

# SIL-THANE®

## SILICONE/URETHANE

### FLUID APPLIED COOL ROOF SYSTEM

## SYSTEM QUICK SPEC METAL

**37 Wet Mils (940 µ)**

Silicone Top Coat  
Aromatic Polyurea Base Coat

#### DESCRIPTION

The **SIL-THANE® COOL ROOF RESTORATION COATING SYSTEM** for metal 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

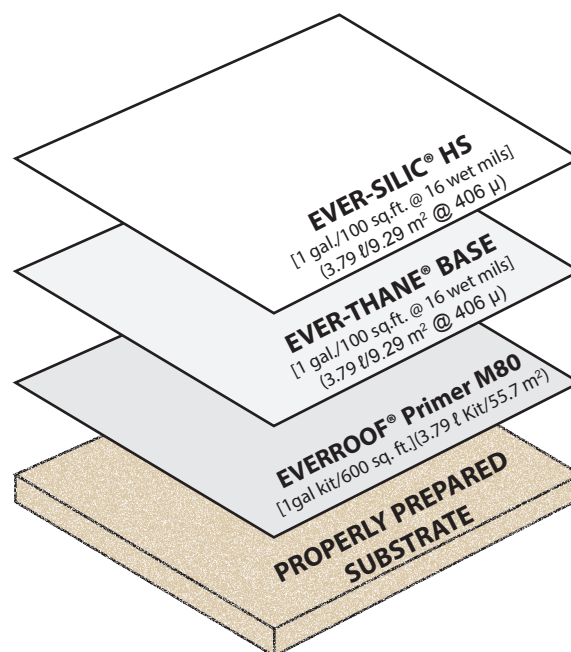
#### WARRANTY

See Warranty System Sheet for Dry Film Thickness Requirement.

#### REQUIRED MATERIALS

- Everroof Primer M100 Rust Inhibitor
- Everroof Primer M80
- Ever-Thane Base
- Ever-Silic HS
- Ever-Fabric 3 oz. Firm 4"
- Everroof Webseal w/polyester backing
- Ever-Thane Fast Flash

#### 10 YEAR SYSTEM COVERAGE for METAL ROOF SYSTEMS




#### SYSTEM DESCRIPTION

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

- (1) EVERROOF® Primer M80 is a two component, liquid applied, solvent based epoxy-polyamine primer with unique 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 a variety of metal 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 a variety of metal roof systems.



## TECHNICAL DATA / PHYSICAL PROPERTIES

 <div>1 gal. (3.79L) Can 5 gal. (18.93L) Pail 55 gal. (208.2L) Drum</div> <div>1 gal. / 100 sq. ft. @ 16 wet mils 406µ (3.79L / 9.29 m<sup>2</sup>)</div>		
TECHNICAL DATA	BASE COAT EVER-THANE® BASE	TOP COAT EVER-SILIC® HS
Color Shelf Life Curing (75°F-24°C, 50% R.H.)	Blue 8 Months 10-12 Hrs.	White 8 Months 8 Hrs.
PHYSICAL PROPERTIES		
Hardness Shore A, ASTM D-2240	50 ± 5%	55 ± 2%
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. Contact an Everroof representative for Kynar® Metal Roof types.

## 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
- Metal Seams
- 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. (3) Metal seam and flashing failure must be repaired by traditional and professional roofing practices.

**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.

## SURFACE PREPARATION

Tighten and/or replace all existing fasteners, install crickets and complete metal sheet work repairs. Prime all unsatisfactory rust areas with Everroof's Primer M100, a rust-inhibitor. Continue to prime remaining areas with Everroof's Primer M80. Detailed all roof penetrations, skylights, rake edges, round projections, machine legs, sign posts, guide wire straps, inside and outside corners, gutters, joints, pipes, voids, protrusions and any areas where water could enter through the roof and encapsulate all fasteners with EVERROOF FAST FLASH™. Clean and seal all drains watertight. Use Everroof's Web Seal where necessary. (4) Treat all seams with one pre-coat of EVER-THANE® BASE at a rate of 1.5 gallon (5.68 l) per 100 sq. ft. (9.29 m<sup>2</sup>) @ 24 wet mils (609.6 µ) minimum and embed Ever-Fabric into the base coat in between coats. EVER-THANE® BASE shall extend a minimum of 3 inches (7.62 cm) beyond the edges of the repair. (5) 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 EVERROOF® Primer M80 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 (940 µ) 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 and horizontals. 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. 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 - Brushes of various sizes and a 3/8" (9.52 mm) nap roller should be used when applying on smooth surfaces such as metal.

## WARNING

EVER-THANE® BASE contains isocyanates.