DURABOND EP

TECHNICAL DATA SHEET

DESCRIPTION

DRYLEX DURABOND EP is a two component adhesive system specially formulated for structural concrete application and bonding of old to new concrete. It has a low to medium viscosity. When compounded, the admixture produces a strong bond with minimum shrinkage and flexibility properties. It contains a special polymeric curing agent that provides the film with a high degree of toughness, adhesion and chemical corrosion resistance and exhibits excellent bonding characteristics even under damp conditions.

ADVANTAGES

- Can be applied on to dry or damp substrates
- Exhibits high mechanical strength
- Easy to apply with brush, roller or directly pouring.
- Excellent adhesion - exceeds that of the tensile strength of the host concrete
- Slow cure allows time to erect steel reinforcement and formwork
- Solvent-free - can be used in enclosed locations

USES

- Bonding freshly mixed concrete and hardened concrete,
- Corrosion protection of reinforcement in structural repairs,
- Priming the concrete substrates under repair mortars,
- Bonding various building materials to each other, concrete, stone, metals etc.,
- Chemical anchorin

PHYSICAL PROPERTIES & CHEMICAL PROPERTIES

Mix Ratio	Mix 2 parts by volume
Pot –Life	30 – 40 minutes @ 25 ºC
Tack – Free – Time	65 – 70 minutes @ 25 ºC
Initial – Cure – Time	60 – 120 minutes @ 25 ºC
Full – Cure – Time	24 hours @ 25˚C, 72 hours before loading pressure
Viscosity	8500 mPa.s
Compressive Strength	80 N/mm2 @ 7 days
Tensile Strength	30 N/mm2 @ 7 days
Flexural Strength	30 N/mm2@ 7 days
Resistance to Chemicals	Highly resistant to most acids, alkalis, salts, alcohol & solvents.
% Solid by volume	100%
Mixed Density	1,25 kg/L

Application Procedure

Preparation of Substrate

The concrete surfaces must be sound, clean and dry. It shouldn't be weakened by over troweling and lack of curing. The concrete should be free of frost, curing membranes, waterproofing treatments, oil stains, laitance, friable material and dust. If there is a water leakage it must be drained or properly plugged. Steel surfaces should be cleaned from rust by sand blasting and if needed new reinforcement should be installed. The edges of the broken surfaces should be saw cut.

by agel chemicals
Torgauer Str. 231, 04347 Leipzig, GERMANY
www.agelchemicals.de - info@agelchemicals.de

Mixing

DRYLEX DURABOND EP has two components in cans, produced according to right mixing ratio. Material temperature should be between 15 – 25 °C before mixing. Component B should be added into the Component A without any remaining material in the can. It should be mixed with using a proper mixer (~300rpm) for polymer mixing. Mix the components at least 3 minutes to have a homogenous mixture.

Application Method

DRYLEX DURABOND EP should be applied to the prepared surface by using a paint brush, roller or can be sprayed with proper equipment. Freshly mixed concrete should be cast when the epoxy is still wet. Time interval for concrete casting can be changed depending on the weather conditions. The concrete should be cast in 40 minutes after priming the hardened concrete. For anchoring the anchor holes should be drilled 6mm wide than anchor bar's diameter and in designed depth. The holes should be cleaned by using steel brush and air guns. Mixed material should be put in a mortar gun with a proper nozzle and start to fill the holes into half depth. Install the anchor bar into the hole slowly by screwing and do not drive the bars.

Cleaning

DRYLEX DURABOND EP should be removed from tools, equipment and mixers with solvent immediately after use. Hardened material can only be removed mechanically.

Coverage

150-250 g/m^2 for obtaining 200 micron layer.

Packaging

- 5 Kg Set
- 3 Kg set
- 1,5 Kg set

Storage

Store in dry conditions and at room temperatures, in original containers.

Shelf Life

24 months.

Precautions
Health and safety

DRYLEX DURABOND EP should not come in contact with skin or eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection. In case of contact with skin, remove immediately with resin removing cream followed by washing with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - do not induce vomiting

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