

# INDUSTRY LEADING FIRE PROTECTION



## TECHNICAL DATA SHEET

### FireMastic-300™

EDITION: 11

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APPROVED TO AS1530.4: 2014 & AS4072.1-2005

Flexible fire and acoustic rated acrylic sealant. Suitable for sealing joints, linear gaps and service penetrations.



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## KEY BENEFITS

- Provides up to an industry leading 5 hour fire rating
- Highly flexible offering up to +/- 25% movement
- Highly cost effective solution
- High Intumescent Content
- Up to 67dB sound reduction
- Suitable for Linear Gaps, Penetration Seals & Dampers
- Approved in a large variety of substrates; FR Plasterboard, Concrete, AAC, Hebel, Speedpanel, Korok, Timber, CLT, AFS, Dintel, solid and hollow masonry.

## 1. INTRODUCTION

**FireMastic-300™** intumescent fire-rated & acoustic acrylic sealant is a one-part acrylic emulsion that is designed to resist the passage of fire, smoke and sound. **FireMastic-300™** will intumesce and form a char when exposed to the heat of a fire, which will prevent the passage of fire and smoke for up to 5 hours in both integrity and insulation. In normal use it will also maintain the sound reduction index of a structure.

**FireMastic-300's** superior acoustic properties means it offers up to a 67dB sound reduction, making it ideal for high performance acoustic installation.

## 2. PRODUCT APPLICATIONS

- Linear gaps seals in plasterboard ceilings and dry wall linings
- Sealing and filling joints in fire rated plasterboard systems
- Sealing of low movement construction joints
- Sealing the perimeter of intumescent dampers
- Fire Stopping around various services:
  - Steel & Copper Pipes
  - Cables
  - Cable Bundles
  - Cable Trays
  - Secondary sealing in-conjunction with other BOSS Fire products
- Areas requiring acoustic barriers or sound reduction
- Internal use only, can be painted

## 3. PHYSICAL SPECIFICATION

**FireMastic-300™** is water based, non-sag, fire rated acrylic sealant. It is specifically designed for interior joints with up to 40% movement (+/- 20% either direction) of the original joint width, and non-combustible service penetrations.

**FireMastic-300™** does not emit halogenated by products under fire conditions and contains no raw materials known to have an estrogenic effect on the environment. It has good un-primed adhesion to a wide variety of common building substrates.

Sizes:	310ml / 600ml	
Colours:	Light Grey / White	
Product code:	FM300	
Shrinkage:	Approximately 12%	
Cure rate:	3mm/day @ 50% relative humidity 23°C Cure for min 28 days curing before fire exposure.	
Slump:	5mm after 1hr in 30mm joints	
Drying time:	Tack dry in 30 min (23deg)	
Flexibility:	Up to +/- 25% movement	
FRL:	Up to -/300/300	
Acoustic Rating:	Up to Rw (C;Ctr): 63(-2;-7) in partition. Rw (C;Ctr): 51(-1;-6) sealant only.	
Shelf life:	24 Months	

## 4. PERFORMANCE SPECIFICATION

FireMastic-300™ has extensive fire test approvals including AS1530.4-2014 and AS4072.1-2005 offering up to FRL -/300/300.



**IMPORTANT:** In order to ensure performance and compliance, passive firestopping products must be installed in accordance with the test evidence, manufacturer's specifications or be the subject of a performance solution. Each project and/or application may have specific requirements and you should investigate these carefully. Ensure that you read and understand the appropriate certification and how it relates to your specific construction details, and ensure you seek acceptance from the Certifying Authority or compliance inspector before installation. Ensure your installation is carried out in accordance with the test certification, manufacturer's instructions, and in accordance with the relevant local building regulations, National Construction Code or Building Code. For updates on the range of BOSS Fire® certification, please contact BOSS Technical Services. **AU:** 1300 502 677 **NZ:** 0800 502 677 **Int:** +61 2 9524 4040 **Email:** info@bossfire.com

## 5. BOSS FIRE SYSTEM MATRIX

For specific summary information on the approved systems relevant to FireMastic-300™ please refer to the **BOSS Fire System Matrix**. The **BOSS Fire System Matrix** is a filterable summary document containing information to help select the appropriate system relevant to your building application. Associated Test and Assessment Reports are also available for download from the Resources page at [bossfire.com/resources](http://bossfire.com/resources).

## 6. INSTALLATION

1. Ensure that the gap, aperture and/or services in question are tested with **FireMastic-300™** and the site conditions are within the application specification.
2. Ensure all surfaces are clean, dry and free from grease.
3. Use masking tape to provide straight edges around surfaces, if required for aesthetics.
4. Please refer over page under backing rod to determine if a backing rod is required.
5. Cut nozzle to required bead size and apply to substrate via a caulking gun. Smooth out sealant with a wet spatula within 5 minutes for professional finish.
6. Clean tools immediately after use with water.
7. Tack dry within 30mins, cures 3mm per 24hrs.



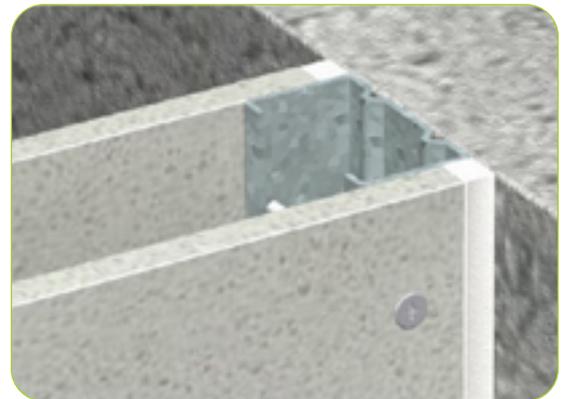
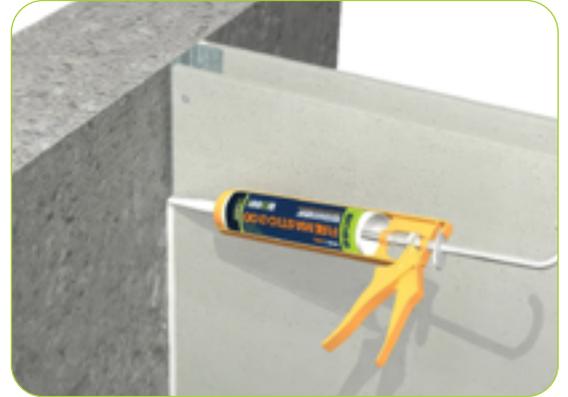
## 7. WALL SYSTEM GAP SEALS

### Linear Gap Seals, System Joints and Construction & Expansion Joints

**FireMastic-300™** can be used to provide an FRL of up to -/300/300, subject to the maximum integrity and insulation of the wall. Generally as the fire resistance of plasterboard wall increases, the thickness of lining increases also and therefore the depth of the seal will increase. The gap of up to 20mm must be the full depth of the plasterboard and will offer the FRL of the wall system up to -/300/300. – **Ref Branz FAR 3821 – Issue 4.**

Examples of suitable plasterboard systems (timber framed or steel framed):

- ✓ T-junction between masonry wall and plasterboard wall
- ✓ T-junction between 2 plasterboard walls
- ✓ Control joint in plasterboard wall
- ✓ Pipe and service penetrations through plasterboard (such as electrical services, metal pipes or ductwork) where a fire seal is required.
- ✓ Plasterboard walls to ceilings
- ✓ Timber to timber and timber to plasterboard junctions
- ✓ Masonry to steel junctions
- ✓ Perimeter edge and deflection head seals in various fire rated wall systems including:
  - o Fire Rated Plasterboard
  - o AAC / Hebel
  - o Dintel
  - o AFS
  - o Shaftliner
  - o Speedpanel & Korok
  - o Concrete
  - o Metal Clad AAC
- ✓ Seal between Timber Interfaces

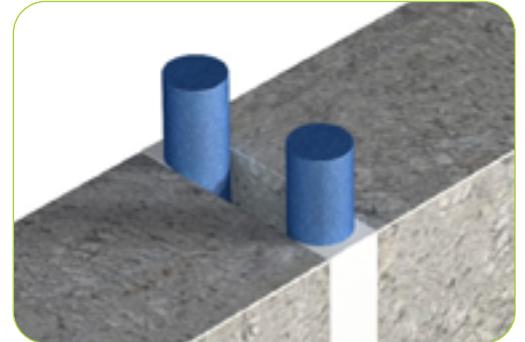


## 8. GAP SEALS IN MASONRY WALLS & FLOORS

FireMastic-300™ can be used to provide an FRL of up to -/300/300 for gap seals in masonry walls and floors. Please refer to the tables on this page for the performance relative to the intended seal size.

### Backing Rods

FireMastic-300™ was tested with foamed polyethylene (PE) backing rods, which controls the depth of seal and fills only part of the gap. PE or similar material rods may be used provided it does not interfere with the required depth of the fire sealant on either face. Please note: Backing rod is required for all gaps of 10mm or greater.



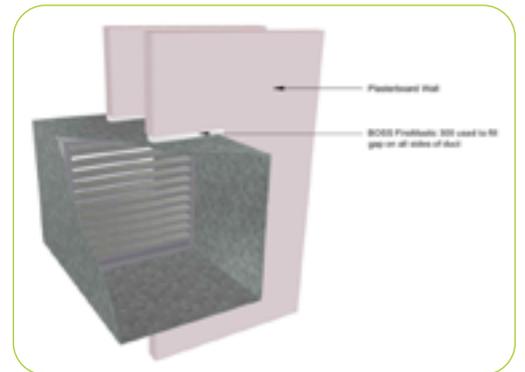
## 9. FIRE DAMPER PERIMETER SEALS

FireMastic-300™ can be used to seal around the perimeter of intumescent dampers, fixed either to the face of a wall or in line with the wall. In both situations, FireMastic-300™ may be used to fill any gaps.

**FACE-FIXED DAMPERS:** apply FireMastic-300™ to the section of damper in contact with the wall and to any steel brackets attached to the wall. The damper must overlap the wall by at least 50mm and any gaps must not exceed 5mm.

**IN-LINE FIXED DAMPERS:** where the damper is fixed in line with the wall, apply FireMastic-300™ all around the edge of the damper. The gap between the edge of the damper and structural opening must not exceed 25mm and the sealant must be filled to the full depth of the damper. This is significantly in excess of any linear gap seal and is therefore able to maintain the fire resistance of the damper.

Notwithstanding the pre-mentioned installation specification, the dampers manufacturers installation instructions must be followed. However FireMastic-300™ may be used in place of the sealant specified.



## 10. STORAGE & DISPOSAL

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**FireMastic-300™** is not affected by external environments. However, for long term storage and ease of installation, **FireMastic-300™** should be stored indoors in a dry, frost-free environment below 30°C. **FireMastic-300™** has an expected shelf life of approximately 24 months.

## 11. HEALTH AND SAFETY

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To learn more about the safe handling of **FireMastic-300™**, see the Safety Data Sheet available at [bossfire.com.au](http://bossfire.com.au).

## 12. IS THIS PUBLICATION CURRENT?

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This document may be superseded by new versions. If you are unsure of whether or not this document is a current publication, please contact us. **AU:** 1300 502 677 **NZ:** 0800 502 677 **Int:** +61 2 9524 4040 **Email:** [info@bossfire.com](mailto:info@bossfire.com)

## 13. LIMITATION

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BOSS Passive Fire Pty Ltd has provided the above technical information in good faith and to the best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Passive Fire's attention relating to the fire resistance or performance of the product described BOSS Passive Fire reserve the right to amend this report.

BOSS Passive Fire strive to constantly improve and develop products so this information may change without notice. The information contained herein has been developed as a guide only and it does not constitute a guarantee of compliance of all applications. Each project and/or application may have specific requirements and you should investigate these carefully. Ensure that you have read and understood the appropriate certification relative to your needs, and ensure you seek acceptance from the Certifying Authority or compliance inspector before installation. For updates on the range of BOSS Fire® certification, please contact BOSS Technical Services. **AU:** 1300 502 677 **NZ:** 0800 502 677 **Int:** +61 2 9524 4040 **Email:** [info@bossfire.com](mailto:info@bossfire.com)



## Further Information

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For additional technical information on the performance of **FireMastic-300™**, other **BOSS Fire®** products or any other BOSS Fire® related information please contact us on:

 **AU:** 1300 502 677     [sales@bossfire.com](mailto:sales@bossfire.com)  
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