

Peran PTS

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/mm². Check the relative humidity of floors at ground level. Substrate humidity must not exceed 75% RH (otherwise the primer must be substituted by Hydraseal DPM).

Blasting, scouring 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 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 the substrate using Flowprime (or Hydraseal DPM where appropriate). Flowcoat SF41 Natural can be used as an alternative to Flowprime.

Pour all of Hardener B into the Base A container. Mix using a slow speed drill and helical spinner 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 and roller. Ensure that the primer permeates any surface irregularities.

Apply scatter Quartz (B&E 1.1mm) into the primer, whilst wet.
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.

Consumption of primer: approximately 0.25ℓ/m² per coat.

Consumption of scatter: approximately 0.2kg/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.

Application

The system is based on mixing a so-called “slurry”.
Firstly mix the Peran PTS, Base A and Hardener B components together using a slow speed drill and helical mixing blade. Scrape sides and base of the mixing vessel during this process. Ensure the liquids are homogeneous before moving to next stage.



Lay the slurry (using the scatter in the primer as a thickness guide) in an even layer by means of a broad steel spatula or trowel (flat edge). Allow to stand for 5 minutes and then cover/blind to full saturation with Quartz.

NOTE! It is important not to over scatter the slurry layer; scatter just enough to cover the wet resin areas. If an excess of quartz is applied to the slurry, the quartz will not compact and wet-up correctly during power floating. A heavy texture/profile will result after curing and the sealer demand will increase.

Consumption: Slurry approximately 1.6ℓ/m²

Quartz Scatter approximately. 4.5 kg/m²

Mixing machine: Slow speed drill and helical steel paddle.

NOTE! Do not mix more slurry than can be applied in 20 minutes.

Let the system stand for 10-15 minutes to allow the resin to wet up and the quartz to settle. The surface should then be smoothed with a light weight power float. Do not over trowel. Allow the system to harden until the surface can be walked on, approx. 15 hours at 20°C. At lower temperatures the hardening time is longer.

Power Float:

Check that the blades are not damaged and are clean. Always make sure you have extra blades in reserve. Soft smoothing blades are used to minimise smoothing swirls. New blades can be worn in by running the float on a smooth hard surface.

Blades should be replaced approximately every 350-400m².

NOTE! When power floating, leave an un-trowelled edge of Quartz (approximately 15cm) in order to “marry in” the next broadcast of scattered quartz.

Skirting/Coves

For best results the floor and coves should be applied in one operation. This will avoid having a seam visible between the floor and cove. Use a chalk line to keep the top edge of the cove straight, then apply masking tape along the same edge, prime the cove using **Flowtex HT F1 coving resin (natural)** (remove the masking tape after the cove detail is complete - before cure is complete).

Mix 1 part by weight of coving resin, and then add 6 parts by weight of the Quartz. Do not mix more than 7kg of the compound at once.

Apply the skirting compound into the wet primer with a trowel/spatula. Carefully smooth. Use a little xylene on the tool for best results. 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 emphasises 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 Flowcoat SF 41 in a flood layer with a broad steel spatula or trowel (flat edged). Allow to penetrate and follow up with a mohair roller to obtain a smooth surface structure.

Do not mix overlarge quantities of topcoat at any one time. If the topcoat starts 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, approximately 15 hours at 20°C. At lower temperatures the hardening time is longer.

Apply a second coat of Flowcoat SF 41

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 carbamation 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

Primer

Flowprime	0.2 - 0.3 kg/m ²
Scatter Quartz	approximately 0.2kg/m ²

Slurry

Bonding agent

Peran STB	1.6ℓ /m ²
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Scatter

Quartz	approximately. 4.5kg/m ²
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Topcoat

Flowcoat SF 41 1 st coat	approximately 3m ² /ℓ
Flowcoat SF 41 2 nd coat	approximately 4m ² /ℓ

Skirting/coves

Primer

Flowtex HT F1 coving resin (natural) approximately 0.03 kg/running metre

Skirting compound approximately 1.3kg/running metre with height of 10cm

Ratio of components

		Weight	Volume
Peran STB	A:B	5:1	3.0:1
Flowcoat SF 41	A:B	5:1	3.0:1

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, 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.