



technical data sheet

SEAL N FLEX 1

Polyurethane Construction Joint Sealant

PRODUCT DESCRIPTION

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.

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).

RECOMMENDED USES

Sealing joints in:

- 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 specialty panel systems (refer "Precautions" page 2)
- Water tanks

FEATURES & BENEFITS

- Low modulus 50% (\pm 25%)
- Excellent durability
- One component, no mixing required
- Australian made
- Colour range
- Acoustic rating
- Paintable (refer limitations)
- Non staining
- Does not support fungal growth

APPROVALS AND STANDARDS

- CSIRO RILEM LONG - TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M)
- ISO 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)

PERFORMANCE PROPERTIES

Typical properties after seven days cure at 25°C and 50%RH on correctly primed substrates.

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.
Specific Gravity	1.23 g/ml
Tensile strength	> 1.3 N/mm ²
Chemical resistance	Resistant to dilute acids, alkalis & some solvents. Intermittent contact with diesel and petroleum.
Elongation at break	>900%
Application Temperature	5°C to 35°C
In Service Temperature range	-40°C to +70°C
Full cure	7 days on porous substrates

PACKAGING

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

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	6mm x 6mm	10mm x 10mm	20mm x 10mm
300ml	8.3	3	1.5
600ml	16.7	6	3

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

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

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 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

For maximum performance on porous surfaces and, in all periodically immersed & submerged applications, use Bostik N49 Primer or Moisture Seal.

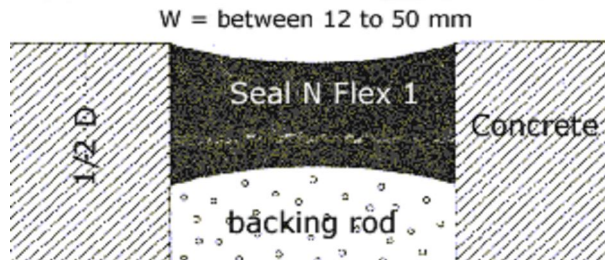
N40 primer is recommended for non-porous surfaces. For priming procedures on both porous & non-porous surfaces, refer primer selection guide and Primer Technical Data Sheets. Non-porous primer applied to substrates should not be allowed to dry or evaporate without being wiped with a clean, dry cloth.

APPLICATION

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 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

- Prime prior to the installation of the backing rod
- Always use backing rod for correct sealant geometry & contact with the substrate
- 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



PRECAUTIONS

Seal N Flex 1 should:

- **NOT** be used in chlorinated water such as swimming pools, spas etc.
- **NOT** be used on any material containing bitumen.
- **NOT** be constantly immersed in salt water
- **NOT** be used for glazing applications
- **NOT** be applied to cement based substrates within 28 days of initial pour or set.
- **NOT** be used in trafficable joints greater than 10mm in width
- **NOT** be applied at temperatures below 5°C or above 35°C.
- **NOT** be exposed to water and/or alcohol before it has completely cured.
- **NOT** be finished using wet tooling techniques, such as soapy water
- **NOT** be applied less than 6mm in width and depth
- **Seal N Flex 1 White** may yellow on the surface if exposed to strong natural or artificial UV light for long periods.
- 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.

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 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 Seal N Flex 1 (refer PATS).

P.A.T.S (Pretested Adhesion To Substrate) 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.

HEALTH AND SAFETY

- On contact, uncured sealant causes irritation.
- Gloves and protective goggles must be worn during application and use.
- Avoid contact with skin, eyes and avoid breathing in vapour.
- Wear protective gloves when mixing or using
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do not induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes and see a doctor.
- For more detailed information refer to Material Safety Data Sheet.

CLEAN-UP

Clean up uncured material and equipment immediately after use using Bostik Handi Clean Towels. Do not use towels on skin.

STORAGE

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

Packaging

Bostik Seal N Flex 1		
ITEM NO	SIZE	COLOUR
256158	300ml Cartridge	Grey
246204	300ml Cartridge	Black
246220	300ml Cartridge	White
216275	600ml Sausage	Grey
217824	600ml Sausage	Limestone
217808	600ml Sausage	Black
216267	600ml Sausage	White
217751	600ml Sausage	Bahama Beige
226203	600ml Sausage	Sandstone
226688	600ml Sausage	Redwood
218626	600ml Sausage	Off White
232440	600ml Sausage	Manilla Sand
242322	600ml Sausage	Classic Bone
232556	600ml Sausage	Epping Grey
Bostik V-70 High Strength Silicone		
661570	400ml Cartridge	Black

The representations and recommendations regarding the products are based on tests which we believe to be reliable. However, no guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with a limited warranty only, and on the condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik Australia Pty Ltd be liable to anyone except for replacement of the products or refund of the purchase price.

ALL SALES ARE EXPRESSLY LIMITED TO THE TERMS AND CONDITIONS OF SALE OF BOSTIK AUSTRALIA PTY LTD



Quality
ISO 9001



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