

## DATA SHEET / *POLYCONCRETE 6mm REPAIT KIT*

### *Polymer Micro Concrete Floor Overlay System*

#### **GENERAL DESCRIPTION**

Polyconcrete is a ready to use, two component micro concrete overlay system incorporating a blend of cement, polymers, proprietary additives and graded aggregates to produce a high performance, impact and abrasion resistant floor finish that is functional, strong and resistant to thermal shock. Polyconcrete results in an ideal surface finish for industrial applications and is able to accept any subsequent floor covering including resin based systems.

#### **PRODUCT BENEFITS**

- Durable
- High early strengths
- Early traffic - 48 hours
- Improved application
- Good workability
- High early strength
- Impact and abrasion resistant
- Chemical resistant
- Thermal shock resistant
- Fast curing

#### **APPLICATION**

- Heavy duty floor overlay screed
- Industrial factory floors
- Floor overlays
- Parking garages, ramps and roads
- Heavy wear areas such as abattoirs, laboratories, car parks, power stations, breweries, agricultural buildings, etc.



## **SUBSTRATE REQUIREMENTS**

Concrete substrates must have a minimum compressive strength of 20 to 25 MPa, a minimum tensile pull-off strength of 1.5 MPa and be free of oil, fat, grease, dust, and loose friable materials.

## **PREPARATION**

Remove laitance and surface contamination by diamond grinding, shot blasting or scabbling to cleanly expose the main aggregate. Remove dust and debris by vacuum prior to screeding. Mark out existing control joints for post cutting once the product has cured. The area to be screeded must be weather-tight (i.e. all roofs, windows and doors are covered).

## **BONDING SLURRY**

Apply cement / water / Floor Primer slurry to the prepared concrete surface. Immediately thereafter proceed with the installation. Do not allow the bonding slurry to dry as it will then act as a bond breaker.

## **INSTALLATION**

Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

## **MIXING**

Mix the Polyconcrete kit as supplied. Decant the polymer liquid into a pan mixer or a conventional concrete mixer and add the bag slowly to produce a uniform mixture.

Perform a snow ball test to ensure cohesion. Do not add additional water to the mix as this will result in shrinkage crack development during curing.

## **PLACING**

Empty the mixture onto the pre-primed floor and rake out between 20 mm screed bars. Level the mix out with a straight edge to achieve the required level or slope and finish the surface off with a steel trowel. Remove the screed bars and fill in any gaps. The mixed material should be placed and floated within 20 minutes of mixing. Polyconcrete must be compact when placed by hand and must be assisted with trowelling. Ensure all gaps and pin holes are closed. For applications over underfloor heating systems apply the Polyconcrete in two layers, a base layer to ensure full compaction around the heating pipes directly followed by a top layer to enclose and finish off the floor system.



## **FINISHING**

A good standard wood or steel float finish is adequate, but generally a tightly closed and flat, steel trowelled finish is specified. After 1 - 2 hours after initial placing, power-float the surface, using a flick of Polyconcrete Liquid mixed 1:1 with water to close the surface to a tight, dense finish. The same process may be achieved by hand floating with a steel trowel should a power float not be used. Power trowelling by skilled operatives is acceptable providing the required surface regularity is maintained. Polyconcrete can be troweled to receive floor finishes directly.

## **CURING**

Cure the screed under polythene sheeting for a period of 5 days if bonded or 10 days if unbonded. The polythene sheet must be well lapped and completely cover all exposed edges. Premature drying generally can increase the risk of cracking and reduce the screed wear resistance.

## **TECHNICAL DETAILS**

Working Time 45 min.

Initial Cure 8 hrs. Hard

Cure 24 hrs. Full Cure 5 days

Appearance Cementitious mortar

Colour Grey, other colours on request

Consistency Workable mortar

Mix Ratio 5 L Liquid / 50 kg Bag Kit

Nominal Thickness 15 mm

Maximum Thickness 200 mm

Coverage @ 10 mm 2.0 m<sup>2</sup> / kit

Shelf Life 6 months

PACKAGING 55 kg, 2 part kit

