TECHNICAL DATA SHEET

Technical Finishes
We deliver results

SOLIDFLOW HYDRO PROOF

28 July 2021; Rev 2

SOLIDFLOW HYDRO PROOF

2.5 - 4mm High Performance Self-Smoothing Damp Proof Resin Floor System

Three component self-smoothing floor composite screed providing exceptional tolerance to damp substrates. Can be used as a stand alone "Temporary Moisture Barrier" (TMB) for floors with the absence of damp proof membrane under the slab. It provides exceptional physical and chemical resistance in demanding industrial environments subject to light-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 is required. HACCP compliant with antimicrobial silver ion technology ideal for food processing areas.



BENEFITS:



Resistant to rising damp and osmosis blisters.



Can be applied on floors without "Damp Proof Membrane".



Heat resistant up to 80 °C.



High chemical resistance.



High impact, abrasion and thermal shock resistance.

Compressive Strength >50 MPa Tensile Strength >12 MPa Flexural Strength >20 MPa Concrete Adhesion >1.5 MPa (Concrete failure) Impact Resistance 1 kg >1.8 m (Concrete failure) Impact Resistance 1 kg >1.8 m (Concrete failure) Impact Resistance 2 kg >1.5 m (Concrete failure) Impact Resistance Dry >70 (Concrete failure) Impact Resistance Nil (Resistance) Impact Resistance Refer to 60 °C @ 2 mm Impact Resistance Refer to chemical chart Impact Resistance Refer to 60 °C @ 2 mm Impact Resistance Refer to 60 °C @ 3 mm	TECHNICAL DETAILS			
Strength		>50 MPa	BS6319	
Concrete Adhesion >1.5 MPa (Concrete failure) ASTM D7234 Impact Resistance 1 kg >1.8 m 1:2011 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 @ 3 mm Chemical Resistance Refer to chemical chart Foot Traffic 12 to 16 hrs Heavy Traffic 24 hrs Kit Yield 15.6 L Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Tensile Strength	>12 MPa		
Concrete Adhesion (Concrete failure) ASTM D7234 Impact Resistance 1 kg > 1.8 m 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 @ 3 mm Refer to chemical chart Foot Traffic 12 to 16 hrs Heavy Traffic 24 hrs Kit Yield 15.6 L Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Flexural Strength	>20 MPa		
Resistance 2 kg > 1.5 m 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 Chemical Resistance Refer to chemical chart Foot Traffic 12 to 16 hrs Heavy Traffic 24 hrs Kit Yield 15.6 L Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener		(Concrete	ASTM D7234	
Slip Resistance	Impact Resistance			
Slip Resistance Slip 770 Wet > 25 Pendulum Slip Test	Hardness	80	Shore D	
(Permeability) INII Test Heat Resistance -5 °C to 60 °C @ 2 mm Chemical Resistance Refer to chemical chart Foot Traffic 12 to 16 hrs Heavy Traffic 24 hrs Kit Yield 15.6 L Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Slip Resistance		TRRL Pendulum Slip Test	
Heat Resistance -15 °C to 80 °C @ 3 mm Chemical Resistance Foot Traffic Heavy Traffic Kit Yield Coverage @ 2.5 mm Coverage @ 4 mm PACKAGING Part 1 Part 2 -15 °C to 80 °C @ 3 mm Refer to chemical chart 12 to 16 hrs 15.6 L 6.24 m² 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) 4.5 kg Hardener	Water Uptake (Permeability)	Nil		
-15 °C to 80 °C @ 3 mm Chemical Resistance Foot Traffic Heavy Traffic Kit Yield Coverage @ 2.5 mm Coverage @ 4 mm PACKAGING Part 1 Factor 12 to 16 hrs 12 to 16 hrs 6.24 m² 6.24 m² 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Heat Resistance	-5 °C to 60 °C @ 2 mm		
Resistance Foot Traffic Heavy Traffic Kit Yield Coverage @ 2.5 mm Coverage @ 4 mm PACKAGING Part 1 Part 2 Refer to Chemical chart 12 to 16 hrs 15.6 L 6.24 m² 6.24 m² 3.9 m² P(Figmented Liquid) Figure 15 kg (Figmented Liquid) 4.5 kg Hardener		-15 °C to 80 °C @ 3 mm		
Heavy Traffic 24 hrs Kit Yield 15.6 L Coverage 6.24 m² © 2.5 mm 3.9 m² PACKAGING Part 1 Part 2 4.5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener		Refer to chemical chart		
Kit Yield 15.6 L Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Foot Traffic	12 to 16 hrs		
Coverage @ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Heavy Traffic	24 hrs		
@ 2.5 mm 6.24 m² Coverage @ 4 mm 3.9 m² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	Kit Yield	15.6 L		
@ 4 mm S.9 III ² PACKAGING Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener	9	6.24 m²		
Part 1 5 kg (Pigmented Liquid) Part 2 4.5 kg Hardener		3.9 m²		
Part 2 4.5 kg Hardener				
, and the second	Part 1	<u> </u>		
Part 3 20 kg (Aggregate)	Part 2			
	Part 3	20 kg (Aggregate)		
Total Kit 29.5 kg	Total Kit	29.5 kg		



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.

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*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.

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).

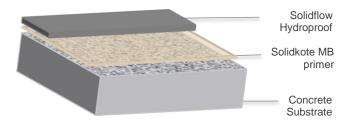
Note: Any filling of blowholes / voids and surface levelling of substrate can be achieved using appropriate products within Technical Finishes Construction Range (please speak to one of our technical sales representatives).

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.



Prime with Solidkote MB primer as a scraper coat at 3 m² / L.

Allow primer to cure for at least 16 hours prior to application of Solidflow Hydro Proof 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 bags (Part 3) before the mixing starts to ensure no time is wasted between mixes / kits. Open Part 1, Part 2 and Part 3 to be ready for mixing.

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 mixer. Start timer when adding Part 2 and mix for 30 seconds. Once 30 seconds is complete, add Part 3 into the mix and mechanically mix with a "Festo" for a further 2 minutes until uniformly wetted out.

Placing

Pour out the mix onto the demarcated area in a long ribbon and pull the mix with a 5 mm or 8 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 join 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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MAINTENANCE

Regular cleaning extends the service life of the Solidflow Hydro Proof system. Maintenance is to be carried out using Liquid Action which complies with SANS 1344 Medium Duty Solvent Detergent (2112/P3325/10/ID).

ANTIMICROBIAL RESISTANCE

An important advantage of the Solidflow Hydro Proof 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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