



# EPOXOTHERM

## Application Instructions (3/6/15)

EPOXOTHERM is a two-part epoxy coating, which produces a hard, yet flexible coating film. When totally cured, the coating will have an equivalent insulation value up to four inches of batt insulation when applied at 80 mils dry. This epoxy coating was formulated with several ceramic compounds, and designed to slow conduction from radiant heat sources.

EPOXOTHERM was designed for use under water or in areas where constant splashing or condensation is a problem. It is resistant to chemicals and solvents, and can be applied to metal, concrete, masonry and wood.

### 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.
- 4) 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 may be damp.

- 1) EPOXOTHERM must be applied during proper temperatures (below) and the prescribed overcoat window of the coating over which it will be applied.
- 2) If applied over an existing coating having a glossed or shiny finish, it must be sanded and roughed to remove gloss before application, to improve the profile.
- 3) Additional coats of EPOXOTHERM can only be applied when the 1<sup>st</sup> coat becomes tacky to the touch and has little to no transfer of coating. After this stage, the surface must be lightly sanded to improve the profile.

### MIXING

- 1) Open pail, mix base with curing agent (8 parts base : 1 part curing agent) (ratio by volume, not by weight)
- 2) Mix by hand for two minutes, or using drill and mixing blade for a minimum of 30 seconds with NO vortex.

### TEMPERATURE

- 1) Apply between 40°F (4°C) and 100°F (38°C).
- 2) Maximum temperature for continuous use when cured is 300°F (149°C).
- 3) Store unmixed product between 40°F (4°C) and 100°F (38°C) according to hazmat standards on MSDS.
- 4) Mix base and curing agent and use immediately if ambient temperature is above 60°F (16°C). If below 60°F (16°C), allow mixed product to stand for 30 minutes before using @ 70°F (21°C).

### POT LIFE

4-6 hours at 70°F (21°C) - 1 hour at 90°F (32°C)

### APPLICATION

EPOXOTHERM can be applied by brush, roller or spray; however, the preferred method is by air or airless sprayer.

- 1) If application is by brush, use a soft bristle brush.
- 2) If application is by roller, use a 1/2 inch nap roller.
- 3) If application is by spray, use a standard airless sprayer (2 gallon/minute at 3,300 psi.) with a .029-.033 tip.

- **NOTE:** The number of applications and the thickness of each should be in accordance with the job specifications.
- **NOTE:** Temperatures must always be a minimum of 5 degrees above the dew point during application.
- **NOTE:** All filters should be removed from both the gun handle and spray machine prior to application, as they will trap the ceramics.

### MINIMUM SPREAD RATES (mil thickness)

**All Surfaces** – Apply 1 application of RUST GRIP® or MOIST METAL GRIP @ 200 sq ft/gallon (18 sq mtr/gallon); 8 mils wet/3.67 mils dry (200 microns wet/97 dry) to prime. Then apply 4 applications of EPOXOTHERM @ 64 sq ft/gallon (6 sq mtr/gallon); 25 mils wet/16 mils dry (625 microns wet/400 dry) each coat, as a minimum thickness to stop condensation.

**NOTE:** Surface and ambient temperatures will determine Cure time. Introduction of heat over surface will enhance the cure time. Induction Period: 30 minutes at 70°F (21°C); No induction time is necessary over 90°F (32°C).

### CURE TIME

**NOTE:** Surface and ambient temperatures will determine cure time. Introduction of heat over surface will enhance the cure time. Induction Period: 30 minutes at 70°F (21°C); no induction time is necessary over 90°F (32°C).

**NOTE:** It is critical that each coat of EPOXOTHERM be firmly adhered to the substrate before the next coat is applied. Depending on ambient and surface temperatures, it may take longer than a 24 hour recoat application window.

### CLEAN-UP EQUIPMENT

- 1) After completion, spray systems should be flushed and cleaned with MEK or other comparable solvents.
- 2) After completion, brushes and rollers can be cleaned with MEK or comparable solvents, stored and reused.