SikaQuick® 2500 id
Very Rapid Hardening Repair Mortar

Description
SikaQuick® 2500 id is a one component, shrinkage compensated, very rapid hardening, early strength gaining, cementitious flowable material for concrete.

Use
- Use on grade, above and below grade on concrete
- Highway overlays and repairs
- Structural repair material for concrete roadways, parking structures, bridges, dams and ramps
- Economical patching material for horizontal repairs of concrete and mortar

Advantages
- Easy to use, labour saving material
- Contains no added chlorides
- Not gypsum based
- High early strength
- Fast setting
- Open to foot traffic in 60 minutes, to vehicle traffic in 3 hour (at 27°C)
- Easily applied to clean, sound substrate
- Not a vapour barrier

Consumption
Yield: approx. 2.300 kg/ltr
(approx. 2.018 kg of SikaQuick® for 1 m³ of mortar – flowable consistency)

Instruction For Use

Surface Preparation
Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease and other contaminates from the area to be repaired. Be sure repair area is not less and 5 mm deep. Preparation work should be done by appropriate means. Obtain an exposed aggregate surface with a minimum surface profile of 3 mm on clean, sound concrete. To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test. Saw cutting of edges is recommended. Saturate surface to be repaired with clean water. Substrate should be saturated surface dry (SSD) prior to application.

Priming
Concrete Substrate:
Use Sikadur® 32 Normal
Open time is approximately 20 – 30 minutes at 27°C.
Apply SikaQuick® 2500 id onto the still tacky Sikadur® 32 Normal.

In case of application to very small area, a scrub coat of SikaQuick® 2500 id can be use prior to placement of mortar. Apply the scrub mortar only to pre-wetted concrete substrate. The open time of the scrub coat is approx. 10 minutes. Apply the following SikaQuick® 2500 id onto the wet scrub before it dries.

Mixing
Mechanically mix in an appropriately sized mortar mixer. Wet down all tools and mixer to be used.

Flowable consistency:
Start with 2.4 litres of water added to the mixing vessel. Add slowly 1 bag of SikaQuick® 2500 id while continuing to mix. Add up to another 0.4 litres of water to achieve desired consistency. Mix for about 2 – 3 minutes until even consistency achieved.

Pourable consistency:
Put 2.4 litres of water added to the mixing vessel. Add slowly 1 bag of SikaQuick® 2500 id while continuing to mix. Mix for about 2 – 3 minutes until even consistency achieved.
Application

Flowable Consistency
Pour the mortar onto the still “tacky” Sikadur® 32 Normal. Finishing of the mortar can be conducted after 25 – 35 minutes.

Pourable Consistency:
The prepared mortar must be scrubbed into the substrate. Be sure to fill all pores and voids. Force material against the edge of the repair, working toward the centre. After filling the repair, screed of excess. Allow concrete to set to desired stiffness, then finish. If a smoother finish is desired, a magnesium float should be used. Mixing, placing and finishing should not exceed 15 minutes maximum.

Maximum application thickness 30 mm as a mortar. For applications greater than 30 mm in depth add 10 mm coarse aggregate or use Sikadur Aggregate 510. The rate is 10 kg of aggregate per 20 kg bag of SikaQuick® 2500 id. The aggregate must be clean, well graded and smooth.

To control setting times, cold water should be used in hot weather and hot water used in cold weather.

Curing

Moist cure should commence immediately after finishing. If necessary, protect newly applied material from rain. To prevent from freezing, cover with insulating material.

Limitations

Minimum ambient and surface temperatures 7ºC and rising. Minimum application thickness 5 mm as a mortar. Use only potable water.

Technical and Physical Data

Mixing Ratio

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Mixing Ratio</th>
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</thead>
<tbody>
<tr>
<td>Flowable</td>
<td>2.8 litre / 20 kg bag (water / powder ratio 14%)</td>
</tr>
<tr>
<td>Pourable</td>
<td>2.4 litre / 20 kg bag (water / powder ratio 12%)</td>
</tr>
</tbody>
</table>

Potlife at 27°C

Approximately 15 minutes after adding powder to the water

Expansion

0.0 – 0.10%

Compressive Strength

<table>
<thead>
<tr>
<th>Time (h)</th>
<th>Flowable (14%)</th>
<th>Pourable (12%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour</td>
<td>15 MPa</td>
<td>20 MPa</td>
</tr>
<tr>
<td>3 hours</td>
<td>24 MPa</td>
<td>30 MPa</td>
</tr>
<tr>
<td>1 day</td>
<td>35 MPa</td>
<td>43 MPa</td>
</tr>
<tr>
<td>7 days</td>
<td>50 MPa</td>
<td>60 MPa</td>
</tr>
<tr>
<td>28 days</td>
<td>60 MPa</td>
<td>70 MPa</td>
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</tbody>
</table>

Flexural Strength

ASTM C-348 28 days

> 7 MPa

Bond Strength

by pull-off test

3 hours >15 kg/ cm² (Using Sikadur® 32 Normal as bonding agent)

Initial Set at 27°C

20 - 30 minutes

Final Set at 27°C

35 - 50 minutes

Colour

Concrete Grey

Storage and Shelf Life

Store dry at 4°C - 35°C. Shelf life is minimum 6 (six) months in original unopened bag.

Packaging

20 kg plastic bag

Caution

Irritant Skin/Eye/Respiratory Irritant. Avoid breathing dust. Dust may cause respiratory tract irritation. May cause delayed lung injury (silicosis).

Warning:

This product contains crystalline silica.

First Aid

Eyes: Rinse thoroughly with water a minimum of 15 minutes. Consult a physician.

Skin: Wash thoroughly with soap and water. Remove contaminated clothing.

Inhalation: Remove person to fresh air. Consult a physician

Ingestion: Dilute with water. Consult a physician. In all cases, if symptoms persist contact a physician.
Handling Precautions
Avoid contact. Wear suitable personal protective equipment (chemical resistant goggles/gloves/clothing). Remove contaminated clothing and launder before reuse. Use in the presence of adequate ventilation. In the absence of adequate ventilation, wear a properly fitted NIOSH respirator. Uncured material can be removed with water. Cured material can only be removed mechanically. Store in a cool, dry area. Keep bag tightly closed.

Important Notification
The information, and, in particular, the recommendations relating to the application and end-use of Sika’s 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.