High chemical resistance epoxy resin protective coating for horizontal and vertical applications

DESCRIPTION

Strongcoat CR is a two-component epoxy resin coating with high chemical resistance. It is designed to provide a hard, gloss coating for concrete surfaces in both horizontal and vertical applications.

APPLICATIONS

Strongcoat CR is used as a protective, decorative and hard-wearing coating for many horizontal and vertical applications, including:

- » Industrial and commercial kitchen walls.
- » Protective coating for concrete and steel.
- » Hospitals and pharmaceutical factory walls.
- » General food processing and manufacturing plants.
- » Soft drink and beverage production areas.
- » Dairy production areas.
- » Fish and meat processing plant walls.

ADVANTAGES

- » High chemical and mechanical resistance.
- » Available in a range of colours.
- » Produces a seamless semi-gloss finish.
- Easy to clean.
- » Does not induce bacterial and fungal growth.

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).

PRIMING

Strongcoat CR 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 a humidity reading greater than 75%, it is recommended that Strongcoat DPM be used prior to coating with Strongcoat CR.

TECHNICAL PROPERTIES:

Colour:	Available in various colours
Mixed density:	1.45 ± 0.10 g/cm ³
Pot life:	30 - 40 min @ 20ºC
Full curing time:	7 days @ 20ºC 5 days @ 35ºC
Compressive strength:	≥ 60 N/mm²
Bond strength:	≥ 2.0 N/mm²
Taber abrasion resistance: ASTM D4060 (1000g , 1000 cycle) weight loss, CS17 wheel	85 milligrams

MIXING

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the hardener and 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 CR by hand as this could lead to areas of uncured material.

APPLICATION

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

CURING TIME

At 20°C Strongcoat CR should be allowed to cure for 24 hours prior to opening it to pedestrian traffic. At the same temperature, Strongcoat CR should be allowed to cure for approximately seven days prior to opening it to vehicular traffic or exposing it to chemical contamination (consult our Technical Department for details of curing times at other temperatures).



OVERCOATING

The second coat of Strongcoat CR must be applied between 12 and 24 hours at 20°C after the first coat has cured. Additionally, the first coat of Strongcoat CR must not be contaminated prior to applying the second coat.

WORKING CONDITIONS

Strongcoat CR should not be applied at temperatures less than 10°C.

CLEANING

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

PACKAGING

Strongcoat CR is available in 5 kg and 10 kg.

COVERAGE

Approximately 3 - 4 m²/kg per to achieve 200 microns dry film thickness per coat.

Important: 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 Strongcoat CR is being applied.

STORAGE

Strongcoat CR has a shelf life of 12 months from date of manufacture if stored in dry conditions at temperatures between 5°C and 30°C in original unopened packs.

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

OCCASSIONAL SPILLAGE

Chemical Resistance (Spot - test @ 1 hr)			
Aqueous Solutions			
Sodium Chloride sat	R		
Chlorinated Water	R		
Solvents			
Xylene	R		
White Spirit	R		
Toluene	RS		
Acetone	R		
Ethanol	R		
Oils & Fuels			
Engine Oil	R		
Diesel	R		
Brake Fluid	R		
Kerosene	R		
Organic Acids			
Oleic Acid	R		
Citric Acid 25%	R		
Vinegar 10%	R		
Inorganic Acids			
Hydrochloric Acid 15%	R		
Sulphuric Acid 25%	R		
Nitric Acid 25%	R		
Phosphoric Acid 20%	R		
Inorganic Bases			
Sodium Hydroxide 50%	R		
Ammonia 10%	R		
Potassium Hydroxide 50%	R		
P: Pesistant			

R: Resistant

RS: Resistant with slight discolouration

CAUTIONS

HEALTH AND SAFETY

Strongcoat CR 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.

Chemical Resistance (Immersion @ 7 days)			
Solvents			
Xylene	R		
Ethanol	R		
Oils & Fuels			
Engine Oil	R		
Diesel	R		
Brake Fluid	R		
Organic Acids			
Oleic Acid	RD		
Citric Acid 20%	R		
Vinegar 10%	R		
Inorganic Acids			
Hydrochloric Acid 10%	R		
Sulphuric Acid 25%	R		
Nitric Acid 10%	R		
Phosphoric Acid 20%	R		
Inorganic Bases			
Ammonia 10%	R		

RD: Resistant with obvious discolouration



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- Protective coatings.
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- » Tile adhesives and grouts.
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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.