watco® | TOR COATINGS

IF YOU'VE GOT A BUILDING,
WE'VE GOT IT COVERED

CONCREX®
CARBON FIBRE

REPAIR | REFURBISH | PROTECT | WATERPROOF

Concrex Carbon Fibre is a premium epoxy resin repair mortar designed to permanently repair damaged concrete floors.

Its unique carbon fibre and ceramic based formulation means it is now even stronger, more chemical resistant and faster drying than ever. Versatile enough for use across a wide range of environments, it can be used virtually anywhere an ordinary mortar might fail, including holes, guide rails, ramps and steps. It can even be moulded into shape to form a kerb or repair a step edge. The high resin content provides superior strength and adhesion, making it ideal for very thin sections, feather-edges or intricate repairs.

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20 year guarantee against impact and abrasion failure

Faster drying, ready for traffic in 1 hour

Tough, quick and permanent floor repairs

Ideal for repairs to holes in concrete, damaged steps and broken floor joint edges

Embedded with carbon fibre for superior strength

Resin rich for thin section and feather edge repairs

Preparation and Application

Take your floor repairs to another level with our step-by-step guide.

1 Surface Preparation

Surfaces should be clean, dry and free of all loose material. Wire brushing or sweeping is generally sufficient. Watco Bio-D degreaser can be used to remove grease and oil. If the surface is damp it can be primed with Watco Tack Coat.

2 Priming

The resin content of Watco Concrex Carbon Fibre is very high. This means that a primer is not usually required when filling holes in concrete floors or resurfacing rough or damaged concrete. Watco Tack Coat adhesive primer is recommended when using Concrex Carbon Fibre as a thin section screed over smooth surfaces. It is also recommended when repairing intricate/high impact areas such as broken floor joint edges, and damaged step nosings.

3 **Mixing** (wear protective gloves)

The resin and the sand are already pre-blended and is supplied with bottles of curing agent, 4 x 100ml in the 10kg pack and 2 x 500ml in the 25kg pack.

The curing agent is added to the sand/resin at point of use, and once mixed the mortar should be used within 15 - 30min depending on the temperature.

If the entire pack of Watco Concrex Carbon Fibre cannot be used within 30 minutes, it can be part mixed. To split a pack carefully halve the sand/resin (ideally measured by weight), and use half the number of curing agent bottles. Do not mix inside the plastic bucket. Tip the sand/resin into a mixing tray or on a board.

Shake the bottles of curing agent thoroughly until the liquid is a uniform grey. Form the resin into a mound and leave a small hole in the middle. Empty the curing agent into the hole, ensuring the bottles are completely drained. Carefully mix the aggregate with the curing agent using a trowel until a smooth mortar is obtained, this will take several minutes. The more thorough the mixing, the 'wetter', smoother and more manageable the mix becomes. Alternatively, you can knead the mixture by hand wearing suitable gloves. It is important to mix thoroughly until you achieve a consistent colour.
A 'Cretangle' or suitable open pan mixer can be used to mix large quantities.

4 Application

Trowel the mortar firmly into the repair and finish with a trowel or float. To get a good smooth finish, regularly wipe the surface of the trowel with a cloth dampened with white spirit. Watco Concrex Carbon Fibre is normally applied at 5mm - 50mm thick, but repairs can be feather-edged if most of the repair is at least 5mm thick. For repairs deeper than 50mm apply in separate layers allowing 6 - 8 hours between layers, or use Concrex Deep Fill which can be applied at 15mm - 100mm thick in one layer.

"By blending carbon fibre and ceramic into this formulation, we have enhanced the performance of what was already the number one best-selling epoxy repair mortar on the market, providing an ultimate solution that cannot be beaten."

Chris Budd
Product & Operations Director

For more information scan the QR code

Datasheet: Concrex® Carbon Fibre

Specification

Composition	Finely graded sand pre-blended with resin. A 10kg unit includes 4 x 100ml bottles of curing agent, and a 25kg includes 2 x 500ml bottles.
Colour	Mid grey.
Priming	We recommend Watco Tack Coat.
Usage Interior/Exterior	Interior & exterior.
Working Life	15 - 30 minutes depending upon temperature.
Application Tools	Steel float or trowel.
Suitable For	Concrete, sand & cement and metal.
Pack Sizes	10kg, 25kg.
Coverage	10kg – 1.2m^2 at 5mm thick. 25kg – 3m^2 at 5mm thick.
Shrinkage (on cure)	Negligible.
Damaged by Frost	No.
Can be Feather-edged	Yes, around the edge of a repair – full strength at 5mm thick.
Application Thickness	Up to 50mm for hole filling only. Do not use at more than 15mm for screeding, instead use Watco Concrex® Deep Fill finishing with a 5mm layer of Concrex® Carbon Fibre.
Cleaning Tools	Use white spirit before Concrex® Carbon Fibre cures.
Shelf Life	12 months in unopened container.
Storage	Between 10°C - 30°C. Do not allow to freeze.
Chemical Resistance	Excellent resistance to spillages of many chemicals commonly used in industry, including (at 20°C) paraffin, petrol, fuel oils, alcohols, dilute nitric, sulphuric and hydrochloric acids, sugar solutions, oxalic acid, citric acid, caustic soda, salt solutions, cutting oils, mineral oils. Advice given regarding other chemicals.
Principal Limitations Please contact us regarding applications not described here.	Do not apply to wet surfaces. Watco Tack Coat should be used for application to damp surfaces before applying Watco Concrex® Carbon Fibre. Do not apply thicker than 50mm in one layer – see section headed 'Application'. Watco Concrex® Carbon Fibre should not be subjected to temperatures above 60°C. Do not use below 10°C.

Curing Times (at 15°C - 20°C)

Curing Times	Light Traffic	Heavy Traffic
Curing time will be extended by lower temperatures. Do not use below 10°C (see Watco Concrex® Cold Set).	1 hour	4 hours

Strength

Concrex® is far stronger than concrete. The table shows a comparison (typical figures).

	Tensile Strength	Flexural Strength	Compressive Strength
Watco Concrex®	15.4 MN/m^2	55.9 MN/m^2	55.2 MN/m^2
Concrete	3.4 MN/m^2	6.9 MN/m^2	21.41 MN/m^2

Watco UK Ltd August 2022