DESCRIPTION
A two component Solvent Free, 100% Solids, moisture insensitive structural Thixotropic Epoxy Adhesive.
Complies to EN1504 Part 9 and EN1504 Part 4
- Principle 4 : Structural Strengthening (SS).
- Method 4.1 - Adding or replacing embedded or external reinforcing steel bars.
Method 4.3 - Plate Bonding.

USES & ADVANTAGES
An adhesive for the bonding of Condur CF structural reinforcement plates.
Advantages include:
- High early strength without shrinkage.
- 100% Solids (No Volatile Organic Content)
- High strength.
- Impermeable to liquids.
- Two pack colour coding gives visual check on correct mixing.
- Non sag easy to apply.
- Unaffected by wide range of acids, alkalis and industrial chemicals.
- High mechanical, abrasion and shock resistance.
- Excellent adhesion to many substrates.
- No primer required.

PROPERTIES
Appearance : Colour
Part A : black paste
Part B : white paste
Mix Ratio: 1:1 by weight
Pot Life : 50 min @23°C ASTM C881
Density Mixed : 1.5±0.05 Kg/Lit @23°C
Sag : Non sag on vertical surface up to 5 mm thickness @ 35°C (F.I.P.)
Open time : 70-80 min @ 23°C
Full Cure : 7 Days
Compressive Strength : @23°C
1 day 75 N/mm² ASTM C579
7 days 85 N/mm² ASTM C579
Tensile Strength : @23°C
7 days 24.7 N/mm² ASTM D638
Flexural Strength : @23°C
7 days 42.9 N/mm² ASTM C580
Bond Strength by Slant Shear : @23°C
7 days >4 N/mm² ASTM C882
(Concrete failure)

**Properties are typical under laboratory conditions and do not constitute a specification.

SYSTEM AND APPLICATION DETAILS
1) Substrate preparation
Ensure that the concrete surface is clean and sound. Remove all contaminants including coatings, grease, oil, dirt, excessive laitance, salts and unsound material by grinding, hammering, etc. Where necessary degrease with chemical degreaser.
Any structural cracks should be injected with Contite PUE300/301 moisture tolerant polyurethane resin.

Note:
- Unsound deteriorated concrete that occurred as a result of corrosion of rebars, needs to be removed behind rebar. Corroded rebar to be cleaned with rust remover. Apply Congard ST on cleaned rebar as a corrosion protective coating. Apply Condur EA2 as a bonding bridge on the prepared concrete surface. Apply Conpatch 600MCI over Condur EA2 bonding bridge to bring back the profile of concrete.

2) MIXING
Mix part A and B of Condur CF Adhesive together at the ratio 1:1 by weight for at least 3 minutes with a (300-400 r.p.m.) slow speed electric drill. Avoid entraining air. Use all material within its pot life. The greater the quantity mixed the shorter will be the pot life. The pot life is longer at temperatures below 15°C & shorter at high temperatures above 30°C. The pot life of Condur CF Adhesive is typically 50 minutes @23°C.

3) Condur CF adhesive application on Condur CF plate
Apply Condur CF Adhesive to the substrate with a notched trowel or spatula/scrap at a thickness of approximately 1 mm.
Clean the side of Condur CF YC-CFRP(S) Plate to be applied to the concrete and apply 1-2 mm thickness of Condur CF Adhesive to the plate using a spatula. Within the open time of the Condur CF Adhesive place the Condur CF YC-CFRP(S) Plate on to the prepared substrate and press the plate firmly into the Adhesive using a hard rubber roller. Ensure excess material is forced out of both sides of the plate.
In case of Condur CF YC-CFRP(S) Plate intersections allow the 1st application to harden before application of 2nd plate and clean the over lapping plate surface before application of Condur CF Adhesive.

Note:
-Condur CF system should only be applied by specialist applicators who have had training in the installation of this system. Cormix International can provide such training & a list of approved applicators.

CLEANING
All tools & equipment should be cleaned immediately after use with Cormix Cleaner. Hardened material can be removed mechanically.

LIMITATIONS
Samples: - Witness samples should be made at site and tested in a laboratory to ensure the material meets the responsible designers requirement.
**Condur® CF Adhesive**

**A SOLVENT FREE MOISTURE INSENSITIVE ADHESIVE FOR BONDING CONDUR CF REINFORCEMENT**

**Dew Point:** The substrate temperature should be at least 3°C above the dew point.
The ambient temperature should be above 8°C.
The product should only be used by experienced professionals. In hot or cold conditions precondition the product 24 hours before use.

Protect from rain for 24 hours after application.
Consult a structural engineer for load calculations & design.
A qualified structural engineer must be responsible for designing the works. Care must be taken is selecting suitably experienced and trained contractors

Protect from permanent exposure to direct sunlight moisture & or water.

**CONSUMPTION RATE**
Approximately 1.5 kg/m² @ 1 mm Thickness

**PACKAGING**
Condur CF Adhesive : 10 kg set

**STORAGE & SHELF LIFE**
Condur CF adhesive has a shelf life of 12 months from date of production if stored properly in original unopened, containers in dry conditions at temperature between +5°C to 35°C protected from direct sunlight.

**HEALTH & SAFETY**
Prolonged and repeated skin contact with epoxy resins and curing agents may cause dermatitis in persons sensitive to these products. Gloves, barrier creams, protective clothing and eye protection should be worn when handling these products. If poisonous occurs, contact a doctor or Poisons Information Centre. If swallowed, do NOT induce vomiting-give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

**TECHNICAL SERVICE**
The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

**QUALITY ASSURANCE**

**DISCLAIMER**
Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc. Cormix does not take responsibility nor need to defend others testing that does not achieve the published data. The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product. Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advise offered.

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