

Properties



One part, PU based Building & Expansion Joint 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

Standards 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 ovement 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.

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. 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.

Cleaning

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

Estimating

Supply

Nitoflor Sol

Nitoseal PU40 600 ml sachets
Primer 4 125 ml
Primer 7E 0.5 litre

5 & 20 litre can

Guide to quantities

| Joint size | Litres per metre run | Metre run per 600 ml sachet |
|------------|-------------------------|--------------------------------|
| 10x 6 | 0.06 | 10.00 |
| 12 x 10 | 0.12 | 5.00 |
| 20 x 10 | 0.20 | 3.00 |
| 25 x 12 | 0.30 | 2.00 |
| 30 x 15 | 0.45 | 1.33 |

Limitations

Not recommended for the following

- Unprimed joints that will be subjected to continuous water immersion.
- Joints that are contaminated with grease, wax, corrosion, bitumen or cement laitance.
- Horizontal joints in floors or decks where traffic or abuse is encountered.
- Special architectural finishes without proper testing.

Application limitations

- Nitoseal PU40 must not be applied to frost-bearing surfaces if temperature will be below freezing for more than 24 hours.
- Tooling techniques using solvents or soapy solutions are not recommended.
- All surfaces must be evaluated for adhesion prior to product acceptance.



Storage

Shelf life

12 months if stored in the original unopened sachets in a cool dry place. Do not store in direct sunlight.

Precautions

Health and safety

Nitoseal PU40 may be harmful if swallowed or inhaled and may cause skin and eye irritation. Product contains a very small amount of isocyanates and low flash point solvent.

Should accidental skin contact occur, remove contaminated clothing and wash with warm soapy water. Do not scrub. If inhaled remove person to fresh air. Get medical advice if breathing becomes difficult. In case of contact with eyes, rinse immediately wih plenty of clean water for at least 15 minutes and seek medical advice. If swallowed, give a glass of water to dilute and seek medical attention immediately - do not induce vomitting. For further information, refer to the appropriate Product Material Safety Data Sheet.

Fire

Nitoseal PU40 does not readily support flame. Primer4, Primer 7E and Nitoflor Sol is highly flammable liquid. Keep away from sources of ignition. No smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with ${\rm CO_2}$ or foam. Do not use water jet.

Disposal

Dispose according to local authority regulations. Do not dispose down drains or into local waterways.

Additional Information

For further information on any of the above, please consult your local Fosroc office - as below.

Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



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