

Sikadur®-32

Epoxy Resin Bonding Agent

Product Description Sikadur®-32 is a high performance bonding agent based on a 2-component solvent free epoxy resin ideally suited to a wide range of building and civil engineering applications.

- Uses**
- Sikadur®-32 may be used to bond all types of construction materials including concrete, brick, stone, mortar, GRC, fibrous cement, wood, iron, steel and cured epoxy mortars.
 - Sikadur®-32 exhibits excellent adhesion enabling it to be successfully employed in both structural and non-structural situations.
 - Damp proof membrane
 - Crack injection 5 – 10mm

- Characteristics / Advantages**
- Easy to apply
 - Excellent adhesion to most building materials even when damp
 - Insensitive to moisture during application, cure or whilst in service
 - Workable at low temperatures
 - Colour coded components to ensure correct mixing
 - Solvent free
 - Vapour impermeable
 - Bonds wet concrete or mortar to dry or hardened materials

Product Data

Colours Grey (mixed) Part A: White Part B: Black

Packaging Part A+B: Linked 5 kg ready to mix units

Storage

Storage Conditions / Shelf-Life 24 months from date of production if stored properly in undamaged original packaging in dry and cool conditions at temperatures between +5°C and +30°C.

Technical Data

Chemical Base Epoxy resin

Density 1.4 kg/l (part A & B mixed)

Solid Content ~ 100% (by volume) / ~ 100% (by weight)

Layer thickness 0.5mm minimum

1.0mm maximum

Change of volume Shrinkage: hardens without shrinkage

Mechanical / Physical Properties

Compressive Strength	70 N/mm ²
Flexural Strength	35 N/mm ²
Tensile Strength	20 N/mm ²
Bond Strength	Concrete: typically 2.0 – 3.0 N/mm ² (concrete failure)
	Steel: typically 18 N/mm ² (epoxy failure)

Application Details

Consumption	0.7 – 1.4kg/m ² typically (0.5mm – 1.0mm)
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Substrate Quality	<p>Mortar and concrete must be older than 28 days (depends on minimal requirement of strengths).</p> <p>Verify the substrate strength (concrete, masonry, natural stone).</p> <p>The substrate surface (all types) must be clean, sound, dry and free from contaminants such as dirt, oil, grease, existing surface treatments and coatings etc.</p> <p>Steel substrates must be cleaned to a bright metal finish.</p> <p>Cement laitance must be removed.</p> <p>Timber substrates must be cleaned to expose original sound timber.</p>
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Substrate Preparation	<p>Concrete, brickwork, mortar substrates:</p> <p>Mechanically prepare surfaces by suitable approved techniques such as needle gunning, scabbling, bush hammering, water/grit blasting etc.</p> <p>Feather edging should be avoided. The edges should be square cut to at least the recommended minimum application thickness of the product.</p> <p>Steel substrate:</p> <p>Prepare surfaces by removing old coatings, rust products, grease, oil etc by suitable mechanical equipment. Apply Sikadur[®]-32 within 4 hours or protect reinforcement with Sika[®] Armatec 110 EpoCem[®]</p> <p>Timber:</p> <p>Mechanically sand or plane timber surfaces.</p>
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Application Conditions / Limitations

Substrate Temperature	+5°C min. / +30°C max.
Ambient Temperature	+5°C min. / +30°C max.

Application Instructions

Mixing	Do not part mix
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Mixing Time



Pre-batched units:
Mix parts A+B together for at least 2 minutes with a mixing spindle or paddle mixer attached to a slow speed electric drill (max. 600 rpm) until the material becomes smooth in consistency and a uniform grey colour. Avoid aeration while mixing. Mix only that quantity which can be used within its potlife.
Apply immediately.

Application Method / Tools

Apply a thin layer of Sikadur[®]-32 to the prepared substrate by brush or roller. Ensure the product is worked well (scrubbed) into the substrate. This is particularly important on damp surfaces. Ensure the attainment of an overall glossy sheen. Any shear connectors or similar must also be coated. Apply the fresh concrete or mortar whilst the Sikadur[®]-32 is still tacky. If Sikadur[®]-32 dries before application reapply.

Apply epoxy mortars within 24 hours.

When used as an impervious barrier apply a minimum of two coats @ 1.0 mm/coat

Cleaning of Tools

Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

Potlife

Temperature	Pot Life (min)	Open Time (hrs)
0°C	-	-
5°C	120	>3
10°C	60	>3
20°C	25	3
30°C	15	1
All above values are approximate		

Notes on Application / Limitations

- Do not apply Sikadur[®]-32 to surfaces with standing water.
 - Maximum moisture content of the concrete 10%
 - Do not mix part kits
 - Do not add solvent or additional fillers to the mix
 - At higher temperature pot life will be shortened
 - At lower temperatures the material will become more difficult to apply and take longer to harden
 - Thinner C is flammable – NO NAKED FLAMES
 - Always ensure good ventilation when applying in a confined space
 - It is important to observe proper concreting practice when applying concrete toppings and screeds on substrates coated with Sikadur[®]-32 as a bonding agent. Correct placement and curing techniques must be observed to prevent excessive and rapid drying of the mix which could cause cracking or curling.
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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	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.
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