

Polycrete

Polycrete is a polymer modified cementitious flooring, which finds enormous applications as industrial floors. **Polycrete** is applied in layers of 8- 15 mm. thickness. Polycrete is also used as underlays over which polymeric : EP / PU / EPU coating is applied.

Properties:

- Thickness varying from 8 to 20 mm.
- Improved flexural and compressive strength than concrete.
- Crack free
- Resistant against fuels.
- Shock resistant
- Better abrasion resistance than concrete.

Typical physical properties:

- Modulus of elasticity : 17000 N/mm²
- Adhesion, pull off : 2.5 3.5 N / mm²
- Flexural strength : > 13 N / mm²
- Compressive strength: > 50 N / mm²
- Water absorption % : < 4

Application areas:

- Warehouses
- Parking decks
- Garages
- Stairs
- Workshops

Typical application as underlays:

- The old worn out floors which are saturated with oil, cannot be coated with polymeric floor toppings. Flame blasting or chemical degreasing do not guarantee 100% results. Such substrates need refurbishing.
- Polycrete is the ideal underlay for these type of substrates.
- The worn out floors are removed upto a depth of 10-15 mm. and then Polycrete is cast over it, over which regular polymeric floor topping is done.

Directions to use:

- Polycrete contains two ingredients : a special polymer and formulated aggregates.
- In order to achieve a good adhesion, a clean and sound substrate is very important. The substrate is made rough by employing surface preparation equipments such as scarifying, shot blasting, grinding etc.
- The substrate is then wetted approximately 12 hours before and should be damp when Polycrete is placed.

Priming: (POLYCRETE 10 P)

- A primer slurry consists of the following: a. Polycrete 10 : 5 lts. b. Aggregate P : 1 bag of 28 kgs.
- Mix the liquid and aggregates. The primer slurry is applied by a broom with a thickness of around 2-3mm.

Placing of screed: (POLYCRETE 10S)

- The screed mix is applied on the fresh primer slurry (wet on wet), distributed by a rake and drawn off across guide rails
- Immediately after levelling, the flooring is compacted and smoothed with a proper trowel.
- After some setting of flooring, further treatment of the surface is carried out with the power trowel.
- The flooring is then allowed to cure in ambient temperature. No water curing is needed.

Screed mix: (POLYCRETE 10 S)

- a. Polycrete 10 : 5 lts. b. Aggregate S : 1 bag of 58 kgs c. Water : Small quantities as required.
- The screed mix is made in forced action mixer. First, the aggregates are added into the mixer. The polymer liquid and water are then added and mixed.

Overlays:

The underlay of Polycrete is allowed to cure for a minimum 72 hours, during which time, the residual moisture will be in the acceptable levels. Check the residual moisture . The surface is then slightly sanded and Cipoxy 16 is used as primer, over which the sealing coat and top coat are given