

# ANTISTATIC FLOORING



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

## 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 right chemical resistance and to achieve additional features, like thermal shock resistance or antibacterial properties.

## Application suitability



## Technical profile

		Flowcoat ESD SF41	Flowcoat ESD SF41 Structure	Peran ESD SL	Peran ESD SL20	Peran ESD STB Compact	Peran ESD STB Structure
ANTISTATIC PROPERTIES	$R_{s}$ [EN IEC 61340-4-1]	<math>10^9 \Omega</math>	<math>10^9 \Omega</math>	<math>10^9 \Omega</math>	<math>10^9 \Omega</math>	<math>10^9 \Omega</math>	<math>10^9 \Omega</math>
	EN IEC 61340-5-1 compliance	✓	✓	✓	✓	✓	✓
	EPA suitability	✓	✓	✓	✓	✓	✓
	ATEX suitability	—	✓	✓	✓	✓	✓
MECHANICAL PROPERTIES	Foot traffic resistance	Medium*	Medium*	Heavy*	Heavy*	Heavy*	Heavy*
	Wheel traffic resistance	Light*	Medium*	Medium*	Medium*	Heavy*	Medium*
	Chemical resistance	Medium	Medium	High	High	High	High
	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 <sup>2</sup>	Seamless system	✓	✓	✓	✓	✓	✓
	Manual cleaning	✓	—	✓	✓	✓	—
	Machine cleaning	✓	✓	✓	✓	✓	✓

<sup>1</sup> Requires using grouting and stop for employees.  
<sup>2</sup> Due to wide variety of possible soiling types, different floor 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.  
**\*Suitability:**  
 Light foot traffic – areas of infrequent use and clean environment (e.g. server rooms, technical rooms, areas for manual sorting of light packages etc.);  
 Medium foot traffic – areas of clean manufacturing with permanent foot traffic, in clean shoes, typically on rubber soles, eg. manufacturing and assembling electronic devices  
 Heavy foot traffic – constant foot traffic in dirty areas, using different kinds of shoes, eg. warehouses, handling areas  
 Light wheel traffic – medium traffic of hand pallet trucks (<math>100</math> kg weight) on full rubber wheels, manual sorting of light weight goods  
 Medium wheel traffic – constant traffic of hand or electric pallet trucks (<math>500</math> kg weight) on full rubber wheels  
 Heavy wheel traffic – constant load for electric pallet trucks (> 1000 kg weight) traffic, wooden pallet drags

## 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 traffic and light or medium chemical loads.

 Electrostatic dissipative

 Smooth surface

 Durability

 Chemical resistance

 Hygienic & easy to clean

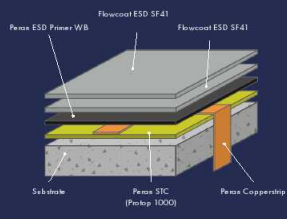
### Standard colour chart



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 information<sup>3</sup>

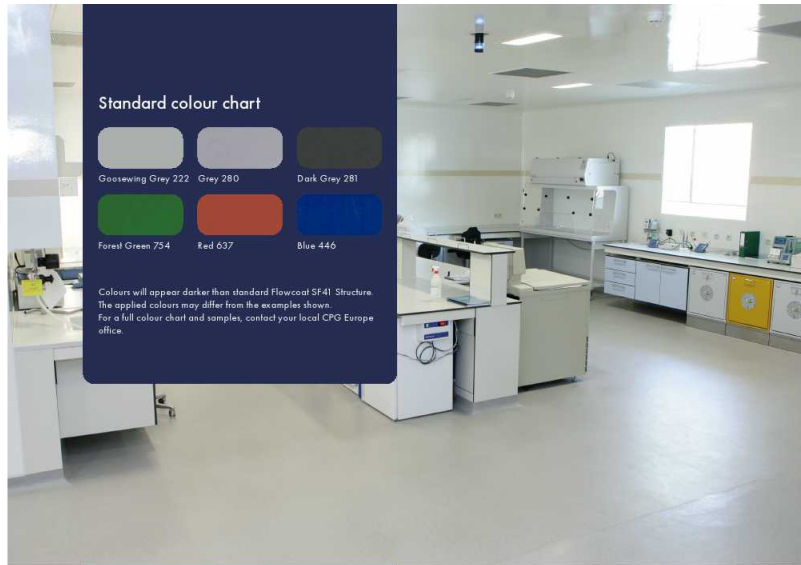
ELECTRICAL RESISTANCE	
$R_a < 10^9 \Omega$	EN 61340-5-1
Body Voltage Generation < 100 V	EN 61340-4-5
SLIP RESISTANCE <sup>4</sup>	
Dry > 40	EN 13036-4
TEMPERATURE RESISTANCE	
Sustained heat: +50°C, intermittent spillages: +70°C	
CAPILLARY ABSORPTION & PERMEABILITY TO WATER	
0,001 kg/m <sup>2</sup> h <sup>0,5</sup>	EN 1062-3
SURFACE HARDNESS	
285 N/mm <sup>2</sup>	EN 13892-6
COMPRESSIVE STRENGTH	
> 80 N/mm <sup>2</sup>	EN 13892-2
FLEXURAL STRENGTH	
> 60 N/mm <sup>2</sup>	EN 13892-2
TENSILE STRENGTH	
> 15 N/mm <sup>2</sup>	BS 6319
IMPACT RESISTANCE	
10 Nm	EN ISO 6272-1
BOND STRENGTH	
> 2,5 MPa	EN 13892-8



### Standard colour chart



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### Technical information<sup>3</sup>

ELECTRICAL RESISTANCE	
$R_a < 1 \times 10^9 \Omega$	EN 61340-5-1
Body Voltage Generation < 100 V	EN 61340-4-5
SLIP RESISTANCE <sup>4</sup>	
Dry > 40	EN 13036-4
TEMPERATURE RESISTANCE	
Sustained heat: +50°C, intermittent spillages: +70°C	
CAPILLARY ABSORPTION & PERMEABILITY TO WATER	
0,001 kg/m <sup>2</sup> h <sup>0,5</sup>	EN 1062-3
SURFACE HARDNESS	
285 N/mm <sup>2</sup>	EN 13892-6
COMPRESSIVE STRENGTH	
> 80 N/mm <sup>2</sup>	EN 13892-2
FLEXURAL STRENGTH	
> 60 N/mm <sup>2</sup>	EN 13892-2

## 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.

 Antistatic properties

 Durability

 Antislip finish

<sup>3</sup> 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. <sup>4</sup> 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 SL

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

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

-  Antistatic properties
-  High chemical resistance
-  Smooth, seamless & hygienic surface
-  Easy to clean
-  High durability

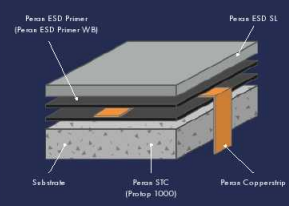
### Standard colour chart



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 information<sup>3</sup>

ELECTRICAL RESISTANCE	
$5 \times 10^9 \Omega \leq R_s \leq 1 \times 10^8 \Omega$	EN 61340-4-1
REACTION TO FIRE	
$C_{g-1}$	EN 13501-1
SLIP RESISTANCE <sup>4</sup>	
Dry > 40	EN 13036-4
VAPOUR PERMEABILITY	
0,4 g/m <sup>2</sup> /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/mm <sup>2</sup>	EN 13892-2
FLEXURAL STRENGTH	
> 40 N/mm <sup>2</sup>	EN 13892-2
TENSILE STRENGTH	
> 25 N/mm <sup>2</sup>	BS 6319-7
IMPACT RESISTANCE	
IR17	EN ISO 6272-1
BOND STRENGTH	
82,7	EN 13813



### Standard colour chart



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.

### Technical Information<sup>3</sup>

ELECTRICAL RESISTANCE	
$R_s \leq 1 \times 10^9 \Omega$	EN 61340-5-1
Body Voltage Generation < 100 V	EN 61340-4-5
SLIP RESISTANCE <sup>4</sup>	
Dry > 40	EN 13036-4
TEMPERATURE RESISTANCE	
Up to +60°C	
WATER PERMEABILITY	
Karsten test - Nil (Impermeable)	
WEAR RESISTANCE	
AR0,5	EN 13892-4
COMPRESSIVE STRENGTH	
> 60 N/mm <sup>2</sup>	EN 13892-2
FLEXURAL STRENGTH	
> 50 N/mm <sup>2</sup>	EN 13892-2

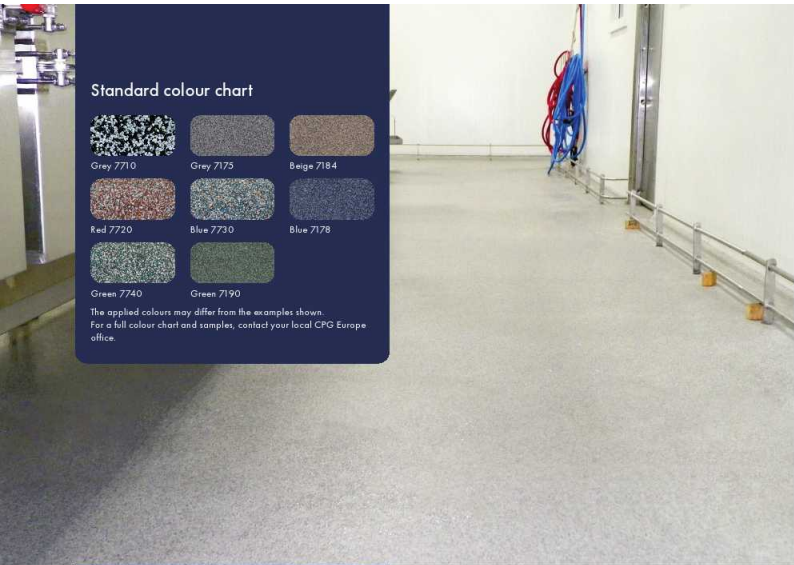
## Peran ESD SL20

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

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

-  Antistatic properties
-  Smooth, seamless & hygienic surface
-  Durability
-  Easy to clean

<sup>3</sup> 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.  
<sup>4</sup> 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.



Standard colour chart



The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local CPG Europe office.




Technical Information<sup>3</sup>

<b>ELECTRICAL RESISTANCE</b>	
$5 \times 10^6 \Omega \leq R_{\square} \leq 1 \times 10^9 \Omega$	EN 61340-4-1
<b>REACTION TO FIRE</b>	
$R_{p+1}$	EN 13501-1
<b>SLIP RESISTANCE<sup>4</sup></b>	
Wet > 40	EN 13036-4
<b>TEMPERATURE RESISTANCE</b>	
Do +50°C	
<b>WEAR RESISTANCE</b>	
RWA1	EN 13892-5
<b>FLEXURAL STRENGTH</b>	
> 40 N/mm <sup>2</sup>	EN 13892-2
<b>IMPACT RESISTANCE</b>	
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.

-  Antistatic
-  Antislip finish
-  Durability & high chemical resistance

Technical Information<sup>3</sup>

<b>ELECTRICAL RESISTANCE</b>	
$5 \times 10^6 \Omega \leq R_{\square} \leq 1 \times 10^9 \Omega$	EN 61340-4-1
<b>REACTION TO FIRE</b>	
$R_{p+1}$	EN 13501-1
<b>SLIP RESISTANCE<sup>4</sup></b>	
Dry > 40	EN 13036-4
<b>TEMPERATURE RESISTANCE</b>	
Up to +50°C	
<b>FLEXURAL STRENGTH</b>	
> 40 N/mm <sup>2</sup>	EN 13892-2
<b>TENSILE STRENGTH</b>	
15 N/mm <sup>2</sup>	EN 13892-2
<b>IMPACT RESISTANCE</b>	
IR20	EN ISO 6272-1

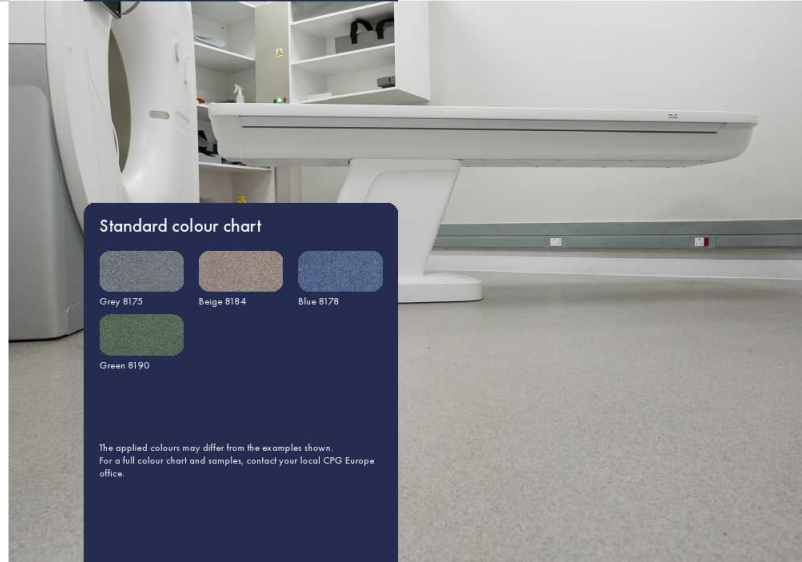
Peran ESD STB Compact

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

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

-  Antistatic properties
-  Durability & chemical resistance
-  Antislip finish

<sup>3</sup> 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.  
<sup>4</sup> 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.



Standard colour chart



The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local CPG Europe office.

## 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.
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 environments 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.



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