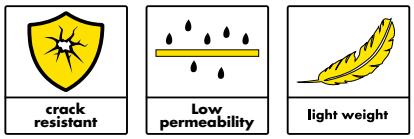
Polycrete FC

Polymer modified cementitious fairing coat

Single component polymer modified fairing coat designed to fill pores, blowholes, minor honeycombs on a concrete surface.

CHARACTERISTICS

- Requires only on site addition of water
- Shrinkage compensated and crack resistant
- Excellent adhesion to concrete
- Easy to apply
- Low permeability. Resistant to the attacks of chlorides and other mild chemicals



DESCRIPTION

Polycrete FC is a single component polymer modified fairing coat designed to fill pores, blowholes, minor honeycombs on a concrete surface. This can also be used as a skim coat prior to the application of protective coatings. It is a shrinkage compensated crack free material, which can be applied as thin surface coats.

FIELDS OF APPLICATION

- can be used as a skim coat and as an aesthetic mortar
- to repair and fill honeycombs, blowholes on concrete surfaces
- smoothen out damaged patches on concrete surfaces due to shutter movement and grout loss
- as fairing coat prior to the application of protective coatings

APPLICATION INSTRUCTIONS

Surface preparation

Clean the concrete surface of all contaminants like oil and grease, traces of curing compound and loosely adhering particles. The cleaning can be done by sand/grit blasting, high pressure water jet or mechanical scabbling.

Priming

Saturate the concrete surface with clean potable water prior to the application of the fairing coat. However, ensure that the surface is free of standing water prior to the application of the fairing coat.

Mixing

Polycrete FC shall be mixed with 4.5-5.0L water at a w/p ratio of 0.18 - 0.2. pour the required quantity of water

in a separate mixing container. Slowly add the powder to the water and mix continuously with a mortar paddle mixer fitted to a slow speed drill (300/400 rpm) till a homogenous and lump free consistency is achieved.

Application

Apply the mixed mortar with a steel trowel evenly on to the concrete surface within its working time. Allow the coat to partly set before finally toweling it to achieve a smooth finish. For achieving a very smooth finish, sprinkle water on the surface and smoothen the surface with the steel trowel. The fairing coat shall be finished by striking off with a straight edge and closed with a steel or plastic float.

CAUTION:

Water can be drawn to the surface if “overworking” with the float occurs resulting in an unsightly finish. Damp sponges or plastic floats may be used to achieve a desired surface texture, but care should again be taken not to overwork the surface.

Curing

Due to the presence of rapid drying polymers in the fairing coat, the applied mortar has to be protected from hot and drying winds. Curing can be done either by the use of a non-degradable type of curing compound or continuous wetting of the surface with water. When cured with wet hessian cloth, the area shall be covered immediately with a

high density polyethyelene sheet which shall be taped to all the edges which has been repaired.
Note: Optimal addition of 1 to 1.5 L Polybond SBR (by reducing the equal volume of water) per 25kg bag Polycrete FC, will increase the cohesion strength of the fairing coat.

YIELD

Polycrete FC	15.65L / 25kg bag (w/p ratio of 0.19)

CLEANING

Clean all tools with water immediately after use. Hardened materials can be removed mechanically only.

STORAGE & SHELF LIFE

Store in a cool, dry place and keep away from all sources of heat and sunlight. In tropical climates, store in air condition rooms. The shelf life is up to 12 months in un-opened conditions and if stored as per recommendations. excessive exposure to sunlight, humidity and UV will result in the deterioration of the quality of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

SUPPLY

Polycrete FC	25kg bag

TECHNICAL SPECIFICATION

Typical properties achieved with 0.19 w/p ratio

PROPERTIES	VALUES	TEST STANDARDS
Color & appearance	Grey powder	-
Mixed density, [g/cc]	1.9±0.05	ASTM D 1475
Application life, [minutes]	30	ASTM C 308
Pull off strength,[N/mm^2]	> 1	ASTM D 4541
Water permeability @5 bar pressure, [mm]	<10	BS EN 12390
Application temp, [°C]	5 to 45	

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.
The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

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