



POLYSCREED WR

8 September 2020; Revision 5

# **POLYSCREED WR**

2 to 25 mm Polyurethane Render

A high performance three component polyurethane wall render providing exceptional physical and chemical resistance in demanding industrial environments. It provides a finish ideal for applications in the food, pharmaceutical and manufacturing industries where high performance and durability is required. HACCP compliant with antimicrobial silver ion technology ideal for food processing areas.



## **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
Water Uptake (Permeability)	Nil	Karsten Test
Heat Resistance	-5°C to 60°C @ 2 mm	
	-15°C to 80°C @ 25 mm	
Chemical Resistance	Refer to chemical chart	
Foot Traffic	12 to 16 hrs	
Heavy Traffic	24 hrs	
Kit Yield	15 L or 7.5 L (Half kit)	
Coverage @ 2mm	3.75 m² / L	
Coverage @ 5mm	1.5 m² / L	
PACKAGING	Full Kit	Half Kit
Part 1 (Resin)	2.9 kg	1.45 kg
Part 2 (Hardener)	2.4 kg	1.2 kg
Part 3 (Aggregate)	27 kg	13.5 kg
Total Weight	32.30 kg	16.15 kg



\*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.

# Technical Finishes

# TECHNICAL DATA SHEET

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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.

#### **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:

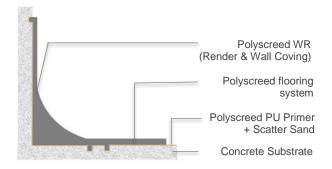
> Solidkote UP Primer or Polyscreed PU Primer.

Greater than 5% Prime with

Polyscreed PU Primer.

Broadcast 0.6 to 1.2 mm sand into wet primer at 0.5 to 1.0 kg/m<sup>2</sup>. Prime both vertical and horizontal portion of surface.

Allow primer to cure for at least 16 hours prior to application of Polyscreed WR 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 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 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**

As soon as mixed, apply with a steel trowel (thickness slightly higher than the end desired thickness). The vertical edge is done first, then the horizontal edge and finally the cove radius is trowled. The render is then compacted and finished to required thickness using a steel-coving trowel. As soon as the first mix has been troweled, the next mix should be delivered to the floor/wall and placed into the previous mix to mix join regions (regions where two mixes meet). Ensure finishing is done within 8 minutes of the start time of each mix. Allow the surface to cure.

#### **SEALING**

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

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# TECHNICAL DATA SHEET



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#### **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.

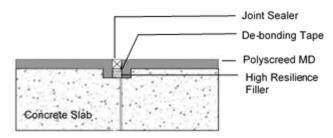
# TECHNICAL DATA SHEET

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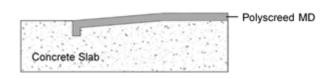
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## **JOINT DETAIL**

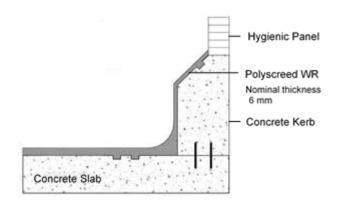


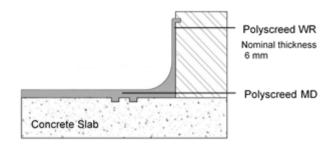
Low Movement Joint Detail



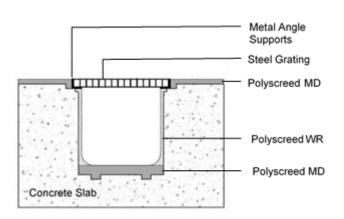
Termination Detail

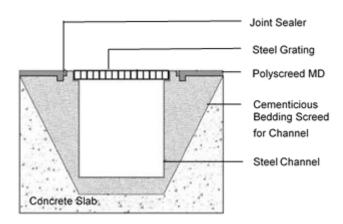
## **COVING DETAIL**





## **CHANNEL LININGS**





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