

Technical Data Sheet

CROSFIL® 580 HES Precision Grout

CROSFIL® 580 HES Precision Grout is a high early strength, Class C Construction Grout. It can be mixed to a plastic or flowable consistency to an applied thickness of 10mm – 100mm. **CROSFIL® 580 HES Precision Grout** is specially formulated with Portland cement, graded fillers and performance additives to reduce water demand and shrinkage. It is non-shrink, with dual expansion in both the plastic and hardened state. It complies with ASTM C1107-91 Type C.

Recommended Uses:

It is 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 is suitable for machine base plates where critical grouting is required, and applications subject to dynamic loads and where continuous vibration is present.

Advantages:

- Versatile and easy to use premixed grout
- Dual Shrinkage compensated
- Very rapid strength gain – 25-30MPa after 2 hours when mixed to a plastic consistency
- Durable, hard wearing finish
- Free of chlorides
- Free of iron – will not rust or stain
- Good impact and thermal resistance
- Excellent flow properties
- Tear and rain resistant PE bags which are recyclable and reduce product loss from damaged packaging

Surface Preparation:

Thorough substrate preparation is essential for achieving adequate adherence of **CROSFIL® 580 HES Precision Grout**. Substrate surfaces including base plates must be free from grease, oil, dust and any loose particles that may interfere with the bond. Surfaces **MUST** be pre-soaked with fresh water 3-4 hours before grouting. Remove any excess water immediately before grouting. Formwork 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:

CROSFILL® 580 must be mechanically mixed using a forced action high shear mixing paddle.

Consistency	Litres / 20kg Bag
Plastic	2.2 - 2.5
Flowable	2.8 - 3.1

1. Following the recommended water addition, measure the required amount of water to achieve your desired consistency.
2. Place approximately 90% of the pre-measured potable water into a clean bucket.
3. Add **CROSFILL® 580** gradually while mixing.
4. Continue mixing for 2 minutes after final addition of ingredients.
5. Slowly add the remaining water until the desired consistency is achieved and mix for a further 1 minute.
6. Use grout within 15 minutes of mixing. Do not attempt to retemper.
7. Do NOT add additional water, as this can cause the grout to segregate and bleed impacting its performance.
8. Do not mix more product than can be used within 15 minutes of mixing.

Pumping:

Select an effective pumping method (eg Positive Displacement Pump) to match the specific application, taking into consideration the total volume of grout, distance and change in level from pump to area of application.

Remove any excess water from grout hoses prior to pumping. It is important to continuously agitate the grout after mixing and during the pumping process. If the grout is allowed to sit unagitated, it will increase in viscosity and may become more difficult to pump.

Grouting equipment should be rinsed / flushed regularly to prevent the build-up of grout on surfaces. Built up grout can become dislodged and cause blockages during the grouting process.

Dispose of any unused grout in an appropriate disposal area or construction waste bin.

Placement:

Place grout within 15 minutes of mixing.

Plastic Consistency - Rod into place

Flowable Consistency - Pouring from one side only into a formed area using a suitable header box. Avoid trapping air during this process.

To facilitate grout movement, gently strap or rod the grout during pouring. 10mm minimum thickness of grout is recommended.

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 are:

Water Temperature Range: 15 – 25 °C. Working with temperatures outside of this range will also impact the fluidity of the grout.

Ambient Temperature: Do not apply at a temperature less than 10 °C. Above 30 °C, consider using cooled water for mixing the product. Do not apply in temperatures above 35 °C.

Substrate Temperature: Do not apply onto a surface which has a temperature less than 10 °C or above 35 °C.

Crosbe CROSFill® 580 HES Precision Grout – Product Data:

Property	Result						
Application Thickness (mm)	10 - 100mm						
Time for Expansion (min)	Start			Finish			
	5 - 10 min			20 - 25 min			
20kg Bags per cubic metre	Plastic			98 - 100			
	Flowable			94 - 96			
Fresh Wet Density (kg/m³)	Plastic			Approx. 2210kg/ m ³			
	Flowable			Approx. 2180kg/ m ³			
Yield / 20kg Bag	Consistency			Yield (L)			
	Plastic			10.0 - 10.2			
	Flowable			10.5 - 10.6			
Setting Time (min)	Consistency			Initial		Final	
	Plastic			55 min		65 min	
	Flowable			65 min		80 min	
Compressive Strength (MPa) <i>in accordance with AS1478.2 Appendix A</i>	Consistency	2 Hr	4 Hr	6 Hr	1 Day	7 Day	28 Day
	Plastic	25-30	70-75	75-80	90-95	95-100	100-110
	Flowable	20-22	45-50	55-60	60-65	85-90	90-95

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

Packaging:

20kg Polyethylene (PE) bags.

Shelf Life & Storage:**Shelf Life**

The shelf life of the product is 18 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 30 °C. 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 **CROSFILL® 580 HES Precision Grout**.

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.

FOR MORE INFORMATION ON CROSE PRODUCTS PLEASE CONTACT US:**P: 1300 797 560****E: info@crosbe.com**