

Kembond EP

Epoxy Resin New to Old Concrete Bonding Agent

Description	Kembond EP is a two-components epoxy adhesive based on a selected solvent-free epoxy system and formulated with special pigments and fillers. It is ideal for bonding a wide range of building materials to one another eg. concrete, brick, metal, stone, and wood. Kembond EP has a high level of mechanical integrity and exhibits excellent bonding characteristics even under damp conditions. Standards: complies with ASTM 881-78 type II, grade 2 class B & C. Kembond EP is approved by the National Organization For Potable Water & Sanitary Drainage for sewerage applications	
Where to use	Kembond EP is used for bonding new to old concrete and can be used on horizontal and vertical surfaces, it provides a bond strength greater than concrete tensile strength itself. It can be used as a bonding agent on steel, mortar, and iron.	
Advantages	• Excellent adhesion to concrete and steel • Can be used on damp or dry surfaces • Pre-packed in an easy-to-handle pack • Prolonged pot life to allow time for form-making • High tensile strength • Thixotropic nature facilitates application in both vertical and overhead locations • Very good chemical properties and cohesive strength	
Properties		
Physical properties		
Density	1.2 ±0.02 Kg/lit	
Pot Life @ 23 °C	3 - 4 hours	
Initial Hardness	1 Day	
Full Cure	7 Days	
Mechanical properties: After 7 days cured at 23 °C and R.H. of 50%:		
Compressive strength	50 - 60 N/mm ²	
Flexural Strength	30 - 35 N/mm ²	
Tensile Strength	18 - 20 N/mm ²	
Shear Strength	24 N/mm ²	
Bond strength to concrete	8 – 10 N/mm ²	ASTM C882
Bond strength to steel	18 - 20 N/mm ²	
Surface Preparation	• Old substrates must be clean, dry, and sound • Remove all traces of laitance by sandblasting, scrapers, or power steel brushes • Surfaces contaminated with oil or grease should be cleaned using a special degreasing agent with water or steam cleaning	
Mixing	• Care should be taken to ensure that Kembond EP is thoroughly mixed • The hardener and resin must be stirred separately before mixing to disperse any settlement • Add the hardener into the resin container and then thoroughly mix using a low electric drill or manually until obtaining a uniform Color using a low-speed mixer or manually	

Application	• Use the fresh mix as soon as possible directly to the prepared substrate using a brush, roller, or Airless spray • Apply new concrete within 3 hours at 23 °C and 1 hour @ 40 °C or as long as the material is still tacky • If the maximum overlay time is missed, then Kembond EP must be mechanically removed and a new fresh application is to take place
Theoretical coverage	0.2 - 0.5 Kg/m ² (depending on substrate conditions)
Packaging	5 Kg Two packs (A+B) 20 Kg Two packs (A+B)
Shelf life & Storage	Kembond EP Shelf life at least 12 months, in original sealed containers, also it must be protected from direct sunlight
Cleaning	Clean all tools and equipment immediately after use with Prosolve EP
Health and Safety	• Kembond EP 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
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 the proper handling of our products.