POLYSCREED PU PRIMER

Polyurethane Concrete Primer

Three-part, cement modified, polyurethane resin primer designed for use with the Polyscreed PU range of products.

The applied product forms a watertight moisture barrier and in doing so reduces the chance of pin or blow hole formation in subsequent cementitious polyurethane systems. When applied to a correctly prepared substrate, the bond strengths are in excess of the concrete cohesive strength and thus forms an excellent bonding surface.

UNIQUE PRODUCT BENEFITS

- Moisture barrier.
- Pore filling and smoothing.
- Excellent adhesion to concrete.
- Heat resistant to 80°C.
- High chemical resistance.
- High impact resistance.
- Solvent free application.
- Antimicrobial silver ion technology.
- HACCP compliant Ideal for food processing areas.

APPLICATIONS:

- Chemical processing plants
- Wet or dry processing areas
- Breweries
- Food processing plants
- Packaging areas
- HACCP environments
- Engineering and fabrication workshops
- Laboratories

TECHNICAL DETAILS

Compressive Strength	> 55 MPa	
Tensile Strength	> 6.5 MPa	BS6319
Flexural Strength	> 40 MPa	
Concrete Adhesion	> 1.5 MPa (Concrete failure)	ASTM D7234
Impact Resistance	1 kg > 1.8 m 2 kg > 1.5 m	ISO6272 -1:2011
Hardness	80	Shore D
Slip Resistance	Dry > 70 Wet > 25	TRRL Pendulum Slip Test
Water Uptake (Permeability)	Nil	Karsten Test
Chemical Resistance	Refer to chemical chart	
Colour	Grey	
Over Coat Min. @ 25°C	16 hrs	
Over Coat Max. @ 25°C	48 hrs	
Kit Yield	6.4 L	
Coverage @ 0.30 mm	21 m² / kit	
Coverage @ 0.50 mm	12.8 m² / kit	
Pot Life	10 to 15 min.	
PACKAGING		
Part 1	2.45 kg (Resin)	
Part 2	2.55 kg (Hardener)	
Part 3	5 kg (Aggregate)	
Total Kit	10 kg	

Leading manufactures of specialist epoxy and polyurethane flooring systems, specialised construction and corrosion protection products.

Distribution facilities nationwide

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SUBSTRATE REQUIREMENTS

Concrete substrates must have a minimum compressive strength of 20 to 25 MPa, a minimum tensile pull-off strength of 1.5 MPa and be free of oil, fat, grease, dust, and loose friable materials. There must be no moisture vapour rising from the concrete and moisture content must be less than 5%.

Note: Any filling of blowholes / voids and surface levelling of substrate can be achieved using appropriate products within Technical Finishes Construction Range (please speak to one of our technical sales representatives).

PREPARATION

Remove all previous coatings, unbonded concrete and laitance mechanically through diamond grinding, abrasive blasting or scarifying to obtain a sound and porous surface (sandpaper texture). Sweep dust and loose debris followed by vacuuming, to obtain a dry and dust-free surface.

MIXING & APPLYING

Ensure application conditions of 10 to 25°C and at a maximum of 75% Relative Humidity. Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

Mixing

Open the aggregate bag (Part 3) before the mixing starts to ensure no time is wasted between mixes / kits. Shake Part 1 and Part 2 vigorously prior to opening.

Set up the mixing machine as close to the floor as possible (Use two mixing vessels to ensure time between mixes / kits is minimized).

Start timer when adding Part 2 to Part 1 and mix using a mechanical mortar mixer for 30 seconds. Once 30 seconds is complete, slowly add Part 3 into the mix and mix until uniformly wetted out. Check for no lumps in the mix, remix for 30 seconds to ensure a lump free consistency.

Placing

Pour out the mix onto the demarcated area and trowel or squeegee out into place. On porous surfaces, apply further resin until surface is completely wetted out. Trowel out as thinly as possible, leaving just enough to give a wet look. Leave for minimum of 16 hours and 36 hours in cold winter



Polyscreed PU Primer Concrete Substrate

months before screeding over. Do not allow the cured primer to cure longer than 48 hours before screeding over. (If more than 48 hrs has passed perform a light grind and apply a new layer of primer).

Note: Certain subsequent screeds to be applied require the primed surface to be broadcast with scatter sand. In such cases broadcast the relevant scatter sand at 0.5 to $1.0 \text{ kg} / \text{m}^2$ into wet primer coat.

Difficult substrates

Weak and dusting substrates generally consume 30% more primer than usual. Re-priming is necessary when the first coat of primer penetrates leaving a patchy appearance. Re-priming may be done immediately (< 30 min.) into wet primer to save time and no longer than 48 hours later.

Coving and Walls

Broadcast silica sand into the wet primer for assistance with bonding on vertical applications.

MAINTENANCE

Polyscreed PU Primer is to be covered with a polyurethane system topping. Protect the primed floor surface from all forms of traffic until screeding over is done. Contaminated surfaces would need to be prepared and primed again.

ANTIMICROBIAL RESISTANCE

An important advantage of the Polyscreed range is its silver ion technology which inhibits the growth of bacteria and fungi ensuring a more hygienic surface.

HEALTH AND SAFETY

Please read Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

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WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will guarantee such workmanship and application. It is vital that the application is done in accordance to our specification.

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