



# Polarcote FR

## A Highly Reflective, Fire Retardant, Elastomeric Roof Coating

**Composition:** Polarcote FR is an intumescent, fire retardant, styrenated acrylic latex roof coating. Polarcote FR is highly reflective, elastomeric, and asbestos free.

**Basic Uses:** Polarcote FR is used as a final surface coat over smooth asphalt emulsions, flashings, and modified bitumen membranes. Polarcote FR will reflect solar radiation, lower surface temperatures, and reduce roof deterioration. Polarcote FR will provide fire resistance to high sloped POWERply MB roof systems. Polarcote FR will intumesce and form a hard char when exposed to flame. This charred surface significantly reduces the potential for spread of flame across the roof surface.

Polarcote FR has been tested for reflective properties according to the standards of the Cool Roof Rating Council (CRRC) and is listed in the CRRC Rated Products Directory at [www.coolroofs.org/products/results](http://www.coolroofs.org/products/results).

Polarcote FR is an ENERGY STAR® certified roof product. When installed properly, this product will help reduce energy costs. Actual savings will vary based on geographic location and individual building characteristics. Consult the product manufacturer, roof contractor, or call 1-888-STAR-YES (1-888-782-7937) for more information. ENERGY STAR certification is valid for roofing products in the United States, but not in Canada. Natural Resources Canada (NRCAN) has implemented an ENERGY STAR program which currently does not include roofing products.

Refer to UL Roofing Materials and Systems Directory and/or FM Approvals RoofNav for applicable system configurations.

**Limitations:** Surfaces must be clean and free of dirt, dust, and other contaminants. Not intended for use in ponded areas.

Do not apply unless temperatures are at least 45°F

(7°C) and rising. Do not apply if temperatures are expected to drop below 45°F (7°C) within 48 hours of application.

Do not apply to wet surfaces. Do not apply unless the ambient and surface temperatures are at least 5°F above the dew point.

Do not apply when freezing temperatures are expected within 48 hours after application.

Do not apply if rain is expected within 12 hours. If temperatures drop below 60°F (15°C), do not apply if rain is expected within 24 hours.

Store containers at temperatures above 32°F (0°C). Do not allow containers to freeze. Store containers indoors in a heated area.

Do not apply over hot applied asphalt or coal tar pitch flood or glaze coats.

**Packaging:** Polarcote FR is available in 5 gallon (19 liter) containers and 53 gallon (200 liter) plastic lined drums.

**Grade:** Brush/roll/spray.

**Color:** White

**Storage Life:** One year in unopened containers.

### RECOMMENDED APPLICATION EQUIPMENT:

**Airless Spray:** Pneumatic, hydraulic, or electric pump with a minimum 2,000 psi material output pressure. Reversible spray tip with a 0.017" to 0.025" orifice and a 40° to 60° spray fan. Material spray lines must be properly rated for the maximum working pressure of the pump being used.

### APPLICATION DATA:

**Surface Preparation:** All fresh applications of mastics and asphalt coatings require a minimum 30 day cure period prior to application of Polarcote FR. Remove all dirt, dust, and other loose debris from the roof. Area to be coated must be a clean, sound, and dry surface.

Asphalt emulsion surfaces such as Tremlastic SP and must cure for 2 weeks and be lightly primed with Tremco SP Primer at a coverage rate of 200-400 sq ft/gal (4.9-9.8 m<sup>2</sup>/L). Allow primer to fully dry prior to the application of Polarcote FR, 1 hour minimum. Do not overprime.

Product Advantages	
Features	Benefits
Water based	<ul style="list-style-type: none"> <li>Meets VOC regulations</li> <li>Easy cleanup</li> <li>Low odor</li> </ul>
Highly reflective	<ul style="list-style-type: none"> <li>Keeps roof surface temperature down</li> <li>reduces air conditioning loads</li> </ul>



Roofing & Weatherproofing Peace of Mind™

Where Tremlastic SP has weathered for longer than 3 weeks, the surface must be powerwashed prior to priming with Tremco SP Primer.

Where Polarcote FR is part of a Tremco Roof System, refer to project specifications for further information.

**Application:** Mix each container thoroughly prior to application. Two coats are recommended. Apply the second coat after the first coat will support foot traffic without tracking. Avoid foot traffic on final coat for 24 hours.

Drying time will vary based on weather conditions during application. Drying times will be longer under cool temperature, high humidity, and/or overcast conditions. Drying time will improve under sunny or breezy conditions.

For best results, apply the second coat in a direction which is perpendicular to the first coat.

For spray application, take necessary precautions to avoid overspray.

**Coverage Rate:** 100 sq ft/gal (2.5 m<sup>2</sup>/L) per coat. Two coats are recommended.

**Cleanup:** Soap and water.

**Precautions:** Users must read container labels and Material Safety Data Sheets for health and safety precautions prior to use.

**Availability and Cost:** Contact your local Tremco Roofing Representative for pricing and availability. For the name and number of your Representative, call the Roofing Division at 216/292-5000.

**Maintenance:** Your local Tremco Roofing Representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventative maintenance are all part of a sound roof program.


**Guarantee/Warranty:** Tremco, Inc. warrants Polarcote FR to be free of defects and to meet published physical properties when tested according to ASTM and Tremco standards. Under this warranty, any product that is proved to be defective when applied in accordance with our written instructions, and in applications recommended by Tremco as suitable for this product will be replaced with like product at no charge. THIS IS BUYERS SOLE AND EXCLUSIVE REMEDY.

All claims concerning product defects must be made in writing within twelve (12) months of shipment. The absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product. This warranty shall be IN LIEU OF any other warranty, express or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## Physical Performance Characteristics

### Polarcote FR

Property	Typical Value	Test Method
Density @ 77°F (25°C)	12.2 lbs/gal (1.46 kg/L)	ASTM D1475
Reflectance	83% - Initial 66% - 3 Years aged	ASTM C1549
Thermal emittance	0.84 - Initial 0.90 - 3 Years aged	ASTM C1371
SRI - Solar Reflective Index	103 - Initial 80 - 3 Years aged	ASTM E1980
Viscosity @ 77°F (25°C)	15,000 cP (15 Pa-s)	ASTM D2196
Nonvolatile content	67%	ASTM D1644
VOC level	<50 g/L	ASTM D 3960

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance		0.83
Thermal Emittance		0.84	0.90
Rated Product ID		0612-0002	
Licensed Manufacturer ID		0612	
Classification		Production Line	

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.

**Technical Services:** Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the services of the Tremco Technical Service staff.

**Statement of Policy and Responsibility:** Tremco takes responsibility for furnishing quality materials and for providing specifications and recommendations for their proper installation.

As neither Tremco itself nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure or its ability to support a planned installation properly, the Owner should obtain the opinion of competent structural engineers before proceeding. Tremco accepts no liability for any structural failure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.

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