PRODUCT DATA SHEET
Sika® Cemflex®

Universal waterproofing and bonding agent

DESCRIPTION

Sika® Cemflex® is an acrylic based emulsion, which improves the water resistance, and adhesion of Portland cement based composites.

USES

Sika® Cemflex® mixed with Portland cement and water forms an effective waterproofing slurry that is used in conjunction with Cemflex® Fabric for:
- Reservoirs
- Shower floors and walls
- Balcony and veranda floors (under tiles)
- Retaining walls

Sika® Cemflex® added to a sand/Portland cement slurry forms a bonding coat for:
- Plaster
- Render

The slurry can also be used for waterproofing between two skins of external brick walling.

CHARACTERISTICS / ADVANTAGES

- Water tight
- Ideal for submerged or subterranean waterproofing
- Good abrasion resistance
- Non-toxic
- Oil resistant
- UV stable

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>Blend of liquid Polymers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>1, 5, 25 and 200ltr Containers</td>
</tr>
<tr>
<td></td>
<td>Fabric: Available in 1m rolls and various cut roll sizes</td>
</tr>
<tr>
<td>Appearance / Colour</td>
<td>Liquid off white</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>12 Months in original, unopened container.</td>
</tr>
</tbody>
</table>
**Storage Conditions**
Store in a dry area between 5ºC and 35ºC. Protect from direct sunlight.

**Density**  
+1,04kg/litre

**pH-Value**  
+ 8.0

### TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>Mortar mix design</th>
<th>Sika® Cemflex®</th>
<th>Water</th>
<th>Portland Cement</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 litre</td>
<td>1 litre</td>
<td>3.4kg</td>
<td>3.2 litre</td>
<td></td>
</tr>
<tr>
<td>5 litre</td>
<td>5 litre</td>
<td>17kg</td>
<td>16 litre</td>
<td></td>
</tr>
<tr>
<td>25 litre</td>
<td>25 litre</td>
<td>85kg</td>
<td>80 litre</td>
<td></td>
</tr>
</tbody>
</table>

### APPLICATION INFORMATION

<table>
<thead>
<tr>
<th>Consumption</th>
<th>Usage</th>
<th>1L Cemflex produces</th>
<th>Total Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Waterproofing slurry</td>
<td>3.2 litres</td>
<td>1m² (with membrane)</td>
</tr>
<tr>
<td></td>
<td>Bonding</td>
<td>4.5 litres</td>
<td>8 - 10m²</td>
</tr>
</tbody>
</table>

**Ambient Air Temperature**  
Min. 5°C – Max. 35°C.

**Substrate Temperature**  
Min. 5°C – Max. 30°C.

### APPLICATION INSTRUCTIONS

#### SUBSTRATE QUALITY / PRE-TREATMENT

The concrete substrate must be sound. The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.

The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.

Weak concrete should be removed and surface defects such as honeycombed areas; blowholes and voids must be fully exposed.

Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using the appropriate product from the Sika® Rep and SikaDur® range of materials.

#### MIXING

**Waterproofing**
Mix the required amounts of Sika® Cemflex® and water first, add the correct quantity of Portland cement slowly, while mixing, to avoid the formation of lumps.
Mixing can either be achieved manually or mechanically, with small quantities of 5litres and less. Larger quantities should be mechanically mixed with a slow speed mixer (set at 400-600 rpm). Mixing should continue until a uniform, lump-free consistency is obtained. The slurry should be mixed periodically during application to prevent settlement.

**Bonding/Bagging mixing**
Sika® Cemflex® and water are mixed in equal proportions by volume. Mix clean building sand with Portland cement in equal proportions by volume and then add sufficient diluted Sika® Cemflex® and continue mixing until a uniform, lump-free consistency is obtained. Mix periodically during application to prevent settlement.

### APPLICATION METHOD / TOOLS

#### Waterproofing slurry
Saturate absorbent surfaces thoroughly with water. While the surface is still damp, apply a coat of waterproofing slurry. Pre-cut the Cemflex® Fabric into convenient sizes for application, then soak the fabric in the slurry (see diagram 1).

Remove the soaked fabric from the slurry and smooth it onto the primed substrate (see diagram 2) making sure to eliminate all air bubbles. Overlaps of adjacent fabric must be a minimum of 50mm. Once the entire area to be treated is covered, apply a generous coat of the slurry and allow to dry.

A final coat of slurry is then applied to complete the application.

#### Bonding / Bagging
For waterproof bagging, saturate the brick substrate and, while it is still damp, apply a coat of bonding/bagging slurry by means of a block brush.

For bonding, saturate the substrate and, while it is still damp, apply a coat of bonding/bagging slurry by means of a block brush. Immediately apply a render of screed while the slurry is still wet.

#### Fish Ponds
Due to the sensitive nature of fish, it is important that the fish pond is adequately washed out after applying the Sika® Cemflex® slurry. Cement is highly alkaline and will have an initial effect on the Ph of the water, so ensure that the water is conditioned and stable before introducing your fish.

### CLEANING OF TOOLS

Remove uncured Sika® Cemflex® slurry from tools with water. Cured material can only be removed mechanically.

### LIMITATIONS

![Sika® Cemflex®](image-url)
Where the application is of a sensitive nature eg reservoirs or large Koi ponds, it is recommended that you seek professional applicators to apply the product. Do not apply Sika® Cemflex® on substrate in which significant vapour pressure may occur. Always ensure good ventilation when using Sika® Cemflex® in a confined space. Freshly applied Sika® Cemflex® should be protected from damp, condensation and water for at least 12 hours. The normal precautions pertaining to dew point should be observed. All water retaining structures should undergo water conditioning to the required specification of their use, before becoming operational. It is recommended that a Cem I 52.5R or N is used for best results. Protect from wind and direct sunlight for at least 24 hours after application. For continuous submersion applications, allow the treated surface to cure for at least 48 hours before submerging.

**BASIS OF PRODUCT DATA**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

**LOCAL RESTRICTIONS**

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

**ECOLOGY HEALTH AND SAFETY**

**LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika’s current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika’s recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.