

# TECHNICAL

### Issue Date: 19/01/2022 Revised: 19/01/2022 Revision No.: 0

## NuCote Structural Repair Mortar Cementitious Rapid Set

#### **PRODUCT DESCRIPTION**

**NuCote Structural Repair Mortar** is a one component ready to use blend of dry powders that only require the addition of clean water to produce a good consistent, semi-flowable, shrink compensated, polymer modified cementitious repair mortar that will set faster than traditional mortars.

The material is formulated for trowelled application. Once mixed and applied, the product develops high early strength; and has good resistant to sulphate attack, carbonation, chloride ingress and freeze/thaw. The finished product is cement grey in colour.

#### **ADVANTAGES**

- Semi flowable Rapid application of large quantities.
- Simple to mix and apply
- Excellent resistant to attack by aggressive chemicals.
- Excellent adhesion.
- Shrinkage compensated.
- Extends life of concrete and repairs.

#### **APPLICATION AREAS**

- Structural repairs to concrete.
- Restoration of spalled and damaged concrete.
- Repairs to honeycomb.

#### **TECHNICAL DATA**

DESCRIPTION	RESULTS
Compressive Strength ASTM C109	>30 Mpa (24 Hours) >50 Mpa (7 Days) >70Mpa (28 Days)
Flexural Strength ASTM C580	>6 Mpa
Expansion	<0.5%
Initial Set	<20 Minutes
Final Set	<30 Minutes

The above results are based on water content of 4 Litre per 25Kg bag of **NuCote Structural Repair Mortar.** Results are affected by product storage conditions, temperature, water content, curing regime, sample quality, and equipment used to prepare samples and conduct actual testing. This product complies the minimum performance characteristics for (BS EN1504-3 Class-R4) classification.

#### PACKAGING

NuCote Structural Repair Mortar is available in 25 kg bags.

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#### STORAGE AND STABILITY

**NuCote Structural Repair Mortar** 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.

#### SURFACE PREPARATION

Concrete substrate must be structurally sound. Remove all oil, grease, paint, corrosion, dust and surface deposits. This can be done by wire brush or sand blasting.

After the substrate has been prepared ensure that the is wetted with water and not allowed to dry out. No priming is required if the substrate has been wetted and has achieved Saturated Surface Dry (SSD) conditions before placing. Bad quality concrete

If the substrate cannot be wetted to achieve Saturated Surface Dry (SSD) conditions, it must be primed with **NuCote MT Primer** and broadcasted with 1.3mm aggregate sand to improve the bonding.

#### MIXING

Add 4 litres of water per bag into the clean mixing container. Pour the desired amount of water into the mixing container for full bag mixing followed by full bag of **NuCote Structural Repair Mortar** and mix for 3 - 5 minutes, until mix is completely homogenous. Water level can be adjusted (3.8 - 4.3 litres per 25 kg bag) to achieve desired consistency. Use of part-bags is not recommended.

#### **PRODUCT LAYING INSTRUCTION**

When laying the product ensure the substrate has been pre-wetted. Levelling and initial finishing should be carried out using a wooden or plastic float. Final finishing should be carries out by steel float.

#### LIMITATIONS

Do not use **NuCote Structural Repair Mortar** at temperatures below 5°C and temperature above 25°C. Do not expose the product during application or while still in a plastic state to running water.

Yield: Mixed with 4 - 5 Litres of water will yield not less than 12 litres.

#### CLEANING

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

#### **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 Structural Repair Mortar system and are returning the obsolete copies.

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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