

## **Technical Data Sheet** Seal N Flex 1

#### 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% (± 50%) of the original installed joint width.

It has excellent resistance to normal weathering conditions such as rain, sunlight, snow, 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)

#### **Classification 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 100 %( <u>+</u> 50%)
- Excellent durability
- One component, no mixing required
- Australian made
- 12 standard colours
- Acoustic rating
- Paintable (refer limitations)
- Non staining

#### **Application Instructions**

#### **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



#### 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



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 (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.

#### 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. (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**

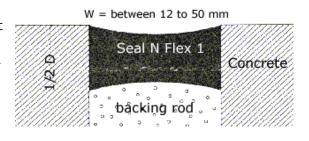
**Bostik Seal-N-Flex 1** should be dispensed from either the cartridge or sausage by means of a caulking gun (available from Bostik).

- 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.
- 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 x W)	6mm x 5mm	10mm x 10mm	10mm x 20mm
300ml	10	3	20mm 1.5
cartridge			
600ml sausage	20	6	3

Calculation formula (W x D X L) / 1000 = Litres

Litres / 0.3 = No of 300ml Ctgs

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 & western elevations in full sunlight. Refer **Bostik V70 Silicone** TDS for recommended metal facade sealant applications.

#### **Paintability**

**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 Programe (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.

#### **Properties**

Colours	Range of 12 colours		
Appearance	Non-sag smooth		
	thixotropic paste		
Cure Method	Moisture Curing		
Tack free time	6-12 hours		
Rate of cure	2 mm/24h on porous		
	substrates		
Hardness shore A	30 approx.		
In Service	-40°C to +70°C		
Temperature range			

Specific Gravity	1.25 g/ml	
Chemical	Resistant to dilute	
resistance	acids, alkalis & some	
	solvents. Intermittent	
	contact with diesel and	
	petroleum.	
Elongation at	>900%	
break		
Full Cure	7 days on porous	
	substrates	
Application	5°C to 35°C	
Temperature		
	> 1.3 N/mm²	
Tensile strength	> 1.3 N/mm²	
Tensile strength VOC g/Lt	> 1.3 N/mm² 74	

#### 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

#### 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.



### **Product Details**

ITEM NO	ITEM NAME	SIZE	COLOUR	PACK
246158	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



#### **BOSTIK PRODUCT GUARANTEE**

This product comes with consumer guarantees that cannot be excluded under the Australian Consumer Law (ACL). In addition to your rights as a consumer under the ACL or other laws, Bostik guarantees the performance of this product for 10 years if the product is used within its shelf life and in accordance with the usage instructions printed on this packaging or the product's Technical Data Sheet available on our website. This 10 year guarantee specifically excludes any loss or damage caused by incorrect usage and covers the removal and replacement of the affected materials if the failure is proven to be directly related to Bostik products within the warranty period.

If you wish to make a claim under this guarantee you must within 2 weeks after first identification of damage notify us in writing using the details on this packaging. You must provide evidence of your purchase and specify the batch number printed on the packaging. Bostik reserves the right to inspect any alleged failure and no responsibility will be accepted unless Bostik is given the opportunity to do so.

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