



# Bostik

# SEAL 'N' FLEX<sup>®</sup> ONE PLUS P590

## LOW MODULUS POLYURETHANE SEALANT

5<sup>th</sup> October 2021

### YOUR SMART ADVANTAGES

- Low modulus
- +100%/-50% joint movement
- Extremely elastic, > 1,000% elongation at break
- Bubble free curing
- Sag free, easy tooling
- Excellent durability
- UV resistant
- Paintable\*
- Made in Australia

### USES

**Bostik Seal 'N' Flex<sup>®</sup> One Plus P590** is a low modulus, bubble free curing, universal polyurethane sealant for construction and expansion joints. When cured it will form a tough and flexible seal capable of cyclic expansion and compression movement of +100%/-50%. **Bostik Seal 'N' Flex One Plus P590** can be used on:

- Insitu concrete and render
- Precast and tilt up panels
- Aluminum Composite Materials
- EIFS/ETICS
- Metal Cladding
- Brickwork and block work
- Plasterboard face and paper lined recessed edges
- Fibre cement sheet
- Aluminium windows
- Granite, sandstone and marble
- GRC, fiberglass and mostly specialty panel systems

### CERTIFICATIONS

- ASTM C920
- ASTM C1248
- F-EXT-INT-CC 25LM: EN 15651-1 for Façade Joints
- EMICODE EC1
- SNJF F25E

### PRODUCT CHARACTERISTICS

Viscosity	Non-sag, smooth thixotropic paste
Cure method	Moisture curing
Application temperature	5 to 40°C

### Product codes

#### 300ml cartridge/ 20 per carton

Grey	30619339
White	30619347
Black	30619336

#### 600ml sausages/ 20 per carton

Grey	30619340
White	30619348
Black	30619337
Limestone	30619341
Sandstone	30619346
Off-white	30619342
Epping Grey	30619338

### TYPICAL PERFORMANCE DATA (approx.)

Temperature resistance	-30 to 80°C
Skin time	90 minutes
Cure rate @ 23°C/50%RH	3mm/24 hours on porous substrates
Full cure	7 days on porous substrates. Allow 14 days in joints over 20mm wide.
Specific gravity	1.30 g/ml
Shore A hardness	>25
100% Modulus	0.30 N/mm <sup>2</sup>
Tensile strength	1.20 N/mm <sup>2</sup>
Elongation at break	> 1000%
Total joint movement	+ 100% / -50%
Maximum joint width	Up to 80mm

# BOSTIK SEAL 'N' FLEX® ONE PLUS P590

## DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting [www.bostik.com.au](http://www.bostik.com.au).

## SURFACE PREPARATION

1. Application temperature + 5°C to + 40°C (applies to environment and substrates)
2. 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
3. Dust and loose particles should be vacuum cleaned.

## PRIMING

**Bostik Seal 'N' Flex One Plus P590** adheres perfectly without the use of a primer to most porous & non-porous substrates. Always test adhesion prior to application.

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

## APPLICATION

**Bostik Seal 'N' Flex One Plus P590** should be dispensed from either the cartridge or sausage by means of a caulking gun.

### Cartridge application:

1. Pierce the membrane at the top of 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

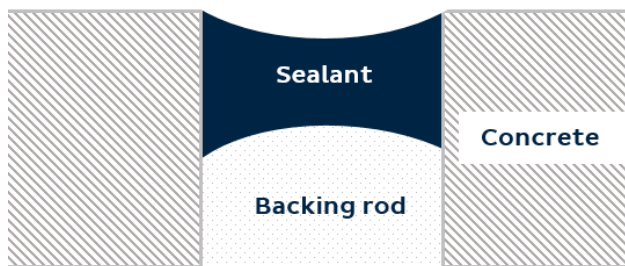
3. Use the trigger to extrude the sealant. To stop; depress the catch plate.

Apply **Bostik Seal 'N' Flex One Plus P590** in a continuous operation 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

A joint with the correct dimensions is able to absorb movements between building materials. Always use a backing rod for correct sealant geometry and contact with the substrate.

- Prime after the installation of backing rod
- Ensure maximum adhesion to the bond face
- Minimum allowable joint depth is 5mm
- Maximum allowable joint width is 80mm
- Tool sealant to achieve concave shape



### Joint Width to Depth ratio:

Width	Depth
Min 5mm to 10mm	<b>1:1 ratio</b> i.e. A 10mm width will require 10mm depth
>10mm, up to 80mm	<b>Depth (mm) = <math>\frac{\text{Width (mm)}}{3} + 6</math></b> i.e. A 16mm joint width will require a 12mm depth: Depth (mm) = $\frac{16}{3} + 6 = 12\text{mm}$

## 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 (W x D)	5mm x 5mm	10mm x 10mm	20mm x 10mm	50mm x 25mm
300ml Cartridge	12	3	1.5	0.24
600ml Sausage	24	6	3	0.48

W=Joint width (mm). D=Joint depth (mm).

# BOSTIK SEAL 'N' FLEX® ONE PLUS P590

## CLEANING

Clean off uncured material, hands and equipment immediately after use using **Bostik Handy Wipe towels**. Cured material can be removed by mechanical means only.

## PAINTABILITY

**Bostik Seal 'N' Flex One Plus P590** can be painted after a minimum of 7 days. 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 One Plus P590**. 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 One Plus P590**.

## LIMITATIONS

Not recommended for:

- Use in chlorinated water such as swimming pools, spas, etc.
- PE, PP, PC, PMMA, PTFE, soft plastics, neoprene and bituminous substrates
- 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
- Applied in temperatures below 5°C or above 40°C
- Exposure to water and/or alcohol before it has completely cured
- Applied to joints less than 5mm in width and depth
- Applied on joints larger than 80mm
- Bostik Seal N Flex One Plus White may yellow on the surface if exposed to strong natural or artificial UV light for prolonged periods of time.

As all substrates and conditions are different, it is strongly recommended that the applicator, or end user conducts their own tests and ensure the product meets their own end use requirements

## STORAGE AND SHELF LIFE

Store in cool (between 5°C to 25°C) dry, well-ventilated area out of direct sunlight. Shelf life is 15 months from production date in original unopened packaging and correct storage conditions.

## VOC INFORMATION

2.8 g/L

BOSTIK HOTLINE

Smart help 1800 267 845



This datasheet is for the general help of users. It is provided in good faith. The data is current and accurate to the best of our knowledge. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. Users should carry out tests to decide the product's suitability for purpose. This data sheet and the properties of the product may change without notice. Users, suppliers and retailers should check that the data sheets they have are the latest. To the maximum extent permitted by law, Bostik disclaims all warranties in relation to manufacture and use of the product. Bostik is not liable for representations made by users, suppliers or retailers about the product. Bostik is not liable for any loss or damage resulting from incorrect, careless, or negligent use or storage of the product, including use of out of date product. Any liability arising from use of the product is limited to the replacement or purchase price of the product. Bostik does not exclude rights and remedies that cannot be excluded by legislation, for example under the Australian Consumer Law (ACL). Sale of the product by Bostik is subject to the Bostik Australia Proprietary Limited Conditions and Terms of Sale. For more information on Bostik, products, and conditions of use and sale visit [www.bostik.com/au](http://www.bostik.com/au)