



TOTAL SEAL

Application Instructions (11/20/09)

TOTAL SEAL is a two-part epoxy coating system that has been specifically designed with specific additives to promote adhesion when used on concrete and masonry. TOTAL SEAL was developed to be applied to surfaces that have hydrostatic pressures and moisture mitigation. It is a water repelling epoxy 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 directly to 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/cm², Sulfates: 5-10 mcg/cm², Chlorides: 3-5 mcg/cm²

Surface must be mostly dry before applying.

- 1) TOTAL SEAL 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 TOTAL SEAL can only be applied when the 1st 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 (4 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

TOTAL SEAL 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 (1.5 gallon/minute at 3,300 psi.) with a .017-.021 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.

MINIMUM SPREAD RATES (mil thickness)

Porous Surfaces – Apply 1st application using a 50/50 mixture of TOTAL SEAL and MEK mixed well. Apply this at 200 sq ft/gallon (18 sq mtr/gallon); 8 mils wet/2 mils dry (to penetrate into pores. Allow 4 hours to dry and ventilate well, then apply 2nd application of 100% TOTAL SEAL at 200 sq ft/gallon. Wait 24 hours and apply the last coat of TOTAL SEAL at 200 sq ft/gallon.

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 TOTAL SEAL 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.