

Flowshield ESD Conductive



Description

Antistatic, hard wearing, self-smoothing epoxy resin floor finish that complies with BS2050, ANSI/ESDS2020, ASTM F150 Conductive, IEC 61340-4-1 and IEC 61340-4-5 requirements.

Uses

To provide a hard-wearing, seamless, antistatic floor. It is commonly used in dry process areas where the floor is subjected to medium to heavy duty foot, trolley and pallet truck traffic. Typical uses include laboratories, clean rooms, equipment testing areas in electronic, aerospace, automotive, printing and pharmaceutical plants.

Benefits

- Attractive, light reflectant appearance
- Meets BS2050, ANSI/ESDS2020 (ANSI/ESD S7.1 and ANSI/ESDSTM 97.1), ASTM F150 Conductive, IEC 61340-4-1 and IEC 61340-4-5 requirements
- Hygienic and easy to clean
- Non-tainting and non-dusting
- Hard-wearing
- High chemical resistance
- Good abrasion resistance

Standard Colour Chart



Steel Blue



Mid Blue



Light Green



Dark Green



Chilli Red



Yellow



Light Grey

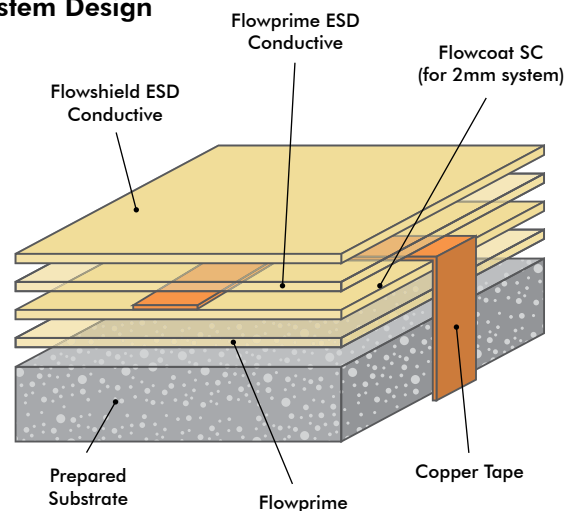


Steel Grey



Charcoal

System Design



Model Specification

System: Flowshield ESD Conductive
Finish: Gloss
Thickness: Dependant on specification
Preparatory work and application in accordance with manufacturer's instructions.

Substrate Requirements

Concrete or screed substrate should be a minimum of 25N/mm², free from laitance, dust and other contamination. The substrate should be dry up to 75% RH as per BS8204 and free from rising damp and ground water pressure. Application of a 1mm self-smoothing product also requires a smooth substrate.

Products Included in this System

Flowprime
Flowcoat SC (for 2mm system)
Copper Tape (conductive grid of 12mm wide copper tape)
Flowprime ESD Conductive
Flowshield ESD Conductive

Detailed application instructions are available upon request.

Installation Service

The installation should be carried out by a Flowcrete approved applicator with a documented quality assurance scheme. Obtain details of our approved contractors by contacting our customer service team or enquiring via our website at www.flowcreteasia.com

Environmental Considerations

The finished system is assessed as non-hazardous to health and the environment. The long service life and seamless surface reduce the need for repairs, maintenance and cleaning. Environmental and health considerations are controlled during manufacture and application of the products by Flowcrete staff and fully trained and experienced contractors.

Aftercare - Cleaning and Maintenance

Clean regularly using a single or double headed rotary scrubber drier in conjunction with a mildly alkaline detergent. Ensure that the floor is not abraded during cleaning and that the cleaning agent does not deposit a layer of wax or residue on the surface as this will impair the antistatic properties of the floor.

Important Note

Flowcrete's products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request.

Conductive Tape

A network of 12 mm wide, self-adhesive, conductive copper tape is always recommended in combination with any Flowcrete antistatic flooring system. The copper tape must be applied directly onto the cured Flowprime, maximum 1 metre in from the perimeter of the application. Further, strips of tape should be applied within this area every 3 metres. Special attention should be paid to tape areas passing over expansion or bay joints to ensure permanent electrical continuity. The applied tape should be secure and fully bonded to a confirmed earth point.

Technical Information

The figures that follow are typical properties achieved in laboratory tests at 20°C and at 50% Relative Humidity.

Fire Resistance	B ₁ - s1 (EN 13501-1)
Slip Resistance	Dry > 40, Wet depends on specification (in accordance with HSE and UKSRG guidelines)

The slipperiness of flooring materials can change significantly, due to the installation process, after short periods of use, due to inappropriate maintenance, longer-term wear and/or surface contaminants (wet or dry)

Textured systems are recommended to meet slip resistance value requirements for wet conditions and/or surface contaminants (wet or dry) - please contact our Technical Advisors for further details and specifications.

Temperature Resistance	Softens over 60°C
Water Permeability	Nil - Karsten test (impermeable)
Chemical Resistance	Contact Technical Department
Abrasion Resistance	Taber Abrader: 80mg loss per 1000 cycles (1 kg load using CS17 wheels)
Compressive Strength	60 N/mm ² (BS6319)
Flexural Strength	40 N/mm ² (BS6319)
Tensile Strength	25 N/mm ² (BS6319)
Bond Strength	Greater than cohesive strength of 25 N/mm ² concrete. >1.5MPa
Electrical Resistance	2.5 x 10 ⁴ - 1.0 x 10 ⁶ Ω (ASTM F150) 5.0 x 10 ⁴ - 1.0 x 10 ⁸ Ω (BS2050)
Body Voltage Generation (BVG)	<100V (IEC 61340-4-5 and ANSI/ESD STM 97.1/97.2)

Speed of Cure

	10°C	20°C	30°C
Light Traffic	36 hrs	30 hrs	24 hrs
Full traffic	72 hrs	48 hrs	36 hrs
Full chemical cure	12 days	7 days	6 days

Customer Service

For more information regarding this product please contact your local Flowcrete office:

Flowcrete Asia	+60 3 6277 9575
Flowcrete Hong Kong	+852 2795 0478
Flowcrete China	+86 10 8472 1912
Flowcrete Thailand	+66 2539 3424
Flowcrete Indonesia	+62 21 252 3201
Flowcrete Vietnam	+84 8 6287 0846

Visit our website for more locations.

Further Information

To ensure you are specifying a fit for purpose flooring for your project please consult our Technical Advisors on the numbers above or visit our website to register your interest in specifying one of the most durable floors on the market.