

Sikadur®-43 ZA

Three component epoxy resin mortar

Product Description

Sikadur® -43 ZA is a solvent-free, three-component, repair and filling mortar based on a combination of epoxy resins and selected high strength aggregates. After mixing, it forms a trowelable mortar with good adhesion to cementitious substrates.

Uses

Sikadur® -43 ZA is a high strength material that is used as a bedding or underfilling mortar or to repair horizontal concrete surfaces, such as:

- Industrial floors
- Bridge decks
- Concrete runways
- Bearing pads
- Floor joint nosings

Characteristics / Advantages

- Shrinkage-free hardening
- High mechanical strength
- Curing is not affected by high humidity
- Suitable for both dry and damp surfaces
- Rapid hardening
- Abrasion and impact-resistant

Tests

Approval/Standards



Product Data

Form

Appearance / Colour	Part A: Liquid Part B: Liquid Part C: Aggregate Part A + B +C mixed:	Opaque Amber Grey Grey
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Packaging	15.7 litre (3.0 Litre component (A + B) and 30.0kg component C) kit.
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Storage

Storage Conditions / Shelf-Life	12 months in original, unopened container. Store in a dry area between 5°C and 30°C. Protect from direct sunlight.
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Technical Data

Chemical Base	Epoxy, Crystalline free silica
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Density	Mixed = 2,1kg/litre (A+B+C)
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Viscosity

Layer Thickness	6mm – 50mm
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Yield	3,0 Litre kit (Components A+B) yields 15.7 litre with Component C
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Mechanical Properties

Compressive Strength	70 N/mm ² after 7 days at 23°C
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Flexural Strength	25 N/mm ²
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Tensile Strength	12 Mpa
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Bond Strength to Concrete	3,5 N/mm ² (Concrete failure) 10 N/mm ² (Steel)
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System Information

System Structure	Primer: Sikafloor® -161 or Sikadur® 43 ZA (Components A & B) Repair Mortar: Sikadur® -43 ZA 6mm – 50mm layer thickness
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Application Details

Consumption / Dosage	The consumption Sikadur® -43 ZA is ~1 litre/m ² @ / 1mm thick
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Substrate Quality	<p>The concrete substrate must be sound and of sufficient compressive strength (min. 20 N/mm² (Mpa) with a minimum pull off strength of 1.5 N/mm² (Mpa).</p> <p>The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.</p> <p>The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.</p> <p>Weak concrete should be removed and surface defects such as honeycombed areas, blowholes and voids must be fully exposed.</p> <p>Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using the appropriate product from the Sikafloor®, Sikadur® and Sikagard® range of materials.</p>
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Substrate Preparation / Priming	<p>All surfaces must be clean, sound and properly cured. Remove all loose materials mechanically, with a wire brush, or by water or grit blasting.</p> <p>Surfaces may be dry or damp, but must be free of any standing water.</p> <p>Use mixed components Sikadur® 43 ZA (Components A & B) or Sikafloor® 156 ZA Primer to prime the substrate. On damp surfaces use Sikadur® -31. Apply with a stiff brush and work in well.</p>
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**Application
Conditions /
Limitations**

Substrate Temperature Min.5°C - max.30°C

Ambient Temperature Min.5°C - max.35°C

Substrate Humidity < 4%

Relative Air Humidity 80 %

Dew point Substrate temperature must always be at least 3°C above the dew point.

**Application
Instructions**

Mixing (Ratio/Dosage) Mix full kits only.

Mix component A thoroughly with component B for 1-2 minutes using a spatula. Then add the aggregate (component C) and continue mixing with a slow speed mechanical mixer until a homogeneous mortar is achieved.

**Application Method /
Tools** Whilst the primer is still tacky, spread the mixed Sikadur® -43 ZA (Components A & B & C) into the tacky primer and compact into place to remove any entrapped air, and then trowel firmly to provide a smooth finish. The surface of the Sikadur® 43 ZA may also be sealed with a coat of Sikafloor® -161 Primer or Sikadur® -43 ZA (components A+B).

Cleaning of Tools Remove uncured Sikadur® -43 ZA from tools with Kwiklean water-soluble solvent immediately after use. Cured material can only be removed mechanically.

Pot life 30 min at 25°C per 0,75 litre kit

**Waiting Time /
Overcoatability** **Initial Cure:** ± 4 hours @ 25°C
Light Traffic 12 hours @ 25°C
Full Cure: 7 days @ 25°C

**Notes on Application /
Limits** Always ensure good ventilation when using Sikadur® -43 ZA in a confined space.

Freshly applied Sikadur® -43 ZA should be protected from damp, condensation and water for at least 12 hours.

Concrete should be a minimum of 28 days old and the moisture content less than 4% before application.

The normal precautions pertaining to dew point should be observed.

If steel is previously coated, contact our Technical Department.

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.

Health and Safety Information

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.



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