

General purpose, high strength, epoxy patch repair mortar

Uses

For speedy and permanent repairs to spalled or cracked concrete structures; bedding in of precast concrete beams; and all repair work to concrete and cementitious substrates where strength, impermeability to water, and resistance to aggressive chemicals is essential. Emergency repairs to concrete structures, sea walls, industrial floors in chemical handling and process areas.

Advantages

- 2 - 3 times stronger than typical concrete. Excellent resistance to abrasion and impact
- Early development of initial hardness, minimises maintenance disruption
- Pre-weighed quality controlled materials ensure consistency and reduce risk of site errors
- Unaffected by a wide range of acids, alkalis and industrial chemicals
- Will cure under damp conditions.
- Two colour pack gives visual check on correct mixing
- Natural grey colour sympathetic to aesthetic requirements

Description

Nitomortar 908 is a blend of silica aggregates bonded together with epoxy resin, designed for speedy and permanent repairs to concrete.

The mixed material is applied to a suitably prepared, and in certain cases primed, surface and quickly cures to form a complete impermeable repair unaffected by many forms of chemical attack.

It is supplied as a two part colour blended material in pre-weighed quantities ready for on-site mixing and use.

Technical support

Parchem offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Design criteria

Nitomortar 908 can be applied in sections up to 50 mm thickness in horizontal locations. Thicker sections up to 75 mm are possible in smaller locations, dependent on the actual configuration of the repair area and the volume of exposed reinforcing steel. The material should not be applied at less than 5 mm thickness. In vertical applications, the material should be "built-up" to a maximum thickness of 12 mm. For greater thicknesses Nitomortar EL-HB should be used.

Greater thicknesses than those specified above can also be achieved by the application of subsequent layers.

Properties

The following results were obtained at a temperature of 20°C unless otherwise specified.

Compressive strength

7 days:	> 50 MPa
Pot life:	40 mins @ 20°C 20 mins @ 35°C
Mix ratio:	1:1 by weight or volume
Initial hardness:	24 hours
Full cure:	7 days
Minimum application temperature:	5°C
Chemical resistance:	The low permeability of Nitomortar 908 retards chemical attack in aggressive environments

Performance of Nitomortar 908 blocks continually immersed at 20°C:

Citric acid	10%	Excellent
Tartaric acid	10%	Excellent
Sodium hydroxide	50%	Excellent
Diesel fuel/petrol	100%	Excellent
Sulphuric acid	10%	Very good
Sugar solutions	Saturated	Very good
Lactic acid	10%	Very good
Hydrocarbons	100%	Very good
Phosphoric acid	10%	Very good

Application Instructions

Preparation

Clean the surface and remove any dust, unsound material, plaster, oil, paint, grease, corrosion deposits or algae. Roughen the surface and remove any laitance by light scabbling or grit-blasting. Saw cut or cut back the extremities of the repair locations to a depth of at least 5 mm to avoid feather-edging and to provide a square edge. Break out the complete repair area to a minimum depth of 5 mm up to the sawn edge.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should then be assessed by a pull-off test.

Substrate priming

The substrate should be primed using Nitomortar 903* or Nitobond EP*. The primer should be mixed in the proportions supplied, adding the entire contents of the 'hardener' tin to the 'base' tin. The two components should be thoroughly mixed together for 3 minutes.

Fosroc®

Nitomortar 908

The mixed primer should be scrubbed well into the prepared substrate, taking care that all imperfections in the surface are properly coated and avoiding 'puddling' in depressions. If the primer is absorbed within 30 minutes, a second coat should be applied before continuing. Nitomortar 908 can be applied as soon as the primer has started to gel but still has surface 'tack'. This is normally between 30 minutes and 4 hours dependent on the ambient and substrate temperatures. If primer cures hard, a second primer application must be made before application of Nitomortar 908.

Mixing

Thoroughly mix resin (white) and hardener (black) using a slow speed electric drill in a suitable container until an even grey colour is obtained.

Mixing part packs

It is recommended that full packs be mixed, however for applications where smaller quantities of product are required, experienced applicators may elect to mix part packs using the mix ratio shown in the Properties section of this document. In doing so the contractor accepts the risk of any off-ratio mixing. Reliable scales should be used to weigh out individual components.

Application

Apply the mixed Nitomortar 908 to the prepared substrate by wood float, pressing firmly into place to ensure positive adhesion and full compaction, then finished with a steel trowel.

Note: the minimum applied thickness of Nitomortar 908 is 5 mm.

Cleaning

Nitomortar 908 should be removed from tools, equipment and mixers with Fosroc Solvent 10 immediately after use.

Limitations

Nitomortar 908 should not be used when the temperature is below 5°C and falling. If any doubts arise concerning temperature or substrate conditions, consult your local Parchem sales office.

Estimating

Supply

Nitomortar 908:	10 litre 2 component pack
Nitomortar 908:	FC340005-10L
Nitomortar 903:	1.5 and 6 litre packs
Nitobond EP:	1.5 and 6 litre packs
Fosroc Solvent 10:	4 and 20 litre pails

Coverage

Nitomortar 908:	2 m ² at 5 mm thick
Nitomortar 903:	5 m ² / litre (approx)
Nitobond EP:	4 - 5 m ² / litre (approx)

Note: The above coverage figures are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced.

Storage

Shelf life

All products have a shelf life of 3 years at 20°C if kept in a dry store in the original, unopened packs. Refer to the Use by Date indicated on the packaging.

Storage conditions

Store in dry conditions in the original, unopened packs. If stored at high temperatures, the shelf life may be reduced to 4 - 6 months.

Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.