

# technical data sheet

## **FIRECAULK** **Fire Rated Acrylic Sealant**

### PRODUCT

Bostik Firecaulk is a fire rated acrylic (water based) gun grade mastic with limited joint movement capability.

### DESCRIPTION

Bostik Firecaulk is a single component, non-sag, fire rated acrylic based gunnable sealant. A general purpose product for construction joints and the sealing of service penetrations in plasterboard, concrete floors and masonry wall constructions.

Bostik Firecaulk is a gun grade acrylic based sealing compound specifically manufactured for sealing low movement interior joints (less than 5%) in masonry and plasterboard to provide a fire barrier for periods up to 4 hours

### RECOMMENDED USES

- Sealing of gaps around pipes, cables, ducts and services which penetrate fire rated walls and floors.
- Fire rated cable penetration in concrete and masonry.
- Installation of fire rated sealant in concrete walls and floors.
- For vertical and horizontal joints, interior or exterior.
- Application requiring acoustic properties or STC rating.
- Sealing construction and expansion joints.
- Sealing joints in pre-cast panels.
- Perimeter sealing of door and window framing.
- Sealing gaps between faced and cladding panels to various building materials.
- For new construction and remedial applications.
- To prevent the spread of fire and smoke through walls and floors.

### FEATURES & BENEFITS

- Fire resistance when tested in accordance with AS1530.4-1998, BS476: Part 20: 1987 and AS4072.1-1992
- Fire rating for gaps up to 50mm.
- Designed for Australian conditions.
- Good flexibility joint movement 5%
- One part no mixing required.
- Very easy to apply and gives a smooth finish.
- Smooth gunnability and tool off finish
- Low odour
- Non-toxic
- Asbestos free.
- Priming not normally required.
- Water clean up.
- Prevents the passage of hot gases.
- Paintable after 24 hours at 20°C.
- Water resistant after cure (7 days after application).
- Excellent adhesion to metal, wood, plasterboard and all masonry
- Acoustic capabilities with STC rating in plasterboard construction.
- Available in two colours, white and limestone

### PERFORMANCE PROPERTIES

Typical properties after 7 days cure at 25°C and 50% RH

Appearance	Non sag smooth thixotropic paste
Stain and Colour Change	None
Chemical Type	One component intumescent acrylic
Chemical Resistance	Fair
Service Temperature	-20°C to +90°C
Application Temperature	+4°C to +35°C
Tool working Time	15 minutes at 25°C
Max. Joint Movement	± 12.5%
Max. Joint Width	50mm
Elongation	290 to 340%
Colour	White and Grey
Full Cure	7 days at 25°C

\* Full test reports on fire resistance available on request.

### PACKAGING

Bostik Firecaulk is available in 10 litre pail, 600ml sausage and 300ml cartridges.

### COVERAGE:

Linear Meters per 600ml sausage (Approx.)

		Joint Depth			
		6mm	8mm	10mm	12mm
Joint Width	6mm	16.6	12.6	10.0	8.4
	8mm	12.6	9.4	7.5	6.2
	10mm	10.0	7.6	6.0	5.0
	12mm	8.4	6.2	5.0	4.2
	15mm	5.7	5.0	4.0	3.34
	20mm			3.0	2.5
25mm				2.0	

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

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

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## APPLICATION INSTRUCTIONS

### Joint Design

Bostik Firecaulk should be applied to a minimum depth of 6mm, maximum depth of 50mm. The ratio of joints width to sealant depth should be approximately 2:1. Joints width should not be less than 6mm. The joint depth must allow a sealant depth, after installation of backer rod or bond breaking material, of a minimum of 6mm. Lap shear joints should have a bead width equal to, or greater than twice the anticipated movement. A conservative design practice, which uses a portion of the sealant's movement capability as a safety factor is recommended. Sealants are subject to cohesive failure when the actual movement is greater than their rated capability.

### 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.

### APPLICATION

Bostik Firecaulk 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 Bostik Firecaulk in a continuous operation using positive pressure adequate to properly fill and seal a cavity.

### METHOD OF APPLICATION

Surfaces to be sealed should be clean, dry and free from oil, grease, dust, dirt and mould release agent. Install back-up material or joint filler as specified. Apply Firecaulk sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint or penetration. Tool Firecaulk with sufficient pressure to spread the sealant against the back-up material and onto the joint surfaces. A tool with a concave profile is recommended to achieve the correct shape.

### PRIMING

Priming is not required unless surface to be bonded is in poor condition or exceptionally porous. Consult Bostik Technical department for advice on priming

### MIXING

No mixing is required for Bostik Firecaulk. Simply use directly from bucket, sausage or cartridge.

### PRECAUTION

- Firecaulk is not recommended for water immersion, exposed external joint sealing or areas subject to heavy traffic. Firecaulk has low ( $\pm 5\%$ ) joint movement capability.
- Firecaulk should not be applied with wet tooling techniques using solvents, water or detergent/soup solution is not recommended.
- Firecaulk should not be applied to surfaces with special protective or cosmetic coatings without prior consultation with the manufacturer. Such surfaces include, but are not limited to, mirrors, reflective glass, or surfaces coated with Teflon, polyethylene or polypropylene.
- Firecaulk can be affected by water before or during cure. The sealant should not be stored, applied or cured in areas where unusually high humidity or free water are present during the application or initial cure.
- Firecaulk should be allowed to cure for 7 days prior to subjecting to any intermittent water exposure.
- Do not apply to surfaces with temperature under 5°C

### PAINTABILITY

Bostik Firecaulk is paintable after fully cured.

### 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

Equipment can be easily cleaned with water while wet or by soaking in Bostik 9913 solvent when dry.

## STORAGE

All material shall be stored under cover in a manner that will prevent damage preferable on pallets and protected from excessive heat and moisture. Do not freeze.

Bostik Firecaulk has a shelf life of 12 months from date of manufacture when stored at or below 27°C

## FIRE

Bostik Firecaulk is non-flammable.

ITEM NO	STOCK SIZE	COLOUR
<b>BOSTIK FIRECAULK</b>		
239747	10L Pail	Limestone
239755	600ml Sausage	Limestone
245410	300ml Cartridge	White

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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 be liable to anyone except for replacement of the products or refund of the purchase price.

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## INTERNATIONAL OFFICES

**Bostik Findley Australia Pty Ltd**  
Tel: 03 9279 9333  
Fax: 03 9279 9270

**Bostik Findley New Zealand Pty Ltd**  
Tel: 0011 644 567 5119  
Fax: 0011 644 567 5412

**Bostik Findley Singapore Pty Ltd**  
Tel: 0011 6 5863 4088  
Fax: 0011 6 5863 4077

**Bostik Findley Malaysia Pty Ltd**  
Tel: 0011 644 567 5119  
Fax: 0011 644 567 5412

## AUSTRALIAN BRANCHES

**Sydney**  
Tel: 02 8825 3488  
Fax: 02 8825 3411

**Brisbane:**  
Tel: 07 3265 2377  
Fax: 07 3265 5421

**Adelaide**  
Tel: 08 8244 0511  
Fax: 08 8244 0522

**Perth**  
Tel: 08 9331 7666  
Fax: 08 9331 7677