

Surface preparation



Prepare Surface according to Surface preparation Guide

Surface must be

1. Dry (both on the surface and inside)
2. Levelled
3. Cohesive
4. Even
5. Free of cracks (to be pre-treated)
6. Clean, free of dust and debris and loose materials and free of oils, grease or other chemical impurities

Recommended primers:

Epoxy SIB Aquapox or SIB E 100 with Sand carpet (1,3/1,8 mm)

SIB ECO Primer with mortar – textured Surface

Check Edge Isolation - if SIB Extreme Flow can run under the Edge isolation it can cause problems in the final appearance of the floor. Make sure it is well sealed.

Check that you have no dead spots, spills or loose particles on the primed floor

Make sure that you have stable temperature on floor and in room

Prefered between 10°C to 25° C

Floorheating should be turned off. Heavy direct sunlight and heavy draft should be prevented



FINISH AROUND EDGES, WINDOWS, DOORS AND INSERTS

Clear out client expectations with the possible options and take precautions before installing the floor. Will there be a skirting board? And if not – how is the floor finished next to the walls?

Tools Needed



Mixing machine or Hippo Mixers

Spike Shoes - High adjustable Gauge Rake- Metallic Spike roller with **30 mm fine spikes**

If tools are new spray them with a hydro repellent for easier cleaning and better performance

Prepare work area

Prepare a work area where you have good access to all work areas and cleaning after finishing

Make sure you have access to the power supply you need for machines

Make sure that you cover all areas where you do not want to stain or have risk to splash on

Be prepared for incidents – have buckets and cleaning gear ready if needed



Screeding the floor

Mixing

Premix the Liquid B component – When mixer/pump is used put a pump into the container with liquid.

Use intensive mixing accessories for the mixer/pump.

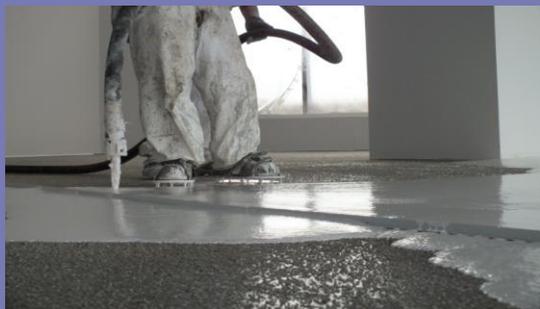
Make a test mix to adjust the mixing rate – follow the instructions on the given material. It will normally be around 36 % B component to Powder in weight.

Once mixing rate is established make sure it is always the same.

Manual mixing – mix for minimum 2-3 minutes – mix till the mix is homogeneous and without lumps and all pigments are integrated in the mix. Make a flow test and make sure that the material has the right consistency.

When the floor is screeded manually with Hippo Mixer or equivalent you can use two mixers to secure an even material flow

When hand mixers are used, we recommend sieving the mix through a 2-3 mm mesh after mixing. That will eliminate the risk of lumps caused by exposure to moisture during transport, storage or mixing.



Thickness

We recommend to screed the floor in 12 mm thickness, so the finished floor is minimum 10 mm after grinding and finishing work

A good base is essential since the thickness of the screed is taken from the floor base

Consumption 21/22 kg + approx. 7 l liquid B component for 12 mm thickness

To achieve an even finish the floor should be screeded in even thickness

Pouring the material evenly

The material is poured out on the floor

One person with spike shoes use the Gauge Rake to spread the Extreme Flow self leveler evenly on the floor.

Another person with spike shoes follow right after with a spike roller to even out marks and smoothen the floor. This process takes air out of the floor leveling compound and evens the floor. For ideal and even application you should work with a team of approximately 5 people



Curing

At 21° C the SIB Extreme Flow cures in 48 hours. If temperature is lower curing will take longer.

SIB Extreme Flow should be curing at stable temperatures.

The SIB Extreme Flow cures without being covered and the material should not be touched during the curing. Touching the material with a trowel after that it has started to settle may cause separation and cracking in the material.

Precaution

It is ideal to finish the floor once you have started to work on it.

Before the floor has been fully finished it is sensitive to water and other liquids that can penetrate and make marks in the floor.

The floor needs to breathe also after the curing process if finished, why the floors should only be covered with breathable materials

Grinding the floor

Metal diamonds

Do the grinding with a constant slow speed always overlapping 50 % the previous grinding line
You should always be checking that parts of the machine or big particles are not dragged around and cause scratching in the floors
Continue with crossed grinding till the surface is even and all scratch marks from the previous steps are gone
Crossed grinding is always the best – North – South, East – West
Repeat the grinding if needed – after the initial grinding the floor should be uniform

30 Grit Metal We recommend to start rough/deep
Going rough and deep on the first grinding steps makes the floor even and more uniform

Remember that the first grinding step is the deepest and the one that sets the standard for the finished floor.
All dead spots should be evened out at this grinding stage.
Clean between Grinding Steps – make sure you do not drag loose particles around that scratch the floor

70 grit metal – the speed on the grinder can be turned up a bit

120 grit metal - the speed on the grinder can be turned up a bit



Comments on Grinding

We recommend to go deep to get the best result. If you due to time issues or budget jump over grinding steps be sure that you always have gone so deep in the grinding that you have taken off the surface film layer formed from the curing of Extreme Flow.

Bigger machines save time and give a flatter grinding with less effort

Edge Grinding

Perfect EDGE work require a lot of tools and perfect edge work takes a lot of work hours
Follow the same steps as in the grinding of the floor



Resin Diamonds

Before starting with the resin diamonds the floor should be totally even and all rests of resin in the surface layer should have been removed
Going into the resin diamonds we go from grinding to polishing

50 Grit Resin

Do the polishing with a constant slow speed always overlapping 50 % the previous grinding line
Continue till all scratch marks from the 120 grit metal are gone

Blow the floor with high pressure air to get the dust out of the pores
Vacuum the floor well and clean it afterwards with a scrubber dryer with brush and a good vacuum - the next step is the pore filling

Pore Filling And Floor finish

Pore Filling

Make a sample of the porefiller the day before – Make 3-4 small tests with different concentrations of pigment

Use the mix that gives the right color match when dry

Porefilling will give you a better finished and smooth floor that is easier to clean

Mix the powder component of SIB ECO FILL with approximately with 30 % water

Mix till you have a homogeneous paste with a good workability – adjust with water and keep the same mixing rate in the application

Spread the slurry over the floor with a rubber rake. Spread it evenly over the floor in a thin layer and work it well into the pores in the floor with a slow speed swing machine with flexible blades.

Go over the same place several times

SIB ECO FILL is a very strong binder. Make sure that you scrape off eventual excess of material. Excess of material can stain the floor and take a lot of extra work to get off

Leave the pore filler to dry – minimum 4 hours, but best till next day

Continue Grinding with 50 Grit resin

Continue till the floor is cleaned and there is no more porefiller left on the surface

Repeat the porefilling process if necessary



Epoxy Trowel or Swing machine

With flexible plastic blades to push the material into the pores



Material spread with rubber rake

A rubber rake is used to extend the material and to take off excess of material



Hand trowel application

Make sure you get over the same spot several times to get the material into the pores

100 Grit Resin Diamonds

The grinding process is continued

A properly porefilled extreme is a very strong and dense surface why a good gloss level is achieved earlier on extreme than on traditional Concrete

If a higher gloss or a tight surface is desired continue **with 200 Grit and 400 Grit**

Extreme can be polished further after 400 grit, but if you do polish further make sure that you use diamonds that do not cause burnmarks on the surface

Water can stain the floor before the floor is sealed if it stand too long on the floor

Specially on grey or darker colors wet grinding is risky and we recommend to take necessary precautions

Clean the floor well with diamond impregnated pads - if the floor has been left at 400 grit use 400 grit of finer



Sealing the floor

PROSIB 330 or PROSIB PLUS

Clean the floor well with a scrubber dryer with a cleaning pad
Make sure that the scrubber dryer is in good conditions – do not leave water sacking on the floor
When the floor is fully dry it is ready to receive sealer

Mix the sealer and apply on the sealer

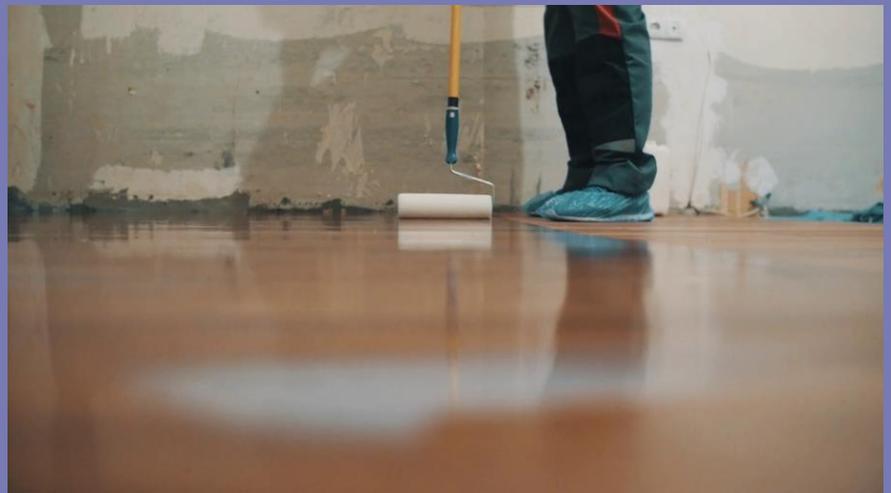
Use a low pressure sprayer to apply the sealer evenly
Pass over with a roller and right after with a dry roller
Let dry for an hour approximately and impregnate a second time

Impregnate with SIB OIL 2K for good protection.



Low Pressure Sprayer

Ideal Sprayer for penetrating sealers



Sealer application

Sealers applied with Low Pressure Sprayer and roller

Cleaning and maintenance

Clean with PH neutral cleaning agent

To maintain sealer

Clean the floor with Concrete Soap with a certain frequency
Add a little SIB OIL 2k when needed

