ROCKBOND
MAKING CONCRETE STRONGER

RB 8.03

TECHNICAL DATA SHEET

(290-190) EPOXY TIE COAT

High Strength epoxy tie coat for concrete screeds and mortars

DESCRIPTION

290-190 Epoxy Tie Coat (RB 8.03) is a three component resin-hardener-filler system, designed for the bonding of freshly mixed concrete, floor screeds or mortar to an existing concrete substrate or other structure materials. The filler content is a colloidal silica powder which is added and mixed in after the ADR 290 resin and ADH 190 hardener have been mixed together. 290-190 Tie Coat provides a bond that is many times greater than the tensile strength of the concrete itself.

SPECIAL PROPERTIES

- Develops high early strength that is much greater than the tensile and flexural strengths of concrete.
- Strong bonding of concrete or mortar to most construction substrates including timber, steel, brick and fibre cement sheeting.
- Can be used on dry on damp substrates and gives excellent adhesion to both.
- Resistant to chemical attack from dilute acids and alkalis, sewage and salt water.
- Easy application.
- Provides impermeable barrier against moisture penetration.

USES

- For bonding of new cementitious floor screeds to existing concrete floors.
- At construction joints to bond new concrete to existing.
- For bonding of plasters and renders to existing substrates.
- For use by tilers in bonding bedding mortar to substrates.
- For acting as a water barrier between existing substrates and repair products.

SURFACE PREPARATION

Thoroughly clean all surfaces ensuring they are free of dirt, oil, grease, dust etc. To ensure all cement laitance is removed, scabbling or sandblasting is recommended. If the substrate is a relatively new concrete it should be treated with a 10% solution of hydrochloric acid. If substrate is steel, remove all rust, point or oil etc by sandblasting.

MIXING INSTRUCTIONS

Add entire contents of Component B (ADH 190) to Component A (ADR 290) and mix together with a mixer attached to slow speed electric drill until fully blended, then slowly add Component C (colloidal silica) while mixing. The mixing ratio by volume of components A:B:C = 3:1:1.

PACKAGING AND SIZE

290-190 Rockbond Epoxy Tie Coat (RB 8.03) is available in 5ltr and 15ltr Packs.

APPLICATION PROCEDURE

Apply Epoxy Tie Coat to the prepared surface of the substrate in a thin uniform layer using a notched trowel, brush or roller, and work well into the surface. Cementitious Floor Screed, fresh concrete or mortar must be applied while the epoxy Tie Coat is still tacky. If any areas of the surface loose their tackiness there will be no bonding and another coat must be applied.

CLEANING

Tools and equipment should be cleaned immediately with "MEK" solvent or "Esol" blended solvent.

HEALTH AND SAFETY

Refer to the Material Safety Data Sheets (MSDS) for detailed product safety information. Wear protective equipment (goggles, safety glasses, gloves, respirators, protective clothing etc) appropriate for the job at hand.
Avoid contact with resin, hardeners, mixed epoxy and sanding dust from partially cured epoxy. Barrier creams provide added protection If resin, hardener or mixed epoxy is got on skin, remove it as soon as possible using a lanolin based water cleaner and not solvents. Avoid breathing concentrated vapours and sanding dust. Rockbond epoxies have low VOC's but vapours can build up in unvented spaces. Although epoxy quickly cures to a sandable state it may take over two weeks at room temperature or elevated temperature to cure completely. If the eyes or mouth are affected wash with clean water and obtain medical attention.
Only dispose of these materials once the have been mixed and cured to a solid inert state.

TECHNICAL DATA

SPECIFIC GRAVITY: 1.11 (ADR 290), 0.97 (ADH 190)
VISCOSITY AT 20°C: 400cps
SERVICE TEMP: < 70°C
APPLICATION TEMP: 5°C to 35°C
SHRINKAGE: Minimal
MIX RATIO: 33 to 100 (by volume)
COMPRESSIVE STRENGTH: 65MPa approx. (at 20°C)
FLEXURAL STRENGTH: 30MPa approx.
TENSILE STRENGTH: 18MPa approx.
BOND STRENGTH:
Sandblasted Steel = 18MPa approx.
Concrete = 3MPa approx. (concrete failure)
POT LIFE: 1 hour at 20°C
GEL-TIME IN THIN FILM AT 20°C: 7 hours
HDT AFTER FOUR DAYS AT 20°C: 67°C
YIELD: A 5ltr Pack when mixed yields 4ltrs of spreadable Epoxy Tie Coat which will treat 8m2 at a thickness of 0.5mm.

TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our **Technical Sales Team: +64 4 568 5401**