# **POLYSCREED LOCKCOAT**

# **Polyurethane Roller Coat**



A high performance three component polyurethane roller coat resin system providing exceptional physical and chemical resistance in demanding industrial environments. Designed for coating of concrete, existing polyurethane screeds and covings.

Ideal for applications in the food, pharmaceutical and manufacturing industries where high performance and durability are required. HACCP compliant with antimicrobial silver ion technology ideal for food processing areas.

#### UNIQUE PRODUCT BENEFITS

- High chemical resistance.
- High impact, abrasion and thermal shock resistance.
- Seamless and easy to clean. Antimicrobial silver ion technology.
- Low VOC content.
- · Fast installation.
- Easy to use fluid consistency with excellent adhesion.
- HACCP compliant Ideal for food processing areas.

TECHNICAL DETAILS		
Compressive Strength	> 50 MPa	
Tensile Strength	> 12 MPa	BS6319
Flexural Strength	> 20 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
Vapour Permeability	3 g / m <sup>2</sup> / 24 hrs @ 9 mm	ASTM E96:90
Water Uptake (Permeability)	Nil	Karsten Test
Foot Traffic	12 to 16 hrs	
Heavy Traffic	24 hrs	
<b>Chemical Resistance</b>	Refer to chemical chart	
Heat Resistance	-5°C to 80°C @ 0.25 mm	
Kit Yield	3.5 L	
Coverage @ 0.25 mm	14 m <sup>2</sup> / Kit	

## **PRODUCT COLOUR RANGE:**



\*Product colours may differ from the ones shown above. For a full colour chart or for samples, contact your nearest Technical Finishes branch. UV exposure yellowing is more prominent in light colours yet does not affect performance.

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

Distribution facilities nationwide

Western Cape +27 (0)21 535 4455 **Eastern Cape** +27 (0)41 451 3944 **Gauteng** +27 (0)11 822 7242 **KwaZulu-Natal** +27 (0)31 705 7733







# **APPLICATIONS:**

- Packaging areas
- Food processing plants
- Medium traffic production plants
- Warehousing
- Chemical processing plants
- Wet or dry processing plants
- Breweries
- HACCP environments

# **SUBSTRATE REQUIREMENTS**

Concrete substrates or polyurethane screeds 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. The surface finish of the concrete or substrate should be class 2 (AS 3610).

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. It is standard practice to ensure grooves 5 mm by 5 mm, run parallel to and 150 mm from all walls, plinths, finished edges, expansion joints, columns.

#### **PRIMING**

Ensure application conditions of 15 to 28°C.

If the substrate moisture content is:

Less than 5% Prime with either:

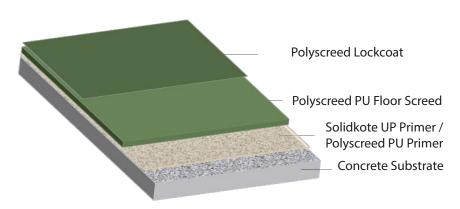
Solidkote UP Primer or

Polyscreed PU Primer.

Greater than 5% Prime with

Polyscreed PU Primer.

Allow Solidkote UP Primer to cure for at least 8 hours prior to application of Polyscreed Lockcoat with a maximum



over coating time of 18 hours.

Allow Polyscreed PU Primer to cure for at least 16 hours prior to application of Polyscreed Lockcoat with a maximum over coating time of 48 hours.

#### **INSTALLATION:**

Ensure application conditions of 15 to 28°C. Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

#### Mixing

Open aggregate (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).

Decant Part 1 into the mixing vessel, start timer when adding Part 2 and mix for 30 seconds. Once 30 seconds is complete, pour Part 3 into the mix and mix for a further 2 minutes until uniformly wetted out.

#### Placing

Pour out the mix into the demarcated area in a long ribbon and pull a with squeegee and finish with a roller. As soon as the first mix has been placed, the next mix should be delivered to the floor and mohair rolled immediately to remove application marks and mix join regions (regions where two mixes meet). Ensure rolling / spiking is within 8 minutes of the start time of each mix. Allow the surface to settle and cure.

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Do not over roll the surface unless a non-slip texture is desired. For a heavy non-slip, broadcast fine silica to saturation. Allow to cure overnight, vacuum and coat again as above.

One coat can be sufficient when over coating an existing Polyscreed SL / MD / RT / HF / WR product (mohair roller), whereas concrete surfaces require two coats (squeegee / steel trowel and back rolled).

For covings, coat the covings while coating the floor surface. Polyscreed Lockcoat may also be used for coating of walls.

#### **SEALING**

Stain resistance is enhanced if the Polyscreed surface is sealed. Solidkote UV Satin is recommended.

#### **MAINTENANCE**

Regular cleaning extends the service life of the Polyscreed system. Maintenance is to be carried out using Liquid Action which complies with SANS 1344 Medium Duty Solvent Detergent (2112/P3325/10/ID). Please refer to full cleaning regime for Polyscreed polyurethane flooring systems.

#### **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.

#### 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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