

NATCEM® D

Product Data Sheet



Description

NATCEM® D is an environmentally friendly, fine, flowable grout consisting of a blend of a Natural Cement binder and retarders.

NATCEM® D is suitable for the following applications:

- Grouting/Void filling
- Direct contact with potable drinking water
- Wastewater environments
- Coastal environments
- Spillways
- Stabilisation
- Waterproof grouting
- Tunnels
- Rivers & Canals

Properties

- Fast setting
- Rapid curing (30 minutes)
- Excellent adhesion
- Only requires the addition of water
- Waterproof
- Approved for use in public water supplies
- Sulphate resistant
- Resistant to chloride penetration
- High chemical resistance
- Sets Underwater
- Very low shrinkage
- Can be used down to 0°C
- Environmentally friendly & low carbon footprint
- Contains no chemical additives
- Tested to BS 6920 - Effect on Water Quality
- Fine particle size for great penetration

Yield

Generally, 1 x 25kg bag of NATCEM® D mixed with **10 litres** water will produce **18 litres** of finished grout.

Setting Time & Strength Gain

Start Set End Set	35 Min 45 Min	at 20°C at 20°C
	Flexible Strength (Mpa)	Compressive Strength (Mpa)
7 Days 21 Days	0.8 1	4 4.5
Strength continues to develop thereafter.		

Setting Times

NATCEM® D is designed to **commence setting at 35 minutes and finish setting at 45 minutes** at 20°C. In winter, NATCEM® D can be used down to 0°C. The set will be slower but can be accelerated by using warm water. In hot temperatures, the set will be faster and can be slowed by using cold water or NATCEM® SETTING RETARDER (see separate product data sheet).

Method of use

Preparation

Do not use on frozen or overheated substrates (0°–30°). The surface to which the NATCEM® D is applied should be clean, free from dust, and thoroughly dampened.

Mixing

Each bag of NATCEM® D should be mixed with **10 litres of water**. For optimum results, mix using conventional mixing machines. Always place the water in the mixer or mixing container and add the powder. Gradually add the NATCEM® D to **10 litres** of clean water per bag whilst continuously mixing the material. If one bag or less is to be used, the NATCEM® D can be mixed with a Rose Bud type paddle attached to an electric drill (900 rpm, 1000w). Mix vigorously for at least 2 minutes after adding all the mixture to the water.

NATCEM® D is designed to give a fluid mix, but this only develops after sufficient mixing. The mix will appear dry at first. Continue mixing until fluidity develops. Exceeding the specified water ratio will lead to lower early strength, longer setting time, and the risk of surface cracking appearing.

Priming

There is no need to prime any exposed reinforcement, but if priming is preferred, a conventional system may be used.

Placing

After mixing, apply the material as quickly as possible using traditional tools. Do not apply additional water to the surface, as this may cause surface cracking. Once the setting has started, **DO NOT** attempt to remix or to smooth the surface. This will cause the mechanical properties, in particular strength and adhesion, to be lost.

Precautions & Storage

We strongly recommend the use of GLOVES, GOGGLES and MASKS. Full details are provided in the Safety Data Sheet. Clean all tools with water immediately after use.

NATCEM® D is packaged in a polythene inner bag with a resealable tie within a stitch-sealed woven polypropylene outer bag that should be stored in dry conditions and will last for at least twelve months.

Approved for use in Public Water Supplies

DWI Reg.31 Approved ref Number: 56/4/1216

Scan to see Mixing Video:



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