

Acu-SPF: 2.8

Spray Polyurethane Foam



DESCRIPTION

A sprayed-in-place, nominal 60 psi compressive strength, rigid, HFC-blown, closed-cell spray polyurethane foam (SPF) roofing system. This two-component SPF consists of side-A and side-B. Acu-SPF:2.8 provides an R-value of 6.3 per inch and a continuous insulation without thermal breaks.

USES

Acu-SPF 2.8 roofing systems can be used in most retrofit and new construction roofing applications. This SPF insulation can also be used for exterior tank and vessel insulation applications. It is used as a roofing system in conjunction with roof coatings also available from Energy Seal Coatings. Intended for use by qualified contractors trained in the processing and application of SPF.

FEATURES & BENEFITS

- ✓ Closed-cell SPF provides a fully adhered, sustainable air barrier and thermal insulation
- ✓ Lightweight
- ✓ Easy to maintain
- ✓ Quick installation time
- ✓ Enhances wind uplift resistance
- ✓ Excellent adhesion to most surfaces
- ✓ Self-flashing, seamless application

PRECAUTIONS

In addition to reading and understanding the A and B Components Safety Data Sheet (SDS), all applicators must use appropriate respiratory protection as well as Personal Protective Equipment (PPE) when handling and processing polyurethane chemical systems.

Large masses of SPF should be removed to outside safe area, cut into smaller pieces, and allowed to cool before discarding to prevent heat buildup and potential fire hazard.

SPF is combustible. Heat sources such as welding, cutting, or roofing torches must not be used in contact with or in close proximity to Acu-SPF: 2.8 or any SPF.

Protect A and B Components from moisture contamination. Application should not take place within 5°F (-15°C) of the dew point.

APPROVALS and CERTIFICATIONS

- Meets ASTM C1028-Type III, Standard criteria
- Miami-Dade NOA
 - Florida Product Approval
 - Meets TAS 110 Criteria
 - UL EX R26705 Evaluation Report
 - UL 790 – R26705 Listings
 - UL 790 – R26705 Certified for Canada
 - California BEARHFTI Listed
 - Teaxs Department of Insurance (TDI) Product Evaluatoin
 - FM 4470 Approval

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Manufactured by Advanced Coating Systems, Inc.

energy-seal.com

Seal It. Conserve It. Protect It.

800-587-3758

Acu-SPF 2.8

Technical Data

Property	ASTM	Result
Compressive Strength:	D 1621	50-60 psi
Tensile Strength:	D 1623	65-75 psi
Dimensional Stability (70°C, 97% RH):	D 2126	< 4.0 %
Water Absorption:	C 2842	0.6% vol.
Water Vapor Permeance:	E 96 – A	1.4 perm @ 1 inch
Density (Core):	D 1622	2.7 – 2.8 lbs. /cu. ft.
Thermal Resistance (R-value)	C518	0.158 K (6.3 per inch)
Closed Cell Content:	D 6226	94%
Surface Buring Characteristics:	E 84	40 FSI
Coverage:	2,500 board feet per set.	
Pre-Consumer Recycled Content	2.5%	
Post-Consumer Recycld Content	6.5%	
Manufacturing Location	Cartersville, GA	
Rapidly Renewable Resource	0%	

Temperature parameters for correct reactivity rates:

Acu-SPF 2.8 Reactivates	Recommended Ambient Temperature Range:
VS (Very Slow)	100F - 125°F (38° - 52° C)
S (Slow)	85° - 110° F (29.5° - 43° C)
R (Regular)	65° - 90° F (18° - 32° C)
F (Fast)	45° - 70° F (7° - 21° C)

Application:

Acu-SPF 2.8 roof systems should be processed through commercially available spray equipment designed for that purpose by a qualified professional applicator. It is the responsibility of the professional applicator to thoroughly understand all equipment technical information and safe operating procedures that pertain to the processing and application of plural component polyurethane foam.

All surfaces to be sprayed with Acu-SPF 2.8 should be clean, dry, and free of all oil, grease, dirt and contaminants.

Prior to application of the Acu-SPF 2.8, the substrate should be between 45° – 160°F (7° – 71°C). Service temperatures for any surface to be sprayed with ACU-ACU-SPF 2.8 2.8 should not exceed 180° (82°C). Moisture, such as, rain, fog, frost, dew, or high humidity (>85% R.H.) will adversely affect the Acu-SPF 2.8 formation and physical properties of the finished product. Wind velocities in excess of 15 mph may affect the Acu-SPF 2.8 surface texture, cure, and physical properties, as well as cause possible overspray problems.

A and B Component material heater temperatures should be set according to ambient temperature and substrate conditions. A typical starting range is 110°F (43°C) for the A component and 120°F (49°C) on the B component; hose heat should be set to maintain these temperatures. Set the dynamic fluid pressure to 1,000 to 1,200 psi. Mixing ratio through the Proportioner is 1:1 by volume. 2:1 transfer pump are recommended to provide positive feed from the material to the proportioner. These are recommended initial settings and may vary based on specific equipment and project conditions.

Each “pass” or layer of the Acu-SPF 2.8 should be at least 0.5 inches (13 mm) and no more than 1.5- 2.0 inches (38-51 mm) thick. Allow at least 10 minutes between each pass for cure and cooling. Multiple layers can be applied to reach the desired thickness and insulation value, as well as to facilitate positive drainage.

The surface of the Acu -SPF 2.8 polyurethane foam must be protected from the adverse effects of sunlight (UV), which can cause discoloration and degradation. The protective coating or covering should be applied over the Acu-SPF 2.8 the same day as the Acu-SPF 2.8 is applied, or within 24 hours. A variety of protective coatings designed for use with Acu-SPF 2.8 are available from Energy Seal Coatings.

Liquid Properties and Characteristics

Packaging: A Component is packaged at 551 lbs. (250 kg) per drum
B Component is packaged at 500 lbs. (227 kg) per drum
1,051 lbs. (477kg) per set A & B net

Shelf life: 12 months for A Component when stored in original unopened containers in dry area between 50°F (10°C) and 80°F (26.7°C) 6 months for B Component when stored in original unopened containers in dry area between 50°F (10°C) and 80°F (26.7°C).

Product size/packaging

Container Size	Gross Weight	Class
55-gallon drum (208.2L) –	A Component – 591 lbs. (268 Kg)	55
55-gallon drum (208.2L) –	B Component – 540 lbs. (245 Kg)	55

D.O.T. Classification: Liquid Plastic Material – NOIBN Protect from freezing (>40°F/4.5°C) during shipping and storage

Storage

Protect from freezing (40°F/4.5°C) during shipping and storage.

CAUTION: Do not apply within one hour of sunset, rain, fog or freezing temperatures. All coatings must be completely dry before exposure to water or foot traffic. Keep all containers covered when not in use. Dispose of all containers in accordance with state and local environmental regulations. Keep away from children. If ingested, DO NOT induce vomiting. Call Physician immediately.

Our technical data and suggestions are based on information from laboratory and field testing which we believe to be reliable and correct. However, the accuracy and completeness of said tests are not guaranteed and not to be construed as a warranty, either expressed or implied. Since the use of the material is beyond manufacturer's control, buyer assumes all risk whatsoever as to their use or results obtained. We guarantee our products conform to Advanced Coating Systems, Inc. quality control. Advanced Coating Systems, Inc. warrants only the standard quality of material. Advanced Coating Systems, Inc.'s sole responsibility shall be to replace that portion of our product, which proved to be defective. The installer is responsible to test adhesion and product compatibility with substrate of all Energy Seal Coatings products prior to application.

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