

# SIL-THANE®

## SILICONE/URETHANE

### FLUID APPLIED COOL ROOF SYSTEM

## SYSTEM QUICK SPEC MOD BIT/BUR

37 Wet Mills (940 µ)

Silicone Top Coat

Aromatic Polyurea Base Coat

#### DESCRIPTION

The **SIL-THANE® COOL ROOF RESTORATION COATING SYSTEM** for asphaltic roof systems combines an aromatic polyurea-urethane base coat, Ever-Thane Base, with a high solid silicone topcoat, Ever-Silic HS. Combining the fire retardant, durability, and strength of an aromatic urethane and with the UV and water resistance of silicone this system provides a very superior and economical way of extending the life of any roof system. Withstands ponding water

#### BASIC USES

The **SIL-THANE® COOL ROOF RESTORATION COATING SYSTEM** is a tough, durable application designed to protect a wide range of roof top environments from weathering, moisture intrusion, and extensive fire damage. It is especially effective as a protective membrane to coat the entire roof, to use for spot repair, and to provide additional protection for flashing when integrated with a reinforcement fabric.

The **SIL-THANE® SYSTEM** provides tenacious adhesion with an existing roof system to form a monolithic membrane. The result is a CRRC and ENERGY STAR system that exceeds all Title 24 requirements.

#### FEATURES & BENEFITS

- Prolongs the life of a roof while helping lower internal temperatures and reducing cooling costs.
- Withstands water penetration
- High tensile strength and abrasion resistance
- Excellent adhesion to a variety of roof surfaces
- Ease of application - extremely fast and simple to install
- Can be used to reinforce and seal seams, penetrations and terminations, and make spot repairs
- Slows degradation caused by normal weathering, aging, and ultraviolet rays
- Low VOC's
- UL-790 Class "A" Fire Resistance Rating

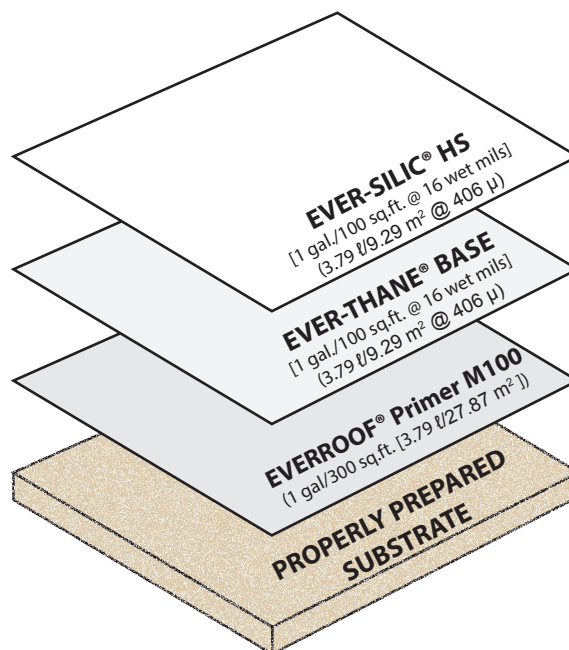
#### WARRANTY

See Warranty System Sheet for Dry Film Thickness Requirement.

#### REQUIRED MATERIALS

- Everroof Primer M100
- Ever-Thane® Base
- Ever-Silic® HS
- Ever-Thane Fast Flash®

#### 10 YEAR SYSTEM COVERAGE for MOD BIT/BUR SYSTEMS







#### SYSTEM DESCRIPTION

The **SIL-THANE® SYSTEM** can be described by using three comprehensive products to cover and protect your roof:

- (1) **EVERROOF® Primer M100**, if applicable, is a two component, liquid applied, water-based epoxy primer with bleed blocking, penetrating characteristic. It has quick/re-coat times and is low viscosity.
- (2) **EVER-THANE® BASE** is a versatile, low VOC, aromatic, single-component, moisture-cure, polyurea-urethane, coating designed as a base coat for asphaltic roof systems.
- (3) **EVER-SILIC® HS** is a versatile, low VOC, single-component, high solids, liquid silicone coating designed to be used as a top coat for asphaltic roof systems.



## TECHNICAL DATA / PHYSICAL PROPERTIES

			1 gal. (3.79L) Can 5 gal. (18.93L) Pail 55 gal. (208.2L) Drum		
			1 gal. / 100 sq. ft. @ 16 wet mils 406µ (3.79L / 9.29 m <sup>2</sup> )		
<b>TECHNICAL DATA</b>			<b>BASE COAT</b> EVER-THANE® BASE	<b>TOP COAT</b> EVER-SILIC® HS	
Color			Blue	White	
Shelf Life			8 Months	8 Months	
Curing (75°F-24°C, 50% R.H.)			10-12 Hrs.	8 Hrs.	
<b>PHYSICAL PROPERTIES</b>					
Hardness Shore A, ASTM D-2240			50 ± 5%	55 ± 2% <sup>N</sup> / <sub>mm</sub>	
Tear Resistance, ASTM D-624			145 lbs./in. (2.54 <sup>mm</sup> )	45 lbs./in. (7.88 <sup>mm</sup> )	
Tensile Strength, ASTM D-412			1550 psi (10.69 MPa)	300 psi (2.07 MPa)	
Elongation, ASTM D-412			365%	200 ± 15%	
Specific Gravity			1.44	1.20	
% Solids by Weight, ASTM D-2369			87% ± 3%	98%	
% Solids by Volume, ASTM D-2697			85% ± 3%	98%	
Viscosity at 77°F (25°C)			4000-6000 cps	10,000 - 12,000 cps	
VOC, ASTM D-2369-81			50g/L (0.42lbs/gal)	48g/L (0.40lbs/gal)	
 Reflectivity			-	-	
 Emissivity			-	-	
 SRI			-	-	
Fire Resistance			UL-790 Class "A"		

## STORAGE & HANDLING

Keep containers closed, store in a dry, cool place away from heat, sparks, open flame, and moisture. Keep material stored above 65°F (18°C) and on wood pallets and/or off concrete floor. Open containers should be blanketed with dry nitrogen before resealing.

## ADHESION TEST

To ensure successful application of the SIL-THANE® SYSTEM, always perform an adhesion test (ASTM D-903) with the EVER-THANE® BASE to ensure the roof substrate will accept the coating.

## PRE-INSPECTION

Pre-inspect roof for necessary repairs before application of coating system. Inspection should include but not limited to the following:

- HVAC Flashing
- Proper Drainage
- Roof Penetrations
- Sign or Display Anchorage
- Drains & Location of Drains
- Water Leakage
- Seam, Terminators, Reglets
- Parapet Wall Conditions
- Wet or Damp Insulation
- Coping and Flashing
- Sleepers & Pitch Pockets

## SURFACE PREPARATION

(1) Remove all unnecessary and non-functional equipment and debris from the roof. (2) Remove dirt, and foreign material detrimental to adhesion or application of fluid-applied roofing by thoroughly cleaning all roof surfaces with a high pressure (2,000 - 2,500) (13.79 MPa - 17.24 MPa) wash. Surfaces contaminated with oil, grease, animal fats, etc. must be removed using tri-sodium phosphate and water, or other solutions as required by job conditions and as permitted by local and federal regulations. Remove all cleaning solutions with plenty of fresh water and allow to dry.

## SURFACE PREPARATION

(3) Membranes with seam and flashing failure must be repaired by traditional and professional roofing practices and then detailed with EVER-THANE FAST FLASH™ or with one pre-coat of EVER-THANE® BASE at a rate of 1 gallon (3.79 l) per 100 sq. ft. (9.29 m<sup>2</sup>) @ 16 wet mils (406 µ) minimum. EVER-THANE® BASE shall extend a minimum of 3 inches (7.62 cm) beyond the edges of the repair. (4) Round projections, machine legs, sign posts, guide wire straps, inside and outside corners, etc. should be flashed using EVER-THANE FAST FLASH™. Seal watertight gutters, parapet walls and caps. Repair any damage metal. Caulk and seal watertight all screws, seams, skylights, joints, pipes, voids, protrusions and any areas where water could enter through the roof. (5) Clean and seal all drains watertight. (6) Allow roof and other prepared surfaces to dry completely before proceeding with priming and/or coating application. Note: Thickness values of cured film are averages and can vary due to finish of surface. Do not apply the system when precipitation is in the forecast within 48 hours of application. Do not apply when raw or freezing temperatures are experienced. Do not apply over wet insulation or related materials.

## COATING APPLICATION

Apply appropriate EVERROOF® primer to the substrate at the rate of 1/3 gal/100 sq. ft. (1.25 l/9.29 m<sup>2</sup>) @ 5 wet mils (1.25 µ), EVER-THANE® BASE basecoat at the rate of 1 gal/100 sq. ft. (3.79 l/9.29 m<sup>2</sup>) @ 16 wet mils (406 µ), and EVER-SILIC® HS topcoat at the rate of 1 gal/100 sq. ft. (3.79 l/9.29 m<sup>2</sup>) @ 16 wet mils (406 µ), to yield a total of 37 (940µ) wet mils of coverage for 10 year warranty.

DO NOT EXCEED 1.5 GALLONS PER SQUARE (5.68l per 9.29 m<sup>2</sup>) PER APPLICATION for EVER-THANE BASE. This will cause blisters and/or pinholes. Care should be taken to avoid sagging, pinholes, and runs of the coating on vertical, horizontal, and slanting surfaces to prevent sagging. Application rate may need adjusting if topcoat starts to sag on verticals. If adjusted, allow base coat and/or top coat to dry 24 hours in-between coats and may require additional coats to achieve required mil thickness. Ever-Thane Accelerator may be used to avoid pinholes and/or blisters.

Actual required application rate will depend on system specified and length of warranty. For low areas that hold excessive ponding water, apply a liquid roof patch to level the sloped area prior to coating. Ever-Thane Accelerator is available for faster curing time for the base coat and top coat.

Protection: After completion of application, do not allow traffic on coated surfaces for a period of at least 48 hours at 75° F and 50% R.H., or until completely cured.

## EQUIPMENT

Spray Applied - See EVERROOF's Spray Application Guide.

Dipped and Rolled - A squeegee and a 3/8" (9.52 mm) nap roller should be used when applying on smooth surface built-up roofing and modified bitumen or fine substrates. Use a 1/2" (12.7 mm) nap roller for mineral surface built-up and modified bitumen or coarse substrates.

## WARNING

EVER-THANE® BASE and contains isocyanates.

**THIS QUICK SPEC IS MEANT ONLY AS AN OVERVIEW OF INSTALLATION PROCEDURES. IT IS NOT MEANT TO REPLACE THE DETAILED SPECIFICATION REQUIREMENTS THAT APPEAR IN THE LOW SLOPE RESTORATION SYSTEM SPECIFICATIONS. BE SURE TO REVIEW DETAILED SPECIFICATION PRIOR TO BEGINNING ANY PROJECT.** Published technical data and instructions are subject to change without notice. Contact your local EVERROOF® representative or visit our website for current technical data and instructions.