



Seal 'N' Flex 1

HI-PERFORMANCE POLYURETHANE JOINT SEALANT

DESCRIPTION

Bostik **Seal N Flex 1** is a low modulus, one component. Class-A polyurethane sealant. When cured it will form a tough, flexible seal capable of cyclic expansion and compression movement of 100% ($\pm 50\%$) of the original installed joint width.

It has excellent resistance to normal weathering condition such as rain, sunlight, sleet, ozone, atmospheric contamination and pollution. This 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).

FEATURES AND BENEFITS

- Low modulus 100% ($\pm 50\%$)
- Excellent durability
- One component, no mixing required
- Acoustic rating
- Paintable (refer limitations)
- Non staining

RECOMMENDED USES

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

PREPARATION & USE

Preparation: 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

Porous Substrates

(Generally, priming for porous substrates is optional but for best result follow the instructions below)

- 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** (refer to the relevant Technical Data Sheet)
- 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.
- Ministry of Agriculture and Fisheries, New Zealand (Meat, Fish, Game, Poultry – All areas)

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 to non-porous or burnished/overworked concrete substrate (refer to the **Bostik MVP525** Technical Data Sheet)
- **Bostik N40 Primer** is recommended for non-porous plastic and metal substrates, e.g. UPVC outlets and

pipe work brass, copper fittings, stainless steel trays and flashings (refer to the Bostik N40 Technical Data Sheet)

- Prime all plastics and metallic non-porous substrates with **Bostik N40 Primer** using the two-cloth method described in the Bostik N40 Technical Data Sheet

APPLICATION

Bostik Seal N Flex 1 should be dispensed from either the cartridge or sausage by means of a caulking gun (available from Bostik)

- Cartridge – 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.
- 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 (optional)
- Ensure maximum adhesion to bond face
- Minimum allowable joint depth is 6mm
- Minimum allowable joint width is 5mm
- Depth to width ratio of 1:1 up to 12mm width, and 1:2 from 12–50mm width
- Tool sealant to achieve concave shape

COVERAGE

The estimated lineal metre yield, per pack size, is recommended in the following table. No allowance has been made for waste or irregular joint geometry.

JOINT SIZE (D&W)	6mm x 5mm	10mm x 10mm	10mm x 20mm
300 ml cartridge	10	3	15
600 ml cartridge	206	6	3

Calculation formula $(W \times D \times L) / 1000 =$
Litres / 0.3 = No of 300ml Ctgts

Litres / 0.6 = No of 600ml Sgs

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

IMPORTANT NOTES

Bostik Seal N Flex 1 must not be

- Used in chlorinated water such as swimming pools, spas etc.
- Used on any material containing bitumen
- Constantly immersed in salt water
- Used for glazing applications

- Applied to cement based substrates within 28 days of initial pour or set
- Used in trafficable joints
- Applied at temperatures below 5°C or above 35°C
- Exposed to water and/or alcohol before it has completely cured
- Finished using wet tooling techniques, using solvents, water or detergent / soap solutions
- Applied less than 5mm in width
- Applied less than 6mm in depth
- 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

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 and western elevations in full sunlight. Refer Bostik V70 Silicone TDS for recommended metal façade sealant applications.

PAINT ABILITY

Bostik Seal N Flex 1 can be painted after 7 days minimum. 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 (PATS)

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.

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

PROPERTIES			
Colours	Range of 12 colours	Specific Gravity	1.25 g/ml
Appearance	Non-sag smooth thixotropic paste		
Cure Method	Moisture curing	Elongation at break	>900%
Tack free time	6 - 12 hours	Full Cure	Depends on joint depth (10mm will cure approx. 5 days)
Rate of cure	2mm/24h on porous substrates	Application Temperature	5°C to 35°C
Hardness shore A	30 approx.	Tensile strength	> 1.3 N/mm ²
In Service Temperature Range	40°C to +70°C	VOC g/Lt	74

*Average laboratory values provided as a general guide

**Actual field performance will depend on installation and site conditions

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.

DISCLAIMER:

The information in this Technical Data Sheet is intended for the assistance of users 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 and control. Users are asked to make sure that the TDS in their possession is the latest issue. Likewise, we recommend users carry out their own tests to determine the suitability of the product for their particular purposes.

Any claim for a defective product must be filed within 30 days of discovery of a problem and must be submitted with written proof of purchase. Claims are not transferrable or assignable and extend only to the original purchaser/user. Bostik reserves the right to inspect alleged failure and no responsibility will be accepted unless Bostik is given the opportunity to do so. Bostik limits its liability to the replacement of the product/s proven faulty.

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