

Nitoseal 878

constructive solutions

High performance, elastomeric, pavement joint sealant

Uses

For the sealing and maintenance of joints in concrete roads, concrete runways and hard standings. Nitoseal 878 is particularly suitable for sealing areas where fuel and oil spillage might occur such as aircraft fuelling areas, oil terminals, garage forecourts, parking and cargo areas.

Advantages

- Fuel, oil and hydraulic fluid resistance
- High durability and long service life
- High movement accommodation

Standards

British Standard 5212:1990 - types N, F and FB.

Description

Nitoseal 878 is a two component product designed to retain its movement accommodation of 25% on butt joints throughout temperature extremes. It does not harden in cold weather nor become excessively soft or pick up in hot conditions.

In trafficked areas the maximum expansion joint width should be limited to 30mm. It is necessary to recess the level of the sealant 5-8 mm below the pavement surface dependent on the time of year and temperature prevailing at the time of sealing.

The width/depth ratio of the Nitoseal 878 seal should be 1:1 to 1½:1 subject to a minimum 10mm depth of sealant (example, contraction joint: 15mm wide x 13mm depth; expansion joint: 25mm wide x 20mm depth).

Properties

Form:	Two component product comprising liquid base and curative
Colour:	Grey
MAF (BS 6093):	Butt joints 25%
Cure process:	Chemical cure
Application	
temperatures:	5°C - 35°C
Setting Time:	After 6 hours @ 25° C Nitoseal 878 will be tack free and accept traffic. Full cure and maximum hardness will be achieved in 3-4 days at 25°C
Shore A Hardness:	20

Chemical resistance to occasional spillage:	Aviation fuels	Synthetic oils
	Hydraulic fluids	Mineral oils
	Skydrol	White spirit
	Kerosene	Mild alkalis
	Petrol	Dilute acids
	Diesel fuels	De-icing salts
		Urea
Solids content:	100%	
Flash point:	Over 65°C	
Flammability:	Burns but does not readily support combustion	

Application instructions

Joint preparation

Joint sealing slots in concrete should be accurately formed and must be dry, sound, clean and free from frost.

Remove all dust and laitance by grit blasting or grinding. Avoid polishing the joint sides when grinding. The prepared sealing slot should be blown out with dry, oil-free compressed air.

Ensure that any expansion joint filler is tightly packed in the joint and insert a bond breaker or Expandafoam cord caulked tightly into the base of the sealing groove to prevent sealant adhering to the base of the slot and provide the specified depth of sealant.

Priming

Concrete joint faces should be primed with Fosroc Primer 20.

Decant sufficient primer into a clean dry tin for the day's usage. Do not return unused primer to the supply tin. Prime the joint faces with a thin uniform coat of primer and allow solvent to evaporate before sealing. This takes between 30 minutes and 2 hours depending on climatic conditions. If sealant is not applied within 2 hours the joint face should be reprimed.

Where concrete joints are exposed, or subject to conditions of prevailing damp, or where the concrete is unusually dense or porous, the use of Primer 19 is recommended. Contact the local Fosroc office for further details.

Empty the entire contents of the Primer 19 hardener tin into the base tin, and replace base tin lid. Mix thoroughly by shaking tin for 2 minutes. Prime the joint face using a clean dry brush. Avoid over application of primer causing puddles in the bottom of the joint. Nitoseal 878 should be applied between 30 minutes and 4 hours after priming. If sealant is not applied within 4 hours the joint face should be reprimed.

The mixed Fosroc Primer 19 should be applied within one working day. Do not split packs of Fosroc Primer 19.

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Mixing

Drain totally the contents of the curing agent tin into the large base component tin. Using a hand held, slow speed drill (300 to 500 rpm) fitted with a Fosroc paddle blade stirrer mix for 1 minute. Stop and scrape around the top of the tin to remove any remaining curing agent. Continue to mix for 3 minutes until the material is thoroughly mixed.

In cold weather, Nitoseal 878 mixes more easily if stored overnight at room temperature.

Application

Pour mixed sealant into a Fosroc G Gun after removing the nozzle end cap, pulling back the plunger rod and replacing end nozzle. In joints of 25 mm and above, the mixed sealant may be poured directly from the tin by bending the side to form a pouring lip. Apply mixed sealant so that the finished level of the seal is recessed below the trafficked surface as specified.

Cleaning

Clean equipment immediately after use with Fosroc Equipment Cleaner. Remove mixed material from hands with 'Swarfega' or similar industrial hand cleanser.

Estimating

Packaging

Nitoseal 878 is supplied in cartons containing 2 x 5 litre units, comprising a tin of base and a tin of curing agent.

Guide to Nitoseal 878 quantities

Joint size in mm pack	Litre per metre	Metre per 20.0 litre
10 x 10	0.100	200
13 x 13	0.169	118
15 x 15	0.225	89
20 x 15	0.300	67
20 x 20	0.400	50
25 x 20	0.500	40
25 x 25	0.625	32
30 x 25	0.750	26



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 of information given by it.

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Certificate number FM 610

1 litre of Fosroc Primer 19 or 20 will be sufficient for 20 litres of Nitoseal 878. Yields are theoretical, no allowance has been made for variations in joint dimensions or wastage.

Limitations

Apply at temperatures of 5°C and rising. Do not warm material above 35°C.

Do not apply direct heat to product. Nitoseal 878 is not compatible with bituminous surfaces. Where Nitoseal 878 could come into contact with pavement asphalt, please contact the local Fosroc Technical Department.

For the sealing of industrial floor joints, higher modulus sealants such as Nitoseal MS300* or Expoflex 800* are recommended. *See separate data sheet

Storage

Nitoseal 878: 12 months in original containers stored in cool, dry conditions i.e. not exceeding 25°C. Higher temperatures may reduce storage life.

Precautions

Health and safety

For further information refer to appropriate Product Safety Data Sheet.