

## Flowshield ESD CR Conductive



### Standard Colour Chart



The applied colours are slightly darker than the examples shown above due to the inclusion of antistatic additives.  
Contact our customer services for a true colour sample or a special colour match.

### 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.

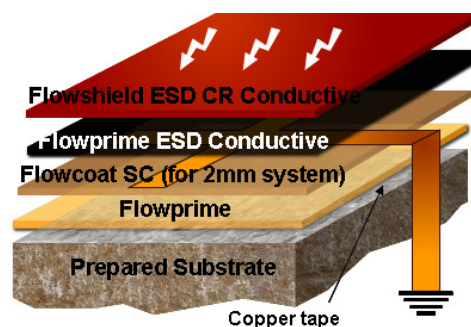
### Benefits

- 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

Chee Mei Electronic, Nokia, Iris Technology, Flextronix, Toshiba, Sharp Roxy, Sony Ericsson, Ta Yee Electronic, Filtronic Telecommunication China

### System Design



## Model Specification

Product: Flowshield ESD CR Conductive system  
Finish: Gloss  
Thickness: Dependant on specification  
Colour: \_\_\_\_\_  
Preparatory work and application in accordance with manufacturer's instructions.  
Manufacturer: Flowcrete Asia Sdn Bhd  
Telephone: Customer Service - +603 6277 9575

## 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 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 12 mm 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 web site at [www.flowcrete.com.my](http://www.flowcrete.com.my).

## 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.

## Focus on the Floorzone

Flowcrete Asia Sdn Bhd 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 12 mm wide, self-adhesive, conductive copper tape is always recommended in combination with any Flowcrete anti-static 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 Value	TRRL Pendulum Test Dry 67
Temperature Resistance	Tolerant Up to 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: 80 mg 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 x 10 <sup>4</sup> – 1 x 10 <sup>8</sup> Ohms (BS2050)
Toxicity	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

## 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 on the surface as this will impair the anti-static properties of the floor.

## 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.

## 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.

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