifics regarding construction applications utilizing Rmax roof insulation products.

**Installation** - The insulation is laid on the roof deck with staggered joints and tightly abutted edges to minimize thermal short circuits. The nailing surface is then installed with the long dimension of the panel perpendicular to the slope of the roof. Stagger all joints from the insulation layer below and leave a 1/8" gap between panels for expansion of the wood nailing surface. Install wood nailers of a thickness equal to the Advantage Vented Nailable Base-3 at all roof eaves and fascia.

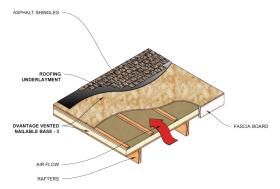
Secure the Advantage Vented Nailable Base-3 to the structural roof deck with Rmax Nail Board Fasteners or other FM listed roofing insulation screws or ring-shank nails of a length at least one-inch longer than the composite thickness of the total insulation panel system. The fastening pattern for securing the Advantage Vented Nailable Base-3 shall be in vertical rows along each furring strip. There shall be a minimum of 15 fasteners per 4'x8' board, see detail below for spacing requirements. When additional fasteners are required at corners and perimeters or based on roof design, they should always be installed through the furring strips to avoid deflection in the nailing surface. Alternatively, additional blocking can be inserted where

fasteners are to be located provided the ventilation requirements are still being met. NOTE: Rmax does not require the foam insulation component to be fastened separately prior to installing the nailing surface component.



**Multi-Layer Insulation Systems** - The roofing industry has long recognized the advantages of multi-layered insulation systems; e.g. the reduction of thermal losses through insulation joints and thermal bridging, reduced moisture migration into the roof system and less movement in the system thereby reducing mechanical stress on the membrane. Rmax recommends two layers of insulation whenever the total insulation requirement exceeds 3.0". Multi-Layer systems utilize Multi-Max FA-3 as the bottom layer prior to installing the Advantage Vented Nailable Base. Joints should be offset between the insulation layers as well as between the insulation and a cover board.

Shingles/Tiles/Shakes/Metal Panels - Specify and install Advantage Vented Nailable Base-3 over a structural roof deck. Refer to cover manufacturer for specific approvals and slope requirements. Follow recommendations of the cover supplier for application of underlayment felts and other details as required.



## **LIMITATIONS**

Advantage Vented Nailable Base-3 is not recommended nor warranted for use in inverted or protected roofing membrane systems (IRMA). Advantage Vented Nailable Base-3 is not a structural panel.

#### **WARNING**

DO NOT leave Advantage Vented Nailable Base-3 exposed. Polyiso foam is an organic material which will burn when exposed to an ignition source of sufficient heat and intensity and may contribute to flames spreading.

#### **WARRANTY**

See Rmax "Sales Policy" for warranty conditions. Rmax does not assume any responsibility or liability for the performance of any products other than those manufactured by Rmax. NOTE: All Rmax products must be tarped, placed on skids and kept dry before and throughout construction.



# **Improving Your Design.**

For warranties, limitations and conditions refer to Rmax Sales Policy and applicable warranties. All documents are located at <a href="www.rmax.com">www.rmax.com</a>. For technical and sales support, email <a href="max@rmax.com">rmax@rmax.com</a> or call (800) 527-0890.

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