



## Waterproof, Non-Shrink, Polymer Modified, Fibre Reinforced, Trowelable / Sprayable, Concrete Replacement Repair Mortar Conforming to EN 1504

### General

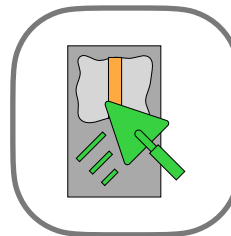
**SS – StructoRep R4/R4 SP** is a one component, fibre reinforced, non-shrink, waterproof, trowel able / sprayable (R4 SP is the spray grade, R4 is the trowel grade) repair mortar, which can be used for a variety of repair operations, where concrete replacement is required as part of repair strategy prior to Protective Coatings. It is a general-purpose solution to repair and restore concrete substrates. **SS – StructoRep R4/R4 SP** ensures excellent strength development and excellent bond to offer a restored substrate that can be utilised in a reasonably short time and a reasonably, waterproof and crack free protection is obtained. The dry sprayable formulation ensures low rebound and quick repairs.

**SS – StructoRep R4/R4 SP** is specially formulated to meet the requirements described above, owing to the selection of particularly suitable cements, special strength enhancing additives, spray aids, polymer binders and well – graded fillers. **SS - StructoRep R4/R4 SP** benefits the user by being easy to apply, provides an excellent surface for Protective Coatings like **SS - ProtectoCon AC** or other systems.

The mortar conforms to strength and durability requirements of EN 1504 and ensures a stable, water-tight, concrete replacement that most importantly does not crack.

### Product Features

- Well graded cementitious mortar, fibre reinforced
- Easy to mix and spray, also available in trowel grade
- Can be used in both dry and wet spray methods
- Sets and hardens rapidly to ensure quick overcoating
- Easy to level and finish
- Suitable for thicknesses of 50 mm in one pass
- Excellent resistance to water, alkalis, oil and salts
- Excellent adhesion to concrete
- Can be used as concrete replacement in structural repairs
- Conforms to strength and durability requirements of EN 1504 Type R4



Concrete  
Repair



### Areas of Application

- Repairing spalled or honeycombed concrete
- Smoothing and levelling broken concrete surfaces
- Repairing Large Concrete Areas
- Replacement of damaged concrete in bridges, buildings and tunnels
- Can be used in repair of jetties and marine structures
- Rock and slope stabilisation
- Tunnel linings
- As shotcrete for stabilising basement walls and other earth retaining structures
- Patching Mortar prior to waterproofing and coatings

### Areas of Application

<b>Specification Keywords</b>	Non-Shrink, Waterproof, Polymer Modified, Fibre reinforced, Sprayable / Trowel Applied, Repair Mortar, for Protection, Repairs, Tunnels, Bridges, Large Areas, sprayed concrete
<b>Delivered As</b>	Grey Powder
<b>Storage Instructions</b>	Store in a cool, dry area away from sunlight in original packaging
<b>Shelf Life</b>	12 months
<b>Post Use</b>	Empty packaging completely. Dispose as per local regulations. Refer MSDS for suggestions.
<b>Packing Size</b>	30 kg

**Assess Build Chem Private Limited**



## Hazards and Safety



## Technical Data

<b>Sp. Gravity</b>	1.8 ± 0.05
<b>Min. Use Temperature</b>	20°C
<b>Pot Life</b>	25 to 30 Minutes
<b>Setting Time</b>	4 to 8 hours depending on ambient temperatures
<b>Compressive Strength</b>	> 45 N/mm <sup>2</sup> in 28 Days
<b>Flexural Strength</b>	> 4.5 N/mm <sup>2</sup> in 28 Days
<b>Mixing Ratio</b>	10 to 12% Water by weight of Powder depending on consistency requirements.
<b>Consumption</b>	1.8 kg Powder / liter Volume.

## Instructions for Use

Prior to use, adequate surface preparation is needed. The substrate should be structurally sound, free from oils, grease, dust or curing compounds, etc. The cracked surfaces should be free from paints and laitance. The substrate should be damp, not saturated prior to application of **SS – StructoRep R4/R4 SP**. Remove any and all dust in the cracks / substrates using an air blower or a stiff brush.

Weigh out the water and **SS – StructoRep R4/R4 SP**. Add the powder to the measured water and not vice-versa as it helps in dispersion of the polymers. Mix Mechanically for 2 to 3 minutes to get a smooth mixture. Water if needed can be added to get the correct consistency. It can also be used with wet spray equipment with suitable nozzles.

Apply to the intended substrate, using a suitable mortar sprayer in 1 to 2 coats as required, with 3 to 5 hours between coats. After the mortar has dried, smoothen the surface using sandpaper or a stiff sponge. Cure like polymer modified mortars.

Mix and use complete bags for best results.

## Safety and Precautions

- Mix only small quantities that can be used within 30 minutes.
- Water should not be added to hardened mortar.
- Higher temperatures accelerate the hardening and lower temperature delays it.
- The mortar requires adequate protection from drying out and needs curing. Contact us for any other special applications.
- Take suitable safety precautions at all times. Always wear protective goggles, safety shoes, masks and gloves.
- If inhaled, move immediately to fresh air. In case of skin or eye contact, flush immediately with water for 15 minutes.
- Remove contaminated clothing and shoes and call a physician.
- Clean up promptly after job is complete. Clean equipment with water and allow to dry in a well-ventilated area. Allow rags etc. to dry in a well-ventilated area out of the reach of children and pets.
- Local, state and federal regulations should be consulted for proper disposal procedures.