EVI VERNICI
PAINTS & COATING SOLUTIONS

CONSTRUCTION CHEMICALS DIVISION

BONDACOAT EP

Solvent Free Epoxy Resin Bonding Agent

Technical Data Sheet

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.
Bondacoat EP is used for bonding agent fresh wet concrete materials to existing concrete surfaces. It is also used on horizontal and vertical surfaces where mortar or concrete can be supported by formwork. The long "open" life makes is 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 part of a repair system where the substrate/repair barrier is required or where the substrate is likely to remain permanently damp or wet.

Advantages

- Easy to apply
- Can be applied to 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 Preperation

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.
Wet substrates should be sponge dried to remove all surface water, then dried. 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 of heavy duty slow speed power drill with a jiffy mixing blade. Mix the two components in the quantities supplied taking care to ensure 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, being sure to achieve an unbroken coating across the entire surface. Bondacoat EP should be tacky before the new concrete, screed or mortar is placed. The maximum overlay times should be carefully observed. Failure to apply 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

4.5m2 /litr at 250 microns (WFT) in two coats.

Cleaning

Tools and equipment can be cleaned immediately by using Thinnercoat 10 organic solvent.

Packing

5 Ltr pack

Technicals Properties

Compressive Strength (ASTM D695)	70 N/mm2
Tensile Strength (ASTM D638)	35 N/mm2
Slant Shear Strength (BS 6319, Part4)	40 N/mm2
Thermal Compatibility (ASTM C884)	Passed
Bond Strength by Slant Shear (ASTM C882)	14 N/mm2
Pull off Strength (ASTM D 4541)	>2.0 N/mm2
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 25°C in dry conditions and keeping away from source of flame. Lasts12 months in tightly closed container.

Flammability

Bondacoat EP is a nonflammable material while THINNERCOAT 10 is flammable, so do not expose to naked flames during application.

Safety Precuation

Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Use a barrier cream. Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapour or spray. MSDS is available on request for the safe handling of this product.

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