

ARMOFLOOR PC5000

High Performance Heavy Duty Polyurethane Floor Screed

Description:

ARMOFLOOR PC5000 is a three components, Heavy duty polyurethane floor screed system designed to provide high mechanical, and chemical industrial flooring. It is composed of polyurethane base, hardener in addition to specially selected filler. Once mixed it produces highly durable impact resistant, abrasion resistant and chemical withstanding floor screed. It is normally applied for a thickness of 3-10 mm. ARMOFLOOR PC5000 can also be used as a repair polyurethane mortar where high compressive strength is required.

Uses:

ARMOFLOOR PC5000 is generally used for industrial flooring characterized with high mechanical and chemical resistance. Wider range of applications include:

- Hygiene, maintenance free flooring such as food processing, dairies, etc.
- Heavy duty industrial faculties.
- Stores and warehouses flooring and loading bays.
- Mechanical and chemical workshops.
- Hangers and heavy equipment stores.
- Army vehicles hangers.
- Chemical and oil plants.
- General repairs for floors subject to heavy traffic.
- Coving filling in manholes and sewage works.

Advantages:

- High impact resistant, with excellent abrasion resistance.
- Excellent mechanical resistance with high compressive, flexure strength.
- Durable with long life span and low maintenance cost.
- Excellent resistance to a wide range of chemicals.
- Excellent adhesion with substrate. Bonding strength with substrate is greater than concrete cohesive strength.

Instructions for Use:

Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Concrete floors should be fully cured.

The right surface preparation will ensure proper bonding between the screed and the substrate. It is always recommended to prepare the floor utilizing mechanical preparation method: Grinding, captive blasting, sand blasting. If the substrate is restricted to access, utilise preparation by handy mechanical tools. Perform repairs to cracks, levelling of floor; voids filling by means of LAVAPOXY Epoxy based repair products.

Apply a rich coat of ARMOPRIME EP100 to the substrate prior to application of the Screed; the primer can be applied in a spread rate of 4 to 6 m²/Lt depending on substrate porosity. Broadcast QUARTZ no. 1 lightly at the rate 0.5-1.5 Kg/m² when the primer is still wet.

Mixing:

The system is supplies as a three parts kit. Mix the contents of component A (Base) with a low speed mixer for one minute to homogenize the content of the container. Slowly add the contents of part B (Hardener) to Part A container and mix thoroughly for 2 minutes. Then slowly add the contents of Part C (Filler) while ensuring continuous mixing for an interval of 3-4 minutes confirming a homogenous color consistent, lump free, mixture is reached.

It is strong recommended mix the content of the kit and not to do partial mixing. Use a heavy duty low speed drill fitted with a suitable paddle for mixing.

Application:

All necessary preparation should be done before start mixing the content of the kit. The work area should be

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divided into bays and governed by guides (metallic or wooden) to the desired thickness of the screed. The level required should be measured by the upper top of the guides to level the floor evenly. Once mixed, the material must be used within its pot life. Pour the mixed mortar on the floor when the primer is still in a tacky condition.

Introduce the ARMOFLOOR PC5000 mixture to the floor within the work area, spread the materials by trowel, after pouring the proper quantity to the governed area. Level the screed to the top level of the guides using a clean smooth metallic trowel. Apply pressure to compact the polyurethane screed while leveling to avoid gaps or air pockets in the screed floor.

Smoothing the surface of the screed with a smooth trowel is essential to produce a smooth polyurethane surface that can directly go into service after curing. Allow 1 day for pedestrian traffic and 3 days for heavy traffic. For decorative or marking reasons, a coat of ARMOFLOOR EP150 can be applied to color the ARMOFLOOR PC5000 screed.

Standards:

ARMOFLOOR PC5000 conforms to:

- ASTM C 307, C 579, C 580, D 4541, D 4060

Packaging:

ARMOFLOOR PC5000 is available in 30 kg set of 3 parts (two parts metallic containers and a bag of filler).

Storage:

Store in original packing in dry conditions away from direct sunlight.

Shelf Life:

ARMOFLOOR PC5000 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

TECHNICAL PROPERTIES:

Color	: Pale
Tensile Strength	: 6.5 N / mm ²
Compressive Strength	: 80 N / mm ²
Flexural strength	: 40 N / mm ²
Impact Resistance	: >13 N/mm ²
Density (Mixed)	: 2.0 ± 0.05 g/cm ³
Adhesion Strength	: 2.5 N / mm ²
Pot-life time at 25°C	: 30 minutes
Foot Traffic	: After min. 24 hours
Vehicular Traffic	: After min. 48 hours
Completely Hardened	: 7 days

Coverage:

ARMOFLOOR PC5000 achieves coverage of 1.5 square meters per set @ 1.0 cm thickness.

Cleaning:

Tools used to mix and apply ARMOFLOOR PC5000 can be cleaned with ARMOSOLVENT.

Remarks:

ARMOFLOOR PC5000 should not be applied in the following situations:

- Onto surfaces likely to suffer from rising dampness or moisture content.
- When surface relative humidity level exceeds 75%.
- When temperature is below 5°C or above 40°C.
- On asphalt, weak or friable concrete, PVC tiles or sheet flooring.

Health and Safety:

- Use goggles and gloves during application. Do not breathe vapor of products. Use only in well ventilated areas
- Avoid contact with eyes or skin.
- Avoid direct contact with flames and fire.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

