

Strongcoat HB PE

High-build epoxy floor coating



DESCRIPTION

Strongcoat HB PE is a cost effective premium quality two-pack, solvent free, epoxy-based coating, which provides floor surfaces with a seamless, hygienic and cosmetically attractive finish.

Strongcoat HB PE is applied by brush or roller in two coats and has very good durability towards pedestrian and vehicular traffic.

It also has very good resistance towards many of the chemicals commonly found in an industrial environment (consult our Technical Department for further details). Anti-Slip resistant finishes are available, please consult our Sales Department for further information.

APPLICATIONS

Strongcoat HB PE is used as protective, decorative, high chemical resistance and hard wearing floor coating system for a wide range of applications including:

- » Aircraft hangars.
- » Car parks.
- » Soft drink and beverage production areas.
- » Show rooms.
- » Production, maintenance and assembly areas.
- » Warehouses.
- » General food processing and manufacturing plants.

ADVANTAGES

- » Produces a seamless, glossy, glass-like surface that is both easy to clean and does not induce bacterial and fungal growth.
- » Good chemical and mechanical resistance.
- » Available in a wide range of attractive colours.
- » Cost effective.
- » Easy application.
- » High build.
- » Hydrocarbon resistant.

STANDARDS

Strongcoat HB PE complies with EN 13813, Class SR-B2,0-AR0,5-IR2.

TECHNICAL PROPERTIES:

Colour:	Available in various colours
Mixed density:	1.5 ± 0.05 g/cm ³
Pot life:	35 min @ 25°C
Compressive strength: EN 13892-2	≥ 35 N/mm ²
Tensile strength: BS 6319-7	≥ 10 N/mm ²
Flexural strength: EN 13892-2	≥ 25 N/mm ²
Abrasion resistance: EN ISO 5470-1 (1000 cycles) CS-17 wheel	≤ 55 milligram
Shore D hardness: ASTM D2240	85 ± 5
Bond strength: EN 1542	≥ 2 N/mm ² (concrete failure)

METHOD OF USE

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.

The surface must be clean, dry (less than 75% RH measured by hygrometer) and free from dust, laitance, oils, paints or other forms of contamination. Grit blasting can be used to remove laitance and surface contamination (see DCP Guide to Surface Preparation for further details). For treatment of surfaces containing expansion joints consult our Technical Department.

PRIMING

Strongcoat HB PE has excellent adhesion to concrete and priming is not normally necessary. If the substrate is particularly porous a priming coat of Strongcoat Primer is recommended. If the substrate has humidity reading greater than 75%, it is recommended that Strongcoat DPM be used prior to coating with Strongcoat HB PE.

Please consult the appropriate data sheets for further details.

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MIXING

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the Strongcoat HB PE Hardener and Strongcoat HB PE Resin container into a mixing bucket and, using a jiffytype mixer attached to a slow-running electric drill, mix for approximately two minutes.

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

APPLICATION

Once mixing is complete, transfer the Strongcoat HB PE to a roller tray and, using a medium-pile simulated sheepskin roller, apply it evenly over the surface.

Note: 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).

WORKING TIME

Strongcoat HB PE has a working time of approximately 20 minutes at 20°C.

Note: Never leave the mixed Strongcoat HB PE to stand for any length of time prior to application as this will considerably shorten its working time.

CURING TIME

At 20°C, Strongcoat HB PE should be allowed to cure for 24 hours before being opened to pedestrian traffic. At the same temperature, it should be allowed to cure for approximately seven days before being opened to vehicular traffic or exposed to chemical contamination. Curing times will be extended at lower temperatures.

OVERCOATING

The second coat of Strongcoat HB PE must be applied no later than 24 hours at 20°C after the first coat has cured. The first coat must also remain free from contamination prior to application of the second coat. Curing times will be extended at lower temperatures.

WORKING CONDITIONS

Strongcoat HB PE should be applied at temperatures above 5°C.

OCCASIONAL SPILLAGE

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

Organic Acids

Oleic Acid	R
Acetic Acid 10%	R
Lactic Acid 10%	R

Inorganic Acids

Sulphuric Acid 25%	R
Sulphuric Acid 50%	RS
Hydrochloric Acid 36%	R

Inorganic Bases

Potassium Hydroxide 50%	R
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Solvents

White Spirit	R
Acetone	R
Ethanol	R
Toluene	R

R: Resistant

RS: Resistant with slight discolouration

OCCASIONAL SPILLAGE

Chemical Resistance after full cure (7 days @ 25°C), ASTM D543 (Immersion test)

Organic Acids

Oleic Acid	R
Lactic Acid 10%	R

Inorganic Acids

Sulphuric Acid 25%	RS
Sulphuric Acid 50%	RD
Hydrochloric Acid 36%	R

Inorganic Bases

Potassium Hydroxide 50%	R
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Solvents

White Spirit	R
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Oils & Fuels

Skydrol	R
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R: Resistant

RS: Resistant with slight discolouration

RD: Resistant with obvious discolouration

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SLIP RESISTANT FINISHES

Apply a coat of Strongcoat Primer to the surface and allow it to cure for the specified time (see the Strongcoat Primer Data Sheet for further details).

Apply a coat of Strongcoat HB PE to the primed surface and, whilst this is still wet, completely blind it with an appropriate grade of Aggregate (consult Technical for details of Aggregate grades). Allow the coat of Strongcoat HB PE to cure for the specified time (see Curing Time) then vacuum off the excess Aggregate.

Seal the bound Aggregate with a further coat of Strongcoat HB PE (consult the Technical Department for further details of coverage rates).

Important: The coverage of Strongcoat HB PE will be considerably reduced when using it to seal Aggregate.

CLEANING

Once mixing and application are complete, tools can be cleaned with a suitable solvent.

PACKAGING

Strongcoat HB PE is available in 5 kg, 10 kg and 20 kg packs.

SPECIFIED COATING THICKNESS

Approximately 200 microns per coat.

COVERAGE

Approximately 3 - 4 m² per kg at the specified coating thickness. This coverage figure is based on application to a smooth dense surface.

Coverage figures will vary according to the texture, porosity and evenness of the surface on which the Strongcoat HB PE is being applied.

STORAGE

Store at temperatures between 5°C and 30°C.

SHELF LIFE

Approximately 24 months if stored in unopened containers and under good conditions.

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



Strongcoat HB PE

CAUTIONS

HEALTH AND SAFETY

Consult the appropriate Material Safety Data Sheets prior to using Strongcoat HB PE.

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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.

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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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