



BONDACOAT EP

Solvent Free Epoxy Resin Bonding Agent

Composition and Application Field

BONDACOAT EP is a high performance, two component, solvent free based epoxy resin containing pigments and fine fillers.

BONDACOAT EP complies with ASTM C881: Type I, II, III, IV and V, Grade 2 Class E&F.

Uses

BONDACOAT EP acts as a bonding agent fresh wet concrete material. It is also used on horizontal and vertical surfaces where mortar or concrete can be supported by formwork. The long "open" life makes it suitable for use with formwork or where additional steel reinforcement has to be fitted. The product is ideal for roads and bridges, pavements, loading bays and factories, and for bonded or granolithic floor toppings. It is suitable for internal and external applications. **BONDACOAT EP** may be used as a repair system where a substrate/repair barrier is required or where the substrate is likely to remain permanently damp or wet.

Advantages

- Easy to apply. Can be applied on dry or damp substrates.
 - Exhibits high mechanical strength.
 - Positive adhesion exceeds that of tensile strength of the host concrete.
 - Slow cure allows ample time to erect steel reinforcement and formwork.
 - Solvent free-can be used on enclosed locations.
- Available in green, red, and white.

Surface Preparation

Surface preparation is the most important factor in developing a successful coating system. The purpose of surface preparation is to remove all dust and contaminants that can interfere with adhesion and to develop a surface roughness to promote mechanical bond. Use a dry sponge to remove water on wet surfaces. Treat oil or grease contamination with degreaser followed by water or steam cleaning.

Mixing

The product components should be thoroughly mixed together. The hardener and base components should be stirred separately before mixing to disperse any settlement. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes. Use heavy duty slow speed power drill with a jiffy mixing blade. Mix the two components in the quantities supplied ensuring that the hardener container is scraped clean. Do not add solvent thinners at any time.

Application Method

After mixing, **BONDACOAT EP** should be applied. It can be applied using a brush or sprayer, achieving an unbroken coat across the entire surface. **BONDACOAT EP** should be tacky before the new concrete, screed or mortar is placed. The maximum overlay duration should be carefully observed. Failure to applying the new concrete, screed or mortar within the maximum over coating time will result in **BONDACOAT EP** becoming hard, thus creating a

slip plane rather than a bonding action. If the maximum overlay time is missed, then the **BONDACOAT EP** must be mechanically removed and a fresh application made.

As soon as the **BONDACOAT EP** has been applied, any required reinforcement and/or formwork should be erected and fixed securely in place within the maximum overlay time specified herein.

Coverage

4-5 m²/liter at 250 microns (WFT) in two coats.

Cleaning

Tools and equipment's should be cleaned immediately by using **THINNERCOAT 10** organic solvent.

Package

5 liter pack including base and hardener

Technical Properties

Compressive Strength (ASTM D695)	70 N/mm ²
Tensile strength (ASTM D638)	35 N/mm ²
Slant Shear Strength (BS 6319, Part 4)	40 N/mm ²
Thermal Compatibility (ASTM C884)	Passed
Bond Strength by Slant Shear (ASTM C882)	14 N/mm ²
Pull Off Strength (ASTM D 4541)	>2.0 N/mm ²
Water Absorption (ASTM D570)	0.05 %
Pot Life @ 35°C	>2 hours
Full Cure	2 days @ 20°C 1 day @ 35°C
Maximum Overlay Time	24 hours @ 20°C 12 hours @ 35°C

Storage and Shelf Life

Product should be stored at 25oC in dry conditions. 18 months in tightly closed container.

Health and Safety

The material should be applied in a good ventilated area. Avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of eye contact, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately. The product complies with environmental and occupational health and safety standards ISO 14001 and OHSAS 18001.