

Structural Repair Mortar with corrosion inhibition.

Product Description

GripRepair SR 30 MCI is a high strength, shrinkage compensated, fibre reinforced, rapid set structural repair mortar that includes corrosion inhibitors.

Characteristics/Advantages

- Easy to use pre-blended product (just add clean water) with superb placing and finishing characteristics.
- Very low permeability protects steel and resists carbonation and chloride attack.
- Excellent high early and initial strengths, with high build allows for efficient application.
- Very good placement and finishing characteristics.
- Shrinkage compensated – Minimises tendency of repairs to cracks and allow ingress of water and chlorides, especially in harsh environments.
- Protects steel from corrosion with migrating corrosion inhibitors.

Typical Uses

Structural repair of concrete such as:

Most types of concrete structures and elements such as cooling towers, industrial buildings, tunnels, pipes, piers, columns and bridges to name a few.

Surface Preparation

Concrete surface or substrate must be structurally sound and fully cured, remove all loose concrete. Surfaces must be free of oil, greases, dust, rust, paint laitance and any other contaminants. Repair areas must have an aggregate exposed surface.

Use non-impact cleaning methods to expose the area and clean all reinforcing.

Priming/Structural Bonding

No primer is required.

Saturation of the repair area with water prior to application is highly recommended. Surface water should be removed prior to application.

For very poor concrete surfaces it is recommended to prepare the area with a **GripKey** bonding agent to ensure a good interfacial bond and to seal the area to prevent further ingress of chlorides or carbonation.

For structural bonds use **GripEpoxy 107N – Wet to Dry Epoxy Adhesive** (refer to spec sheet).

GripRepair SR 30 MCI



Mixing

A mechanical mixer is recommended. Add 3.0 to 3.5 Litres of water per 25kg bag into mixer then slowly add the **GripRepair SR 30 MCI** whilst mixing, until the desired consistency is achieved and free from lumps. Allow material 2 – 3 minutes to stand and remix without adding any water.

Hand or manual mixing is not suggested but should not other option be available add no more than 10kg's to no more than 1.4litres of water and mix vigorously with a spatula or similar. Increases in water content will result in lower strengths.

Placing/Application

GripRepair SR 30 MCI should be applied by trowel. A thin scraper coat can be used to improve application of layers thicker than 20mm. It is recommended for layers thicker than 30mm

GripRepair SR 30 MCI should be built up in layers of up to 30mm.

Layers up to 50mm can be placed with lower water content to give a stiffer stronger mix if required. Do not exceed 30mm for overhead applications.

Curing

Repair areas should be covered as soon as possible after placement with damp hessian or alternatively apply **GripCure Acrylic**. Curing is an essential part of achieving a crack free repair.

PRODUCT DATA

Appearance:	Powder
Colour:	Grey
Packaging:	25kg plastic lined polypropylene bags
Coverage:	1 bag of GripRepair SR 30 MCI mixed with 3.5lt of water will yield approximately 12.5lt of mortar
Storage Conditions:	Store in a dry cool area, temperature between 5 - 25°C
Shelf Life:	12 months in original unopened bags, when store in the correct storage conditions

GripRepair SR 30 MCI



Mechanical / Physical Properties

Type of repair Mix	Structural Repair Mortar
Mix Ratio	3.0 – 3.5lt
Ambient temperature at mixing	25°C
Yield	Approx. 12.5lt
Horizontal Max Thickness (with lower water)	50mm
Overhead Max Thickness	30mm
Working Temperature	Between 5°C and 35°C
Compressive Strengths	
After 4 hours	≥15MPa
1 days	≥22MPa
7 days	≥45MPa
28 days	≥75MPa
SANS 50196 - 1	
E-Modulus (28 Days)	≥20MPa
Adhesion (28Days)	≥2Mpa
Capillary absorption	≤0.6kg/m ² h ^{0.5}

Limitations

Do not mix more than 3.5lt of water with **GripRepair SR 30 MCI**

Mix only the require amount which can be placed within 10minutes.

Discard mixed **GripRepair SR 30 MCI** not used within 45 minutes DO NOT REMIX WITH ADDITIONAL WATER.

Do not apply if surface temperature area is below 5°C

Health and Safety

Refer to **GripRepair SR 30 MCI** MSDS sheet