

# ARMOLEVEL EP5

## Epoxy Self Levelling Base Coating (up to 5mm)

### Description:

ARMOLEVEL EP5 is a solvent free, high performance, epoxy self-leveling base coat that provides a floor with seamless, water-tight, highly chemical and abrasion resistant smooth layer that removes irregularities and accept further finishes (Epoxy & Polyurethane). It is composed of Epoxy base, hardener and selected graded filler, and can be applied from 1.0 to 5.0 mm thickness.

### Uses:

ARMOLEVEL EP5 is designed for flooring repair and elimination of irregularities up to 5.0 mm thickness. Providing a solution when floor maintenance problems exist. It provides a dense, impervious, abrasion and chemical resistant floor surface ready to receive finishing coat. Typical applications include a Base (Repair) layer for:

- Hygienic facilities; laboratories and hospitals.
- Food processing and medicine production.
- Car parks.
- Heavy duty storage areas and hangers.
- Production faculties and industrial flooring.
- Decorative flooring for seamless colourful floors.

### Advantages:

- Smooth, impervious seamless floor.
- Achievement of levelled surface in large areas to receive further finishes.
- Compatible with all types of Epoxy & Polyurethane based coatings.
- Self-smoothing, high build applications.
- Free of solvent, very low VOC, suitable for work in contained areas.
- High mechanical strength, excellent abrasion resistance.
- Excellent adhesion to substrate.
- Resistance against chemicals, detergents, oils and fuels, spillages.

- Nontoxic, very limited odor.
- Fast repair to floor to receive finishes.

### Instructions for Use:

ARMOLEVEL EP5 should be applied by specialist contractors who must follow the Product Method Statement. Consult with MATEX Technical Department for a list of approved applicators.

### 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. Substrates should be totally dry and not likely to suffer from rising dampness. If necessary, suitable damp-proof membranes should be installed to prevent such risk.

Proper surface preparation is essential to ensure maximum bond strength between the substrate and the flooring system is achieved. It is always recommended to prepare the floor utilizing mechanical preparation method; grinding, captive blasting and sand blasting. If the substrate is restricted to access, utilise preparation by handy mechanical tools. Perform repairs to cracks, levelling of floor, fill voids by means of LAVAPOXY-epoxy based repair products. Consults MATEX Technical Department for further advice. Remove dust from surface thoroughly, preferably by vacuum.

In case of porous surfaces, apply a rich coat of ARMOPRIME EP70 or EP100 – epoxy based primers, to the substrate prior to application of the product. The primer can be applied in a spread rate of 6-8 m<sup>2</sup>/Lt depending on substrate porosity.

### Mixing:

Mix the contents of component A (Base) with a low speed mixer to homogenize the content of the container. Slowly add the contents of part B (Hardener) to Part A container. Mix the material

# ARMOLEVEL EP5

thoroughly with low-speed mixer (200-300 RPM) for an interval of 1-2 minutes. Further add the contents of part C (Filler) to the mixture slowly ensuring continuous mixing for 3-5 minutes confirming a homogenous, color consistent and lump free mix is achieved.

Allow the mix material to relax for 1-3 minutes prior to application, to allow entrapped air to escape from the mix to prevent pinholes formation at the surface of the finished product. Part mixing of the product components is not acceptable as it will affect both performance and appearance of the finished floor.

## Application:

The applicator should ensure that there are sufficient supplies of labor and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area. The mix should be poured onto the primed substrate as soon as mixing is completed, in a controlled quantity according to the thickness of application versus the area of work. Pour the mix evenly to the floor. Allow ARMOLEVEL EP5 to flow to the floor. Set the thickness of application to the controlled pin flat aluminum trowel. Double check the exact desired thickness, then spread the materials to the floor evenly using the aluminum adjusted height flat trowel. Allow even spread for the entire work area. Directly apply second batch to the remaining area of the floor in order to prevent fusing marks (control of material quantity and fast preparation of the mix to the requirements of the selected area is a major factor of creating a smooth, leveled fusing free floor). With a spiked roller, go over the surface of the product while wet, to allow the ARMOLEVEL EP5 to release all air entrapped within. Workers should wear spiked shoes at all times while handling the product.

| TECHNICAL PROPERTIES           |                   |
|--------------------------------|-------------------|
| Density                        | 2.0 ± 0.03 kg/lit |
| Pot-life time at 25°C          | 60 minutes        |
| Application Temperature        | +5°C to +40°C     |
| Complete Hardening             | After 7 days      |
| Open to foot Traffic@25°C      | 24 hours          |
| Open to Vehicular Traffic@25°C | 48 hours          |

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|--|--|
| Pull off strength@7 days cure (ASTM D4541) | >2 N/mm <sup>2</sup> (Failure within the concrete substrate) |
| Compressive Strength@7 days (ASTM C579)    | >65 N/mm <sup>2</sup>  |
| Flexural Strength @ 7 days (ASTM C580)     | 40 N/mm <sup>2</sup>   |
| Tensile strength @7 days (ASTM D638)       | 18N/mm <sup>2</sup>  |
| Water Absorption                           | <0.1%  |

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

ARMOLEVEL EP5 achieves approx. coverage of 15 square meters per kit @ 1.0 mm dry film thickness.

\*Coverage rate is an approximate value, and subject to actual site conditions.

## Standards:

- EN 1381
- ASTM D4541, ASTM D638, ASTM C579, ASTM C580

## Packaging:

ARMOLEVEL EP5 is available in 30 Kg set of three parts (A+B) metal containers and bag of filler.

## Storage:

Store in original packing in dry conditions away from direct sunlight and in temperature controlled warehouse. Store at +15°C to 25°C

## Shelf Life:

ARMOLEVEL EP5 can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

# ARMOLEVEL EP5

## Cleaning:

Clean used tools with ARMOSOLVENT before product dries. Hardened product can only be cleaned mechanically.

## Remarks:

- ARMOLEVEL EP5 should not be applied onto surfaces likely to suffer from rising dampness or moisture content.
- ARMOLEVEL EP5 Should not be applied at ambient temperatures less than 5°C.
- ARMOLEVEL EP5 should not be applied to asphalt, weak or friable concrete, PVC tiles or sheet substrates.
- ARMOLEVEL EP5 should not be applied if the surface relative humidity is more than 75%.
- All Existing expansion or movement joints should be followed through the new floor surface.

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

### FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to ARMOLEVEL EP5 Material Safety Data Sheet.

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