ACFoam® CrossVent®

Nailable Cross Ventilated Roof Insulation

DESCRIPTION: Thermally efficient cross ventilated non-structural composite insulation. Consisting of ACFoam®-II or ACFoam®-III polyisocyanurate (polyiso) insulation board and a min. 7/16" APA/TECO rated OSB or min. 19/32" CDX plywood separated with and bonded to 5 individual 1.0", 1.5" or 2.0" vent spacer strips. ACFoam® CrossVent® is offered in a variety of composite thicknesses, providing long-term thermal resistance (LTTR) values from 5.7 to 23.6. Made to order in 4ft x 8ft (1220mm x 2440mm) panels with a nominal thickness of 2.5" to 6.5". Manufactured in accordance with **ASTM C1289, Type V.**

ADVANTAGES: ACFoam® CrossVent® combines the performance of a cross-ventilating air space, nailable roof substrate and thermally efficient polyiso insulation. Integrity™ EPS Vent Spacers yield a 6000 psf minimum compressive resistance as well as continuous Atlas Nail Base Fastener support across the 4' dimension. Available as a special order product with FSC® Certified, Fire-Treated, Preservative-Treated and Radiant Barrier OSB or CDX. ACFoam® CrossVent® is manufactured using CFC-, HCFC- and HFC-free foam blowing technology with zero ozone depletion potential (ODP) and virtually no (negligible) global warming potential (GWP). ACFoam® CrossVent contains between 52.9% and 28.9% recycled materials by weight *(Atlas Technical Bulletin: TB-2)*.

APPLICATION: Approved for use as a non-structural panel in new and re-roofing applications. ACFoam® CrossVent® is typically installed over sloped solid-wood and metal roof decks. Deck slope must be appropriate for the type of roof system specified. Typical roof systems include asphalt shingles, standing seam metal, tile and slate. ACFoam® CrossVent® is not designed or approved for vertical application. The architect, engineer or design professional is responsible for determining the need for and location of a vapor/air retarder.

INSTALLATION: **Atlas requires mechanical attachment of Atlas ACFoam® CrossVent® with Atlas Nail Base Fasteners to approved structural roof decks.** ACFoam® CrossVent® shall be kept dry before, during and after installation. This product will burn if exposed to an ignition source of sufficient heat and intensity. Do not apply flame directly to ACFoam® CrossVent® insulation. Refer to product packaging and *PIMA Technical Bulletin #109* for storage and handling recommendations. Suitable for multi-layer assemblies when installed over Atlas ACFoam®-II or -III and through-fastened with Atlas Nail Base Fasteners. Refer to *Nailable Insulation Guide* for fastening guidelines and installation recommendations.

Prior to installation, Atlas Roofing Corporation recommends that you consult your local building codes, contract documents, professional engineer, FM Global, Miami-Dade County and membrane manufacturer for additional installation guidelines as well as design enhancements.

NET FREE AREA PER LINEAR FOOT

AIR SPACE DIMENSIONS	1.0"	1.5"	2.0"
NET FREE AREA (NFA/LF)	9.50 sq. inch	14.25 sq. inch	19.00 sq. inch

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULTS
DIMENSIONAL STABILITY	ASTM D2126	< 2%
COMPRESSIVE STRENGTH	ASTM D1621	20 psi (140 kPa) or 25 psi (172 kPa)
WATER ABSORPTION	ASTM C209 & D2842	< 1.0%, < 3.5%
WATER VAPOR TRANSMISSION	ASTM E96	< 1.0 perm (57.5ng/ (Pa•s•m²))
PRODUCT DENSITY	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m³)
FLAME SPREAD	ASTM E84 (10 min.)	[1]40-60
SMOKE DEVELOPMENT	ASTM E84 (10 min.)	[1]50-170
TENSILE STRENGTH	ASTM D1623	> 730 psf (35 kPa)
SERVICE TEMPERATURE	-	-100° to +250°F

[1]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. Codes exempt foam plastic insulation when used in FM 4450 or UL 1256. Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

THERMAL DATA

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

[2]LTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-S770-09. 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 (m^2 • K/W). [4]Composite thickness includes wood layer, vent spacer strips and ACFoam®-II polyiso insulation board.

** To minimize the effects of thermal bridging, Atlas strongly recommends the use of multiple layers when the total desired or specified R-value requires an insulation thickness greater than 2.7" thick.*

- **ASTM C1289, Type V**
- **UL Standard 1256 Classification** Construction No. 120, 123 & 458
- **UL Standard 790 (ASTM E108)** For use with Class A, B or C Shingles, Metal or Tile Roof Coverings
- **UL Standard 263 (ASTM E119)** Fire Resistance Classification
- **FM Standard 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** Insulation Quality Standards and Title 25 Foam Flammability Criteria (License #T 1231)
- **Miami-Dade County Approved** (19/32" CDX Plywood)
- **State of Florida Product Approval** (FL17989)
- **APA/TECO** Rated OSB Nailing Surface
- **FHA** min. Property & **ARMA** Insulated Deck Requirements