

Corrobond PCI

Corrosion Inhibitive, Cement-Base, Polymer Modified Rebar Coating and Bonding

Description	Corrobond PCI is Corrosion inhibitive, 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	<ul style="list-style-type: none"> • Corrobond PCI is used for general repair purposes of damaged or spalled concrete and for the protection of steel reinforcement rods against corrosion. • Corrobond PCI is used for the restoration of concrete structures permanently subjected to severe weathering conditions. • Corrobond PCI is used as a corrosion inhibitor rebar coating and bonding mortar between old & new concrete.
Advantages	<ul style="list-style-type: none"> • 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 min - Initial 250 min - Final
Density	$2 \pm 0.2 \text{ gm. /cm}^3$ fresh wet
PH	
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	2.3 N/mm ²
Adhesion concrete to plain bars	5.0 N/mm ²
Adhesion concrete to deformed bars	10.4 N/mm ²
Surface Preparation	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Mix Corrobond PCI with mixing liquid to a batter consistency. • Mix together for 3 minutes using a low speed electric mixer.

Application	<ul style="list-style-type: none"> • Apply a slurry coat by brush over reinforcing rods and concrete. • Slush mix under and between steel rods and make sure all cracks and voids are filled. • Reinforcing rods should be completely surrounded by Corrobond PCI in order to avoid corrosion. • Then apply Corrobond PCI to a thicker consistency as a second coat after 3 hours. • Minimum layer thickness 1 mm. • Each new layer should be applied within 2 - 3 hour. • If repairs are to be delayed the second layer of Corrobond PCI to be broadcast with quartz sand.
Theoretical coverage	2 Kg /m ² /1mm thick.
Packaging	20 Kg Sacks powder& 5 Kg pails liquid
Shelf life & Storage	Corrobond PCI has a shelf life of 12 months if maintained in dry storage conditions (unopened sacks).
Precaution	<ul style="list-style-type: none"> • Use only potable water. • Do not add extra water above stated quantities. • In case retarded drying out is required, apply a curing agent or cementitious paint immediately after application. • Corrobond PCI should not be applied to substrates that is exposed to running water or which are permanently wet. • Application should not be carried out when ambient temperature is below 5 °C.
Health and Safety	<ul style="list-style-type: none"> • Corrobond PCI is non-toxic if comes in contact with skin. • Use gloves to avoid contact with skins. • If skin comes in contact, wash immediately with soap and water. • Do not use solvents. • Eye contamination must be immediately washed with water, then seek medical treatment. • Do not breath dust, Use a practical mask.
Additional Information	<p>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.</p> <p>PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range for our customer's satisfaction.</p> <p>PROKEM reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale & delivery.</p> <p>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.</p> <p>PROKEM extends technical services to include after sales support to assist user's in Environmental Considerations Corrobond PCI is environmentally safe.</p> <p>PROKEM provides the construction a proper handling of our products.</p> <p>industry with a comprehensive range of construction** COROBOND PCI is a new version of COROBOND 101 , It is manufactured using PCI 2005 produced by Cortec USA, whom we represent as a soul agent in Egypt .</p>