



FLORGARD ESD

ELECTROSTATIC DISSIPATIVE INDUSTRIAL FLOORING MORTAR

Product Description

FLORGARD ESD is a four pack easy to apply, solvent free resin based floor topping.

It is specially formulated as part of an antistatic flooring system.

Green Building Compliance

This product has following distinct advantages

- Eco-friendly
- Low VOC
- Solvent free with a high level of mechanical, chemical and water resistance,
- Low odour
- Antimicrobial
- Low maintenance
- Easier cleanability
- LEED compliant
- Ideal for use in Green Building

Features

- Meets BS 2050/ASTM F: 150 Antistatic requirements.
- Seamless and hygienic finish, no crevices where dirt and bacteria can dwell.
- Excellent chemical resistance to sugars and acids.
- Easy to clean and sterilize, low maintenance requirements.
- High abrasion resistance.
- Solvent free; low odour.

Uses

To provide a hard wearing, seamless, antistatic floor with an electrical resistance in the range $5 \times 10^4 - 10^9$ ohms. Specific applications include:

- Electronics manufacture and assembly
- Clean Rooms, Process Area, and Solvent handling/process areas in pharmaceuticals units
- Computer rooms
- Hazardous dust and chemical environments
- Hospital operating theatre
- Nuclear plants, computer and control panel rooms

Properties

Application	: Serrated Trowel/Roller
Finish	: Gloss
Pot Life @ 30°C	: 25-30 mins
Compressive strength (ASTM C 579)	: >55 MPa
Flexural strength (ASTM C 580)	: >33 MPa
Tensile strength (ASTM C 307)	: >15 MPa
Bond strength to concrete (ASTM D 4541) : (Elcomete pull of test)	Exceeds Tensile strength of concrete
Hardness, Shore D (ASTM D 2240)	: 80
Taber Abrasion Loss	: 0.05mm
Impact resistance	: 0.05 mm
Electrical resistance	: $5 \times 10^4 - 10^9$ ohms
Curing Time	:
Initial Cure	6-8 hours,
Full Mech. Cure	48 hours
Ready for use	To walk – 24hrs
To light traffic	48 hrs
Full Chemical Cure	7 days
Mixing Ratio	: As supplied

The values given above are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

System Coverage for 2mm thickness

Coating System	Product	Consumption
Primer	Florprime EP	0.2 kg/m ²
Base coat	Florscreed SL	0.6 kg/m ²
Earthing connection	Apurva's Conductive copper tape	0.8 running meter
Antistatic primer	Florprime ESD	0.12 kg/m ²
Top Coat	Florgard ESD	2.5 kg/m ²

Method of Application

APURVA's system should be installed by approved contractors. Following information should be used as a guideline.

APURVA INDIA PRIVATE LIMITED

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Inspection and Surface preparation

The long-term durability of the applied **FLORGARD ESD** is dependent on the adhesive bond achieved between the flooring material and substrate. It is most important therefore, that substrate surfaces is correctly prepared prior to application.

- a) New concrete or cementitious substrates should have been placed atleast 28 days and have a moisture content of less than 5% before topping with **FLORGARD ESD**.
- b) Before application, the surface to be coated, should be free from loose particles, rust, oils, grease, or earlier coatings and should be thoroughly dry.
- c) After surface is dry, all repair work like sealing of joints, crack filling of cavities and crevices should be carried out.
- d) If the surface is VDF or smooth surface then Shot Blasting or grinding is recommended to make the surface rough in order to enhance the bonding of the primer.

Concrete defects such as voids, bug holes, excess porosity, and physical and chemical damage are usually filled or repaired prior to the installation of the F/C system. (Materials such as slurries, mortars, and polymer concrete are used to level, smooth and patch concrete surfaces).

The laitance (A thin, weak, brittle layer of cement and aggregate on concrete surface) on in-situ bases and any surface sealer or curing membrane should be entirely removed by suitable mechanised equipment, e.g. shot-blasting, panning or grinding, to expose cleanly the coarse aggregate.

Old Concrete surfaces: All surface contamination, e.g. oil, paint and rubber, should be removed and adequate mechanical preparation carried out to achieve a sound and stable surface with exposed coarse aggregate. (Existing floor paints should be removed by mechanical abrasion or contained shot blasting. When clear of all surface contamination, the concrete should be prepared mechanically to remove all laitance and expose a fresh surface).

After surface preparation all loose debris and dirt should be removed by vacuum- equipment.

Laying of FLORGARD ESD

FLORGARD ESD shall be mixed and applied only by specialist flooring contractors who have been trained in the correct application procedures. Detailed method statement is available on request.

Application

Spread the mixture on the floor immediately to the required thickness by means of rollers and serrated trowels. The floor should be rolled by a spike roller to remove trapped air.

Special conditions

Colours

We shall always endeavour to supply the material in the colour shade ordered. However exact matching will not be possible.

Batch to batch colour variation may occur. Ensure that materials for final application are always drawn from the same batch.

Where colour matching is required over more than one order or delivery. Apurva's Technical department must be contacted prior to placing the order(s) and the requirement stated clearly on all orders relating to the project(s).

Temperatures

For best results and easy laying the **FLORGARD ESD** should be stored and used at temperatures between 10°C – 25°C.

It is not advisable to lay below 7°C or above 30°C.

Substrate Requirements

- Must be of sufficient strength to support loads applied through the topping.
- Must be free from rising damp.
- All contamination must be removed to give a clean dry textured surface.

Packaging

FLORGARD ESD is available in 17.5 kg pack size.

Shelf life

FLORGARD ESD has a shelf life of 12 months if kept in warehouse conditions at 30°C in the original, unopened pack.

Storage conditions

Store in dry conditions between 5°C and 30°C, away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

Handling & Safety

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying it is advised to wear a mask. If it comes in contact with the body, wash affected parts with plenty of water. In case of persistent irritation, contact a physician.

Disclaimer: *The manufacturer reserves the right to change the specifications. Apurva India Private Limited products are guaranteed against material manufactured and are sold subject to the company's Terms and Conditions of Sale. Whilst we endeavour to ensure that advice, specifications, recommendations and information given is correct, we cannot have control over how our products are applied and will not accept liability, directly or indirectly, arising from application of our materials.*

Version No./Date of revision : 04/JULY 2017

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