

# Strongcoat SL3

Self leveling topping for floor surfaces



## DESCRIPTION

Strongcoat SL3 is a three-component, solvent free, epoxy-based self-leveling topping designed to provide floor surfaces with a seamless, durable, hygienic and cosmetically attractive finish.

Strongcoat SL3 is applied to horizontal surfaces giving very good durability towards pedestrian and vehicular traffic. It also has very good resistance to many of the chemicals commonly found in an industrial environment and can be supplied in a variety of colours.

Strongcoat SL3 cures to a durable, hard wearing surface providing continuous protection for concrete floors in light, medium and heavy duty applications with a thickness range between 2 - 4 mm.

Strongcoat SL3 is also available in a slow curing grade (Strongcoat SL3-S) specially formulated for application in hot weather conditions.

## APPLICATIONS

Strongcoat SL3 is used to provide a hygienic, dense and hard wearing surface for concrete floors for a wide range of applications such as:

- » Aircraft hangars.
- » Hospitals.
- » Pharmaceutical factories.
- » Showrooms.
- » Laboratories.
- » Heavy or light industrial plants.
- » Kitchens.
- » Food & beverage production facilities.
- » Car parks and traffic decks.

## ADVANTAGES

- » Provides hygienic floor.
- » Hard wearing system.
- » Solvent free.
- » Available in a wide range of attractive colours.
- » Resistant to a wide range of chemicals.
- » Provides a smooth gloss finish.

## STANDARDS

Strongcoat SL3 complies with EN 13813, SR-B2.0-AR0.5-IR9.0.

## TECHNICAL PROPERTIES @ 25°C:

Mixed density:	1.75 ± 0.10 g/cm <sup>3</sup>
Pot life:	45 - 65 min
Foot traffic:	After 24 hr
Vehicular traffic:	After 48 hr
Chemical curing:	7 days
Compressive strength: BS EN 13892-2	≥ 85 MPa @ 7 days
Flexural strength: BS EN 13892-2	≥ 30 MPa @ 7 days
Tensile strength: BS 6319, Part 7	≥ 13 MPa @ 7 days
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss	
H22 wheel	400 milligram
CS17 wheel	130 milligram
Maximum wear depth: BS EN 13892-4	0.05 mm (class AR0.5)
Impact resistance: ISO 6272-2	9.0 N.m
Bond strength: BS EN 13892-8 ASTM D4541	> 2 MPa (concrete failure)
VOC: ASTM D2369	< 30 g/ltr (comply with LEED)



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## METHOD OF USE

### SUBSTRATE PREPARATION

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. 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.

Contact DCP Technical Department for further details.

### SURFACE PREPARATION

Ensure that all pinholes and grooves in the prepared substrate are properly filled using suitable epoxy putty materials prior to the application of subsequent layers. This is crucial to prevent pinhole reflection and to achieve a smooth, seamless finish.

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.

### PRIMING

Concrete substrates should be primed with Strongcoat Primer or Strongcoat Primer S. 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.

### MIXING

Prior to mixing, stir the individual components of Strongcoat SL3, taking care to ensure that the bottom and sides are thoroughly scraped. Transfer the entire contents of the Base and Hardener into a separate mixing container.

Using a Jiffy-type mixer attached to a slow-running electrical drill, mix for approximately 2 minutes. Once mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.

## CHEMICAL RESISTANCE

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

### Organic Acids

Lactic Acid 10%	RS + SS
Oleic Acid sat.	RS
Citric Acid 25%	RS

### 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
Ethanol	R
Ethyl acetate	R
N propanol	R
Methoxy propanol	R

### Oils & Fuels

Brake Fluid	RS
Engine Oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R

### Inorganic Acids

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

R: Resistant

RS: Resistant with slight discolouration

SS: Slight softening

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Start the mixer and transfer to it the entire contents of the Strongcoat SL3 Filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

#### Notes:

- » *Never mix Strongcoat SL3 by hand as this could lead to areas of uncured material.*
- » *In certain cases, the Base of the product can be supplied uncoloured and needs the addition of a colour pack. In such cases, mix the components of the Base, Hardener and colour pack using same procedure above, then add the filler component accordingly.*

#### APPLICATION

Once mixing is complete, transfer the Strongcoat SL3 to the prime 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 SL3 is still wet.

#### FINISHING

While still wet, thoroughly spike roll the Strongcoat SL3.

#### REMARKS

- » Strongcoat SL3 should not be applied on to surfaces known to suffer from damp rising.
- » Strongcoat SL3 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.
- » 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).

#### CLEANING

Strongcoat SL3 can be removed by DCP Solvent prior setting.

#### PACKAGING

Strongcoat SL3 is available in 19 kg packs (10.85 litre), other packages are available upon request.

#### THICKNESS RANGE

2.0 - 4.0 mm.

#### COVERAGE

Approximately 5.4 m<sup>2</sup>/19 kg kit @ 2 mm thick.

Actual coverage can vary depending on the substrate conditions.

#### STORAGE

Strongcoat SL3 and primer have 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.



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## CAUTIONS

### HEALTH AND SAFETY

Strongcoat SL3 and its primer 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.

### FIRE

Strongcoat SL3 is nonflammable.

## MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

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



#### 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.