

Structural Suppo Mortars



Products







Highway Products







**TECHNICAL DATA** 

# CABLE DUCT GROUT

## **Product Codes**

AG12, Packaging listed overleaf.

## Description

Cable Duct Grout is a specially formulated Portland cement powder mix designed for the grouting of cables in pre-stressed concrete and in posttensioned concrete. The mix design consists of a blend of fine and ultra fine cements plus a set of synergistic admixtures. The grout powder is packaged in 20kg durable, moisture resistant bags ready for on site mixing. The material readily mixes with water to produce a particularly fluid flowing grout which will penetrate and fill fine voids within and around the cables then harden without shrinking to give a high strength product.

Particular advantages of the product include quick and easy mixing with water producing a flowing mix which promotes penetration into confined spaces. The grout is dual shrinkage compensated in both the plastic and hardened states and contains a powerful corrosion inhibitor to protect the cables. The grout will not segregate or bleed, and is readily pumpable.

Once hardened and cured, excellent mechanical and bond strengths are achieved giving resistance to static and dynamic stresses. The grout has a chloride free mix design enabling the use of Cable Duct Grout in contact with all reinforcing steels.

Cable Duct Grout is fully compliant with the requirements of :-

Concrete Society Technical Report 47.

Uses include:	Grouting of ducts, voids		
	and fine fissures		
	Support of cable anchor plates		
	and ground anchors		
	To provide bearing or contact		
	between structural elements Grouting behind shafts and		
	tunnel linings		
	Underpinning, loose floor and		
	road slabs		

#### **Standards**

Cable Duct Grout has been tested in accordance with the appropriate parts of British Standards: B.S. 1881 B.S. 4550 EN 196 ASTM C230 ASTM C827

## **Specification Outline**

Grouting works shall be carried out using Cable Duct Grout as manufactured by Tecroc Products Ltd. The product must be stored, handled and used strictly in accordance with the manufacturer's instructions.

## **Quality Assurance**

Tecroc Products Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN 9002;1994 and is assessed by SGS Yarsley International Certification Services Ltd.

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## Typical Grout Properties @ 20 °C

Water content 35% by weight

7litres per 20kg bag

Compressive Strength Tested To BS 1881				
1Day	3 Days	7 Days	28 Days	
25N/mm <sup>2</sup>	35N/mm <sup>2</sup>	50N/mm <sup>2</sup>	70N/mm <sup>2</sup>	
Consistency		Highly fluid grout		
Consistency life		60 minutes		
with slight agitation				
Setting times		Initial 5 hours		
To BS 4550		Final 7 <sup>1</sup> /2 hours		
<b>Volume stability</b> Non shrink to ASTM C827				
Flexural strength		11N/mm <sup>2</sup> @ 28 days Tested to EN 196		
Tensile strength			7.5N/mm <sup>2</sup> @ 28 days Tested to B.S. 1881	
Density		2000kg/m <sup>3</sup>	2000kg/m <sup>3</sup>	

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# TECROC PRODUCTS

## CABLE DUCT GROUT

TECHNICAL DATA

#### **Instructions For Use**

#### Preparation

All necessary preparatory work must be completed before the grout is mixed. The fluid nature of the grout at 35% maximum water to powder ratio enables it to flow long distances in well prepared elements. Sufficient head should always be provided by positive pump pressure to ensure grout flow along or upwards in the cable ducts. Site trials may be carried out to confirm that suitable equipment is available. A surcharge stand pipe should be allowed for to take up 'sinkage' as the grout fills voids. Ensure that enough grout is mixed and available for the grouting operation to be completed in one continuous pour.

#### Mixing

For each 20kg bag of Cable Duct Grout, 7 litres of water are required. For single bag mixes suitable mixing may be achieved using a high torque slow speed drill with a Grout Stirrer. For larger mixes use a standard grout mixer such as the Groutmaster, Putzmeister or Colcrete series.

Pour the required quantity of clean water into the mixing vessel. Slowly add the Cable Duct Grout to the water whilst continually mixing. Keep the mixed grout in a slow agitating holding tank prior to placing.

#### Placing

Cable Duct Grout will be pumped into place.

The grout pump should be of the positive displacement type capable of generating at least 10 bars pressure. Up to 40 bars may be required to fill particularly long or high upward running ducts. The rate and continuity of placing should be controlled to encourage good penetration of grout into the voids within the duct and the expulsion of air from the duct. The grout should be mixed at a rate of production such that placing is achieved within 20 minutes of mixing. Do not disturb once grouting has been completed before the grout has hardened. Cable Duct Grout may be placed at temperatures between 5°C and 35°C. For placing temperatures outside this range contact the Technical Service Department.

#### Curing

After grouting has been completed, or when the formwork is removed, any exposed grout must be cured immediately with Polycure at the rate of  $10m^2$ /litre. During adverse weather conditions, such as high temperatures and drying winds, a second application of Polycure should be applied after the first application is dry.

### Precautions

#### Health and Safety

Cable Duct Grout is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice.

Full health and safety data are given in Product Safety Data Sheet.

### Fire

Cable Duct Grout is non-flammable

#### Yield

Each 20kg bag of Cable Duct Grout will yield approximately 13.5 litres of mixed material.

### **Storage And Shelf Life**

Cable Duct Grout will have a storage life of 12 months in unopened bags when kept in dry conditions at a temperature between 5°C and 45°C. Storage at higher temperatures and high humidity may reduce shelf life.

#### **Packaging And Ordering**

Cable Duct Grout is supplied: 20kg valvesack bags Product Code AG12

For further information and sales please contact your local Tecroc Products office as listed below.

Tecroc Products Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Tecroc Products Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Tecroc Products Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.

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