



## technical data sheet

# FIREBAN ONE

## One Part Fire Rated Polyurethane Joint Sealant

### PRODUCT DESCRIPTION

Fireban One is a fire rated, low modulus, one component, and Class-A polyurethane sealant. When cured it will form a tough, flexible fire rated seal capable of cyclic expansion and compression movement of 50% ( $\pm 25\%$ ) of the original installed joint width.

Fireban One 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

#### Fire Rated sealing of joints in:

- Insitu concrete floors and walls
- Precast and tilt up panels
- Brickwork & blockwork
- Rendered masonry
- Plasterboard (Fire rated & Non Fire rated)
- Fibre cement sheet (Fire rated & Non Fire rated)

### FEATURES & BENEFITS

- Fire Rated up to 4 hrs (1530.4-2005)
- Acoustic Rated
- One component, no mixing required
- Low modulus 50% ( $\pm 25\%$ )
- Excellent durability
- Australian made
- 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)
- Fire Test Certification AS 1530.4-2005, AS4072.1 and BS476-20
- 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
- BOMBA Approved (Malaysia)
- SISIR Approved (Singapore)
- 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
Colour	Limestone Grey
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	1.45 g/ml
Tensile strength	> 1.3 N/mm <sup>2</sup>
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

Fireban One is supplied in 600ml sausages, 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	10mm x 10mm	20mm x 10mm	40mm x 20mm
600ml	6	3	0.75

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

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

### INSTALLATION INSTRUCTIONS

#### SUBSTRATE 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.

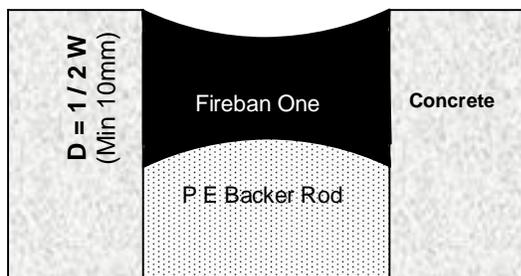
N40 primer is recommended for non-porous surfaces. For priming procedures on both porous & non-porous surfaces, refer primer selection guide and Primer Technical Data Sheets. Non-porous primer applied to substrates should not be allowed to dry or evaporate without being wiped with a clean, dry cloth.

## APPLICATION

Fireban One should be dispensed from the sausage by means of a sausage barrel, available from Bostik. For sausages, 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 Fireban One 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 for 10mm joints and 1:2 for joints over 10mm up to 40mm and 3:4 for some joints in specialist applications ( refer to Application manual BOS 5.02 for specific joint configurations)
- Tool sealant to achieve concave shape



## PRECAUTIONS

**Fireban One 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
- **BE** applied as per **Installation Manual BOS 5.02** to ensure correct Fire Rated joint design & certifications.

## PAINTABILITY

Bostik Fireban One 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 Fireban One. 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 Fireban One (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 Fireban One and equipment immediately after use with Bostik Handi Clean Towels. Do not use towels on skin. Cured Fireban One can be removed by mechanical abrasion. Aromatic solvent clean up is not recommended.

## STORAGE

Store between 5°C and 30°C. Shelf life is one year in original unopened sausage.

## Packaging

ITEM NO	PACKAGING	COLOUR
<b>Fireban One</b>		
224200	600ml (870gm) Sausage	Limestone
<b>Moisture Seal Primer</b>		
263362	8L Kit	Grey
263370	20L Kit	Grey
<b>MVP 525 Primer</b>		
362727	8L Kit	Grey
<b>N49 Primer</b>		
151203	1L Can	Clear
159565	4L Can	Clear
<b>N40 Primer</b>		
231436	1L Can	Clear
<b>Handi-Clean Towels</b>		
257753	72 / bucket & 6 buckets/ctn	Orange

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.

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Quality  
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