



## POLY REPAIR 3400- HIGH PERFORMANCE COARSE STRUCTURAL REPAIR MORTAR – R4

### DESCRIPTION :

POLYREPAIR 3400 is a cement based, single component, waterproof, non-shrinking structural repair mortar with coarse aggregate and fiber reinforcement including performance and workability boosting chemical additives.

### ADVANTAGE:

- Easy to apply.
- Suitable for upside down applications.
- Not affected by humidity due to not having any metal content.
- Resistant to sulphate and chlorine.
- Does not cause corrosion.
- Resistant to carbonation.
- Can be used in contact with reinforcement due to chloride-free content.
- Does not shrink.
- Ensures high compressive strength.
- Does not cause cracking and dusting.
- Resistant to freeze-thaw cycle.

### AREA OF USE :

- Any kind of industrial, reinforced concrete building
- Floorings on special coverings and surface repairs for areas with light or medium traffic load
- Filling tension gaps (rod clearances/tie-rod holes) and core spaces in concrete buildings,
- Repairing concrete that is obtained via moulding during any kind of construction work and repairment of cracks,
- Engineering constructions such as subway, motorway, dam etc.,
- Repairment, restoration and reinforcement projects,
- Repairing surface disorders of 10 – 40 mm thick at once.

### SURFACE PREPARATION :

- The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.
- The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.
- Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

### MIXTURE PREPARATION :

- 25 kg of POLYREPAIR 3400 is slowly poured into 3.5-4.5 liters of clean water. Preferably with a low-speed mixer, it is mixed with water for a minimum of 1-2 minutes up until when a homogeneous mixture is obtained.
- The prepared mortar is left to develop for 3 minutes after which is then lastly stirred for another 2 minutes.
- The fresh mortar should be used within 30 minutes.

### APPLICATION :

- It is applied to the surface of suitable width using a trowel.
- To ensure surface smoothness, a three-layer application is performed. After application, the surface must be kept moist for 24 hours.
- If the application thickness is more than 30 mm, it should be applied in layers, and at least 3 hours should be waited between each layer.
- Consumption: Powder consumption for a thickness of 1 mm is  $1.90 \pm 0.2 \text{ kg/m}^2$ .

### PRECAUTION IN APPLICATION:

- Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.
- Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.
- The application area should be protected from the effects of wind and direct sunlight.
- The final consumption amount might vary depending on application conditions and surface characteristics.

### STANDARDS :

EN 1504-3, Class R4

### PACKING :

25 kg craft bags.

### STORAGE AND SHELF LIFE :

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use



**SECURITY INFORMATION :**

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.



**TECHNICAL PROPERTIES:**

Appearance	Grey Powder	-
Pot Life	Min. 45 Minutes	-
Application	Between +5°C and +35°C	-
Temperature		
Mixing Ratio	3.5 -4. 5 L water / 25 kg powder	-
Application	max. 40 mm	-
Thickness		
Consumption	For a thickness of 1 mm is	-
	1.90 ± 0.2 kg/m <sup>2</sup>	

**PERFORMANCE :**

Compressive Strength (28 days)	≥ 60 N/mm <sup>2</sup>	EN 12190
Flexural Strength (28 days)	≥ 10 N/mm <sup>2</sup>	EN 1015-11
Adhesive Strength (28 days)	≥ 2 N/mm <sup>2</sup>	EN 1542
Capillary Water Absorption	≤ 0.5 kg/(m <sup>2</sup> .h <sup>0.5</sup> )	EN 13057
Elastic Modulus	> 20 Gpa	EN 13412
Restrained Shrinkage / Expansion	≥ 2 N/mm <sup>2</sup>	EN 12617-4
Chloride Ion Content	≤ 0.05 %	EN 1015-17
Reaction to Fire	A1	EN 13501-1

Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

WE ARE HERE , DO NOT WORRY ABOUT THE STANDARD

WITH POLYSTAR THE HIGHEST QUALITY CONCRETE IS ACHIEVED

