

Sikadur[®]-32

Epoxy resin bonding agent

Construction

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 epoxy mortars, fresh cementitious concrete or mortar to a wide variety of surfaces including mineral substrates (concrete, brick, stone, mortar, GRC, fibrous cement), wood, iron and steel and cured epoxy mortars. Sikadur-32 exhibits excellent adhesion enabling it to be successfully employed in both structural and non-structural situations. Special high strength grades can be made to order.
Advantages	<ul style="list-style-type: none">▪ Shrink free▪ Insensitive to moisture during application, cure or whilst in service▪ Applicable at low temperatures down to 5°C▪ Excellent adhesion to most building materials even when damp▪ High tensile and flexural strength▪ Supplied in factory proportioned units▪ Easily applied▪ Proven in service for over 25 years worldwide
Storage and Shelf Life	Minimum shelf life is approximately 3 years. Store under controlled conditions in original containers (minimum 5°C, maximum 35°C temperature range).
Instructions for Use	
Surface Preparation	<p>Mineral/Resin Substrates. Mechanically roughened, free from all contaminants (eg. dust, oils, grease, ice, etc.), surface water, laitance, old form oil, curing membrane and old coatings. Suitable methods of preparation include blast cleaning and scabbling (sanding/grinding on fibrous cement).</p> <p>Wood. Mechanically sanded, free from all contaminants (dust, oils, grease, etc.) surface water, stains, impregnants and old coatings.</p> <p>Iron/Steel. Mechanically cleaned, free from all contaminants (dust, oils, grease, etc.) coatings and corrosion products and surface water for maximum bond strengths. Suitable methods include blast cleaning to minimum standards Sa2 AS 1637.9 or equivalent methods to St3 AS 1627.9.</p>
Mixing	Sikadur-32 is supplied in factory proportioned units comprising the correct quantities of Part A (Resin) and Part B (Hardener). Thoroughly stir both components separately using a slow running drill/stirrer with a windmill type paddle (max. speed 600 rpm). Decant all Part B into Part A and mix thoroughly together until a uniform colour is achieved (typically 3 mins). Apply immediately.
Application	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. Apply epoxy mortars within 24 hours.
Cleaning	Uncured material may be cleaned from application tools etc. by using Sika Colma Cleaner (flammable solvent). Cured material can only be removed mechanically.

Technical and Physical Data

Form	Slightly thixotropic liquid	
Density	1.4 kg / litre approx.	
Volume solids	100% (solvent free)	
Mix ratio	A : B = 2 : 1 by weight	
Secant Flexural Modulus of Elasticity (BS 6319) @ 7 days	2.0 GPa approx.	
Comprehensive strength @ 7 days (BS 6319) @ 24 hours	60 MPa approx. 14 MPa approx.	
Flexural strength @ 7 days (BS 6319)	28 MPa approx.	
Tensile strength @ 7 days (BS 6319)	13 MPa approx.	
Adhesion to concrete	>3 MPa approx. (concrete failure all grades)	
Adhesion to sandblasted steel @ 10 days	20 MPa approx.	
Application Temperature (min.-max.)	20°C – 40°C (substrate and ambient temperatures)	
ASTM C881-78	Complies with Type II, Grade 2 Class B & C	
Consumption/Coverage	Approx. (0.2-0.6L/m ²) typically (0.25-0.36L/m ²) (dependent on surface profile, texture, temperature and wastage)	
Colour	Grey/Beige	
Packaging	3 litre, 18 litre net pre-proportioned kits	
Potlife (3 litre mix)	Temperature	
	20°C	75 mins approx.
	35°C	23 mins approx.
Open Time	Temperature	
	40°C	4 hours approx.
	30°C	8 hours approx.
	20°C	12 hours approx.

Bond coat of Sikadur-32 applied immediately after mixing



Important Notes

- Do not apply Sikadur-32 to surfaces with standing water. Maximum moisture content of the concrete 10%.
- Do not mix part kits.
- Only mix as much as can be applied within the stated potlife.
- Do not dilute the product with solvent as this will affect the cure and in-service performance.
- Service temperatures >70°C may affect the performance of the product.
- Lower temperature (substrate/ambient) during storage/application will increase the material consumption due to a rise in viscosity.
- Minimum application thickness 0.1 mm as bonding agent.
- If Sikadur-32 has exceeded its open time, another coat must be applied within 24 hours. After 24 hours the surface must be mechanically abraded then washed clean with Sika Colma Cleaner. Allow to dry before recoating.
- It is important to observe proper concreting practice when applying concrete toppings and screeds on substrates coated with Sikadur-32. Correct placement and curing techniques must be observed to prevent excessive and rapid drying of the mix.
- If in doubt, consult our Technical Department.
- The temperature at which the Sikadur-32 is stored during the 24 hours before it is mixed will govern its potlife when mixed.
- Compressive strengths etc. of epoxy resins must be qualified by the testing method eg. Test Standard or size of specimen under test and the rate at which the test piece is loaded while under test, as these factors will affect the result markedly. Faster loading rates will generally give higher ultimate loads and vice versa. Also, a specimen at lower temperature will show higher strengths and vice versa.

Handling Precautions

- Avoid contact with the skin, eyes and avoid breathing its vapour.
- Wear protective gloves when mixing or using.
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do NOT induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly.
- If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

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.

