



CEMPROTEC LEVELLING COAT

Self-Levelling Cementitious Mortar for Concrete Floors

USES

CEMPROTEC LEVELLING COAT is a two component cementitious mortar for levelling tamped or uneven concrete floors in heavily trafficked areas prior to the application of **CEMPROTEC E-FLOOR**.

ADVANTAGES

- Materials are pre-packaged in a convenient and easy to handle size, requiring only mixing on site to give a mortar which can be rapidly applied by trowel or squeegee.
- Suitable for use on both level and sloping substrates and ramps.
- Can be applied to saturated substrates, or floors with no effective waterproofing membrane, without risk of osmotic blistering.
- Excellent adhesion to dry or damp cementitious substrates.
- Rapid hardening - Hydrates to give high early strength material with low moisture, enabling minimum overcoat times.
- Water-based product, which cures without the release of hazardous solvents. Equipment easily cleaned with water.
- Low permeability - Dense matrix offers enhanced resistance to water, plus diffusion resistance to chlorides and oxygen.

PRODUCT DESCRIPTION

CEMPROTEC LEVELLING COAT is a two component epoxy and cementitious modified polymer screed for levelling concrete substrates in trafficked areas prior to the application of **CEMPROTEC E-FLOOR**. It incorporates advanced cement chemistry, metakaolin, fibre, epoxy and styrene acrylic copolymer technology to give enhanced performance and excellent adhesion to concrete surfaces. When mixed, it exhibits a degree of flow to enable ease of application by pouring or pumping techniques to give an even finish. It hydrates to form a dense screed, which exhibits both polymeric and resinous properties giving low permeability to water and ensuring long term performance. It is specially formulated to harden rapidly to form a durable surface, which can typically be overcoated within 24 hours. The material is designed for application to sound substrates, any joints and "live" cracks must be continued through the finished system.

PREPARATION

The areas to be treated must be free from all unsound material, i.e. surface laitance, dust, oil, grease, organic growth or previous surface treatments, and smooth surfaces should be mechanically roughened. This is best achieved using totally enclosed shot blasting equipment or alternatively a surface scaler/planer or scabbling machine can be used. Areas still exhibiting signs of oil, grease, etc, must be treated with **FLEXCRETE DEGREASANT** as instructed on the individual Data Sheet. Repeat applications may be required in areas where the contamination is persistent. In some instances of heavy contamination, it may be necessary to use hot compressed air equipment, flame spalling or steam cleaning techniques prior to sealing the surface with **CEMPROTEC EPOXY PRIMER** as described on the individual Data Sheets. All previous repair materials, patches, etc, which are unsound should be removed and major cracks, voids, defects, etc, should be cleaned out prior to making good using an appropriate Flexcrete Repair Mortar. All debris should be removed to leave a thoroughly clean, dust free, open textured surface.

MECHANICAL CHARACTERISTICS (TYPICAL)

Compressive Strength:	BS 4551 Tested at 20°C
4 hours	2 - 6 MPa
1 day	13 - 18 MPa
7 days	35 - 40 MPa
28 days	45 - 55 MPa
Flexural Strength:	BS 4551 Tested at 20°C
1 day	5 MPa
28 days	12 MPa
Adhesive Strength:	BS 1881 Part 207
Concrete	3 MPa (including Primer)
Asphalt	>2 MPa (failure in substrate)

TECHNICAL DATA

Basis:	Cement and epoxy modified, styrene acrylic copolymer
Mixed Colour:	Concrete Grey
Mixed Density:	2000 kg/m ³
Min Application Temperature:	5°C
Max Application Temperature:	35°C

APPLICATION DATA

Application Guide available on request.

PRIMING

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water. Substrates which have been subjected to hot compressed air treatment should be treated immediately with **CEMPROTEC EPOXY PRIMER** and allowed to cure overnight before proceeding. All surfaces, with the exception of those that have been treated with **CEMPROTEC EPOXY PRIMER**, should be sealed with **CEMPROTEC EF PRIMER** at a typical coverage rate of 5m²/litre. Allow to become clear, typically 1-3 hours dependent upon climatic conditions, before proceeding. If overcoating with **CEMPROTEC E-FLOOR**, then **CEMPROTEC LEVELLING COAT** must also be primed with **CEMPROTEC EF PRIMER**.

MIXING

It is important to ensure that a continuous supply of mixed material is available for laying. Pour the contents of one of the bottles marked Part A (liquid) into a suitable mixing vessel and slowly add one of the bags marked Part B (powder). The modules must be mechanically mixed using a drill and paddle specially designed to entrap as little air as possible for a minimum of 5 minutes until homogeneous. On larger contracts, multiple packs can be mixed at once or a continuous mixer/pump used. Please contact our Technical Department for further advice.

PLACING

CEMPROTEC LEVELLING COAT should be poured or pumped onto the prepared surface and spread to the required thickness with a trowel, squeegee or pin leveller. Lightly roll the top surface with a spiked roller to remove entrapped air and to produce a slightly dimpled finish.

Allow to cure overnight before overcoating with **CEMPROTEC E-FLOOR**.

All construction joints and "live" cracks in the existing floor must be continued through into the new coating. The material should be continued into the faces of joints or cracks. Allow to cure for a minimum of 24 hours before reinstating joints with suitable sealant.

IMPORTANT NOTES

- Finishing must be completed within the working life of the material and no later than 10 minutes after placing.
- Ideally the floor should be divided up into bays to aid accurate material application. The operation should be continuous, working to only one wet edge, and full bays should be treated within the working life of the material.
- The material must be primed before over-coating with **CEMPROTEC E-FLOOR**.

CURING

Normal procedures relating to curing of cementitious products should be strictly adhered to. It is important that the surface is protected from strong sunlight, drying winds and high air movements, to prevent skinning during placing and rapid drying out in the plastic state.

CLEANING

All tools should be cleaned with water immediately after use.

SHELF LIFE

Shelf life is 12 months in dry, frost free conditions at moderate temperatures not greater than 20°C.

PACKAGING AND COVERAGE

Pack Size:	25 kg
Coverage:	12.5 litres per 25kg pack
Coverage:	2.0 kg/mm/m ²

SAFETY DATA

Safety Data Sheet available on request.



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