



# DRI-FLOOR ESD 1600

## 2-component, electrically conductive dissipative self-levelling epoxy coating

Self-levelling epoxy-based formulation with electrically conductive coatings according to ESD requirements. It is suitable to be installed on concrete or cementitious-based substrates.

### FEATURES/BENEFITS

- Electrically conductive
- Suitable even for heavy traffic areas
- Good chemical resistance
- Dustproof
- Easy maintenance and upkeep

### APPLICATION AREAS

- Electronic industries
- Chemical industries
- Pharmaceutical industries
- Laboratories
- Aerospace industries
- Areas that require conductive floors or clean environments

### PRODUCT DATA

<b>Appearances / Colours</b>	Opaque (Custom colours available)
<b>Packaging</b>	20kg set
<b>Storage</b>	12 months from date of production
<b>Storage Condition</b>	Stored at cool & dry conditions in original unopened packaging. Storage should not be at very low temperatures as this will affect product workability.

### TECHNICAL DATA

<b>Origin</b>	Epoxy
<b>Density</b>	Approx. 1.30 kg/l $\pm$ 0.05 (mixture)
<b>Workability</b>	<ul style="list-style-type: none"><li>• 40 minutes @ 10°C</li><li>• 25 minutes @ 20°C</li><li>• 15 minutes @ 30°C</li></ul>
<b>Overcoating Time (after primer coat)</b>	<ul style="list-style-type: none"><li>• 1 – 7 days @ 10°C</li><li>• 18 hours – 5 days @ 20°C</li><li>• 12 hours – 4 days @ 30°C</li></ul>
<b>Open to Foot Traffic</b>	<ul style="list-style-type: none"><li>• 30 hours @ 10°C</li><li>• 24 hours @ 20°C</li><li>• 16 hours @ 30°C</li></ul>
<b>Full Cure</b>	<ul style="list-style-type: none"><li>• 10 days @ 10°C</li><li>• 7 days @ 20°C</li><li>• 5 days @ 30°C</li></ul>
<b>Application Temperature</b>	8 – 35 °C

\* Curing time may vary and are subjected to ambient conditions.

## TECHNICAL PROPERTIES

<b>Electrical Resistance</b>	$R_E < 10^6 \Omega$ (EN 1081)
<b>Resistance to Ground</b>	$R_E < 10^9 \Omega$ (DIN 61340-4-1)
<b>Walking Test (DIN 61340-4-5)</b>	< 100V
<b>Compressive Strength</b>	~ 55 MPa @ 7 days
<b>Flexural Strength</b>	~ 28 MPa @ 7 days
<b>Taber Abrasion Resistance</b>	~ 80 mg (CS10 abrasive wheel, 1000 g load, 1000 revolutions)

## SUBSTRATE

New concrete should be cured for at least 28 days and should have a pull-off strength  $\geq 1.5 \text{ N/mm}^2$ . Cement or mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface. Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed. Substrate must have sufficient gradient for surface water to run off easily without ponding water. Substrate must not contain >4% moisture with no rising dampness (checked by testing with polythene sheet). A suitable primer system must be used along with the installation of copper band strips prior to the installation of Dri-Floor ESD 1600 in order to create an electrically conductive system.

## MIXING

Dri-Floor ESD 1600 consists of a base & a hardener component supplied in pre-batched packs. Before application, the base and hardener components are carefully mixed by means of slowly rotating electric drill with paddle. To complete the mixing, the resin is poured from one can to another and mixed again. Mineral aggregates are mixed with the binding resin by means of a forced action mixer. To ensure the correct mixing ratio & for ecological reasons, packs should be emptied thoroughly. It is recommended to mix in full sets.

## APPLICATION

Application of Dri-Floor ESD 1600 can be done in a single layer up to 1.5 – 2.0 mm thick with a notched spreader or rake over the entire surface to be treated. Once the product has been spread, back-roll with a spike roller (in two perpendicular directions) to remove any entrained air. Ensure sufficient cure time is allowed before opening for traffic.

## LIMITATIONS

- Do not apply on substrates with rising moisture. Freshly applied coatings should be protected from damp, condensation, and water for at least 24 hours.
- Dri-Floor ESD 1600 is applied on substrates after a suitable water-based primer for electrically conductive coatings, such as Dri-Floor EP 1060, is applied.
- Do not dilute Dri-Floor ESD 1600 with water or solvents.
- The colour or surface of Dri-Floor ESD 1600 may be affected by the electrically-conductive fillers within the product. This does not affect its performance or functionality.
- The colour of Dri-Floor ESD 1600 may vary or yellow or chalk under UV. This does not affect its performance or functionality.
- Do not apply product on >1% sloped areas.

## HEALTH & SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTE

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The information, and, in particular, the recommendations relating to the application and end-use of these products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance to the manufacturer recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising

out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. The manufacturer reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

