

SEALGUARD VFI®-991 SILICONE

SEALGUARD VFI-991 Silicone is a solvent-based, moisture-cure, fluid applied roof coating. It comes in a single-component metal container and lays flat and smooth on the roof when rolled. VFI-991 boasts better recoat capabilities, allowing it to bond seamlessly to many substrates. When recoating, fewer materials and labor are used to maintain your flat or low-slope commercial roofing system.

- Better recoat capabilities save you time and money to extends the roof's life
- Smoother and flatter surface when rolling for subsequent coating and recoating
- Capable of bonding to existing coatings and multiple substrates with the use of a primer
- Light power washing needed only once a year for superior brightness & maximum UV reflectivity
- 100% silicone for bacteria, mold, & mildew resistance and improved protection from weathering
- With a proper drainage system, it withstands ponding water exposure and will not fail

PHYSICAL PROPERTIES

	TEST METHOD	TEST RESULTS
Tensile Strength	ASTM D412	434 psi
Elongation	ASTM D412	246%
Final Elongation after 5000 Hours	ASTM D412	221%
Tear Strength	ASTM D624	41 pli
Aged Solar Reflectance of White	CRRC 0948-0013	0.70
Aged Thermal Emittance of White	CRRC 0948-0013	0.90
Permeance	ASTM E96	9.9 perms
Low Temperature Flexibility	ASTM D522	Pass
Resistance to Wind Driven Rain	TT-C-555B	Pass

LIQUID PROPERTIES

	TEST METHOD	TEST RESULTS
Solids by Weight	ASTM D1644	77%
Solids by Volume	ASTM D2697	64%
Liquid Density	N/A	10.00 lbs/gal
Specific Gravity	N/A	1.20 g/mL
Flash Point	N/A	105°F
Viscosity	ASTM D2196	2000 cps
Tack Free Time	N/A	1-2 hours @ 75°F, 50% Rh
Cure Time	N/A	2-4 hours @ 75°F, 50% Rh
Recoat Window	N/A	2-48 hours @ 75°F, 50% Rh
VOC	N/A	<250 g/L



Cements and coatings for roofing systems as to an external fire exposure only 84GM

MANUFACTURER OF HIGH PERFORMANCE POLYMERS

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EQUIPMENT

The coating can be applied to the surface with airless spray equipment, industrial paint brushes, or nap rollers. When spraying, use equipment equivalent to:

- Graco GH 933 or DutyMax GH 675DI are capable of 1.5-2.5 gpm and a minimum constant pressure of 5,000 psi. We also recommend spraying with Graco Xtreme-Duty ½-inch or ¾ inch hoses with ⅜ inch whip hoses and Graco XTR-7 Airless Spray Guns with minimum .030 sized tips. The Graco 5:1 Monarch Transfer Pump should be used with drums.
- WIWA HERKULES GX, model 333/075, produces a flow rate per cycle of 275 cm³ or 9.3 fl oz, a pressure ratio of 75:1, and max inbound air pressure of 6.5 bar or 94 psi.
- Hennes-Johnson Model 5320 Silicone sprayer with a trigger gun capable of providing 5,000 psi of constant pressure at 3 gpm with ¾ or ½ inch nylon lined hoses and a whip hose.

SURFACE PREPARATION

For improved adhesion on the roof surface, use a broom to remove all contaminants, including dirt, debris, leaves, or films. Use VFI-1009 Cleaning Detergent to scrub areas containing grease, oil, animal fats, etc. Power wash as needed. Rinse off all cleaning agents and allow the roof to dry.

Make any necessary repairs to the roof components. Tighten gaps and seams to be flush with the surface. Loose or backed-out fasteners should be tight or replaced with oversized fasteners. VFI recommends applying VFI-#11 9:1 Epoxy Primer to the entire surface for ensured adhesion and SEALGUARD VFI-993 Silicone Flashing Grade over seams, penetrations, and protrusions.

MIXING

Mix the coating until uniform before use. Mix times may vary depending on volume and mixing method.

APPLICATION REQUIREMENTS

VFI-991 should only be applied when the surface and ambient temperatures are between 40°F - 120°F and when rain or moisture are not present during the application and curing process. Bring the material to a minimum temperature of 65°F before use. Apply the roof coating at a minimum of 2 gallons per square. Check specifications for required wet and dry film thickness. For additional reinforcement, apply the coating with polyester fabric reinforcement. The first coat must be fully cured before a second coat is applied.

CLEANING

VFI-991 cures with moisture, so do not use water to clean tools and equipment. We recommend using chemically dry mineral spirits to clean brushes, rollers, and spray equipment. If you are spraying, don't leave VFI-991 inside the spray equipment. Flush the mineral spirits through the hoses and lines until the uncured coating is removed.

STORAGE/SHELF LIFE

The material shelf life is 12 months from the date of manufacture. Store in a dry, temperature-controlled space in sealed and unopened containers between 60°F - 90°F. Opened containers can be resealed with a nitrogen purge, but it will ultimately shorten the shelf life of the product.

PRECAUTIONS

Foot traffic is not recommended on any roof surface coated with VFI-991. If foot traffic is necessary, wait 24-72 hours for the coating to fully cure before allowing people to walk on designated traffic areas only. Avoid breathing in vapors or repeated skin contact. Do not thin or add foreign material to the product. See Safety Data Sheet for complete safety data.

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