

## Peran STB Hand Trowel

### Application instructions

#### Preparation/Substrate

Surfaces to be coated should be sound and provide adequate strength for the proposed end use with a minimum compressive strength of 25 N/mm<sup>2</sup>. Check the relative humidity of floors at ground level. Substrate humidity must not exceed 75% RH (otherwise the primer must be substituted with Hydraseal DPM).

Blasting, scarifying or diamond grinding removes laitance. Irregularities, damage and cracks can be filled with epoxy screed (e.g. Flowtex F1 Mortar) or levelled with an epoxy scratch-coat (e.g. Flowprime mixed with fine dry sand).

All mobile joints must pass through the screed and must be sealed tight. Anchor grooves must be cut on both sides of such joints. Welded joints and cracks in the concrete may be coated, but if movement occurs the screed will also crack.

All residues must be removed to provide a dry, dust free open textured surface. The surface profile and levels should be appropriate for the system to be applied.

Contact us for advice if there are impurities, such as oils etc., in the concrete.  
Follow our instructions for connections to grid drains, cesspools, pipes and pipe inlets.

#### Primer

Prime using **Flowprime**.

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.

Natural quartz 0.7-1.2 mm (**B&E 1.1**) or similar is sprinkled in the wet primer. 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.

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

Consumption, primer: approx. 0.3 kg/m<sup>2</sup>.

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

#### Mixing

**Peran STB Hand Trowel** is supplied in complete batches, A+B+C. Add the Hardener to Base A and mix thoroughly for 1-2 minutes using drill and helical spinner. Transfer to a rotary forced action mixer and add the Filler C and mix for a further 2 minutes until uniform. The mixed material should be used immediately for best results and within 20 minutes.

Remember never to split batches/components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in colour, etc.

## Application

The ready-mixed compound is poured into a laying box and the box weighted. The box is then drawn at an even speed over the surface to be laid. After each run it is compacted and smoothed with a steel trowel by hand or power float.

Finishing with a smoothing machine should be carried out after two runs have been laid closing the sledge marks by hand before doing this.

Alternately Peran STB Hand Trowel may be spread and applied by hand trowelling. In this case 5mm screed bars should be used to accurately gauge the thickness of the applied product. Once spread to the desired thickness. Compact and finish with a steel trowel.

**NOTE!** Do not smooth closer to the edge than approx. 15 cm, i.e. the edge between the concrete and in to the laid compound, this is to ensure the next mix can be correctly blended in with the last.

## Skirting/coves

To achieve the best results the floor, coves and skirting should be applied in a single procedure. If procedures are carried out before or after there will be a visible seam between the floor and cove. Check if the skirting should follow the floor, or be straight in the top edge. Limit the height with tape or a fixed edge trim before starting, and then prime the wall with Flowprime.

Apply the skirting compound in the wet primer with a coving trowel, carefully smooth. If applied to a tape, draw the tape and brush to the top edge to obtain a smooth transition.

**NOTE!** Pay special attention to the above. A well executed skirting shows good workmanship.

## Topcoat

Before applying the topcoat, scrape ("de-nib") the skirting, cove and floor to remove all the loose particles and high points. Carefully vacuum clean. The compound should be allowed to cure for at least 15 hours (max 24 hours) before applying the topcoat.

Apply the Peran STB sealcoat in a flood layer with a broad steel spatula or trowel (flat edged). Allow the Peran STB topcoat to penetrate down into the compound for approximately 5 minutes and follow up with a stiff rubber rake to obtain a smooth (lightly textured) surface structure.

Use Ivory 318B to seal vertical (and non horizontal) surfaces, such as skirting, coves and around grid drains.

Do not mix over large quantities of topcoat at any one time. If the topcoats start to gel/harden during the application, this will result in an uneven surface finish. Do not mix more than can be consumed within 15 minutes.

Allow the sealer to harden until the surface can be walked on, approx. 15 hours at 20°C. At lower temperatures the hardening time is longer.

## Second Topcoat

Apply a further coat of FLOWSEAL in the same way as the first coat, less penetration time should be required for the second coat. If a slight texture is required care must be taken to keep the final coat very tight!

A matt sealer is highly recommended to give the best aesthetics for the system; otherwise the gloss finish exhibited from the STB sealcoat may highlight every undulation or trowel mark.

Apply **Super Satin** in a very thin layer to finish the system. Super Satin is solvent free. Super Satin observes the VOC (Volatile Organic Compound) limits introduced in 2007 and will conform to the limits set for 2010.

Add all of Hardener B to Base A. Mix with slow speed drill and helical spinner, taking care not to entrain air.

Super Satin must be distributed evenly in consistent layer thickness, not exceeding 500µ, to ensure a consistent matt and bubble-free finish. Use a paint tray, high quality fluff-free roller and finish within five minutes of applying to the floor.

**NOTE!** It is essential that this coating be applied at the correct film thickness. Thick film builds may result in surface imperfections. Always use a paint tray when sealing. Do NOT tip into pools on the floor.

Please consult individual Product Datasheets for further information.

**Note that:**

Flowcrete products are often multiple component system. Poor mixing, or incorrect mixing procedures, can result in irregular and incomplete hardening, which in turn can result in inferior performance of the finished system.

Check the batch numbers and size of the quartz. Remove any sacks that do not contain the correct colour or size.

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 preferred. Conditions of high humidity combined with sudden falls in temperature should be avoided during the cure period as this can lead to condensation effects such as carbonation and blooming – whilst not deleterious over the performance of this system, this can cause an impaired surface finish. The temperature of the substrate should exceed the “dew point” by more than 3°C during application and hardening.

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

The surface can normally be walked on after approx. 15 hours at 18°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

### Consumption

#### Consumption of flooring Materials

Primer	Flowprime	0.3 kg/m <sup>2</sup> (Depends on porosity of substrate)
Aggregate scatter	0.7-1.2mm quartz	0.5 kg/ m <sup>2</sup>
Screed compound		at 5 mm
Screed	Peran hand trowel	11 kg/ m <sup>2</sup>
Topcoat 1 <sup>ST</sup> coat	Flowseal	0.3 kg/ m <sup>2</sup>
Topcoat 2 <sup>nd</sup> coat	Flowseal	0.3 kg/ m <sup>2</sup>
Topcoat	Super Satin	0.1 kg/ m <sup>2</sup>

### Ratio of Components

	weight	volume
Flowprime	2.3:1	2:1
Peran STB sealcoat	Mix as supplied	
Super Satin	4.5:0.5	4.5:0.5

### Skirting/coves

#### Primer

Flowtex HT F1 coving resin (natural) approx. 0.02 kg/running metre

**Skirting compound** approx. 2 kg/running metre with height of 10cm

#### Topcoat

Ivory 318B approx. 0.03 kg/running metre

### Cleaning of tools

Cleaned immediately after use in solvent, e.g. W.S.B.C.

*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.*