

Flowshield ESD CR Conductive



Description

Flowshield ESD CR Conductive is an antistatic, highly chemical resistant, 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 chemical ESD process areas where the floor may be subject to pedestrian, trolley, pallet truck and rubber wheeled forklift traffic. Typical uses include laboratories, clean rooms, equipment testing areas and electronic, aerospace, automotive, printing and pharmaceutical plants.

Benefits

- High chemical resistance
- Attractive, enhances working environment
- 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
- Abrasion resistant

Standard Colour Chart



Steel Blue



Mid Blue



Light Green



Dark Green



Chilli Red



Yellow



Light Grey

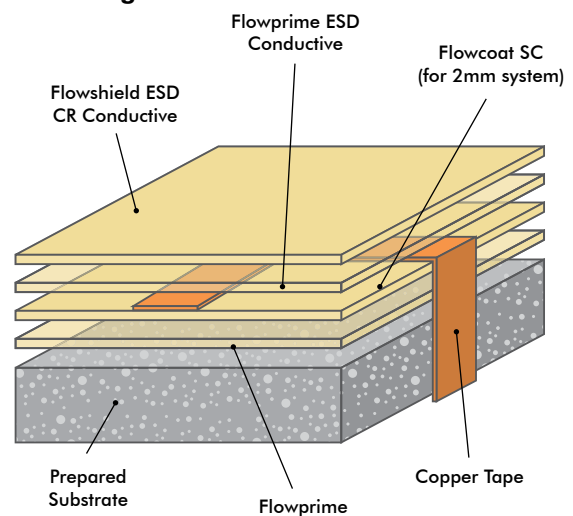


Steel Grey



Charcoal

System Design



Model Specification

System: Flowshield ESD CR 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 CR 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) |
| Vapour Permeability | 4gms / m ² / mm / 24 hours |
| 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) |
| Toxicity (when cured) | Taint free to sensitive foodstuffs |

Speed of Cure

| | 10°C | 20°C | 30°C |
|--------------------|---------|--------|--------|
| Light Traffic | 36 hrs | 24 hrs | 16 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.