



constructive solutions

GUIDE TO CONCRETE DEFECTS

Have you noticed cracks in concrete or other concrete defects on-site? Fosroc has a comprehensive range of concrete repair products that can provide the solution.

Use this guide to help identify concrete defects onsite and the recommended Fosroc repair solution. Contact your Fosroc representative for further advice and to arrange a site visit to finalise the best product solution for the job.

This is a guide only, always refer to the product TDS before making your final selection and speak to your Fosroc representative.



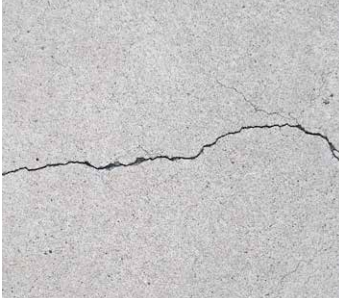
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VERTICAL & OVERHEAD APPLICATIONS

Problem

Solution

Surface cracks, hairline cracks



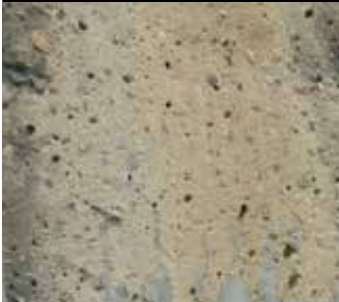
Nitomortar AP

Two part epoxy adhesive repair paste



- Use for speedy patching of repairs to concrete structures.
- Initial hardness developed after 5 hours.
- Excellent abrasion and impact resistance.
- Can be used for potable water applications, complies with AS4020.2018.
- Trowel applied.

Shallow surface imperfections, 0-3mm deep, such as pinholes



Renderoc FC

Polymer modified cementitious fairing mortar



- Use to cover surface imperfections up to 3mm deep.
- Designed for application in thin layers to produce a fair-faced appearance to concrete and masonry surfaces in readiness for a protective coating.
- Trowel applied

Surface imperfections, 0.5-5mm deep, such as blowholes



Renderoc ST 06

Two part cementitious repair mortar



- Use to reinstate low concrete cover on precast and in-situ concrete where there is not enough concrete to protect the reinforcing steel.
- Can be used to seal shallow non-moving hairline shrinkage cracks.
- Functions as a barrier protecting concrete from the ingress of water, chloride ions, carbon dioxide etc from the atmosphere.
- Low permeability to water, CO2 and chloride ions.
- Trowel applied, 0.5mm to 5mm deep.

Low concrete cover



Renderoc ST 06

Two part cementitious repair mortar



- Use to reinstate low concrete cover on precast and in-situ concrete where there is not enough concrete to protect the reinforcing steel.
- Functions as a barrier protecting concrete from the ingress of water, chloride ions, carbon dioxide etc from the atmosphere.
- Low permeability to water, CO2 and chloride ions.
- Trowel applied, 0.5mm to 5mm deep.

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HORIZONTAL APPLICATIONS

Problem

Solution

Localised patch repairs
(1 to 2m²)

Renderoc Rapid

Cementitious rapid set repair mortar



- Use for urgent localised, small area patch repairs of floors and pavements
- Designed to accept traffic 1 hour after placement.
- Internal and external applications.
- Trowel applied, 25mm to 250mm deep
- When reinstating floor and pavement areas having a repair area >2m², use Fosroc Patchroc C or GP, check with your Fosroc Representative.

Large area repairs
(up to 18m²)

Paveroc

Cementitious repair mortar



- Use for reinstatement of large areas of concrete floors and pavements, up to 18m²
- Trafficable after 16 hrs
- Apply by trowel or pour, 15mm to 50mm deep

Cracks at concrete joints

Nitomortar 903 + F4 Fillers

Two part, solvent free, epoxy mortar



- Combined with F4 Fillers, Nitomortar 903 is used to produce epoxy mortars of various consistencies.
- Often used to rectify cracks at joint arrises.
- HACCP certified for use in food handling areas.
- Suitable for potable water applications, complies with AS4020:2018.

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ALL ORIENTATIONS

Problem

Solution

Acid and chemical attack

Renderoc G

Geopolymer, acid resistant repair mortar



- Use for long term protection of concrete in aggressive environments, such as:
 - potable water structures
 - sewer systems
 - sugar, dairy and wine processing industries
- Excellent long term chemical resistance.
- Suitable for potable water applications, complies with AS 4020:2018.
- Can be applied by trowel or wet spray.

Cracks in beams, slabs, pillars

Nitofill LV

Low viscosity epoxy injection system



- Use to consolidate a structure or exclude water and air from contact with the reinforcement steel in structural and non-structural concrete including beams, slabs and pillars.
- Ideal for small scale crack repairs on site.
- Suitable for in-situ or precast concrete elements.
- Supplied in a dual cartridge, packers and couplers are also available.
- Suitable for cracks down to 0.2 mm at the substrate surface and internal cracks tapering down to 0.1 mm.
- Not suitable for moving cracks.

Must be applied by a trained applicator.

Water leaks

Nitofill PU150

Hydrophilic polyurethane injection resin



- Use to seal leaking cracks, voids or fractures in inaccessible areas in concrete structures.
- It is a single component system that reacts with water to form foam, which expands to fill the void and stop the water flow.
- Rapidly forms a highly resilient, flexible seal that allows movement of the crack, fracture or joint.
- Reacts with sea water or mineral water.
- Can be used for potable water applications, complies to AS/NZS 4020:2005.

Must be applied by a trained applicator.

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Structural defects

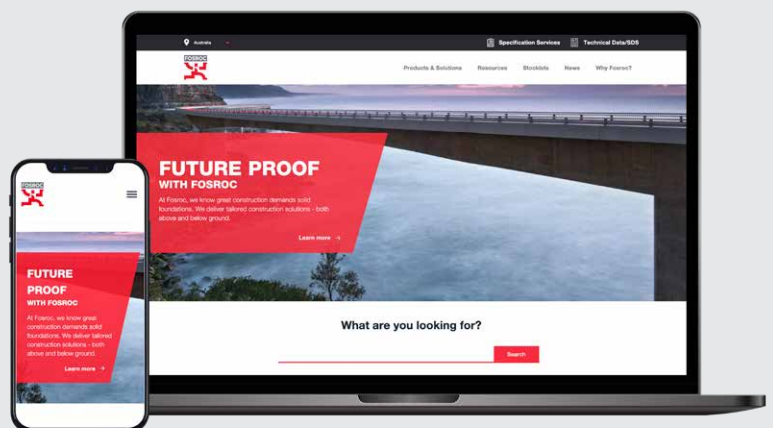
Fosroc offers a comprehensive range of concrete repair products that are suitable for more severe repairs such as structural defects. Contact your Fosroc representative, they will come to site, assess the repair and determine the best course of action, including product and application recommendations.

Here are some examples of concrete in need of major repair:



So keep a watch out on site, the Fosroc team is ready to help.

For more product information, including TDSs, product brochures and product selection tools visit fosroc.com.au and fosroc.co.nz.



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