

NUPATCH MORTAR & CONCRETE

Fast Setting Repair Compounds

Description

Prepacked, rapid setting, fibre reinforced cementitious repair Mortar and Concrete containing a latex bonding and waterproof gauging liquid. Designed to give rapid strength development even under adverse conditions.

Products Available

Nupatch Mortar:	Contains aggregate size 2 - 5mm for depth of repair from 10 - 30mm.
Nupatch Concrete:	Contains aggregate size up to 10mm for thickness in excess of 25mm.
Nupatch Primer:	Primer tack coat for use with both Nupatch Mortar and Nupatch Concrete.

Applications

- Repair of damaged concrete both insitu and precast.
- Repair of damaged floors and roads.
- Screeding where abrasion and/or water resistance is required.
- Repairs to spalled columns and beams using formwork.

Advantages

- Pack contains everything required including gauging liquid.
- Guaranteed water/cement ratio.
- Excellent adhesion to dense concrete and steel etc.
- Contains no chlorides.
- All contents pre-weighed dispensing with need for any measurement.
- Excellent workability and finishing properties.
- Good resistance to water, frost and salt.
- Can be laid in thin sections.

Technical Information

	Typical Density kg/m ³	Compressive Strength (N/mm ²)			
		4hr	24hr	7days	28days
Nupatch Mortar	2100	15	33	45	55
Nupatch Concrete	2350	20	37	49	58

Typical compressive strength results in N/mm² using 100mm cubes tested in accordance with BS1881 Part 4.

Maximum Water/Cement Ratio:	0.39
Usable Life:	Approx. 20 mins @20°C

Surface Preparation

The substrate must be clean and sound, hence all grease, oil, dust and laitance must be removed. Oil and grease should be removed by using Desolve and laitance should be removed by scarifying or acid etching with Chemclean. Once the reaction has ceased, the surface must be washed with water. The edges of the repair must be recessed at least 10mm. Where spalling is caused by reinforcement corrosion, all steel must be exposed and cleaned to remove all loose scale and rust, preferably by grit blasting.

Priming

Thoroughly dampen down the concrete and ensure all free standing water has been removed then prime with Nupatch Primer. Failure to thoroughly dampen down the substrate will cause the Nupatch Primer to dry too quickly. Mix the primer in the proportions supplied by adding the entire contents of the powder component to the liquid and thoroughly mix. Apply the Nupatch Primer to the prepared substrate, including any exposed reinforcement. The Nupatch repair material must be applied to the primed area while the primer is still tacky. Should the primer dry before the mortar is placed then the primer must be removed and the substrate re-primed.

Coverage of Nupatch Primer is 2.5 - 3.5 m² per pack.

Mixing

Mix as for normal concrete ensuring that materials are thoroughly mixed before use. The use of a forced action pan mixer will ensure thorough mixing. Add all the ingredients to the mixer and then add the gauging liquid. Do not overmix.

Application Instructions

Apply the mixed Nupatch to the substrate previously primed with the Nupatch Primer while the primer is still tacky. Compact the Nupatch to ensure maximum durability and finish as for normal concrete. Application to vertical surfaces will require the use of a shutter. All equipment should be cleaned immediately after use by washing with water.

Curing

Normal curing procedures should be adhered to and precautions taken to avoid frost attack.

Packaging

Nupatch Mortar is supplied in 25.0 kg packs (Yield 12.5 litres).

Nupatch Concrete is supplied in 25.0 kg units (Yield 10.5 litres).

Nupatch Primer is supplied in 3.8 kg packs (Coverage 2.5 - 3.5 m² per pack).

Storage

Nupatch has a shelf life of 12 months when stored unopened at moderate temperatures. Protect from frost.

Health & Safety

Nupatch does not present any undue hazard and is non-toxic, however, as it is alkaline, gloves should be worn and any material should be washed from the skin and eyes before it dries with clean water.

The normal standards of hygiene should be observed and the use of a barrier cream is advisable.

Limitations

Application should not be carried out when the temperature is below 0°C.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors.

Technical representatives are available throughout the UK to provide further information and arrange demonstrations.