

# **Flowcem VS**

## **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.

Concrete surfaces must be prepared mechanically by blasting, diamond grinding or high pressure washing to remove laitance.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. 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

For dense concrete surfaces priming by wetting the surface with water is sufficient. Porous concrete surfaces to be primed with Flowseal EPW Clear.

#### Priming with 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 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.

## **Application of Flowcem VS**

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 applied immediately after mixing onto the damp surface and spread evenly to the required thickness.

When necessary it may be finished off with a wet neoprene sponge.

Alternately the product may be sprayed using a hopper gun and finished off with a steel trowel.

A seamless finish can be achieved if a "wet" edge is maintained during application.



During prolonged interruptions in the work the seam is placed where is it least visible e.g. along drains or door openings etc. Use masking tape. Apply the compound over the tape. Remove the tape after 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 curing.

Allow the product to harden (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.

#### Overcoating with a moisture sensitive finishes

Allow Flowcem VS 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 VS with a moisture sensitive, impervious coating, check surface moisture content is 75% RH or less. At surface moisture contents up to 85% RH, Flowcem VS 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 <sup>2</sup> /Liter	
	Ratio	Weight Volume	4 : 1 4 : 1
Flowcem	Consumption	4.0 kg/m <sup>2</sup> for 2 6.0 kg/m <sup>2</sup> for 3	g/m <sup>2</sup> for 2mm g/m <sup>2</sup> for 3mm
	Ratio	Weight	1 : 2.5 : 15

### **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 (Pty) Ltd., 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.