

# Fosroc® Nitoseal® PU250



constructive solutions

(Replaces Emer-Seal PU25)

## 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.

### Advantages

- Excellent primerless adhesion to concrete, timber, masonry, bricks, aluminium, metal and ceramics
- Low stringing
- Low odour
- Weather resistant
- Easy to gun out

### 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.

### Technical Support

Parchem also offer a technical support package to specifiers and contractors which includes on-site, technical advice from staff experienced in the construction industry.

### Design Criteria

Nitoseal PU250 may be applied in joints between 15mm and 35mm wide.

### Maintenance

There are no special requirements, however, any damage found during routine inspections should be cut out and replaced.

### Specification Clauses

Where so indicated on the drawings, joints are to be sealed using Fosroc Nitoseal PU250, a one part polyurethane joint sealant as supplied by Parchem. The sealant must be capable of  $\pm 25\%$  joint movement, have an elongation at break greater than 500%, Shore A hardness in the range of 20 - 30 and an elastic modulus at 100% elongation of 0.20 - 0.30MPa.

Joints must be prepared and primed where required in accordance with the current technical data sheet.

The product manufacturer must be accredited to ISO 9001. The sealant and associated materials must be installed by an experienced contractor.

## Properties

Data quoted are typical for this product but do not constitute a specification.

<b>Form:</b>	Smooth, non-slump paste
<b>Movement accommodation factor:</b>	$\pm 25\%$ (total 50%)
<b>Tack-free time:</b>	90 mins (+/- 10 mins) at 23°C, 50% RH
<b>Cure speed:</b>	3mm / day 23°C 50% RH
<b>Typical hardness Shore 'A' (ISO 868):</b>	25 (+/-5)
<b>100% Modulus (ISO 8339):</b>	0.20 - 0.30 MPa
<b>Elongation at break:</b>	>500%
<b>Continuous service temperature range:</b>	- 40°C to + 70°C
<b>VOC content:</b>	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 Parchem. 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 Parchem for specific advice.

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## Nitoseal® PU250

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### 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.

### 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. Parchem 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.

### Material Code:

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Nitoseal PU250 Concrete Grey	FC920112-600ML
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### Coverage:

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

### Shelf life

Shelf life is 15 months when kept in its original, un-opened packaging and stored in dry conditions between +10°C and 25°C with 55% relative humidity, away from direct sunlight and moisture.

### 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.



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