

# CWC®SMARTFLEX EPA

## Solvent Free Thixotropic Epoxy Adhesive

**CWC®SMARTFLEX EPA** is a fast curing, 2-component specially designed Epoxy Adhesive material for bonding TPE Based expansion Joint tape, metal plate, plywood, asbestos, etc. to concrete. It hardens in few hours. It is a solvent free thixotropic high strength compound. It is used as general purpose adhesive for many applications conforming to ASTM C 881.

**Part A : Base – White ; Part B : Hardener - Black**

### Indicative Characteristics

Mixing Ratio (Pack A : B), by wt.	2 :1
Pot life, minutes, at 30°C, ASTM C 881	Not less than 20
Open time, minutes, at 30°C	Not less than 60
Thixotropy (Sag), mm in 10 minutes, at 30°C, ASTM C881	Not more than 30
Shrinkage, ASTM D2566	Not More than 0.4%
Comp. Strength, 24 hours, MPa, ASTM D 695	> 40
Comp. Strength, 7 days, MPa, ASTM D 695	> 65
Shear Bond Strength, ASTM C 882	No joint failure at 8MPa (min.)
Water absorption, ASTM D 570	0.5% (Max)
Solubility	0.1% (Max)
Specific Gravity	1.7±0.2
Coverage, kg/mm/m <sup>2</sup>	~1.75

### Domains of Application

- Used as an epoxy adhesive for **CWC®SMART BAND** system.
- Particularly suited for maintenance work in a situation where time is a Constraint.
- A highly effective adhesive for most building material including steel and concrete surface in an aggressive environment.
- Used in situations where long term protection against abrasion, weathering and chemical exposure is high. Can be used for bedding thin sheets of membranes etc.
- Can be used as spout sealing compound
- Can be used as groove filling on vertical as well as overhead application.
- Can be used to bond permanently freshly mixed concrete or mortar, glazed bricks, tiles, steel or other structural material to old sound concrete.

### Method of Application

#### Surface Preparation

Substances must be sound, dry, clean and free from laitance, ice, standing water, grease, oils, old surface treatments or coatings and all loose or friable particles must be removed to achieve a laitance and contaminant free, open textured surface. Steel must be cleaned and prepared thoroughly to an acceptance quality i.e. by shot blasting and vacuum cleaning. Surface temperature must be above 5°C and below 35°C as well as 3°C above dew point.

#### Mixing

A suitable power driven mixer / stirrer is recommended for uniform mixing of the **CWC®SMARTFLEX EPA**. Manual mixing is also allowed. Stir the base and hardener separately. Mix hardener gradually into the base under continuous stirring as per the stated mixing ratio. Mix well for 5-6 minutes till the components become homogeneous color.

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#### Application

The product shall be spread by notched steel trowel or putty knife to the required thickness. Apply the mixed material on both sides of the surfaces to be bonded. The joint should be closed immediately or within the open time of the adhesive.

#### Advantages

- Non slump
- Primer less
- High initial and ultimate strengths.
- Impermeable to liquids and water vapor
- Suitable for dry and slight damp concrete surfaces
- Hardening is not affected by humidity
- Thixotropic: non-sag in vertical and overhead applications
- Solvent free
- Hardens without shrinkage
- Different colored Parts (for homogeneous mixing).

#### 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

3kg kit

#### 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)

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