



KUT NON SHRINK PUMPING GROUT

Cementitious Microsilica Modified Slurry

GAP – 05 - 0104

DESCRIPTION

KUT NON SHRINK PUMPING GROUT is supplied as a ready to use powder requiring only the addition of water to produce a free flowing grout.

KUT NON SHRINK PUMPING GROUT is a unique product designed to give positive expansion in the plastic and hardened states, producing a low porosity high durability material.

It is carefully designed very fine blend of portland cements modified with silica fume, water reducing agents and expansive agents. The product is formulated to produce controlled expansion in the plastic state with low water mixing requirement to minimize segregation delivering high early strength and long lasting durability.

USES

- **KUT NON SHRINK PUMPING GROUT** is used for general purpose grouting of narrow concrete cracks or gaps between concrete and metal structures.
- It is recommended to filling gaps between metal electrical lighting poles base plates and the concrete supporting foundation.
- It is used for cable duct grouting in post tensioned concrete members..
- It is used for sealing / filling narrow concrete cracks, grouting machine base plates, stanchion bases and crane rails.
- It is an excellent grout for all horizontal ducts or concrete in situ opened channels installation of pipe lines, cables, ducts, plastic conduits etc.

ADVANTAGES

- **Fresh Product** : Locally manufactured always fresh product.
- **Non Shrink** : Positive expansion in plastic states.
- **Constant Quality** : Factory controlled pre – packed material eliminates site batching variations.

- **Pumpability** : Can be pumped long distance into narrow gaps. No segregation or bleeding.
- **High Early Strength** : Ensures rapid installation and early operation of plant.
- **Iron Free** : No metallic iron to cause staining or deterioration due to rust expansion.
- **Chloride Free** : Good early strength development without the use of chlorides.

TYPICAL PROPERTIES

- **Compressive Strengths** : **BS 1881**, Part 116, Cubes cured under restraint.

Age (days)	Compressive Strength (N/mm ²) at 25°C flowable
1	20
7	45
28	63

- **Flexural Strength** : **BS – 4551** at 20°C 8.5 N/mm² at 28 days.
- **Wet Density** : **BS 1881** – 2000 kg./m³ giving a yield of 16 ltrs. per 25 kg. bag at flowable / pumpable consistency.

Flow – gap widths are normally from 10 to 40 mm but the grout will flow into smaller gaps and can be pumped into small gaps i.e. between prestressing tendons in cable ducts.

- **Expansion Characteristics** : An initial expansion of 1 to 2 % when measured according to **ASTM C 827** overcomes plastic settlement in the unset material. Expansion in the hardened state when measured according to **ASTM C 1090– 88** complying with **ASTM C 1107 – 91** compensates for drying shrinkage.
- **Time for Expansion** : Initial expansion in the plastic state starts after 15 minutes and is completed by initial set. Expansion in the hardened state is complete after 3 days. Temperatures above 25°C may slightly reduce these times



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Surface Preparation : Remove oil and grease by blasting or scabbling. Clear entire area with oil free compressed air.

Pumping : Any standard grout pump may be used. These include diaphragm, piston and gear pump. Ensure a constant supply of grout to the pump.

Mixing : Place required water in mixer according to consistency required (7.5 litre to give flowable consistency). Gradually add 25 kg. of **KUT NON SHRINK PUMPING GROUT** and stir with slow speed electrical drill fitted with mixing paddle or mechanical mixer. Do not use colloidal mixer. Mix for 2 to 5 minutes after all powder has been added to obtain a lump free grout.

Placing : Pour grout from one side only maintaining hydrostatic head with continuous supply of grout until the grout comes part way up in end form. Alternatively grout can be pumped into position. When grout is set, cure exposed surfaces with a curing membrane after trimming to agreed profile.

PACKAGING

KUT NON SHRINK PUMPING GROUT is available in 25 kg. bag

Coverage Yield : A 25 kg. bag will yield approximately 16 ltrs. of pumpable free flow consistency grout.

Allowance should be considered for wastage in filling uneven surfaces or in grouting concrete cracks or sealing gaps

PRECAUTIONS

Cleaning : All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage system.

Protection : All work must be protected from rain and frost until fully hardened.

Storage : Shelf life is 12 months when stored in dry conditions at moderate temperature and humidity.

Fire Resistance : **KUT NON SHRINK PUMPING GROUT** is not flammable.

PERFORMANCE STANDARDS

KUT NON SHRINK PUMPING GROUT is tested using the appropriate section of

BS – 1881

ASTM C – 827 – 78

BS – 4551

BS 5075 – Part 2

ASTM C – 1107 Grade C.

KUT NON SHRINK PUMPING GROUT meets requirement of **CP 110 Part 1 – 1972 Section 6.12** for prestressing duct grouts.

HEALTH & SAFETY

KUT NON SHRINK PUMPING GROUT is non toxic but is mildly alkaline. Gloves should be worn during application.. Splashes to the skin or eyes should be removed with clean water. In the event of prolonged irritation, seek medical advice.

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Distributor: