Overview

- **Description**
  VFI-640-1 is a premium grade water-based elastomeric base coat which cures to form a seamless membrane when applied over the entire roof area. VFI-640-1 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet sun and other weather exposures.

- **Usage**
  - VFI-640-1 was especially developed for use in embedding reinforcement fabric at detail areas and/or over the entire roof.

Features and Benefits

- **Description**
  - VFI-640-1 is a strong and durable liquid applied roof coating basecoat that adheres well to many substrates.
  - Extends the useful life of the roof.
  - Offers high tensile strength and elongation.
  - Offers excellent resistance to extended exposure to solar ultraviolet energy.
  - UL and FM approved.

- By decreasing roof surface temperature when topcoated with VFI-605-1, VFI-640-1 and VFI-605-1 system can reduce energy costs of the building.
- Fungal and algal resistant—even in high temperatures.
- Low VOC, non-flammable and presents minimal hazard to the applicator or the environment.

Physical Properties Per ASTM D6083

- **Initial Tensile Strength**
  - ASTM D2370 200 psi minimum

- **Initial Elongation**
  - ASTM D2370 300 % minimum

- **Tear Resistance**
  - ASTM D624 80 pli minimum

- **Fungi Resistance**
  - ASTM G21 0

- **Permeance (perms)**
  - ASTM D1653 14

- **Film Properties After 1000 hrs Accelerated Weathering**
  - D4798 Pass

- **Elongation**
  - ASTM D2370 350 % minimum

- **Low Temperature Flex**
  - ASTM D522 Pass

- **Appearance After 1000 hrs Accelerated Weathering**
  - ASTM D4798 Pass

- **Water Swelling (% mass)**
  - ASTM D 471 20

- **Resistance to Wind Driven Rain**
  - TT-C-555B Pass
Liquid Component Properties And Environmental Performance

- **Solids**
  - Weight – ASTM D 1644 61%
  - Volume - ASTM D 2697 57%

- **Liquid Material Density & Specific Gravity**
  - ASTM D 2939 10.90 +/-0.50

- **VOC**
  - The volatile organic content is <50 grams per liter.
  - Flash Point (°F) >212.

- **Storage Stability or Shelf Life**
  - Typically 18 months from date of manufacture when properly stored. Keep containers covered when not in use. Do not store at temperature greater than 120°F. Do not allow product to freeze. Discard if any degrees of freezing would occur.

- **Service Temperature**
  - -50°F to 200°F

Application

- **Equipment**
  - Brush, roller and high pressure sprayer for best appearance and coverage.

- **Material Preparation**
  - Do not apply at temperatures less than 40°F or greater than 120°F. Store 24 hours at room temperature prior to application.

- **Mixing**
  - Stir well prior to application. To field tint this product, please use a water-based, exterior-grade pigment, only with approval from Volatile Free, Inc.

- **Substrate 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 VFI-630 Flashing Grade and/or polyester fabric prior to application.
  - 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**
  - See VFI Specification for specific application information.

- **Clean Up**
  - Clean equipment and overspray with water. Clean hands with waterless hand cleaner.

- **Precautions**
  - See Safety Data Sheet for complete safety data and handling of the product.

- **Thinning**
  - Do not thin. Do not heat outside of container.

- **Packaging**
  - 5 Gallon Pail
  - 50 gallon Drum
  - 275 Gallon Tote

For more information, contact us today at 800-307-9218