



Flowcem

Application instructions

Preparation/Substrate

Surfaces to be coated should be sound and provide adequate strength for the proposed end use. The surface profile and levels should be appropriate for the system to be applied. Substrate humidity must not exceed 100% RH (surface dry).

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.

Priming with Flowseal EPW Clear

For normal concrete substrates use Flowseal EPW Clear.

Pour Base A into the Hardener B container and drain thoroughly or scrape out residues. Mix the liquids until homogenous with a slow speed drill and helical spinner, taking care not to entrain air.

Apply primer immediately after mixing using a rubber squeegee and/or medium pile roller, ensuring it is worked into all irregularities.

The primer must be allowed to flash off by for app 15 minutes before application of the flowcem but must be wet or tacky.

It is important there are no dry patches. Porous floors (high air cavities) will need two coats of primer.

Application of Flowcem

Flowcem is supplied in pre-proportioned units (components A+B+C). Stir or shake the Base A and Hardener B components to re-mix any separation during transport. Transfer both components into a suitably sized mixing container to accommodate the full unit with space for mixing. Thoroughly stir with slow speed drill and helical spinner for 30 seconds. Add component C to the mixture and mix until homogenous (minimum 2 minutes).

Remember never attempt to proportion the resin and hardener components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in the final finish.

The compound is poured out immediately after mixing in a corridor on the floor. Spread the material with a trowel, 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. E.g. for a thickness of 2.0 mm the spacing rake is set to approx. 3.0mm. The thickness is guaranteed by measuring, and checking how much material has been used (every 50m²).

Flowcem can be applied in layers 2 - 3mm thick.



The surface must be rolled immediately with a spiked roller to remove entrained 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 drains or door openings etc. Use masking tape. Apply the compound over the tape. Remove the tape after rolling with the spiked roller, allowing the product to become partially cured.

During the continuation of the work, mask with new tape over the edge of the finished coat. Remove after rolling.

Allow the product to harden until the surface can be walked on (approx. 16 hours at 20°C). At lower temperatures the hardening time is longer. The ambient humidity during application and cure must not exceed 85% RH.

Optional slip resistant finish – quartz aggregate or similar dressing (granulometry to suit) may be used to provide a slip resistant profile. This can be overcoated with a suitable resin topping to provide the desired finish.

Broadcast, to excess, the selected aggregate into the surface of the wet product, within 5-10 minutes of application.

Overcoating with a moisture sensitive finishes

Allow Flowcem to dry before overcoating, which normally takes 2 days and depends upon the ambient conditions and moisture content of the substrate.

When over-coating Flowcem with a moisture sensitive, impervious coating, check surface moisture content is 75% RH or less. At surface moisture contents up to 85% RH, Flowcem can be overlaid with Flowseal EPW before applying any such coatings.

Ensure that the surface of the product is clean and dust free before applying a topcoat. Otherwise clean the surface with a coarse Scotch pad and rotary scrubber to remove any loose contamination. Do not grind the surface and reduce the overall thickness of the product because this will reduce the effectiveness of the moisture barrier.

Notes:

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 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. Conditions of high humidity combined with sudden falls in temperature should be avoided during the cure period as this can lead to condensation effects and prevent the product from hardening. 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. 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.

Ensure good ventilation when using the product in a confined space.

Flowcem should normally be sealed to provide a trafficable finish.



When overcoating Flowcem with Flowcrete resin based SL products, use the appropriate primer for the system.

Flowcrete resin coatings can normally be applied onto Flowcem without the need for a primer. In which case allow at least 48 hours for the product to dry.

Application temperatures can affect the workability of the product. At temperatures below 15°C, the Filler C component can be reduced by a maximum of 10% by weight to improve the fluidity. Do not add more water to the mix.

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

Consumption/Ratio of Components

Flowseal EPW Clear	Consumption	Approx. 5m ² /Litre	
	Ratio	Weight	4 : 1
		Volume	4 : 1
Flowcem	Consumption	4.2 kg/m ² for 2mm	
		6.3 kg/m ² for 3mm	

Cleaning of tools

Clean tools directly after use with soap and water.

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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