FloArm UL Di-Electric

High build, High breakdown voltage Di Electric flooring underlayment

TECHNICAL DATA SHEET

Product Description

FloArm UL Di-Electric is a three component solvent free system pre-weighed for on-site mixing. The floor provides a hard wearing, Semi Smooth, impervious and ready to apply top layer. FloArm UL Di-Electric can be effectively used as an underlay for subsequent finish. Total System BDV will passes Type B requirement of BDV value.

FloArm UL Di-Electric is a blend of epoxy resin systems and selected fillers. Each system contains 3 pre weighed materials of exact proportion for mixing and use on site. It is basically designed for quick installation of Dielectric floor High BDV requirement

Uses

As an underlayer to Di-Electric

1, Switch Panel board area
2, Insulated floor
3, DG room
4, Power plants
5. Sub-station
6. Battery Room

Features and Benefits

- Ultra high electric & insulation resistance.
- Unique breakdown voltage (Tested ERDA-Vadodara in /air 60.9 kv .
- Hard wearing - durable and abrasion resistant with low maintenance costs
- Resistant to a wide range of chemicals and liquids
- Seamless – easily cleaned to maintain high standards of hygiene
- High build High Adhesion
- Smooth Glossy Finish
- Easy to apply in single layer
- Tough and abrasion resistance

Application Methodology

Step no.1: Surface Preparation
The concrete substrate must be sound and of sufficient compressive strength (minimum 20 N/mm2) with a minimum pull off strength of 1.5 N/mm^2. The substrate must be level, clean, dry and free of all contaminants such as dirt, oil, grease etc. All previous floor coating if any must be mechanically removed to the maximum extent possible. It is acceptable to re-lay on floor coating that has a firm bond (pull out strength of 1.5 N/mm^2).

Concrete substrates must be prepared mechanically depending upon surface condition using abrasive blast cleaning or scarifying or grinding to remove cement laitance and achieve an open textured surface. Weak concrete must be re moved and surface defects such as blowholes and voids must be fully exposed. Repairs (blow holes/voids and surface leveling) to the substrate must be carried out using appropriate repair product. The concrete or screed substrate has to be primed or leveled in order to achieve an even surface. All dust, loose and friable material must be completely removed from surfaces before application of the product, preferably by brush and/or vacuum.

Ensure moisture content of the concrete surface below 4% - no rising moisture according to ASTM D 4263 (Polythene Sheet Method) and above 3^{0}C dew point.

Step no.2: Priming
The concrete surface after proper and thorough surface preparation has to be primed with appropriate primer (FloArm Primer 1260 or 1290). The primer is a solvent free resin system. It is designed for better adhesion with the substrate and the flooring system. The primer should be mixed in the given proportions supplied. The entire contents of the hardener should be poured into the base and should be mixed using a low speed drill machine with an attachment for about 3 minutes @ (150-200 RPM) to get a homogeneous mix. Once mixed, the primer should be applied immediately on to the prepared concrete surface. After priming, the surface has to be kept for drying - approximately 8-12 hrs. For more information refer Primer TDS. Depending on the ambient temperature, application of FloArm SL Di-Electric can be undertaken.

FloArm UL Di-Electric

High build, High breakdown voltage Di Electric flooring underlayment

MYK arment®

TECHNICAL DATA SHEET

Priming for Damp Concrete/Rising moisture:
Normal priming is limited to application below 4% surface moisture in concrete. If the moisture content is > 4%, use special primers FloArm Primer 1250 or moisture barrier underlays i.e., Cempo® series of products.

Step no 3: Product Mixing:

The pre-weighed packs of the components - resin, hardener and filler has to be mixed for 2 to 3 minutes using a low speed electric (300 -400 rpm) spiral shaped stirrer in a suitably sized mixing vessel.

The hardener should be added to the base and should be stirred for 2-3 mins till homogeneous mix is achieved. Add the filler slowly into the mixing container, ensure stirring while pouring. Mix for another 2 – 3 mins till the product is homogeneous.

Important: Do not dump the powder component all at once. Mix till the material is completely homogeneous. Part mixing is not recommended.

Step no 4: Product application details

Application Thickness Recommendation: Total 5 mm

System:
Primer - FloArm Primer 1260
Under Layment - FloArm UL Di-electric – 3mm
Topping – FloArm SL Di-Electric – 2 mm

Product Application:

The material once mixed should be used within its specified pot life; the material is poured (before pouring, stir well mixed mass manually to avoid any settlements at the bottom) on to the primed surface and spread to the required thickness with a notched steel trowel, care should be taken not to over work the resin, spread evenly and slowly, the floor should be firmly rolled with a spiked nylon roller to help release any entrapped air in the material and help level any slight roller mark. The rolling should be carried out using a “back and forth” technique along the same path. An overlap of 50% with adjacent paths is recommended.

Technical Data

Mixed Density	Approx. 1.96 gm/cc
Pot Life	20 Minutes @ 35°C 45 Minutes @ 20° C
Shore D hardness (ASTM D2240)	70 - 80 @ 7 Days at 30°C
Compressive strength (IS 9162)	500 Kg/cm² , 7 days @ 30ºC
Flexural Strength (IS 9162)	200 Kg/cm² , 7days @ 30°C
Foot Traffic (ASTM C 722)	24 Hrs @30°C 48 Hrs @20°C
Vehicular traffic (ASTM C 722)	48 Hrs @30°C
Chemical Resistance (ASTM C 722) (Spot)	7 Days @30°C
Full Cure (ASTM C 722)	7 Days @30°C
Bond strength @ 7 days at +27°C (ASTM D4541-95)	1.5 N/mm^2 (concrete failure)
Insulation resistance @ 500 V, coating thickness: 5 mm (ASTM D 257-14)	Average $2x10^{11}$ Ω
Breakdown voltage, KV @ coating thickness: 5 mm (IS 2584)	60.9 KV
AC proof Voltage @ 22 KVA for 3 minutes (IS 2584)	Withstood
Leakage Current @ 22 KV (IS 2584)	< 1mA

FloArm UL Di-Electric

High build, High breakdown voltage Di Electric flooring underlayment

TECHNICAL DATA SHEET

Consumption

FloArm Primer 1260 o= 250 – 300 gms ,
FloArmUL Di-Electric- 8.5M^2 @3mm for pack of 50 kg
Refer TDS of FloArm SL Di-Electric.

Packaging

FloArm UL Di-Electric is supplied in 50 kg composite pack.

Storage and Shelf Life

12 Months if stored in cool dry place, unopened condition

Health & Safety

FloArm UL Di-Electric should be applied with gloves and care should be taken to see that it does not fall on skin or eyes. Splashes on to eyes have to be immediately washed with plenty of clean water and medical advice has to be taken.

Product Categories Available

Legal Note

MYK Arment Private Limited
8-2-703/A, 3rd Floor, Leela Gopal Towers, Road No. 12, Banjara Hills, Hyderabad -500 034
Tel: +91 40 6816 0001 | Email: myk@mykarment.com | www.mykarment.com