



## APPLICATION GUIDELINES

## GROUTING INSTRUCTIONS

SUPERSHIELD CRYSTALGROUT is mixed in the ratio of 2.5 parts of powder to 1- 1.25 parts of water using a mechanical mixer. The mixing-time depends on the mixer, although four minutes should be considered the minimum. The final mixed material must exhibit a uniform, free flowing consistency. The mixed and uniformly stirred material is applied by means of appropriate pressure grouting equipment. (Refer Grouting Procedures given below).

## PATCHING INSTRUCTIONS

1) SURFACE PREPARATION: Rout out faulty concrete until the sound substrate is reached. Remove all loose materials from the area and saturate with clean water. Allow water to be absorbed into the concrete, and then remove excess water.

2) MIXING: For repairs to concrete and to make waterstop profiles, add water to SUPERSHIELD

CRYSTALGROUT (1 parts water to 4 parts powder by volume). To prepare stiff putty consistency patching compound use the following procedure. Begin by mixing 3 parts powder with 1 part water by volume until smooth (Mix for min two minutes) .Then add an additional one part of powder (Total of 4 powder one water)and continue mixing to obtain a workable mortar consistency and trowel on as required.

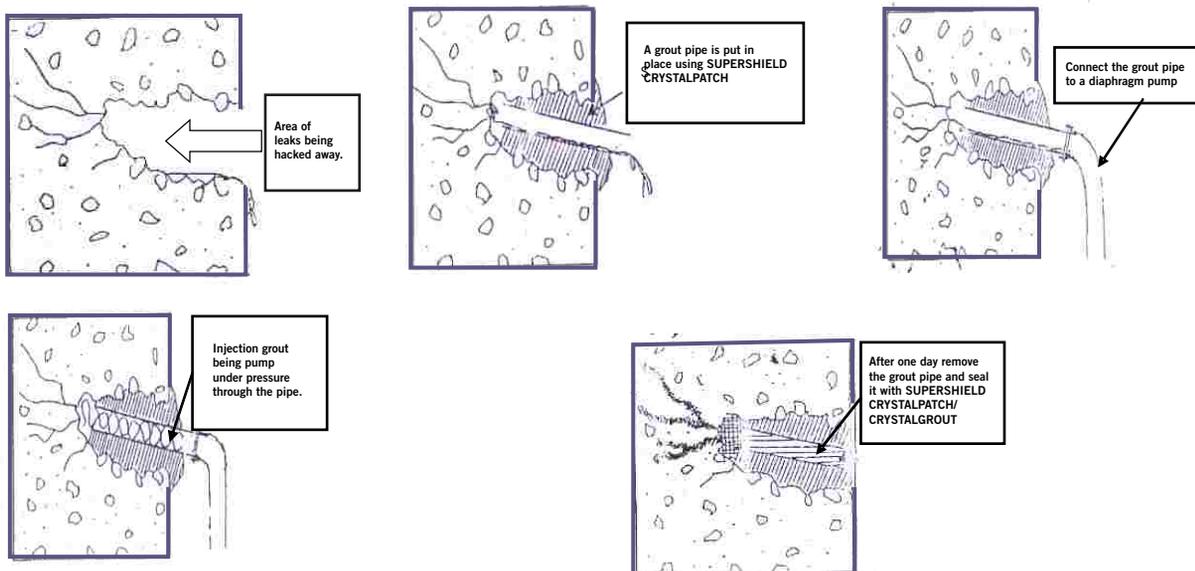
## PLASTERING INSTRUCTIONS

1) Mortar Preparation: Mix 1 part of SUPERSHIELD CRYSTALGROUT with 3 parts of fine sand and add required amount of water to make a mortar consistency.

2) Application: The mortar can be applied manually at a maximum layer thickness per layer of 30mm.

3) Curing: SUPERSHIELD CRYSTALGROUT is cement based and will cure and harden in the same way as ordinary concrete. However the setting and hardening time of SUPERSHIELD CRYSTALGROUT will be much faster than the ordinary concrete.

## GROUTING PROCEDURE



The information contained herein is based on our long-term experience and the best of our knowledge. We can, however, make no guarantee since for a successful outcome, all circumstances in an individual case must be taken into consideration. Indications of quantities required are only averages which in certain cases might be greater.



## APPLICATION GUIDELINES

Note: The mixture will appear dry at first, but with vigorous mixing the SUPERSHIELD active chemicals will dissolve and will make the mix more workable.

When aggregates are added to SUPERSHIELD CRYSTALGROUT for large patching works or for plastering purpose, it is advised to mix SUPERSHIELD CRYSTALGROUT in a slurry consistency using a portion of water that is to be added into the mix followed by the specified amount of aggregates and the balance water.

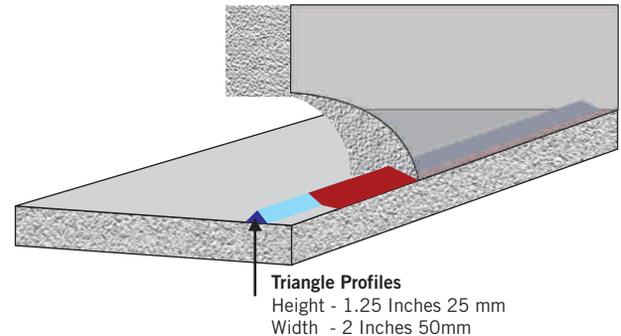
**TRIANGULAR CRYSYALLINE WATERSTOPS**

1) SURFACE PREPARATION: Remove all loose materials from the area and saturate with clean water. Allow water to be absorbed into the concrete, and then remove excess water.

2) MIXING: To make triangular shaped waterstops, add water to SUPERSHIELD CRYSTALGROUT (1 parts water to 4 parts powder by volume). To prepare stiff putty consistency mortars use the following procedure. Begin by mixing 3 parts powder with 1 part water by volume until smooth (Mix for min two minutes) .Then add an additional one part of powder (Total of 4 powder one water)and continue mixing to obtain a workable mortar consistency and trowel on as required.

3) INSTALLING: Apply a line of CRYSTALGROUT down the center of the joint using a margin trowel and then mold it into a triangle. The grout should form a continuous triangular strip that measures 50mm (2 inches) wide by at least 30 mm (1.25 inches) high. If reinforcing bars are present, apply CRYSTALGROUT as close to the center of the joint as possible ensuring a minimum 20 mm (1 inch) of

cover remains between the grout and the edge of the pour.

**HEALTH AND SAFETY**

SUPERSHIELD CRYSTALGROUT contains chemicals, which may cause skin irritation. For personal precaution, protective gloves and goggles are recommended to be worn during handling of this product. If product gets in contact with the eyes, flush immediately with clean water and seek medical assistance if symptoms prolong.

**STORAGE**

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

**PACKAGING**

Available in 25 kg (55.1 lb) Pails and 25 kg (55.1 lb) PE-lined paper bags.