

Strongcoat PF400

Pitch free, epoxy protective coating



Description

Strongcoat PF400 is a solvent free, non-toxic, pitch free epoxy coating with outstanding mechanical and chemical properties.

Strongcoat PF400 is supplied as a two component product in pre-weighed base and hardener packs, ready for site mixing.

Applications

Strongcoat PF400 is designed for internal applications such as:

- ▲ High chemical resistant coating for the sewage and waste water industry.
- ▲ Lining of tanks, manholes, pipes, jetties, piers, ducting, coating concrete, asbestos cement, steel pipes and non-ferrous metals.
- ▲ Protection of concrete and steel structures in offshore or marine environments.
- ▲ Heavy duty protective coating for aggressive immersion conditions on cementitious & metal substrates.

Advantages

- ▲ Excellent chemical and mechanical resistance.
- ▲ Produces a seamless, glossy, glass-like surface that is both easy to clean and does not induce bacterial and fungal growth.
- ▲ Exhibits excellent abrasion resistance.
- ▲ Resistant to sewage effluents.
- ▲ Provides a high build coating.
- ▲ Cost effective; does not require primer.
- ▲ Easily applied by brush, roller or spray.
- ▲ Non-toxic and non-carcinogenic.
- ▲ Solvent free, environmentally friendly coating.

Method of Use

Substrate Preparation

Concrete surfaces:

The substrate should be sound, clean and free from contamination. Surface laitance should be removed by grit blasting or water jetting. All blow holes should be filled with epoxy paste such as Quickmast 341.

Technical Properties:

Specific gravity:	1.50 ± 0.10
Solid content:	100%
Pot life:	80 min @ 25°C 40 min @ 35°C
Re-coatable time:	Minimum 4 hr @ 25°C Maximum 24 hr @ 25°C
Full cure:	After 7 days @ 25°C
Chemical resistance:	Refer to DCP chemical resistance table
Bond strength over C25/30 concrete: ASTM D4541	≥ 2 MPa @ 7 days (substrate failure)
Compressive strength: BS 6319-2	≥ 80 MPa @ 7 days
Tensile strength: BS 6319-7	≥ 15 MPa @ 7 days
Flexural strength: BS 6319-3	≥ 30 MPa @ 7 days
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	70 milligram
VOC: ASTM D2369	≤ 10 g/ltr (complies with LEED)

Steel surfaces:

All surfaces should be grit blasted to reach a bright finish meeting the requirement of Swedish Standard SA 2 1/2.

Priming

Strongcoat PF400 is designed to be applied over well prepared substrates directly without a primer. If the application will be taken place over other substrates, please consult DCP's Technical department for advice.

DCP Saudi Co.
Riyadh Offices:
Exit 9, Al Izdehar, Beside ACDelco Petrol Station

Jeddah Offices:
Al-Henaki Business Center, Tower C



Strongcoat PF400

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with a suitable paddle should be used. Stir the content of each component separately to disperse any settlement. Add the entire content of the hardener to the base and mix for 3 minutes and until a uniform colour and consistency are achieved.

Application

Strongcoat PF400 can be applied by brush; roller or airless spray machine. The first coat should be applied to obtain a continuous uniform coating.

The second coat should be applied within the over coating time to achieve the maximum adhesion between the two coats.

Notes:

- ▲ Strongcoat PF400 should not be applied over existing coatings. However it can be applied on top of itself, by maintaining the mentioned over coating time.
- ▲ Application should not be undertaken if the temperature is below 5°C, nor when the relative humidity exceeds 90%.
- ▲ Application should not be carried out, when there is standing or running water.
- ▲ Strongcoat PF400 is not colour stable when exposed to direct sun light nor when in contact with some chemicals. However, this colour change does not affect the performance of the coating.
- ▲ Precaution is recommended if the application is taking place at high temperatures (above 30°C).

Cleaning

All tools should be cleaned immediately using DCP Solvent. Hardened material must be cleaned mechanically.

Packaging

Strongcoat PF400 is available in 5 kg (3.3 litre) and 20 kg (13.3 litres).

Coverage

Approximately 225 - 300 g/ m² in order to achieve a dry film thickness of 150 - 200 microns per coat.

Occasional Spillage.

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

Organic Acids

Oleic Acid sat.	RS
Citric Acid 25%	R
Vinegar 10%	SS

Inorganic Bases

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

Aquous Solutions

Sodium Chloride sat	R
Tap Water	R
Chlorinated Water	R
Dead Sea Water	R

Solvents

White Spirit	R
Xylene	SS
Toluene	R
Acetone	R

Oils & Fuels

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

Inorganic Acids

Sulphuric Acid 25%	RS
Phosphoric Acid 20%	RS + SS
Hydrochloric Acid 10%	RS
Nitric Acid 25%	RS

DCP Saudi Co.

Riyadh Offices:

Exit 9, Al Izdehar, Beside ACDelco Petrol Station

Jeddah Offices:

Al-Henaki Business Center, Tower C

Strongcoat PF400

Storage

Strongcoat PF400 has a shelf life of 12 months from date of manufacture if stored in dry conditions at room temperature in original unopened acks.

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

Cautions

Health and Safety

Strongcoat PF400 should not come in contact with skin or eyes. Goggles and gloves should be used.

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 Safety Data Sheet.

Fire

Strongcoat PF400 is nonflammable.

Chemical Resistance

Based on test method ASTM D1308, after 7 days immersion in the below chemicals.

Nitric Acid 10%	RS
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	RS
Vinegar 5%	RS
Sulphuric Acid 25%	RS
Ammonia Solution 10%	R
Tap Water	R
Sodium Chloride Sat.	R
Diesel	R
Engine Oil	R
Brake Fluid	R

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

DCP Saudi Co.

Riyadh Offices:

Exit 9, Al Izdehar, Beside ACDelco Petrol Station

Jeddah Offices:

Al-Henaki Business Center, Tower C

Strongcoat PF400

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.

DCP Saudi Co.

Riyadh Offices:

Exit 9, Al Izdehar, Beside ACDelco Petrol Station

Jeddah Offices:

Al-Henaki Business Center, Tower C

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

