



Technical Data Sheet

Date: 5 March 2012



FIRE TECH FIRECAULK

FIRE & ACOUSTIC RATED ACRYLIC SEALANT

DESCRIPTION

Bostik Fire Tech 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 Fire Tech 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.
- Application requiring acoustic properties or STC (Sound Transmission Co-efficient) 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.
- Helps prevent the spread of fire and smoke through walls and floors.

FEATURES AND BENEFITS

- Fire resistant 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 New Zealand conditions.
- Good flexibility joint movement 5%
- One part no mixing required.
- Smooth gunnability and tool off finish
- Low odour
- Non-toxic
- Asbestos free
- Water clean up
- Prevents 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 grey

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APPLICATION INSTRUCTIONS

Joint Design

Bostik Fire Tech 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.

Surface 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 Fire Tech 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). Cut the nozzle to give the required angle and bead size. Pierce the membrane from the top of the cartridge and screw on the supplied nozzle. 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 depress the catch plate located at the very rear of the gun. Apply Bostik Fire Tech 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 Fire Tech Firecaulk sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint or penetration. Tool Fire Tech 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

PRECAUTIONS

- Fire Tech Firecaulk is not recommended for water immersion, exposed external joint sealing or areas subject to heavy traffic
- Fire Tech Firecaulk has low ($\pm 5\%$) joint movement capability.
- Fire Tech Firecaulk should not be applied with wet tooling techniques using solvents, water or detergent/soap solution.

- Fire Tech 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.
- Fire Tech 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.
- Fire Tech 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 full cure

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	+5°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	Grey
Full Cure	7 days at 25°C

* Full test reports on fire resistance available on request.

COVERAGE

Approximate linear meters per 600mL sausage

Joint Width	Joint Depth			
	6mm	8mm	10mm	12mm
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 $W \times D \times L = \text{Litres } 1000$

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

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

CLEANING

Equipment can be easily cleaned with water while wet or by soaking in Bostik Solvent No. 2 when dry.

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.

Full details are available on the product Safety Data Sheets. To ensure no harm is caused to persons using Bostik products, it is recommended that the appropriate Safety Data Sheets are read by all concerned. Visit www.bostik.co.nz for copies.

VERSION

V1

5 March 2012

Localisation