



SEAL `N' FLEX 1

POLYURETHANE CONSTRUCTION JOINT SEALANT

KEY FEATURES

- Low modulus
- $\pm 50\%$ joint movement
- Excellent durability
- One component, no mixing required
- Acoustic rated
- Non staining
- Paintable *
- Available in 12 popular colours
- Made in Australia

DESCRIPTION

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 joint width.

CLASSIFICATION STANDARDS

- CSIRO RILEM Long - Term Sealant Durability Study DBCE Doc.97/196 (M)
- DIN 18540 (German) and SJNF (French) approval as a low modulus external joint sealant
- AS 4020 Potable Water
- ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 50, use NT, G, A, M & O as an external joint sealant.
- AS 1157-1972 Resistance to fungal growth. Ministry of Agriculture and fisheries New Zealand (Meat, Fish, Game, Poultry - All areas)

RECOMMENDED USES

Seal `N' Flex 1 can be used on:

- Insitu concrete & render
- Precast and tilt up panels
- Brickwork & Blockwork
- Plasterboard face and paper lined recessed edges
- Fibre cement sheet
- Aluminium windows
- Granite, sandstone and marble
- GRC, Fibreglass & most other specialty panel systems

SURFACE 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, loose particles, etc should be

PERFORMANCE PROPERTIES

Typical properties after 7 days cure at 25°C and 50% Relative Humidity

Colours	12 popular colours
Viscosity	Non-sag smooth thixotropic paste
Cure Method	Moisture Curing
Chemical Resistance	Dilute acids, alkalis and some solvents, Intermittent contact with petroleum and diesel
Application Temperature	5°C to 35°C
Service Temperature	-40°C to 75°C
Tack Free Time	6 to 12 hours
Cure rate	2mm/24 hours on porous substrates
Full Cure	7 days on porous substrates. Allow 14 days in joints over 20mm wide.
Specific Gravity	1.25g/ml
Shore A Hardness	30
Tensile Strength	1.3N/mm ²
Elongation at break	> 900%
Total joint movement	$\pm 50\%$
maximum joint width	Up to 50mm
VOC	74g/L

vacuum cleaned.

PRIMING

Priming of all surfaces is recommended to achieve stated performance properties.

DO NOT USE METHYLATED SPIRITS OR TURPS.

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 (refer to the Bostik N49 Primer Technical Data Sheet).

- Porous substrates not subject to immersion or ponded water, e.g. vertical expansion joints in concrete or masonry structures or internal acoustic plasterboard applications 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 N40 Primer is recommended for non-porous plastic and metal substrates. E.g. UPVC outlets and pipework, brass, copper fittings, stainless steel trays and flashings (refer to Bostik N40 primer Technical Data Sheet).
- Prime all plastic and metallic non-porous substrate with Bostik N40 Primer using the two-cloth method described in the Bostik N40 Primer Technical Data Sheet.

APPLICATION

Seal `N' Flex 1 should be dispensed from either the cartridge or sausage by means of caulking gun.

Cartridge application :

1. Pierce the membrane at the top of the cartridge and screw on the nozzle.
2. Cut nozzle to give the required angle and bead size.
3. Place the cartridge in a Bostik applicator gun and squeeze the trigger.

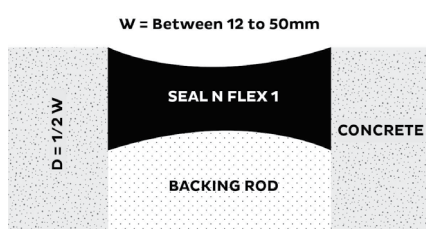
Sausages application :

1. Clip the end of the sausage and place in a barrel gun.
2. Screw end cap and nozzle on to barrel gun.
3. Use the trigger to extrude the sealant. To stop; depress the catch plate.

Apply Bostik Seal `N' Flex 1 in a continuous bead using enough pressure to properly fill the joint. Tool off the surface of the 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
- Minimum allowable joint depth is 6mm
- Maximum allowable joint width is 50mm
- Depth to width ratio of 1:1 for up to 12mm width and 1:2 for 12 t 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 x W)	6mm x 6mm	10mm x 10mm	10mm x 20mm	25mm x 50mm
300ml cartridge	8.3 m	3 m	1.5 m	0.24m
600 ml sausage	16.7 m	6 m	3m	0.48m

W = Joint width (mm), D = Joint depth (mm), L = Length (metres)

$$\text{Calculation formula} = \frac{W \times D \times L}{1000} = \text{Litre}$$

Litres / 0.3 = number of 300 ml cartridge

Litres / 0.6 = number of 600 ml sausage

* PAINTABILITY

Bostik Seal `N' Flex 1 can be painted after a minimum 7 days. Coating 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 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 coatings with Bostik Seal `N' Flex 1.

LIMITATION

Not recommended for :

- 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.
- application to cement based substrates within 28 days of initial pour or set.
- use in trafficable joints.
- applied in temperatures below 5°C or above 35°C.
- exposure to water and/or alcohol before it has completely cured.
- finished using wet tooling techniques, using solvents, water or detergent / soap solutions.
- applied to joints less than 5mm in width and 6mm in depth.
- applied to joints larger than 50mm.

Bostik Seal N Flex 1 white may yellow on the surface if exposed to strong natural or artificial UV light for long period of time.

Composite metallic facade systems can be subject to significant daily cyclic 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 in Northern & Western elevations in full sunlight. Refer to V70 silicone TDS as a recommended metal facade sealant.

PACKAGING

300ml cartridge, 20 cartridges per carton.

600ml per sausage, 20 sausages per carton.

CLEAN UP

The use of protective goggles, barrier creams and ointments, gloves and protective clothing is recommended. Cured material can be removed by mechanical means only. Clean off uncured material and equipment immediately after use using Bostik Handy Wipe towels to remove adhesive from skin.

STORAGE AND SHELF LIFE

Store in cool (between 5°C to 30°C), dry, well-ventilated area out of direct sunlight. Store away from oxidizing agents and acids. Shelf life is 24 months in original unopened container.

DISPOSAL

Empty cartridges and foils may be disposed via local landfill. If spilt, absorb with clay, sand or earth. collect and seal in properly labeled metal container. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.

HEALTH AND SAFETY

CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.

Keep out of reach of children. Read label before use. Avoid breathing dust, fume, gas, mist, vapours or spray. Wash hands, face and all exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective clothing, gloves, eye/face protection and suitable respirator. In case of inadequate ventilation wear respiratory protection.

Fire : If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Spills & Leaks : Clear area of all unprotected personnel. Slippery when spilt, Wear protective equipment. Absorb with sand & soil. Collect and seal in properly labelled drums. Dispose of contents/container in accordance with local, regional, national and international regulations.

If poisoning occurs, contact Poisons Information Centre.

FIRST AID :

Swallowed : Do NOT induce vomiting. Give a glass of water. Seek medical advice.

Skin : If skin contact occur, remove contaminated clothing and wash skin thoroughly. If irritation occurs seek medical advice.

Inhaled : Remove from contaminated area. Apply artificial respiration if not breathing. Seek medical advice.

Eye : Hold eyes open, flood with water for at least 15 minutes and see a doctor.

The information and recommendations relating to the application and end-use of the product are given in good faith and based on tests which we believe to be reliable. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. However, no warranty in respect of merchantability or fitness for a particular purpose, nor any liability arising out of any legal relationship, whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. No guarantee of their accuracy can be made because of the great range of field conditions and variation encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with limited warranty only, and on condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik be liable to anyone except for replacement of the products or refund of the purchase price.

BOSTIK HOTLINE

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