## Fosroc® Nitoseal SC100



constructive solutions

# High joint movement accommodation, one-component silicone joint sealant for façade applications

#### **Uses**

For sealing moving or static joints in:

- Precast or in-situ concrete
- Curtain walls and lightweight cladding
- Tilt-up slabs
- Brick, blockwork, marble and granite facades
- Most building materials

#### **Advantages**

- Will not stain porous construction materials such as concrete, marble or granite
- Easy application
- Fast curing
- Service temperature range -50°C to +150°C
- Long life weathering performance
- High joint movement accommodation
- Excellent adhesion to most construction materials

#### **Description**

Nitoseal SC100 is a one part, gun applied, neutral cure silicone sealant which cures rapidly to form a durable, weathertight seal. Nitoseal SC100 remains permanently flexible and weatherproof under a wide range of climatic conditions. The unique polymers utilised in this 'state of the art' sealant combine to provide the outstanding weathering performance, for which silicone sealants are renown, with no risk of staining porous building materials.

### **Design criteria**

Nitoseal SC100 is designed for sealing movement joints between 10mm and 35mm wide however joints down to 5mm and up to 50mm wide can be sealed under suitable conditions.

The movement accommodation factor (MAF) of a joint sealant must be considered in the design width and spacing of movement joints in a structure.

The sealant Width to Depth ratio should be kept at a minimum depth of 10mm for joint widths between 10mm and 20mm and 2:1 for joint widths greater than 20mm.

For further details contact Fosroc for specific advice.

#### **Properties**

Data quoted are typical for this product but do not constitute a specification.

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Form:	Non slump thixotropic paste	
Movement accommodation factor:	Plus 50% / minus 30% (80% total)	
Typical hardness Shore 'A':	18 - 25	
Physical or chemical change:	Chemical cure (non-acidic)	
Application temperature:	Minimum 5°C Maximum 35°C	
Service temperature:	Minus 50°C - 150°C	
Tooling time:	20 minutes @ 25°C, 65% RH	
Cure rate:	Approx. 3 mm for 1st day at 25°C, 65% R.H then 1 mm / day thereafter	

#### **Application instructions**

#### **Preparation**

Joint faces must be sound and completely dry, clean and frost free. Oil, grease, curing compunds, form release agents, and all surface contaminants must be completely removed by grinding joint faces or by using Fosroc Solvent 10.

If it is necessary to apply Nitoseal SC100 onto paints or other renewable surface coatings it is recommended that proposed system be carefully tested to ensure that adhesion is acceptable and properties of either the paint or the sealant are not adversely affected by long term contact. Nitoseal SC100 is suitable for use directly onto powder coated metals and ColorBond steel surfaces.

#### **Priming**

Nitoseal SC100 has excellent adhesion to most building surfaces without the use of a primer. For optimum results, particularly with moving joints, priming is always recommended.

Primer 10:	Concrete, brick and most porous substances
Primer 13:	Concrete surfaces subject to water immersion, fibreglass

For other surfaces, or where any doubt exists, test first or contact Parchem Technical Services for advise.

#### Primer drying times:

Primer 10:	30 minutes
Primer 13:	30 minutes - 2 hours

Primers must be touch dry before sealant is applied. Reprime if the sealant is not applied within 8 hours after primer application.

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#### **Bond breakers and joint fillers**

In moving joints, the sealant must not be allowed to bond to the back face of the joint. Prevention of 3 sided adhesion is achieved by installing either a polyethylene bond breaker tape, or through the use a polyethylene foam backing rod.

#### **Application**

Fit the sausage of Nitoseal SC100 into a suitable sausage gun, and gun firmly into joint. Ensure sealant is forced well against all joint surfaces to achieve good surface wetting and thus optimum adhesion. Guide nozzle along the joint gradually, applying even pressure to the trigger. The joint must be filled completely at all points.

#### **Tooling**

Immediately after application the sealant should be tooled. Use a smooth convex tool to produce both the required surface finish and to assist in further forcing the sealant into good contact with the joint faces. The use of use soapy water as a tooling aid is not recommended as the cure of the sealant may be adversely affected.

#### **Membrane bond breaker**

When being used as a waterproofing membrane bond breaker it is recommended that the Nitoseal SC100 be allowed to cure for 24 hours to develop a sufficient skin before applying the membrane.

#### Cleaning

Equipment should be cleaned promptly by wiping with Fosroc Solvent 10, as cured sealant is very difficult to remove. Cured sealant can only be removed by mechanical methods. Soaking the equipment in Fosroc Solvent 10 makes removal of cured sealant easier.

#### **Limitations**

Elastomeric sealants such as Nitoseal SC100 should not be applied in close proximity to bituminous materials or products containing reclaimed rubber (e.g. some tile adhesives). If any doubt exists, contact Fosroc for advice.

#### Supply

Nitoseal SC100 is supplied in 600ml foil sausages in carton of 12.

Nitoseal SC100 Concrete Grey:	FC920161-600ML
Nitoseal SC100 Black:	FC920160-600ML

#### **Ancillaries**

Primer 10 (250ml):	FC965214-250ML	
Primer 13 (250ml pack):	Base: Hardener:	FC965229-125ML FC965230-125ML
Primer 13 (1 litre pack MTO):	Base: Hardener:	FC965229-500ML FC965230-500ML
Fosroc Solvent 10:	4 and 20 litre drums	

#### Coverage

Each 600 ml sausage of Nitoseal SC100 will seal 6 metres of a 10 x 10 mm joint or 3 metres of a 10 x 20 mm joint.

As a guide, 250 ml of primer will be required for every 12 sausages on porous surfaces or for every 50 sausages on non-porous surfaces.

#### Storage

Shelf life 12 months in unopened containers stored under cool, dry conditions.

#### Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

#### Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.



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