ACFoam® CrossVent® NH

Nailable Cross Ventilated Roof Insulation

PRODUCT DATA SHEET

DESCRIPTION

ACFoam® CrossVent® NH is a 4ft×8ft non-structural, thermally efficient, above-deck, cross ventilated, nailable roof insulation panel that is manufactured in accordance with ASTM C1289, Type V.

ACFoam CrossVent NH is offered in a variety of composite configurations providing long-term thermal resistance (LTTR) values and consists of three components:

- ACFoam-II NH or ACFoam-III NH polyiso insulation
- 1.0″, 1.5″, or 2.0″ airspace provided by Atlas Integrity EPS vent strips
- Nailable surface of APA/TECO rated OSB or CDX plywood

APPLICATIONS

Approved for use as a non-structural panel in new and re-roofing applications. ACFoam CrossVent NH is approved for installation over wood and steel roof decks with a minimum 3:12 pitch. Please reference the Atlas Nailable Insulation Guide for approved deck types and fastening requirements. Typical roof systems include asphalt shingles, standing seam metal, tile, and slate. ACFoam CrossVent NH is not approved for either vertical or adhered applications. The architect, engineer, or design professional is responsible for determining the need for and location of an air/vapor retarder.

INSTALLATION

Atlas requires mechanical attachment of Atlas ACFoam CrossVent NH with Atlas Nail Base Fasteners to approved structural roof decks. ACFoam CrossVent NH shall be kept dry before, during and after installation. Refer to product packaging, Atlas Technical Bulletin #12, and PIMA Technical Bulletin #109 for storage and handling recommendations. To minimize the effect of thermal bridging, and the impact of moisture/airflow into the roof system, Atlas strongly recommends ACFoam CrossVent NH be installed in multiple layers using a base layer(s) of ACFoam roof insulation below the ACFoam CrossVent NH composite panel and through-fastened with Atlas Nail Base Fasteners. Please refer to our website for more information.

Prior to installation, Atlas recommends, as applicable, you consult with your local building code official(s), contract documents, design professional, and all other relevant parties to ensure appropriate compliance.

PHYSICAL PROPERTIES

ACFOAM CROSSVENT NH BASE MEETS OR EXCEEDS THE FOLLOWING PHYSICAL PROPERTIES (POLYISO ONLY)

PROPERTY	TEST METHOD	ASTM C1289 OR CAN/ULC 704.1 (MIN REQUIREMENTS)
DIMENSIONAL STABILITY (LENGTH AND WIDTH)	ASTM D2126	<2%
COMPRESSIVE STRENGTH	ASTM D1621	20 psi (140 kPa) or 25 psi (172 kPa)
WATER ABSORPTION	ASTM C209 ASTM C1763 ASTM D2842	<1.5% <1.5% <3.5%
WATER VAPOR TRANSMISSION	ASTM E96	ACFoam-II <1.5 perm (85.5ng/(Pa.s.m2) ACFoam-III <4.0 perm (228.8ng/(Pa.s.m2)
PRODUCT DENSITY	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m^3)
FLAME SPREAD	ASTM E84/UL723	*40–60
SMOKE DEVELOPMENT	ASTM E84/UL723	*50–170
TENSILE STRENGTH	ASTM D1623	>730 psf (35 kPa)
SERVICE TEMPERATURE	–	-100° to +250°F

*Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤75 and smoke development ≤450 meet code requirements for foam plastic roof insulation. Physical properties listed above are presented as typical average values as determined by referenced ASTM test methods and are subject to nominal manufacturing variations.

ADVANTAGES

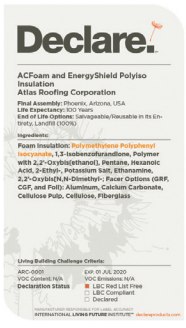
Five 4.0″ wide (24″ o.c.) Atlas EPS vent strips per panel, each yielding a 6,000 psf minimum compressive resistance and continuous support for Atlas Nail Base Fasteners which allows flexibility for compliance with job-specific fastening densities required by the International Building Code (IBC). Available with three airspace options to comply with applicable Net Free Area (NFA) designs and shingle manufacturers warranty requirements:

- 1.0″ air space = NFA/LF 9.5 sq. in.
- 1.5″ air space = NFA/LF 14.25 sq. in.
- 2.0″ air space = NFA/LF 19.0 sq. in.

Also available as a special order product with FSC® Certified nailable surface or Fire-Treated CDX.

CODE COMPLIANCE

- **ASTM C1289 Type V**
- **UL 1256 Classification** Construction No. 120, 123 & 458
- **UL 790 (ASTM E108)** For use with Class A, B or C Shingles, Metal or Tile Roof Coverings
- **UL 263 (ASTM E119)** Fire Resistance Classification
- **FM 4450/4470** Approved (1-90, 1-105) Approved for Class 1 Insulated Roof Deck Construction. Refer to FM Approvals® RoofNav for Specific System Details
- **IBC Chapter 26 & NBC** Sections on Foam Insulation
- **California State Thermal Insulation Directory,** T 1231
- **Miami-Dade,** NOA No. 17-1211.05
- **Florida Product Approval,** No. FL17989
- **APA/TECO** Rated OSB Nailing Surface
- **U.S. Voluntary Product Standard** PS 2 Compliant
- **Living Building Challenge Red List Free,** with Declare Label and Product Database Listing



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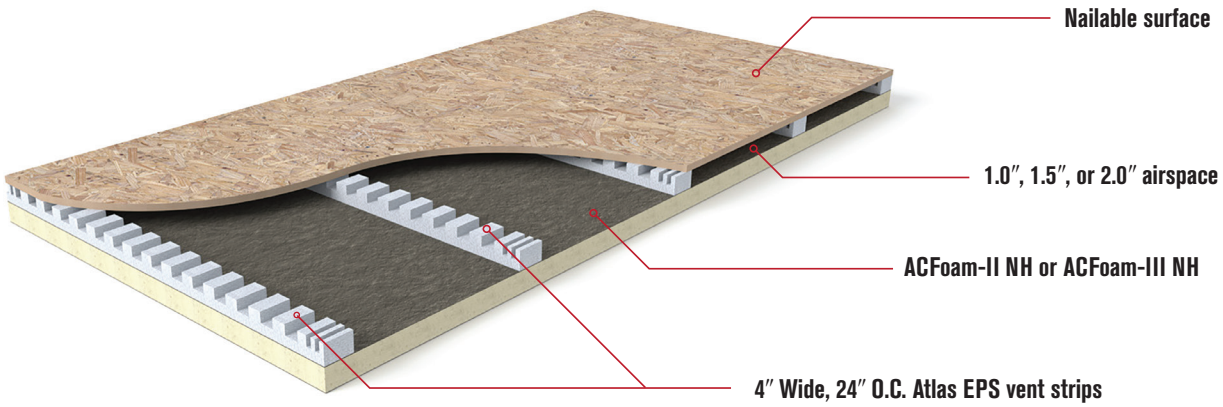
THERMAL DATA

[1]COMPOSITE THICKNESS	2.5″/64mm	3.0″/76mm	3.5″/89mm	4.0″/102mm	4.5″/114mm	5.0″/127mm	5.5″/140mm	6.0″/152mm	6.5″/165mm
1.0″ AIR SPACE: [2]LTTR VALUE [3](RSI) (NFA/LF=9.5 SQ. IN.)	5.7 (1.00)	8.6 (1.50)	11.4 (2.01)	14.4 (2.54)	17.4 (3.06)	20.5 (3.60)	23.6 (4.15)	–	–
1.5″ AIR SPACE: [2]LTTR VALUE [3](RSI) (NFA/LF=14.25 SQ. IN.)	–	5.7 (1.00)	8.6 (1.50)	11.4 (2.01)	14.4 (2.54)	17.4 (3.06)	20.5 (3.60)	23.6 (4.15)	–
2.0″ AIR SPACE: [2]LTTR VALUE [3](RSI) (NFA/LF=19.0 SQ. IN.)	–	–	5.7 (1.00)	8.6 (1.50)	11.4 (2.01)	14.4 (2.54)	17.4 (3.06)	20.5 (3.60)	23.6 (4.15)

[1]Composite thickness includes wood layer, vent spacer strips and ACFoam-II polyiso insulation board.
[2]LTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-770-09. Test samples were third-party selected and tested by an accredited material testing laboratory. Thermal resistance of unsealed air space does not apply. Only LTTR of ACFoam is reported.
[3]RSI is the metric expression of R-value (m2 • K/W).
**To minimize the effects of thermal bridging, Atlas strongly recommends the ACFoam CrossVent NH assembly be installed in multiple layers using a base layer(s) of ACFoam roof insulation below the ACFoam CrossVent NH composite panel and through-fastened with Atlas Nail Base Fasteners.*

NAILABLE SURFACE OPTIONS	AVAILABLE THICKNESSES		
OSB	7/16″	5/8″	3/4″
CDX	19/32″	5/8″	3/4″
FRT CDX (SPECIAL ORDER)	19/32″	5/8″	3/4″
FSC CERTIFIED OSB (SPECIAL ORDER)	7/16″	5/8″	3/4″
FSC CERTIFIED CDX (SPECIAL ORDER)	19/32″	5/8″	3/4″

FOR A COMPLETE LIST OF PRODUCT SIZES, REFERENCE ACFOAM PACKAGE AND LOADING GUIDE.



WARRANTY

ACFoam CrossVent NH is backed by a Limited 20-Year Thermal Warranty. For complete terms and conditions, visit our website.

Other than the aforementioned representations and descriptions, Atlas Roofing Corporation (hereafter, "Seller") makes no other representations or warranties as to the insulation sold herein. The Seller disclaims all other warranties, express or implied, including the warranty of merchantability and the warranty of fitness for a particular purpose. Seller does, however, have a limited warranty as to the LTTR-Value of the insulation, the terms of which are available upon request from the Seller. Seller shall not be liable for any incidental or consequential damages including but not limited to the cost of installation, removal, repair or replacement of this product. Buyer's remedies shall be limited exclusively to, at Seller's option, the repayment of the purchase price or resupply of product manufactured by Atlas in a quantity equal to that of the nonconforming product. Atlas distributors, agents, salespersons or other independent representatives have no authority to waive or alter the above limitation of liability and remedies.