

### 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.

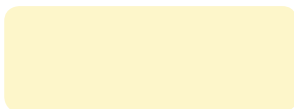
#### Benefits

- 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

#### Project References

Available on request.

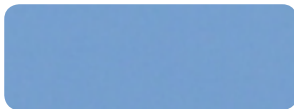
#### Standard Colour Chart



Ivory



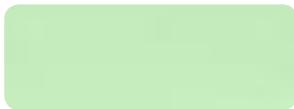
Yellow



Steel Blue



Mid Blue



Light Green



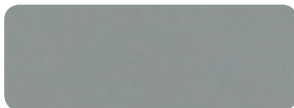
Dark Green



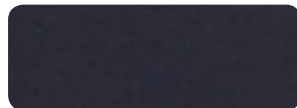
Chilli Red



Light Grey

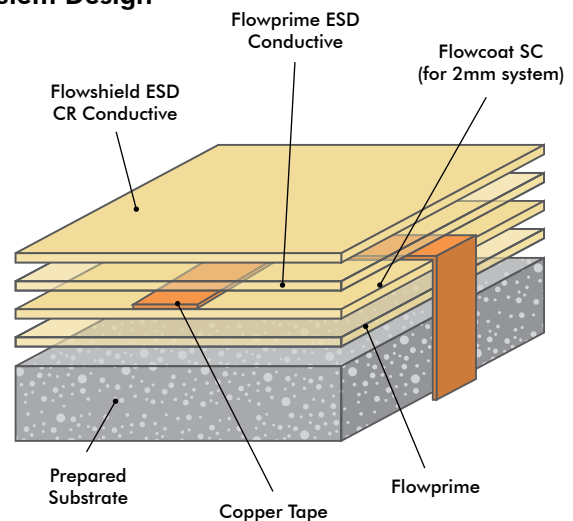


Steel Grey



Charcoal

#### System Design



## Model Specification

Product: Flowshield ESD CR Conductive System  
Finish: Gloss  
Thickness: Dependant on specification  
Colour: \_\_\_\_\_  
Preparatory work and application in accordance with suppliers instructions.  
Manufacturer: Flowcrete Middle East FZCO  
Telephone : Customer Service +971 4 886 4728

## Substrate Requirements

Concrete or screed substrate should be a minimum of 25N/mm<sup>2</sup>, 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.flowcrete.ae](http://www.flowcrete.ae)

## 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 the manufacture and application of the products by Flowcrete staff and fully trained and experienced contractors.

## Focus on the Floorzone

Flowcrete Middle East FZCO is a division of the Flowcrete Group, world leaders in specialist industrial and commercial flooring. Systems available include: underfloor heating systems, floor screeds, surface damp proof membranes, decorative floor finishes, seamless terrazzo, car park deck waterproofing and corrosion protection systems... to name just a few. Our corporate objective is to satisfy your flooring needs.

## Conductive Tape

A network of 12mm 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	BS476:Part 7 Surface spread of flame: Class 2 (indicative)
Slip Resistance	TRRL Pendulum Slip Test Dry 67
Temperature Resistance	Softens over 60°C
Water Permeability	Nil – Karsten test (impermeable)
Vapour Permeability	4gms / m <sup>2</sup> / 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 <sup>2</sup> (BS6319)
Flexural Strength	40 N/mm <sup>2</sup> (BS6319)
Tensile Strength	25 N/mm <sup>2</sup> (BS6319)
Bond Strength	Greater than cohesive strength of 25 N/mm <sup>2</sup> concrete. >1.5MPa
Electrical Resistance	2.5 x 10 <sup>4</sup> – 1.0 x 10 <sup>6</sup> Ω (ASTM F150) 5.0 x 10 <sup>4</sup> – 1.0 x 10 <sup>8</sup> Ω (BS2050)
Toxicity	Taint free to sensitive foodstuffs

## Speed of Cure (per layer)

	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

## 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.

## Further Information

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