



# Product Data Sheet

## ASMACO FIRESTOP SILICONE SEALANT

**One Component Fire Rated Silicone Sealant for Penetration Seals, internal, external Linear joints**

**Description:** ASMACO FIRESTOP SILICONE SEALANT, a reliable solution for your fire-rated sealing needs. This one-part, low modulus sealant boasts neutral curing and exceptional adhesion to various construction substrates such as stone, steel, masonry, brick, and wood, without the necessity of priming. Perfect for weather-sealing building facades and expansion joints requiring fire ratings, it ensures utmost protection. Moreover, it's an ideal choice for small penetration sealing systems, ensuring secure passage for pipes and cables through fire-rated wall structures. Trust our Firestop Silicone Sealant for durable and effective fire protection in critical sealing applications.



### PACKAGING / SUPPLYING

ASMACO FIRESTOP SILICONE SEALANT is available in 280 ml cartridges, 12 cartridges / carton.

Other packs like 600 ml sausage and pails can be supplied subjected to minimum order quantity.

### KEY PERFORMANCE PROPERTIES

- Cures at room temperature when exposed to moisture in the air
- One-part low modulus sealant
- Neutral cure, halogen-free
- Easy to apply non-slump
- Excellent unprimed adhesion to most porous and non-porous construction substrates
- Excellent weathering characteristics, including resistance to ozone, UV radiation and temperature extremes
- Long service life
- A fire resistance rating in integrity (E) and insulation (EI) of up to 240 minutes–4 hours can be achieved depending on the joint configuration
- Civil Defense Approval for UAE

### AREAS OF APPLICATION

The sealing of vertical and horizontal linear expansion joints and pipe and cable penetrations in fire rated walls also,

- Cladding and glazing
- Construction movement joints
- Steel, copper and EMT pipes
- Insulated steel and copper pipes
- Cable bundles
- Closed or vented plastic pipes
- HVAC penetrations

### STANDARDS

ASMACO FIRESTOP SILICONE SEALANT has been tested in:

▪ Non-load bearing concrete, block walls,	BS EN 1364-1
▪ Non load bearing elements curtain wall full configurations,	BS EN 1364-3
▪ Non load bearing elements curtain wall part configurations,	BS EN 1364-4
▪ Door shutter & open able windows,	BS EN 1634-1
▪ Building material & structures,	BS 476 – 20
▪ Building material & structures,	BS 476 – 22, ISO 834-1, ISO 834-8,
▪ Doors & shutters,	ISO 3008
▪ Building Construction Glazed elements,	ISO 3009
▪ Waterproofing membrane,	ASTM D 570,
▪ European Union of Agreement, EUA tc	M.O.AT 30 & 31 para E, EN 12311-1
▪ Fire Rated, for 4 hours without any failure.	BS 476 Part 22: 1987 Amd 2014
▪ To achieve class 2,	BS 476 Part 7: 1997.
▪ Adhesives and Sealants Dubai Municipality Green Building requirements, Passes the test.	GBRS Clause 404.02
▪ Linear expansion joint configurations according to	EN1366-4 and to BS 476 Part 22/1987.
▪ Pipes and cables penetration systems according to	BS 476 Part 22 / 1987.
▪ UAE Civil Defense Approved.	

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## METHOD OF APPLICATION

### Cleaning:

Ensure all surfaces are clean, dry, sound, and free from frost. Remove any release agents, water repellents, laitance, dust, dirt, old sealants, or other contaminants that could affect adhesion. Metallic substrates should be degreased and grit blasted or washed to eliminate any impurities. Suitable solvents, such as ASMACO Cleaner 1, can be utilized for cleaning metallic substrates. For specific advice on cleaning particular substrates, please reach out to ANCHOR ALLIED FACTORY LLC's technical services department. When using any solvent, ensure adequate ventilation, and avoid heat, sparks, and open flames. Follow all precautions listed on the solvent container label or Product Safety Data Sheet, as recommended by the solvent manufacturer and applicable regulations.

### Adhesion:

ASMACO FIRESTOP SILICONE SEALANT demonstrates excellent adhesion to most common construction substrates. If uncertain or when unusual substrates are involved, contact ANCHOR ALLIED FACTORY LLC's technical services department. Optionally, prime cement or concrete with ANCHOR PRIME P1 Primer for optimal adhesion. ANCHOR ALLIED FACTORY LLC conducts specific adhesion and compatibility testing on individual substrates to provide accurate recommendations. If any doubts arise regarding the use of ASMACO FIRESTOP SILICONE SEALANT, users are strongly advised to contact the technical services department.

### Back-up Materials:

Various backer materials have been evaluated in different joint designs, including closed-cell polyethylene and polyurethane foam backer rods, ceramic fiber, and mineral wool. Mineral wool with a density of 45 kg/m<sup>3</sup>, lightly compressed to 10%, and closed-cell PU/PE backer rods with a density of 35 kg/m<sup>3</sup> have been assessed. In penetration sealing applications, mineral wool has been evaluated. The supporting construction comprises a standard rigid aerated concrete wall (thickness: 150 mm, density: 550 kg/m<sup>3</sup>). Based on the required fire rating and joint/penetration design, the most suitable system can be selected by referring to the rating tables

### Masking:

Mask areas adjacent to the joints with tape to prevent substrate contamination and ensure a tidy sealant line. Remove masking tape immediately after tooling.

### Application:

Do not apply ASMACO FIRESTOP SILICONE SEALANT to surfaces below 5°C (41°F) as it's impossible to guarantee a dry, frost-free surface at these temperatures. Table 4 provides an estimate of material consumption based on joint dimensions.

NOTE: The joint should maintain a minimum width of 6 mm. Achieving specific fire ratings depends on the selected joint configuration, as detailed in Table 1. Testing has been conducted on various joint types, as depicted in Figures, according to the specified configurations. The choice of joint configuration should be made based on project requirements. For additional information or support, please reach out to Anchor Allied's Technical Support Department.

## COVERAGE RATE

The approximate linear meter sealant consumption per liter, per sausage, per cartridge can be estimated from the following formula:

$$\frac{W \times D}{1000}$$

= Sealant Consumption per linear meter per liter.

Where: W = Joint Width (mm), D = Joint Depth (mm)

Joint Size W x D in mm	Liters / meter Run	600 ml / Sausage meter run	280 ml / Cartridges meter run
6 x 5	0.03	20.00	9.33
6 x 10	0.06	10.00	4.67
10 x 10	0.10	6.00	2.80
15 x 10	0.15	4.00	1.87
20 x 15	0.30	2.00	0.93
25 x 20	0.50	1.20	0.56

## FIRE RATINGS

ASMACO Fire Stop Silicone Sealant has undergone rigorous fire rating testing and has demonstrated its ability to resist penetration for up to 4 hours without failure, according to specified joint configurations. The fire ratings achieved were tested in accordance with BS 476 Part 22: 1987 Amd 2014 and are applicable under specific testing conditions.

Users are advised to adhere to the manufacturer's recommendations to ensure that ASMACO Fire Stop Silicone Sealant is suitable for their particular application. It's essential that all substrates used in the system possess an equivalent or higher fire rating to maintain the integrity of the fire protection system.

- All single side joints & Double side joint were tested on fire side
- Mineral wool, Density 100 Kg/m<sup>3</sup>, Polyethylene, Ceramic Fibre backing materials been used.
- It is recommended to use suitable backing material to ensure the full result.

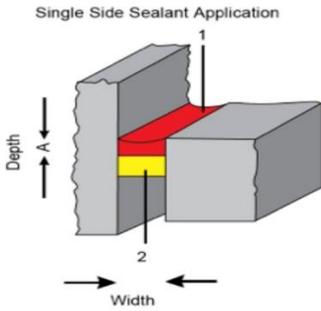
Refer Fig Applications & Table1,

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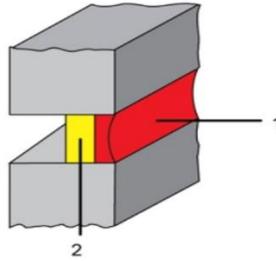


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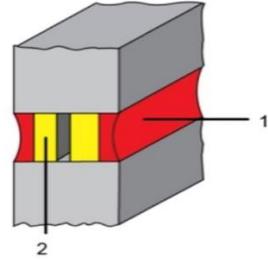
## JOINT SEALING



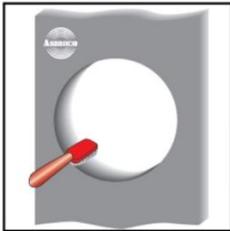
Single Side Sealant Application



Double Sided Sealant Application



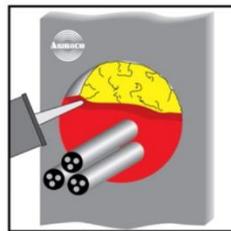
## PENETRATION SEALING



1. Clean opening.



2. Pack mineral wool.  
(If required)



3. Apply Fire stop sealant



4. Smooth Fire stop sealant



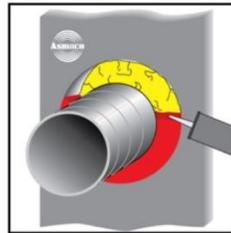
5. Leave completed seal  
undisturbed for 48 hours.



1. Clean opening.



2. Pack mineral wool.  
(If required)



3. Apply Fire stop sealant



4. Smooth Fire stop sealant



5. Leave completed seal  
undisturbed for 48 hours.

SN	DESCRIPTION
	BACKING MATERIAL
	FIRESTOP SILICONE SEALANT



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TABLE 1:

Joint width	Joint Depth	Backing material	Joint type	Integrity rating
<b>SINGLE SIDE</b>				
6 mm	10 mm	8 mm Ceramic Fiber	Single side	4 hours
10 mm	10 mm	12 mm Ceramic Fiber	Single side	4 hours
25 mm	20 mm	30 mm Ceramic Fiber	Single side	4 hours
<b>DOUBLE SIDE</b>				
6 mm	5 mm	8 mm Polyethylene Foam	Double side	4 hours
15 mm	10 mm	20 mm Polyethylene Foam	Double side	4 hours
20 mm	15 mm	25 mm Polyethylene Foam	Double side	4 hours
25 mm	20 mm	30 mm Polyethylene Foam	Double side	4 hours
6 mm	5 mm	8 mm Ceramic Fiber	Double side	4 hours
15 mm	10 mm	20 mm Ceramic Fiber	Double side	4 hours
20 mm	15 mm	25 mm Ceramic Fiber	Double side	4 hours
25 mm	20 mm	30 mm Ceramic Fiber	Double side	4 hours

## HEALTH & SAFETY

Protective clothing such as gloves and goggles should be worn while applying **ASMACO FIRESTOP SILICONE SEALANT**. In case the material splashes to the skin or eyes wash the same with fresh water immediately.

**In critical cases seek medical assistance.**

## CLEAN UP

Clean equipment immediately with **ANCHOR CLEANER 1** after usage.

## STORAGE & SHELF LIFE

**ASMACO FIRESTOP SILICONE SEALANT** Store in cool place under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air – conditioned environment (<25° C). The shelf life is up to 12 months in unopened conditions if stored as per guidelines.

## QUALITY & CARE

All products originating from **ANCHOR ALLIED FACTORY LLC** Sharjah, UAE. facility is manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, and ISO 14001.



# Product Data Sheet

## TECHNICAL PROPERTIES

PROPERTIES	TYPICAL VALUES	TEST STANDARDS
Color	White	—
Consistency	Smooth Paste	ASTM C1184 – 23
Application Temperature	+5°C — +40°C	ASTM D 6411
Service Temperature	-50 °C — +150°C	ASTM D 6411
Working Time	15 min	ASTM C1184-18
Slump	Nil	ASTM D 2202
Density	1.35	ASTM C 1115 - 17
Tack Free Time @ RT	30 min	ASTM C 679
Hardness Durometer	28	ASTM C 661
Curing Rate (23°C, 50% R.H)	2mm /day	ASTM D 5893-04
Joint Movement Accommodation	50%	ASTM C 719
Fire Resistance Rating	240 min	BS 476 Part 22 1987 Amd 214
TVOC	≤ 9.0µg/m <sup>3</sup>	CDPH Version 1.2
VOC g/L	<16	USEPA -24
VOC g/L	< 16	SCAQMD Rule 1168
Tensile Strength	1.4 N/mm <sup>2</sup>	ASTM D 412
Elongation at Break	>300 %	ASTM D 412
Elastic Recovery	>90	ASTM C 1184
Secant Tensile Modulus	0.4 N/mm <sup>2</sup>	ASTM D 412

## Shipping Limitations: None

### Note

The information and data contained in the product data sheet is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of the product for usage. Since the supplier cannot know all the uses, or the conditions of use to which the product may be exposed, no warranties concerning the fitness or suitability for particular use or purpose are made. It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application. Likewise if the application, product specifications or manner in which our products are used require government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

**Non – Warranty** : Because the storage, handling and application of the material is beyond Anchor Allied Factory Ltd's control, we can accept no liability for the result obtained. Anchor Allied Factory Ltd's sole limited warranty is the product meets the manufacturing specifications in effect at the time of shipment. There is no warranty or merchantability or fitness for use, nor any expressed or implied warranty. Anchor Allied Factory Ltd will not be liable for any incidental and consequential damage of any kind. The exclusive remedy for breach of such limited warranty is a replacement of any product shown to be other than warranted. Suggestions of uses should not be taken as inducement to infringe any patents.

All ANCHOR ALLIED FACTORY LLC datasheets are updated on a regular basis. This technical data sheet supersedes all previous editions relevant to this product. It is the user's responsibility to obtain the recent version.



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MFG. OF SILICONE , ACRYLIC & POLYURETHANE SEALANTS, WATER PROOFING COATINGS, SELF - ADHESIVE TAPES, SPRAY PAINTS, CONTACT ADHESIVE, PVC CEMENTS, EPOXY STEEL

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