

Energy Seal Coatings

Cool Roof Solutions

Acu-Shield:Ceramic

Elastomeric Ceramic Roof Coating



DESCRIPTION

Acu-Shield:Ceramic is a single component, water-based, 100% acrylic elastomeric coating. It is a ceramic modified roof coating which shows excellent weathering and abrasion resistance. It is ideal for application over a variety of roof substrates.



USES

Acu-Shield:Ceramic dries to form a "rubber-like" protective membrane over asphalt, concrete, EPDM, stucco, wood, tile, capsheet, TPO, PVC and metal roof surfaces. Long term solar reflective index makes it ideal as a 'cool roof' coating.

FEATURES & BENEFITS

- ✓ **SRI:** Initial: 108 - After 3 yrs. 97 (solar reflectance index, ASTM E1980-01)
- ✓ **Solar Reflectance:** Initial 0.86 - After 3 yrs. 0.78
- ✓ **Thermal Emittance:** Initial 0.89 - After 3 yrs. 0.87
- ✓ Reduces daily expansion and contraction (thermal cycling).
- ✓ Contains strong rust inhibitive pigments.
- ✓ Reflects 90% of the infra-red heat and harmful UV rays of the sun.
- ✓ Excellent reflective properties which helps to reduce cooling costs. Prevents premature aging and leaks.
- ✓ Contains a strong mildewcide / fungicide.
- ✓ Excellent adhesion to various substrates.
- ✓ Superior resistance to dirt pick-up, helps stay white longer & maintains reflectivity.
- ✓ Easy to use, easy clean up, non-toxic and VOC compliant water based coating.

PREPARATION

All surfaces to be coated must be clean, dry and free of any oil, grease or dirt. High pressure water washing is recommended. Any existing coating must be checked for good adhesion. Before application, any loosely adhered coating must be removed and bare surfaces must be prepared, cleaned and checked for compatibility.

APPLICATION

Acu-Shield:Ceramic is ready to use. Thinning is not required or recommended.

Spray: Airless sprayer. 3000 p.s.i., 2 g.p.m. capacity with a #631 tip.

Brush: Good quality synthetic bristle brush.

Roller: Long nap roller.



V.O.C.
50 g./lit.

Acu-Shield:Ceramic

Manufactured by Advanced Coating Systems, Inc.

www.energy-seal.com

Seal It. Conserve It. Protect It.

800-587-3758

Acu-Shield: Ceramic

Technical Data

Property	ASTM	Result
Color:		White; custom colors available.
Viscosity:	D 562	115 – 120 KU @ 25°C / 77°F
Density:	D 1475	11.40 ± .1 lb/gal
PH:		> 8.0 ± .5
Tear resistance	D624	80 lb/in ²
Percent Solids by Volume:	D 2697	54% ± 2 %
Percent Solids by Weight:	D 1644	64% ± 2%
Flash Point:		Same as water.
Hardness, Shore A:	D 2240	60 – 80
Tensile Strength at Max Stress:	D 2370	200 lb/in ² @ 22°C / 73°F
% Elongation at Break:	D 2370	145% @ 22°C / 73°F
Flexibility:	D 522	Pass (-5°C)*
Permeability (20 mil dry film)	D 1653	21
Fungi Resistance:	G 21	Zero Growth
Coverage:	2.5 gallons per 100 sq.ft. yields 20 dry mils. 3.5 gallons per 100 sq.ft. yields 30 dry mils. For corrugated metal, add 20% for pitches & ribs.	
Recommended Coverage:	Minimum of two coats. (20 dry mils.)	
Min. Surface Application Temp.:	7.2°C / 45°F. Do not allow to freeze.	
Drying Time estimation:	3 hours @ 25°C / 77°F, 50% relative humidity; to sustain foot traffic.	
Packaging:	5 gallon buckets, 50 gallon drums.	
	* After 1000 hours accelerated weathering.	

 COOL ROOF RATING COUNCIL ®	<u>Initial</u>		<u>Weathered</u>	
	Solar Reflectance		0.86	0.87
	Thermal Emittance		0.89	0.87
	Rated Product ID Number		0002	
	Licensed Seller ID Number		0728	
	Classification		Field-Applied Coating	
	Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.			

CAUTION: Do not apply within one hours of sunset, rain, fog or freezing temperatures. All coatings must be completely dry before exposing 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. sole responsibility shall be to replace that portion of our product, which proved to be defective. Installer is responsible to test adhesion and product compatibility with substrate of all Energy Seal Coatings products prior to application.