

Flowshield LXP

Application instructions

Preparation/Substrate

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

The surface profile and levels should be appropriate for the system to be applied. Substrate humidity must not exceed 75% RH, in which case use Hydraseal DPM.

Blasting, scouring or diamond grinding removes laitance. 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 etc., in the concrete. Check the relative humidity of floors at ground level. Follow our instructions for connections to grid drains, cesspools, pipes and pipe inlets.

Primer

Concrete

Prime using **Flowprime LXP** in one or two coats to ensure that the substrate is fully sealed. To help prevent the possibility of pin holes, use two coats of primer and apply a full scatter (to excess) of Silica sand Grade 50 or Natural Quartz 0.1 - 0.3 mm between coats. Ensure that the excess sand is removed after the first coat has cured and before the application of the second coat.

Pour Hardener B into the packaging holding Base A and completely pour out the resultant mixture. Mix using a low-speed drill and stirrer until a homogenous mixture is obtained. Do not mix in too much air.

Allow the primer to harden until the surface can be walked on, approx. 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 avoid dry patches. Apply immediately after mixing using a double-lipped rubber squeegee and/or roller. Ensure that the primer permeates any surface irregularities.

Consumption, primer: approx. 0.3 kg/m².

Hydraseal DPM is to be used as the primer in instances where the substrate exceeds 75% RH; refer to a separate application instruction for more information.

Metal

Prime using **Peran Primer W**.

Stir Hardener B before adding Base A. Make sure that the container holding Base A is completely emptied. Mix using a low-speed drill and stirrer until a homogenous mixture is obtained. Then add cold water amounting to 15% of the A+B mix by weight, and mix for a further minute.

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

Peran Primer W can be coated after 2-3 hours at 20°C

Consumption, primer: approx. 0.25 kg/m².

Asphalt

Although Flowshield LXP will bond to asphalt, it is essential to use a Flowprime LXP as a primer to reduce the suction of the substrate and avoid pin holes in the final finish.

To help prevent the possibility of pin holes, use two coats of primer and apply a full scatter (to excess) of Silica sand Grade 50 or Natural Quartz 0.1 - 0.3 mm between coats. Ensure that the excess sand is removed after the first coat has cured and before the application of the second coat.

Note that:

Uneven floors may require the use of Flowshield LXP as a scratch-coat. Use 0.1 - 0.3 mm natural sand in a 2:1 ratio before applying the Flowshield LXP system.

Mixing

Flowcoat / Flowshield LXP is supplied in complete batches, A+B. The coloured Base A must be stirred well. Transfer Hardener B to Base A. Mix thoroughly using a low-speed drill for 1-2 minutes. Thoroughly stir. Pour the material into another mixing vessel and mix for a further minute. Remember, never split up a batch. 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 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. For example, to achieve a thickness of 1.5 mm, the spacing rake must be set to approx. 2.5 mm. The thickness is guaranteed by measuring, and checking how much material has been used (every 50 m²). For a thickness of 1.5 mm, material consumption is 2.3 kg/m².

The surface is rolled (after approx. 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 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 drains or door openings etc. Use masking tape. Apply the compound up on the tape. During the continuation of the work, mask with new tape on the finished coat.

Important Information :

There may be colour differences between different batches. Make sure that the material comes from the same batch.

In instances where the colour is to be the same across multiple orders, Flowcrete should be notified so that production can take this into account.

Flowshield LXP is not colour fast and may change colour over time. This does not compromise the product's flexibility or chemical resistance characteristics.

Note that :

Concrete is a very porous material; as it warms during the day it "outgases" (expels air).

A coating applied while the concrete is out gassing is likely to develop bubbles and pinholes.

To avoid this, the material should be applied when the temperature of the concrete substrate is static or falling (usually this is from late afternoon into the night).

Stop applying the material well before dawn, so it has time to set up (firm to the touch) before out gassing begins. This may be anywhere from 1 to 6 hours, depending upon the weather conditions and the product applied. In addition, it is a good idea to shade the work area from direct sunlight.

An additional priming process may be required in situations where out gassing could be a problem. Consult Flowcrete for priming recommendations.

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.

The coloured Base A is stirred first before the B component 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. 16 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.

Consumption of Materials / Ratio of Components

	Consumption of Materials	Ratio of Components (A:B)	
		Weight	Volume
Flowprime LXP	approx. 0.3 kg/m ²	2.6 : 1	-
Peran Primer W	approx. 0.25 kg/m ²	1:4	1:3
Flowshield LXP	approx 2.3 kg/m ² (at 1.5 mm)	4.9:1	3.9:1

Cleaning of Tools

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

Any suggested practices or installation specifications for the composite floor or wall system (as opposed to individual product performance specifications) included in this communication (or any other) from Flowcrete UK Ltd constitute potential options only and do not constitute nor replace professional advice in such regard. Flowcrete UK Ltd recommends any customer seek independent advice from a qualified consultant prior to reaching any decision on design, installation or otherwise.

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