



# CWC®EP BONDING AGENT

## Solvent Free Epoxy Resin Based Thixotropic Bonding Agent

### Description

**CWC®SMART EP BONDING AGENT** is a two component solvent free thixotropic epoxy resin bonding system for joining old concrete to new concrete and old concrete to old concrete

**Pack –A: Resin (white), Pack –B: Hardener (black)**

**CWC®SMART EP BONDING AGENT** conforms to ASTM C 881 Grade 3 Type II.

### Advantages

- Provides a permanent bond
- Cures in both dry and damp conditions.
- Thixotropic - can be applied on vertical and overhead surfaces without sagging
- Can be used as bonding agent for mortars, renders, stone, steel, iron etc.
- Easy to mix and apply
- Excellent adhesion to most building material

### Domains of Application

It is mainly used to bond permanently freshly mixed concrete or mortar, glazed bricks, tiles, steel or other structural material to old sound concrete. It is based on a 100% epoxy formulation and contains no solvents or water diluents **CWC®SMART EP BONDING AGENT** is a time tested dimensionally stable compound, which has been extensively used for structural bonding.

### Method of Application

#### Surface Preparation

Surface should be clean, free from dirt, loose particles, oil, grease or other foreign material. Deep contaminated concrete or metal should be thoroughly cleaned by wire brush. Ensure that the surface is not too wet during application of Bonding Agent.

### Indicative Characteristics

<b>Appearance of cured film</b>	Grey
<b>Specific Gravity at 27°C</b>	1.8 ±0.1
<b>Solid content, % (w/w)</b>	>98
<b>Mixing Ratio, Pack –A:B ( by wt.)</b>	2:1
<b>Pot life, minutes at 27°C, 100 g mass</b>	> 45
<b>Application Temperature, °C</b>	5 to 40
<b>Coverage (Theoretical)</b>	0.3-0.8 kg /m <sup>2</sup> per coat depending surface profile
<b>Initial cure at 27°C, for pedestrian traffic</b>	After 24 hours
<b>Slant- Shear Bond Strength, at 14 days, N/mm<sup>2</sup></b>	12 (minimum) or concrete failure
<b>Compressive Strength, 14 days, MPa</b>	> 60

### Mixing

A suitable power driven mixer / stirrer is recommended for uniform mixing of **CWC®SMART EP BONDING AGENT**. Stir the base and hardener separately. Add hardener into the base and stir well till a uniform color is achieved. Wait for 5 minutes for induction. Remix the mass again before apply it. All packs are pre-weighed and ready for on site mixing. Do not use fraction of any **pack**. Always use whole packs for best results.

**Concrete Works Construction Chemicals Private Limited (CIN: U74999PN2021PTC199740)**

**Corp. Office:** Office No. 70, Mahavir Center, Fourth Floor, Sector 17, Vashi, Navi Mumbai 400703.

**Reg. Office:** 1471 D.B. House, Office No. F-4, 4<sup>th</sup> Floor, Madhav Nagar Road-EWSD Sangli, 416416

**Email:** [info@cwchemicals.com](mailto:info@cwchemicals.com) | **Web.:** [www.cwchemicals.com](http://www.cwchemicals.com)



### Application

Apply a thin layer of SMART EP BONDING AGENT with brush or squeeze to the existing surface, working well into the substrate. Place fresh concrete/mortar while it is still tacky (2-5 hours). A second coat of **CWC®SMART EP BONDING AGENT** may be applied after the first thin layer of the applied SMART EP BONDING AGENT passes its tacky stage, prior to placing the freshly mixed concrete or mortar. Good concrete practice should be followed in placing, consolidation and curing of concrete. While application, the substrate temperature should be at least 5°C but not above 40°C.

### Shelf Life & Storage

12 months from the date of manufacturing when stored in unopened, original sealed and dry condition at a temperature range from +5°C to 40°C

### Packing

6 kg kit (Resin Part A – 4 kg, Hardener Part B – 2 kg)

### Precautions

- Store the material at the 5° to 40°C temperature range in shaded cool place and keep it away from fire and any heated body. Clean all tools with MEK or any standard solvent before polymerization starts.
- Mix only sufficient materials for immediate requirements. Leave the mixed material to stand for 5-8 minutes to enable entrapped air, if any, to escape from the mix and then use as quickly as possible.
- Thixotropy or anti sagging property is greatly influenced with surface temperature.

### Safety

- Wear hand gloves, safety shoes and safety goggles while using and handling the product.
- In case eyes or mouth are affected wash with plenty of clean water and seek medical treatment immediately.

Before use, refer to the Material Safety Data Sheet. The MSDS is available on [www.cwcchemical.in](http://www.cwcchemical.in)