Stanton Construction Chemicals

PRODUCT DATA SHEET

GripRepair RS

Rapid Setting Polymer Modified Concrete Repair Mortar

Product Description:

GripRepair RS is a polymer modified concrete repair mortar designed for rapid setting concrete repairs, such as honeycombed, spalled and damaged concrete. Ideal for honeycombing and patch repairs.

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.
- Very good placement and finishing characteristics.
- Shrinkage compensated – Minimizes tendency of repairs to crack and allow ingress of water and chlorides, especially in harsh environments.

Typical Uses:

Most types of concrete structures and elements such as industrial buildings, water-retaining structures, sewage and effluent concrete systems, tunnels, pipes, columns, stadiums to name a few.

Directions for Use:

Exposed Rebar & Structural Concrete Repairs:

Surface Preparation:

Where necessary cut back to expose sound concrete and reinforcing bars. Mechanically clean reinforcing steel to remove corrosion. Wash reinforcing steel with clean water (to remove soluble salt contamination) and dry. Use hot water and trisodium phosphate to remove grease and oil.

Priming:

- Prime all clean and prepared concrete & steel surfaces with **GripEpoxy 107** Wet to Dry Epoxy Adhesive @ 1mm thick.
- If inserting new reinforcing bars, coat same with **GripEpoxy 107N** Wet to Dry Epoxy Adhesive prior to proceeding with the repair.

Repair:

- Whilst primer is still wet - carefully apply and compact **GripRepair RS** mortar.
- **GripRepair RS** mortar can be applied from 5mm to 30mm dependent on repair size geometry.
- On larger flat overhanging areas, layers should not exceed 20mm in thickness, though several layers can be applied in quick succession, each layer being allowed to obtain initial set before the next is applied (usually between 20-40 minutes dependent on ambient temperature conditions). Finish off the final surface. Alternatively scratch the first coat after application, allow to dry overnight and then apply second layer. Cure with water or wet hessian.

Non-Structural Concrete Repairs:

Surface Preparation:

Where necessary cut back to expose sound concrete and reinforcing bars. Mechanically clean reinforcing steel to remove corrosion. Wash reinforcing steel with clean water (to remove soluble salt contamination) and allow to dry. Use hot water and trisodium phosphate to remove grease and oil.

Priming:

- Prime all clean and prepared concrete & steel surfaces with **PlasterGrip** – keying & bonding agent.

Repair:

- Whilst primer is still wet - carefully apply and compact **GripRepair RS** mortar.
- **GripRepair RS** mortar can be applied from 5mm to 30mm dependent on repair size geometry.

Mixing:

- A mechanical mixer is recommended. Add 2/3 (2.5Litres) of the water per 20kg bag into the mixing vessels then slowly add the **GripRepair RS** whilst mixing when the mix stiffens add the remaining 1/3 (1.1 to 1.3 liters) and continue mixing until the desired consistency is achieved and free from lumps. It is not suggested to empty the powder into the mixing vessels first and try to mix by adding the water. Allow material 1 – 2 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 1.8litres of water and mix vigorously with a spatula or similar. Increases in water content will result in lower strengths.
- It is recommended to use rubber or "builders" gloves due to the high alkalinity of the product.

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.

Limitations:

- Do not mix more mortar than can be used within 20 minutes
- Do not provide less than 25mm absolute minimum cover of repair mortar over reinforcement

- Do no re-temper or add water once the material has started to set
- For areas where the repairs are larger than 400mm thick, steel ties with thin mesh should be inserted to support its own weight.).

Product Data:

- Appearance: Powder
- Colour: Grey
- Packaging: 20kg plastic lined polypropylene bags
- Yield: 1 bag of **GripRepair RS** mixed with 3.6lt of water will yield approximately 10L of mortar
- Storage Conditions: Store in a dry cool area, temperature between 5 - 25°C
- Shelf Life: 12 months in original unopened bags, when stored in the correct storage conditions

Mechanical / Physical Properties:

Type of repair Mix	Structural Repair Mortar
Mix Ratio	3.6 – 3.8lt
Ambient temperature at mixing	25°C
Yield	Approx. 10lt
Horizontal Max Thickness (with lower water)	30mm per layer
Overhead Max Thickness	20mm
Working Temperature	Between 5^{c} and 35^{c}
Compressive Strengths 28 days SANS 50196 - 1	< 40 MPa
Adhesion (28Days)	≥1.7Mpa

Health and Safety

Refer to **GripRepair RS** MSDS sheet



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