

Flowpatch[®] Sub Zero

Rapid set, pourable, concrete repair mortar for temperatures as low as minus 10°C



Watco Flowpatch Sub Zero is a magnesium phosphate cement, blended with specially selected aggregates, that will cure rapidly, even at minus 10°C and accept traffic after just 2 hours.

Ideal for repairing holes in damaged concrete floors in freezer and chiller rooms. Also suitable for general external repairs in cold conditions.



Areas of use:

- Cold stores
- Securing railings
- Poles and posts
- Roads and manhole frames
- Interior or exterior

Features:

- Easy to use – just add water, mix and apply
- High resistance to frost and de-icing salt
- Magnesium-based formula generates heat when mixed with water, allowing the product to be used as low as minus 10°C
- Low shrinkage
- High strength and durable
- Long working time combined with fast curing, can therefore be exposed to vehicle traffic after 2 hours (at 20°C)
- Can be applied at 50mm thick at minus 10°C

Need help? Speak to the experts

Our dedicated and professional team are here to help you get the best results for your project. They will talk you through the preparation and application stages when using **Flowpatch Sub Zero**.

Call our expert team on: **01483 418 418** (Weekdays 8:00am - 5:30pm. Saturday 9:00am - 12:00pm)



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1 Surface Preparation

Remove all loose material including dust, oil and grease. All substrates must be clean and structurally sound. The concrete should be damp, without free standing water or puddles.

Contaminated, smooth substrates or damaged concrete – must be prepared sufficiently via methods such as sandblasting or high-pressure water jetting.

Minimum application depth should be 10mm. Any repair edges should be cut to depth.

Please note: Although Flowpatch Sub Zero can be applied in temperatures as low as minus 10°C, the temperature of the substrate should be a minimum of 0°C and maximum of 30°C. Frozen substrates need to be thawed prior to application, we recommend using a blowlamp or gas torch.

2 Mixing

We recommend mixing is done in a forced action mixer or similar. Smaller quantities can also be mixed using a high-speed drill and paddle.

Remove the powder from the plastic container and prepare the water ready to mix. You will need approx. 3L water per 25kg powder. Add $\frac{3}{4}$ of the bag of powder to the water, while mixing for two minutes. Then, add the remaining quantity and mix thoroughly for a further two minutes until the mixture is a smooth (lump-free) workable mixture.

Please note: The maximum amount of water must be used. Do not use mix more material than can be applied within 20 minutes (at 20°C). Use immediately. For applications with a thickness above 100mm, 30% of clean, well-sized gravel can be added.

3 Application

Watco Flowpatch Sub Zero can be applied at temperatures between minus 10°C and 30°C. Concrete substrates and any metal parts in contact with Flowpatch Sub Zero must be free from frost.

As repair mortar: Apply a base coat with Flowpatch Sub Zero by brushing it into the porous substrate to create the optimum bond. Then apply the remaining material – wet in wet – up to the required thickness.

When working with Flowpatch Sub Zero at sub zero temperatures, cover Flowpatch Sub Zero with insulation materials or dry cloths until sufficiently cured. We recommend covering for 24 hours or until open to traffic.

Do not apply Flowpatch Sub Zero if the temperature is expected to drop below minus 10°C during the application or within 24 hours.

4 Safety

All product labels provide general safety information. Material Safety Data Sheets are available.

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Specification

Composition	Magnesium phosphate cement based powder.
Number of Components	1
Usage	Interior & exterior.
Application Tools	Steel float or Trowel and Mixing Blade.
Suitable For	Concrete, sand & cement.
Pack Sizes	25kg
Density	2.25 g/cm ³
Layer Thickness	Repair mortar - 10-100mm / 100-150mm (blended with 7.5kg clean gravel 4-8mm or 8-16mm per 25kg bag) Flowable mortar - 25 - 150mm.
Coverage	0.5m ² at 25mm thickness.
Curing Time	The mixed mortar will start to harden in approximately 20 minutes. Ready for light traffic after 1 hour at 20°C and ready for heavy traffic after 2 hours at 20°C. Lower temperatures will increase curing time..
Pot Life	Approximately 20 minutes. Do not mix more than you can use within this time frame.
Cleaning Tools	Remove excess with a cloth or scraper and wash with water before the product sets.
Shelf Life	9 months in unopened containers.
Storage	Store in dry conditions. Do not allow to freeze.
Safety	All product labels provide general safety information. Material Safety Data Sheets are available. Flowpatch Sub Zero contains cement which can cause serious eye damage, skin or respiratory irritation. Keep out of reach of children. Wear protective gloves (e.g. nitrile gloves) and eye/face protection. Avoid breathing in dust. If inhaled, remove victim to fresh air and and keep in rest position comfortable for breathing. If on skin: wash hands with plenty of soap and water and pit skin cream on (PH value approx. 5.5). If skin irritation occurs get medical attention. Take off contaminated clothing and wash it before reuse. The product is non-flammable.