

## PRODUCT DATA SHEET

# SikaScreed<sup>®</sup>-20 EBB

### EPOXY BONDING BRIDGE FOR SIKASCREED FLOOR SCREEDING SYSTEMS

#### PRODUCT DESCRIPTION

SikaScreed<sup>®</sup>-20 EBB 2-part, epoxy based, moisture tolerant bonding bridge for SikaScreed<sup>®</sup> floor screeding systems.

#### USES

A bonding bridge for:  
SikaScreed<sup>®</sup> product range

#### CHARACTERISTICS / ADVANTAGES

- Easy to mix and apply
- Suitable for dry and damp concrete surfaces
- High substrate adhesion strength
- Hardens without shrinkage

#### APPROVALS / STANDARDS

Structural bonding products for use bonding of mortars or concrete according to EN 1504-4, declaration of performance 41536303 and provided with CE marking.

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Epoxy resin and special fillers
<b>Packaging</b>	Pre batched units (A + B): 15 kg containers
<b>Appearance / Colour</b>	Part A = White Part B = Dark Grey Mixed A+B = Concrete Grey
<b>Shelf Life</b>	24 months from date of production
<b>Storage Conditions</b>	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.
<b>Density</b>	~1.4 kg/litre (+23 °C)

## TECHNICAL INFORMATION

<b>Tensile Adhesion Strength</b>	> 1.5 N/mm <sup>2</sup> or a failure in the substrate. Adhesion will generally be dependent on surface preparation.
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## APPLICATION INFORMATION

<b>Consumption</b>	For substrate roughness up to 1.0 mm and normal absorbency ~ 0.6 - 1.0 kg/m <sup>2</sup> . These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. For higher substrate roughness and/or stronger absorbency the consumption must be calculated using preliminary site trials.								
<b>Layer Thickness</b>	~ 1.0 mm max.								
<b>Ambient Air Temperature</b>	+10 °C min. / +30 °C max.								
<b>Dew Point</b>	Beware of condensation. The substrate and uncured product must be at least +3 °C above dew point to reduce the risk of condensation.								
<b>Substrate Temperature</b>	+10 °C min. / +30 °C max.								
<b>Substrate Moisture Content</b>	Substrate must be dry or matt damp (no standing water).								
<b>Pot Life</b>	(acc. to EN ISO 9514) <table><thead><tr><th>Temperature</th><th>Potlife (200 g)</th></tr></thead><tbody><tr><td>+10 °C</td><td>~ 145 minutes</td></tr><tr><td>+20 °C</td><td>~ 55 minutes</td></tr><tr><td>+30 °C</td><td>~ 35 minutes</td></tr></tbody></table> <p>The pot-life begins when the resin and hardener are mixed. It is shorter at high temperatures and longer at low temperatures. The greater the quantity mixed, the shorter the pot-life. To obtain longer workability at high temperatures, the mixed SikaScreed®-20 EBB may be divided into smaller quantities. Another method is to cool down parts A+B before mixing them (not below +5 °C).</p>	Temperature	Potlife (200 g)	+10 °C	~ 145 minutes	+20 °C	~ 55 minutes	+30 °C	~ 35 minutes
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<b>Waiting Time / Overcoating</b>	Maximum waiting time for wet-in-wet application on SikaScreed®-20 EBB <table><thead><tr><th>Temperature</th><th>Waiting time</th></tr></thead><tbody><tr><td>+10 °C</td><td>5 hours</td></tr><tr><td>+20 °C</td><td>2 hours</td></tr><tr><td>+30 °C</td><td>1 hour</td></tr></tbody></table> <p>If the maximum waiting time is exceeded then product should be removed before any further SikaScreed®-20 EBB applications and the substrate prepared appropriately.</p>	Temperature	Waiting time	+10 °C	5 hours	+20 °C	2 hours	+30 °C	1 hour
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## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

Concrete and cementitious substrates must be older than 28 days (depending on any minimal strength requirements) Substrate must be structurally sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum tensile strength of 1.5 N/mm<sup>2</sup>. Substrates must be clean, free of all contaminants such as dirt, oil, grease and loose friable material. Cement laitance, coatings or other surface treatments must be completely removed. Cementitious substrates must be prepared mechanically using suitable abrasive blast cleaning or planing / scarifying equipment to re-

move cement laitance, coatings or other surface treatments and achieve an open textured gripping surface profile suitable for the product thickness. Concrete and cementitious substrates surface preparation: Minimum substrate roughness of 0.5 mm according to EN 1766 > CSP 3 (International Concrete Repair Institute) or equivalent. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by vacuum extraction equipment. For critical adhesion applications it is recommended that site trials incorporating adhesion pull-off tests are carried out to confirm values are acceptable for the application.

### MIXING

Part A : part B = 2 : 1 by weight or volume. Prior to mixing all parts, mix part A (resin) using a low speed single paddle electric stirrer (300 - 400 rpm) until a uniform colour has been achieved. Add part B (hardener) to part A and mix part A + B continuously for 3.0 minutes until a uniformly coloured mix has been achieved. To ensure thorough mixing pour materials into a clean container and mix again for at least 1.0 minute to achieve a smooth consistent mix. Over mixing must be avoided to minimise air entrainment. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing. Mix full units only. Mixing time for A+B = 4.0 minutes.

## APPLICATION

Prior to application, confirm substrate moisture content, relative air humidity and dew point.

**Levelling.** Avoid excess thicknesses of the SikaScreed®-20 EBB in local areas by prefilling as required, any surface voids with the SikaScreed HardTop mortar system.

**Bonding bridge.** Pour mixed SikaScreed®-20 EBB onto prepared substrate and apply evenly to the required thickness using a suitable stiff bristle brush or broom and work material well into the substrate. Alternatively for dry substrates, apply by roller or spray application. Ensure all areas of the substrate are fully covered. Apply SikaScreed® floor screeding systems on top of SikaScreed®-20 EBB 'wet' on 'wet'. When applying SikaScreed® floor screeding systems on top of SikaScreed®-20 EBB bonding bridge. As a guide it is recommended to keep application area to a maximum of 4 m<sup>2</sup> in addition to recommended waiting / over-coating times.

## CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Colma Cleaner immediately after use. Hardened / cured material can only be removed mechanically.

## LIMITATIONS

SikaScreed®-20 EBB is formulated to have low creep under permanent loading. However due to the creep behaviour of all polymer materials under load, the long term structural design load must account for creep. Generally the long term structural design load must be lower than 20 - 25 % of the failure load. Please consult a structural engineer for load calculations for your specific application.

- Protected from damp, condensation and water contact (rain) before applying subsequent products.
- For structural bonding, SikaScreed®-20 EBB is formulated to have low creep under permanent loading. However due to the creep behaviour of all polymer materials under load, the long term structural design load must account for creep. Generally the long term structural design load must be lower than 20 - 25 % of the failure load. Consult a structural engineer for load calculations for structural applications.
- Do not mix more SikaScreed®-20 EBB than can be used for each area and observe pot-life and waiting times.
- Any of the SikaScreed®-20 EBB that has dried must be removed mechanically and replaced before application of the following SikaScreed® mortar.
- Existing joints in the substrate must always be brought through the screed and appropriately formed and sealed as required.
- For application onto damp concrete or cementitious substrates, product must be worked well into the substrate

## VALUE BASE

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

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## 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, sub-

strates 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.

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