

CONCREX® CARBON FIBRE

Permanent granite hard repairs where ordinary mortars fail

AREAS OF USE

- Permanent repairs for:
- Holes in concrete floors
 - Damaged steps
 - Broken floor joints
 - Eroded, uneven concrete



FEATURES

- Epoxy resin reinforced with carbon fibre and ceramic
- Virtually indestructible
- Rapid curing – ready for light traffic in as little as an hour
- Excellent chemical resistance
- Resin rich for thin section and feather-edge repairs
- Anti slip
- Non-dusting
- Incredibly versatile

DESCRIPTION

New Watco Concrex® Carbon Fibre is the ultimate floor repair mortar. The addition of carbon fibre makes this the strongest, longest lasting floor repair mortar that you can buy.

The unique formulation also includes a rapid setting curing agent for even faster repairs, and Novolac resin for superior chemical resistance - cement based repair mortars have no resistance to acidity.

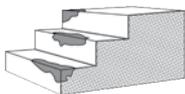
Abrasion resistance is greatly enhanced by the addition of a ceramic additive.

Compared with other repair mortars this formulation is particularly rich in epoxy resin. This provides superior strength and adhesion, making it ideal for very thin section, feather-edge or intricate repairs.

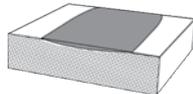
The new rapid cure formulation keeps downtime to a minimum in busy areas, with light traffic possible in as little as an hour.

Use in heavy wear areas where other repair mortars would fail - make your floor repairs permanent with Watco Concrex® Carbon Fibre.

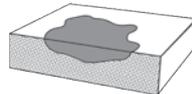
WHERE TO USE WATCO CONCREX® CARBON FIBRE



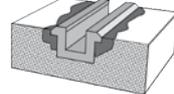
Damaged steps



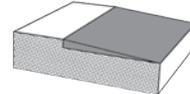
Worn floors



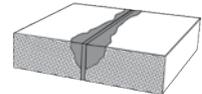
Holed floors



Fitting guide rails



Different levels



Spalled expansion joints

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.	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.
Colour	Mid grey.	Cleaning Tools	Use white spirit before Concrex® Carbon Fibre cures.
Primer Required	Not usually – see section headed 'Priming'.	Shelf Life	12 months in unopened container.
Usage Interior/Exterior	Interior & exterior.	Storage	Between 10°C - 30°C. Do not allow to freeze.
Working Life	15 - 30 minutes depending upon temperature.	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.
Application Tools	Steel float or trowel.		
Suitable For	Concrete, sand & cement and metal.	Principle 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.
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.		

Curing Times (at 15°C-20°C)	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

ALSO AVAILABLE IN THE CONCREX® RANGE



PREPARATION & APPLICATION

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.

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.

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 - 30 minutes depending upon 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 sand/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.



1 Empty the bottles of curing agent onto the sand/resin



2 Mix thoroughly using a trowel (or by hand – it's easier)



3 Trowel firmly into the repair



4 Wipe the trowel with white spirit to get a good finish

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.

SAFETY

Material Safety Data Sheets are available.