

ANTISTATIC FLOORING

Protect your facility, electronic equipment and employees from ESD effects.



Construction Products Group Europe

www.flowcrete.com.pl

HANSHIN[®] Transformer

Antistatic flooring

Antistatic flooring solutions have dissipative or conductive properties. They either disperse the charges gathering on the floor surface or allow them to flow to the ground, minimizing their harmful effects.

Antistatic flooring is used in areas where electro-static discharge can cause a fire or explosion, disturb using or damage sensitive electronic equipment, cause damage to electronic ready goods or employees discomfort.

Flowcrete anti-static flooring range consists of both smooth and antislip finishes, thin and thick layered. Ability to use different flooring technologies, epoxy, PU concrete or vinyl ester helps choosing the righ chemical resistance and to achieve additional features, like thermal shock resistance or antibacterial properties.

Flowcrete's antistatic flooring range meets requirements of EN 61340-5-1 and EN 61340-4-5 in the area of static electricity protection.

Application suitability



Manufacturing halls



Manufacturing lines

Assembly areas







Electronic equipment Chemical storages





Hazardous areas



		Flowcoat ESD SF41	Flowcoat ESD SF41 Structure	Peran ESD SL	Peran ESD SL20	Peran ESD STB Compact	Peran ESD STB Structure
ANTISTATIC PROPERTIES	R _G (EN IEC 61340-4-1)	<10° Ω	<10 ⁶ Ω	<10° Ω	<10º Ω	<10º Ω	<10 ⁶ Ω
	EN IEC 61340-5-1 compliance	~	~	√1	~	✓	✓
NTISTATIC	EPA suitability	~	1	~	~	1	~
AN	ATEX suitability	-	~	~	~	~	✓
PERTIES	Foot traffic resistance	Medium*	Medium*	Heavy*	Heavy*	Heavy*	Heavy*
	Wheel traffic resistance	Light*	Medium*	Medium*	Medium*	Heavy*	Medium*
MECHANICAL PROPERTIES	Chemical resistance	Medium	Medium	High	High	High	High
MECHAI	Impact resistance	IR10	IR10	IR17	IR20	IR20	IR10
	Temperature resistance	Up to +50°C	Up to +50°C	Up to +60°C	Up to +60°C	Up to +50°C	Up to +50°C
CLEANING & HYGIENE ²	Seamless system	~	V	√	~	~	~
	Manual cleaning	~	-	~	~	~	_
	Machine cleaning	√	1	√	√	✓	~

¹ Requires using grounding wrist straps by employees.
² Due to wide variety of possible soiling types, different final finishes (smooth, structured etc.) and vast offer of cleaning and maintenance chemical agents present on the market, we recommend to always create individual, detailed cleaning plan and instructions in cooperation with professional cleaning company.

Definitions: Light foot traffic – areas of seldom use and clean enviroment, e.g. server rooms, technical rooms, area for manual sorting of light packages etc.; Medium foot traffic – areas of clean manufacturing with permament foot traffic, in clean shoes, typically on rubber soles, eg. manufacturing and assembling electronic devices Heavy foot traffic – constant feet traffic in dirty areas, using different kinds of shoes, eg. warehouses, handling areas, Light wheel traffic – seldom traffic of hand pallet trucks (< 100 kg weight) on full rubber wheels, manual sorting of light weight goods Medium wheel traffic – constant traffic of hand or electric pallet trucks (> 500 kg weight) traffic, wooden pallets dragging

Laboratories

Server rooms

Clean rooms

R&D rooms

Flowcoat ESD SF41

Smooth, antistatic flooring system based on solvent-free, pigmented epoxy resin.

Recommended for areas where floor is exposed to light or medium foot traffic and/or light wheel traffice and light or medium chemical loads.



Standard colour chart



Colours will appear darker than standard Flowcoat SF41. The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local CPG Europe office.

Technical information³

ELECTRICAL RESISTANCE		
$R_u < 10^{\circ}\Omega$	EN 61340-5-1	
Body Voltage Generation < 100 V	EN 61340-4-5	
SLIP RESISTANCE ⁴		
Dry > 40	EN 13036-4	
TEMPERATURE RESISTANCE		
Sustained heat: +50°C, intermit	tent spillages: +70°C	
CAPILLARY ABSORPTION & PERMEABILITY TO WATER		
0,001 kg/m²xh ^{0,5}	EN 1062-3	
SURFACE HARDNESS		
285 N/mm²	EN 13892-6	
COMPRESSIVE STRENGTH		
> 80 N/mm²	EN 13892-2	
FLEXURAL STRENGTH		
> 60 N/mm²	EN 13892-2	
TENSILE STRENGTH		
> 15 N/mm²	BS 6319	
IMPACT RESISTANCE		
10 Nm	EN ISO 6272-1	
BOND STRENGTH		
> 2,5 MPa	EN 13892-8	





ELECTRICAL RESISTANCE		
EN 61340-5-1		
EN 61340-4-5		
SLIP RESISTANCE ⁴		
EN 13036-4		
TEMPERATURE RESISTANCE		
Sustained heat: +50°C, intermittent spillages: +70°C		
CAPILLARY ABSORPTION & PERMEABILITY TO WATER		
EN 1062-3		
SURFACE HARDNESS		
EN 13892-6		
COMPRESSIVE STRENGTH		
EN 13892-2		
FLEXURAL STRENGTH		
EN 13892-2		

³ The figures in the table beside are typical properties achieved in laboratory tests – these results may vary depending on the conditions on the installation site. ⁴ The final anti-slip properties of the floor are influenced by the application method, the size and shape of the aggregate used for the topcoat (aggregate recommendations available from CPG Eastern Europe), the degree of abrasion, maintenance and the nature the dirt.



Flowcoat ESD SF41 Structure

Anti-slip flooring system with antistatic properties based on colored epoxy resin and special aggregate.

Provides required anti-slip finish in rooms and areas where the floor is expected to be resistant to medium mechanical and chemical loads.



Peran ESD SL

An epoxy, antistatic, self-leveling flooring system with smooth and glossy finish.

Peran EDS SL is recommended for areas exposed to heavy foot traffic and medium wheel traffic.



Standard colour chart



Colours will appear darker than standard Peran SL. The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local CPG Europe office.

Technical information³

ELECTRICAL RESISTANCE		
$5 \times 10^4 \Omega \le R_{_{\rm U}} \le 1 \times 10^6 \Omega$	EN 61340-4-1	
REACTION TO FIRE		
C _n -s1	EN 13501-1	
SLIP RESISTANCE ⁴		
Dry > 40	EN 13036-4	
VAPOUR PERMEABILITY		
0,4 g/m²/mm/24 h	ASTM E96:90	
TEMPERATURE RESISTANCE		
Up to +60°C		
WATER PERMEABILITY		
Karsten test - Nil (Impermeable)		
WEAR RESISTANCE		
RWA1	EN 13892-5	
COMPRESSIVE STRENGTH		
> 60 N/mm²	EN 13892-2	
FLEXURAL STRENGTH		
> 40 N/mm²	EN 13892-2	
TENSILE STRENGTH		
> 25 N/mm²	BS 6319-7	
IMPACT RESISTANCE		
IR 17	EN ISO 6272-1	
BOND STRENGTH		
B2,7	EN 13813	





Colours will appear darker than standard Peran SL20. The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local CPG Europe office.

ELECTRICAL RESISTANCE		
$R_g \le 1 \times 10^6 \Omega$	EN 61340-5-1	
Body Voltage Generation < 100 V	EN 61340-4-5	
SLIP RESISTANCE ⁴		
Dry > 40 EN 13036-4		
TEMPERATURE RESISTANCE		
Up to +60°C		
WATER PERMEABILITY		
Karsten test - Nil (Impermeable)		
WEAR RESISTANCE		
ARO,5	EN 13892-4	
COMPRESSIVE STRENGTH		
> 60 N/ mm²	EN 13892-2	
FLEXURAL STRENGTH		
> 50 N/ mm ²	EN 13892-2	

³ The figures in the table beside are typical properties achieved in laboratory tests – these results may vary depending on the conditions on the installation site. ⁴ The final anti-slip properties of the floor are influenced by the application method, the size and shape of the aggregate used for the topcoat (aggregate recommendations available from CPG Eastern Europe), the degree of abrasion, maintenance and the nature the dirt.



Peran ESD SL20

An epoxy, antistatic, self-leveling flooring system with smooth and glossy finish.

Provides highly aesthethic, durable and chemically resistant surface. Compliant with all EPA and ATEX zones requirements including "Walking Test".



Standard colour chart





Technical Information³

ELECTRICAL RESISTANCE		
$5 \times 10^4 \Omega \le R_G \le 1 \times 10^6 \Omega$	EN 61340-4-1	
REACTION TO FIRE		
B _n -s1	EN 13501-1	
SLIP RESISTANCE ⁴		
Dry > 40	EN 13036-4	
TEMPERATURE RESISTANCE		
Up to +50°C		
FLEXURAL STRENGTH		
> 40 N/mm ²	EN 13892-2	
TENSILE STRENGTH		
15 N/mm²	EN 13892-2	
IMPACT RESISTANCE		
IR20	EN ISO 6272-1	

Peran ESD STB Compact

Industrial, antistatic flooring that consists of coloured quartz granules encapsulated within a clear resin binder.

It has very high durability and chemical resistance. Reccomended for areas with heavy foot and wheel traffic.



Durability & chemical resistance



³ The figures in the table beside are typical properties achieved in laboratory tests – these results may vary depending on the conditions on the installation site. ⁴ The final anti-slip properties of the floor are influenced by the application method, the size and shape of the aggregate used for the topcoat (aggregate recommendations available from CPG Eastern Europe), the degree of abrasion, maintenance and the nature the dirt.

Technical Information³

ELECTRICAL RESISTANCE		
$5 \times 10^4 \Omega \le R_G^2 \le 1 \times 10^6 \Omega$	EN 61340-4-1	
REACTION TO FIRE		
B _A -s1	EN 13501-1	
SLIP RESISTANCE ⁴		
Wet > 40	EN 13036-4	
TEMPERATURE RESISTANCE		
Do +50°C		
WEAR RESISTANCE		
RWA1	EN 13892-5	
FLEXURAL STRENGTH		
> 40 N/mm²	EN 13892-2	
IMPACT RESISTANCE		
IR10	EN ISO 6272-1	





Peran ESD STB Structure

Antistatic, antislip flooring system based on a special mixture of conductive epoxy resins and coloured quartz sand.

Very durable floor that provides excellent antislip properties but is easy to clean and maintain.



Antibacterial and corrosion protection flooring systems with antistatic properties

SYSTEM	DESCRIPTION	APPLICATION SUITABILITY	
Flowfresh ESD MF	A smooth, antimicrobial treated industrial floor based on polyurethane resin with the addition of cement aggregate. It is an antistatic flooring system with high mechanical, thermal and chemical resistance.	Recommended for areas where the floor is at the same time exposed to strong chemicals, high or low temperature and conductive properties are necessary. Ideal for tough environments where very high hygienic standards of manufacturing process are required. manufacturing process are required.	
Flowchem VE ESD RC	An anti-static roller coat applied, shrinkage compensated, vinyl ester resin based coating with excellent resistance to aggressive chemicals and solvents as well as resistance to mechanical and thermal attack.	Recommended to protect concrete floors, walls, kerbs, equipment bases, trenches, drains and other surfaces exposed to heavy loads, high temperatures, corrosive chemicals and solvents, where antistatic properties are necessary.	
Flowchem VE ESD GL	Antistatic, protective coating based on non-shrinking vinyl ester resin with continuous reinforcement made of fiberglass mats.	Recommended to protect concrete and metal surfaces exposed to sustained or intermittent chemical, thermal and mechanical loads, where antistatic properties are necessary.	
Flowchem VE ESD GL Structure	Antistatic, protective coating based on non-shrinking vinyl ester resin with continuous reinforcement made of fiberglass mats. It has antislip finish.	Recommended to protect concrete and metal surfaces exposed to heavy chemical, temperature and mechanical loads, in enviroments where antislip finish and antistatic properties are necessary.	
Flowchem VE ESD HD	An electrostatic dissipative, horizontal trowel applied, low shrink, vinyl ester resin based screed system with outstanding chemical and mechanical resistance.	Recommended to protect substrates exposed to very high temperatures, strong chemicals, solvents and heavy traffic in areas where antistatic protection is necessary.	





CPG Europe manufactures high performance building materials in order to solve the complex challenges faced by today's construction industry. With over 1,400 employees across Europe, we are committed to shaping a world where buildings and structures save energy, last longer and exceed sustainability benchmarks.

Delivering World-Class Construction Product Solutions.

The product brands housed within CPG Europe cover a wide array of different construction needs and provide a wealth of complex services, support and systems that are rarely found together under one roof.

Sealing, bonding & insulation



Window Insulation, Façade Construction, Exterior Insulation & EIFS, Structural & Inplant Glazing





Seamless Resin Flooring, Subfloor Preparation, Car Parking Structures

Civil Engineering, Potable & Waste Water Industry, Balconies, Terraces, **Basements & Foundations**

Europe's leading construction products brands...









Intumescent Coatings, Fire Stopping



Liquid Applied Systems, Felt Systems, Vegetated Roofing









Tremco CPG Poland Sp. z o.o. ul. Marywilska 34 03-228 Warsaw, Poland

tel.: +48 22 879 8907 email: poland@cpg-europe.com www.cpg-europe.com



+48 22 879 8907



www.flowcrete.com.pl/blog

youtube.com/flowcretetv



/company/flowcrete-polska



/flowcretepolska