

Technical Data Sheet

CROsfill® 580 HES Precision Grout



CROsfill® 580 HES Precision Grout is a rapid set, ultra-high flow grout with both high early, and high final strength. It is designed to be mixed to both a plastic and highly fluid consistency. **CROsfill® 580 HES Precision Grout** is specially formulated to provide incredibly high dimensional stability in both the plastic and hardened state, even at a highly fluid consistency.

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, applications subject to dynamic loads, and where continuous vibration is present.

Advantages:

- CROsfill 580 is classified as Non Hazardous with respect to Respirable Crystalline Silica (RCS) as it contains less than 0.1% RCS
- Shrinkage compensated
- Very rapid strength gain – 25 to 30MPa after 2 hours when mixed to a plastic consistency
- Durable, hard-wearing finish
- Good impact and thermal resistance
- Excellent flow properties
- Contains no Methocel or ligno-sulphonate based superplasticisers
- Contains no aluminates or other gas producing additives
- Contains no iron – will not rust or stain
- Tear and rain resistant recyclable PE bags that help reduce product wastage

Surface Preparation:

Thorough substrate preparation is essential for achieving adequate adherence of **CROSFILL® 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 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.

Water Dosage	% of water	Litres of water per 20kg bag
	13.0	2.5
	17.0	3.4
	21.0	4.2
	23.0	4.6

- 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 Place grout within 10 minutes when using minimum water dosage and within 20 minutes when using maximum water dosage.
- 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 (e.g., 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 10 minutes when using minimum water dosage and within 20 minutes when using maximum water dosage.

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 Range: Do not apply at temperatures less than 10 °C and above 30 °C. Please consult Crosbe where extreme temperatures are expected. For best results, Crosbe recommends pre conditioning power and water to approximately 20 °C before mixing.

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

Shelf Life & Storage:**Shelf Life**

The shelf life of the product is 9 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.

Crosbe CROStill® 580 HES Precision Grout – Product Data:

Portland Cement	Complies with AS 3972							
Aggregates	Complies with AS 2758.0							
Maximum Particle Size	0.60 mm							
Water Dosage	% of water	Litres of water per 20kg bag			Yield (Litres per 20kg bag)			
	13.0	2.5			10.3			
	17.0	3.4			10.7			
	21.0	4.2			11.3			
	23.0	4.6			11.9			
Fresh Wet Density	AS 1012.5	% of water			Density (kg/m³)			
		13.0			2210			
		23.0			2060			
Flow Characteristics	AS 1478.2 Appendix C	% of water		Flow Cone (s)				
		23.0		25				
Setting Time	AS 1012.18	% of water		Initial (min)		Final (min)		
		13.0		10		15		
		23.0		25		40		
Compressive Strength (MPa)	% of water	2h	3h	4h	24h	7 Days	28 Days	
	13.0	28	49	72	95	99	107	
	23.0	17	26	30	60	74	82	
Dimensional Change (Drying Shrinkage)	AS 1478.2 Appendix B	% of water		7 Days		28 Days		56 Days
		13.0		50		70		80
		23.0		80		90		140

Packaging:

20kg Polyethylene (PE) bags, 1000kg bulk bags.

Safety Data:

CROSfill 580 is classified as Non Hazardous with respect to Respirable Crystalline Silica (RCS) as it contains less than 0.1% RCS

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 GROSE PRODUCTS PLEASE CONTACT US:

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