

Fosroc® Nitoseal PU40

(Formerly Nitoseal HP40)



constructive solutions

One part building sealant

Uses

Nitoseal PU40 is suitable for sealing joints in concrete, brickwork, blockwork, precast panels, stone cladding, perimeter sealing around doors and windows, and non-trafficked floor joints.

Advantages

- Adhesion to most common building materials
- Single component with fast rate of cure
- Easy to apply
- UV resistant
- Primerless for most applications (see "Priming")
- Available in a range of colours
- ISO11600:2002 Type F 25LM compliant

Standard compliance

- ISO11600:2002 Type F 25LM
- ASTM C920-95 Type S, Grade NS, Class 25
- US Fed Spec TT-S-00230a Type II, Grade NS, Class25

Description

Nitoseal PU40 is a one part, low modulus gun-grade elastomeric sealant based on polyurethane technology. Nitoseal PU40 may be applied to joints between 5 and 35mm wide. To minimise stress imposed on the joint sealant, all moving joints should be designed to an optimum width to depth ratio of 2:1 with an overriding minimum depth of 5mm for non-porous surfaces and 10mm for porous surfaces.

For joint widths exceeding 35mm, please contact your local Fosroc Technical Service Department.

Properties

Form	Smooth, non-slumping paste
Colour	For current range contact Fosroc
Skinning time at 20°C / 50% RH	Approx. 2 hours
Cure rate at 20°C / 50% RH	24 hours 3mm
Application temperature:	5°C to 50°C
Hardness at 20°C	Shore "A" 25
Movement accommodation factor (MAF)	25%
UV resistance	Very Good
Service temperature range	-40°C to 70°C

Application instructions

Joint surfaces must be clean, dry and free from frost. Remove all dirt, laitance, loose material and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces.

Removal can be achieved by rigorous wire brushing, grinding or grit blasting.

When resealing, the existing sealant should be removed from the joint and the arris cleaned back to sound clean concrete. All debris should be removed.

Any expansion joint filler must be checked to ensure it is tightly packed and no gaps or voids exist at the base of the sealing slot before positioning a bond breaker.

The use of a bond breaker is not required in expansion joints containing cellular polyethylene joint filler such as Hydrocell XL, Backing rod or Expandafoam. For construction or contraction joints a bond breaker tape or back-up strip must be used.

Where a particularly neat finish is required, mask the face edges of the joint before sealing and remove immediately after tooling is completed.

Priming

A primer is not normally required. In joints subjected to high movement or where intermittently immersed during service, Fosroc Primer 7 (porous substrates, drying time 30 minutes) or Fosroc Primer 4 (non-porous substrates, drying time 2-5 minutes) is recommended.

Prime the joint face using a clean, dry brush. Avoid over application of primer, to prevent causing puddles in the bottom of the joint.

If a primed joint on porous substrate is left unsealed for more than 4 hours, the primer should be removed by grit blasting or grinding and the joint re-primed; on non-porous substrate, joint should be re-primed.

(For further advice on priming required please contact your local Fosroc Technical Service Department).

Application and finishing

Sachets

Cut and remove the end of the sachet and place sachet in the Fosroc GX gun.

Fit the nozzle and cut at 45 degrees to a suitable size for sealing the joint.

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Cartridges

Cut and remove the end of threaded stub on cartridge. Fit the nozzle and cut at 45 degrees to a suitable size for sealing the joint.

Extrude the sealant firmly in to the joint. Tool flush within 5 minutes of application to ensure good contact between the sealant and the substrate.

Cleaning

Clean tools immediately after use with Fosroc Equipment Cleaner or Fosroc Solvent 102.

Estimating

Guide to quantities Sealant

Joint size mm	Litres / metre run	Metres / 600ml sachet
10 x 6	0.06	10.0
12 x 10	0.12	5.0
20 x 10	0.20	3.0
25 x 12	0.30	2.0
30 x 15	0.45	1.3

Primer

1 litre of Fosroc Primer 7 for approximately 120 metres of Nitoseal PU40 seal.

1 litre of Fosroc Primer 4 for approximately 500 metres of Nitoseal PU40 seal.

Packaging

Nitoseal PU40	600ml sachets x 10 per box 310ml cartridges are available subject to minimum order quantity (contact your local Fosroc customer service department).
Fosroc Primer 7	1 litre packs
Fosroc Primer 4	1 litre packs

Limitations

- Should not be applied at temperatures below 5°C.
- Not suitable for water immersed conditions. Nitoseal MS600 should be used for this application.
- Not suitable for contact with bituminous materials.
- Not suitable for trafficked floor joints.
- Nitoseal MS300 should be used for this application.
- May cause staining to decorative stone. For a non-staining sealant use Nitoseal MS100.
- Colour change may occur on exterior exposure. This will not cause any negative effect on the physical properties of the product. If long-term aesthetics regarding colour stability is of critical importance, contact Fosroc for further advice.
- Not suitable for contact with solvents, oil or petrol.
- Should only be over-coated with a compatible, flexible coating capable of accommodating the expected movement in the joint. Over-coating may reduce the movement capability of the sealant.

Storage

Store in original packaging in cool, dry conditions. Shelf life 12 months. Storage outside of these conditions may reduce shelf life.

Precautions

Health and safety

Nitoseal PU40 is not classified hazardous. Contains isocyanates. For further information refer to appropriate Product Safety Data Sheet. Fosroc Primer 7 is flammable, harmful. Contains isocyanates. See Product Safety Data Sheet for details. Fosroc Primer 4 is highly flammable. See Product Safety Data Sheet for details. Fosroc Equipment Cleaner and Fosroc Solvent 102 are flammable. Refer to appropriate Product Safety Data Sheet.

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Important note

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