

## technical data sheet

# SEAL 'N' FLEX FC

### Fast Curing Polyurethane Trafficable Sealant

#### PRODUCT

Bostik Seal 'N' Flex FC is a fast cure high performance one component polyurethane elastomeric joint sealant.

#### DESCRIPTION

When fully cured Seal 'N' Flex FC will provide a tough, flexible seal capable of cyclic expansion and compression to 50% of original joint width without primer on most substrates. Seal 'N' Flex FC is unaffected by ultra-violet radiation, atmospheric contamination or pollution. Its excellent weatherability enables it to retain its original properties after years of exposure. (C.S.I.R.O RILEM exposure study).

#### RECOMMENDED USES

- Trafficable - Plats, stairs, roads, runways, aprons and pavements.
- Vertical - Precast, blockwork, aluminum, plasterboard, timber and most common building substrates.
- Pick resistant - Prisons, cells, schools and public amenities.
- Chemical resistant - Service stations, hangers, aprons and banded areas.
- Fungal resistance - Wet areas, wash down bays, food processing.

#### FEATURES & BENEFITS

- **Australian Made**  
ISO 9002
- **Aromatic Technology**  
No priming required on most substrates.
- **U.V Resistant**  
No discolouration.
- **± 25% Movement**  
Low modulus elastomeric sealant.
- **Abrasion & Pick Resistant**  
Security applications.
- **Shore A 50**  
Trafficable applications.
- **AS 4020**  
Potable water approval.
- **Excellent Chemical Resistance**  
Petroleum & wash down environments.
- **Resistant to Fungal attach AS 1157.2**  
Chicken, poultry & food environments.
- **Acoustic Properties**  
Paintable

#### APPROVALS & STANDARDS

ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use T,G,A,M&O as an external joint sealant.

Federal Specification TT-S-00230C, Type II, Class A.  
AS 4020-1992 Potable Water.

#### PERFORMANCE PROPERTIES

Typical properties after seven days cure at 25°C and 50% RH

|                         |                                  |
|-------------------------|----------------------------------|
| Technology              | Aromatic                         |
| Appearance              | Non-sag smooth thixotropic paste |
| Cure System             | Moisture Curing                  |
| Tack free time(minutes) | 45 minutes                       |
| Rate cure in mm/24h     | 3.5                              |
| Hardness Shore A        | 50 ± 5%                          |
| Tensile Strength        | > 2.1 N/mm <sup>2</sup>          |
| Elongation at break     | > 650%                           |
| Application Temperature | 5°C to 35°C                      |
| Temperature Resistance  | -40°C to + 70°C                  |
| Colour                  | Grey, black and white            |
| Full Cure               | 7 days                           |

#### PACKAGING

Seal N Flex FC is supplied in 380gm (300ml) cartridges and 720 gm (600ml) 20 per carton.

#### COVERAGE

The coverage below is approximate and is dependent on substrate conditions.

| Pack Size          | Lineal Metres<br>6mm Bead | Lineal Metres<br>20mm Bead |
|--------------------|---------------------------|----------------------------|
| 380gm ct. (300ml)  | 10                        | 2.3                        |
| 720gm sge. (600ml) | 19                        | 4.4                        |

#### APPLICATION INSTRUCTIONS

##### Preparation:

Clean all surfaces by removing foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants and any protective coating. Porous substrates should be cleaned by grinding saw cutting or blast cleaning (sand or water). Dust, loose particles, etc should be blown out of joints with oil free compressed air or vacuum cleaned. Non porous and plastic surfaces should be cleaned by solvent or mechanical means. Cleaning solvents should not be allowed to air dry or evaporate without being wiped with a clean, dry cloth.

##### PRIMING

In most common applications Seal 'N' Flex FC does not require priming.

For maximum performance on porous surfaces use Bostik N49 Primer and/or Bondflex Primer. N40 Primer and 5077 cleaner / primer is recommended for non-porous surfaces. On applications involving glass, specially treated surfaces or critical structural fabrications consult Bostik for primer recommendations.

## APPLICATION

Seal 'N' Flex FC when used as an adhesive or sealant should be dispensed from either the cartridge or sausage sachet by means of a hand or air operated caulking gun designed for such application (available from Bostik).

Pierce the membrane from the top of the cartridge and screw on the supplied nozzle. Having previously cut this to give the required angle and bead size.

Place the cartridge in a suitable Bostik extrusion gun and press the trigger. For sausages, a barrel gun is required, this is available from Bostik. Clip the end of the sausage and place complete sausage with pierced end located at the top of the nozzle. Screw top of nozzle and housing on barrel of gun. Using the trigger on the gun extrude product from the sausage to stop product flow, using the thumb depress the catch plate mechanism located at the very rear of the gun, directly above the trigger.

Apply Seal 'N' Flex FC in a continuous operation using positive pressure adequate to properly fill and seal a cavity.

### Construction Adhesive Applications

Seal 'N' Flex FC does not need to be applied to both surfaces to be bonded, but both surfaces must be prepared in accordance with preparatory work.

Apply in beads or daubs to the prepared substrate. Materials being adhered can be bonded immediately or left open for up to 15 minutes after application prior to bonding. If no mechanical fixing is to be used in conjunction with adhesive, clamping is necessary until full cure is achieved.

Use only enough sealant to achieve adequate bond (dependant on surface texture). Excess sealant can be removed by dry cloth or solvent wipe before curing.

If adhesive is to be exposed, smooth off with spatula or putty knife to flush finish.

### Construction Sealant/Adhesive Applications

Seal 'N' Flex FC is especially suitable for vertical joint sealing or in flooring applications such as saw cut jointing.

More joint movement can be accommodated in a thin bead of sealant than in a thick bead. The ratio of joint width of sealant to depth should be 2:1. The use of a bond breaker prevents undesirable three-sided adhesion. Open cell polyurethane foam or closed cell polyethylene foam rod is the recommended back up material to control correct sealant geometry.

Install back up material or joint filler, as specified. Apply Seal 'N' Flex FC continuously using positive pressure to properly fill and seal the joint. Tool the sealant with adequate pressure to spread the sealant against the back up material and onto the joint sides. Excess sealant should be wiped from all surfaces while still uncured. Remove any masking tapes prior to sealant curing.

## PRECAUTION

- Seal 'N' Flex FC should not be used in highly chlorinated areas such as swimming pools, spas etc without prior consultation with Bostik Technical Services.
- Seal 'N' Flex FC should not be used in glazing applications subject to UV light radiation or direct sunlight exposure without prior consultation with Bostik.
- Seal 'N' Flex FC should not be applied or finished with wet tooling techniques, using solvents, water or detergent/ soap solutions.
- Seal 'N' Flex FC sealant should not be applied to unpredictable absorptive surfaces such as marble, limestone or granite unless a standard of appearance has been agreed on as a result of testing for stain and/or discolouration.
- Do not use in interior or exterior structural sealing below the watertline in marine applications.
- Do not apply at temperatures below 5°C.
- Do not apply to surfaces with special protective or cosmetic coating such as mirrors, reflective glass or surfaces coated with Teflon, polyurethane or polypropylene. Will not adhere to polyethylene, polypropylene or PTFE.

## PAINTABILITY

Bostik Seal 'N' Flex FC can be painted as early as 24 hours after application using water borne coating and most epoxy coating systems. Coatings containing high solvent contents such as gloss enamels or high oil based undercoats may cause the surface of the sealant to react creating a tacky surface to develop. A field test is recommended to ensure compatibility. To obtain best appearance and performance the paint must approximate the elongation capabilities of the sealant. High build coatings with some elastomeric ability such as quality acrylic emulsions have the capability to absorb low movement without significant distortion of the paint film. Please contact Bostik Technical Department if unsure of any paint system.

## 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 pre-testing 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 using Bostik 9907 solvent. Do not use solvents on skin. For removal on skin, uncured sealant can be removed with Bostik Hand-Clean towels.

Cured Seal N Flex FC is difficult to remove via chemical means and mechanical means may be necessary.

## STORAGE

Store between 5°C and 30°C.

Shelf life is twelve months in original unopened cartridge or sausage.

## FIRE

Seal 'N' Flex FC is non-flammable.

| ITEM NO                 | STOCK SIZE              | COLOUR |
|-------------------------|-------------------------|--------|
| <b>SEAL 'N' FLEX FC</b> |                         |        |
| 248673                  | 380gm (300ml Cartridge) | Black  |
| 247235                  | 380gm (300ml Cartridge) | Grey   |
| 248703                  | 380gm (300ml Cartridge) | White  |
| 248665                  | 720gm (600ml Cartridge) | Black  |
| 247227                  | 720gm (600ml Cartridge) | Grey   |
| 248681                  | 720gm (600ml Cartridge) | White  |
| <b>N40 PRIMER</b>       |                         |        |
| 231436                  | 1 Litre                 | Clear  |
| <b>BOND FLEX PRIMER</b> |                         |        |
| 151203                  | 1 Litre                 | Clear  |
| 159565                  | 4 Litre                 | Clear  |
| <b>5077 CLEANER</b>     |                         |        |
| 227935                  | 1 Litre                 | Clear  |

*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 Findley Australia Pty Ltd be liable to anyone except for replacement of the products or refund of the purchase price.*

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