

## Technical Data Sheet

# CROSflow® 810 Floor Leveller

**CROSflow® 810 Floor Leveller** is a cementitious self-levelling underlayment with exceptional flow and adhesion properties. CROSflow® 810 Floor Leveller is suitable for internal applications where a thickness between 1mm and 30mm is required. Use CROSflow® 810 Floor Leveller over new or old concrete floors prior to the application of floor coverings. Will accept carpet and tiles after 24 hours, all other flooring coverings after 72 hours.

### Recommended Uses:

- Suitable for internal application
- Residential and commercial application
- New construction
- Refurbishment old floors
- Underlayment for carpet, carpet tiles, and ceramic tiles after 24 hours cure - refer to temperature considerations
- Underlayment for vinyl and timber after 72 hours cure - refer to temperature considerations

### Advantages:

- CROSflow 810 is classified as Non Hazardous with respect to Respirable Crystalline Silica (RCS) as it contains less than 0.1% RCS
- May be applied to a thickness of up to 30mm in one application
- Tear and rain resistant PE bags which are recyclable and reduce product loss from damaged packaging
- Highly accurate and consistent bag weights
- Excellent adhesion
- Exceptional flow and workability
- Trafficable at 12 hours
- Accepting of some floor coverings within 24 hours – refer to temperature considerations

### Surface Preparation:

Concrete floors must be structurally sound, clean and dry. Surface must be free from dust, dirt, wax, grease, asphalt, latex and gypsum compounds, adhesives, paint, curing and sealing compounds and other



contaminants which may act as a bond breaker. Concrete must be free from laitance, efflorescence and not be subject to hydrostatic pressure. Mechanically prepare the floor using recommended preparation methods such as shot blasting, scarifying, diamond grinding, or other suitable methods to provide a roughened, clean, sound, solid and open porous surface. Acid etching is not a suitable method of preparing the subfloor. Remove all dust and debris from the floor by vacuuming the surface with a suitable H Class industrial cleaner – must be equipped with a Hepa filter.

All concrete sub floors must be fully cured and dry in accordance with AS 1884 (Less than 75% relative humidity when measured in accordance with ASTM F2170. Ambient temperature, surfaces and materials should be maintained at temperatures higher than 10°C and below 35°C. For floors with a high humidity content or subject to rising damp, apply **CROSflow® Moisture Vapour Barrier**. Refer to the **CROSflow® Moisture Vapour Barrier** TDS for details. Refer to Crosbe Technical Bulletin on Concrete Subfloor Preparation for detailed information on preparation of the subfloor.

### Priming:

Using a soft brush or broom, prime the prepared concrete area with **CROSflow® Primer** and allow primer to dry. A second coat of primer may be necessary on areas with very porous surfaces where the initial coat has been completely absorbed. Allow the primer to fully dry to a clean, thin film (approx. 1- 2 hours depending on ambient conditions) before applying **CROSflow® 810**. Low temperature can delay the drying time of primer. Do not apply levelling until the primer has dried thoroughly.

### Mixing:

Place the recommended 4.4 – 4.8 litres of potable water into a clean mixing vessel and whilst mixing, slowly add the entire 20kg contents of **CROSflow® 810**. Mixing should take place using a forced action high shear mixing paddle, with a mixer capable of stirring at 600rpm. Mix for approximately 2 – 3 minutes to a lump free consistency. Be mindful of temperature considerations when using externally.

Use mix within 15 minutes after mixing, be sure to only mix a quantity that can be use within this time. This is particularly important when using in external environments.

- Do NOT overwater **CROSflow® 810**, use only the recommended mix water volume.
- Do NOT use a concrete or masonry mixer to mix **CROSflow® 810**.
- Do NOT mix by hand.
- Do NOT attempt to retemper mixed product once the working time of 30 minutes has been exceeded.

### Application:

Pour the mixed **CROSflow® 810** onto the prepared substrate and spread into place using a long handled gauged spreader. **CROSflow® 810** seeks its own level during the first 10 - 15 minutes after pouring. Subsequent applications of leveller should be made whilst the material on the floor is still fluid and has a wet edge, to allow for easy blending. **CROSflow® 810** can be applied up to 30mm thick in one application. Thicker applications may require a longer cure. In external applications, be mindful of the substrate temperature when applying.

It is recommended that spiked boots be worn, to minimise any indentations in the leveller whilst still fluid.

**CROSflow® 810** can be pumped with the use of an effective positive displacement pump. It is suggested that the pump manufacturer's instructions are followed carefully. Contact Crosbe Technical Services should any additional information be required.

#### Set Time:

Allow a cure time of 12 hours at 23°C for foot traffic. Allow **CROSflow® 810** to cure 24 hours at 23°C before applying carpet, carpet tile, or ceramic tile floor coverings. Allow **CROSflow® 810** to cure 72 hours at 23°C before applying impervious floor coverings, such as timber or vinyl. These times can be impacted by air temperature, substrate temperature and relative humidity. Thicker layers will extend drying times. These times can be impacted by air temperature, substrate temperature and relative humidity. Thicker layers will extend drying times.

#### Coverage:

20kg bag of **CROSflow® 810** will cover approximately 4.1m<sup>2</sup> at 3mm thickness, and 2.5m<sup>2</sup> at 5mm thickness.

#### Clean Up:

Wash all tools in water immediately after use.

#### 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 Temperatures: Do not grout at a temperature less than 10 °C. Above 30 °C, consider using cooled water for mixing the product. Do not grout 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.

#### CROSflow® 810 – Product Data:

Property	Test Result
Working Time at 23 °C	30 minutes
Fresh Mix Density (kg/m <sup>3</sup> )	2020

<b>Yield (L/20kg Bag)</b>	12.1L @ 4.4L water addition
	13.3L @ 4.8L water addition
<b>20 Kg Bags per cubic metre</b>	83 @ 4.4L water addition
	82 @ 4.8L water addition
<b>Foot Traffic at 23 ° C</b>	Approx. 12 hours
<b>Floor Coverings at 23 ° C</b>	Carpet & Ceramic Tiles: 24 hours, Timber & Vinyl: 72 hours
<b>Setting Times at 23 ° C</b>	Initial: 6-8 hours
	Final: 8-10 hours
<b>Compressive Strength</b>	1 Day: >12 MPa
	7 Day: >25 MPa
	28 Days: >32 MPa
<b>Application Thickness</b>	Minimum: 1mm
	Maximum: 30mm

Testing Parameters: 23% of water. Laboratory at: 23 +/- 2 ° C > 50% RH. 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.

#### Precautions:

- **CROSflow® 810** is designed as an underlayment and must not be used as a trafficable wearing surface. It must be covered with a suitable floor covering or coating.
- Do not use externally or in areas where the underlayment or subfloor is likely to be exposed to submersion, wetting or high levels of humidity.

#### 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 **CROSflow® 810**, available at [www.crosbe.com](http://www.crosbe.com).

**FOR MORE INFORMATION ON CROSBE PRODUCTS PLEASE CONTACT US:**

**P: 1300 797 560**

**E: [info@crosbe.com](mailto:info@crosbe.com)**

**Important Notice:**

A safety Data Sheet (SDS) is available from the Crosbe website ([crosbe.com](http://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.