

# Method Statement for Application Of **Sikafloor -381N**

## “SIKA EGYPT” Flooring Systems

Scope:

Method statement for the application of Sikafloor -381N, a 2-part, self-smoothing epoxy coating, highly chemically and mechanically resistant



Construction



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## 1-Products and Description:



- **Sikafloor®-156**

Two part epoxy primer, levelling mortar and mortar screed.



- **Sikafloor®-381N**

Two part, economic, solvent-free, pigmented epoxy resin binder for self-smoothing screeds.



- **Quartz sand**  
(0.1 - 0.3 mm)  
(0.4 - 0.7mm)

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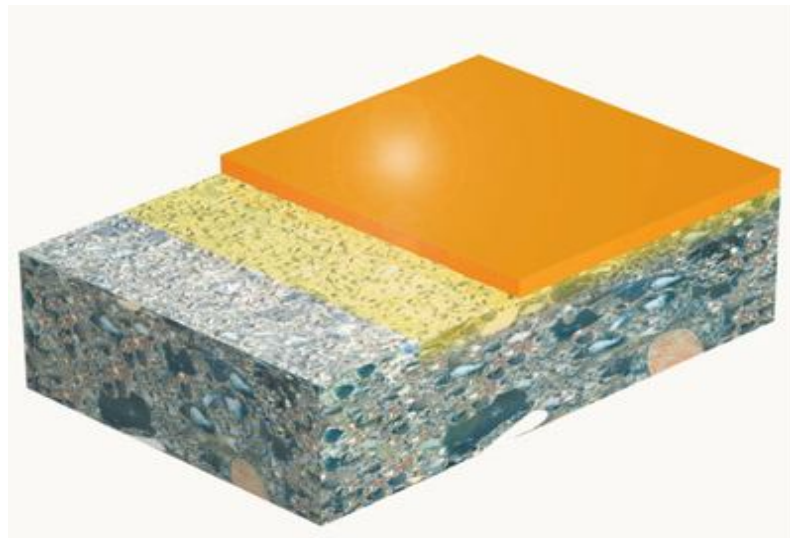
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## 2-Sikafloor -381N system Build Up:

Coating System	Products	Consumption
Primer	Sikafloor -156	0.3 – 0.5 kg/m <sup>2</sup>
Levelling (optional)	Sikafloor -156 mortar	Refer to PDS of Sikafloor -156
Wearing course horizontal areas (1.8 – 2.8mm)	Sikafloor -381N filled with quartz sand 0.1 - 0.3	1.8 kg/m <sup>2</sup> /mm Binder + quartz sand
Wearing course vertical areas (1.5mm)	Sikafloor -381N + 2.5 – 4 wt.% Extender T	2 x 1.25 kg/m <sup>2</sup>
Wearing course with slip resistance (2.5mm)	Sikafloor -381N, broadcast to excess with silicon carbide 0.5 – 1.0 mm or quartz sand 0.4 – 0.7 mm	1.6 kg/m <sup>2</sup> Binder without filling Silicon Carbide 0.5 – 1.0 mm or quartz sand 0.4 – 0.7 mm (5-6 kg/m <sup>2</sup> )
Seal coat (on broadcast areas only)	Sikafloor -381N +5 wt.% Thinner C	0.75 – 0.85 kg/m <sup>2</sup>



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### 3. Substrate Requirements

#### 3.1 Pull off and compressive strength

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>.

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/mm<sup>2</sup>.  
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<sup>®</sup> EpoCem<sup>®</sup> 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)



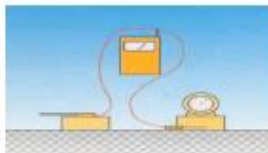
< 4% pbw if priming with Sikafloor<sup>®</sup>-161 VP

> 4% pbw application of a temporary moisture barrier with Sikafloor<sup>®</sup>-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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#### **4- Substrate Priming and leveling:**

- \* Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- \* Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- \* Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials.
- \* If necessary, apply two priming coats. Apply Sikafloor -156 at a consumption of 0.3 – 0.5 kg/m<sup>2</sup> by means of brush, roller.

Note: you can use each of Sikafloor -156, Sikafloor -161 or Sikafloor -94 as a low viscosity primer.

#### **5- Mixing of Sikafloor -156:**

Mix Component A using an electric mixer (300 – 400 rpm) for at least 3 minutes before adding component B,  
Mix Component A and B of Sikafloor -156 using an electric stirrer (300– 400 rpm) for at least 3 minutes or longer, until homogeneous, uniform mix is achieved.



**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.**

## **6- Mixing of Sikafloor -381N:**

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 – 0.3mm and mix for a further 2 minutes until a uniform mix has been achieved.

**Note:** Please refer to the pictures in section 5 with regards to the mixing procedure which is analogue to that of Sikafloor -156

## **7- Application of Sikafloor -381N**

Make sure, that the application of Sikafloor -381N is still within the over-coating time.

Sikafloor -381N is poured, spread evenly by means of serrated trowel. Turn the serrated trowel and smooth the surface in order to remove air bubbles.

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 be mechanically removed.





**Sikafloor®-381N is poured, spread evenly by means of a serrated trowel, either standing up or kneeling down.**



**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 with a spiked roller to ensure even thickness and to remove entrapped air.**



**Close up.**

**Note:** Freshly applied Sikafloor -381N must be protected from damp, condensation and water for at least 24 hours.

## 8- Application tools:

- Trowel



- Spiked roller



- Mechanical Mixer



*For any further clarification don't hesitate to contact Sika Egypt Technical Department.*

**Technical Department**



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