`

FLORCOAT 500 SL AS

2 component, epoxy conductive, self levelling, gloss, coloured, 1-2 mm .

FIELD OF APPLICATION:

FLORCOAT 500 SL AS is designed for use as conductive surface coating for industrial floors that requires electrostatic discharge, especially in fire protection zones and explosion proof areas. For examples at the areas such as chemical plants, laboratories, hospitals, operating theatres, and others.

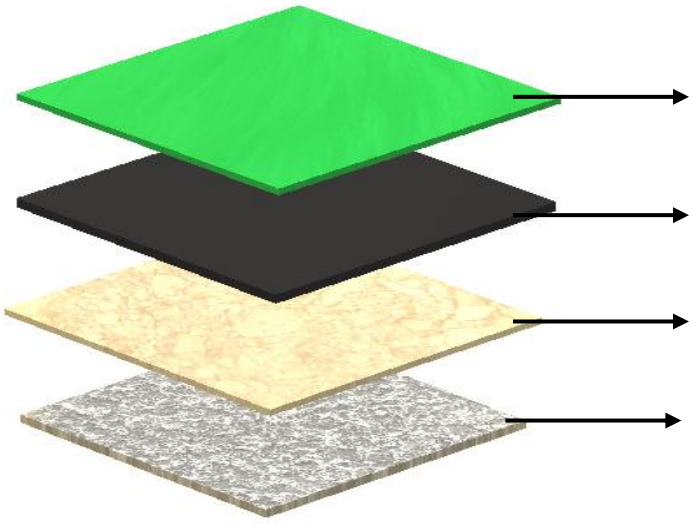
PRODUCT DESCRIPTION:

FLORCOAT 500 SL AS is a two-component self levelling epoxy resin, coloured, smooth gloss finish, low odour, and low VOC, and provide conductive (ESD) properties by using directly with conductive layer **FLORPRIME 180 AS**. It also possesses good chemical resistance against wide range of chemical, solvents and lubricant, and good abrasion resistance against medium traffic. In general, epoxy resins are not colour stable if exposed to UV light and weathering. It is recommended to use colour stable sealer on top of this material if needed.

BENEFITS:

- 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.
- Glossy finish, seamless and easy to clean.
- Good chemical resistance towards wide range of chemical, petroleum oils, solvents, and other cleaning agents.
- Good abrasion resistance against medium traffic and trolley movement.
- Hard wearing floor finish.
- Available in many colours.

SYSTEM BUILD UP:



Coloured Top Coat – **FLORCOAT 500 SL AS**

Conductive Layer – **FLORPRIME 180 AS**

Primer – **FLORPRIME 180**

Substrate – concrete, cementitious crete, magnesite creed, other moisture sensitive substrate.

`

TECHICAL DATA:

Density	Part A + Part B : At 25 °C	1.45 g/cm^3
Packaging size	Part A + Part B = 20 kg	16 kg A + 4 kg B
Mixing ratio	Part A : Part B	4 : 1 by weight (kg)
Flexural strength	DIN EN 196/ASTM C 109	> 35 N/mm^2
Compressive strength	DIN EN 196/ASTM C 109	> 55 N/mm^2
Adhesive strength	DIN EN ISO 4624	> 2.0 N/mm^2 (concrete failure)
Abrasion resistance	1000 cycles weight loss	5 mg
Shore D hardness	DIN EN ISO 868	74-83
Complied ANSI/ESD S20.20-2007 **Human Body Voltage** **System resistance**	 < 100 Volts < 3.5E x 10^7 ohm (Ω)	
Working time	At 25 °C	Approximately 20 – 25 minutes
Application temperature	Min 3 °C above dew point	10 – 30 °C
Material consumption	Min 1.5 mm	2 kg/m^2
Cure to withstand	At 25 °C, Foot traffic Heavy traffic Exposure to chemical	After 18 – 24 hours After 3 days After 7 days
Colours	Flortech standard, other colour available upon request.	
Shelf life and storage	12 months in closed original containers at 10 – 30 °C, avoid direct sunlight.	

ESD Floor Main Checking Criteria and Specification

Conductive	**Surface to Ground (Earth) Rg Spec (BS-2050)**	1E+4 Ω ~ 9E+6 Ω (1 x 10^4 ohm to 9 x 10^6 ohm)
	Surface to Surface (Earth) Rs Spec (BS-2050)	1E+4 Ω ~ 9E+6 Ω (1 x 10^4 ohm to 9 x 10^6 ohm)
Dissipative	**Surface to Ground (Earth) Rg Spec (BS-2050)**	1E+6 Ω ~ 9E+9Ω (1 x 10^6 ohm to 9 x 10^9 ohm)
	Surface to Surface (Earth) Rs Spec (BS-2050)	1E+6 Ω ~ 9E+9Ω (1 x 10^6 ohm to 9 x 10^9 ohm)

`

Substrate Requirement:

Make sure substrate or screed have minimum 1.5 N/mm^2 adhesive pull off strength. The substrate must be clean, firm, dry and free from any dust, oi, loose particles, paint residues or other contaminants. Repair imperfection (holes and cracks) with an epoxy patching material such as **FLORPRIME 110** where necessary. First, prepare substrate by captive shot blasting or diamond grinding to achieve good surface profile for optimum mechanical interlocking. It is important to ensure the subfloor is float before proceeding to commence installation.

Always apply **FLORPRIME 180 AS** on a primer or a levelling layer. For the connection to the earth point, use copper tape min 50 cm into the surface. It is recommended to use minimum 2 earth points per each room and for each 100 m^2 one earth point.

Mixing:

First, mix part A (resin) for 30 seconds by using suitable mixer. Then pour part B (hardener) into part A and mix the material for another 2 minutes. Make sure to move the mixer from top to bottom, side to side to achieve homogenous mixing.

Application:

Pour the mixed material onto the substrate and spread with notch trowel or pin rake and set it to required thickness minimum **1.5 mm, 2kg/m^2** material consumption. Then, follow up by using spike roller on the substrate to release the trapped air bubbles on the surface.

Do not apply the material when the relative humidity exceeds 90 % on the surface. Do not apply when the temperature below 5 °C and above 40 °C.

Note for conductive system:

Prior to the application of conductive coating **FLORCOAT 500 SL AS**, the conductive layer **FLORPRIME 180 AS** must be measured. Distance between the measurement points at least 50 cm. If the required conductive measurement value is not reached, further measurement must be carried out within the radius of 50 cm.

Area coating system	No of measurements (min)
< 10 m^2	1 measurement/m^2
10 – 100 m^2	10 – 20 measurement
> 100 m^2	10 measurement/ m^2

FLORTECH SDN BHD,
8, Jalan Selat Selatan 24, Sobena Industrial Estate, 42000. Pandamaran, Port Klang,, Selangor, Malaysia
Phone: +60-331631884
Email: flortech.my@gmail.com