



# PRODUCT DATA SHEET

PROD. #281.0

## ROOFSHIELD

### SOLAR-REFLECTIVE 100% ACRYLIC ELASTOMERIC ROOF COATING



#### PRODUCT DESCRIPTION

**Roof Shield Solar-Reflective 100% Acrylic Elastomeric Roof Coating** is a high build 100% acrylic waterproof roof coating formulated for application to various types of roofing surfaces. Its unique low VOC formula is designed to provide unsurpassed quality and performance. The coating's high film elongation and memory make it suitable for all climates and seasonal conditions. It provides excellent weather resistance, waterproofing properties, bridges hairline cracks, has excellent adhesion, and is mildew, algae and fungus resistant. It applies easily to a variety of roof substrates, making this product extremely versatile in its application for flat, sloped and ponding water roofs. **MILDEW RESISTANT** - This paint contains agents which inhibit the growth of mildew on the surface of this paint film.

PRODUCT FEATURES	PRODUCT USES		PERFORMANCE QUALITIES		VOC COMPLIANCE	
<ul style="list-style-type: none"><li>• 100% Acrylic Formula</li><li>• Excellent Coverage</li><li>• Waterproofs</li><li>• Weather Resistant</li><li>• Bridges Hairline Cracking</li><li>• Repairs Cracks &amp; Seams</li><li>• Mildew, Algae &amp; Fungus Resistant</li><li>• Easy To Apply</li></ul>	<i>Suitable for the following properly prepared surfaces;</i> <b>EXTERIOR</b> <div><div>Modified Bitumen</div><div>Hypalon</div></div> <div><div>Asphalt BUR</div><div>Metal Roofs</div></div> <div><div>TPO</div><div>Concrete Roofs</div></div> <div><div>PVC</div><div>Tar &amp; Gravel Roofs</div></div> <div><div>EPDM</div><div>Flat &amp; Sloped Roofs</div></div>		<b>Product Quality:</b>	Professional Best	<b>AIM</b>	Yes
			<b>Product Use:</b>	Exterior	<b>LADCO</b>	Yes
			<b>Application:</b>	Brush, Roller Cover, Airless Spray	<b>OTC I &amp; II</b>	Yes
			<b>Product System:</b>	Water-Based	<b>CARB</b>	Yes
			<b>Finish:</b>	Flat	<b>SCAQMD</b>	Yes
	<b>For Exterior Use Only!</b>					

#### APPROVALS

This roof coating is Florida Building Code Approved and has the following approvals:



#### SURFACE PREPARATION

**General:** The entire surface area should be clean, dry, sound, fully cured and free from dirt, grease, oils, waxes, mildew and any other surface contaminants that may cause paint failure.

- Remove any loose scale, chalked, cracked or peeling paint from previously painted surfaces by hand scraping, sanding, wire brushing, power tool cleaning or pressure washing.
- For exterior surfaces, pressure wash the entire surface area using a unit with a minimum of 1500 – 2000 psi of water pressure. More difficult areas should be hand scraped, sanded, wire brushed and/or power tool cleaned as mentioned above.
- For metal roof surfaces, remove any loose rust, mill scale, rust deposits or white rust from metal surface by the same methods as described above.
- Repair/replace any damaged and/or delaminated surface areas. Previously painted surfaces may need to be primed, depending on the overall condition of the existing coating.
- Sand all rough paint edges smooth to adjacent surface area. Sand all glossy surfaces to effectively dull existing finish.
- All fasteners should be inspected and loose, broken or missing fasteners replaced. All seams, fasteners, curbs and penetrations should be sealed with acrylic mastic patch.
- Prime all bare, new or repaired surfaces with the appropriate Richard's primer.

**CAUTION!** Roof surfaces may be slippery, especially when wet. Avoid walking on the roof when moisture is present. Refer to OSHA Standard #1926.501-Fall Protection, to review safety guidelines for working or walking on all types of roof surfaces.

**Mildew** - Surface areas affected by mildew should be treated with a commercial mildew removal and/or wash product carefully following manufacturer's application and safety directions. Rinse thoroughly with clean water, and allow a minimum of 24 hours to dry thoroughly.

- WARNING!** If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how you can protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-Lead, or log onto [www.epa.gov/lead](http://www.epa.gov/lead).

#### TECHNICAL DATA

- APPLICABLE STANDARDS:** Exceeds ASTM D-6083
- COLORS:** White
- TINTING:** Universal Colorants - (Pastel Colors Only)
- VEHICLE TYPE:** 100% Acrylic
- VISCOSITY:** 60,000 cps
- GLOSS @ 60°:** Flat / 0 – 5 units
- UL FILE NO.:** R14353
- FLASH POINT:** N/A
- FIRE RATING:** Class A – UL 790
- FLAMMABILITY:** Meets Class A Req. ASTM E-108 Applied To Non-Combustible Roof Decks. (SI-40-AC Specs)
- SOLAR REFLECTANCE:** Initial 0.85 (ASTM C-1549)
- VOC:** Not to Exceed 50 g/l – 0.42 lb/gal
- SOLIDS:** By Volume: 52.0% ± 2%  
By Weight: 64.0% ± 2%
- TENSILE STRENGTH @ 73° F:** 275 psi
- ELONGATION AT BREAK - @ 73° F:** 240%
- COVERAGE:** 65 – 80 Sq. Ft. / Gal.  
(Depending on Application & Surface Porosity.)
- MIL FILM:**  
**Wet:** 20.0 – 25.0 mils      **Dry:** 10.4 – 12.8 mils
- WATER VAPOR PERMEABILITY:** 29 Perms  
(@ 20 mils DFT (ASTM D-1653A))
- WATER SWELLING:** 6.0%
- TEAR RESISTANCE (DIE C):** 95 LBF/IN
- FUNGI RESISTANCE RATING:** 0
- DRY TIME:** (@ 70° F & 50% Relative Humidity)  
To Touch: 2 – 4 Hours  
Recoat: 4 – 6 Hours, or after overnight.
- CLEAN UP:** Warm Soapy Water
- THINNING:** Not Recommended

## RECOMMENDED PRIMER COATINGS

Although formulated to be self-priming on properly prepared painted surfaces in good condition, the following Richard's products are recommended primer coatings for this finish coating material. However, recommended Richard's primer coatings are not limited to the products listed below;

- **Unpainted Cement, Slate, Masonry & Barrel Tile Roofs:**
  - 56, Signature Series Waterborne Epoxy Ester Bonding Liquid
  - 1414, Rich Flex Alkali Resistant Acrylic Masonry Primer
- **Painted Cement, Slate, Masonry & Barrel Tile Roofs:**
  - 56, Signature Series Waterborne Epoxy Ester Bonding Liquid
  - 1791, Rich Flex 100% Acrylic Pigmented Multi-Surface Conditioner
  - 1791-C, Rich Flex 100% Acrylic Clear Multi-Surface Conditioner
- **Unpainted Asphalt Shingle & Gravel Roofs:**
  - 56, Signature Series Waterborne Epoxy Ester Bonding Liquid
- **Painted Asphalt Shingle & Gravel Roofs:**
  - 56, Signature Series Waterborne Epoxy Ester Bonding Liquid
- **Unpainted Metal Roofs:**
  - 1015, Rust Shield Red Oxide Metal Primer
  - 1018, Rust Shield Rust Inhibitive Metal Primer
  - 1215/1220, Rust Shield II 100% Acrylic DTM Primers
- **Painted Metal Roofs:**
  - 1791, Rich Flex 100% Acrylic Pigmented Multi-Surface Conditioner
  - 1791-C, Rich Flex 100% Acrylic Clear Multi-Surface Conditioner
- **Travel Trailer & Mobil Home Roofs:**
  - 56, Waterborne Epoxy Ester Masonry Bonding Liquid

## APPLICATION EQUIPMENT

- **Brush Application:** Apply using a quality nylon, polyester, or combination nylon/polyester bristle brush.
- **Roller Application:** Apply using a smooth - medium nap synthetic or lamb's wool roller cover, depending on the texture and surface porosity.
- **Spray Application:**
  - **Pump:** Gas or Electric Airless Sprayer
  - **Pressure:** Unit capable of pumping two (2) gallons per minute.
  - **Tip:** 0.021" – 0.030" Reversible
  - **Hose:** ¼ inch (6.3 mm) - ¾ inch (10 mm)

## PACKAGING & WEIGHT PER GALLON

- **Packaging:** Gallons – 4/case                      5 Gallons - Each
- **Weight per Gallon:** 11.7 lbs.

## CLEAN UP & THINNING INSTRUCTIONS

**Clean Up:** Clean up any minor spills and spatters immediately with warm soapy water, as well as all painting tools and airless equipment. More serious spills should be contained and removed with inert absorbent material. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state and federal regulations.

**Thinning:** Stir thoroughly and apply as it comes from the container. Thinning is not necessary. **DO NOT THIN!**

## WARRANTY & LIMITATIONS

The technical information contained herein is accurate to the best of our knowledge. All warranties are excluded, whether expressed or implied, by operation of law or otherwise, including all implied warranties of merchantability or fitness for a particular purpose. Seller shall not be liable, directly or indirectly, under any circumstances for consequential, incidental, special or any other type of damages arising or resulting for any reason under the sale, handling, or use of goods sold. Seller's liability hereunder, and buyer's exclusive remedy hereunder, for negligence or any other reason, is expressly limited to reimbursement of the purchase price of the materials sold after proof of purchase is provided to the seller. Notice of any alleged failure or defect in the material must be given to the seller in writing by certified U.S. mail within 15 days of noticing the problem. Failure to give the required notice within the time provided constitutes a waiver of any claim. The Manufacturer is not responsible for any misrepresentation made by the Dealer.

REV 05-22

## PRODUCT APPLICATION – General

RoofShield Solar-Reflective 100% Acrylic Elastomeric Roof Coating may be easily applied with a quality brush, roller cover, or airless spray equipment as follows;

- Mechanically mix before using. For best results, apply two (2) finish coats.
- To assure color uniformity, intermix multiple containers of custom tinted or stock colors. Apply a small test area to verify color.
- When applying by brush, apply a smooth and generous coat on smaller surface areas, such as painting trim or cutting-in larger surface areas.
- When applying by roller, apply an even and generous coat in a "W" or crisscross motion, avoiding any excessive respreading or reworking.
- When applying by airless spray equipment, use a unit that has the capacity to pump at least two gallons per minute at no less than 3000 psi with a 0.021" – 0.030" fluid spray tip.
- During spray application, it is recommended to back-roll the surface area to insure proper adhesion and an even coat application.
- If applying two finish coats, allow to dry thoroughly between coats, and apply the second coat in a direction perpendicular to the first coat.
- To assure coating uniformity, always paint to a natural break in the surface, such as a corner or edge. Maintain a wet edge during application by brushing, rolling or spraying into previously applied coating area.
- Do not store above 90° F. Apply when surface and ambient temperatures are above 40° F and rising with less than 90% relative humidity and no threat of rain for 48 hours.
- Surface temperatures should be under 100° F to avoid premature curing. If roof surface is hot, apply a light water spray to reduce its temperature.

## PRODUCT LIMITATIONS

- When applied to areas that retain water (ponding) more than 48 hours, service life will be severely diminished and adhesion failure can be expected.
- Not for use in corrosive or chemical environments.
- Not for use in areas subject to intense heat.
- Not for use on below grade substrates.

## PRECAUTIONARY & SAFETY INFORMATION

**CAUTIONS:** Avoid prolonged contact with skin, and breathing of dust, vapors and/or spray mists. Causes eye irritation. **USE WITH ADEQUATE VENTILATION!** Ensure fresh air entry during application and drying. If you experience eye water, headache or dizziness, or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriately fitted respirator, (NIOSH approved), during and after application. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes, skin and clothing. Use chemical safety glasses, goggles or a face shield for proper eye protection. Wash thoroughly after handling and before eating or smoking. Close container after each use. **DO NOT TAKE INTERNALLY!**

**FIRST AID:** In case of skin contact, wash thoroughly with plenty of warm soapy water. For eye contact, flush with plenty of water for 15 minutes and get medical attention immediately. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. If swallowed, do not induce vomiting, get medical attention immediately.

**KEEP OUT OF REACH OF CHILDREN!**