

# PFL Non-Shrink Grout

**PeterFell**  
SPECIALISTS IN COLOURED CONCRETE

**PFL Non-Shrink Grout is a shrinkage compensated cementitious grout designed for decorative grouting in the PeterFell system.**

## Description:

PFL Non-Shrink Grout is used to fill in decorative cut lines in the Peter Fell system. This grout is specially designed to counteract the effects of shrinkage usually associated with cementitious grouts. PFL Non-Shrink Grout displays excellent adhesion to the substrate, is non-corrosive, non-toxic, and impact resistant. It is a single component material, just add water. It is designed to develop high early strength, enabling quick cure time and project progression. PFL Non-Shrink Grout can be coloured with any of PFL oxides, or left as natural grey.

## Precautions:

- Grouting should NOT be conducted as for ceramic tiles - this will lead to contamination of the concrete.
- DO NOT USE EXCESS WATER to clean wet grout from the concrete surface during application as this can lead to contamination of the concrete surface. Ensure ONLY clean water is used.
- In cases of excessive slab movement, due to design or environment, any stresses or cracking will occur down construction cuts (what they are designed for). This movement can result in cracking (typically fine hairline cracks) or 'popping' of cementitious grout (even PFL Non-shrink grout with impact resistant compounds). In these extreme cases a more flexible material should be used - contact Peter Fell Ltd for further information.

**Equipment:** Bucket (for mixing), PFL Grout Gun or trowel and PFL Grout Tape, hose (for concave finish), safety equipment (see 'Safety and Handling').

- **PFL Grout Guns** and **PFL Grout Tape** are available from Peter Fell Ltd.

**Preparation:** Concrete surface should be clean, and cut lines free of water, loosely adhering particles, and any other contaminants.

**Mixing:** The table below outlines mixing guidelines:

CUTS (lineal metres) <sup>#</sup>	GROUT WEIGHT	WATER		PFL COLOUR (5% dose)*
		Suggested	Maximum	
up to 15 m	5 kg	0.8 L	0.9 L	70 ml
up to 35 m	10 kg	1.6 L	1.8 L	140 ml
up to 50 m	15 kg	2.4 L	2.7 L	210 ml
up to 70 m	20 kg	3.2 L	3.6 L	280 ml
up to 85 m	25 kg (bag)	4.0 L	4.5 L	350 ml

<sup>#</sup> Measurements based on standard decorative cut 10 mm wide by 10 mm deep

\* For colours dosed at different rates or for full colour dose rate and weight information contact Peter Fell Ltd.

- It is recommended to mix small quantities at a time (i.e. 5 kg). It is strongly recommended grout is mechanically mixed (i.e. using drill attachment). PFL Non-Shrink Grout should be prepared as follows:
  - Measure suggested water and add approximately 3/4 of this volume to the mixing container
  - If adding colour measure into water, rinsing container to ensure all colour is added.
    - Important to add colour in same way in all subsequent mixes to ensure colour consistency.
  - Add grout to liquid and mix thoroughly (mechanical mixing recommended)
    - If hand mixing ensure ALL grout thoroughly incorporated.
  - Add remaining water as required to achieve desired consistency.
    - DO NOT add extra water as this will effect the colour.

Application continued over page...

## Application (continued):

There are two methods for the grouting of decorative cuts:

- (i) Grout Gun:** The recommended method. The PFL Grout Gun allows controlled application, reducing the risk of spillage and contamination of the surrounding surface.
- (ii) Trowel:** A more time consuming method that requires the surround of the cut lines to be protected using PFL Grout Tape.

- Both methods are described below. For both methods it is recommended to start in the least obvious location, working in small lengths at a time. Both methods can be finished in the same way (see 'Finishing' below) yielding the same final results.

### (i) Grout Gun Method:

- PFL Non-Shrink Grout should be mixed as described above to a reasonably fluid consistency
- Cut PFL Grout Gun nozzle to required width at a 45° angle.
- Remove trigger mechanism and fill gun with prepared grout mixture.
- Replace trigger mechanism and secure.
- Walk slowly backwards dispensing grout evenly into cut lines, controlling flow by pressure on the trigger.
- Ensure grout totally fills cut lines and is contacting all internal cut faces, and grout is slightly proud to top surface (i.e. marginally above level of the concrete).
- Finish grout in desired fashion (see 'Finishing Options' below) before it sets (within 30 minutes of mixing).

### (ii) Trowel Method:

- PFL Non-Shrink Grout should be mixed as described above to a firm consistency.
- Line both sides of ALL cut lines with PFL Grout Tape
- Apply grout into cut lines using trowel, taking care not to spread excess onto unprotected concrete.
- Ensure grout completely fills cuts, ensuring contact with all internal cut faces, and is slightly proud at top surface (i.e. marginally above level of the concrete).
- Finish grout in desired fashion (see 'Finishing Options' below) before it sets (within 30 minutes of mixing).

## Finishing Options:

Grout can be finished either flush or set down (concave) from the concrete surface, depending on personal preference. Finishing should be done only when grout has started to cure (stiffen), approximately 5 - 25 minutes from time of mixing - this will vary depending on mix consistency, application and drying conditions.

**Flush:** Once grout is sufficiently stiff, run a trowel or equivalent tool parallel to the surface, cutting grout flush with surface. To close the surface, work the trowel over the grout until desired finish is achieved. Any excess grout should be allowed to harden completely before attempting to remove.



Flush finish

**Concave:** Once grout is sufficiently stiff, run a trowel or equivalent tool parallel to the surface, cutting grout flush with surface. Run a pointing tool along grout to achieve desired curvature. Alternatively, a piece of hose (approximately 13 mm diameter works well) can be used. Any excess grout should be allowed to harden completely before attempting to remove.



Concave finish

**Drying time:** While grout will harden within 3 hours of application, PFL Non-Shrink Grout requires a minimum of 24 hours to attain full cure.

**Clean-up:** DO NOT USE EXCESS WATER TO CLEAN GROUT as this will spread the grout and contaminate the concrete, especially if using coloured grout. Use ONLY clean water when cleaning grout during application. Excess grout should be allowed to completely harden prior to removal from concrete surfaces. Hardened grout can be removed from concrete by broom or brushing. A damp sponge or cloth can be used to ensure a final clean up of the grout line. Ensure water is continuously changed and clean the cloth/sponge regularly to prevent contamination during this process. All tools and equipment are to be cleaned immediately in water after use. The hardened grout can only be removed mechanically once it has set.

## Safety and Handling:

- Hazard:** PFL Non-Shrink Grout is considered non-hazardous. However, as this product is a cement based powder it is recommended appropriate precautions are taken during use, including use of dust mask when handling in a confined space. Avoid prolonged contact.
- Safety:** Wear suitable protective clothing, gloves, eye protection, face mask (when handling dry powder).
- Pack Sizes:** 2, 5, and 25 kg bags.
- Storage:** Store in cool, dry, well ventilated place away from all liquids. Store out of reach of children. Store away from oxidizing agents (e.g. nitrates, peroxides, hypochlorites), acids, heat sources, and foodstuffs. Ensure bag is securely stored when not in use, and checked regularly for leaks or spills. PFL Non-Shrink Grout can be stored for up to 12 months.

## First Aid:

- Swallowed:** DO NOT induce vomiting and seek medical attention if irritation persists. Drink water to remove from mouth and throat. Give water or milk to drink.
- Eyes:** Immediately flood with copious quantities of water, holding eye open if necessary, for at least 15 minutes. Seek urgent medical attention.
- Skin:** Remove contaminated clothing and shoes and wash skin thoroughly with soap and water. If irritation occurs or persists, seek medical attention. Launder clothing and clean shoes before re-use.
- Inhalation:** Remove patient from exposure, keep warm and at rest. If there is respiratory distress, give oxygen and seek immediate medical attention.

## Physical and Chemical Properties:

Appearance.....	grey flowing powder
pH (viscous slurry in water).....	12-14
Solubility (in water).....	negligible
Bulk density (of dry powder).....	approximately 1.0 kg/L
Ignition temperature.....	>350°C

## Product Warranty

The information contained in this document is true and accurate to the best knowledge of Peter Fell Ltd. We cannot however anticipate all conditions under which this information and our products may be used. Peter Fell Ltd therefore accepts no responsibility and offers no warranty with respect to results obtained by the application of our products, their suitability, or for their safe use. Peter Fell Ltd offers our products for sale subject to, and 'The Customer' and all users are deemed to have accepted, our Terms and Condition of Trade. Peter Fell Ltd warrants our products to be free of manufacturing defects. If the product when purchased was defective and was within recommended storage life when used, Peter Fell Ltd will replace the defective product with new product without charge to the purchaser. Peter Fell Ltd makes NO OTHER WARRANTY, either expressed or implied, concerning our products.