

Flowshield SL 1000

Application instructions

Preparation/Substrate

Surfaces to be coated should be sound and provide adequate strength for the proposed end use (minimum compressive strength of 25 N/mm² and tensile pull off reading of 1.5N/mm²).

The surface profile and levels should be appropriate for the system to be applied. All “high spots” to be diamond grinded. Substrate humidity must not exceed 75% RH, or when tested with a “Protimeter” moisture meter a reading less than 5% must be achieved.

Ensure all soft cement laitance are removed via blasting, scouring or diamond grinding. Irregularities, damage and cracks are filled with epoxy filler. All residues must be removed to provide a dry, dust free open textured surface.

Contact us for advice if there are impurities, such as oils, curing compounds or synthetic fibres, in the concrete. Check the relative humidity of floors at ground level.

Primer

Prime using **Flowprime** in one coat (or two coats depending on substrate porosity) to ensure that the substrate is fully sealed. Should the concrete or screed be porous a second coat may be required. To prevent the possibility of pin holes or out gassing, apply a full scatter (to excess) of Silica sand Grade AFS 55 between coats. Ensure that the excess sand is removed after the first coat has cured and before the application of the second coat. Flowcoat SF41 Natural can be used as a substitute to Flowprime.

Pour all of Hardener B into the Base A container. Mix using a slow speed drill and helical spinner for a minimum of 60 seconds until a homogenous mixture is obtained. Do not entrain too much air. Immediately after mixing, pour out all of the resulting mixture onto the floor and apply using a double-lipped rubber squeegee, steel trowel and/or roller. Ensure that the primer permeates any surface irregularities.

Allow the primer to harden until the surface can be walked on, approximately 15 hours at 20°C. At lower temperatures the hardening time is longer. It is important there are no dry patches. In instances where the substrate is highly absorbent, two coats of primer may be required in order to prevent out gassing or pin holing in the Flowshield SL 1000.

Apply immediately after mixing using a double-lipped rubber rake and/or roller. Ensure that the primer permeates any surface irregularities.

Consumption of primer: approximately 0.3kg/m².

Hydraseal DPM must be used as the primer in instances where the substrate exceeds 75% RH; refer to the separate application instructions for Hydraseal DPM.

Mixing

Flowshield SL 1000 is supplied in complete batches, Base A, Hardener B and Filler C. The pigmented Base A must be stirred well. Transfer Hardener B to Base A. Mix thoroughly using a low-speed drill for 1-2 minutes. Then add Filler C. Mix thoroughly. Remember never to split batches/components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in colour, etc.



Application

The compound is poured out immediately after mixing in a run on the floor. Spread the material with a toothed rake (4mm SL rake) or spacing rake. The thickness of the layer is regulated by setting the distance between the pin and plate on the back of the spacing rake. To achieve a thickness of 1mm, the spacing rake must be set to approximately 1.5mm. The thickness is guaranteed by measuring, and checking how much material has been used (every 50 m²).

Flowshield SL 1000 is applied in thicknesses of 1mm .

The surface is thoroughly rolled (after approximately 5 minutes) with a spiked roller to remove any air bubbles. The spiked roller also has a smoothing effect. Use clean spiked shoes if it is necessary to walk on freshly laid compound.

During prolonged interruptions in the work the seam is placed where it is least visible, e.g. along drainpipes or door openings etc. Use masking tape. Apply the compound up on the tape. Remove the tape after rolling with the spiked roller. During the continuation of the work, mask with new tape on the finished coat. Remove after rolling.

Allow the product to harden until it can be walked on (after approximately 24 hours at 20°C). The hardening time lengthens at lower temperatures.

Note that:

Flowcrete products are often multiple-component systems. Poor mixing, or incorrect mixing procedures, can result in irregular and incomplete hardening, which in turn can result in an inferior final result.

Pigmented Base A is stirred first before Hardener B is added.

The temperature should be over 15°C to achieve the best results during application. The temperature of the substrate should be at least 10°C, although a temperature of 15-25°C is recommended.

The temperature of the substrate should exceed the "dew point" by more than 3°C during application and hardening.

The product should be stored in such a way that the temperature is the same as the room temperature where the product is to be applied, i.e. between 15-25°C. This improves the mixing, flow, penetration and hardening of the product.

The surface can normally be walked on after approx. 15 hours at 20°C. Complete hardening takes 5-7 days.

There are often several types of products at a workplace. Sort the products separately to avoid mistakes.

A high solids, Metallised Polish may be used to achieve a more durable finish and increase scratch resistance. Please consult the Technical Department for recommendations.



Consumption/Ratio of Components

Primer:

Consumption of Materials approximately 0.3kg/m²

	Weight	Volume
Ratio of Components		
Flowprime	2.2 :1	2 : 1

Flowshield SL 1000:

Consumption of Materials 1ℓ/m²

The product is delivered A+B+C in the following packs :-

Unit	Base A	Hardener B	Filler C
(25.5 litres)	15ℓ	5ℓ	15kg

Cleaning of Tools

Clean immediately after use in solvent, e.g. Flowsolve Cleaner or Acetone.

Any recommendation or suggestion relating to the use of the products made by Flowcrete SA, whether in its technical literature, or in response to a specific enquiry, or otherwise, is based upon data believed to be reliable, however the products and information are intended for use by Customers having requisite skill and know-how in the industry and therefore it is for the Customer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that the Customer has done so at its sole discretion and risk.



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