

CROSFILL® 570

Ultra-Flow & Cure



CROSFILL® 570 Ultra-Flow & Cure is a rapid set, ultra-high flow, high strength, anchoring and patching grout. It is designed to be mixed to both a paste and a highly flowable consistency. **CROSFILL® 570 Ultra-Flow & Cure** is specially formulated to provide incredibly high dimensional stability in both the plastic and hardened state, even at a highly flowable consistency.

Recommended Uses:

It is particularly suited to setting post holes and spigots for balustrading, where rapid setting is important. It is also suitable for most void filling grouting applications including core holes, grouting under precast panels and concrete sections, hollow block walls, under column bases, anchor bolt filling, and general concrete repair work. It can be used for machine base plates where critical grouting is required, and applications subject to dynamic loads and where continuous vibration is present.

Advantages:

- CROSFILL 570 is classified as Non Hazardous with respect to Respirable Crystalline Silica (RCS) as it contains less than 0.1% RCS.
- Suitable for use as a very high flowable and plastic consistency grout.
- Extremely fast setting – sets hard in only 20-30 min.
- Rapid strength gain – 34MPa after 2 hours when mixed to a highly flowable consistency.
- Suitable for use at low temperatures, down as low as 5°C.
- Excellent flow properties.
- Fully recyclable, rain and tear resistant PE bags.

Surface Preparation:

Thorough substrate preparation is essential for achieving adequate adherence of **CROSFILL® 570**. The substrate surfaces including base plates must be free from grease, oil, dust, and any loose particles that may interfere with the bond. Ensure all post holes are cleared of any dust after drilling. Surfaces **MUST** be pre-soaked with fresh water 3-4 hours before grouting. Remove any excess water immediately before grouting. If using the **CROSFILL® 570** with any formwork, it should be constructed carefully where required to retain the grout. Carefully seal any gaps with a non-porous material to prevent leakage of grout.

Mixing and Set Time:

CROSFILL® 570 must be mechanically mixed using a forced action high shear mixing paddle. Do Not mix by hand.

Mixing of **CROSFILL® 570** should be carried out in small quantities of 10Kg or less. Mixing of quantities larger than 10Kg, will result in a mix with a very short pot life, and may set before it is able to be used. Mixing smaller quantities must be done with accurate dosing of water and powder, otherwise performance may be compromised.

Water addition quantities are highly dependent on the ambient temperature conditions. The following table and supporting information provide a comprehensive guide:

Temperature	Mix Water %	Mix Water for 1 Kg	Mix Water for 10 Kg
Below 10°C	33%	330ml (0.33L)	3.3L
10°C to 25°C	37%	370ml (0.37L)	3.7L
Above 25°C	41%	410ml (0.41L)	4.1L



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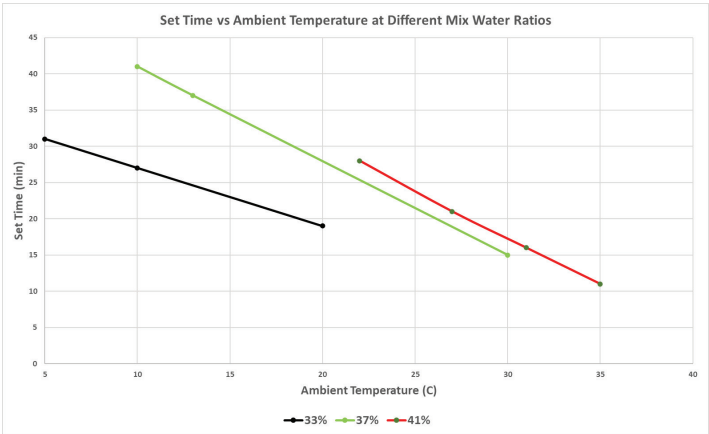
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Temperatures below 10°C will severely slow down the cure rate and strength development. If work must proceed under these conditions, we advise that the powder be protected from these temperatures, and the mix water temperature be warmed to a minimum of 20°C to minimise the impact. It is advisable not to grout in temperatures below 5°C.

Temperatures above 30°C will rapidly accelerate the cure rate and cause the product to thicken and lose flow very quickly. It is advisable not to grout under these conditions, but if work must proceed under these conditions, we advise that both the powder must be protected from these temperatures and the mix water temperature be cooled to below 20°C to minimise the impact of severe temperature. It is advisable not to grout in temperatures above 35°C.

1. Place the required quantity of potable water into a clean bucket.
2. Add **CROSFILL® 570** gradually while mixing.
3. Continue mixing for 2 minutes after final addition of ingredients.
4. Do not add too much water or too little water to the mix – use the recommended quantity.
5. Do NOT mix more grout than can be used within the working time of 10 min.

The relationship between set time, water content and mix temperature is critical for a rapid set system like the **CROSFILL® 570**. The following graph shows the relationship:



What this summarises is demonstrated in the table below:

Water Mix Content	Temperature (°C)	Set Time (min)
33%	5	30 – 35
	10	25 – 30
	15	20 – 25
37%	10	40 – 45
	15	30 – 35
	20	25 – 30
	25	20 – 25
41%	25	20 – 25
	30	15 – 20
	35	10 – 15



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When working at high and low temperatures, it is very important to make sure your mix water ratio is designed, to give you optimum set time for your application. As a guideline:

- Higher water content slows down cure, and lower water content speeds up cure.
- Lower temperatures slows down cure, and higher temperatures speeds up cure
- Balance your water content with the mix temperature to get the best result for your job

Placement

Place grout within 10 minutes of mixing. Do not attempt to retemper once the grout has started to stiffen. This timeframe will be shorter at temperatures above 35°C and longer at temperatures below 10°C.

When filling holes with embedded inserts in them – insert the embedded item into the hole, then pour the **CROSFILL® 570** around it ensuring the hole is filled. Allow to stand for 2-3 minutes then ensure the embedded item is supported until the **CROSFILL® 570** has set sufficiently to support it on its own (environmental temperature's will dictate this timeframe).

IMPORTANT NOTE:

- When using **CROSFILL® 570** with aluminium, the aluminium needs to be anodized, painted, or sealed to protect it from contact with the grout. The **CROSFILL® 570** is alkaline in nature and can react with the aluminium. Use in outdoor environments can exacerbate this problem.

Temperature Consideration:

The mechanism of interaction between cement and water is temperature sensitive. The set time is delayed at low temperatures and is accelerated at high temperatures. To avoid significant change in setting times, the recommended water temperature and ambient temperature ranges listed in the above section on Mixing should be followed accurately.

Ambient Temperature: Do not grout at a temperature less than 5°C. It is advisable not to grout in temperatures above 35°C, but if it is essential to do so, follow instructions above.

CROSFILL® 570 Ultra Flow & Cure – Product Data:

Application Thickness (mm)	10 - 100mm					
Fresh Mix Density	33% Mix Water	1900 Kg/m3				
	37% Mix Water	1800 Kg/m3				
Yield / 10Kg Bag (Litres)	41% Mix Water	1700 Kg/m3				
	33% Mix Water	7L				
	37% Mix Water	7.6L				
	41% Mix Water	8.3L				
Compressive Strength (MPa) In accordance with AS1478.2 Appendix A	Cure Time	2 Hr	4 Hr	1 Day	7 Day	28 Day
	33% Water	45	52	55	57	65
	37% Water	42	50	53	55	60
	41% Water	34	40	43	45	52

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.



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Packaging:

20kg Polyethylene (PE) bags

Shelf Life & Storage:

Shelf Life

The shelf life of the product is 6 months from the date of manufacture, if stored indoors in accordance with recommended storage conditions.

Storage

Store in dry conditions, in unopened and undamaged PE bags and in temperatures below 30C. If stored in excessive temperature conditions, externally exposed to the elements or in high humidity conditions, the shelf life may be reduced.

Safety Data:

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. In case of contact with the eyes rinse with running water (15 mins) including removal of contaminated clothing. Wear protective gloves, clothing, eye, and face protection. Avoid inhaling dust/ fume/gas/mist/ vapours/spray. Ensure adequate ventilation during mixing and application. A class P2 dust mask is recommended for use when handling powdered material, and whilst grinding or scabbling floors. For detailed information, refer to the SDS for **CROSflow**® 570, available at www.crosbe.com.

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Important notice:

A safety Data Sheet (SDS) is available from the Crosbe website (crosbe.com). Please read the SDS carefully prior to using this product. In an emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia).

Product disclaimer:

Recommendations and advice regarding the use of this product are to be taken as a guide only. The manufacturer of this product and any of its affiliate companies cannot be held responsible for any loss or damage arising from the incorrect usage of this product. The use of this product is beyond the manufacturers control, and liability is restricted to the replacement of material should the product be proven faulty. The information contained herein is to the best of our knowledge, true and accurate. We reserve the right to update information without prior notice. No warranty is implied or given to its completeness or accuracy in describing the performance or suitability of the product for a particular application.