

Heavy duty epoxy urethane joint sealant

Uses

For sealing internal joints subject to heavy loading and abrasion, or where chemical resistance is required. Can be used in factories, warehouses and distribution centres. It is, particularly effective where there is forklift truck traffic. Nitoseal PU800 can also be used where joints would be subject to stiletto heels, shopping centres, podiums etc. It is suitable for use in prisons as an anti-pick sealant for sealing internal partitions, cell doors and windows, fittings and furniture.

Advantages

- Cures to a tough seal
- Abrasion resistant
- High modulus
- Resistant to chemical, fuel and oil spillage
- Easily installed to give a flush finish
- Hard, but flexible sealant; resists picking and vandalism

Description

Nitoseal PU800 is a two-component gun grade elastomeric sealant for limited movement joints. After mixing, the resultant compound will cure to provide an exceptionally robust seal, while retaining a degree of flexibility. Nitoseal PU800 is abrasion resistant and withstands spillage of fuel oils, mineral acids and vegetable oils. Nitoseal PU800 can be used in joints between 5 mm and 50 mm wide.

Specification clauses

The joint sealant shall be Fosroc Nitoseal PU800, an epoxy urethane, heavy duty sealant. It shall be applied strictly in accordance with the Fosroc data sheet.

Properties

Nitoseal PU800

Form:	Two-part compound Base: White paste Curing agent: Grey paste
Colour:	Light grey
MAF (BS 6093):	10% for butt joints
Cure:	Chemical cure
Pot life:	1 hour at 25°C
Trafficking time:	24 hours at 20°C: light traffic 48 hours at 20°C: heavy traffic
Application temperature:	To avoid prolonged cure time apply Nitoseal PU800 above 5°C
Hardness Shore 'A':	65 to 80
Chemical resistance to occasional spillage:	Resistant to alcohols, alkalis, mineral oil, hot detergent solution, 60% live steam, 25% mineral acids, vegetable oils and kerosene
UV resistance:	Some surface discolouration and slight surface hardening
Solids content:	100%
Density:	1.4 g/cm ³
Flash point:	Over 65°C

Application instructions

Joint Design

Joints should be designed so that joint changes do not exceed the 10% MAF of Nitoseal PU800.

We would recommend that joints in new concrete slabs are left to the final stages of construction when temperatures have stabilised and the initial shrinkage has taken place.

Where joints are less than 25 mm and are fully supported by a solid backing, minimum depth should be 10 mm to 15 mm. Where a resilient filler provides the backing, the minimum depth should be 20mm. For wider joints a square section is preferable

Fosroc® Nitoseal PU800

formerly Expoflex 800

Preparation

Joint surfaces shall be clean, dry and free from contamination. Any voids or gaps at the base of the sealing slot should be filled and a suitable bond breaker should be pushed into construction and contraction joint slots. Where a particularly neat finish is required mask edges of joint before priming (if required) and sealant application.

Priming

Where surface shall be subject to submersion or permanently damp, joints should be primed using Fosroc Primer MS2. Decant the entire contents of primer curing agent into the primer base tin and replace lid. Mix thoroughly by shaking tin for 2 minutes. Apply the primer using a clean dry paint brush working well in to ensure complete coverage. Nitoseal PU800 should be applied between 30 minutes and 4 hours after priming.

Mixing

Add the curing agent to the base component tin. Mix thoroughly using a slow speed drill (300 to 500 rpm) fitted with a Fosroc Sealant Mixing Paddle. Mix for 3 minutes then scrape down the sides and bottom of the tin using a spatula, mix for a further 2 minutes. Only thorough mixing, including material right at the bottom of the tin, will result in proper curing. In cold weather Nitoseal PU800 mixes more easily if stored overnight at room temperature.

Immediately after mixing load the Nitoseal PU800 into a Fosroc "G" Gun using a follower plate. Extrude the sealant firmly into the joint to ensure complete contact with the joint face.

Finishing

Nitoseal PU800 should be tooled off flush with adjacent surfaces. A minimum of surface lubrication such as dilute detergent solution may be used to assist the process. Remove masking immediately after tooling.

Cleaning

Clean equipment immediately after use with Fosroc Equipment Cleaner.

Estimating

Nitoseal PU800 is supplied in 2 litre tins in cartons of two.

Guide to quantities

Joint size w x d in mm	Litres per metre run	Metre run per 2.0 litre pack
5 x 15	0.075	26.67
5 x 20	0.100	20.00
20 x 10	0.200	10.00
20 x 25	0.500	4.00
25 x 25	0.625	3.20
30 x 25	0.750	2.67
30 x 30	0.900	2.22
40 x 25	1.000	2.00
40 x 40	1.600	1.25
50 x 25	1.250	1.60
50 x 50	2.500	0.80

Guide to Fosroc Primer MS2 coverage

Joint depth	Metres of joint /750ml pack of primer
10mm	500 - 600
15mm	335 - 400
20mm	250 - 300
25mm	200 - 240

Yields are theoretical, no allowance is made for substrate variation or wastage.

Storage

Storage life Nitoseal PU800 18 months, Fosroc Primer MS2 18 months, in original containers and kept in dry conditions between 5°C and 27°C.

Precautions

Health and safety

For further information refer to appropriate Product Safety Data Sheet.

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Important note

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Fosroc Limited

Drayton Manor Business Park
Coleshill Road, Tamworth,
Staffordshire B78 3XN. UK

www.fosroc.com

telephone:
+44 (0) 1827 262222

fax:
+44 (0) 1827 262444

email:
enquiryuk@fosroc.com



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