

Strongcoat SLW

Water based, damp tolerant, 0.5 - 1.5 mm thick self leveling epoxy topping for floor surfaces



Description

Strongcoat SLW is four component, damp tolerant, water based epoxy self leveling topping that provides floor surfaces with a seamless, hygienic and cosmetically attractive matt finish.

Strongcoat SLW is applied by trowel or rack to horizontal surfaces and has very good durability towards pedestrian and light vehicular traffic. It also has very good resistance to many chemicals.

It can be supplied in a variety of colours (consult our sales Department for details). Strongcoat SLW cures to a durable and hard wearing matt finish.

Applications

Strongcoat SLW is used to provide a seamless hygienic, dense and hard wearing surface for concrete floors for a wide range of applications such as:

- ▲ Hospitals.
- ▲ Pharmaceutical factories.
- ▲ Showrooms.
- ▲ Laboratories.
- ▲ Light industrial plants.
- ▲ Kitchens, Restaurants and reception areas.
- ▲ Schools, colleges, and universities.
- ▲ Retail environments, offices and in all places that stay occupied during flooring applications.

Advantages

- ▲ Rapid drying time permits faster use of floors.
- ▲ Good chemical resistance to a wide range of chemicals.
- ▲ Hygienic and cosmetically attractive seamless matt finish.
- ▲ Easy to clean and to maintain.
- ▲ Available in a range of attractive colours.
- ▲ Zero VOC, complies with LEED requirements.

Method of Use

Substrate Condition

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

Technical Properties:

Appearance:	Matt
Colour:	Wide range of colours
Mixed density:	1.60 ± 0.05 g/cm ³
Pot life:	20 min
Foot traffic:	24 hr
Light traffic:	48 hr
Bond strength: ASTM D4541-95	> 2 MPa (concrete failure)
Compressive strength: BS 6319, part 2:1983	> 30 MPa @28 days
Flexural strength: BS 6319, part 3:1990	> 10 MPa @28 days
Tensile strength: BS 6319, part 7:1985	> 3.5 MPa @28 days
Shore D hardness: ASTM D2240	> 60 @28 days
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	90 mg @28 days
VOC: ASTM 2369	< 10 gr/ltr (complies with LEED)

Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 85%, relative humidity can be measured using a hygrometer.

Concrete relative humidity should be less than 85% for concrete 14 days old or more.

Contact DCP Technical Department for further details.

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 by hot compressed air.

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Priming

Strongcoat SLW can be applied directly on damp or even on fresh concrete substrates, or over its primer (Strongcoat SLW Primer diluted up to 80% by water) or over Strongcoat WD. Use lambs wool roller to apply the primer.

More than one coat may be required for highly porous or textured surfaces.

The primer should be allowed to cure for 18 to 24 hours at 25°C before applying a second coat or prior to applying Strongcoat SLW.

Mixing

Strongcoat SLW is supplied in four pre-weighted packs base, hardener, filler and color packs which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application.

Prior to mixing, stir individual components of Resin, Hardener and colour pack. Add the entire contents of the colour pack into the base container and mix with heavy duty drill for 1 minute maximum till a uniform colour is achieved. Add the entire contents of the mixed colour pack and base to the hardener container and mix thoroughly for further 1 min.

Once the Strongcoat SLW Hardener, Resin, and colour pack have been mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.

Start the mixer and slowly add the entire contents of the Strongcoat SLW Filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 3 minutes until a completely homogenous material is obtained.

Note: Never mix Strongcoat SLW by hand as this could lead to areas of uncured material.

Occasional spillage: Chemical resistance after full cure (7 days @ 25°C), ASTM D1308 (Spot test @ 1 hr)

Organic Acids

Citric acid 25%	R
Acetic Acid 10%	RS
Lactic Acid 10%	R

Inorganic Bases

Sodium Hydroxide 50%	R
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Aqueous Solutions

Tap water	R
Distilled water	R
Sodium Chloride Sat.	R
Chlorinated Water	R

Solvents

Xylene	R
Ethylene Glycol	R

Oils & Fuels

Diesel	R
Brake Fluid	R
Engine Oil	R

Inorganic Acids

Sulphuric Acid 25%	R
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	RS
Nitric Acid 10%	R

R: Resistant

RS: Resistant with slight discoloration

Application

Once mixing is complete, transfer the Strongcoat SLW to the primed surface at the required thickness by rack. Care should be taken when joining the lanes, to achieve a smooth connection. It is recommended to mask off edges with tape which is then removed while Strongcoat SLW is still wet.

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Finishing

While still wet, thoroughly spike roll the Strongcoat SLW.

Remarks

- ▲ Never leave the mixed Strongcoat SLW to stand for any length of time prior to application as this will considerably shorten its working time. DCP Technical department should be contacted for advice.
- ▲ Strongcoat SLW should not be applied onto surfaces known to suffer from damp rising.
- ▲ Strongcoat SLW should not be applied at temperatures below 10°C.
- ▲ For temperatures above 30°C the following steps need to be done:
 - i. Material needs to be stored in a cool place away from direct sunlight.
 - ii. Equipments to be into direct contact with the material, needs to be cool.
 - iii. Application during the coolest time of the day is preferable.

Cleaning

All tools should be cleaned immediately after application with water. Hardened materials must be cleaned mechanically.

Packaging

Strongcoat SLW is supplied in 20 kg (12.4 ltr) packs. Strongcoat SLW Primer and Strongcoat WD are supplied in 5 kg packs.

Coverage

Strongcoat SLW Primer:

45 - 52.5 m²/ 5 kg pack per coat to achieve 65 - 75 microns DFT.

30 m²/ 5 kg pack per coat to achieve 65 - 75 microns DFT.

Strongcoat SLW:

0.8 kg/m² to achieve 500 microns dry film thickness.

1.6 kg/m² to achieve 1000 microns dry film thickness.

2.4 kg/m² to achieve 1500 microns dry film thickness.

Storage

Strongcoat SLW and primer have a shelf life of 12 months from date of manufacture if stored if stored at temperatures between 5°C and 25°C.

If these conditions are exceeded, DCP Technical departments should be contacted for advice.

Cautions

Health and Safety

Strongcoat SLW and its primer should not come in contact with skin or eyes.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

For further information refer to the material Safety Data Sheet.

Fire

Strongcoat SLW is nonflammable.

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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.

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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.



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