ACFoam® Supreme NH

Foil Faced Roof Insulation

DESCRIPTION: Closed-cell non-halogenated polyisocyanurate (polyiso) foam core integrally bonded to reflective tri-laminate foil facers. ACFoam® Supreme NH is offered in a variety of thicknesses, providing long-term thermal resistance (LTTR) values from 5.7 to 26.8. Available in 4ft×8ft (1220mm×2440mm) and 4ft×4ft (1220mm×1220mm) panels. Manufactured in accordance with **ASTM C1289, Type I, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi) and CAN/ULC-S704 Type 2, Class 1 or Type 3, Class 1.**

ADVANTAGES: Reinforced foil facers provide increased dimensional stability as well as decreased potential for water absorption and water vapor transmission. ACFoam® Supreme NH 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). Not designed as a substitute for a vapor/air retarder. ACFoam® Supreme NH contains between 13.7% and 11.5% recycled materials by weight *(Atlas Technical Bulletin: TB-2)*.

APPLICATION: Manufactured and tested for use in new and re-roofing applications. ACFoam® Supreme NH roof insulation shall be installed over the roof deck. ACFoam® Supreme NH is typically specified for cold storage and metal building applications. Used in metal roof systems as well as mechanically attached and ballasted single-ply membrane systems. Refer to FM Approvals® RoofNav and UL Online Certifications Directory for additional application details. Should not be used in hot asphalt, torch applied or adhered systems.

INSTALLATION: ACFoam® Supreme 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® Supreme NH insulation. Refer to product packaging and *PIMA Technical Bulletin #109* for storage and handling recommendations. **An offset or staggered multi-layer application of ACFoam® is strongly recommended when the total insulation thickness exceeds 2.7"** *(Atlas Technical Bulletin: TB-5)*. Typical field fastening requirements can be obtained from membrane system manufacturer or FM Global Property Loss Prevention Data Sheets 1-29.

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.

ACFOAM SUPREME NH MEETS OR EXCEEDS THE FOLLOWING PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ASTM C1289 OR CAN/ULC S704 MINIMUM REQUIREMENTS
DIMENSIONAL STABILITY	ASTM D2126	< 2%
COMPRESSIVE STRENGTH	ASTM D1621	20 psi (140 kPa) or 25 psi (172 kPa)
WATER ABSORPTION	ASTM C209 & D2842	< 0.5%, ≤ 3.5%
WATER VAPOR TRANSMISSION	ASTM E96	< 0.3 perm (17.2ng/ (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

[2]LTTR VALUE	THICKNESS		[3]RSI	FLUTE SPANABILITY	
	in	mm		in	mm
5.7	1.0	25.4	1.00	2.625	66.68
8.6	1.5	38.1	1.50	4.375	111.13
11.4	2.0	50.8	2.01	4.375	111.13
14.4	2.5	63.5	2.53	4.375	111.13
17.4	*3.0	76.2	3.06	4.375	111.13
20.5	*3.5	88.9	3.60	4.375	111.13
23.6	*4.0	101.6	4.15	4.375	111.13

CAN/ULC-S770-09 does not apply to impermeably-faced foam plastic insulation. Atlas has chosen to establish an [2]LTTR value for ACFoam® Supreme based on LTTR test experience with permeably-faced products. [3]RSI is the metric expression of R-value (m² • K/W).

**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 I, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi)**
- **UL Standard 790 (ASTM E108)** Roofing Systems Classification
- **FM Standard 4450/4470 Approved** Refer to FM Approvals® RoofNav for Specific System Details
- **IBC Chapter 26 & NBC** Sections on Foam Insulation
- **Living Building Challenge Red List Free, with Declare label and Product Database Listing**

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