

# Flowchem VE ESD HD

An electrostatic dissipative, horizontal trowel applied, low shrink, vinyl ester resin based screed system with outstanding chemical and mechanical resistance.





## Temperature Resistant:

To +160°C (system thickness 5 mm); to +185°C (system thickness 10 & 15 mm); resistant for temperature changes

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## Electrostatic discharge properties: Electrostatic properties in accordance

with the PN-EN IEC 61340 standard for EX zones (5 mm system)



#### Resistant to Chemicals:

Resistant to concentrated acids and alkalis (almost the entire pH scale), in gaseous and liquid form



#### Wear Resistant:

Excellent abrasion and good impact resistance

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REACTION TO FIRE $B_{g}$ -s1EN 13501-1ELECTRIC RESISTANCE5 x 10 <sup>4</sup> - 1 x 10° Ohm (5 mm system) 5 x 10 <sup>4</sup> - 1 x 10° Ohm (10-15 mm system)PN-EN IEC 61340-5-1 <b>TEMPERATURE RESISTANCE</b> + 160°C for 5 mm system; + 185°C for 10-15 mm system)ASTM 648.56 <b>SLIP RESISTANCE</b> ?Dry > 40BS 7976-2 <b>VOLUME SHRINKAGE</b> < 0,003 %RILL 4 2.5.3.2.1 <b>BARCOL HARDNESS</b> ASTM 2583 <b>2 4 GPa</b> ASTM 2583 <b>E-MODULUS</b> 24 GPaASTM D-695 <b>COMPRESSIVE STRENGTH</b> 120 MPaASTM D-695 <b>FLEXURAL STRENGTH</b> 42 MPaASTM D-695 <b>FLEXURAL STRENGTH</b> 23 MPaASTM D-638 <b>ADHESION</b> > 4 MPa (Substrate failure)SPEED OF CURE? <b>PLEO OF CURE</b> 12 hFull Traffic12 hFull Traffic24 h		·
"         Image: Constraint of the system           5 x 10 <sup>4</sup> - 1 x 10 <sup>0</sup> Ohm (5 mm system)         PN-EN IEC 61340-5-1           5 x 10 <sup>4</sup> - 1 x 10 <sup>0</sup> Ohm (10-15 mm system)         PN-EN IEC 61340-5-1           TEMPERATURE RESISTANCE         ASTM 648.56           + 160°C for 5 mm system; + 185°C for 10-15 mm system         ASTM 648.56           SLIP RESISTANCE <sup>2</sup> Dry > 40           Dry > 40         BS 7976-2           VOLUME SHRINKAGE            < 0,003 %	REACTION TO FIRE	
$5 \times 10^4 - 1 \times 10^6 Ohm$ $(5 mm system)$ $5 \times 10^4 - 1 \times 10^9 Ohm$ $(10-15 mm system)$ PN-EN IEC 61340-5-1TEMPERATURE RESISTANCE $+ 160^\circ$ C for 5 mm system; $+ 185^\circ$ C for 10-15 mm systemASTM 648.56 $+ 160^\circ$ C for 5 mm system; $+ 185^\circ$ C for 10-15 mm systemASTM 648.56SLIP RESISTANCE2Dry > 40BS 7976-2VOLUME SHRINKAGE< 0,003 %	B <sub>n</sub> -s1	EN 13501-1
(5 mm system)       5 x 10 <sup>4</sup> - 1 x 10° Ohm         (10-15 mm system)       ITEMPERATURE RESISTANCE         + 160°C for 5 mm system;       ASTM 648.56         + 185°C for 10-15 mm system       ASTM 648.56         SLIP RESISTANCE <sup>2</sup> Dry > 40         Dry > 40       BS 7976-2         VOLUME SHRINKAGE          < 0,003 %	ELECTRIC RESISTANCE	
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42 MPa     ASTM D-790       TENSILE STRENGTH     23 MPa       23 MPa     ASTM D-638       ADHESION     -       > 4 MPa (Substrate failure)     -       SPEED OF CURE <sup>2</sup> +20°C       Light Traffic     12 h       Full Traffic     24 h	120 MPa	ASTM D-695
TENSILE STRENGTH       23 MPa       ASTM D-638       ADHESION       > 4 MPa (Substrate failure)         SPEED OF CURE <sup>2</sup> +20°C       Light Traffic       12 h       Full Traffic       24 h	FLEXURAL STRENGTH	
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SPEED OF CURE <sup>2</sup> +20°C       Light Traffic     12 h       Full Traffic     24 h	ADHESION	
Light Traffic 12 h Full Traffic 24 h	> 4 MPa (Substrate failure)	
Light Traffic 12 h Full Traffic 24 h		
Full Traffic 24 h		
Full Chemical Cure 72 h		
	Full Chemical Cure	72 h

#### Black

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

### **Model Specification**

Model Specification	Flowchem VE ESD HD
Finish	Satin
Thickness	5-15 mm
Colour	Black
Producer:	CPG Europe
Supplier:	Tremco CPG Poland Sp. z o.o.
Telephone:	+48 22 879 89 07

#### Installation Service

The installation should be carried out by a Flowcrete approved contractors with a documented quality assurance scheme. Obtain details of our approved contractors by contacting CPG Eastern Europe or enquiring via our website at www.flowcrete.com.pl.

## Products Included in this System

Primer:	Flowchem VE Primer;	
	Peran Copperstrip	
Conductive layer:	Flowchem VE ESD Primer	
Top layer:	Flowchem VE ESD HD	

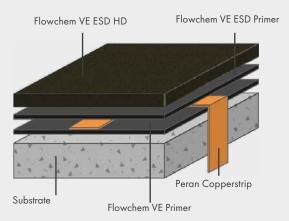
## Aftercare – Cleaning and Maintenance

Posadzkę można zamiatać, odkurzać, zmywać na mokro lub sprzątać przy użyciu maszyny czyszczącej wyposażonej w tarcze szczotkowe w połączeniu ze średnio alkalicznym detergentem.

#### Substrate Requirements

Concrete or screed substrate should be class min. C20/25, a minimum bond strength of 1,5 MPa (pulloff test), surface even, clean, free from laitance, dust and other contamination. All damages in the substrate should be repaired prior to applying the flooring. The substrate should be dry up to 75% RH as per BS 8204 (5% humidity measured by the Tramex method) and free from rising damp and ground water pressure. In case of higher humidity, one should use combination of Flowfresh Primer and Hydraseal DPM as primer. Details to be found in the *Flowcrete Resin Flooring Substrate Requirements.* 

## System Design



## **Environmental Considerations**

The finished system is assessed as non-hazardous to health and the environment. The long service life and seamless, impermeable surface with perfect adhesion to the substrate reduce the need for repairs and maintenance.

Technical information, recommendations and instructions concerning the product use, storage and maintenance included in this System Data Sheet are based on Tremco CPG Poland Sp. z o.o. (further related as "CPG Polska") knowledge and experience, reflecting the best acknowledged way of using the material for a given moment. Taking into consideration other factors that are beyond the producer's control, including differences in quality of substrates, tools and other complementary materials, weather conditions, proper installation and also cleaning and maintenance, CPG Polska cannowledge and other complementary materials, weather conditions, proper installation and also cleaning and maintenance. CPG Polska cannow with up-to-date norms and building principles, and also safety, hyginee and health production rules according to the information included in Material Safety Data Sheets and also on the products packaging. This System Data Sheet replaces all previous versions. In order to receive up-to-date System Data Sheets contact CPG Polska.

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