

# POLYSCREED MD

## 4 mm Polyurethane Floor Screed



A high performance four component polyurethane self-smoothing floor screed providing exceptional physical and chemical resistance in demanding industrial environments subject to medium traffic.

It provides a smooth, yet non-slip, protective floor finish 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	BS6319
Tensile Strength	> 12 MPa	
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
Heat Resistance	- 5°C to 70°C @ 3 mm	
	- 15°C to 90°C @ 4 mm	
Chemical Resistance	Refer to chemical chart	
Foot Traffic	12 to 16 hrs	
Heavy Traffic	24 hrs	
Kit Yield	21.4 L	
Coverage @ 3 mm	7.13 m <sup>2</sup> (8 mm rake)	
Coverage @ 4 mm	5.3 m <sup>2</sup> (10 mm rake)	

### 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.

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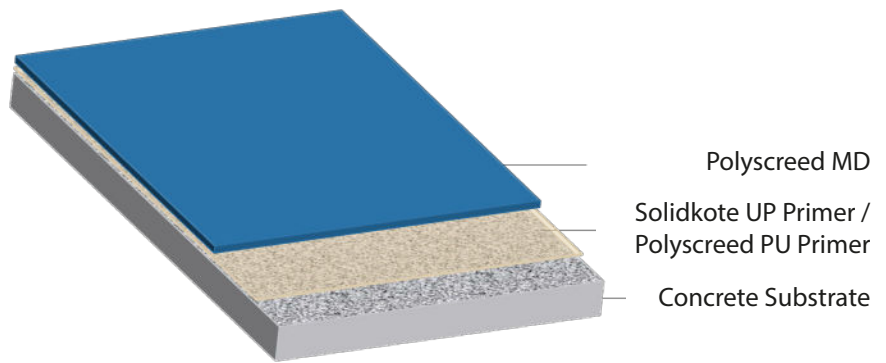
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## APPLICATIONS:

- 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 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 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 MD 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 MD 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 both aggregate bags (Part 3) before the mixing starts to ensure no time is wasted between mixes / kits. Shake Part 1, Part 2 and Part 4 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 and Part 4 (Pigment paste) into mixing vessel and mix for 5 seconds (until uniform).

Start timer when adding Part 2 and mix for 30 seconds. Once 30 seconds is complete, pour Part 3 filler 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 the mix with an 8 mm or 10 mm notched rake. As soon as the first mix has been troweled, the next mix should be delivered to the floor and placed into the previous mix. Spike roll immediately to remove trowel marks and mix joint regions (regions where two mixes meet). Ensure spiking is within 8 minutes of the start time of each mix. Allow the surface to settle and cure.

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## 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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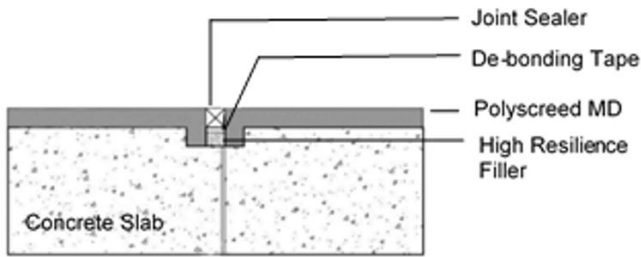


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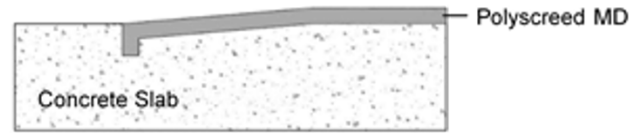


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## JOINT DETAIL

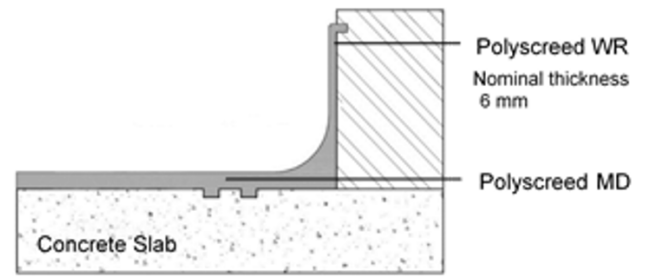
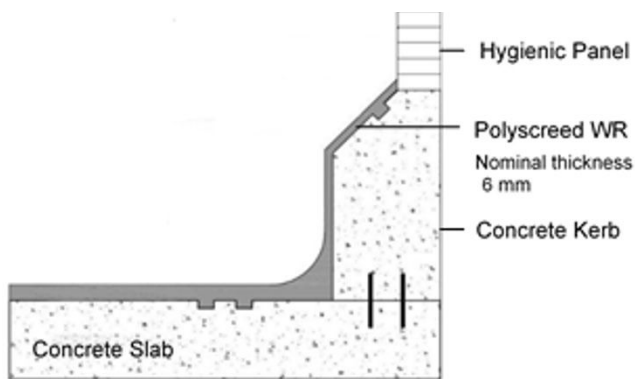


Low Movement Joint Detail

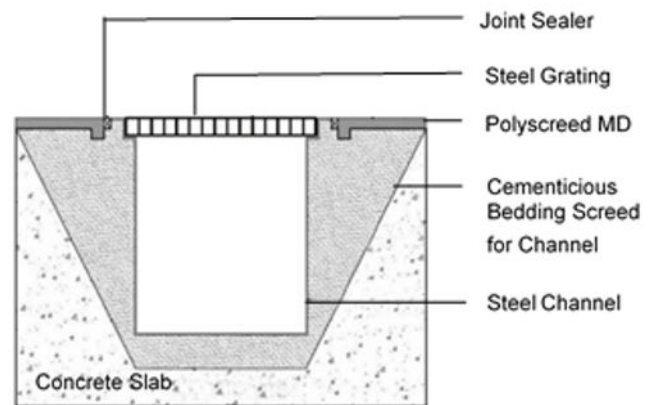
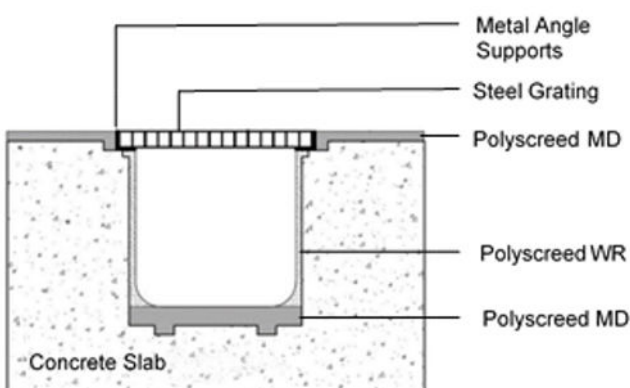


Termination Detail

## COVING DETAIL



## CHANNEL LININGS



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