

PS #220

Solvent-based 100% Silicone Elastomeric Roof Coating (FR)

DESCRIPTION


PS #220 is a ready to use, single component, solvent borne, moisture cure fluid applied silicone coating. When cured, PS #220 forms a breathable membrane possessing superior weathering and water resistance characteristics.

USES

Suitable for use on sprayed polyurethane foam, most metal roof systems, concrete, Thermoplastic and Thermoset single-ply membranes (primer may be required). Suitable for use over various conventional BUR and polymer modified roof membranes with smooth and mineral surfacing when primed with KM Epoxy Primer or KM 1P one-part acrylic primer/bleed blocker. Contact KM Coatings Technical Services for clarification of unusual surfaces or project conditions.

TYPICAL PHYSICAL PROPERTIES (ASTM D6694)

Tensile Strength (psi)	486 ±20 @ 73°F 700 ±20 @ 0°F	ASTM D412
Elongation (Break) (%)	267 ±20 @ 73°F 282 ±20 @ 0°F	ASTM D412
Tear Resistance (Die C) (lbf/in)	33.7	ASTM D624
Permeability	5.9	ASTM E96, Procedure B
Tensile, set @ 100% Elongation	Nil.	
Temperature Stability Range	-80°F to 350°F (-37°C to 177°C)	
Water Absorption	0.1 weight % after 2 weeks @ 75°F (24°C)	ASTM D471
Weathering / UV Resistance	No degradation after 8,760 hours	ASTM G53
Specific Gravity	1.23 @ 77°F (25°C)	
Tack Free Time	1 hour, temperature and humidity dependent	
Viscosity - spray grade/bulk (cP)	5,000 – 8,000	Brookfield® 4d/5 RPM/77°F
Viscosity - spray grade/pail (cP)	8,000 – 12,000	Brookfield® 4d/5 RPM/77°F
Durometer Hardness	50 ±5	Shore A
Solids Content by Weight (%)	80 ±2	ASTM D1644
Solids Content by Volume (%)	69 ±2	ASTM D2697
Maximum Continuous Service Temperature	185°F (85°C)	
Flash Point	> 105°F	ASTM D93
Cure Time Min.	2 hours @ 100°F and 90% humidity, Max. 8 hours @ 40°F and 90% humidity.	
Drying Time	1 hour @ 77°F	
VOC	< 250 gm/L	Std. Method

 COOL ROOF RATING COUNCIL	Rated Product ID #: 0754-0007	
	Smooth	Rough
Solar Reflectance	Initial / Aged 0.85 / 0.66	Initial / Aged Not Rated
Thermal Emittance	0.85 / 0.90	Not Rated

The ratings above are subject to CRRC rating program conditions, requirements and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating requirements and limitations. For the purposes of a CRRC rating, a rough substrate is defined as a surface that is equally coarse or coarser than a new (i.e., unweathered) #11 granulated modified bitumen sheet.

Solar Reflectance Index (SRI) – Initial: 106 • Aged: 80

For most current product data and warranty information, visit: www.kmcoatings.us
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CODES AND STANDARDS

- Meets or exceeds the requirements of ASTM D6694 Standard Specification Liquid-Applied Silicone Coating
- Meets or exceeds the requirements of ASTM C1305 Standard Test Method for Crack Bridging Ability of Liquid Applied Waterproofing Membrane
- UL Classified - File #R20755
- Can be used to comply with 2016 Title 24 Part 6 Cool Roof requirements (white only)
- CRRC Listed (white only)
- NSF Protocol P151 - Health Effects from Rainwater Catchment System Components. See listing at www.nsf.org for application and cure instructions for rainwater catchment use. (white only)
- Texas Department of Insurance
- Florida Building Code
- Miami-Dade County Product Control Approved



PACKAGING

5GA pail, 50GA drum

STANDARD COLORS

PS #220 is available in white and light grey. PS #220, white, is highly reflective and exceeds the minimum standards for California Title 24 reflectivity and emissivity.



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PONDING WATER

The chemistry of silicone, which KM Silicone roof coatings are manufactured with, is not adversely affected by ponding water or prolonged rain exposure. Please be advised that good roofing practices, Building Codes and The National Roofing Contractors Association (NRCA) consider ponding water on any roof undesirable and recommend that all roof systems be designed and built to ensure positive drainage (See the NRCA Roofing and Waterproofing Manual and any applicable Code Ordinances).

APPLICATION INSTRUCTIONS

SURFACE PREPARATION:

- All surfaces to receive coating must be clean, dry and free from any foreign matter such as dirt, oils, grease or other debris that could inhibit the adhesion capabilities of the newly installed products.
- Metal surfaces that display rusting or other oxidation, to be prepared with a grinder or wire brush as needed to remove surface contaminants.
- Existing roof systems to be visually inspected for conditions that may adversely affect adhesion of performance of newly installed products. Repair any visible deficiencies such as splitting, blistering, and buckling with PS #220, KM Acrylicalk, Brush-It Acrylicalk or KM 1213 and KM Polyester Fabric.
- Visually inspect all metal and non-metal flashings, edges, drains, valleys and through-roof penetrations and repair as needed by project conditions.
- Do not apply to wet or visibly damp surfaces, or surfaces previously covered with coal tar based products or Kynar® finishes.
- Concrete surfaces cured with wax/resin based compounds can inhibit adhesion.

APPLICATION:

- Stir well prior to application. Caution: due to the combustible nature of this product, do not use an electric mixer.
- PS #220 is recommended to be applied with high pressure sprayer for best appearance and coverage. It may also be applied by roller or brush applications.
- Apply PS #220 at 16 wet mils (1 gallon per 100 square feet) per coat. Typical application conditions require PS #220 be applied in two coats at 20 wet mils per coat. Consult KM Coatings Technical Services for application rates for specific roof membranes and for job specific application specifications.
- Subsequent coats should be applied within 48 hours of prior applications to insure full and uniform adhesion. Coating must be evenly applied and pinhole-free. Before applying a subsequent coat of this product, the previous coat must be completely dry and cured. Apply second coat perpendicular to the first.
- Apply only when ambient temperatures are 50°F and rising. Cold weather could result in uneven application and improper curing of product. Do not apply if there is a threat of inclement weather within 4 hours of application. Drying time is dependent on temperature, humidity and film thickness.
- Do not thin product.
- Prior to using this product on new cap sheets (smooth or granulated), it is recommended to wait 30 days for weathering.

STORAGE AND CLEANING

- Product shelf life: 12 months from date of manufacture when stored between 35°F and 75°F.
- Do not store at temperatures greater than 120°F.
- Store 24 hours at room temperature prior to application.
- Observe normal safeguards for storing and handling of this product prior to and during application.
- Keep containers covered when not in use.
- Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or mineral spirits. PS #220 cures by reacting with moisture and should not be left in spray guns, pump equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings and seals. Equipment without these components will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.

APPLICATION EQUIPMENT

This product may be sprayed, brushed, or rolled. Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing a minimum of 3500 PSI at the spray gun head should be used. The pump should have a minimum of 3 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, having a minimum orifice of .030 and a 50° fan tip. **DO NOT USE** hose that has been used for Acrylics or other waterborne coatings because the liner absorbs moisture and initiates the silicone cure process.

WARRANTY

KM Coatings manufactures a variety of fluid-applied materials to suit various project needs and offers extended manufacturer's warranties to its Approved Applicator network. Warranty type, Terms and Conditions, as well as coverages, will depend on product(s) utilized and project circumstances under which materials are used. Unless otherwise provided for as part of an extended manufacturer's warranty, Product Liability is strictly limited to manufacturing defects for a period of one year.

For Professional Use Only — Keep out of the reach of children.

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Refer to SDS for specific data and handling of our products.

All data furnished refers to standard production using manufacturing testing tolerances. The product user, and not KM Coatings, is responsible for determining the suitability and compatibility of our products for the user's intended use.

