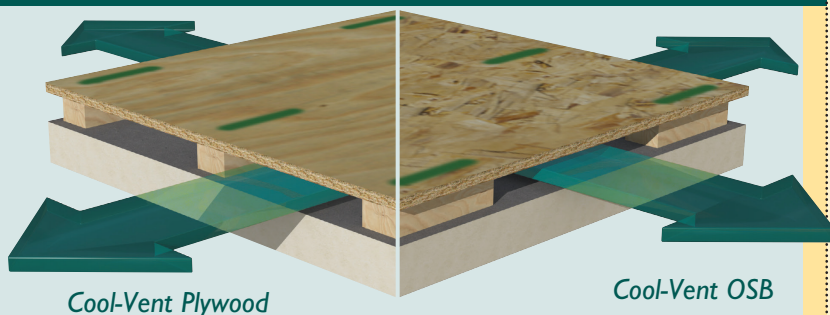


Cool-Vent Ventilated Nailbase Polyisocyanurate Insulation Panel



PRODUCT DESCRIPTION

Cool-Vent is a venting composite insulation board that consists of a 4'x8' panel of rigid polyiso, a middle layer of solid wood spacers, creating a standard 1" air space and a top layer of APA/TECO rated OSB or plywood. Cool-Vent is the environmentally intelligent choice for steep slope roofing applications and is viable in green and sustainable building designs.

FEATURES AND BENEFITS

- Manufactured with NexGen Chemistry: Contains no CFCs, HCFCs, is Zero ODP, EPA Compliant and has virtually no GWP
- 75% lateral air movement
- Optimal cooling and ventilation through 92% open air space
- The edges of the wood panels are rabbeted to provide for expansion and contraction of the wood while allowing the foam edges to be installed tightly to achieve thermal integrity across the entire roof deck
- Wood spacers less than 12" apart; minimizes deflection
- Design flexibility: 1.5" and 2" wood spacers available for increased air flow (when eave ridge distance is over 28 feet)
- Exceeds requirements of ARMA Tech Bulletin 211-RR-24 regarding minimum depth of air space
- When Cool-Vent is manufactured with H-Shield F it performs as a radiant barrier.

PANEL CHARACTERISTICS

- Available in two grades of compressive strengths per ASTM C1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- Also available in ASTM C1289 Type II, Class 2 (H-Shield CG), Grade 2 and ASTM C1289 Type I, Class 1 (H-Shield F), Grade 2
- Available in 4' x 8' (1220mm x 2440mm) panels in overall thicknesses of 2.5" (64mm) to 5.0" (127mm)
- Available with FSC® Certified OSB or plywood (special order)
- When FSC wood is specified, Cool-Vent is manufactured with H-Shield CG and FSC Wood blocks.
- Multiple Substrate Types Available:

OSB: . 7/16" or 3/8"
Plywood: . 5/8" or 3/4" CDX · Fire-Treated

APPLICATIONS

Cool-Vent is custom built to incorporate the individual specifications of the building designer. Cool-Vent is for use on slopes of 3:12 or greater (for lower slope considerations see H-Shield NB).

Applicable construction types include:

- Non-insulated Cathedral and Vaulted Ceilings
- Exposed ceiling designs beneath steel, wood, tongue & groove deck types in commercial and residential constructions
- Log Home applications
- Post & Beam constructions

Acceptable Roof Coverings:

- Shingles (Architectural and/or Dimensional recommended)
- Slate (Natural and Synthetic)
- Tile
- Metal Roof Systems

COOL-VENT THERMAL VALUES

THICKNESS [†] (INCHES)	(MM)	MINIMUM R-VALUE*	FLUTE SPANABILITY
2.5"	64	5.7	2 5/8"
3.0"	76	8.6	4 3/8"
3.3"	84	10.3	4 3/8"
3.5"	89	11.4	4 3/8"
4.0"	102	14.4	4 3/8"
4.5"	114	17.4	4 3/8"
5.0"	127	20.5	4 3/8"

*NEW Long Term Thermal Resistance Values are based on ASTM C 1289, effective 1/1/2014, which provides updated 15 year time weighted averages.

†Thickness is calculated with 7/16" OSB and 1" airspace.
 For other dimensions contact Hunter Panels.

When Cool-Vent with a foam thickness greater than 3.5" is specified, Hunter Panels recommends the installation of a two layer system with staggered joints.

UPDATED July 2014

Codes and Compliances

- ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- International Building Code (IBC) Chapter 26
- State of Florida Product Approval Number FL 5968
- Miami Dade County Product Control Approved

Underwriters Laboratories Inc Classifications

- TGDY. R20624 Shingle Deck Accessory; Cool-Vent roof insulation is classified for use with any Class A, B, or C asphalt organic shingles, metal or tile roof coverings.
- UL 1256
- Insulated Metal Deck Construction Assemblies – No. 120, 123
- UL 790
- UL 263 Hourly Rated P Series Roof Assemblies

UL Classified for use in Canada

- Refer to UL Directory of Products Certified for Canada for more details

Factory Mutual Approvals

- FM 4450, FM 4470

LEED Potential Credits for Polyiso Use (PRE LEED V4)

For current LEED V4 contribution information go to www.PIMA.org or www.hpanels.com

Energy and Atmosphere

- Optimize Energy Performance · Measurement & Verification

Materials & Resources

- Material Reuse · Construction Waste Management
- Recycled Content · Local and Regional Materials
- Certified Wood

Innovation and Design



TYPICAL PHYSICAL PROPERTY DATA CHART PER ASTM C 1289 POLYISO FOAM CORE ONLY

PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D 1621	20 psi* (138kPa, Grade 2)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E 96	< 1 perm (57.5ng/(Pa•s•m ²))
Water Absorption	ASTM C 209	< 1% volume
Service Temperature		-100° to 250° F (-73°C to 122°C)

*Also available in 25 psi, Grade 3

INSTALLATION

- Install Cool-Vent only over fully supported structural decking
- **Cool-Vent is NOT a structural panel**
- Cool-Vent must be applied perpendicular to the flutes in steel deck applications
- The use of 15# and 30# roofing felt is not recommended under asphalt shingles when using Hunter Panels Cool-Vent product
- Install Cool-Vent on slopes 3:12 or greater

NOTE: When installing Cool-Vent over an acoustical deck, check local codes for fire ratings. The use of a 5/8" minimum gypsum fire barrier may be required.

The Use of Synthetic Underlayments

The use of synthetic underlayments is becoming an industry norm (for steep slope application). Hunter Panels strongly suggests the use of a synthetic underlayment under asphalt shingles unless otherwise specified by the shingle manufacturer. Synthetic underlayments provide excellent water resistance and absorb no moisture.

Vapor Retarders

The incorporation of a vapor barrier or retarder within the roofing assembly is highly recommended when the project is located in Zones 4 - 8 as determined by the International Code Council Dept. of Energy NW National Lab of the United States (map located at www.polyiso.org). Consult a licensed design professional, architect or engineer to establish whether or not a vapor barrier is necessary and to specify its type and location within the system. This is especially important during the construction phase when excessive moisture drive is present. Hunter Panels recommends that a dew point calculation be performed prior to the installation of any product. This calculation is based on the buildings interior relative humidity, interior temperature conditions and outside temperature. Excessive moisture migration and temperature fluctuations during construction will potentially damage the system and cause unwanted condensation and aesthetic anomalies.

When Cool-Vent with a foam thickness greater than 3.5" is specified, Hunter Panels recommends the installation of a two layer system with staggered joints.

WARNINGS AND LIMITATIONS

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof covering material. Hunter Panels will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. For more information refer to the Storage and Handling Technical Bulletin at www.hpanels.com, or refer to PIMA Technical Bulletin No. 109: *Storage & Handling Recommendations for Polyiso Roof Insulation* at www.polyiso.org.

Definition of NFA/LF

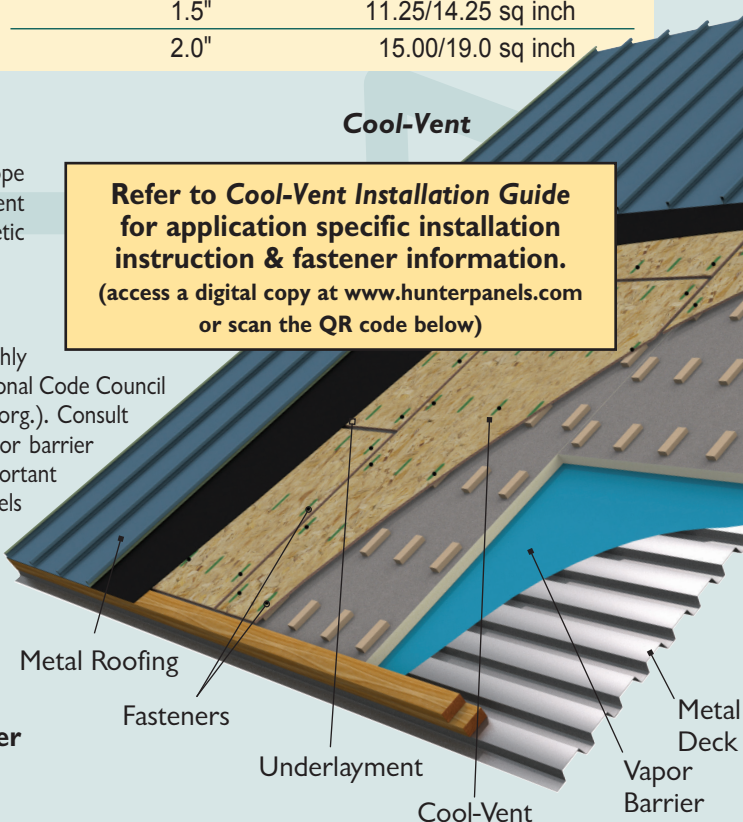
The Net Free Area of Ventilation Per Linear Foot is derived by multiplying the air space in inches by the length in inches of the Cool-Vent panel. The area of the wood spaces is then subtracted and the difference is divided by 4 or 8.

AIRSPACE DIMENSION	NFA/LF
1.0"	7.5/9.5 sq inch
1.5"	11.25/14.25 sq inch
2.0"	15.00/19.0 sq inch

Cool-Vent

Refer to Cool-Vent Installation Guide for application specific installation instruction & fastener information.

(access a digital copy at www.hunterpanels.com or scan the QR code below)



Scan to access online Installation Guide

HUNTER
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