

TECHNICAL DATA SHEET

ASMACO INTUMESCENT ACRYLIC SEALANT

(HIGH PERFORMANCE GUN GRADE INTUMESCENT FIRE-STOP ACRYLIC SEALANT)

DESCRIPTION:

ASMACO INTUMESCENT ACRYLIC SEALANT is a single component high performance gun grade intumescent fire-stop sealant based on fire resistant acrylic emulsions. The sealant is suitably formulated by using special additives and chemicals. The product is fire resistant, easy to apply and seals joints between construction parts subjected to moderate stress.

The intumescent (expands when exposed to fire) fire-stop sealant, once used as recommended, helps to protect combustible and non-combustible penetrations and linier joints for up to 4 hours fire rating. This product can be used for sealing all low movement joints, internal perimeter pointing of fire rated door and window frames and restricts the passage of fire and smoke from room to room and to escape routes. Since the sealant is water-based, it is user friendly and low VOC.

KEY PERFORMANCE PROPERTIES:

- Protects most typical fire-stop penetration applications up to 4 hours
- Class 2 surface spread of flame classification
- Meets Green building requirements
- Easy to work with and fast cleanup
- Can be re-penetrated when laying new cables, ducts, pipes etc
- Good unprimed adhesion to most common construction substrates
- Can be painted
- Resistance to Ozone, UV radiation and temperature extremes

TYPICAL AREAS OF USE:

- Internal perimeter pointing around door and window frames, where the integrity of fire walls need to be maintained
- In small joints formed where fire rated partition sections meet.
- Steel, copper and EMT pipes

- Insulated steel and copper pipes
- Cable bundles
- Closed or vented plastic pipes
- HVAC penetrations **For use with:**
- Concrete, masonry, drywall and wood floor assemblies
- Wall and floor assemblies rated up to 4 hours

Examples:

- Sealing around plastic pipe penetrations in fire rated construction
- Sealing around combustible and non-combustible penetrations in fire rated construction

TECHNICAL DETAILS:

Composition	:	Acrylic Polymer
Consistency	:	Paste
Colour	:	Red
Working time	:	30 minutes maximum
Specific Gravity	:	1.6
Slump resistance	:	No slump
Handling Dry	:	24 hours
Curing time	:	Approx. 14-21 days
Movement capability	:	Approx. 5%
Intumescent Activation	:	Approx. 250 °F (121 °C)
Expansion rate (unrestricted)	:	Up to 3-5 times original volume
Temperature resistance (cured)	:	-40 °F (-40 °C) to 212 °F (100 °C)
Application temperature	:	35 °F (2 °C) to 100 °F (38 °C)

TECHNICAL SPECIFICATIONS AND STANDARDS:

- Asmaco Intumescent Acrylic Sealant has been tested to BS 476 Part 22: 1987 Amd 2014 for 4 hours without any failure
- Asmaco Intumescent Acrylic Sealant has been tested to BS 476 Part 7: 1997 and achieved Class 2.
- Asmaco Intumescent Acrylic Sealant has been tested to GBRS Clause 404.02 (Adhesives and Sealants), Dubai Municipality Green Building requirements and passes the test.

FIRE RATINGS:

Asmaco Intumescent Acrylic Sealant has been tested for the fire rating and found to resist penetration for 4 hours without failure at specified joint configurations. The fire rating achieved tested as per BS 476 Part 22: 1987 Amd 2014 and are specific to the conditions of testing. They do, however, provide a good indication of expected performance of the sealant in fire situations.

User should satisfy themselves that Asmaco Intumescent Acrylic Sealant is suitable for their specific application. Testing of a particular joint configuration may be required to establish specific ratings. All substrates used in the system must have an equivalent or higher fire rating.

METHOD OF APPLICATION:

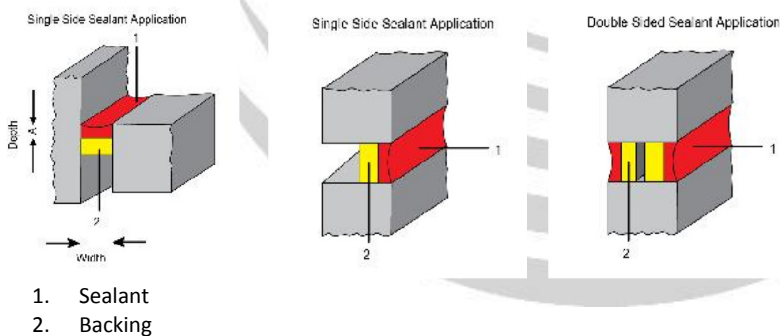
Surface should be clean, dry and free from oil grease or any other contamination. The sealant should be carefully applied using a mastic gun, ensuring that the material is forced well into the gap to obtain the correct joint and achieve good adhesion between surfaces. Necessary tooling to be done within 30 minutes after application. Do not apply sealant if it is raining or about to rain. After applying, protect from rain at least for 8 hours.

The joint should have a minimum width of 6 mm. Specific fire rate achievement depends on the joint configuration. Refer Table 1 for the detailed joint configuration as per which the test has been conducted. Joint types have been tested as per the figure 1. The joint configuration may be selected as per the project requirement. For additional information or support, contact Anchor Allied's Customer support department.

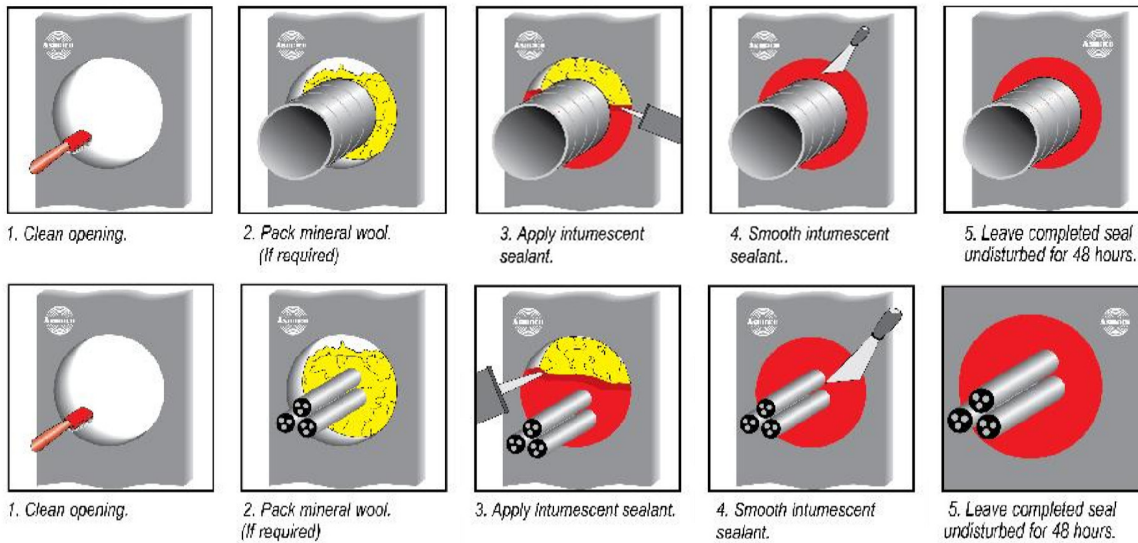
To get maximum fire resistance, Ceramic fiber or fiber rope / mineral wool with 100 Kg/m³ density may be used as back up.

Area adjacent to the joint should be masked with masking tape to prevent contamination of the substrate and to ensure neat sealing and the tape may be removed immediately after tooling before skin formed. Joint should be tooled within 5 minutes of application. Uncured sealant may be cleaned with dampened cloth and cured sealant can only be cleaned with mechanical means.

Joint Sealing



Penetration Sealing



Identification plates may be fixed where ever applicable

LIMITATIONS :

Asmaco Intumescent Acrylic Sealant should not be applied to building materials that bleeds oils, plasticizers or solvents. All acrylic sealants are susceptible to shrinkage this should be taken in to account when applying material.

TABLE 1: FIRE RATING

Joint width	Joint Depth	Backing material	Joint type	Integrity rating
6 mm	10 mm	8 mm Ceramic Fiber	Single side	4 hours
6 mm	10 mm	8 mm Ceramic Fiber	Double side	4 hours
10 mm	10 mm	12 mm Ceramic Fiber	Single side	4 hours
10 mm	10 mm	12 mm Ceramic Fiber	Double side	4 hours
25 mm	25 mm	30 mm Ceramic Fiber	Single side	4 hours
25 mm	25 mm	30 mm Ceramic Fiber	Double side	4 hours
25 mm	20 mm	30 mm Ceramic Fiber	Double side	4 hours
25 mm	25 mm	25 mm Mineral wool	Single side	4 hours
25 mm	25 mm	25 mm Mineral wool	Double side	4 hours

Note:

- All single side joints were tested on fire side
- Mineral wool nominal density - 100kg/m³
- The selection of backing material and type of joint may be decided based on the fire rating to be achieved.
- It is recommended to use backing material supplied with the sealant to ensure full result
- Approximate consumption per 280 ml cartridge

Joint width		6 mm	10 mm	20 mm	25 mm	30 mm
Joint depth mm	10	4.6 m	2.8 m	1.4 m		
Joint depth	20 mm		1.4 m	0.7 m	0.56 m	0.46 m
Joint depth	25 mm				0.44 m	0.37 m

CAUTION:

DIRECT CONTACT WITH UNCURED SEALANT IRRITATES EYES AND MAY IRRITATE SKIN. OVER EXPOSURE TO VAPOUR MAY IRRITATE NOSE AND THROAT. Avoid eye and skin contact. Use with adequate ventilation. Do not handle contact lenses with sealant on hand. In case of eye contact, flush eyes with plenty of fresh water for 15 minutes and obtain medical attention. In case of skin contact, remove from skin and flush with water. KEEP OUT OF REACH OF CHILDREN. Consult Material Safety Data Sheet (MSDS) to know more about handling and safe usage.

STORAGE AND SHELF LIFE:

12 months from date of production if stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures below 25°C, don't allow to freeze.

PACKAGING:

ASMACO INTUMESCENT ACRYLIC 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.

SHIPPING LIMITATIONS:

None

Version: 02 Date: 22.04.2017

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.