

# Strongcoat HC

Medium to heavy duty high build epoxy floor coating for vehicle decking system



## Description

Strongcoat HC is a hard wearing, epoxy base coating system primarily designed for use in car parks. It has excellent resistance to petrol, battery acid, diesel, brake fluid, de-icing salts, etc. Strongcoat HC System is formulated for easy application by roller or brush.

Strongcoat HC is multi layer system consists of the following:

- ▲ Strongcoat EC10, a primer with excellent adhesion to concrete substrates.
- ▲ Strongcoat HB, a high build , solvent free epoxy coating.
- ▲ Strongcoat HB, a high build, solvent free epoxy coating.

## Applications

Strongcoat HC System is designed for use in applications, such as:

- ▲ Car park decks.
- ▲ Car park ramps and turning circles.
- ▲ Traffic aisles and parking bays.
- ▲ Road marking.

## Advantages

- ▲ Seamless.
- ▲ Excellent chemical resistance.
- ▲ Excellent resistant to petrol, battery acid, diesel and brake fluid.
- ▲ Resistant to de-icing.
- ▲ Can be applied as a smooth and anti-slip coating systems.

## System Specification

The combination of products specified depends on the area within the car part to which the Strongcoat HC System is being applied.

### Car parks decks

*Ramps and turning circles, Antislip system*

- ▲ Strongcoat EC10.
- ▲ first coat of Strongcoat HB
- ▲ Second coat of Strongcoat HB + Full blind of Antislip Aggregates.
- ▲ One coat of Strongcoat HB.

*Ramps and turning circles, smooth application*

- ▲ Strongcoat EC10.
- ▲ First coat of Strongcoat HB.
- ▲ Two coats of Strongcoat HB.

*Traffic aisles and parking bays, Antislip system*

- ▲ Strongcoat EC10.
- ▲ One coat of Strongcoat HB + full blind of Antislip Aggregates.
- ▲ One coat of Strongcoat HB.

*Traffic aisles and parking bays, smooth application*

- ▲ Strongcoat EC10.
- ▲ First coat of Strongcoat HB .
- ▲ Second coat of Strongcoat HB.

## Method of Use

### Strongcoat EC10

### Surface Preparation and Priming

To obtain a proper bond the substrate must be structurally sound clean, dry (less than 75% RH measured using a hygrometer, unless it is a suspended deck free to dry from below) and free from dust, laitance, oils, paints or other forms of contamination. Grit blasting, grinding or scarification can be used to remove laitance and surface contamination.

Areas known to have been subject to heavy contamination should be thoroughly inspected before applying Strongcoat EC10. This is especially important where deposits of oil or grease have collected. Any irregularities within the substrate should be made good before the application of the Prime coat. Small defects may be made good using suitable repair materials such as Cempatch range or epoxy putty "Quickmast 341".

## Mixing

Strongcoat EC10 comprises three components; a resin, hardener and colour pack which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

# Strongcoat HC

Taking care to ensure that the bottom and sides are thoroughly drained, pour the contents of the hardener portion into the resin container.

Using a power whisk attached to a slow speed electric drill, mix for approximately 2 minutes, scrape down and re-mix for a further 1 minute, avoiding the entraining of excessive air, until a uniform consistency is obtained add the colours pack and further mix for 2 minutes. Allow to stand for 1 minute.

*Note: Never mix Strongcoat EC10 by hand as this could lead to areas of uncured material.*

## Application

Once mixing is complete, spread the Strongcoat EC10 onto the floor using a medium pile roller, ensuring it is worked well into the surface.

## Overcoating

Strongcoat EC10 may be overcoated as soon as it becomes tack free. If overcoating of the Strongcoat EC10 exceeds 30 hours, light scarification of the surface should be undertaken before further applications of Strongcoat HB.

## Strongcoat HB

### Surface Preparation

All surfaces should be primed with Strongcoat EC10 before applying Strongcoat HB.

### Mixing

Strongcoat HB comprises three components, a resin, hardener and colour pack which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

Pre-mix the resin component with a power whisk attached to a slow speed electric drill for 1 minute before mixing both components.

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the contents of the resin in to the hardener. Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes, ensuring the mixing head is pushed around the sides and bottom of the mixing container.

Transfer the contents into another container, scraping

down and re-mixing for a further 2 minutes avoiding the entraining of excessive air until a uniform consistency is obtained. Add the colour pack and further mix for 2 minutes.

## Application

Immediately after mixing is complete, spread the Strongcoat HB onto the primed floor using a short or medium pile roller and to obtain an antislip surface fully blinded with Antislip aggregates at the rate of 2 - 3 kg/m<sup>2</sup> and allow to dry. All excess aggregates shall be removed before applying the final top coat. To obtain smooth surface, Antislip aggregates are not used.

## Strongcoat HB

### Mixing

Strongcoat HB comprises three components, a resin, hardener and colour pack, which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of both components into a separate mixing container. Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes ensuring the mixing head is pushed around the sides and bottom of the mixing container. Add the colour pack and further mix for 2 minutes.

## Application

On completion of mixing immediately apply the Strongcoat HB at the required thickness to the Antislip blinded or smooth Strongcoat HB.

## Cleaning

Tools should be cleaned with Quickmast Solvent immediately after use.

## Packaging

Strongcoat EC10 is available in 5 and 20 kg packs.

Strongcoat HB is available in 6 and 18 kg packs.

Antislip Aggregate is available in 25 kg bags.



# Strongcoat HC

## Coverage

The coverage obtained will vary depending on the porosity and texture of the surface to which the System materials are applied and, if applicable, the type and size of aggregate used. As a guide, the minimum coverages (per coat) should be as follows:

Strongcoat EC10: 0.2 kg/m<sup>2</sup>.

Strongcoat HB: 0.30 - 0.40 kg/m<sup>2</sup>.

Strongcoat HB: 0.4- 0.5 kg/m<sup>2</sup> when broadcast with Antislip Aggregate.

Antislip Aggregate: 2 - 3 kg/m<sup>2</sup>.

## Storage

Store in a dry area at temperatures between 8°C and 35°C.

## Shelf Life

Strongcoat HC has a shelf life of 12 months from date of manufacture if stored un-opened, undamaged, sealed containers, stored under good conditions.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

## Cautions

## Health and Safety

Consult the appropriate Material Safety Data Sheet prior to using each product.

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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.

# Strongcoat HC

Technical Properties @ 25°C:	Strongcoat EC10	Strongcoat HB
Mixed density:	1.35 ± 0.05 g/cm <sup>3</sup>	1.60 ± 0.05 g/cm <sup>3</sup>
Pot life:	3 hr @ 25°C 1 hr @ 35°C	50 min @ 25°C 25 min @ 35°C
Minimum time between coats:	6 hr @ 25°C 4 hr @ 35°C	12 hr @ 25°C 6 hr @ 35°C.
Maximum time between coats:	24 hr @ 25°C 16 hr @ 35°C	36 hr @ 25°C 18 hr @ 35°C
Dry film thickness:	70 - 80 microns/coat	
Full curing time:	7 days @ 25°C 5 days @ 35°C	7 days @ 25°C 5 days @ 35°C
Compressive strength: BS 6319, Part 2:1983	-	70 MPa
Flexural strength: BS 6319, Part 3:1990	-	> 45 MPa
Tensile strength: ASTM D638	-	> 20 MPa
Bond strength: ASTM D4541-85	-	2.5 MPa (concrete failure)
Solid contents:	-	100%
Water absorption: ASTM D570	< 0.5%	< 0.6%
Scrub resistance: ASTM D2486/2000	> 5000 cycle	-
Adhesion: ISO 2409/1992	Excellent	-
Opacity: (Grindo pac)	5 m <sup>2</sup> /ltr	-
Abrasion resistance: ASTM D4060/01 1000 cycle 1000 g using CS-17 wheel	< 100 mg	-

## Note:

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