

# Strongcoat EPU2

Epoxy polyurethane self leveling topping for floor surfaces



## Description

Strongcoat EPU2 is a epoxy polyurethane-based self leveling topping that provides floor surfaces with a hard wearing seamless, hygienic and cosmetically attractive finish.

Strongcoat EPU2 is applied by trowel to horizontal surfaces and has 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 (consult our Technical Department for further details).

It can be supplied in a variety of colours (consult our Sales Department for details).

Strongcoat EPU2 cures to a durable, hard wearing surface.

## Applications

Strongcoat EPU2 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.
- ▲ Light industrial plants.
- ▲ Kitchens.

## Advantages

- ▲ Provides hygienic floor.
- ▲ Hard wearing system.
- ▲ Solvent free.
- ▲ Lightweight.
- ▲ Available in a wide range of attractive colours.
- ▲ Resist a wide range of chemicals, consult DCP technical department for more details.

## Standards

Strongcoat EPU2 complies with EN 13813, Class SR-B2.0-AR0.5-IR9.75

## Technical Properties @ 25°C:

Compressive strength: BS 6319, Part 2:1983	≥ 35 MPa @ 7 days
Flexural strength: BS 6319, Part 3:1990	≥ 20 MPa @ 7 days
Tensile strength: BS 6319, Part 7:1985	≥ 8 MPa @ 7 days
Pot life:	40 - 50 @ 25°C 30 - 40 @ 35°C
Foot traffic:	After 24 hr
Vehicular traffic:	After 7 days
Chemical curing:	7 days
Mixed density:	1.50 ± 0.05 g/cm <sup>3</sup>
Maximum wear depth: BS EN 13892-4	< 0.01mm
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	100 - 150 milligram
Impact resistance: ISO 6272-2	9.75 N.m
Bond strength: BS EN 13892-8	> 1.8 MPa (concrete failure)
Shore D Hardener ASTM D2240	55 ± 5

## 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 N/mm<sup>2</sup> and a maximum concrete relative humidity of 80% (max. moisture content of 4%), relative humidity can be measured by using hygrometers.



# Strongcoat EPU2

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

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. 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 individual components of Strongcoat EPU2. Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the Resin, 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 EPU2 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 transfer to it the entire contents of the Strongcoat EPU2 Filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes. (Never mix Strongcoat EPU2 by hand as this could lead to areas of uncured material.

## Application

Once mixing is complete, transfer the Strongcoat EPU2 to the prime surface at the required thickness by rack. Care should be taken when joining the lanes, to achieve a smooth connection.

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

#### Organic Acids

Oleic Acid sat.	R
Citric Acid 10%	R
Lactic Acid 10%	R

#### Inorganic Bases

Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R

#### Aqueous Solutions

Sodium Chloride sat.	R
Chlorinated Water	R

#### Solvents

White Spirit	R
Xylene	R

#### Oils & Fuels

Benzyl Alcohol	R
Brake Fluid	R
Engine Oil	R
Diesel	R
Detergents & Soaps	R

#### Inorganic Acids

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

*R: Resistant*

*RS: Resistant with slight discoloration*

It is recommended to mask off edges with tape which is then removed while Strongcoat EPU2 is still wet.

## Finishing

While still wet, thoroughly spike roll the Strongcoat EPU2.

# Strongcoat EPU2

## Remarks

- ▲ Strongcoat EPU2 should not be applied on to surfaces known to suffer from damp rising.
- ▲ Strongcoat EPU2 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.
- ▲ Strongcoat EPU2 can be scratched from sharp objects or any hard moving machineries on the floor.

## Cleaning

Strongcoat EPU2 can be removed by DCP solvent prior setting.

## Packaging

Strongcoat EPU2 is available in 20 kg packs (13 litre).  
Strongcoat Primer is available in 5 kg packs.

## Thickness range

1.5 - 2.5 mm.

## Coverage

Strongcoat EPU2: Approximately 6 m<sup>2</sup>/kit @ 2 mm thick.  
Strongcoat Primer: Approximately 5 m<sup>2</sup>/kg.

Actual coverage can vary depending on the substrate conditions.

## Storage

Strongcoat EPU2 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, DCP Technical Department should be contacted for advise.

## Cautions

### Health and Safety

Strongcoat EPU2 and its primer should not come into contact with skin and eyes.

In case of contact with eyes wash immediately with plenty of water and seek medical advise promptly.

For further information refer to the Material Safety Data Sheet.

## Fire

DCP solvent is flammable material and should not be used near a naked flame. Do not smoke near DCP solvent.

*Flash Point:* of Strongcoat EPU2 and its primer are above 50°C.

## 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.

# Strongcoat EPU2



**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.

-  expertise
-  quality
-  full range

[www.dcp-int.com](http://www.dcp-int.com)

IND-05-2015-A