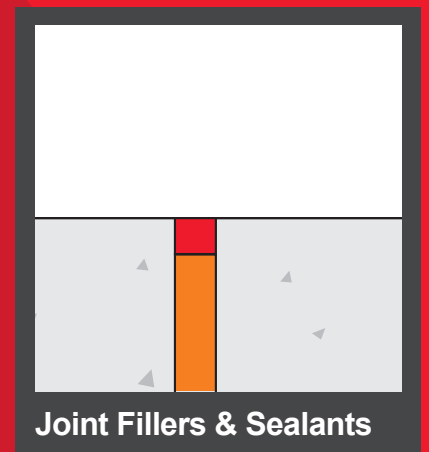




*constructive solutions*

# SEALANT SOLUTIONS

**NITOSEAL® ▪ THIOFLEX® ▪ FLAMEX®**



**Joint Fillers & Sealants**



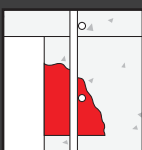
## About Fosroc and Parchem

**Fosroc is a world leader in construction solutions. Since the company's beginnings over 80 years ago, Fosroc has developed into an international leader in delivering construction solutions for virtually any building or infrastructure project. New or old construction above or below ground, we combine high quality products, expert technical support, customer service and innovation to give you the best solution for your project.**

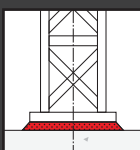
We provide construction solutions for; new and old concrete repair, grouts, waterproofing, joint fillers & sealants, industrial flooring, protective coatings, surface treatments, and concrete additives.

Fosroc has an extensive network of offices and manufacturing locations across Europe, the Middle East, India and Asia, and is further represented in other regions across the world by distributor and licensee partners.

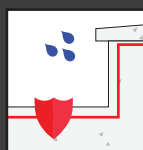
Parchem Construction Supplies, part of DuluxGroup, is the licensed manufacturer and distributor of Fosroc, Vector, Vandex and EdenCrete products in Australia, and Concrete Plus is the licensed distributor in New Zealand.



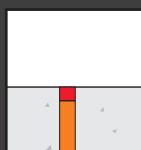
Concrete Repair



Grouts



Waterproofing



Joint Fillers & Sealants



Industrial Flooring



Protective Coatings



Surface Treatments



Concrete Additive

# Fosroc Sealant Solutions

Sealants account for only a small proportion of the cost of a building project, however, their performance is vital to the integrity of any structure.

Fosroc's specialised range of sealants has been developed by experts in joint design and sealant technology for civil and general construction project needs including airports, railways, super structures, water treatment plants, roads and footpaths.

## Fosroc offers:

- ▶ Pouring grade sealants – designed exclusively for horizontal joints in floors and pavements
- ▶ Gun grade sealants – suitable for use in vertical and horizontal joints
- ▶ Fire rated, fuel resistant, chemical resistant and biodegradation resistant sealants

## Our Range

### General Construction

Nitoseal PU250  
Nitoseal PU400  
Nitoseal SC100  
Nitoseal SC140  
Nitoseal MS250  
Nitoseal MS400  
Nitoseal MB175  
Nitoseal PY350

### Civil Construction

Nitoseal SC800  
Nitoseal SC820  
Nitoseal SC600  
Thioflex 600 Pouring Grade  
Thioflex 600 Gun Grade

### Fire Rated

Flamex One  
Flamex XT

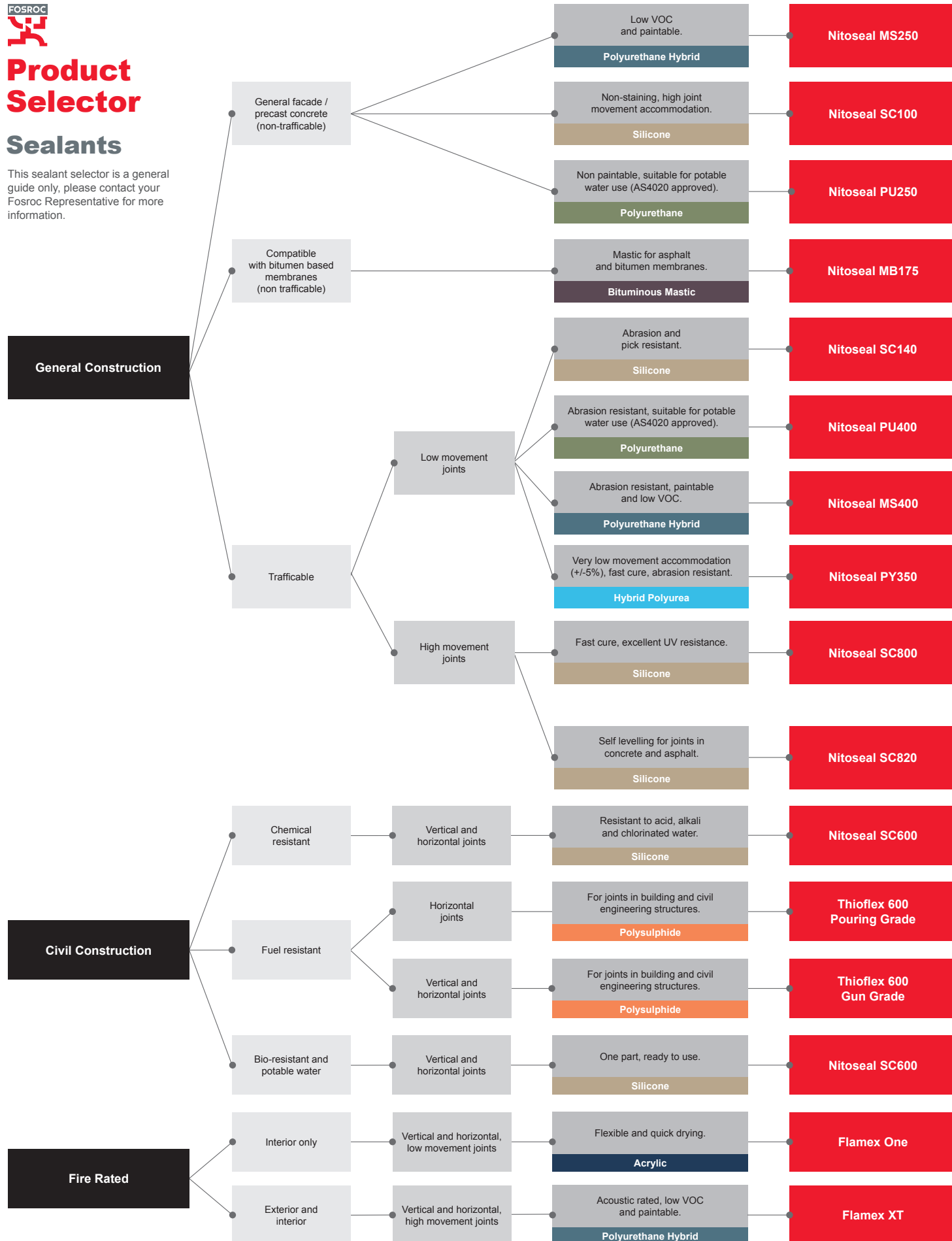




# Product Selector

## Sealants

This sealant selector is a general guide only, please contact your Fosroc Representative for more information.



Please always refer to the product TDS before making your final selection or speak to your Fosroc representative.



# Product Selector

## Sealants

This sealant selector is a general guide only, please contact your Fosroc Representative for more information.

Recommended for sealing gaps/joints between:	Nitoseal PU250	Nitoseal PU400	Nitoseal SC100	Nitoseal SC140	Nitoseal MS250	Nitoseal MS400	Nitoseal MB175	Nitoseal PY350	Nitoseal SC800	Nitoseal SC820	Nitoseal SC600	Thioflex 600 Gun Grade	Thioflex 600 Pouring Grade	Flamex One	Flamex XT
Acoustic rated joints															■
Aircraft apron joints - concrete			■						■			■	■		
Aircraft runway joints									■			■	■		
Aluminum frames surrounding gaps	■		■		■										
Asphalt joints										■					
Bio-resistant joints											■				
Bitumen based membranes joints							■								
Block work joints	■		■		■	■									
Bolted lap joints		■	■												
Brick work joints	■		■		■	■									
Bridge deck joints									■						
Car park joints - asphalt										■					
Car park joints - concrete								■	■						
Cement sheeting joints	■		■		■	■									
Chemical resistant joints								■			■				
Cladding joints	■		■		■										
Concrete deck joints		■		■		■		■							
Cover plate gaps		■	■	■											
Curtain wall joints	■		■		■										
Drainage channel joints							■	■							
Driveway joints - concrete (trafficable)		■		■		■		■							
Door frames surrounding gaps	■		■												
Façade joints (paintable)					■										
Fire rated joints														■	■
Floor joints (trafficable)		■		■		■		■							
Fuel resistant joints												■	■		
General joints (non-trafficable)	■		■		■										
Gutter lap joints			■				■								
Pavement joints - asphalt										■					
Pavement joints - concrete		■		■		■			■			■	■		
Potable water approved		■	■								■				
Pipe penetration gaps		■			■										
Prison & correctional facility joints (pick resistant)			■	■											
Retaining wall joints					■		■								
Road joints - asphalt										■					
Road joints - concrete									■						
Roofing flashing / joints - bitumen based							■								
Sea wall / defenses joints / gaps											■				
Sewage treatment works joints											■				
Shopping centre floor joints (pick resistant)				■				■							
Tilt up slab / precast joints	■		■*		■										
Timber frames surrounding gaps	■		■		■										
Trafficable floor joints		■		■		■		■							
Water immersed (permanent) joints - concrete & metal		■													
Waterproofing membrane joints - bitumen based							■								
Wide joints				■											
Window frames surrounding gaps	■		■		■										

\*Non paintable

Please always refer to the product TDS before making your final selection or speak to your Fosroc representative.

General Construction Sealants Product Guide

Product Names	Nitoseal PU250	Nitoseal PU400	Nitoseal SC100	Nitoseal SC140
Previously Known As / Replaces	Emer-Seal PU25	Emer-Seal PU40	Emer-Seal Construction Silicone	Emer-Seal Construction Silicone HM FC
Product Description	High performance sealant for vertical exterior and interior applications. Weather resistant, easy to gun and low stringing. Approved for potable water applications.	High performance sealant for construction joints, trafficable surfaces and water immersed applications. Features a tough chemical and abrasion resistant seal. Approved for potable water applications.	High joint movement accommodation, one-component silicone sealant. Excellent weather resistance. Will not stain porous construction materials such as concrete, marble or granite.	Tough, pick and abrasion resistant, fast-curing silicone sealant / adhesive for civil and industrial applications.
Sealant Technology	Polyurethane	Polyurethane	Silicone	Silicone
Joint Type	Horizontal / Vertical	Horizontal / Vertical	Vertical	Horizontal / Vertical
Application Interior/ Exterior	Exterior / Interior	Exterior / Interior	Exterior	Exterior / Interior
Typical Applications	Sealing concrete and fibrous products, external cladding, brick work and sealing joints around aluminium and timber window and door frames.	Sealing movement and construction joints, metal or concrete water retaining structures, cover plates and covings, bolted lap joints, pipe penetrations, trafficable floor joints and water immersed applications.	Used for façades including precast or in-situ concrete, curtain walls and lightweight cladding, tilt-up slabs, brick, blockwork, marble and granite.	Used in trafficable floor joints, cover plates and covings, joints in prison cells and shopping centres.
Application Type (Gun/Pour)	Gun	Gun	Gun	Gun
Number of Components	One	One	One	One
Skinning Time	55 minutes @ 25°C, 65%RH.	25 minutes @ 25°C, 65%RH.	20 minutes @ 23°C and 65% RH	9 minutes @ 25°C, 65%RH.
Tooling Time	50 minutes @ 25°C, 65%RH.	25 minutes @ 25°C, 65%RH.	20 minutes @ 23°C and 65% RH	10 minutes minimum @ 25°C, 65%RH.
Hardness Shore 'A'	25 (+/-5)	40 (+/-5)	18 - 25	50 (+/-5)
Joint Size	15mm to 35mm	15mm to 35mm	6mm to 50mm	5mm to 50mm
Joint Movement Capability	+/- 25% (total 50%)	+/- 12.5% (total 25%)	+50% / -30% (total 80%)	+/- 25% (total 50%)
Modulus @ 100%	0.20 to 0.30 MPa	0.30 to 0.40 MPa	N/A	1.0 MPa
Cure Time Approximately	3mm / day 23°C 50% RH	3mm / day 23°C 50% RH	3mm for 1st day at 25°C, 65% R.H then 1 mm / day thereafter	Approx. 5mm 1st day at 25°C, 65% R.H then 2 mm / day thereafter.
Coverage Guide Approximately	600ml sausage will seal 3 metres of 20mm x 10mm sealant bead.	600ml sausage will seal 3 metres of 20mm x 10mm sealant bead.	600ml sausage will seal 3 metres of a 10mm x 20mm joint.	600ml sausage will seal 3 metres of 10mm x 20mm joint.
Trafficable	No	Yes	No	Yes
Paintable	No	No	No	No
Weather Resistant	Yes	Yes	Yes	Yes
Colour	Concrete Grey	Concrete Grey	Concrete Grey & Black	Concrete Grey
Product Codes	FC920112-600ML Concrete Grey	FC920121-600ML Concrete Grey	FC920161-600ML Concrete Grey FC920160-600ML Black	FC920150-600ML Concrete Grey
Primer Requirements	Primer 4 – non-porous materials.  Primer 13 – if the Nitoseal PU250 is to be water immersed.  Primer 21 – porous materials.	Primer 4 – non-porous materials.  Primer 13 – if the Nitoseal PU400 is to be water immersed.  Primer 21 – porous materials.	Primer 10: Concrete, brick and most porous substances.	Primer 10 – Concrete, brick and most porous substances.  Primer 11 – Metals and most non-porous substrates.  Primer 13 – Concrete surfaces subject to water immersion, fiberglass.

Nitoseal MS250	Nitoseal MS400	Nitoseal MB175	Nitoseal PY350
Duraflex	Duraflex FC		
High performance sealant for moving joints or static joints in building facades and general construction. UV resistant, with a tough and stain free finish with Duraflex® technology.	High performance sealant for moving or static trafficable joints where high strength is required such as; in pavements and footpaths. UV and weather resistant, with a tough and stain free finish with Duraflex® technology.	Rubberised bitumen, mastic joint sealant compatible with bitumen based membranes.	Two-component, hybrid polyurea, rapid cure joint sealant. Very low movement accomodation and high shore A hardness, designed to resist heavy hard wheeled traffic.
Polyurethane Hybrid (Silyl Modified Polymer)	Polyurethane Hybrid (Silyl Modified Polymer)	Bituminous Mastic	Hybrid Polyurea
Horizontal / Vertical	Horizontal / Vertical	Horizontal / Vertical	Horizontal
Exterior	Exterior	Exterior	Exterior / Interior
Brickwork, precast or insitu concrete, curtain walls and lightweight cladding, tilt-up slabs.	Trafficable floor joints in pavements and footpaths, brick, blockwork, excellent adhesion to most building materials.	Retaining walls, roofing, lap joints in gutters and drainage channels where ponded water may reside, sealing terminations of bitumen based waterproofing membranes.	Used for very low movement construction or contraction joints where the anticipated movement is less than 5% of the joint width including retail, warehousing, bunds and other industrial applications.
Gun	Gun	Gun	Gun
One	One	One	Two
65 minutes @ 23°C and 50% RH	50 minutes @ 23°C and 50% RH	N/A	N/A
35 minutes @ 23°C and 50% RH	25 minutes @ 23°C and 50% RH	60 minutes @ 23°C	4 minutes @ 25°C
34	42	N/A	80 (+/-3)
5mm to 50mm	5mm to 50mm	10mm to 40mm	6mm to 30mm
+/- 25% (total 50%)	+/- 20% (total 40%)	+/- 5% (total 10%) butt joints +/- 10% (total 20%) lap joints	+5% / -5% (total 10%)
0.75 MPa	1.15 MPa	N/A	3.1 MPa
>2mm / 24h @ 50% RH @ 25°C	>2mm / 24h @ 50% RH @ 25°C	N/A	Full cure 2 hours
600ml sausage will seal 12 metres of 10 mm x 5mm joint.	600ml sausage will seal 12 metres of 10mm x 5mm joint.	600ml sausage will seal 3 metres of 10mm x 20mm joint.	600ml pack will seal 4.2 metres of a 12mm x 12mm joint.
No	Yes	No	Yes
Yes	Yes	No	No
Yes	Yes	Yes	Yes
A range of colours, See p13.	Concrete Grey, Black & White	Black	Grey
FC920171-600ML Concrete Grey FC930223-600ML Special colour MTO. Full MS250 colour range can be found on page 13	FC920181-600ML Concrete Grey 600ml FC920180-600ML Black 600ML FC930203-600ML White 600ML FC930202-600ML Special colour MTO FC920181-200L Concrete Grey 200L MTO	FC900222-600ML Black	FC920125-600ML pack FC920123-20KG Part A of 40KG MTO pack FC920124-20KG Part B of 40KG MTO pack
Primer 10 – Some porous surfaces such as FC sheet adhesion may be improved by the use of a primer.	Primer 10 – Some porous surfaces such as FC sheet adhesion may be improved by the use of a primer.	Not normally required. Check TDS.	Not normally required. Check TDS.

Please always refer to the product TDS before making your final selection or speak to your Fosroc representative.

General Construction Sealants Product Guide (continued)

Product Names	Nitoseal SC800	Nitoseal SC820
Previously Known As / Replaces	Emer-Seal Roadseal	Emer-Seal Roadseal SL
Product Description	Low modulus, high joint movement accommodation silicone sealant with Roadseal® technology. Excellent UV and weathering resistance with excellent adhesion to dry concrete and a fast rate of cure.	A low modulus, self-levelling sealant that can be used with joints in asphalt with Roadseal® technology.
Sealant Technology	Silicone	Silicone
Joint Type	Horizontal / Vertical	Horizontal
Typical Applications	Sealing joints between concrete roads and pavements, bridge decks and car parks, aircraft runways and aprons.	Sealing sawn joints in asphalt roads and pavements, slot sealing of cable installations in asphalt and concrete pavements and abutment joints between concrete and asphalt pavements.
Application Type (Gun/Pour)	Gun	Gun
Number of Components	One	One
Chemical Resistance to spillage	Resistant to dilute acids and alkalis. Not resistant to organic solvents.	Resistant to dilute acids and alkalis. Not resistant to organic solvents.
Tack Free Time	45 to 60 minutes @ 23°C	45 to 60 minutes @ 23°C
Service Temperature	-50°C to 150°C	-50°C to 150°C
Tooling Time	20 minutes @ 23°C	20 minutes @ 23°C
Hardness Shore 'A'	17 +/- 5	10 +/- 2
Joint Size	2:1 and an overriding minimum depth of 7 mm	Minimum depth of 7mm
Joint Movement Capability	+100% / -50% (total 150%)	+100% / -50% (total 150%)
Modulus @ 100%	Low Modulus	Low Modulus
Cure Time Approximately	Approx. 3 mm in 24 hours, then 1 mm / day @ 25°C 65%RH	Approx. 3 mm in 24 hours, then 1 mm / day @ 25°C 65%RH
Coverage Guide Approximately	20 litre drum will seal 200 metres of a 10mm x 10mm joint.	20 litre drum will seal 200 metres of a 10mm x 10mm joint.
Trafficable	Yes	Yes
Standards compliance / conforms to	QLD Main Roads & NSW RMS - see TDS for details.	N/A
Weather Resistant	Yes	Yes
Colour	Concrete Grey	Charcoal Grey
Product Codes	FC920130-600ML – Concrete Grey FC920130-20L – Concrete Grey MTO FC920130-200L – Concrete Grey MTO	FC920140-600ML – Charcoal Grey FC920140-20L – Charcoal Grey MTO FC920140-200L – Charcoal Grey MTO
Primer Requirements	Primer 10 – On concrete and masonry surfaces. Primer 13 – Must be used in applications subjected to permanent water immersion.	Primer 10 – On concrete and masonry surfaces. Primer 13 – Must be used where Nitoseal SC820 is to be subjected to long term water immersion or on asphalt which has not been cut with a saw.



Civil Construction Sealants Product Guide

Nitoseal SC600	Thioflex 600 Pouring Grade	Thioflex 600 Gun Grade
Emer-Seal CR		
Highly chemical resistant, fast cure, one-component joint sealant, designed for sealing expansion and construction joints exposed to aggressive chemical environments.	Fuel resistant, multi-component, pouring grade, joint sealant for horizontal movement joints in concrete building and civil engineering structures.	Fuel resistant, low modulus, high joint movement accommodation joint sealant for sealing high movement joints in building and civil engineering structures.
Silicone	Polysulphide	Polysulphide
Horizontal / Vertical	Horizontal	Horizontal / Vertical
Chemical bund areas, floor joints in chemical processing plants, concrete joints exposed to acid spillage, swimming pools, sewage processing tanks, food, wine and citrus processing areas.	Sealing horizontal movement joints in building and civil engineering structures, including roads, floors, airfields and subways.	Sealing high movement joints in building and civil engineering structures, including superstructures, floors, basements, pavements and subways.
Gun	Pour	Gun
One	Two	Two
Highly resistant to biological attack such as sewers, a wide range of chemicals including, strong acids and alkalis. Highly resistant to pool chlorine, salt water chlorination and ozone treatment.	Resistance to occasional spillage of dilute acids, dilute alkalis, petrol, aviation fuels, diesel fuel, kerosene, lubricating oils, skydrol, white spirit and aromatic solvents.	Resistance to occasional spillage of dilute acids, dilute alkalis, petrol, aviation fuels, diesel fuel, kerosene, lubricating oils, skydrol, white spirit and aromatic solvents.
N/A	N/A	N/A
-50°C to 150°C	-20°C to 60°C	5 to 50°C
20 minutes @ 25°C 65% RH	2 hours @ 25°C 65%RH	2 hours @ 25°C 65%RH
32 +/- 5	15 to 23	15 to 20
8mm to 50 mm wide	5mm to 50mm wide	5mm to 50mm wide
+25% / -25% (total 50%)	+/- 25% (total 50%)	+/- 30% (total 60%)
Tensile Modulus 0.4 MPa @ 100% >1.0 MPa @ >400%	Low Modulus	Low Modulus
3mm in 24 hours, 1mm / day @ 25°C 65% RH	4 weeks @ 5°C 2 weeks @ 15°C 1 week @ 25°C	3 weeks @ 15°C 1 week @ 25°C
600 ml sausage will seal 3 metres of a 20 mm x 10 mm joint.	Refer to TDS	6 litre pack will seal 30 metres of a 20mm x 10mm joint.
Yes	Yes	Yes
Complies to AS/NZS 4020 Potable Water.	N/A	N/A
Yes	Yes	Yes
Concrete Grey, Pool Blue, White	Grey	Grey
FC920100-600ML – Concrete Grey FC920101-600ML – Pool Blue FC9201026-600ML – White	FC920400-3.7L Base of 4L pack FC920416-14.8L – Base of 16L pack FC920401-300ML Curing compound 300ml	FC902422-5.5L Base of 6L pack FC920423-500ML Curing compound of 6L pack
Primer 13	Primer 4 – Priming non porous surfaces. Primer 7 – Priming porous surfaces. Primer 13 – Priming surfaces subject to immersion.	Primer 4 – Priming non porous surfaces. Primer 7 – Priming porous surfaces. Primer 13 – Priming surfaces subject to immersion.

Please always refer to the product TDS before making your final selection or speak to your Fosroc representative.

# Fire Rated Sealants Product Guide

Product Names	Flamex One	Flamex XT
Product Description	Flexible, quick drying, economical joint sealant for low movement interior joints where a fire rating of up to 4 hours is required.	High performance fire and acoustic rated sealant for exterior and interior movement joints in building facades and general construction. It has outstanding weather and UV resistance and adhesion performance where a fire rating of up to 4 hours is required.
Sealant Technology	Acrylic	Polyurethane Hybrid (Silyl Modified Polymer)
Joint Type	Vertical / Horizontal	Vertical / Horizontal
Typical Applications	Precast and insitu concrete, compartment walls, corridors, basements and around building components such as fire door/window frames.	Sealing control joints in concrete, masonry, AAC, brick. Acoustic sealing between most building materials including concrete, masonry, plaster, metals, timbers and plastics.
Application Interior/Exterior	Interior only	Interior / Exterior
Application Type (Gun/Pour)	Gun	Gun
Number of Components	One	One
Tooling Time	20 minutes @ 25°C, 50% RH	30 minutes @ 23°C and 50% RH
Hardness Shore 'A'	N/A	31
Joint Size	6mm to 30mm wide	20mm to 40mm wide
Joint Movement Capability	+/- 10% (20% total)	+/- 20% (40% total)
Modulus @ 100%	N/A	0.67MPa (ASTM D412)
Cure Time (Approximately)	1mm in 24 hours at 25°C, 50% RH	>2mm in 24 hours @25°C @ 50% RH
Coverage Guide (Approximately)	600ml sausage will seal 2 metres of a 25mm x 12mm joint.	600ml sausage will seal 3 metres of a 20mm x 10mm joint.
Paintable	Yes	Yes
Standards compliance / conforms to	AS1530.4 - see TDS for results	AS1530.4 - see TDS for results. Acoustic rating Rw (CT;CTR): Up to 50Rw.
Colour	Concrete Grey	Concrete Grey
Product Codes	FC920025-600ML – Concrete Grey	FC920045-600ML – Concrete Grey
Primer Requirements	N/A	N/A

Please always refer to the product TDS before making your final selection or speak to your Fosroc representative.



# Colour Charts

## Standard colour range for Nitoseal MS250



## Nitoseal MS250

Product code	Description	Size
FC920175-600ML	NITOSEAL MS250 BEIGE 600ML	600ml
FC920170-600ML	NITOSEAL MS250 BLACK 600ML	600ml
FC920176-600ML	NITOSEAL MS250 BRICK RED 600ML	600ml
FC920171-600ML	NITOSEAL MS250 CONCRETE GREY 600ML	600ml
FC920178-600ML	NITOSEAL MS250 DARK EARTH 600ML	600ml
FC920174-600ML	NITOSEAL MS250 DARK GREY 600ML	600ml
FC920172-600ML	NITOSEAL MS250 OFF WHITE 600ML	600ml
FC920169-600ML	NITOSEAL MS250 PALE BROWN 600ML	600ml
FC920177-600ML	NITOSEAL MS250 REDWOOD 600ML	600ml
FC920179-600ML	NITOSEAL MS250 SANDSTONE 600ML	600ml
FC930223-600ML	NITOSEAL MS250 SPECIAL COLOUR 600ML MTO	600ml
FC920173-600ML	NITOSEAL MS250 WHITE 600ML	600ml

## Standard colour range for Nitoseal MS400



## Nitoseal MS400

Product code	Description	Size
FC920180-600ML	NITOSEAL MS400 BLACK 600ML	600ml
FC920181-600ML	NITOSEAL MS400 CONCRETE GREY 600ML	600ml
FC930203-600ML	NITOSEAL MS400 WHITE 600ML	600ml
FC930202-600ML	NITOSEAL MS400 SPECIAL COLOUR 600ML MTO	600ml
FC920181-200L	NITOSEAL MS400 CONCRETE GREY 200L MTO	200L

# FOSROC SEALANT GUN



Fosroc Sealant Gun is designed to pump high volumes of sealant packed in sausages up to 600mL. Designed for all Fosroc Nitoseal and Flamex Sausages.

**Designed For 600ml Sausage, 300-375ml Cartridge**

**105mm Nozzle Included**

**High Thrust Ratio**

Product code	Description
FC920210-UNIT	FOSROC SEALANT GUN

\*All colours are a grade 2 match to Australian Standard colours. Colours shown are as close as possible to actual colours. Please note due to limitations of the printing process printed images may not represent the true colour and we recommend always confirming your colour choice against a product sample for final colour approval.

# CUSTOM COLOURED SEALANTS? YES. WE CAN DO THAT.

Now you can get the right colour for your project with Fosroc's custom colour service for Nitoseal MS250 and Nitoseal MS400. Just provide us with a sample of the colour you need and we'll match it.\*

\*\*Colour matches are available for typical shades associated with facade and pavement requirements. Minimum order of 360 sausages, 3-4 week lead time applies from approval of colour samples.



# Sealant Property & Technology Definitions

Low Modulus	High Modulus
<p><b>Range &lt;0.4 MPa</b></p> <ul style="list-style-type: none"> <li>• Low modulus material requires little force to extend it (e.g. a rubber band)</li> <li>• Low modulus sealants must be able to take significant movement with rapid stretch and close</li> <li>• Sealants are soft</li> </ul>	<p><b>Range &gt;0.4 MPa</b></p> <ul style="list-style-type: none"> <li>• High modulus material requires a greater force to extend it (e.g. a car tyre)</li> <li>• Typically used for low moving joints</li> <li>• Sealant must be hard enough to withstand loads but still possess movement capability</li> <li>• Sealant is harder than low modulus</li> </ul>
<p><b>Main Uses</b></p> <ul style="list-style-type: none"> <li>• Movement and construction joints</li> <li>• Lightweight panels moving easily in changing temperatures</li> <li>• Trafficable joints are typically sealed with high modulus sealants</li> </ul>	<p><b>Main Uses</b></p> <ul style="list-style-type: none"> <li>• Concrete floor joints with small wheel fork-lift trucks</li> <li>• Joints that could be vandalised (e.g. prisons)</li> </ul>
Hardness Shore 'A'	Joint Movement Capability
<p><b>Range 0 - 100</b></p> <ul style="list-style-type: none"> <li>• Sealant hardness – measures ability to resist penetration on a scale from 0 – 100</li> <li>• Lower hardness means softer and usually more movement in the joint</li> <li>• Higher hardness means harder and usually less movement in the joint</li> </ul>	<p><b>Range +/- 5% to +100%</b></p> <ul style="list-style-type: none"> <li>• Measures cyclic movement (extension [+] and compression [-]) of a sealant e.g. +/-12.5%, +/-25%, +/-35%, +/-50%, +100%</li> </ul>





# Technology Advantages & Limitations

	Polyurethane	Polyurethane Hybrid (Silyl Modified Polymer)	Silicone	Polysulphide	Bituminous Mastic	Acrylic	Hybrid Polyurea
<b>General Technology Advantage</b>	<ul style="list-style-type: none"> <li>Industry accepted 'standard' technology</li> <li>Economical sealant solution</li> <li>Offers good weathering performance</li> <li>High bond strength</li> </ul>	<ul style="list-style-type: none"> <li>Leading technology</li> <li>Isocyanate free</li> <li>Low VOC</li> <li>Superior UV resistance (compared to Polyurethane)</li> <li>Paintable, fire rated &amp; trafficable grades available</li> <li>Non-staining</li> </ul>	<ul style="list-style-type: none"> <li>High chemical resistance</li> <li>High movement</li> <li>Excellent weathering performance</li> <li>High pick resistance</li> <li>Extended life span</li> </ul>	<ul style="list-style-type: none"> <li>High movement</li> <li>High fuel resistance</li> <li>Chemical cure</li> <li>Fast return to service options</li> </ul>	<ul style="list-style-type: none"> <li>Compatible with Bitumen based membranes</li> </ul>	<ul style="list-style-type: none"> <li>Paintable</li> <li>Water clean up</li> </ul>	<ul style="list-style-type: none"> <li>Extremely tough</li> <li>Very high hardness</li> <li>Excellent abrasion resistance</li> <li>Rapid cure</li> </ul>
<b>General Technology Limitations</b>	<ul style="list-style-type: none"> <li>Not paintable</li> <li>Inferior UV resistance compared to a Silyl Modified Polymer</li> <li>Cure / gunnability at low temperatures</li> </ul>	<ul style="list-style-type: none"> <li>Is less economical than a Polyurethane due to higher cost of raw materials and process</li> </ul>	<ul style="list-style-type: none"> <li>Not paintable</li> <li>May stain</li> <li>Must be applied to clean surfaces</li> </ul>	<ul style="list-style-type: none"> <li>Not paintable</li> </ul>	<ul style="list-style-type: none"> <li>Not paintable</li> <li>Non-trafficable</li> </ul>	<ul style="list-style-type: none"> <li>Internal use only</li> <li>Low movement capacity</li> </ul>	<ul style="list-style-type: none"> <li>Very low movement capability</li> </ul>



**Fosroc solutions help ensure that iconic Australian structures are protected for future generations.**

**Sydney Harbour Bridge**

Products used: Fosroc Nitoseal MS250 and Nitoseal MS400, Fosroc Conbextra Deep Pour, Fosroc Renderoc HB70.



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