# **POLY PAIR FC** Polymer and fiber modified cementitious repair mortar

## **Description**

**POLYPAIR FC is a high strength mortar containing**blend ed, non-shrink cements, graded sands, fibers and chemical additives.

#### <u>Advantages</u>

- Ready to use, simply add water.
- Low permeability protects steel from chlorideattac k.
- Non-shrink due to polymers and fibers.
- Excellent adhesion to concrete.
- Rust-inhibitor, no extra protection needed.
- Reduces labor cost.
- Allows high build repairs.

## Uses

POLY PAIR FC is ideal for the following:

- Used to reinstate all types of concrete.
- Enhances initial bond, flexural and tensilepro perties.
- Used to affect large repairs.
- General repair and restoration work oncon crete.

# **Standards & Specifications**

Tests carried with a water powder ratio of 0.11 at 20 °C

Compressive strength (according to BS 6319 - 1970)

Age	Compo Strength (Kg/cm2)
1	230
3	450
7	500
28	550

Flexural strength at 28 days 90 - 100 Kg/cm<sup>2</sup>

Adhesion 210 Kg/cm<sup>2</sup> (According to BS 6319 after 28 days)

Wet density	$2300 \text{ Kg}/\text{m}^3$
Coefficient of thermal expansion	9 x 10 <sup>-6</sup>

Setting time (according to BS 4550 - 1978) depending on temperature and water content

Initial4 hoursFinal5 hours

## Chemical resistance

Low permeability slows chemical attack in aggressive environments.

# Package & Yield

POLY PAIR FC is supplied in 25-Kg Plastic bags.

## **Rates:**

One bag yields approx. 12 liters of mortar depending on water addition.

Range of water is (2.5 - 3.0) liters. This will cover 1.2 m2 at 1 O-mm thickness.

# **Application Instructions**

#### Preparation

• All substrates must be free of laitance, oil, dust, grease, paint, corrosion and any other deleterious substances.

• Smooth surfaces should be mechanically roughened by scrabbling gun to form a good mechanical key.

• Edges of the repair area must be saw cut to 5 mm to avoid feather edging.

• The complete area should be blown clean with oil free compressed air.

## <u>Priming</u>

All surfaces must be primed prior to repair, reinforcing steel must be primed with Corrosion. Concrete surfaces should be thoroughly soaked with water prior to priming.

**POLYPAIR FC** should be applied while primer isstill wet or tacky.

Build up may be reduced due to spillage in vertical situations.

#### Mixing

- It is essential that quantity of one bag or more be mixed in a forced pan mixer or with a slow speed drill 500 rpm.
- Always add powder to water and mix until homogeneous. The water must be cleaning, uncontaminated, and should not exceed 3.0 liters per bag.

#### Application

- **POLY PAIR FC** should be applied with a wood float to ensure positive contact with the primed surface.
- Depending on the nature and position of the repair it may be necessary to build up **POLY PAIR FC** in many layers. The minimum layer thickness is 5 mm and can be built up to 25 mm in vertical surfaces by using" wet on wet" technique.
- POLY PAIR FC is finished by wood float, steel trowel or sponge.

## Curing

**POLY PAIR FC** must be cured immediately after finishing with standard procedures or using Tec bond ACR.

## Storage & shelf life

**POLY PAIR FC** has a shelf life of 12 months if stored in normal temperature and closed shaded dry area in undamaged original packing.

## **Technical support**

For any technical support, please consult **POLYCOO** office or representatives.

## Health & safety

See separate data sheet or contact **POLYCOO** for more details.



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