ACFoam®-II NH
GRF Roof Insulation

PRODUCT DATA SHEET

DESCRIPTION

Available in both flat and tapered panels. Closed-cell polyisocyanurate (polyiso) foam core integrally bonded to non-asphaltic, fiber-reinforced, organic felt facers (GRF) on both sides. ACFoam®-II NH is offered in a variety of thicknesses (including tapered insulation), providing long-term thermal resistance (LTTR) values from 5.7 (4.3 for tapered) to 26.8. Flat ACFoam-II NH is available in 4ft x 8ft (1220mm x 2440mm) and 4ft x 4ft (1220mm x 1220mm) panels. Tapered ACFoam-II NH is available in 4ft x 4ft (1220mm x 1220mm) panels. Manufactured in accordance with **ASTM C1289, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi) and CAN/ULC 704.1, Type 2, Class 2 or Type 3, Class 2.**

APPLICATIONS

Manufactured and tested for use in new and re-roofing applications. ACFoam-II NH roof insulation shall be installed over the roof deck. ACFoam-II NH is used in built-up (BUR), modified bitumen, standing seam metal, ballasted single-ply, mechanically attached single-ply and adhered single-ply roofing systems. These roofing systems depend on proper installation for successful performance. Refer to roof cover manufacturer, FM Approvals® RoofNav and UL Product iQ® for additional application details.

INSTALLATION

ACFoam-II NH 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-II NH insulation. 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 the ACFoam-II NH insulation be installed in multiple layers. Please refer to our website for more information. Typical field fastening requirements can be obtained from roof cover manufacturer and/or, FM Approvals Roof Nav, or FM Global Property Loss Prevention Data Sheet 1-29.

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.

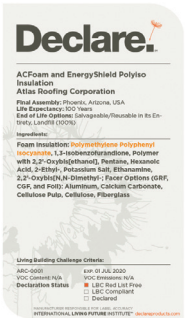
PHYSICAL PROPERTIES

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	<1.5 perm (85.5ng/(Pa▪s▪m²))
PRODUCT DENSITY	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m³)
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.

CODE COMPLIANCE

- **ASTM C1289 Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi)**
- **CAN/ULC 704.1, Type 2, Class 2 or Type 3, Class 2**
- **CCMC No. 12464-L**
- **UL Certified for Canada –** Insulated Roof Deck Assemblies Construction No. C38 and 52. Meet CAN/ ULC-S126, CAN/ULC-S101 and CAN/ULC-S107
- **UL 1256 Classification** Construction No. 120, 123 & 292
- **UL 790 (ASTM E108)** Roofing Systems Classification
- **UL 263 (ASTM E119)** Fire Resistance Classification
- **FM 4450/4470** 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
- **GREENGUARD GOLD Certified**
- **Living Building Challenge Red List Free,** with Declare Label and Product Database Listing



FLAT GRF ROOF INSULATION

THICKNESS	THERMAL RESISTANCE		PIECES PER UNIT	SQUARE FEET PER UNIT		TRUCKLOAD QUANTITIES (SQUARES)	AVERAGE WEIGHT (LB/SF)	RECYCLED CONTENT		
	AVERAGE [1]LTTR VALUE	[2]RSI		4×8	4×4			POST CONSUMER	PRE CONSUMER	TOTAL
1.0″	5.7	1.00	48	1536	768	368.64	0.245	33.7%	19.2%	52.9%
1.5″	8.6	1.50	32	1024	512	245.76	0.313	26.4%	18.2%	44.6%
2.0″	11.4	2.01	24	768	384	184.32	0.380	21.7%	17.5%	39.2%
2.5″	14.4	2.53	19	608	304	145.92	0.448	18.4%	17.1%	35.5%
3.0″	17.4	3.06	16	512	256	122.88	0.515	16.0%	16.7%	32.7%
3.5″	20.5	3.60	13	416	208	99.84	0.583	14.2%	16.5%	30.6%
4.0″	23.6	4.15	12	384	192	92.16	0.650	12.7%	16.3%	28.9%

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

TAPERED GRF ROOF INSULATION

SLOPE	LABEL	THICKNESS			THERMAL RESISTANCE		BOARD FT PER PIECE	PIECES PER UNIT	BOARD FT PER UNIT	SQUARE FT PER UNIT	WEIGHT (LB/SF)	RECYCLED CONTENT		
		MINIMUM	MAXIMUM	AVERAGE	AVERAGE [1]LTTR VALUE	[2]RSI						POST CONSUMER	PRE CONSUMER	TOTAL
1/8″	AA	0.5″	1.0″	0.75″	4.3	0.76	12	64	768	1024	0.211	39.1%	20.0%	59.0%
1/8″	A	1.0″	1.5″	1.25″	7.1	1.25	20	38	760	608	0.279	29.6%	18.6%	48.2%
1/8″	B	1.5″	2.0″	1.75″	10.0	1.76	28	26	728	416	0.346	23.8%	17.8%	41.6%
1/8″	C	2.0″	2.5″	2.25″	12.9	2.27	36	20	720	320	0.414	19.9%	17.3%	37.2%
1/4″	X	0.5″	1.5″	1.0″	5.7	1.00	16	48	768	768	0.245	33.7%	19.2%	52.9%
1/4″	Y	1.5″	2.5″	2.0″	11.4	2.01	32	24	768	384	0.380	21.7%	17.5%	39.2%
1/2″	Q	0.5″	2.5″	1.5″	8.6	1.51	24	32	768	512	0.313	26.4%	18.2%	44.6%

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

[1]LTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-770. Test samples were third-party selected and tested by an accredited material testing laboratory.
[2]RSI is the metric expression of R-value (m2 • K/W).
**To minimize the effects of thermal bridging, and the impact of moisture/airflow into the roof system, Atlas strongly recommends the ACFoam-II NH insulation be installed in multiple layers.*

WARRANTY

ACFoam-II 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.

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