Fosroc®
Nitoseal® PU250

FOSROC constructive solutions

High performance, polyurethane joint sealant for vertical interior and exterior applications

Uses

Sealing joints in concrete panels, fibrous cement products, external cladding panels, blockwork and brickwork. Also in sealing joints around aluminium and timber door and window frames and between metal.

Nitoseal PU250 is also suitable for sealing movement joints in metal or concrete water tanks.

Advantages

- Excellent primerless adhesion to concrete, timber, masonry, bricks, aluminium, metal and ceramics
- Low stringing
- Low odour
- Weather resistant
- Easy to gun out
- Suitable for use in contact with drinking water

Standards Compliance

Nitoseal PU250 has been tested to comply with AS4020:2018. Refer to AWQC Report 339139.

Copies of the report are available on the Fosroc website.

Description

Nitoseal PU250 is a high performance elastomeric joint sealant based on polyurethane technology. Nitoseal PU250 uses a cure system reacting on exposure to atmospheric moisture. When cured it forms a waterproof and durable seal, which makes it ideal for exterior applications.

Design Criteria

Nitoseal PU250 is designed for sealing movement joints between 10mm and 35mm wide however joints down to 5mm and up to 50mm wide can be sealed under suitable conditions.

The movement accommodation factor (MAF) of a joint sealant must be considered in the design width and spacing of movement joints in a structure.

The sealant Width to Depth ratio should be kept at a minimum depth of 10mm for joint widths between 10mm and 20mm and 2:1 for joint widths greater than 20mm.

For further details contact Fosroc for specific advice.

Properties

Form:	Smooth, non-slump paste
Movement accommodation factor:	± 25% (total 50%)
Tack-free time:	90 mins (+/- 10 mins) at 23°C, 50% RH
Cure time:	3mm / day 23°C 50% RH
Hardness Shore 'A':	25 (+/-5) (ISO 868)
Modulus at 100% elongation:	0.20 - 0.30 MPa (ISO 8339)
Elongation at break:	>500%
Continuous service temperature range:	Minus 40°C to + 70°C
VOC content:	103.6g / litre

Application Instructions

Preparation

The joint surfaces must be thoroughly dry, clean and frost free. Remove all dirt, laitance, loose materials and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using Fosroc Solvent 10.

In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, to allow optimum sealant performance.

In shallow joints self-adhesive polyethylene bond breaker tape should be used to eliminate adhesion to the base of the joint (3 sided adhesion).

Deep joints should incorporate a backing strip such as Expandafoam Backing Rod or Hydrocell to support the sealant while also acting as a bond breaker.

Priming requirements

Good adhesion can be gained to clean, dry, uncontaminated concrete, timber, metals, ceramics, brickwork and most coating surfaces without the use of primers. On some surfaces however, adhesion may be improved by the use of a primer. Where doubt exists over the suitability of the substrate for unprimed adhesion, site trials should be conducted in conjunction with priming advice from Fosroc. In most applications optimum adhesion to concrete and other porous materials can be achieved using Primer 21. Primer 13 must be used on concrete in applications subject to semi-permanent or long term water immersion. For non-porous materials such as aluminium, stainless steel and galvanised metals, refer to Fosroc for specific advice.

Gun Loading

Nitoseal PU250 is applied using a suitable sealant gun. Insert the sausage into the gun, cut a slit in the top of the sausage, replace the end cap and nozzle and apply the sealant.

Fosroc®
Nitoseal® PU250

Application

Extrude the sealant firmly into joint to ensure complete contact with joint faces. Smooth finish if necessary with a suitable spatula. Do not spray detergent solution on to the sealant surface as this will promote surface blisters.

Cleaning

Clean tools immediately after use with Fosroc Solvent 10.

Limitations

Do not apply Nitoseal PU250 to bituminous surfaces nor allow bitumen to contact Nitoseal PU250. Nitoseal MB175 is recommended for these applications (refer to Nitoseal MB175 TDS).

Paintability - although polyurethane sealants will generally accept painting with acrylic coatings, it is possible for plasticisers to migrate over time and stain the surface of the coating. Fosroc does not recommend painting over Nitoseal PU250 and recommends the use of Nitoseal MS250 in these applications.

Supply

Nitoseal PU250 is supplied in 600 ml foil sausages in cartons of 12.

Nitoseal PU250 Concrete Grey:	FC920112-600ML

Primer 13 is supplied in 2 component packs.
(Base and Hardener, supplied in the correct proportions Complete units must be mixed to ensure correct curing)

Primer 13 (250ml pack):	Base: Hardener:	FC965229-125ML FC965230-125ML
Primer 13 (1 litre pack MTO):	Base: Hardener:	FC965229-500ML FC965230-500ML

Primer 21 (250ml):	FC965228-250ML
Fosroc Solvent 10 (4 litre):	FC600800-4L

Coverage:

As a guide, one 600 ml sausage will seal 3 metres of 20mm x 10mm joint

Storage

Shelf life is 18 months from date of manufacture when kept in its original, un-opened packaging and stored in dry conditions between +10ºC and 25ºC with 55% relative humidity, away from direct sunlight and moisture.

Important notice

A Safety Data Sheet (SDS) is available from the Fosroc website. 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.

Sold under license from Fosroc International Limited. Fosroc and the Fosroc logo are trade marks of Fosroc International Limited, used under license.

Parchem Construction Supplies Pty Ltd
1956 Dandenong Rd Clayton VIC 3168
Ph: 1800 812 864
www.fosroc.com.au ABN 80 069 961 968

Distributed in New Zealand by: Concrete Plus Ltd
150 Hutt Park Road Gracefield Ph: 0800 657 156
www.fosroc.co.nz NZBN 9429033691282