

# ACFoam®-HD CoverBoard

## High Density Roof Coverboard Insulation

**DESCRIPTION:** Closed-cell polyisocyanurate (polyiso) foam core integrally bonded to inorganic ACFoam®-III coated glass facers. Available in 0.5" thick 4ft x 8ft (1220mm x 2440mm) and 0.5" thick 4ft x 4ft (1220mm x 1220mm) panels. Manufactured in accordance with **ASTM C1289. Type II.** Class 4. Grade 1 (80 psi (551 kPa) minimum, up to 110 psi (758 kPa) compressive strength).

**ADVANTAGES:** Developed with coated glass facers and a *high density* polyiso foam core. ACFoam®-HD CoverBoard offers increased dimensional stability and roof system protection in a lightweight and easy to handle rigid polyiso construction. When using ACFoam®-HD CoverBoard in adhered systems, field testing has confirmed significantly more efficient use of solvent-based adhesives than with organic faced insulations. Adhesive application rates vary by manufacturer. Check adhesive manufacturer's recommendation for application rates. Manufactured using CFC-, HCFC- and HFC-free foam blowing technology with zero ozone depletion potential (ODP) and virtually no (negligible) global warming potential (GWP). This product has been validated by UL Environment as resistant to mold growth based on independent testing to UL 2824. ACFoam®-HD CoverBoard contains 7.4% recycled materials by weight (Atlas Technical Bulletin: TB-2).

**APPLICATION:** Manufactured and tested for use in new and re-roofing applications. ACFoam®-HD CoverBoard is used in mechanically attached single-ply, fully adhered single-ply, and self-adhered "peel & stick" roofing systems. These roofing systems depend on proper installation for successful performance. Refer to FM Approvals® RoofNay and UL Online Certifications Directory for additional application details and approvals.

**INSTALLATION:** ACFoam®-HD CoverBoard 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®-HD CoverBoard 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.

## PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULTS	
DIMENSIONAL STABILITY	ASTM D2126	< 0.5%	
COMPRESSIVE STRENGTH	ASTM D1621	<sup>2</sup> Grade 1	
WATER ABSORPTION	ASTM C209	< 3.0%	
WATER VAPOR TRANSMISSION	ASTM E96	< 1.5 perm (85.0ng/ (Pa*s*m²))	
FLAME SPREAD	ASTM E84 (10 min.)	<sup>1</sup> 40-60	
SMOKE DEVELOPMENT	ASTM E84 (10 min.)	<sup>1</sup> 50-170	
TENSILE STRENGTH	ASTM D1623	> 2000 psf (95 kPa)	
SERVICE TEMPERATURE	-	-100° to +250°F	

<sup>1</sup>Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤75 and smoke development  $\leq 450$  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.

<sup>2</sup>80 psi (551 kPa) minimum, up to 110 psi (758 kPa)

## THERMAL DATA

THICK	THICKNESS		RMAL	PCS/PKG
in	mm	3R-VALUE	⁴RSI	
0.5	12.7	2.5	0.44	42

<sup>3</sup>Determined by ASTM test method C518 at 75°F mean temperature. <sup>4</sup>RSI is the metric expression of R-value (m<sup>2</sup>•K/W).

## **FASTENING GUIDELINES**

THICKNESS	FM RATING	FIELD FASTENERS Per 4'x8' Board
0.5"	1-75	12
	1-90	16

Tested ratings refer to selected adhered membranes.

## ASTM C1289, Type II, Class 4, Grade 1

- FM Standard 4450/4470 Approved Refer to FM Approvals® RoofNay for Specific System Details
- **UL Certified for Canada**
- **UL Standard 1256 Classification** Construction No. 120, 123 & 292
- **UL Standard 790 (ASTM E108)** Roofing Systems Classification
- UL Standard 263 (ASTM E119) Fire Resistance Classification
- UL 2824 resistant to mold growth as validated by UL Environment
- FM 4473 rated SH-1 for Severe Hail
- UL Class B Over Combustible Decks with UL Classified Membranes
- **IBC Chapter 26 & NBC** Sections on Foam Insulation
- Has acheived GREENGUARD GOLD Certification



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