

Cretex® MC Deepfill

Product Description

Extremely fast cure / low temperature acrylic-based concrete repair

Cretex MC Deepfill is a three-part acrylic resin based heavy duty floor repair material designed for use at extremely low temperatures and having very rapid curing characteristics. It offers excellent impact and chemical resistance, and may be used for both interior and exterior repairs.

Typical Uses

Its extreme curing characteristics make Cretex MC Deepfill ideal for rapid repairs to floors, steps, nosing, kerbs and expansion joint in areas of constant traffic. It may be used to improve the mechanical resistance and load-bearing characteristics of concrete floors.

Cold Store Grade is ideal for use in very low temperature environments such as cold stores and exterior applications in harsh climates.

Suitable Substrates

Cretex MC Deepfill may be applied to clean, dry concrete with a moisture content not exceeding 5%.

Colour

Cretex MC Deepfill is grey in colour.

Packaging

Cretex MC Deepfill is supplied as a 25kg powder pack, 1.8L of resin and 150gms of BPO hardener.

Direction For Use

Surface Preparation

THOROUGH SUBSTRATE PREPARATION IS ESSENTIAL.

Concrete repairs should be prepared with squared off edges having a 4mm minimum vertical lip. Remove all loose material – wire brushing is advisable. Sweep clean or vacuum. The surface must be free from grease, oil or contamination. Ensure concrete is dry (moisture content not exceeding 5%) before priming.

Caution – *Cretex MC Deepfill* is methyl methacrylate based and has a characteristic odour during the vaporising of the solvent. Although non-toxic and non-injurious to health, this can cause tainting and OPEN food products should therefore be removed or sealed during and following application until the vapour has dispersed.

Priming

The substrate should first be primed with Polycote MC Primer, brushing thoroughly into the entire surface. Allow the primer to cure, normally within 40 minutes.

Mixing

Using a clean plastic bucket of at least 25L capacity, pour in the resin and add the BPO hardener powder and mix for 3 minutes using a heavy-duty slow speed drill with a 0-15 litre mixing paddle. Then add the 25kg pack of powder and mix for a further 5 mins until fully mixed.

ENSURE THOROUGH MIXING AS AN UNMIXED PRODUCT WILL RESULT IN A POOR OR NON-CURE SITUATION.

Tip: For Cold Store Grade – the workable life of the material will be maximised if it has been stored at a very low temperature (e.g. in the code store itself) prior to mixing.

Application

The material should be placed immediately after mixing.

Trowel out to the required smoothness. **DO NOT TAMP** as this may cause the resin to rise to the surface leaving a weakened bond at the base of the repair material.

Where the depth of repair requires more than one layer (see 'Application Thickness' on the front of this sheet) MC Primer should be applied between layers to aid inter-section bonding – see 'Priming'.

Application (cont)

For vertical repairs – where step nosings or expansion joint edges have broken away, the vertical face of the repair material should be supported to prevent slumping.
Suitable sized wooden shuttering should be covered with polythene to reduce adhesion and should be removed as soon as the material is firm.

Cretex MC Deepfill may also be used for screeding and cove-forming – please contact Polycote Technical Helpline.

Application Thickness

The recommended range of application thickness of Cretex MC Deepfill is from 10mm to 75mm.

For repair depths exceeding 75mm, the material should be placed in layers, repriming the top of the previously cured layer.

Physical Properties

Compressive Strength	75kN/mm ²
Flexural strength	24kN/mm ²
Flexural tensile strength	27.5kN/mm ²
Tensile Strength	7.8kN/mm ²
Beginning and deformation under pressure	26kN/mm ²
Break elongation	0.56%

Pot Life & Curing Time

The pot life of Cretex MC Deepfill is 10-15 minutes depending on temperature.
Initial curing time to foot traffic resistance is approximately 1 hour.
Full strength and chemical resistance are achieved after 2 hours

Application Temperature

Cretex MC Deepfill is available in two temperature grades:
Standard Grade for 0°C to + 30°C application temperature, and **Cold Store Grade** for –40°C to 0°C application temperature.

Coverage

The coverage rate per 27kg unit of Cretex MC Deepfill is approximately 1m² at 12.5mm nominal thickness.

Cleaning

Tools and equipment should be cleaned whilst product is still wet with Solvent Cleaner.
Hands and skin should be cleaned immediately with Organic Hand Cleaner.

Shelf Life & Storage

The shelf life of Cretex MC Deepfill in unopened containers is approximately 6 months subject to conditions of storage. Store in a cool dry environment away from sources of ignition.

Health & Safety

Before using this product, please ensure you have received and read carefully both the Hazard Label applied to the container and the relevant Material Safety Data Sheets.

Any Questions

Please do not hesitate to contact us for advice regarding the use of this product or its suitability for your particular application.
Our aim is to provide all the technical help you need to make an informed choice and achieve total success.
Polycote Technical Helpline: **01234 846400**

All reasonable care has been taken in supplying the above information. However, any figures quoted do not constitute a specification but represent typical values obtained. It is the customer’s responsibility to ensure the product is fit for the intended purpose and that conditions are suitable. Any technical advice is offered in good faith, but without warranty. This is also applicable when proprietary rights and third parties are involved. In the light of the Company’s policy of continual research and development, it is the customer’s responsibility to ensure that the information contained herein has not been superseded.