

# TECHNICAL DATA SHEET

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# NuCote Non-Shrink Grout Cementitious Grout

# **PRODUCT DESCRIPTION**

**NuCote Non-Shrink Grout** is a one component cementitious and environmentally safe fluid and pourable grout with controlled shrinkage and expansion. **NuCote Non-Shrink Grout** consists of dry cement, graded aggregates, polymer and chemical additives, which only require the addition of controlled amount of clean water to produce a flowing non shrink compensated grout for minimum depth of 3mm and maximum gap of 250mm.

**NuCote Non-Shrink Grout** is a blend of cement, graded fillers, and chemical additives for optimum flow and high early strength. **NuCote Non-Shrink Grout** can be easily mixed and applied.

# **ADVANTAGES**

- High ultimate early strength.
- Excellent bond to concrete and other cementitious substrates without priming.
- Low permeability gives excellent resistant to attack by elements.
- Shrinkage compensated.
- Controlled expansion.
- Easy to mix.
- Rapid Setting.

# APPLICATION AREAS

- Filling void between base plate and a substrate.
- Anchoring of wide range of fixing (Mast, Anchor bolts, and Fence post).
- Hair line crack filler.
- All types of concrete structural repair.

# **TECHNICAL DATA**

DESCRIPTION	RESULTS
Compressive Strength	>25 MPa (24 Hours)
	>50 MPa (7 Days)
	>60 MPa (28 Days)
Flexural Strength	>8 MPa (28 Days
Application Depth (Min) (mm)	5mm
Application Depth (Max) (m <sup>2</sup> )	200mm – 250mm
Yield	Mixed with 5 litres of water will yield 14 litres per
	mixed grout.

Note: The above results are based on water ratio of 5 litres of clean tap water per 25 Kg bag. Actual product flow ability is affected by substrate conditions, temperature, water content, sample quality and equipment used to prepare mix.

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#### PACKAGING

NuCote Non-Shrink Grout is available in 25 kg bags.

## STORAGE AND STABILITY

**NuCote Non-Shrink Grout** has a shelf life of 12 months when stored in the original containers in a cool, dry place. Failure to do so will result in a reduction of shelf life.

# WORKABILITY

Once mixed, **NuCote Non-Shrink Grout** allow for easy application. Application time at 25 Degrees Celsius is 25 minutes.

# INSTALLATION INSTRUCTIONS

1. SUBSTRATE SURFACE PREPARATION

Concrete substrate must be structurally sound. Remove all oil, grease, paint, corrosion, dust, surface deposits, laitance or algae. Bolt holes and fixing pockets must be blown clean of any dirt or debris.

## 2. WATER SATURATION

Prepared substrate should be saturated it with clean tap water not allowed to dry out completely but should reach Saturated Surface Dry (SSD) condition before application for at least 2 hours prior to grouting. Any residual surface water must be removed before application of NuCote Non-Shrink Grout. No primer required under normal circumstances.

#### 3. BASE PLATE

The base plate must be clean and free from oil and grease.

#### 4. LEVELLING PLATES

This should be treated with a release agent if there are to be removed once the product hardened.

#### 5. FORMWORK

The formwork should be leak-proof by using foam rubber or a sealant between the joints and beneath the formwork.

# 6. UNRESTRAINED SURFACE AREA

This must be kept at a minimum. Generally, the gap between the perimeter formwork and the plate edge should not exceed 75mm on the pouring side and 25mm on the opposite side. It is advisable where practical to have no gap at the flank sides.

#### 7. MIXING

NuCote Non-Shrink Grout should be with forced action

mixer (a slow speed (500rpm) heavy duty drill with a paddle is acceptable).

The quantity of clean water required to be added to a 25Kg bag to achieve the desired consistency is:

Trowellable:	3.5 Litres per 25Kg bag
Flowable:	5.0 Litres per 25Kg bag

#### 8. PLACING

Apply immediately after mixing and at 25°C place the grout within 15 minutes of mixing to gain full benefit of the expansion process. **NuCote Non-Shrink Grout** can be placed in a minimum thickness of 5mm to a maximum thickness of 250mm in a single pour. Any bolt pocket must be grouted prior to grouting between the substrate ant the base plate. Sufficient grout must be prepared before starting. Continuous flow is essential hence the time take to pour a mix must be regulated to time taken to prepare another one.

Pouring should be from one side to avoid air or pre-soaking water becoming trapped under the base plate. Always pour the grout along the shortest rout of travel. **NuCote Non-Shrink Grout** can be pumped using heavy duty diaphragm, screw feed or piston pumps.

Make sufficient material, plant and labour available to ensure continuous application process.

#### CLEANING

Clean hands and skin immediately after use with an industrial hand cleaner. Clean tools and equipment immediately after use with **NuCote Cleaner X.** 

# LIMITATIONS

Do not use **NuCote Non-Shrink Grout** at temperatures below 5°C and temperature above 25°C. Avoid applications during the hottest times of the day and in direct sunlight. **NuCote Non-Shrink Grout** should not be used in any unrestrained situations.

Do not expose the product during application or while still in a plastic state to running water.

Application thickness should be in the following range 10 (mm) - 125(mm).

#### SAFETY AND HANDLING

Wear a dust mask when mixing **NuCote Non-Shrink Grout.** Suitable gloves and eye protection should be worn at all times. Should the product come into contact with the eyes, wash immediately and seek medical advice.

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# HEALTH AND SAFETY INFORMATION

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If inhaled move to fresh air. Consult a physician after significant exposure. If swallowed, clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. In case of skin contact, take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician when in contact with existing open wounds.

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological, and other safety-related data.

The Material Safety Data applicable to the handling of urethane raw materials should be read, understood, and rigidly adhered to. These are available on request from NATIONAL URETHANE INDUSTRIES (Pty) Ltd.

In accordance with ISO 9001:2015 and the Occupational Health and Safety Act (Act 85 of 1993), herewith Product and Safety Data Sheet.		
We hereby confirm that we have received a Product and Safety Data Sheet for NuCote Non-Shrink Grout system and are returning the obsolete copies.		
COMPANY NAME:		
SIGNATURE:		
NAME:		
DATE:		

#### CAUTION

The information contained in this bulletin is to the best of our knowledge true and accurate but any recommendations or suggestions, which may be made, are without guarantee since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

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