

# ARMOFLOOR EP500

## High Build Epoxy Floor Coating

### Description:

ARMOFLOOR EP500 is an epoxy floor coating based on solvent free technology. The product is manufacture in colored duel pack system, base and hardener. It is suitable for chemical protection of industrial pavements, reinforced concrete, slabs and metallic structures.

ARMOFLOOR EP500 adheres perfectly to a variety of supports like: concrete, metal, wood, stoneware, etc. Once cured, the applied material becomes an anti-dust coating with high chemical resistant, excellent abrasive and mechanical continuous membrane.

### Applications:

ARMOFLOOR EP500 is used as a coating or within a system at:

- Car parks & ramps.
- Storage areas and hangers.
- Production faculties and industrial flooring.
- Pharmaceutical and food processing faculties.
- Warehouses.
- Decorative flooring for shops and malls.

### Advantages:

- Solvent free, odourless coating.
- High build coating in single application.
- Excellent mechanical and abrasion resistant.
- Durable and low maintenance cost.
- Excellent resistance to a wide range of chemicals.
- Excellent adhesion to substrate. Bonding strength is greater than cohesive strength of concrete.

### 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 for at least 28 days after casting in order to allow all shrinkage movements to take place.

Prepare floor using mechanical preparation methods such as: Grinding, captive blasting, or sand blasting. If the substrate is restricted to access, utilise preparation by handy mechanical tools.

Perform necessary repairs to cracks, damaged substrate or voids filling by means of proper repair products. Consults MATEX Technical Department for further advice. Apply a rich coat of ARMOPRIME EP70 to enhance mechanical adhesion between the coating and the substrate in case of porous surfaces.

For applications on metal surfaces, apply ARMOPRIME EP70 or EP100 immediately after mechanical preparation by Sand blasting or mechanical wire brush to remove rust and corrosion to prevent further oxidization to the surface.

#### Mixing:

Mix the content of component A (Base) with a low speed mixer for two minutes to homogenize the material of the container. Slowly add the content of part B (Hardener) to Part A container. Mix thoroughly the material for an interval of 3-4 minutes to obtain a homogenous, color consistent, lump free mixture

*Note that the mixing process is exothermic (heat generating). If high heat is noticed, avoid excessive mixing by reducing the speed of mixing machine.*

#### Application:

After mixing the product, allow the mix to rest for 3-5 minutes to release entrapped air, ARMOFLOOR EP500 can be applied by brush, roller or spray machine. After preparation of the work area, apply first coat with the desired thickness. The minimum thickness of product recommended is 70 microns. Application thickness can reach up to 250 micron per coat.

For anti-slip flooring, apply the selected aggregate size in the rate set by design while the coating is still wet.

Once coating is dry (15-24 hours), remove excess aggregates and apply second coat as required. Apply the subsequent coat of ARMOFLOOR EP500 within a

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time frame of 24 hours. Allow 3 days for pedestrian traffic and 7 days for full traffic to ensure proper curing of the material.

## Standards:

ARMOFLOOR EP500 conforms to:

- ASTM C 579, C501
- BS 6319, PART 3 & PART 7

## Packaging:

ARMOFLOOR EP 500 is available in 4 liter set and 15 liter set of two parts in metallic containers.

## Coverage:

ARMOFLOOR EP 500 achieves coverage of 5 square meters per liter @ 200 micron thickness both dry and wet film thickness (DFT, WFT).

## Storage:

ARMOFLOOR EP500 to be stored in original packing in dry conditions away from direct sunlight.

TECHNICAL PROPERTIES	
Color	: Standard Color Chart
Solid Content	: 100%
Tensile strength	: 22 N / mm <sup>2</sup>
Compressive strength	: 80 N / mm <sup>2</sup>
Flexural strength	: 42 N / mm <sup>2</sup>
Bond strength	: greater than cohesive strength of concrete
Density	: 1.39 Kg. / Lt.
Viscosity at 25°C	: 1200 Mpa.S
Pot-life time at 25°C	: 60 minutes
Open to foot traffic	: 24 hours @ 25°C
Open to vehicular traffic	: 48 hours @25°C
Heat resistance	: -30°C to +90°C
VOC	: <10 g/L

## Cleaning:

All tools must be cleaned with solvent before hardening.

## CHEMICAL RESISTANCE

Material	Concentration	Resistance
Citric Acid	10%	Excellent
Hydrochloric Acid	20%	Excellent
Sodium Hydroxide	50%	Excellent
Acetic Acid	10%	Excellent
Butanol	-	Excellent
Nitric Acid	20%	Excellent
Sulphuric Acid	20%	Excellent
Mineral Oil	10%	Excellent
Ammonia	10%	Excellent
Sea Water		Excellent
Jet Fuel		Excellent

## Shelf Life:

ARMOFLOOR EP500 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Remarks:

- ARMOFLOOR EP500 should not be applied onto surfaces likely to suffer from rising dampness or moisture contents.
- Humidity level not to exceed 5%.
- ARMOFLOOR EP500 Should not be applied at ambient temperatures less than 5°C.

## Health and Safety:

- Use goggles and gloves during application. Do not breathe the vapor of the product. Use only in well ventilated areas.
- Avoid contact with eyes or skin. In case of contact with eyes, clean with plenty of clean water and seek medical assistance.
- Avoid direct contact with flames and fire.
- Before use, read MSDS of the product.

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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.

