

Corrobond 101

Anti-Corrosive Cement-Base, 2 Components Polymer Modified Rebar Coating and Bonding Agent

Description	Corrobond 101 is an anti-corrosive, 2 components cement-base polymer modified rebar coating & bonding agent between old & new concrete. Especially designed for repairing of vertical and horizontal surfaces of concrete and masonry
Where to use	• Corrobond 101 is used for general repair purposes of damaged or spalled concrete and for the protection of steel reinforcement rods against corrosion • Corrobond 101 is used for the restoration of concrete structures permanently subjected to severe weathering conditions • Corrobond 101 is used as an anti-corrosive rebar coating and bonding mortar between old & new concrete
Advantages	• Easy to use • Excellent weathering resistance • Rust inhibiting properties since it does not contain calcium chloride • Excellent adhesion to concrete and steel • Breathable • Economic since it can be applied without the need of expensive form work • Water repellent • Non-shrink mortar
Properties	
Physical Properties:	
Coefficient of thermal expansion	$9 \times 10^{-6} / ^\circ\text{C}$
Setting time	180 minute - Initial 250 minute - Final
Density @ 23°C	$2 \pm 0.2 \text{ gm. / cm}^3$ fresh wet
Mechanical Properties: After 28 days cured at 20 °C and R.H. of 70 ±5%	
E-modules	24550 N/mm ²
Adhesion strength to concrete	1.5 - 2 N/mm ²
Adhesion concrete to plain bars	1 - 2 N/mm ²
Surface Preparation	• Remove all damaged and contaminated concrete to reach the sound core • Remove additional concrete surrounding and along the reinforcement bars • Formation of clean-cut edges to avoid feather edges thoroughly clean reinforcement bars to remove all rust, scale and surface contaminants. (Sand or abrasive blasting is advised.) • If steel is heavily corroded that significant loss of section has occurred, add new steel (Please consult a qualified engineer) Clean and dampen the concrete surface with water

Mixing	Corrobond 101 is supplied in premeasured units • Slowly add the part B (powder) to part A (liquid) in a suitable mixing container and mix to a lump-free batter consistency for approximately 3 minutes • Mixing ratio: Liquid : Powder as (1:4) PBW when used for rebar /protective coating • Do not add water or rework a stiffened mix by adding water
Application	• Apply a slurry coat by brush over reinforcing rods and concrete • Slush mixes under and between steel rods and make sure all cracks and voids are filled • Reinforcing rods should be completely surrounded by Corrobond 101 in order to avoid corrosion • Then apply Corrobond 101 to a thicker consistency as a second coat after 3 hours • Minimum layer thickness 1 mm and each new layer should be applied within 2 – 3 hours • If repairs are to be delayed the second layer of Corrobond 101 to be broadcast with quartz sand
Cleaning	Tools and equipment to be cleaned with Prosolve EP immediately after use
Theoretical coverage	2 Kg/m ² /1mm thickness
Packaging	Powder 20 Kg sack Liquid 5 Kg pails
Shelf life & Storage	Corrobond 101 has a shelf life of 12 months if kept in original, undamaged packaging in a dry warehouse
Precaution	• Keep away from all sources of ignition during storage, mixing, application and curing • Do not apply to asphalt or weak concrete • Do not install at temperature below 10 °C or above 45 °C
Health and Safety	• Some people are sensitive to epoxy resins and skin contact should be avoided • Gloves and barrier cream should be used when handling these products • If contact with resin occurs, it must be removed
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction, PROKEM reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & 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 PROKEM extends technical services to include after sales support to assist users in a proper handling of our products