

ESD Permanent Floor Tiles

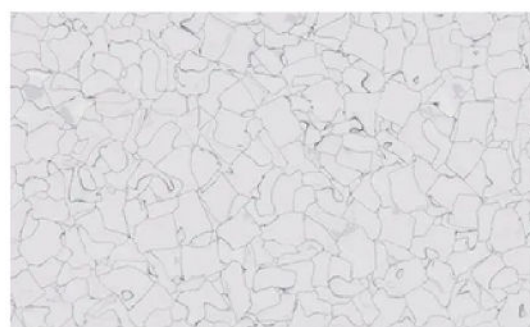
Description

Colorex ESD Permanent Floor Tiles is an advanced technical flooring system specifically designed to control static discharge in static sensitive areas such as cleanrooms, operating theatres, pharmaceutical and electronics manufacturing. Not only does Colorex provide an advanced technical solution, but it is also aesthetically pleasing, enhancing any commercial interior from industrial to educational establishments. Colorex can be used in many different applications. It can be installed by fully adhering it directly to a subfloor or bonding it to a raised access floor panel. It can also be laid as part of a loose lay tile system. Colorex is available with three levels of conductivity.

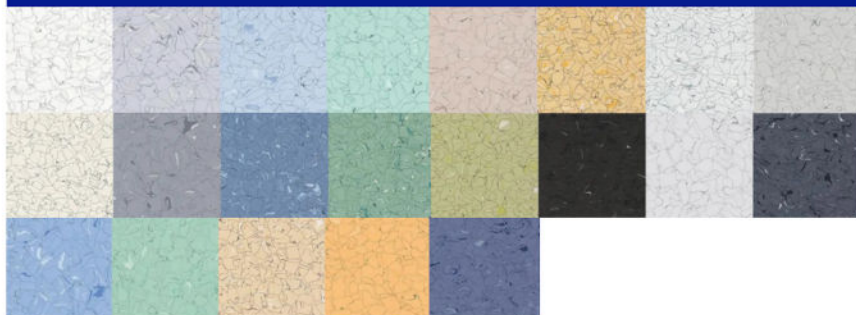


Colorex SD Static Dissipative Tiles

Colorex SD is a static dissipative homogeneous floor covering in tile format with permanent ESD properties. Because of the dense network of dissipative veins, static charges flow easily through the floor to Earth. Colorex SD tiles can withstand the most demanding conditions and offer a perfect solution for highly sensitive areas. Colorex enables safe electrostatic discharge through the whole thickness of the tile. The conductive mass throughout the tile is formed of a dense network of tiny carbon black veins permanently static dissipative floor, connection between tiles through the conductive adhesive and connected to Earth through copper strip.



Available Colours



Meets the Following ESD Standards & Regulations:



RoHS and REACH compliant



EN 14041 CE



IEC 61340-5-1

EN ISO 10581 and ASTM 1700



ESD Permanent Floor Tiles

Application Areas

Colorex ESD Permanent Flooring can be applied in the following areas:

- ESD facilities
- Cleanrooms
- Pharmaceutical laboratories
- Production sites (electronics, manufacturing, life sciences)
- Operating theatres

Key Features

- Tile format ensures less wastage than sheet – Environmentally-friendly.
- Fully complies with all ESD standards and cleanroom standards.
- 2mm tile thickness.
- 61.5 cm x 61.5 cm (length x width).
- NCS S 0500-N, LRV 79%.
- Offers a lifetime conductivity warranty guaranteeing optimal performance throughout the life of the product.
- The dense construction provides a pore-free surface ensuring the highest hygiene properties.
- Excellent resistance to heavy loads – an ideal solution for industrial and commercial environments.
- The surface can be fully repaired – extending the useful life of the product.
- Available in tile format – enables quicker installation.
- The conductive coating on the chips ensures that the unique electrostatic dissipative properties are consistent throughout the product.
- The construction guarantees a long life conductivity that remains unaffected by changes in humidity and temperature.
- Colorex meets the requirements of EN ISO 10581 and ASTM 1700.
- All Colorex products meet the requirements of EN 14041.

Finishing Solutions

In highly sensitive healthcare areas, and anywhere that has strict hygiene requirements, it's important that floor-to-wall transitions are water-tight, perfectly hygienic and aesthetically pleasing. The integrated coving system creates a perfect seal for these critical areas using the same Colorex material.



ESD Permanent Floor Tiles



Properties	Test Method	Colorex SD
Binder Content	EN ISO 10581	Type 1
Total Thickness	EN ISO 24346	2.0 mm / 3.0 mm*
Commercial Use	EN ISO 10874	34 very heavy
Light Industrial Use	EN ISO 10874	43 heavy
Tile Size	EN ISO 24342	615 x 615 mm 615 x 1230 mm*
Total Weight	EN ISO 23997	3.2 kg/m ²
Electrostatic (General Requirements)	IEC 61340-5-1	Compliant
Electrical Resistance	IEC 61340-4-1 ESD STM7.1	$1 \times 10^{(6)} \leq R \leq 10^{(8)} \Omega$
Electrical Resistance (In combination with ESD control footwear)	IEC 61340-4-5 ESD STM97.1	$R \leq 1 \times 10^{(9)} \Omega$
Body Voltage Generation (In combination with ESD control footwear) <i>Typical value</i>	IEC 61340-4-5 ESD STM97.2	< 100 V ~ 40 V
Dimensional Stability	ISO 23999	$\leq 0.05\%$
Residual Indentation <i>Typical value</i>	EN ISO 24343-1	$\leq 0.10 \text{ mm}$ ~ 0.02 mm
Resistance To Loads	Powered pallet truck and forklifts: total weight up to 2.5 t with hard wheels and up to 5 t with air tyres. Static loads: 50 kg/cm ² - dynamic loads: 90 kg/cm ² (performance may vary, subject to local conditions)	




ESD Permanent Floor Tiles



Properties	Test Method	Colorex SD
Castor Chair Continuous Use	ISO 4918	Pass
Impact Sound Reduction	EN ISO 140-8	2 dB
Light Fastness	EN ISO 105-B02	≥6
Resistance To Chemicals	EN ISO 26787	Excellent
Slip Resistance	DIN 51130	R9
Bacteria Resistance	ISO 846	Pass
Thermal Dilatation Coefficient		0.07 mm/m°C
Outgassing	IDEMA M11-99	Total < 1 µg/cm ²
Indoor Air Emissions: TVOC after 28 days	EN 16516	≤ 0.025 mg/m ³
Cleanroom Particle Emission	ISO 14644-1	ISO 4
Creating Better Environments		
Renewable Electricity		Colorex SD is manufactured using 100% electricity from renewable sources



ESD Permanent Floor Tiles

Properties	Test Method	<div>EN 14041</div> <div></div> <div>0201083-DoP-003</div>
Reaction To Fire**	EN 13501-1	Bfl-s1, G, CS
Slip Resistance	EN 13893	$\mu \geq 0.30$
Thermal Conductivity	EN 12524	0.25 W/(m·K)
Body Voltage	EN 1815	≤ 2 kV
Electrical Behaviour - Static Dissipative	EN 1081	$\leq 1 \times 10^{(9)} \Omega$
Electrical Behaviour - Conductive	EN 1081	n.a.

Colorex meets the requirements of EN ISO 10581 and ASTM 1700

All Colorex products meet the requirements of EN 14041

* Available on request

** Product also tested to ASTM. Fire ASTM E648: class 1, Smoke ASTM 662: pass



Eliminate Costly Static Damage...

Whether you are experiencing unacceptable levels of damage in transit, need a specific cleanroom solution or simply don't know which ESD safe equipment is best for you, we can help!

Request complimentary, no obligation advice by speaking with one of our technical experts today.

