

# HI-GROUT 100

(Plasticised Expanding Grout)

**HI-BOND**<sup>TM</sup>  
CONSTRUCTION CHEMICALS

## DESCRIPTION

**Hi-Grout 100** is a plasticized expanding grout powder additive which when mixed with cementitious system imparts shrinkage compensation and high flowability. It is a combination of a plasticizing agent use of a reduced W/c ratio with consequent increased strength & durability and a gas producing expansion medium counteracts the natural settlement and plastic shrinkage of the grout and aids stability and cohesion. It is suitable for Pre-Stressing grout admixture when complying with BS888110-1:1997-A.

## USES

- Cable duct grouting.
- Bed grouting.
- Filling and Jointing.
- Pressure Grouting.
- Filling up the plumbing and electric chases.
- Cavity filling.

## ADVANTAGES

- Economical to use.
- Compatible with all types of admixtures and cements.
- Compensates shrinkage in plastic stage.
- Reduces W/c ratio, improves strength and pumpability.

## PACKING

**Hi Grout 100** is supplied 250grs pouches.

## PROPERTIES

**Aspect** :Light yellow free flowing powder  
**Chlorideion content** :Nil  
**Dosage** :250gm/50kg cement  
**Compressive Strength** :Its Plasticising action allows the reduction of W/c ratio of grouts whilst maintaining flow properties. This gives improvement in strength and long term durability when cured under restraint.

### Setting

**Times** : It does not affect the setting times.

### Volume

**Expansion** : up to 4% (Neat cement grout\*)  
: up to 2% (Cement sand grout\*)

\*Properties of mix as suggested in directions for use

**Compatibility:** compatible with all types of Portland cement.

## APPLICATION

All areas to be grouted must be clean and free of oil, grease, dirt and dust. Remove all loose materials. All metal components to be in contact with grout must be free of rust, paint, or oils. All concrete to come in contact with the grout must be thoroughly saturated with clean water for a minimum of 12 hours before placement of grout. Remove excess water from holes and voids just before grout placement.

A mechanically powered grout mixer must be used for best results. It is essential that machine mixing capacity and labour availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of a holding tank with provision for gentle agitation to maintain fluidity.

First take water in the mixer and then the Portland cement, mix thoroughly until the cement has been completely dispersed. Then add Hi - Grout 100 and sand (if any is being used), and continue mixing a further 5 minutes, making sure that a smooth even consistency is obtained.

The grout shall be placed within 15 minutes of mixing to gain the full benefit of the expansion process. Usual placing or pumping procedures shall be adopted ensuring a continuous operation.

Recommended grout specifications for grouting

## Dosage

OPC	Concreting Sand	Water	Hi Grout 100	Approx yield
50 kg	--	20 to 23 litres	250 g	36 litres
50 kg	50 kg	22 to 25 litres	250 g	57 litres

**Note:** For grout, mortar or concrete mixes with an aggregate/ cement ratio more than 1, use 4 x 250 g units of Hi Grout 100 per 100 kg of cement.

### Effects of overdosing

Drastic overdosing of Hi Grout 100 increases expansion and may cause frothing.

### Curing

On completion of the grouting operation, any exposed areas which are not to be cut back should be

thoroughly cured by means of water application, Hi cure curing membrane.

### Cleaning

Grouts mixed with Hi Grout 100 should be removed from tools and equipment with clean water immediately after use.

### SHELF LIFE

6 months from the date of manufacture, if stored in original container under shade, unopened. Store in dry area.

### HEALTH & SAFETY

For further information refer to appropriate Product Safety Data Sheet.

## This Product is Formulated and Labeled and Commercial use only

For Best Results and Safest Usage, User is Specialty Directed to Consult.

Product Warranty: All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct. HI BOND warrants its products to be free of mfg. Defects and that, at the time and place of shipment, our material will meet current published physical properties when applied within HI BOND'S directions and tested in HI BOND'S standards. HI BOND'S facility is limited to replacement of material found to be defective. As HI BOND has no control over the use to which others may put its products. It is recommended that the product be tested to determine if suitable for a specific application and / or our information is valid in particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, applications and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents.