Technical Data Sheet

# CROSfill® 530 Precision Grout

CROSfill® 530 Precision Grout is a high ultimate strength, flowable, dual shrinkage compensated Class C precision grout. CROSfill® 530 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.

## Recommended Uses:

It is suitable for precision grouting applications from 10 to 125mm, where high flow and ultimate strength is required. 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:

- CROSfill® 530 Precision Grout is classified as Non-Hazardous with respect to Respirable Crystalline Silica (RCS) as it contains less than 0.1% RCS.
- Versatile and easy to use premixed grout.
- Dual expansion system, providing shrinkage compensation in both the plastic and hardened states.
- Suitable for use under static and dynamic loads.
- Rapid strength gain.
- Durable, hard-wearing finish.
- Free of chlorides.
- Free of iron – will not rust or stain.
- Good impact and thermal resistance.
- Excellent flow properties, making it suitable for large and small pours.
- 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 CROSfill® 530. 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 to saturate it with fresh water several hours before grouting. Remove any free 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® 530 Precision Grout must be mechanically mixed using a forced action high shear mixing paddle.

1. Recommended water addition is 3 – 3.1L water for a 20kg bag.
2. Place approximately 90% of the pre-measured potable water into a clean bucket.
3. Add CROSfill® 530 Precision Grout 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 15-20 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.

**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 15-20 minutes of mixing.

CROSfill® 530 Precision Grout can be placed in thicknesses up to 125mm in a single pour. For areas where the grout depth will be greater than 125mm, we suggest undertaking this in multiple pours.

**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, ambient and substrate temperature ranges are:

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

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.

**CROSfill® 530 Precision Grout – Product Data:**

| Application Thickness (mm) | 10 - 125mm | | |
|---|---|---|---|
| 20 Kg Bags per cubic metre | Flowable (15.5% nominal water) | 100 | |
| Expansion (per ASTM C1090) | | Height Change % | |
| | 28 days | 0% | |
| Yield / 20Kg Bag | Flowable (15.5% nominal water) | 10L | |
| Setting Time (min) | | Initial | Final |
| | Flowable (15.5% nominal water) | 250 min | 300 min |
| Compressive Strength (MPa) In accordance with AS1478.2 Appendix A. (15.5% water addition) | 1 Day | >40MPa | |
| | 7 Days | >70MPa | |
| | 28 Days | >90MPa | |
| Flexural Strength (MPa) (15.5% water addition) | 28 days | 12 MPa | |

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:

24 months from date of production if stored indoors in undamaged and unopened PE bags.

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® 530.

## Contact Crosbe:

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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 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 manufacturer's control, and liability is restricted to the replacement of material should the product be proven faulty. The information contained herein is true and accurate to the best of our knowledge. 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.