



SEAL N' FLEX ONE

HIGH PERFORMANCE POLYURETHANE SEALANT

TECHNICAL SHEET– Version 4

SMART ADVANTAGES

- Low modulus, class A
- $\pm 50\%$ joint movement
- Excellent durability
- Acoustic rating
- Paintable (refer Limitations)
- Non staining
- Resistance to normal weathering conditions

DESCRIPTION

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

FUNCTIONAL CHARACTERISTICS

- Insitu concrete and render
- Precast and tilt up panels
- Brickwork and block work
- Plasterboard face and paper lined recessed edges
- Fibre cement sheet
- Aluminium windows
- GRC, fibreglass and mostly specialty panel systems

TECHNICAL CHARACTERISTICS

Properties	Value
Appearance	Black, grey and white
Cure method	Moisture curing
Application temperature	5 to 35°C
VOC	74g/L
Service temperature	-40 to 75°C
Tack free time	6-12 hours
Full cure	2mm/24 hours on porous substrates
Specific gravity	1.25 g/ml
Shore A hardness	30
Tensile strength	> 1.3 N/mm ²
Elongation at break	> 900%
Total joint movement	$\pm 50\%$
Maximum joint width	Up to 50mm

DIRECTIONS FOR 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

- **Bostik Seal N' Flex One** adheres without the use of a primer to standard concrete or mortar, and bare Aluminium*.
- Always conduct a pre-tested Adhesion to Substrate prior to application.

*Aluminium coated panel has a protective coating (wax or plastic) on the surface of composite or cladding panels; therefore, check the compatibility of sealants. Doing this check beforehand is advisable.

IMPORTANT: For optimum adhesion and in areas of critical, high-performance applications such as high stress joints, extreme weather exposure, or surfaces that are too porous, the use of substrate primer is required.

Porous Substrates:

1. Absorbent or porous substrates will allow a bead of water to easily soak into and wet out the surface of the substrate.
2. 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).
3. Porous substrates not subject to immersion or ponded water e.g., vertical expansion joints in concrete or masonry structures does not require priming if clean, dry, and uncontaminated.

Non-Porous Substrates:

1. 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.
2. **Bostik N40 Primer** is recommended for non-porous plastic and metal substrates e.g., u-PVC outlets and pipe work, brass, copper fittings, stainless steel trays and flashings (refer to the Bostik N40 Primer Technical Data Sheet).
3. Prime all plastics and metallic non-porous substrates with Bostik N40 Primer using the two-cloth method described in the Bostik N40 Primer Technical Data

APPLICATION

Cartridge Application:

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

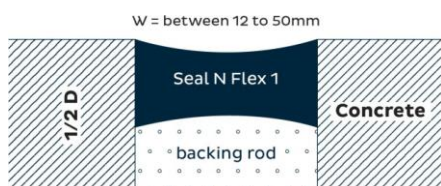
Sausage Application:

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

Apply Bostik Seal N' Flex One in a continuous operation using enough pressure to properly fill the joint. Tool off the surface of the sealant with an appropriately 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 a backing rod for correct sealant geometry and contact with the substrate
- Primer 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 ration 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 (DxW)	5 x 5 mm	10 x 10 mm	10 x 20 mm	25 x 50 mm
300ml cartridge	10	3	1.5	0.24
600ml sausage	20	6	3	0.48

LIMITATIONS

- Not recommended for:
 - Use in chlorinated water such as swimming pools, spas, etc.
 - Use on any material containing bitumen
 - Constantly immersed salt water
 - Use for glazing applications
 - Application to cement based substrates within 28 days of initial pour or set
 - Use in trafficable joints
 - 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 on joints larger than 50mm
- Bostik Seal N' Flex One 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 sealants finish prior to full cure, especially on Northern and Western elevations in full sunlight. Refer to Bostik V70 Silicone Technical Data Sheet as a recommended metal façade sealant.

IMPORTANT NOTES

A simple bonding test can be done on a flat test surface e.g., concrete, aluminium etc. a test piece like that shown is recommended.

1. Clean the surface following the project-specific recommendations.
2. Place a piece of polyethylene sheet or bond breaker tape across the flat test surface.
3. Apply a bead of sealant and tool it to form a strip approximately 200mm long, 25mm wide and 3mm thick. at least 50mm of the sealant should be applied over the polyethylene sheet or bond breaker tape.
4. After cure of the sealant, pull the sealant perpendicular to the substrate until failure. record the mode of failure of the test sealant.

DISCLAIMER

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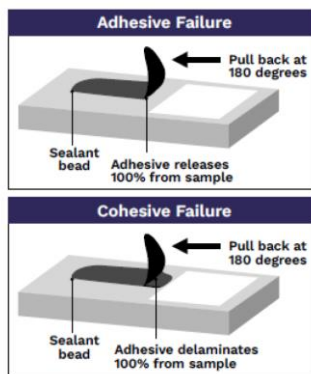
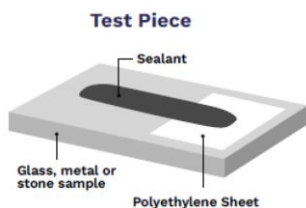
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BOSTIK HOTLINE

Smart help 0508 222 777



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For emergency information contact the National Poisons Information Centre, phone 0800 764 766 (0800 POISON) or CHEMCALL, phone 0800 243 622.

CLEANING

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

Store in a cool dry place between 5°C to 25°C, well-ventilated area out of direct sunlight. Store away from oxidizing agents and acids.

PACKAGING

colour	Size / 20 per carton	
	300ml cartridge	600ml sausage
Black	30804581	30840036
White	30840067	30840033
Grey	30803243	30840034

HEALTH AND SAFETY

Complete details on each of the products mentioned are available on the product Safety Data Sheets. To ensure no harm is caused to persons using Bostik products, it is recommended that all concerned read the appropriate Safety Data Sheets. Visit www.bostik.com for copies.

Bostik Seal 'N Flex One should be used in accordance with good occupational, health and safety practices. Causes skin irritation. May cause an allergic skin reaction. May cause an allergy or asthmatic symptoms or breathing difficulties if inhaled.

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