



constructive solutions

Fosroc Nitoseal PU40-CS

One part, highly resilient polyurethane based, non-sag elastomeric sealant

Uses

Nitoseal PU40-CS sealant is designed for sealing expansion and control joints.

Typically used in precast concrete construction, balcony parapets, bridge culverts, retaining walls, boundary walls, roof joints, caulking joints around windows, doors, skirting, walls & floor joints

Advantages

- Excellent weathering & ageing properties
- Easy to apply
- Excellent resistance to chemicals & micro organisms
- Can be over painted after curing
- Single component – minimizes wastage
- UV stable
- Strong adhesion to most common building substrates

Standard compliance

Nitoseal PU40-CS sealant meets or exceeds the test requirements of:

- ASTM C920-14a Types S, Grade NS, Class 25, Use NT, Use I, Use M, Use G, Use A and Use O.
- DIN EN ISO11600:2002 Type F 25 LM

Description

Nitoseal PU40-CS sealant is a one component, moisture curing, non-sag, gun-grade polyurethane elastomeric sealant.

It is highly resilient and has excellent recovery characteristics. It can function under wide range of temperatures.

Application

Insert sachet in to Fosroc Barrel Gun. Cut end off sachet and attach cap and nozzle and cut nozzle to desired bead size. Mask joint sides and insert a suitable backing rod if required. Extrude firmly into joint and tool off using a suitable curved tool.

Cleaning

Clean equipment immediately after use with Fosroc Solvent 102.

Design Criteria

Nitoseal PU40-CS can be applied to joints between 2 mm and 35 mm wide and applied between 2 mm and 20 mm deep.

Joints which are expected to experience continual cyclic movement should be designed such that the sealant is applied to an optimum width to depth ratio of 2:1 subject to the overriding recommended minimum sealant depths of: a) 6 mm for accurately formed, non-porous surfaces such as glass and metal, b) 10 mm for precast concrete, in-situ concrete, brick and other porous surfaces.

The sealing slot should be formed using a backer rod (Expancel) which supports the sealant during application and provides a bond breaker at the base of the slot to allow movement to be accommodated over the full width of the sealant.

Typical Properties

Characteristic	Result
Composition	1-part polyurethane, moisture curing
Consistency	Smooth and pasty
Colour	Grey, White & Beige
Skin formation	~ 60 minutes (+23°C / 50% r.h.)
MAF(Movement Capability)	25%
Specific Gravity	1.24
Sag flow	0 mm, very good
Service temperature	-40°C to +70°C
Tear strength	~ 6 N/mm (+23°C / 50% r.h.)
Shore A Hardness	~ 30 after 28 days (+23°C / 50% r.h.)
E- Modulus	~ 0.4 N/mm ² at 100% elongation (+23°C / 50% r.h.)
Elongation at break	~ 500% (+23°C / 50% r.h.)
Elastic recovery	> 70% (+23°C / 50% r.h.)

Instruction for use Preparation

Ensure joint sides are square, clean and dry. Remove any laitance, dirt or other contaminants by wire-brushing, grinding or grit blasting.

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Estimating

Supply

Nitoseal PU40-CS: 600 ml sachets

Primer 7E: 500 ml can

Fosroc Solvent 102: 4 litre can

Guide to quantities

Joint size	Litres per Metre run	Metre run per 600ml sachet
6 x 10	0.06	10.00
12 x 10	0.12	5.00
20 x 20	0.40	1.50
25 x 12	0.30	2.00
30 x 15	0.45	1.33

Storage

Shelf life

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

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-CS 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.

Precautions

Health and safety

Nitoseal PU40-CS 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 with 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 vomiting.

For further information, refer to the appropriate Product Material Safety Data Sheet.

Fire

Nitoseal PU40-CS does not readily support flame. Prime 7E and Solvent 102 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 CO₂ or foam. Do not use water jet.

Disposal

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

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 Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of 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.

Al Gurg Fosroc LLC

Post Box 657, Dubai
United Arab Emirates

www.fosroc.com

telephone:
(+9714) 2039699

fax:
(+9714) 2859649

email:
agf@fosroc.com

Registered Office: 215 Community, Street No. 13, Nad Al Hamar Road, Al Ramool Industrial Estate, Rashidiya, Dubai

