

# ARMOFLOOR PU400

## High Build Flexible Polyurethane Floor Coating

### Description:

ARMOFLOOR PU400 is a solvent free high build elastomeric, hygienic Polyurethane floor coating, introduced in dual pack system, colored to choice and for mechanical and chemical protection of floors, pavements reinforced concrete and metallic structures.

ARMOFLOOR PU400 adheres perfectly to a variety of supports like: concrete, metal, wood, stoneware, etc. A slip resistant texture can be provided by the use of one of anti-slip MATEX Quartz range which have been carefully graded to ensure an even texture.

### Uses:

ARMOFLOOR PU400 is used as a coating or within a system at:

- Hygienic areas: Food processing, poultry facilities, Cold stores
- Hospitals, Clinics and laboratories.
- Car parks & ramps.
- Decorative flooring for shops and malls.
- Metallic surfaces.

### Advantages:

- Solvent free, no odor during application
- Hygienic product
- Elastomeric flooring systems.
- Integrates waterproofing systems at car park decks.
- Excellent mechanical and abrasion resistant.
- Durable and low maintenance cost.
- Excellent resistance to a range of chemicals
- Excellent adhesion.
- Ease of application, requires no thinning.
- Slip resistant - different textures available to suit conditions to avoid slipping.
- Liquid applied providing complete protection.
- Can achieve 200 microns per coat which means less labor cost.

### 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. Ensure that concrete floors are fully cured. And have moisture content less than 5%. Prepare surface utilizing mechanical preparation method: Grinding, captive blasting, sand blasting in order to provide suitable profiled open texture surface. If the substrate is restricted to access, utilise preparation by handy mechanical tools.

All repairs to cracks, levelling of floor, voids filling should be completed by LAVAPOXY and LAVAPOXY FINISH, epoxy based repair products. Once the repair is completed allow the product to cure then remove the dust from the surface. Apply a rich coat of ARMOPRIME EP100 or ARMOFLOOR PU to the substrate prior to application of ARMOFLOOR PU400. The primer can be applied at a spread rate 4 to 6 m<sup>2</sup>/Lt depending on substrate porosity. If slip resistance finish is required, spray on to the wet primer 0.5-1.0 Kg/m<sup>2</sup> of ARMOFLOOR Quartz. Once the primer is cured, remove excess silica.

For applications on metal surfaces, the surface should be mechanically cleaned by sand blasting or by wire brush to remove the rust and corrosion residues. Apply the primer immediately after the cleaning to prevent oxidization process to start at surface. Wooden floors should be clear from nail heads and punch below surface. Sand the floor with a coarse abrasive first, then with a fine abrasive in the direction of the grain till a smooth surface is achieved.

#### Mixing:

The system consists of pre-weighted base & hardener components. 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 the materials with low speed mixer fitted

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with a suitable paddle for an interval of 3-4 minutes confirming a homogenous, color consistent, lump free mixture is reached.

## Application:

After mixing, allow the product to rest for two minutes to release the entrapped air. Apply two coats of ARMOFLOOR PU 400 by brush, roller or spray machine. Each coat can be applied with a minimum thickness of 100 microns DFT to reach the desired total thickness. Maximum applied thickness can reach up to 400 microns DFT in two coats.

ARMOFLOOR PU400 can also be applied as a single intermediate coat, or as a multi coat sandwich system incorporating aggregates to give a slip resistant finish. For anti-slip flooring, spread the selected size Quartz in the rate set by design while the coating is wet. Once the surface is dry (12-24 hours), remove excess silica sand and apply the second coat as required. For heavy traffic areas such as drive lanes, ramps, turn areas, or other areas subjected to high abrasive traffic, apply a third coat of ARMOFLOOR PU400. Subsequent coats of the product should be applied within a time frame of 24 hours.

TECHNICAL PROPERTIES	
Appearance	: Liquid coating
Color	: Matex Flooring Color Chart
Density	: 1.54 Kg/Ltr.
VOC	: < 10 g/Ltr.
Pot-life time at 25°C	: 30 minutes
Bond Strength	: 2.2 N/mm <sup>2</sup> (Cohesive failure of concrete)
Elongation (ASTM D 412)	: 100%
Tensile Strength (ASTM D 412)	: 11.0 N/mm <sup>2</sup>
Flexural Strength	: 22 N/mm <sup>2</sup>
Abrasion Resistance (ASTM D 4060)	: <40 mg/ 1000 cycles
Full Traffic Use at 25°C	: 7 days
Application Temperature	: +5°C to +40°C
Elongation	: 100%
Elastic Modulus (Kpa)	: 590
Shore hardness D	: 65
Crack Bridging	: 2mm
Compressive Strength	: 62 N/mm <sup>2</sup>

## Standards:

ARMOFLOOR PU400 conforms to:

- ASTM D4541 , ASTM D4060, ASTM D 412

## Packaging:

ARMOFLOOR PU400 is available in 4 liter and 15 liter set of two parts metallic containers.

## Coverage:

ARMOFLOOR PU400 achieves coverage of 5 square meters per liter @ 200 micron DFT (Dry film thickness) per coat.

## Storage:

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

## Shelf Life:

ARMOFLOOR PU400 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Cleaning:

- Clean tools with ARMOSOLVENT promptly before material hardens. Cured material must be mechanically removed.

## Remarks:

- ARMOFLOOR PU400 should not be applied onto surfaces likely to suffer from rising dampness or moisture content.
- Application should not be carried out when humidity exceeds 90%, or when the surface to be coated is less than 3°C above the dew point.

## 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.

MATEX Rev.05-0820

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.

