

ARMOFLOOR S3210

Polyurethane Flexible Waterproof Traffic Deck System

Description:

ARMOFLOOR S3210 is a multi-layer Heavy duty polyurethane traffic deck system designed to provide elasticity, high mechanical and chemical resistance for concrete flooring.

The system is developed based on high quality durable polyurethane resins, manufactured to deliver elasticity and high mechanical strength with various finishes for anti-skid purposes according to the aggregate applied within the system if required.

ARMOFLOOR S3210 is a system based on high quality Polyurethane resins recommended for indoor applications.

Applications:

ARMOFLOOR S3210 is generally used for car parks and industrial flooring characterized with high mechanical and chemical resistance requiring elasticity and waterproofing features, Wider range of applications include:

- Car parks for Multi store buildings
- Industrial facilities.
- Food and vegetable stores
- Poultry facilities
- Stores and warehouses flooring
- Laboratories and medical facilities
- Shopping malls and pedestrian areas

Advantages:

- High impact resistant, with excellent abrasion resistance.
- Flexible and accommodates substrate movement
- Durable with long life span and low maintenance cost.
- Excellent resistance to a wide range of chemicals

- Excellent adhesion with substrate, with bonding strength greater than concrete cohesive strength.
- Anti-slip characteristics when integrated with QUARTZ aggregates.

Chemical Resistance:

ARMOFLOOR S3210 system is resistant to wide range of chemicals.

| CHEMICAL RESISTANCE | | |
|---------------------|---------------|------------|
| Material | Concentration | Resistance |
| Citric Acid | 10% | Excellent |
| Sodium Hydroxide | 50% | Excellent |
| Acetic Acid | 10% | Excellent |
| Butanol | — | Excellent |
| Nitric acid | 10% | Excellent |
| Mineral Oil | 10% | Excellent |
| Ammonia | | Excellent |
| Sea Water | | Excellent |
| Jet Fuel | | Excellent |

ARMOFLOOR S3210 SYSTEM:

| | |
|-----------------|---|
| ARMOPRIME EP100 | Two component solvent free low viscosity epoxy primer. |
| ARMOFLOOR MB2 | High build elastomeric two component liquid applied waterproofing membrane. |
| ARMOFLOOR UVR | Two parts solvent based UV pigmented top coat |
| QUARTZ | Dry, graded silica sand |
| ARMOFLOOR LM | Line marking coating |

Colors:

ARMOFLOOR S3210 system is available in various colors including: Light grey, grey, dark grey, green blue, brick red, beige and light green, refer to MATEX Flooring Colour Chart.

ARMOFLOOR S3210

Application Thickness:

ARMOFLOOR S3210 with ARMOFLOOR UVR Topcoat can be applied in the following thinness to achieve desired results:

| | | |
|--------------------|----------------|-----------------------|
| PRIMER | ARMOPRIME E100 | 100-150 micron |
| Base Coat | ARMOFLOOR MB2 | 500 micron |
| Aggregate | QUARTZ | 1-2 Kg/m ² |
| Intermediate Layer | ARMOFLOOR MB2 | 250 micron |
| UV Protection | ARMOFLOOR UVR | 100-150 micron |
| Line Marking | ARMOFLOOR LM | As per drawing |

Average thickness of the above system will vary between 1000-1500 micron, depending of aggregate application.

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.

Mixing:

ARMOFLOOR S3210 products are mixed mechanically with low speed drill mixer fitted with suitable paddle. To prepare the mix, add the contents of Part B (hardener) to Part A (base) container, and mix for minimum of 3 minutes till obtaining a homogeneous mix. Do not mix partially the base and the hardener. Mix the complete kit at a time.

Application:

Priming:

Apply a rich coat of ARMOPRIME EP100 to the substrate prior to application of subsequent layers; the prime can be applied in a spread rate of 7-9 m²/Ltr. depending on substrate porosity.

Base Coat:

Within 6-24 hours form application of primer, apply a layer of ARMOFLOOR MB2 with a nominal thickness of 500 microns, While the coat is still tacky, broadcast the QUARTZ at rate of 1-2 Kg per square meter to achieve anti-slip properties.

Intermediate Layer:

After 24 hours, swipe the excess aggregates and clean the surface properly, apply a coat of ARMOFLOOR MB2 at a rate of 250 microns per sqm.

Top Coat:

Flooring areas having direct exposure to sun light apply protective coat of ARMOFLOOR UVR at a thickness of 100 micron. Interior areas do not require application of ARMOFLOOR UVR.

Allow the system to cure for at least 3 days then apply line marking to the drawings utilizing ARMOFLOOR LM.

Packaging:

ARMOFLOOR S3210 System is available as:

| | |
|-----------------|-----------------|
| ARMOPRIME EP100 | 15 Liter Kit |
| ARMOFLOOR MB2 | 15 Liter Kit |
| ARMOFLOOR UVR | 15 Liter Kit |
| QUARTZ | 25 Kg Bag |
| ARMOFLOOR LM | 20 Kg Metal Can |

Technical Properties

ARMOPRIME EP100

| PROPERTIES | RESULTS |
|----------------------|--|
| Appearance | Fluid Liquid |
| Density | 1.05 ± 5% Kg./Lt. |
| Compressive Strength | 70 N / mm ² |
| Bonding strength | Greater than cohesive strength of concrete substrate |
| Dry Residual | 100% |

ARMOFLOOR S3210

ARMOFLOOR MB2

| PROPERTIES | RESULTS |
|--------------------------|---------------------------|
| Color | Grey |
| Density | 1.50 Kg/m ³ |
| Pot life | 30 minutes @ 25°C |
| Solid Contents | 100% |
| Touch Dry | 6 hours |
| Full Dry | 7 days |
| Water vapor transmission | 0.3 g/h/m ² |
| Adhesion to concrete | 2.0 N/mm ² |
| Crack bridging | Up to 1/2 inch ,no effect |
| Tensile strength | 6.0 N / mm ² |
| Elongation at Break | 100% |
| Water penetration | NIL |
| Complete Curing | 7 days |
| Application Temp. | +5°C to +40°C |
| Service Resistance | -5°C to +80°C |

Remarks:

ARMOFLOOR S3210 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 80%.
- When temperature is below 5°C or above 40°C.

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.

ARMOFLOOR UVR

| PROPERTIES | RESULTS |
|----------------------------------|--|
| Color | Standard Color Chart (further colors are available on request) |
| Tensile Strength | 5 N / mm ² |
| Density | 1.17 g/cm ³ |
| Abrasion Resistance (ASTM D4060) | 90 mg/1000 cycles |
| Pot-life time at 25°C | 60 minutes |
| Drying time @23°C | |
| Recoating | 12-24 hours |
| Light Traffic | 24-48 hours |
| Vehicle Traffic | 7 days |
| Dry Coat Thickness | 75 - 100 μ depending on substrate conditions |
| Adhesion to Concrete | Concrete fails before loss of bond |

System Thickness:

800-1000 microns

Cleaning:

Tools used to mix and apply ARMOFLOOR S3210 can be cleaned with ARMOSOLVENT.

MATEX Rev.03-0120

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.

