

Thin Fairing Coat For Concrete Surface Repairs

Guardian CFC is a polymer modified cementitious one part cosmetic repair mortar and thin fairing coat for concrete surface.

Complies to EN1504 part 9 and EN1504 Part 3.

Principle 3 : Concrete Restoration (CR).

- Method 3.1 - Applying mortar by hand.
- Method 3.3 – Spraying concrete or mortar.

USES & ADVANTAGES

Guardian CFC is used to repair minor surface defects on concrete mortar & stone. As a cosmetic repair material it is used to eliminate small defects due to bubbles, demoulding etc. Suitable for small repairs to precast concrete, columns, beams and fair faced concrete.

Advantages include:-

- Ready to use, one part.
- Good adhesion.
- Non toxic.
- Spray or brush apply.
- No corrosive effect to reinforcement.
- Good mechanical strength.
- Fast strength development.
- **Guardian CFC** may be over-coated.
- Non shrink

PROPERTIES

Appearance:	Grey powder
Density:	Bulk density: ~1.38 kg./l. Fresh mortar : ~2.15 kg./l.
Pot life:	30 minutes at 20°C 15 minutes at 30°C
Compressive Strength:	35-45 N/mm ² (28 days at 25°C, 50% rel. humidity) ASTM C109
Flexural Strength:	5-6 N/mm ² (28 days at 25°C, 50% rel. humidity) ASTM C348
Bond Strength to Concrete:	1.5-2.5 N/mm ² (28 days at 25°C, 50% rel. humidity) ASTM D 4541
Modulus of Elasticity:	19,600 N/mm ²
Coefficient of Thermal Expansion:	14 x 10 ⁻⁶ m/°C
CO₂ Diffusion Resistance (æ H₂O):	600
Water Vapour Diffusion Resistance (æ H₂O):	93
Water Absorption ISAT :	BS 1881 Part 5 10 mms < 0.009 ml/m ² /sec 2 hours < 0.006 ml/m ² /sec
Pot life:	25-35 min @25 °C

SUBSTRATE PREPARATION

Ensure the substrate is clean, free from laitance, oil & grease. No loose particles should be present. The substrate must be saturated thoroughly for at least 2-4 hours before application of **Guardian CFC**.

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MIXING

Mix **Guardian CFC** to water at no more than 5 : 1 (by weight) 3.6 : 1 (by volume). Add slowly the **Guardian CFC** to the water while mixing. Mix for approx. 3 minutes.

Mixing should be done by slow speed drill (500 r.p.m.) and using a proper mixing paddle. The entire contents of the bag should be mixed otherwise the product may not perform to specification.

METHOD OF USE

Apply **Guardian CFC** to the prepared area by trowel or putty knife. Work in a thin layer less than 2 mm. Finish off & smooth the repaired area with a soft sponge.

CONSUMPTION

Approx. 1.8 kg/m²/mm.

PACKAGING

20 kg. 4 Ply plastic lined bags.

STORAGE & SHELF LIFE

Guardian CFC should be stored in original, unopened packaging in a cool place away from moisture & naked flame. The shelf life is at least 9-12 months in unopened bags.

HEALTH & SAFETY

Guardian CFC is non-toxic but is alkaline in its nature. When applying gloves & goggles should be worn. Wash off splashes to skin with water. If in eyes wash out with plenty of clean water and seek medical attention.

Guardian CFC is non-flammable.

TECHNICAL SERVICE

Guardian offers a comprehensive range of high performance, high quality products suitable for use within all aspects of the concrete repair and protection industry. In addition, the company offers a technical support package to specifiers, end users and contractors, as well as on-site assistance. The Guardian Coating 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 (OEM)

ISO 9001 : 2015 verified by TUV Nord.