

# Application Instructions (4/7/15)

SUPER THERM<sup>®</sup> is a water-borne combination of highperformance aliphatic urethanes, elastomeric acrylics, and resin additives which produces a tough, yet flexible coating film. Designed for performance and durability, SUPER THERM<sup>®</sup> contains 4 unique ceramics to block up to 95% of Solar Heat entering a structure due to Visual Light, Ultra Violet (UV), and Infrared (IR). SUPER THERM<sup>®</sup> is a flexible membrane with low permeability that can greatly reduce expansion and contraction of a roof. It also prevents corrosion and surface deterioration.

#### SURFACE PREPARATION

Surface must be clean from oil, tar, rust, grease, salts, and films.

- 1) Use general degreaser if needed.
- 2) Clean surface using TSP (tri-sodium-phosphate) or a citrus cleaner to release dirt and degreaser residue.
- 3) Pressure-wash if possible @ 3500 psi.
- Salt contamination on a surface can come as a result of salt water, fertilizers, and car exhaust. Use Chlor-Rid or equivalent to decontaminate surface if salts are present. Acceptable levels: Nitrates: 5-10 mcg/cm<sup>2</sup>, Sulfates: 5-10 mcg/cm<sup>2</sup>, Chlorides: 3-5 mcg/cm<sup>2</sup>

## Surface must be completely dry before applying.

- SUPER THERM must be applied during proper temperatures (below) and the prescribed overcoat window of the coating over which it will be applied.
- Maximum Surface Temperature when applying: 150°F (65°C)
- 3) Minimum Surface Temperature when applying: 40°F (5°C)
- 4) Maximum Surface Temperature after curing: 300°F (149°C)
- **NOTE:** Use Rust Grip® as a primer when needed. Refer to Rust Grip technical data sheet for overcoat window.
- **NOTE:** If pack rust or mill scale exist, it must be removed by grit blast, power tool or needle gun. Once removed, begin with Step 1 (power wash).
- **NOTE**: Harsh environments where color is desired, or where pooling may occur: SUPER THERM<sup>®</sup> should be over coated with ENAMO GRIP (solvent based) over metal or concrete, and SP SEAL COAT or SP LIQUID MEMBRANE over flexible surfaces (foam, tar, rubber and wood).
- **NOTE**: Modified bitumen, asphalt roofing and single-ply membranes must be primed with the appropriate primer (i.e. Super Base/HS or SP Single-Ply Primer).

#### **MIXING**

SUPER THERM<sup>®</sup> should be mechanically mixed or mixed by hand (boxing) for three minutes, then applied.

#### APPLICATION

SUPER THERM® can be applied by brush, roller or spray; however, the preferred method is by air or airless sprayer. It should never be applied directly over rust, nor should it ever be diluted or thinned.

- 1) If application is by brush, use a soft bristle brush.
- 2) If application is by roller, use a 3/4 inch nap roller.
- 3) If application is by spray, use a standard airless sprayer (2 gallons/minute at 3,300 psi.) with a .029-.033 tip according to fan width spread of application and pump pressure. To achieve proper thickness, temperature and humidity must be considered by applicator.
  - **NOTE:** The number of applications and the thickness of each should be in accordance with the job specifications.
  - **NOTE:** All filters should be removed from both <u>the</u> <u>gun handle</u> and <u>spray machine</u> prior to application, as they will trap the ceramics.
  - NOTE: Temperatures must always be a minimum of 5 degrees above the dew point during application.
  - **NOTE:** If SUPER THERM<sup>®</sup> is applied during a period of extremely high humidity or if there is rain soon after the application, bubbles may appear on the surface. Do not puncture these bubbles. This is normal and the coating will continue to cure with no effect on the performance or appearance of the coating. Bubbles will dry down tight and disappear without a trace or imprint.
  - **NOTE**: 2" corrugation = roof size x 135%; 2.5" corrugation = roof size x 145%; 3" corrugation = roof size x 160%

#### MINIMUM SPREAD RATES (mil thickness)

SUPER THERM<sup>®</sup> will be applied at no less than a total of 17 mils wet (425 microns)/9.1 mils dry (229 microns) for each application. Spread Rate is 95 sq ft per gallon. (8.7 sq meter per gallon)

#### **CURE TIME**

- 1) 30-60 minutes to tack free at 70°F (21°C)
- 2) Overcoat: 2 hours when 70°F (21°C) at 40% Relative Humidity

# 3) Full Cure: 21 days

**TEMPERATURE** 

- 1) Apply between 40°F. and 150°F.
- 2) Store between 40°F. and 100°F.

## **CLEAN-UP EQUIPMENT**

 After completion, spray system should be cleaned with soap and water; cleaned brushes and rollers can be reused.