Strongcoat Dissipative

Dissipative floor with resistance up to 1x10⁹ Ohm

DESCRIPTION

Strongcoat Dissipative is a flow-applied thick epoxy resin floor topping with dissipative properties. The system comprises of an epoxy primer, a dissipative epoxy base coat and a dissipative epoxy topcoat.

APPLICATIONS

Strongcoat Dissipative has a resistance up to 1 x 10^9 Ohm. Strongcoat Dissipative is suitable for use in areas where a static dissipative floor is required, such as:

- Electronic manufacturing facilities.
- Hospital operation theatres.
- Hazardous dust and chemical environments.

ADVANTAGES

- Provide a dissipative floor for static electricity to pass through to earth controlling static electricity.
- Alternative smooth finish.
- Hard wearing surface that can be subjected to heavy foot traffic and forklift traffic.
- Chemical resistant.

METHOD OF USE

SUBSTRATE PREPARATION

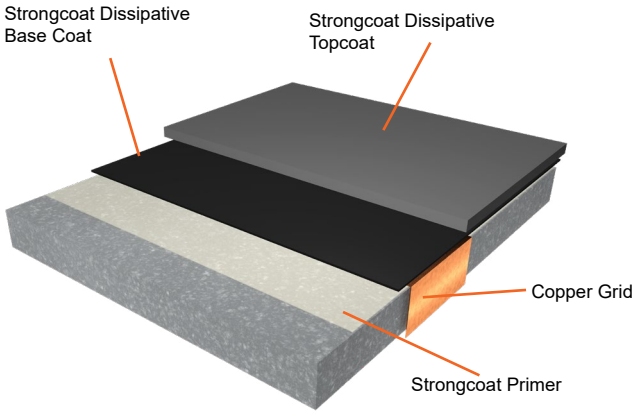
The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminations. A clean surface will ensure maximum adhesion between the substrate and the coating.

Concrete floors must have a minimum compressive strength of 25 MPa and a maximum concrete relative humidity of 80% (max. moisture content of 4%). Relative humidity can be measured by using hygrometers.

Concrete relative humidity should be less than 80% for concrete of 28 days old or more.

SURFACE PREPARATION

Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment. In case of areas deeply contaminated by oil or grease, such areas should be treated with hot compressed air.



ELECTRICAL PROPERTIES:	
Surface resistance: ASTM F150-78	≤ 1 x 10^9 ohms

PHYSICAL PROPERTIES FOR TOPCOAT:	
Mixed density:	1.6 ± 0.1 g/cm³
Pot life:	40 - 60 min @ 25ºC
Cure time: Foot traffic Vehicular traffic	 24 hr @ 25ºC 48 hr @ 25ºC
Compressive strength: BS 6319-2	≥ 75 MPa @ 7 days
Flexural strength: BS 6319-3	≥ 30 MPa @ 7 days
Tensile strength: BS 6319-7	≥ 12 MPa @ 7 days
VOC:	< 50 g/ltr

PHYSICAL PROPERTIES FOR BASE COAT:	
Colour:	Black
Mixed density:	1.05 ± 0.05 g/cm³
Pot life:	1 - 2 hr @ 25ºC
Tack free time:	2 - 3 hr @ 25ºC

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PRIMING

Concrete substrates should be primed with Strongcoat Primer. The primer should be allowed to cure for 24 hours. Use lambs wool roller to apply the primer. More than one coat may be required for highly porous or textured surfaces.

Once the primer has fully cured, copper tape shall be applied to the primed concrete substrate in accordance with the approved method statement, which provides detailed requirements and procedures for the application of the copper tape.

STRONGCOAT DISSIPATIVE BASE COAT

Prior to mixing, stir the two components of Strongcoat Dissipative (base & hardener). The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes.

The use of a heavy duty slow speed drill fitted with a mixing paddle is recommended. Application is done by using a suitable short hair roller. Allow to cure for 24 hours at normal conditions before being over coated with the topcoat.

STRONGCOAT DISSIPATIVE TOPCOAT

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the resin and hardener and colour pack into a separate mixing container.

Using a jiffy-type mixer attached to a slow-running electric drill, mix for approximately for 2 minutes. Once the Strongcoat Dissipative hardener, resin and colour pack have been mixed, transfer the entire contents into a Casco or Creteangel-type mixer, taking care to ensure that the bottom and sides are thoroughly scrapped.

Start the mixer and transfer to it the entire contents of the Strongcoat Dissipative filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

Once mixed, the Topcoat should be laid using a V-shape notched trowel or pin leveler at a coverage rate of 3.4 kg/ m² to achieve 2.0 mm thickness.

OCCASIONAL SPILLAGE

Chemical Resistance after full cure (7 days @ 25°C)

Organic Acids	
Lactic Acid 10%	RS + SS
Oleic Acid sat.	R
Citric Acid 25%	RS
Vinegar 10%	R
Inorganic Bases	
Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R
Aqueous Solutions	
Sodium Chloride sat	R
Tap Water	R
Chlorinated Water	R
Dead Sea Water	R
Solvents	
White Spirit	R
Xylene	R
Toluene	R
Acetone	R
Oils & Fuels	
Benzyl Alcohol	R
Brake Fluid	RS
Engine Oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R
Inorganic Acids	
Sulphuric Acid 25%	R
Phosphoric Acid 20%	RS + SS
Hydrochloric Acid 36%	RS + SS
Nitric Acid 10%	R

R: Resistant
RS: Resistant with slight discolouration
SS: Slight softening

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Care should be taken when joining the lanes, to achieve a smooth connection. Good lighting conditions will assist in even application and spoting the poorly covered areas.

It is recommended to mask off edges with tape which is then removed while product is still wet.

After around 10 minutes of laying the topcoat, it should be rolled using a spike roller at right angle to the direction of laying. After further 15 - 20 minutes, a second spike rolling should be done in a perpendicular direction to the first direction.

For more information about the installation and verification of Strongcoat Dissipative refer to the product's Method Statement of contact DCP Technical department.

REMARKS

In lighter colour shades, the product may experience accelerated yellowing over time, even indoors, particularly when exposed to heat from strong lighting (e.g., industrial discharge lamps, fluorescent lamps, metal halide or mercury vapour lamps).

PACKAGING

Strongcoat Primer: 5 kg packs.
Strongcoat Dissipative Topcoat: 15 kg packs.
Strongcoat Dissipative Base Coat: 5 kg packs.

COVERAGE

Strongcoat Primer: 5 m²/kg @ 200 micron DFT.
Strongcoat Dissipative Base Coat: 7.5 m²/kg @ 125 micron DFT.
Strongcoat Dissipative Topcoat: 3.2 kg/m² @ 2 mm DFT.

Actual coverage can vary depending on the substrate conditions.

STORAGE

Strongcoat Dissipative system has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 30°C.

If these conditions are exceeded, contact DCP Technical Department for advice.

CAUTIONS

HEALTH AND SAFETY

Strongcoat Dissipative should not come into contact with skin and eyes.
In case of contact with eyes, immediately flush with plenty of water and seek medical attention.

For further information, refer to the Material Safety Data Sheet.

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- Concrete admixtures.
- Surface treatments
- Grouts and anchors.
- Concrete repair.
- Flooring systems.
- Protective coatings.
- Sealants.
- Waterproofing.
- Adhesives.
- Tile adhesives and grouts.
- Building products.
- Structural strengthening.