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ROKRETE PU-MF AS

5 component, self-smoothing ESD Polyurethane Screed.

FIELD OF APPLICATION:

ROKRETE PU-MF AS is designed to the area which requires hygienic, conductive properties where the floor surface is required without the risk of static build up, for the area that constantly subjected to heavy traffic and mechanical abuses. For example, at the areas such as military arsenal, ammunition dump, electronic semi-conducting device areas, explosion risk plant and high-power stations.

PRODUCT DESCRIPTION:

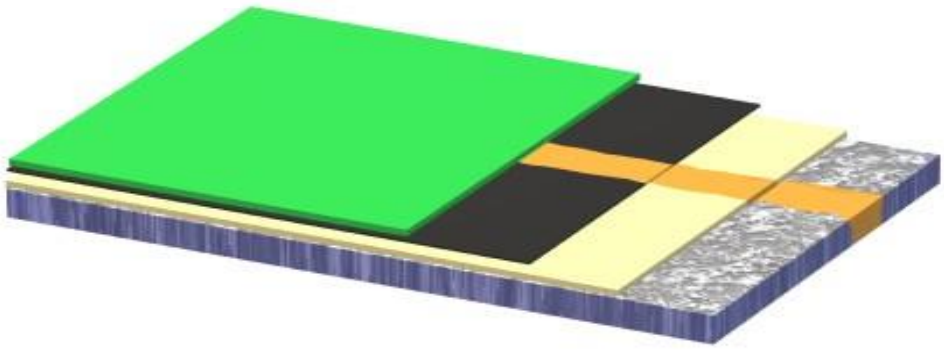
ROKRETE PU-MF AS is a 5 component, 4 to 6 mm self-smoothing ESD polyurethane flooring systems. It is seamless, high mechanical and chemical resistance, high conductive properties, solvent free and odorless.

BENEFITS:

- Highly conductive – can eliminate electrostatic discharge from human body, trolley, and vehicles.
- Solvent free – non-flammable, non-toxic, environmentally friendly.
- Low VOC emission and low odor.
- Seamless and easy to clean.
- Excellent chemical resistance towards wide range of chemical, petroleum oils, solvents, and other cleaning agents.
- Good abrasion resistance against heavy traffic and trolley movement.
- Hard wearing floor finish.
- Available in many colours.

SYSTEM BUILD UP:

Thickness – 4- 6 mm



Substrate	:	**Concrete, cementitious crete.**
Primer	:	**FLORPRIME 112 FC**
Conductive Primer	:	**FLORPRIME 180 AS**
Top Coat	:	**ROKRETE PU-MF AS**
Copper Tape		

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TECHICAL DATA:

Density	At 28 °C	1.85 g/cm^3
Tensile strength	24 Mpa	
Compressive strength	28 days	48 N/mm
Adhesive strength	Concrete failure	> 2.0 Mpa
Flexural strength	21 Mpa	
Service temperature	At 3 mm At 6 mm	5 °C – 80 °C max -5 °C – 100 °C max
Shore D hardness	79 – 85	
Abrasion Resistance	ASTM D 4060 – 10 Taber Abraser 1000 rev/1kg	Loss 34 mg
Water vapor transmission	ASTM E96/E96M-10, g/hr.m^2	1.25±
Mixing ratio by weight	Part A : Part B : Part C : Part D : Colour Paste	3 : 3 : 13 : 0.078 : 0.175
Packing size	19.253 kg	
Working time	25 °C	25 min
Shelf life and storage	9 months in unopened original containers (at 10 – 30 °C)	
Material consumption	1.9 kg/m^2 @ 1mm	
Recoating time	Within 14 to 18 hours	
Curing time	Human traffic : Light traffic : Fully chemical cure :	30 hours 36 hours 7 days

ESD Floor Main Checking Criteria and Specification

Surface to Ground (Earth) Rg Spec (BS-2050)	1E+4 MΏ ~ 1E+9 MΏ (1-9 x 10^4 Ώ to 1-9 x 10^9 Ώ)
Surface to Surface (Earth) Rs Spec (BS-2050)	1E+4 MΏ ~ 1E+9 MΏ (1-9 x 10^4 Ώ to 1-9 x 10^9 Ώ)
Decay time through human body	Spec : < 20 sec
Complied ANSI/ESD S20.20-2007 Human Body Voltage (HBM)	<100 Volts
System resistance	<3.5E + 7 Ώ

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FLORTECH
FLOORING TECHNOLOGY

APPLICATION METHOD

Substrate Preparation:

Before applying the material, make sure to clean the substrate from any dust, contaminant, and loose particles. Substrate concrete or screed must be minimum of 25 N/mm^2 in term of compressive strength and 1.5 N/mm^2 of adhesive strength. The substrate also must be dry, free from water puddles or ground water pressure. Repair crack or hollows with **FLORPRIME 110** if necessary. Prepare the substrate by vacuum shot blasting, rough contamination to remove by grinding. At all edges, bay joint columns, doorways and drain, prepare grooves 3 mm wide x 3 mm for anchoring purposes.

Application:

Shake Part A (resin) well before pour into a clean container together with Part B (hardener). Start mixing by using a helical mixer at low speed (500rpm) for approximately 10 seconds. Then, add conductive filler, Part D to mix approximately 10 seconds. Add in color paste and mix 20 second follow by adding cement filler (Part C), mix for at least 40-50 seconds or until homogeneous.
Usually 16-24 hours after primer cured, then only apply **ROKRETE PU MF AS** onto the primer coat. Apply the topping within pot life 20 minute (working time), spread the composite matrix with notched trowel, pin rake or screed box and set it to the nominated thickness. Immediately release the entrapped air by using spike roller.

Apply **FLORPRIME 180 AS** as a primer for sealing well the substrate porosity. After 14 to 24 hours when **FLORPRIME 180 AS** was cured**,** then only continue to apply **ROKRETE PU-MF AS** topping into the primer. Apply the material within then pot life using notched squeegee or pin rake and set it to required thickness. Finish the application by using spike roller to release air trap or bubbles.

Temperature Condition of Application:

Do not apply when temperatures is below 5 ^{o}C and above 40 ^{o}C. Do not apply when relative humidity exceeds 90 % and when the surface to be coted is less than 5 % above the dew points.

Cleaning :

To prolong the lifespan of polyurethane floor, clean regularly using double headed rotary scrubber with alkaline detergent.

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