



## Technical Data Sheet

# Seal N Flex 1

## Polyurethane Construction Joint Sealant

### DESCRIPTION

**Bostik Seal N Flex 1** is a low modulus, one component, and Class-A polyurethane sealant. When cured it will form a tough, flexible seal capable of cyclic expansion and compression movement of 50% ( $\pm$  25%) of the original installed joint width.

**Bostik Seal N Flex 1** is resistant to normal weathering conditions such as rain, sunlight, snow, sleet, ozone, atmospheric contamination and pollution. Its excellent weather ability enables it to retain its original properties after years of exposure, refer to the CSIRO RILEM LONG- TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M)

### CLASIFICATION STANDARDS

- ✓ CSIRO RILEM LONG - TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M)
- ✓ SO 11600-Class F-25LM
- ✓ DIN 18540 (German) and SNJF (French) approval as a low modulus external joint sealant
- ✓ ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use NT, G, A, M, &O as an external joint sealant.
- ✓ AS4020 Potable water
- ✓ AS1157-1972 Resistance to fungal growth
- ✓ Ministry of Agriculture and fisheries New Zealand (Meat, fish, Game, Poultry- All areas)

### FEATURES

- ✓ Low modulus 50 % ( $\pm$  25%)
- ✓ Excellent durability
- ✓ One component, no mixing required
- ✓ Australian made
- ✓ Colour range
- ✓ Acoustic rating
- ✓ Paintable (refer limitations)
- ✓ Non staining



### RECOMMENDED USES

#### Sealing joints in:

- ✓ Insitu concrete & render.
- ✓ Precast and tilt up panels.
- ✓ Brickwork & block work.
- ✓ Plasterboard face and paper lined recessed edges.
- ✓ Fibre cement sheet.
- ✓ Aluminium windows.
- ✓ Granite, sandstone and marble.
- ✓ GRC, fibreglass & most specialty panel systems

### APPLICATION INSTRUCTIONS

Clean and dry all surfaces by removing foreign matter and contaminants such as laitance, oil, dust, grease, frost, water, dirt, old sealants, curing agents and any protective coating. Dust and loose particles should be vacuum cleaned. Priming of all surfaces is recommended to achieve stated performance properties. **DO NOT USE METHYLATED SPIRITS OR TURPS.**

## PRIMING

### POROUS SUBSTRATES

- Absorbent or porous substrates will allow a bead of water to easily soak into and wet out the surface of the substrate.
- For maximum performance on porous surfaces and, in all periodically immersed and submerged applications, use **Bostik N49 Primer**, or one coat of **Bostik MVP525**.
- Porous substrates not subject to immersion or ponded water, e.g. vertical expansion joints in concrete or masonry structures, do not require priming if clean, dry and uncontaminated.

### NON POROUS SUBSTRATES

- Non-absorbent substrates will cause a bead of water to be retained on the surface of the substrate as a raised droplet. The droplet does not easily soak into the surface of the substrate.
- **Bostik MVP525** is recommended for non-porous or burnished/overworked concrete substrate as per **Bostik MVP525** Technical Data Sheet.
- **Bostik N40 Primer** is recommended for non-porous plastic and metal substrates.
- Prime all plastics and metallic non-porous substrates with **Bostik N40 Primer** using the two-cloth method described below.
- E.g. UPVC outlets and pipe work: brass, copper fittings, stainless steel trays and flashings

### TWO CLOTH METHOD - N40 primer application

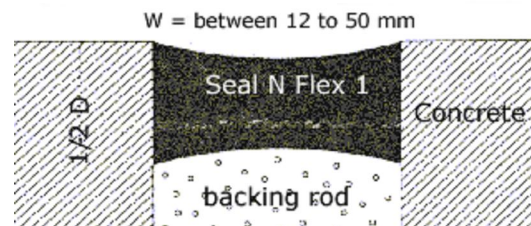
- Dampen a clean and dry cloth with **Bostik N40 Primer** and spread evenly over the non-porous substrate using a cleaning/rubbing action.
- With a second clean and dry cloth, immediately wipe all primer residues off with a buffing action.
- Allow the substrate to dry for a minimum of 5 minutes before installing **Bostik Seal 'N' Flex 1**.
- Do not leave the primer longer than 4 hours before applying sealant/adhesive.
- Re-prime if 4 hours has elapsed without applying sealant/adhesive
- Clean and re-prime if the primed surface is contaminated before **Bostik Seal 'N' Flex 1** is applied.

## APPLICATION

**Bostik Seal-N-Flex 1** should be dispensed from either the cartridge or sausage by means of a caulking gun (available from Bostik). Pierce the membrane at the top of the cartridge and screw on the nozzle. Cut nozzle to give the required angle and bead size. Place the cartridge in a Bostik applicator gun and squeeze the trigger. For sausages, a barrel gun is required; clip the end of the sausage and place in barrel gun. Screw end cap and nozzle on to barrel gun. Using the trigger extrude the sealant, to stop depress using the catch plate. Apply **Bostik Seal N Flex 1** in a continuous bead using enough pressure to properly fill the joint. Tool off surface of sealant with an appropriate sized spatula or trowel. Apply sufficient pressure to leave a smooth, consistent surface and ensure maximum contact with the interface of the joint.

## JOINT SEALING HINTS

- Always use backing rod for correct sealant geometry & contact with the substrate.
- Prime after the installation of the backing rod.
- Ensure maximum adhesion to bond face and depth to width ratio of 1:1 up to 12mm and 1:2 from 12– 50mm.
- Tool sealant to achieve concave shape





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## COVERAGE

The estimated quantity below is the approximate lineal metre yield, per pack size, for recommended joint dimensions. No allowance for waste or irregular joint geometry.

SIZE	5mm x 6mm	10mm x 10mm	20mm x 10mm
300ml cartridge	10	3	1.5
600ml sausage	20	6	3

Calculation formula  $(W \times D \times L) / 1000 = \text{Litres}$

Litres / 0.3 = No of 300ml Ctgs

Litres / 0.6 = No of 600ml Sgs

W = Width (mm)      D = Depth (mm) L= Length (metres)

## IMPORTANT NOTES

- **Bostik Seal N Flex 1** should not be used in highly chlorinated water such as swimming pools, spas etc.
- **Bostik Seal N Flex 1** should not be used on any material containing bitumen.
- **Bostik Seal N Flex 1** should not be constantly immersed in salt water
- **Bostik Seal N Flex 1** should not be used for glazing applications
- **Bostik Seal N Flex 1** should not be applied to cement based substrates within 28 days of initial pour or set.
- **Bostik Seal N Flex 1** should not be used in trafficable joints.
- **Bostik Seal N Flex 1** should not be applied at temperatures below 5°C or above 35°C.
- **Bostik Seal N Flex 1** should not be exposed to water and/or alcohol before it has completely cured.
- **Bostik Seal N Flex 1** should not be finished using wet tooling techniques, using solvents, water or detergent / soap solutions.
- **Bostik Seal N Flex 1** should not be applied less than 5mm in width, or less than 6mm in depth.
- **Bostik Seal N Flex 1 White** may yellow on the surface if exposed to strong natural or artificial UV light for prolonged periods of time.
- Composite metallic façade systems can be subject to significant daily cyclical movement due to temperature variations. Crimping and bulging of installed sealant before full cure may permanently deform the sealant finish prior to full cure, especially on northern & western elevations in full sunlight. Refer **Bostik V70** Silicone TDS for recommended metal façade sealant applications.
- Maximum joint width on vertical substrates is 20mm
- Maximum joint width on horizontal substrates is 50mm.
- Allow 14 days for full cure in joints over 20mm in width.

## PAINTABILITY

**Bostik Seal 'N' Flex 1** can be painted after full cure. Coatings containing solvents such as enamels, oil based or other coatings may cause the surface of the sealant to react creating a tacky surface. Surface coatings may discolour in direct contact with cured **Bostik Seal N Flex 1**. Surface coatings may crack and craze as a result of cyclical movement of supporting sealant joint. A field test is recommended to ensure compatibility of any coating with **Bostik Seal N Flex 1** (refer PATS).

## BOSTIK CO-OPERATIVE TEST PROGRAMME

Bostik offer a service in which a program has been established to eliminate potential field problems by pretesting Bostik adhesives with samples of building materials to which the adhesive will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.



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## PROPERTIES

<b>Tensile strength</b>	> 1.3 N/mm <sup>2</sup>	<b>Hardness shore A</b>	30 approx.
<b>Appearance</b>	Non-sag smooth thixotropic paste	<b>Specific Gravity</b>	1.23 g/ml
<b>Tack free time</b>	6-12 hours	<b>Elongation at break</b>	>900%
<b>Rate of cure</b>	2 mm/24h on porous substrates	<b>Full Cure</b>	7 days on porous substrates
<b>Chemical resistance</b>	Resistant to dilute acids, alkalis & some solvents. Intermittent contact with diesel and petroleum.	<b>Application Temperature</b>	5°C to 35°C
<b>In Service Temperature range</b>	-40°C to +70°C	<b>Cure Method</b>	Moisture Curing

## STORAGE & SHELF LIFE

Store between 5°C and 30°C. Shelf life is two years in original unopened cartridge or sausage

## SAFETY PRECAUTIONS

**SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.**

**EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)**

**MSDS can be downloaded from [www.bostik.com.au](http://www.bostik.com.au)**

## CLEAN -UP

The use of protective goggles, barrier creams and ointments, gloves, and protective clothing is recommended. Clean up uncured material and equipment immediately after use using **Bostik Handi Clean Towels**. Do not use towels on skin. Cured material can be removed by mechanical means only.

## PACKAGING

**Bostik Seal N Flex 1** is supplied in 300ml cartridges and 600ml sausages, 20 per carton.

## VOC – 74g/Lt

[voccertificates.australia@bostik.com](mailto:voccertificates.australia@bostik.com)

## PRODUCT DETAILS

ITEM NO	ITEM NAME	SIZE	COLOUR	PACK
256158	SEAL N FLEX 1	380gms	GREY	CARTRIDGE
246204	SEAL N FLEX 1	380gms	BLACK	CARTRIDGE
246220	SEAL N FLEX 1	380gms	WHITE	CARTRIDGE
216275	SEAL N FLEX 1	720gms	GREY	SAUSAGE
217824	SEAL N FLEX 1	720gms	LIMESTONE	SAUSAGE
217808	SEAL N FLEX 1	720gms	BLACK	SAUSAGE
216267	SEAL N FLEX 1	720gms	WHITE	SAUSAGE
217751	SEAL N FLEX 1	720gms	BAHAMA BEIGE	SAUSAGE
226203	SEAL N FLEX 1	720gms	SANDSTONE	SAUSAGE
226688	SEAL N FLEX 1	720gms	REDWOOD	SAUSAGE
218626	SEAL N FLEX 1	720gms	OFF WHITE	SAUSAGE
232440	SEAL N FLEX 1	720gms	MANILLA SAND	SAUSAGE
242322	SEAL N FLEX 1	720gms	CLASSIC BONE	SAUSAGE
232556	SEAL N FLEX 1	720gms	EPPING GREY	SAUSAGE
226289	SEAL N FLEX 1	720gms	BRONZE	SAUSAGE





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The information in this Technical Data Sheet is intended for the assistance of purchasers and is of a general nature. It reflects the extent of our knowledge and experience of our products and is based on tests which we believe to be reliable. However, no guarantee of accuracy can be given due to the wide range of surfaces, environmental and field conditions and variations encountered in raw materials, manufacturing equipment and methods at the place where the work is performed. Some of these will be beyond our knowledge or control. We recommend purchasers carry out their own tests to determine the suitability of the product for their particular purposes. Bostik Australia Pty Ltd limits its liability to replacement of the products or refund of the purchase price, but this limitation does not affect consumers' rights which cannot by law be excluded.

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Quality

ISO 9001

SAI GLOBAL

Quality endorsed ISO9001 (Thomastown site)  
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