

PROTAL™ ST EPOXY

Surface Tolerant Liquid Epoxy Glass Flake Coating

Description

Protal ST Epoxy is a two-part, high solids, fast drying, glass flake epoxy coating for application directly onto steel, galvanised steel or concrete. Its good penetration and adhesive properties ensure excellent protection in long term exterior exposure.

Uses

Used wherever steel grit blasting is not possible. Protal ST Epoxy can be used alone or in combination with Denso Weatherseal Topcoat Acrylic or Denso Weathershield 65 for long term exposure to water in applications such as: structural steel, pipe externals, pipe racks, tanks, offshore platforms, locks, gates, and bridges.

Features

- Minimal surface preparation
- Long term exterior protection.
- Excellent water/sea water resistance
- Good resistance to dilute acids and alkalis, petroleum products & aliphatic solvents
- Good flexibility, hardness and adhesion to steel and concrete
- Good impact resistance
- Low VOC's
- Potable water compliant to SABS 1211 & AS/NZS 4020:1999

Application

Prepare surfaces by removing soluble salts, oil, grease and dirt. New steel should be blasted to SA 2.5 (ISO 8501). Where grit blasting is not possible, mechanically clean to St2. Abrasive blasting is recommended for severe environments. Concrete preparation: remove laitance and other surface contaminants.

Use as supplied in pre-weighed packs Part A (base component) with Part B (hardener). Pour all of Part B into Part A and thoroughly mix with a power whip for at least 2 minutes. Allow to stand for 10 minutes prior to use.

The substrate temperature must be a minimum 5°C and 3°C above the dew point temperature before proceeding with the coating operation. The first coat can then be applied by brush, roller or airless spray to a wet film thickness of 295 microns (250 microns DFT). Check the film thickness of the coating regularly with a wet film gauge during application.

Spraying is carried out using a 0.8 mm - 1.1 mm tip, 15 - 20 MPa nozzle pressure and a spray angle of 40 -80°, to achieve nominal DFT of 250 micron. Recoating should occur prior to full cure of preceding coat. If full cure has been reached, abrade the coating surface prior to recoating. Apply the second coat at 250 micron dry film thickness in the same manner as the first. When dry, a final weather resistant topcoat such as a Denso Weatherseal Topcoat Acrylic or Denso Weathershield 65 can be applied by brush, roller or spray.



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TECHNICAL DATA

PROPERTIES	VALUE
Pot Life @ 25°C	2.5 h @ 20°C
Full Cure @ 25°C	7 days
Overcoating Time @ 15°C	20 h minimum
@ 30°C	6 h minimum
Theoretical Film Thickness (typical)	295 micron (wet), 250 micron (dry)
Theoretical Coverage	3.4 m ² /L (range 5.0 - 2.0 m ² /L)
Solids by Weight (ISO 1515)	85 ± 2 %
Mixing Ratio by Volume	6 Parts Base:1 Part Hardener
Specific Gravity	1.5
Induction Time	10 minutes
Application Temperature	+5°C to +40°C. Note: If temperature falls below 5°C, surface must be preheated.
Maximum Service Temperature	85°C (dry), 52°C (wet)
Abrasion Resistance / Scratch Test (ISO 1518 1992 (E))	> 4 kg
Flash Point	35 ± 2°C
Colour	White, Grey
Packaging	5 L (4.28 L Base / 0.714 L Cure) 20 L (17.15 L Base / 2.85 L Cure)

STORAGE: Store the containers in a cool, dry, well-ventilated area away from heat and direct sunlight. The containers should be kept tightly sealed. Shelf life: 12 months, when stored between 5°C to 25°C.

CLEANING: Clean equipment with Epoxy Thinner or equivalent solvent cleaner.

HEALTH AND SAFETY: Spray or brush under well-ventilated conditions. Wear suitable protective clothing and glasses. See safety data sheets for further information.



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