Strongcoat 500

Solvent base polyurethane resin floor and wall coating

Description

Strongcoat 500 is a composite system compose of two layers; epoxy primer, and a U.V resistant polyurethane top coat.

Strongcoat 500 provide a hard abrasion resistance coating with outstanding chemical resistance suitable for floors, walls, ceiling and other substrates.

Strongcoat Primer 10, and 500P are supplied as two or three components products in pre-weighed base, hardener and/or colour packs, ready for site mixing.

Applications

Strongcoat 500 is designed for applications such as:

- Car parks, showrooms and warehouses.
- Protective coating for concrete and steel.
- Wall and floor coating in food processing plants, grain silos, dairies, breweries , hospitals, and pharmaceutical industries.
- High chemical resistant protective coating for power stations, oil refineries, and sewage treatment plants.
- Production, maintenance and assembly areas.

Advantages

- Excellent UV resistance.
- Excellent resistance to a variety of chemicals.
- Easy to clean with a smooth, hard and glossy finish.
- Exhibits good mechanical properties.
- Resistant to sewage effluents.

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 exposed blow holes should be filled with epoxy paste using Quickmast 341.

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

Priming

Concrete substrates should be primed with Strongcoat Primer 10. Use lambs wool roller to apply the primer. Work the primer well into the surface of the concrete. Strongcoat Primer 10 should be applied at the rate of 0.167 kg/m² to give a dry film thickness of 75 microns.

Strongcoat 500P should be applied over the primed surfaces within 24 hours, otherwise a light abrasion should be conducted on the dried primed surfaces and cleaned thoroughly before applying Strongcoat 500P.

Strongcoat 500P

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with 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 uniform color and consistency are achieved.

Application

Strongcoat 500P is used as a top and UV resistant coat. Strongcoat 500P can be applied by brush, roller or airless spray. Strongcoat 500P should be applied at the rate of 0.145 kg/m² to obtain a continuous uniform coating of a dry film thickness of 75 micron.

One or two coats can be applied depending on required dry film thickness. The second coat (if needed) should be applied within the minimum overcoating time to achieve a maximum adhesion between the two coats.

Cleaning

All tools should be cleaned immediately after application using DCP Solvent. Hardened materials must be cleaned mechanically.

Packaging

Strongcoat Primer 10 is available in 5 kg packs.
Strongcoat 500P is available in 7.25 kg packs.

Strongcoat 500

Coverage

Strongcoat Primer 10: 0.167 kg/m^2 to achieve 75 micron dry film thickness.

Strongcoat 500P: 0.145 kg/m^2/coat to achieve 75 micron dry film thickness.

Storage

Strongcoat Primer 10, and 500P have a shelf life of 12 months from date of manufacture if stored in dry conditions at room temperature in original unopened Packs

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

Cautions

Health and Safety

Strongcoat Prime 10 and 500P 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 Material Safety Data Sheet.

Fire

Strongcoat Primer 10 and 500P are flammable. Ensure adequate ventilation. Do not use near named flames.

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 500

Technical Properties @ 25°C:	Strongcoat Primer 10	Strongcoat 500P
Specific gravity:	-	1.45 ± 0.05 (for coloured) 1.03 ± 0.05 (for clear colour)
Solid content:	-	75 ± 5% (for coloured) 50 ± 5 (for clear colour)
Colour:	-	Grey, dark grey, red, green and clear
Abrasion resistance:	-	Excellent
Bond strength: ASTM D4541-95	> 2 MPa (concrete failure)	-
Pot life:	3 hr @ 25°C 1 hr @ 35°C	4 hr @ 25°C 2 hr @ 35°C
Full cure:	10 days@ 25°C 7 days @ 35°C	After 7 days @ 25°C
Initial cure:	24 hr @ 25°C 12 hr @ 35°C	-
Chemical resistance:	-	Refer to DPC chemical resistance table
Taber abrasion resistance: (1000 g, 1000 cicle) ASTM D4060, weight loss CS17 wheel	120 milligram	-
Minimum application temperature:	-	5°C
Over coating time:	-	Withing 24 hrs
Volume solids:	-	50 ± 5%
Minimum time between coats:	6 hr @ 25°C 4 hr @ 35°C	-
Maximum time between coats:	24 hr @ 25°C 16 hr @ 35°C	-
Dry film thickness:	70 - 80 microns/coat	-
Water absorption: ASTM D570	< 0.1%	-
Scrub resistance: ASTM D2486/2000	> 5000 cycle	

Strongcoat 500

Technical Properties @ 25°C:	Strongcoat Primer 10	Strongcoat 500P
Adhesion: ISO 2409/1992	Excellent	-
Opacity: (Grindo pac)	5 m²/ltr	-
Mixed density:	1.30 g/cm³ @ 25°C	