

Method Statement for Application Of **Sika Floor[®] 92SL**

“SIKA EGYPT” Flooring Systems

Scope: A three component solvent free pigmented self leveling flooring based on Epoxy resins.

A- Limitations

- Minimum age of cementitious substrate (3-6) weeks depending on climate conditions and curing, unless we use one of Epocem's technology products
- The compressive strength should be ≥ 25 N/mm² or to meet defined loads.
- The adhesive tensile strength should be ≥ 1.5 N/mm²
- The moisture content in the concrete should be $< 4\%$
- The relative humidity should be $< 80\%$
- The bearing layer surface temperature should be 3°C degrees above the determined dew point temperature in order to avoid water condensation.
- Minimum substrate temperature + 10°C

B- Surface Preparation:

- The substrate must be clean –free from grease, oils or organic/in organic acids and all loosely adhering particles- dry and sound.
- For good bond insufficient layers and oily contamination's must be removed mechanically also for, e.g. by sand blasting or grinding.
- Vacuum cleaning is than required.



3. Substrate Requirements

3.1 Pull off and compressive strength

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

If in doubt, apply a test area first.



Testing of the substrate
Pull-off strength > 1.5 N/mm².
E.g. Proceq, Dyna pull-off tester.

3.2 Moisture content

Prior to application, confirm substrate moisture content, r.h. and dew point.
If > 4% pbw moisture content, Sikafloor[®] EpoCem[®] may be applied as a T.M.B. (temporary moisture barrier) system.



Measuring of the substrate moisture:
Moisture content < 4% by weight.
E.g. Sika Tramex moisture meter.

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Tramex moisture meter.

There must be no rising moisture according to ASTM D 4263 (Polyethylene sheet test)



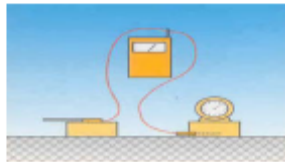
< 4% pbw if priming with Sikafloor®-161 VP

> 4% pbw application of a temporary moisture barrier with Sikafloor®-81 EpoCem (please refer to Sikafloor-81 EpoCem Product Data Sheet)

3.3 Ambient and surface temperature

Ambient and Surface temperature:

- Min. +10°C (but at least 3°C above dew point)
- Max. +30°C



Defining the climatic conditions:
Substrate temp. > 3°C above dew point
E.g. thermometer, hygrometer, dew point table.

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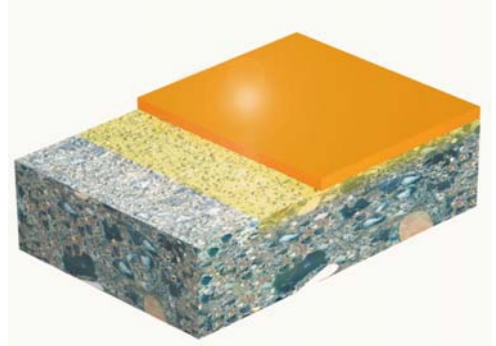
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5. Primer Layer:

- Apply Sika Floor[®] 94 or 161 (**Two-component low viscosity primer, based on epoxy resin**)
- Prior to application of Sikafloor[®] 94 or 161 both components A + B have to be mixed intensively with an electrical or pneumatically stirrer of approx. 300 – 400 rpm. Mixing time is minimum 3 minutes but it may take longer until a homogeneous mixture is achieved.
- To achieve uniform and perfect wetting, Pour properly prepared material onto substrate and evenly distribute using roller or brush.
- Consumption depending on porosity of substrate minimum 2 x Sika floor[®] 94, .Material consumption approx. 0.2- 0.3 kg/m² / coat.

Sika System

- Primer : Sikafloor[®] - 94 , a solvent free Epoxy primer
- Self Leveling layer of Sikafloor[®] -92SL a solvent free, Coloured epoxy binder



6. Mixing of Sikafloor® 94 or 161Primer



Prior to mixing, stir component A (resin) and add all of component B (hardener).



Make sure the hardener is fully emptied into the resin component



Mix both components thoroughly with a low speed electric stirrer (300 - 400 rpm).



Mix for at least 3 minutes until a uniform mix has been achieved.

7. Application of Sikafloor-161 as a Primer

Make sure, that all substrate requirements are met, such as temperature, moisture content of the prepared substrate etc. (please refer to section 5). Apply Sikafloor-161, if the moisture content is below 4%, (test method: Sika-Tramex, or CM-measurement or Oven-dry-method; no rising moisture according to ASTM (Polyethylene-sheet)). If the moisture content is above 4%, apply Sikafloor EpoCem system as a temporary moisture barrier – please refer to the PDS).

Apply the mixed material by roller, taking care to ensure good wetting of the substrate but avoiding puddles on the surface. Work within the potlife of the material (15 minutes at 30°C).

Clean all tools and application equipment with Thinner C immediately after use. Hardened and / or cured material can only be removed mechanically.

Freshly applied Sikafloor®-161 should be protected from damp, condensation and water for at least 24 hours. Sikafloor®-161 mortar screed is not suitable for frequent or permanent contact with water unless sealed.



Apply by brush, roller or squeegee and work well into the substrate.

9. Mixing of Sikafloor® – 92SL

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 2 minutes until a uniform mix has been achieved.

When parts A and B have been mixed, add the quartz sand 0.1 - 0.3 mm and mix for a further 2 minutes until a uniform mix has been achieved.

To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix.

Over mixing must be avoided to minimise air entrainment.



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10. Application of Sikafloor® -92SL

Roll immediately in two directions with a spiked roller to ensure even thickness and to remove entrapped air.

Clean all tools and application equipment with Thinner C immediately after use.
Hardened / cured material can only be mechanically removed.



After spreading the material evenly, turn the serrated trowel and smooth the surface in order to achieve an aesthetically higher grade of finish.



Roll immediately in two directions to ensure even thickness and to remove entrapped air.



Close up.

11. Tools and Equipment

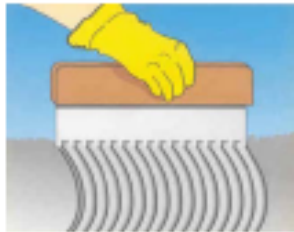
Professional equipment is required to achieve a functioning floor, such as: vacuum shot blaster, grinder, scabblers etc.



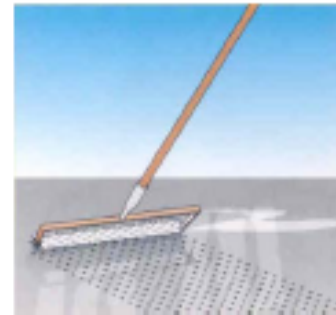
Preparation of the substrate:
Blast cleaning or other
mechanical means e.g. Blastrac



Even application of Primer coat:
Sikafloor®-161 with medium to long
haired roller or brush. E.g. Polyplan
roller and brush.



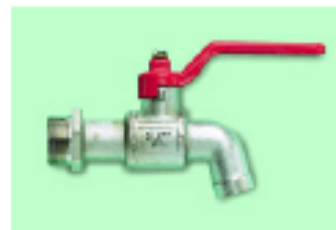
Spreading of Sikafloor®-263 SL
with notched trowel. E.g. Polyplan
notched trowel 5/7 mm.



Removal of entrapped air: Spike
rolling immediately e.g. Polyplan
spike roller.



For lifting, transportation, storing
and filling of 200 Lite drums. E.g.
Polyplan 'barrel cart'.



Decanting of large drums into
smaller units. E.g. Polyplan
'stop cock'.

➤ Please refer to attached technical data sheets

Technical Department.

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