



Product Data Sheet

# Fire Mastic



Gyprock Fire Mastic is a permanently flexible, water based acrylic sealant for fire resistant caulking of penetrations and joints in plasterboard and masonry surfaces.

## Product Overview

Gyprock Fire Mastic is an off-white, low VOC, fire and acoustic acrylic grade sealant manufactured to stringent product specifications, and featured in many Gyprock fire and acoustic rated systems. It has a working life of 30 minutes and a skin time of 15mins. It provides a neutral paintable surface once cured, and is intumescent, expanding when exposed to fire or extreme heat.

## Typical Applications

Gyprock Fire Mastic is designed to create a fire resistant seal around pipes, conduits, busways, cable trays and ducts which penetrate walls, floors and ceilings. It will bond to plasterboard, masonry, concrete, metal deflection heads and cable coverings.

\*CSR Gyprock only support the use of Gyprock Fire Mastic sealant when used as part of specified Gyprock systems as noted in our literature.



### Sealant

Off-white acrylic sealant



### Fire-rated Properties

Assists in fire-rated caulking of penetrations



### Acoustic Properties

High acoustic rating when used in a system

## Technical Specifications

### Product Options

Gyprock Fire Mastic is available in a 600ml sausage and has a shelf life of 12 months from date of manufacture.

For product availability and to place an order, contact your nearest supplier.

### Physical & Chemical Properties

Appearance	Off White paste
Working time	Skin time = 15mins, Working time = 30mins
Joint movement capability	+/- 20%
Elongation at break	>400%
Modulus	<0.4MPa at 100% elongation, fully cured. 0.8MPa max modulus.
Intumescent	Yes
Viscosity	750,000 – 950,000cP
Specific gravity (H <sub>2</sub> O=1)	1.50 – 1.60
Acoustic rating R <sub>w</sub>	Tested to R <sub>w</sub> + C <sub>tr</sub> 55 as a gap sealant in a wall system.
Fire rating*	Up to FRL -/240/240 FRL when tested as a control joint to AS1530.4 supplemented by AS4072.1 and BS476: part 20.
Halogen free	Yes
VOC content (as specified by GBCA)	31g/L
Service temperature	-20 to 80oC
Hardness (Shore A)	23 – 35

### Product Manufacture

FireMastic is manufactured for CSR Gyprock in Australia to stringent product specifications.

### Product Handling

**Transportation and manual handling:** Refer to the Gypsum Board Manufacturers of Australia (GBMA) website for recommended OH&S practices.

**Storage:** Store unopened sausages below 30°C in a cool dry place away from direct sunlight. Opened sausages may skin and form a lump near the opening. Discard any lumps or skin and remaining product can be used.

### Health and Safety

**Safety Data Sheets** are important documents in the construction industry and assist in the continuing focus on occupational health and safety on and off sites.

\* for 10mm x 10mm joint in concrete. For full details on FireSeal suitability, fire and acoustic performance, mandatory system requirements or applicable system warranties for all products or building systems within CSR, please refer to the relevant design guides published by Hebel®, Gyprock®, Bradford™ or Cemintel™.



## Installation Instructions

### Surface Preparation

Make sure substrate application area is clean, sound, dry and free of oil, grease and other contaminants like dust, loose particles, release agents, silicone, and water repellents. This is critical for porous substrates like aerated concrete or cut edges of plasterboard. In circumstances where it is difficult to ensure completely dust free surfaces applying by brush a 1:1 thin consistency of Firemastic and water as a primer will assist to improve the integrity of the substrate. Areas adjacent to joints may be masked to provide a clean finish. Masking should be removed immediately after application.

### Application

Apply Firemastic in ambient conditions (5°C - 35°C). Higher temperatures should be avoided to prevent the possibility of bubbling of the sealant due to quick water loss and do not apply < 5 °C. Trowel or caulking gun can be used for filling the joint, then tool off with a spatula and clean off excess with a damp cloth. Protect the applied Firemastic from water for minimum 24 hours until a suitable skin has cured (will require significantly longer drying time at lower temperatures <15 °C). Some shrinkage is normal during curing and drying of the Firemastic and should be anticipated when measuring joints.

### Curing

Time to cure is dependent on ambient weather conditions and depth of joint. Allow longer curing times in cold or damp ambient conditions. Protect from water contact until at least a thick-skinned surface has formed.

Firemastic is not recommended for use in external applications where 2 non-porous substrates need to be sealed. In these situations, Firemastic will be very slow curing and any water from rain, dew, fog etc may result in wash-out of Firemastic from the joint.

### Installing to Standards

AS/NZS2589: Gypsum linings – Application and Finishing outlines the procedures for jointing and finishing of Gyprock plasterboard in conjunction with additional details contained in Gyprock Technical Literature.

### Clean up

After applying Firemastic clean all tools and metal surfaces with warm water while the sealant is not skinned. It is difficult to remove cured sealant, it may need to be removed mechanically.

### Painting

Firemastic sealant is suitable for painting when fully cured. To avoid paint cracking issue, Firemastic should be cured for at least 24 hours, longer under adverse drying conditions (cooler, high humidity) before painting where possible. In standard conditions (25 °C or higher) Firemastic may be painted after 6 hours, however, care should be taken to ensure a flexible acrylic coating is used and that a firm skin has developed.

### Limitations

- Do not apply to wet surfaces, contaminated, dusty, loose substrate surfaces.
- Firemastic sealant may be used both for interior and exterior sealing, but not recommended for use in water retaining structures or water may be pooling.
- Firemastic is not recommended in exterior applications where non-porous substrates are to be sealed.
- Firemastic sealant has good servicing characteristics when unprotected in internal applications.
- For external use, Firemastic sealant must be protected from direct rain or water, until such time as the sealant builds up a thick skin to avoid washout. Therefore, do not apply sealant when rain exposure is likely before a thick skin has developed. This is typically 24 hours in summer (25 °C or higher), but will be significantly longer in cooler, high humidity conditions.

### Resources

Gyprock makes available [resources](#) that provide comprehensive selection, design, installation and maintenance guidance.



### **Manufactured for Life**

Gyprock products are manufactured for life with all CSR products designed to achieve optimal performance when part of a CSR integrated system.



### **Certified Low VOC**

Exceeds the GBCA specification for Volatile Organic Compound content according to independent testing.