

StrongPatch RSP

Rapid Setting Patch Repair for Concrete Slabs and Floors.

Description

StrongPatch RSP is a blend of dry powders and graded aggregates which requires only the site addition of clean water to produce a highly consistent, high strength, free flowing repair concrete which self- compacts. The material is blend of inorganic cements, special fillers and chemical additives to control the rate of strength gain to provide a fluid micro-concrete. **StrongPatch RSP** exhibits excellent thermal compatibility with good concrete and good water repellent properties.

Uses

For the emergency reinstatement of damaged or deteriorated concrete. The material is particularly suitable for repairs to airport runways, aprons and areas where wheeled traffic requires fast return to service. It may be used internally and externally.

Advantages

- Rapid strength gain – will accept vehicular traffic in in 3 hours
- High Strength, high abrasion and weather resistance
- Economical – can be bulked-out with graded aggregate in some locations
- Flowable, self – compacting – eliminates honey – combing and voids
- Contains no chloride admixtures

Physical Properties

Water powder ratio at 0.13 (28°C)

Compressive Strength, N/mm ² ASTM C-109	
3 hours	30
1 day	45
7 days	60
28 days	70
Working Life, mins	
25°C	30
30°C	20
Setting Time, mins BS 4550 : Part 3 : 1978 w/p ratio 0.18 @ 25 °C	
Initial set	40
Final set	60
Traffic Time, hr @ 25°C Pedestrian Vehicular	
	1
	3
Fresh wet density	Approximately 2,300 kg/m ³

Application Instructions

Preparation

Saw cut the extremities of the repair locations to a depth of at least 20 mm to avoid feather – edging and to provide a square edge. Break out the complete repair area to a minimum depth of 20 mm up to the sawn edges.

Clean the surface and remove any dust, oil, paint and grease deposited.

Priming

Prior placing, the prepared concrete substrate should be saturated by flooring with clean water. Immediately prior to the application of **StrongPatch RSP**, the water should be removed leaving the substrate fully

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Mixing

Mixing in a suitability sized drum using an approved spiral paddle in a slow speed (400/500 rpm) heavy duty drill is acceptable. Measure 4.0 to 4.5 litres of water and pour three quarters *into the mixer*. Add one full 30 kg bag of **StrongPatch RSP** and mix for one minute before adding the rest of the water. Mix for a further 3 to 4 minutes until a smooth even consistency is obtained.

When the drill and paddle mixing method is used, the complete measured volume of water should be placed in the mixing drum. With the paddle rotating, add one full 30 kg bag of **StrongPatch RSP** and mix for 3 to 5 minutes until a smooth **StrongPatch** even consistency is obtained.

Placing

The mixed material should be placed within 10 minutes of mixing in order to gain full benefit of fluidity. Repairs may be surfaced finished using a trowel or wood float. If a textured surface is required, this can be achieved using a suitable roller or brush as the material begins to stiffen. **StrongPatch RSP** can be applied up to 100 mm thickness in a single application.

For repair sections deeper than 100 mm, it would be necessary to fill-out **Strongpatch RSP** with suitable and properly graded aggregate in order to minimize temperature rise. Aggregate should be in a saturated, surface dry condition. The quantity of aggregate required will vary dependent on the nature and configuration of the repair location. The quantity of aggregate should never exceed 1 part aggregate to 1 part **StrongPatch RSP** (by dry weight). Trial mixes should be made in order to ensure the optimum addition of both water and aggregate.

Packing

StrongPatch RSP	30 kg bag
StrongBond AR	20 kg pail

Yield

StrongPatch RSP 15 litre per bag
depending on water addition
or 66 bags → yield 1 m³

StrongBond AR 4 – 6 m² per litre
depend on porosity of substrate

Technical Support

Estrong offers a comprehensive range of high performance, high quality of product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifiers, end- users and contractors, as well as on-site technical assistance.

Storage

StrongPatch RSP should be stored on pallets in dry conditions. Under these conditions, the product will have a shelf life of 6 months.

Precaution

StrongPatch RSP should not come in contact with the skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately and do not induce vomiting.

Additional Information

Estrong manufactures and offers a wide range of complementary products, which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.