

670HS Karna-Sil Ultra (High Solids, very low VOC Silicone Coating)

DESCRIPTION:

KARNAK 670HS Karna-Sil Ultra is a white, single component, high solids, moisture curing silicone coating that produces a durable elastic coating with exceptional weathering and water resistance characteristics.

USES:**Newly Sprayed Poly-Urethane Foam or Previously Coated Silicone roofs****(No Primer required):**

Apply 670HS Karna-Sil Ultra directly over newly sprayed polyurethane foam, or pressure-washed, clean and dry Silicone coated roofs.

Metal, Concrete, Masonry, TPO, PVC, Hypalon, and EPDM roofs (Requires Epoxy Primer):

Pressure-wash roof, and let dry prior to primer application. Apply 180 Karna-Sil Epoxy Primer and allow to cure before applying 670HS Karna-Sil Ultra.

BUR (Built-Up) and Modified Bitumen (Requires Epoxy Primer or 405 Base Coat):

Pressure-wash roof, and let dry prior to primer application. Apply either 180 Karna-Sil Epoxy Primer or 405 Bond-N-Shield acrylic base coat and allow to cure before applying 670HS Karna-Sil Ultra.

670HS may be used on vertical as well as horizontal applications. All surfaces must have positive drainage. **Note:** Vertical application may require multiple coats to achieve desired film thickness.

SURFACE PREPARATION:

Surfaces to be coated should be dry, clean, and free of dirt, dust, grease, oil and loose rust or coating. Recommended application temperature is 50°F to 120°F. Power wash surfaces with 799 Wash-N-Prep Roof Cleaner or 507 SPC Primer/Wash (EPDM Only) and water. Wash roof surfaces with a minimum of 2000 psi. taking all necessary precautions to avoid damage to the roof system. Patch and repair all seams, flashings, damaged areas, leak and cracks with 502MS Karna-Flex, 505MS Karna-Flex WB, 550 Patch-N-Go self-sealing tape or appropriate sealants or caulking materials.

APPLICATION:

670HS Karna-Sil Ultra should be applied in a single coat application at the required application rate. If additional coats are to be applied, allow previous coat to cure 2-8 hours (dependent upon temperature and humidity) before applying subsequent coat. Subsequent coats should be applied within 24 hours of previous application to ensure uniform adhesion. Applied coating film should be even and free of pinholes. Coverage will vary depending on the surface to be coated. To improve aesthetics, impact resistance and toughness of the coating, ceramic roofing granules should be applied immediately into the final coat after application. Back-roll granules into coating and allow to cure then blow off or sweep loose granules from the surface.

KARNAK

330 Central Avenue, Clark, NJ 07066
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www.karnakcorp.com

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Mix coating prior to application with a 3" diameter mixer (5-gallon pail) or 6" diameter mixer (50 gallon drum). Once product is mixed, the entire container should be used. 670HS Karna-Sil

Ultra may be applied by brush, roller or airless spray equipment. Apply at temperatures 50°F to 120°F. Do not apply if rain is expected within 24 hours after application. Commencement of work by the contractor implies their approval of the roof surface. See listing at www.nsf.org for application and cure instructions for rainwater catchment use.

SPRAY APPLICATION:

For spray application, a high-pressure airless spray unit with a minimum of 3500 psi working pressure at the gun tip should be used. The pump must have a 3 gallon per minute output. Hoses should be jacketed for prevention of moisture contamination. Hoses should have a 3/4" ID and tip size should be a minimum size 0.027 orifice. Do not use with hoses that have been used to spray acrylic coatings.

COVERAGE RATE:

Apply in a single coat at 1.5 gallons per 100 sq. ft. to yield approximately 23 dry mils.

SPECIFICATIONS:

ASTM D-6694

PHYSICAL PROPERTIES:

| | | |
|--------------------------|-----------------|-------------|
| Weight per Gallon | 10.7 lbs. | |
| Solids by Weight: | 96% | ASTM D-1644 |
| Solids by Volume: | 96 % | ASTM D-2697 |
| Color: | White | |
| Reflectivity | Initial 0.87 | ASTM C-1549 |
| | Aged 0.70 | ASTM C-1549 |
| Emissivity | Initial 0.89 | ASTM C-1371 |
| | Aged 0.90 | ASTM C-1371 |
| Initial SRI: | 110 | |
| Aged SRI: | 86 | |
| Hardness Shore A: | 50 | ASTM D-2240 |
| Elongation: | 192% at 73°F | ASTM D-2370 |
| | 216% at 0°F | ASTM D-2370 |
| Tensile Strength: | 331 PSI at 73°F | ASTM D-2370 |
| | 432 PSI at 0°F | ASTM D-2370 |
| Tear Resistance: | 26 PSI | ASTM D-624 |
| Application temperature: | 50°F to 120°F | |

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| | | |
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| Storage temperature: | 50°F - 90°F | Dry environment |
| Permeance: | 5.9 perms | ASTM E-96 |
| Service Temperature: | -15°F to 180°F | |
| Cure Time: | 2-8 hrs. | (Temp. & Humidity Dependent) |
| Shelf Life (Unopened): | 12 months | (Stored at 35°F - 75°F) |

Cool Roof Rating Council (CRRC) - White

| | | | | |
|-----------------------|---------|------|--------|------|
| 1. Solar Reflectance: | Initial | 0.87 | 3 year | 0.70 |
| 2. Thermal Emittance: | Initial | 0.89 | 3 year | 0.90 |
| 3. SRI: | Initial | 110 | 3 year | 86 |

VOC Content:

Please visit www.karnakcorp.com for latest VOC content as products are updated to comply with the most current VOC regulations.

CAUTION:

Pumping equipment should be grounded to avoid accidental ignition due to static sparks. Avoid breathing solvent vapors. Use with appropriate MESA/NIOSH approved respirator when exposure can exceed recommended PEL. Not for interior use. Do not apply when rain is imminent. Keep containers properly sealed when stored indoors, in a cool well-ventilated area. Keep containers away from moisture. Keep away from heat, sparks and open flame. Do not store above 100°F. Do not thin. Keep out of reach of children. Avoid prolonged contact with skin. Dispose of in an environmentally safe manner. Cover air intakes during application and while drying. Please refer to MSDS for more safety information.

COLD-PROCESS SYSTEMS AND COATING, EITHER EMULSION OR SOLVENT BASED, SHOULD ONLY BE INSTALLED ON DECKS WITH POSITIVE DRAINAGE.

PER NRCA, (NATIONAL ROOFING CONTRACTORS ASSOCIATION, "THE CRITERIA FOR JUDGING PROPER SLOPE FOR DRAINAGE IS THAT THERE BE NO EVIDENCE OF STANDING WATER ON THE DECK 48 HOURS AFTER IT STOPS RAINING."

PACKAGING:

Available in 5 gallon pails and 50 gallon drums

APPROVED BY:



If further information is needed, contact KARNAK Technical Services at 1.800.526.4236.

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