



# TECHNICAL DATA SHEET

## RP-MAX4

### STRUCTURAL REPAIR MORTAR

#### DESCRIPTION:

Grey cement-based, reinforced with fiber & chemicals, resistant to water and moisture, structural repair mortar for indoors and outdoors with low chloride permeability and improved adhesion and compressive strength.

#### APPLICATION AREAS:

Applied by hand for the structural repair of all kinds of concrete structures such as columns, beams, floors, curtain and retaining walls, and concrete blocks and rod holes filling as horizontal & vertical at indoors & outdoors.

#### ADVANTAGES:

- \* RP-MAX4 structural repair mortar provides labor and time advantage, by it's easy preparation and application features.
- \* Provides very high adhesion and mechanical strength.
- \* Prevents crack formation with it's fiber and chemical additives.
- \* Provides high resistance to frost and corrosive salts.
- \* Provides resistance to water and moisture.
- \* Provides repairing of concrete surfaces until 40 mm depth at one layer.

#### SURFACE PREPARATION:

Application surfaces should be clean, sound and free from dust. Adhesion barrier materials (oil, dirt, dust etc.) should be cleaned from the surface, cement-mortar residues should be scraped, any loose parts should be removed. If needed, surface should be cleaned with water. PRIMER-ST primer should be used at least 1 hour before the application to reduce water absorption of the surface in very hot and windy weather. If there is exposed steel reinforcement in the area to be repaired, RP-AC anti-corrosion mortar should be applied before the application.

#### PRODUCT PREPARATION:

25 kg RP-MAX4 structural repair mortar is added on 2,75-3,75 liters of clean water by sprinkling. Blended by a low speed mixer or by a trowel to ensure that there are no lumps in it. Mortar is rested for 5 minutes to mature and mixed again before the application.

#### APPLICATION METHODS:

- \* RP-MAX4 mortar is filled into the cracked area at a maximum depth of 40 mm with a trowel by applying pressure.
- \* If the crack is deeper than 40 mm, 2nd layer application should be done 1 day after 1st layer application.
- \* After the crack is fully filled with mortar, the application surface is smoothed by using trowel.
- \* If application area is wide and deep, glass-fiber mesh should be used to prevent formation of cracks on the surface. Mesh is placed by stretching while mortar surface is still fresh. Mesh should be embeded on plaster as gently pressing by a trowel.
- \* If needed, surface is smoothed with water by using finishing trowel when mortar surface starts getting dry.
- \* After drying time is completed, the surface becomes ready for the other applications on it.
- \* Ambient and surface temperature should be between +5°C and +30°C during the application.
- \* CURE-AR or CURE-SR should be applied to the surface to prevent early drying and to ensure ideal curing.
- \* Any extra material (lime, cement, etc.) should not be added into mortar.
- \* Surface should be protected from airflows and sudden temperature changes during and after the application.
- \* Mortar should not be applied on frozen, melting or within 24 hours danger of frost surfaces.
- \* Hardened mortar should not be used by adding water and mix again.

#### SHELF LIFE:

Unopened original packages can be stored in dry (%60 R.H.) and cool (+5°C / +25°C) environments for up to 12 months.

#### APPLICATION LIMITS:

Maturation Time: 5 min.  
Workability Time: 30 min.  
Drying Time: minimum 1 days

#### UNIT CONSUMPTION:

0,35 m<sup>2</sup> / 25 kg package (Application thickness: 40 mm)



1783

NUR KİREÇ SAN. TİC. VE PAZ. LTD. ŞTİ.  
Güzel Cumhuriyet Mah. Çimento Bulv. No:23 PK: 01965  
Yüreğir/Adana/Türkiye  
"NUR YAPI KİMYASALLARI"  
17

1783-CPR-639

TS EN 1504-3 / 04.2008

R4 Class Cement Based Structural Repair Mortar  
Used in Unreinforced Concrete Repair

Mortar Type: PCC / Repair Principle: 3 / Repair Method: 3.1-3.2

Reaction To Fire A1 Sınıfı

Dry Bulk Density 1500 ± 100 g/L

Compressive Strength (1st day) ≥ 20 N/mm<sup>2</sup>

Compressive Strength (28th day) ≥ 45 N/mm<sup>2</sup>

Bonding Strength Created by Adhesion ≥ 2,0 N/mm<sup>2</sup>

Restricted Shrinkage-Expansion ≥ 2,0 N/mm<sup>2</sup>

Dangerous Substances In Accordance With Article 5.4

PERFORMANCE DECLARATION NO 1504-3 / PB-05.004

PDDD SYSTEM SİSTEM 2+



GHS05



GHS07

H315: It causes skin irritation.

H318: It causes serious eye damage.

H335: It may cause respiratory irritation.

P280: Wear protective gloves/protective cloths/eye protection /face protection.

P305 In case of contact with eyes, rinse carefully with water  
P351 a few minutes. If available and easy, remove contact  
P338: lenses. Continue rinsing.

