Fosroc®
Nitoseal® MS250

constructive solutions

(Replaces Duraflex®)

High UV resistant elastomeric joint sealant

Uses

Seal moving or static joints in high performance applications in building facades and general construction such as;

- Precast or insitu concrete
- Curtain walls and lightweight cladding
- Tilt-up slabs
- Brick and blockwork
- Most building materials

Advantages

- Easy to extrude – even at low temperatures
- Low stringing - smooth finish
- 50% joint movement capability
- Outstanding weathering and UV resistance to maintain colour and integrity
- Excellent primerless adhesion to concrete, timber, masonry, aluminium, metal and ceramics
- Will not stain masonry surfaces
- Blister free cure in high humidity or on SSD (Saturated Surface Dry) surfaces
- Very low VOC 12g/L
- Contains no isocyanate/solvent free
- Made in Australia

Description

Nitoseal MS250 is a high performance elastomeric joint sealant based on Silyl Modified Polymers (Polyurethane hybrid) - Duraflex® technology. Nitoseal MS250 offers the weathering and adhesion performance of a silicone sealant together with the toughness of a polyurethane sealant.

Nitoseal MS250 is available in a range of colours - refer to the Supply section in this TDS.

Design Criteria

Nitoseal MS250 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.

Form:	Smooth, non-slump paste
Skin time:	65 mins @ 23°C and 50% RH
Tooling Time:	35 mins @ 23°C and 50% RH
Cure time at 25°C:	>2mm / 24h @ 50% RH
Typical hardness:	34 Shore A
Joint Movement Capability:	Total 50% (+/- 25%)
Elongation at break:	520%
Modulus @ 100%:	0.75 MPa
Continuous service temperature range:	Minus 15 to 70°C
Min. application temperature:	5°C
Specific Gravity:	1.45
VOC content:	12g/L (ASTM D3960)

Application Instructions

Preparation

Joint surfaces must be clean, dry (SSD) and free from frost. Remove all dirt, laitance, loose materials and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using Fosroc Solvent 10. In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, to allow optimum sealant performance. In shallow joints self-adhesive polyethylene tape can be used. Deep joints should incorporate a backing strip such as Expandafoam Backing Rod to support the sealant while also acting as a bond breaker.

Priming requirements

Excellent adhesion can be gained on concrete, timber, metals, ceramics, brickwork and most coating surfaces without the use of primers. On some surfaces (such as FC sheet) however, adhesion may be improved by the use of a primer such as Primer 10 - refer to Fosroc for advice.

Gun Loading

Nitoseal MS250 is applied using a suitable sausage gun. Insert the sausage into the gun, cut a slit at the top of the sausage, replace the end cap and nozzle and apply the sealant.

Application

Extrude the sealant firmly into joint to ensure complete contact with joint faces. Tool the sealant into the joint.

Nitoseal MS250 is easily tooled to a smooth finish without the use of soapy water / tooling aids. If a tooling aid is to be used it must only be applied after the Nitoseal MS250 has been initially tooled into the joint to stop any contamination of the joint faces.

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Nitoseal® MS250

Cleaning

Clean tools immediately after use with Fosroc Solvent 10.

Limitations

Do not apply to bituminous surfaces nor allow bitumen to contact Nitoseal MS250.

Nitoseal MS250 is not suitable for application under water or continually immersed conditions. Do not apply to wet surfaces (free water present).

Paintability

Nitoseal MS250 is paintable with water based paints typically after a thick skin has been allowed to develop. Painting can actually be performed as soon as the sealant has skinned but there is a risk of damaging the sealant. For best results painting should be done no later than 7 days after sealant application. The flexibility of coatings being applied over Nitoseal MS250 should also be taken into consideration to ensure the coating can accommodate the expected movement in the joint.

Solvent based paints

Do not paint over Nitoseal MS250 with solvent based paints (eg. enamels).

Supply

Nitoseal MS250 is supplied in 600 ml foil sausages in cartons of 12.

Nitoseal MS250 Beige:	FC920175-600ML
Nitoseal MS250 Black:	FC920170-600ML
Nitoseal MS250 Brick Red:	FC920176-600ML
Nitoseal MS250 Concrete Grey:	FC920171-600ML
Nitoseal MS250 Dark Earth:	FC920178-600ML
Nitoseal MS250 Dark Grey:	FC920174-600ML
Nitoseal MS250 Off White:	FC920172-600ML
Nitoseal MS250 Pale Brown:	FC920169-600ML
Nitoseal MS250 Redwood:	FC920177-600ML
Nitoseal MS250 Sandstone:	FC920179-600ML
Nitoseal MS250 White:	FC920173-600ML
Nitoseal MS250 Special Colour (MTO*):	FC930223-600ML

*Made to Order: Min.order qty. 120
Lead time: 14 - 21 days from approval of colour.

Coverage

One 600 ml sausage will supply 6 metres of 10mm x 10mm sealant bead.

Storage

Nitoseal MS250 has a shelf life of 12 months when kept in its original, un-opened packaging and stored in dry conditions between +10ºC and 25ºC with 55% relative humidity, away from direct sunlight and moisture.

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