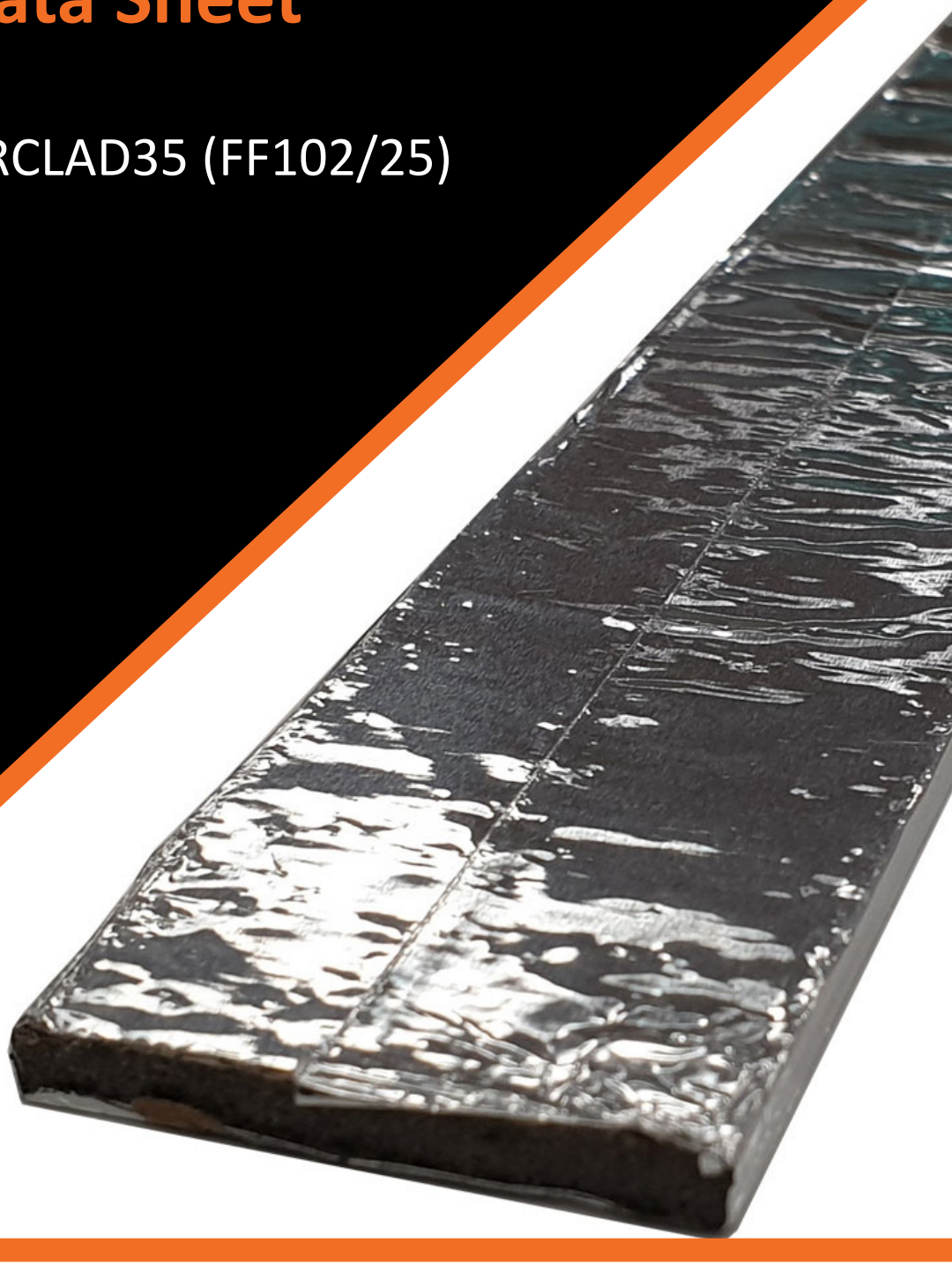
ASTROFLAME
PASSIVE FIRE STOP SYSTEMS

Technical Data Sheet

Astro Clad - AFFRCLAD35 (FF102/25)

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Astroflame (Fireseals) LTD : Unit 8 , I.O Centre : Stephenson Road : Segensworth : Fareham : PO15 5RU
T - **01329 844500** : W - **www.astroflame.com** : E - **sales@astroflame.com**



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General Product Description

The Astro Clad - AFFRCLAD35 (FF102/25) Ventilated Cavity Fire Barrier, is manufactured from low smoke zero halogen high expansion intumescent material and is designed to reinstate fire resisting performance to external wall cavities that are required to be ventilated (open-state) in non-fire conditions.

The Astro Clad - AFFRCLAD35 (FF102/25) is manufactured from a rigid intumescent material allowing it to be provided in a strip format, it is also covered with a protective layer of aluminium foil for ease of handling and increased durability. In the event of a fire the Astro Clad - AFFRCLAD35 (FF102/25) intumescent material will expand to close the external wall cavity, providing effective fire resistance, for integrity and insulation for up to 60 minutes depending upon the construction of the external walls.

The Astro Clad - AFFRCLAD35 (FF102/25) is designed for use within a designed 25mm cavity, and once installed will close the remaining free air gap (in front of the 4mm cavity barrier) of 21mm.

Product Details

- A fire rated product designed to act as an external wall cavity barrier at the junction of compartment floors, within uninsulated cavities
- Tested and proven to reinstate the fire resistance performance within “open-state” external wall cavities for periods up to 60 minutes, for
- both integrity and insulation to the principles of EN 1363-1 and in accordance with ASFP TGD 19 guidance
- Ventilated design – developed to allow maximum ventilation of cavities reducing the need for cavity trays or weepholes
- Suitable for “open-state” ventilated cavities up to 25mm wide
- Provided in strips of 1m long, 35mm wide and 4mm thick
- Lightweight - designed to be easily and quickly installed
- No maintenance required after installation

Approved Applications

Astro Clad - AFFRCLAD35 FF102/25 “open state ventilation”

United Kingdom and European Fire Test Performance- Tested to BS EN 1363-1:2012 and to the principles of ASFP TGD19:2014									
Inner Leaf Substrate Type (facing cavity) with Appropriate minutes Fire Rating	Outer leaf Substrate Type (facing cavity) With Appropriate Fire Resistance	Orientation	Insulation Type Within Cavity	Maximum Cavity Width (in mm)	Maximum Open State Air Gap (in mm)	Product Dimensions (thickness x height x length in mm)	For Use Within Internal or External Corners	Product Fire Resistance Rating	
								Integrity	Insulation
OSB/Timber Frame	Masonry	Horizontal	None	25	21	4 x 35 x 1000	No	60	60
Fire Test Report-Warringtonfire-WF 430196R (2020)									

Physical Properties

Property	Units	Astro Clad - AFFRCLAD35 FF102/25
Free Expansion	Ratio:1	26:1

Colour	Silver
Finish	Aluminium Foil
Cuttability	Can be cut to length
Working Life	60 years (see below)
Storage	Dry, ambient
Transportation Storage Temperature	-20°C to +70°C
Durability	Type X intended for use in conditions exposed to weather (UV, rain, frost)
Halogen Content	Low
Minimum Total Working Life (Years)	Based on typical climatic conditions UK 60 years Australia 45 years France 60 years New Zealand 60 years Germany 60 years Hong Kong 40 years The Netherlands 60 years

Sizes	4mm (thick) x 35mm (wide) x 1000mm (long)

Pre Installation

The principal designer must approve the use of any cavity barrier, in conjunction with the products fire test reports, taking full account of the whole construction of the external wall systems and components, including any requirements of Building Regulations and or NHBC Standards.

General considerations for the principal designer

Ideally the cavity barrier should be installed uninterrupted in a continuous line, the product is tested without interruptions.

The principal designer must sanction any interruptions, which may include items such as brackets, rails or battens, that may affect the continuous line of the cavity barrier. The principal designer must consider the combustibility, melting points and the shape of any interruptions, that are likely to prevent the cavity barrier performing as tested or as expected in the projects design.

If there are interruptions/obstructions that prevent the cavity barrier being fitted in a continuous line, and with sanction from the principal designer, the product may be cut with a sharp knife and tightly butted up against any obstructions and then restarted on the opposite side of the obstruction. The obstruction must not create a void which the cavity barrier can not expand into.

Intumescent cavity barriers are tested and designed to expand outwards, from the face of the intumescent material only, additional design details will be required to account for external corners.

The cavity barrier should not be penetrated by anything other than the mechanical fixings which are used to fix the cavity barrier to the building.

The cavity barrier should be installed onto a flat surface, with no gaps behind the cavity barrier, the maximum space in front of the cavity barrier should not be greater than 21mm

The Astroflame technical team should be consulted in any instance where the principal designer is uncertain as to any issues which may impede the ability of the cavity barrier to perform as expected.

Ensure the installation area is free from dust, oil and any corrosive material.

Check the mounting substrate is solid and free from cracks and degradation before beginning.

Tools Required

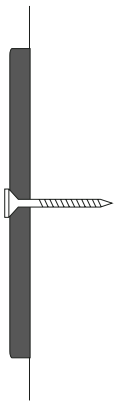
- Sharp Knife
- Measuring Tape
- Stainless Steel screws or nails - which ever fastening is used must have a diameter smaller than 11.5mm
- Appropriate drill for fixing type if using screws

PPE Required

- Hand protection
- Eye protection

Installation Instructions





- Double check for any obstructions, ensure that if there are any that could allow fire to pass vertically, they are firestopped separately using an approved and applicable firestop product.
- Affix the product using stainless steel screws or nails at a maximum spacing of 250mm using a maximum countersunk screw head size of 11.5mm.
- Tighten any fastenings until the head is just touching the product, it should not be overtightened as this may damage the strip.
- When attaching a solid substrate ensure that the fixings are along the centre line of the fire barrier and the labelled side is facing out into the cavity. (So that you can read the label once the fire barrier is installed).
- If adding additional lengths, ensure they are tightly butted up against each other.



Intended Use

As a cavity barrier, within external wall cavities requiring permanent (open-state) ventilation, to reinstate fire resistance performance of uninsulated cavities of up to 25mm, in fire conditions.

Maintenance

No active maintenance required, where alterations are made around the product it should be checked visually to ensure that the product is still installed as per the approved original design and fitting instructions at the time of original installation.

Storage

Take care not to exceed safe working loads and heights for storage shelves and racks





Installation

We have technical representatives who provide assistance in the selection and specification of the products on this site and should be consulted for exact installation and product suitability. Ensure an early engagement with ourselves, designers, main contractor and specialist installers before any installation. Other trades and/or manufacturers may need to be consulted. For in-depth information, specification and technical advice please call our Head Office on tel 01329 844 500 or email sales@astroflame.com

Maintenance

All interested parties, designer, specifier, main contractor and specialist installers should provide access to allow the fire stopping seals to be regularly inspected and maintained, as well as records kept of such maintenance at minimum periods of 12 months, as required by the Regulatory Reform Order, and repaired if necessary. Reference should be made to the relevant Code of Practice for the Installation and Inspection of Fire Stopping.

Competency

It is vital that those entrusted to design or install a fire stopping product have the necessary levels of competence to undertake the task professionally and thoroughly. The level of competency required will be commensurate with the expected complexity of the building. All designers must eliminate, reduce or control foreseeable risks that may arise during installation, construction or maintenance when preparing or modifying designs. Clients should ensure that the principal designer and principal contractor carry out their duties under CDM regulations. The ASFP foundation course in passive fire protection provides essential knowledge as part of demonstrating competency and understanding in this key fire protection specialism.

Additional Notes

Astro Clad - AFFRCLAD35 (FF102/25) Ventilated Fire Barrier 'Open State' Cavity Barriers are designed to prevent fire spread and provide compartmentalisation in the external façade. It is essential that the correct fire barriers are specified and installed, therefore please review the Field of Application Reports seen at the bottom of the product page to ensure the product is suitable for your application.

The manufacturer of this product no longer offers Free of charge technical advice on cavity barriers. If **advance technical advice** is required this can still be provided but at a cost of **£400 payment in advance**. If this service is needed please contact tel: 01329 844 500 or email: sales@astroflame.com

We would always recommend that the client seeks approval for the use of **ALL cavity barriers** from the project's principal designer/building control officer and/or the projects fire engineer before proceeding to purchase the product.

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