

Strongcoat EC10

Solvent based epoxy resin floor and wall coating



DESCRIPTION

Strongcoat EC10 is a hard wearing, solvent based, epoxy resin coating, designed to provide a hard, semi-gloss coating to concrete floors, walls, ceiling, steel and other substrates.

Moreover, Strongcoat EC10 can be used as a primer for solvent based and solvent-free high build epoxy coatings.

APPLICATIONS

Strongcoat EC10 is used as protective, decorative and hard wearing coating for floors or walls in many applications including:

- » Soft drink and beverage production areas.
- » Dairies production areas.
- » Show rooms.
- » Industrial and commercial kitchen walls.
- » Warehouses.
- » Hospitals and pharmaceutical factory walls.
- » Fish and meat processing plant walls.
- » General food processing and manufacturing plants.
- » Light vehicular traffic areas.

Also Strongcoat EC10 can be used as a primer for solvent based and solvent-free high build epoxy coatings.

ADVANTAGES

- » Can be used on concrete, steel, galvanized steel substrates.
- » Excellent chemical and mechanical resistance.
- » Available in a wide range of attractive colours.
- » Cost effective.
- » Easy application.
- » Produces a seamless semi-gloss surface that is both easy to clean and does not induce bacterial and fungal growth.

STANDARDS

Strongcoat EC10 complies with BS 476, Part 7 : 1987, Class 1 Spread of Flame.

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.

TECHNICAL PROPERTIES:

Mixed density:	1.35 ± 0.05 g/cm ³ @ 25°C
Pot life:	3 hr @ 25°C 1 hr @ 35°C
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
Initial curing:	24 hr @ 25°C 12 hr @ 35°C
Full curing:	10 days @ 25°C 7 days @ 35°C
Bond strength: ASTM D4541-95	> 2.2 MPa (concrete failure)
Water absorption: ASTM D570	< 0.5%
Scrub resistance: ASTM D2486	> 5000 cycle
Adhesion: ISO 2409:1992	GT1
Opacity: (Grindo pac)	5 m ² /ltr
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss	
CS17 wheel	70 - 80 milligram
Mixed viscosity:	200 ± 20 poise @ 25°C
Gloss @ 60°: ISO 2813	30 - 35
Fineness of grind: ASTM D1210	4 Hegman
Non volatile content by weight:	70 ± 2%
Dry time, dry hard: ASTM D1640	7 - 8 hr
VOC: ASTM D2369	< 400 g/ltr (comply with LEED)



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Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 80% (max. moisture content of 4%), relative humidity can be measured by using hygrometers. Concrete relative humidity should be less than 80% for concrete of 28 days old or more.

SURFACE PREPARATION

Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment.

Acid etching can be used only in well ventilated areas. Areas deeply contaminated by oil or grease, such areas should be treated by hot compressed air.

MIXING

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application. Prior to mixing, stir individual components of the Base and Hardener.

Add the entire content of the hardener container to the base and mix thoroughly for at least 3 minutes.

Note: In certain cases the Base of the product can be supplied uncoloured and needs the addition of a colour pack. In such cases, mix the components of the colour pack and Base for 2 minutes, then add the entire content of the Hardener to the mixture and mix thoroughly for 3 minutes.

COATING

Use brush or lambs wool roller, or airless spray machine to apply the mixed Strongcoat EC10 onto the prepared surfaces.

Apply 2 coats of Strongcoat EC10 at 5.5 - 6.5 m²/kg/coat, second coat should be applied at a right angle to the first coat.

The second coat may be applied as soon as the first coat has initially dried. Drying time will depend on the substrate and the ambient conditions. If the over coating time is exceeded the first coat must be abraded with sand paper prior to the application of the second coat. Adequate ventilation must be provided to ensure that necessary drying and curing of the material is achieved.

OCCASSIONAL SPILLAGE

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

Organic Acids

Lactic Acid 10%	R
Oleic Acid sat.	R
Citric Acid 25%	R
Acetic Acid 10%	R
Vinegar 10%	R

Inorganic Bases

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

Aqueous Solutions

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

Solvents

White Spirit	R
Xylene	R
Toluene	R
Acetone	R

Oils & Fuels

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

Inorganic Acids

Sulphuric Acid 25%	R
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	R
Nitric Acid 10%	R

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

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REMARKS

- » Higher traffic areas should receive extra coats or a higher build system.
- » Strongcoat EC10 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 85%.
- » Strongcoat EC10 should not be applied onto surfaces known to suffer from rising dampness.
- » In case of spray applications, airless spray machines should be used.

CLEANING

Tools and equipment can be cleaned with DCP Solvent. Dried Strongcoat EC10 may be removed mechanically.

PACKAGING

Strongcoat EC10 is available in 5 kg packs (3.85 litre) and 20 kg packs (15.4 litre).

COVERAGE

The coverage rate is 30 m²/5 kg pack per coat to achieve dry film thickness of 70 - 80 microns per coat.

When used as a primer apply Strongcoat EC10 in one coat at a rate of 25m²/5 kg achieving a thickness of around 90 microns.

STORAGE

Store in a dry area out of direct sunlight at temperatures between 15°C and 30°C.

SHELF LIFE

Strongcoat EC10 has a shelf life of 18 months from date of manufacture if stored in proper conditions and unopened packs.

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

CAUTIONS

HEALTH AND SAFETY

Strongcoat EC10 should not come in contact with skin and eyes.

In case of accidental splashes to the eyes, rinse thoroughly with clean water and seek medical advise. Suitable protective gloves and goggles should be worn. Do not use solvent to clean Strongcoat EC10 from skin.

For further information refer to the Material Safety Data Sheet.

FIRE

Strongcoat EC10 and DCP Solvent are flammable. Ensure adequate ventilation. Do not use near a naked flame and do not smoke during use.

Flash Point:
DCP Solvent: 37°C.



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- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



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.