

## VFI®-640-1 GRAY ACRYLIC COATING

VFI-640-1 Gray Acrylic Coating is a single-component, fluid-applied, elastomeric roof coating commonly used as a base coat. As a water-based product, no hazardous chemicals are used when cleaning equipment, and it only needs a standard acrylic sprayer for easy application. When applied as a base coat in a commercial roof restoration system, it works with an acrylic top coat to build film thickness, protecting the substrate from impacts, UV radiation, and weathering.

- Identifiable color for easy detection of where more coverage is needed in top coat applications
- Darker color helps the coating cure faster for quick and easy top coat application
- High adhesion improves the bond of the topcoat layer to the substrate
- Better impact resistance to hold up against physical wear and tear
- Withstands extreme weather conditions and UV rays, helping to extend the life of the roof
- Exceeds EPA standards for VOCs

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Tensile Strength	ASTM D2370	201 psi
Elongation	ASTM D2370	718%
Final Elongation after 1000 Hours	ASTM D2370	574%
Tear Strength	ASTM D624	84 pli
Permeance	ASTM D1653	14 perms
Low Temperature Flexibility	ASTM D522	Pass
Accelerated Weathering after 1000 Hours	ASTM D4798	Pass

LIQUID PROPERTIES	TEST METHOD	TEST RESULTS
Solids by Weight	ASTM D1644	61%
Solids by Volume	ASTM D2697	57%
Liquid Density	N/A	10.90 lbs/gal
Specific Gravity	N/A	1.30 g/mL
Viscosity	ASTM D2196	8,500 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	<25 g/L



Cements and coatings for roofing systems as to an external fire exposure only B4GM

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## EQUIPMENT

Coating can be applied to the surface with airless spray equipment, industrial paint brushes, or nap rollers. If spraying, use equipment like Graco Big Rig Sprayers GH 733 or GH 833 that can maintain a minimum constant pressure of 3,000 psi and are capable of 4.0 gpm. They can be used with either siphon feed or direct immersion kits. We recommend using the spray equipment with Graco Xtreme-Duty High Pressure ½-inch hoses with ¼ or ⅜-inch whip hoses and Graco Silver Plus Guns with minimum .030 tips. Another option for spraying acrylic includes the Hennes-Johnson Model 4520 Cold Process sprayer, capable of 4,500 psi at 5.0 gpm.

## SURFACE PREPARATION

Using a broom, clean the entire substrate of dirt and debris that may affect adhesion. Power wash the surface as needed, and use VFI-1009 Cleaning Detergent to scrub areas with grease, oil, and animal fats. Rinse the roof of all cleaning agents and allow it to dry.

Make necessary repairs to the roof's structural components. Gaps and seams should be tight and flush. Eliminate gaps and deflections bigger than ¼" with additional screws or rivets. Loose or backed-out fasteners must be tightened or replaced with oversized fasteners. VFI always recommends using a primer like VFI-#11 9:1 Epoxy Primer for improved adhesion.

## MIXING

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

## APPLICATION REQUIREMENTS

A multicoat method using VFI-605-1 White Acrylic Coating as a top coat is recommended after applying VFI-640-1. The surface and ambient temperature must be between 50°F – 120°F and remain above 40°F during application and curing for ensured adhesion. Rain and moisture will negatively affect adhesion, so stop application if either is present.

Apply the base coat at a minimum rate of 1.25 gallons per square. A topcoat should be applied at a minimum rate of 1 gallon per square over the base coat. After topcoat application, the coverage rate should total a minimum of 2.25 gallons per square. Check specifications for required wet and dry film thickness. Apply the top coat within 48 hours of the base coat, after it has fully cured.

\*Roofs with a slope less than or equal to 1/12 should be fully reinforced with polyester fabric.

## CLEANING

All application tools, including spray equipment, brushes, rollers, etc., can be cleaned with water. If the material has cured on or in the equipment, use chemically dry mineral spirits.

## 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. VFI-640-1 must be protected from freezing.

## PRECAUTIONS

VFI-640-1 must be protected from freezing. It is not recommended for use on flat roofs or where ponding water is present. 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.