



UL INTERNATIONAL (UK) LTD  
Kingsland Business Park,  
Unit 1-3 Horizon,  
Wade Rd,  
Basingstoke RG24 8AH,  
United Kingdom

appointed according to Article 29 of Construction Products Regulation 2011 as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020

<b>UK Technical Assessment</b>	<b>0843-UKTA-24/0046 of 30/09/2024</b>
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<b>Technical Assessment Body Issuing the UKTA:</b>	UL International (UK) Ltd
<b>Trade name of the construction product</b>	Astro PS Coat
<b>Product family to which the construction product belongs</b>	Fire Stopping and Fire Sealing Products – Penetration Seals
<b>Manufacturer</b>	Astroflame Fireseals Ltd Unit 8, The I.O. Centre Stephenson Road Segensworth Fareham Hampshire PO15 5RU
<b>Manufacturing plant(s)</b>	A/008
<b>This UK Technical Assessment contains</b>	10 pages including 2 Annexes which form an integral part of this assessment.
<b>This UK Technical Assessment* is issued, on the basis of</b>	EAD 350454-00-1104, September 2017

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\* in accordance with Construction Products Regulation 2011 as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020

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## I. SPECIFIC PARTS OF THE UK TECHNICAL ASSESSMENT

### 1 Technical description of the product

- 1) Astro PS Coat is an ablative coating applied to mineral wool board used to reinstate the fire resistance performance of wall constructions where they have been provided with apertures for the penetration of single or multiple services.
- 2) The mineral wool board is then cut and friction fit into the aperture, prior to being inserted into the aperture in the wall. The Astro PS Coat is then applied over the surface of the board material to provide a dry film thickness of 0.7mm.
- 3) Astro PS Coat is supplied in 2.5, 5, 10, 20, 25 and 205 litre pails
- 4) Mineral fibre boards are 50mm thick and supplied in overall dimensions 1200mm x 600mm with a density of 140kg.m<sup>3</sup>.
- 5) Astro Intu Mastic is required to seal all joints and junctions during the sealing process. Astro Intu Mastic is subject to a separate UKTA's referenced 24/0037 & 24/0038.
- 6) Astro HPE Sealant is required to seal around specific services (See Annex C). Astro HPE Sealant is subject to a separate UKTA referenced 24/0039.

### 2 Specification of the intended uses of the product in accordance with the applicable UK Assessment Document (Pre-Exit European Assessment Document): EAD 350454-00-1104: 2017

The intended use of Astro PS Coat is to reinstate the fire resistance performance of rigid and flexible wall constructions where they are penetrated by various cables and metallic pipes

- 1) The specific elements of construction that the Astro PS Coat may be used to provide a penetration seal in, are as follows:

Rigid walls: The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m<sup>3</sup>.

Flexible walls The wall must have a minimum thickness of 100 mm and comprise timber or steel studs lined on both faces with minimum 2 layers of 12.5 mm thick, 'Type F' Gypsum boards according to EN 520. In timber stud walls, no part of the penetration shall be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1, is provided within the cavity between the penetration seal and the stud.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 2) The Astro PS Coat may be used to provide a penetration seal with pipes and cables (for details see Annex A).
- 3) The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.
- 4) The Astro PS Coat may be used to seal apertures in the separating element up to 730mm wide by 1200mm high. The minimum permitted separation between adjacent seals/apertures is 200mm.
- 5) Pipes must be installed singular, cables require no minimum separation.

- 6) Services in walls shall be supported at maximum 250mm from the face of the separating element.
- 7) The provisions made in this UK Technical Assessment are based on an assumed working life of the Astro PS Coat of 10 years, provided that the conditions laid down in the product data sheet for the packaging/transport/storage/installation/use/repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.
- 8) Use Category: Type Z1: Intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0°C, without exposure to rain or UV.

### 3 Performance of the product and references to the methods used for its assessment

Product-type: Coating		Intended use: Penetration Seal
Assessment method	Essential characteristic	Product performance
<b>BWR 2 Safety in case of fire</b>		
EN 13501-1	Reaction to fire	No performance determined
EN 13501-2	Resistance to fire	Annex A
<b>BWR 3 Hygiene, health and environment</b>		
EN 1026	Air permeability	Annex B
EAD 350454-00-1104, Annex C	Water permeability	No performance determined
Declaration of manufacturer & EN 16516	Content, emission and/or release of dangerous substances	Declaration of manufacturer
<b>BWR 4 Safety in use</b>		
EOTA TR 001:2003	Mechanical resistance and stability	No performance determined
EOTA TR 001:2003	Resistance to impact/movement	No performance determined
EOTA TR 001:2003	Adhesion	No performance determined
EAD 350454-00-1104, Clause 2.2.9	Durability	Type Z <sub>1</sub>
<b>BWR 5 Protection against noise</b>		
EN 10140-1,2,4,5/ EN ISO 717-1	Airborne sound insulation	R <sub>w</sub> (C;Ctr)= 41(-3;-7)
<b>BWR 6 Energy economy and heat retention</b>		
EN 12664, EN 12667, EN 12939, EN ISO 8990, EN ISO 6946, EN ISO 14683, EN ISO 10211, EN ISO 10456	Thermal properties	No performance determined
EN ISO 12572, EN 12086, EN ISO 10456	Water vapour permeability	No performance determined

**4 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE**

According to the Statutory Instrument 2019 No. 465 – made 5<sup>th</sup> March 2019 and cited as the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and coming into force on exit day and Statutory Instrument 2020 No. 1359 – made 26<sup>th</sup> November 2020 and cited as the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 and coming into force immediately before the 2019 Regulations come into force, on the procedure for attesting the conformity of construction products as regards fire stopping, fire sealing and fire protective products, published as ‘Pre-Exit’ European Assessment Documents, (see <https://www.gov.uk/guidance/pre-exit-european-assessment-documents-construction-products>), the system of assessment and verification of constancy of performance (see Annex V to Construction Products Regulation 2011 as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020) given in the following table(s) apply.

<b>Product(s)</b>	<b>Intended use(s)</b>	<b>Level(s) or class(es)</b>	<b>System(s)</b>
Fire stopping and Fire Sealing Products	For fire compartmentation and/or fire protection or fire performance	Any	1

**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

Tasks of the manufacturer:

Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this UK technical Assessment.

The manufacturer may only use initial / raw / constituent materials stated in the technical documentation of this UK Technical Assessment.

The factory production control shall be in accordance with the Control Plan of 18/10/2022 relating to the UK Technical Assessment 0843-UKTA-24/0046 issued on 30/09/2024 which is part of the technical documentation of this UK Technical Assessment. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at UL International (UK) Ltd.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

Other tasks of the manufacturer

Additional information

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

(a) Technical data sheet:

- Field of application:
- Building elements for which the penetration seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.
- Limits in size, minimum thickness etc. of the penetration seal
- Construction of the penetration seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.
- Services which the penetration seal is suitable, type and properties of the services like material, diameter, thickness etc. in case of pipes including insulation materials; necessary/allowed supports/fixings (e.g. pipe trays)

(b) Installation instruction:

- Steps to be followed
- Procedure in case of retrofitting
- Stipulations on maintenance, repair and replacement

**6 Issued on:**

**30<sup>th</sup> September 2024**

Report by:



P. Foster  
Project Engineer Associate  
Built Environment

Reviewed by:



C. Johnson  
Senior Staff Engineer  
Built Environment

**For and on behalf of UL International (UK) Ltd.**

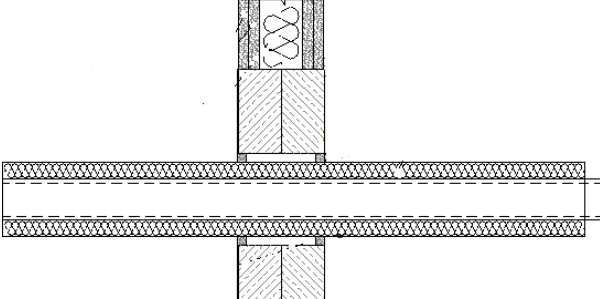
# ANNEX A – Resistance to Fire Classification – Astro PS Coat

## A.1 Flexible and Rigid wall constructions according to I.2.1 with wall thickness of minimum 100 mm

### A.1.2 Penetration seal with Astro PS Coat installed centrally within the wall

**Construction details:**

- Continuous/sustained insulated mettalic pipes installed at any postion within the wall(min. seperation 50mm from seal edges).
- Double layer of Astro PS Coating installed centrally within the wall.
- Max. Aperture size 730mm wide x 1200mm high



#### A.1.1.1

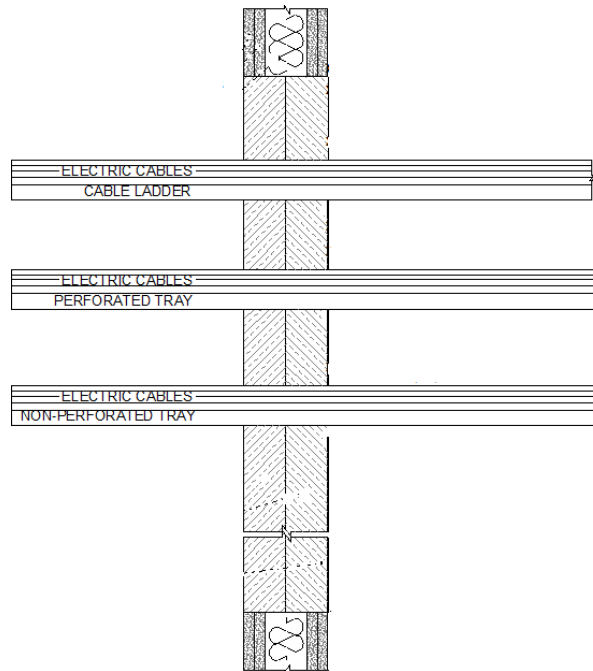
Service(s)	Insulation	Seal	Classification
<b>Mild Steel or Copper</b>			
40mm diameter and 1.5 – 14.2 mm wall	20mm thick foil faced glass wool insulation (min 80Kg/m <sup>3</sup> )	15mm deep x 15mm wide annulus HPE	<b>EI 60 U/C</b>
40-159mm diameter and 2.3 – 14.2 mm wall	30mm thick foil faced glass wool insulation (min 80Kg/m <sup>3</sup> )	Sealant to both faces seal	<b>E 60 U/C EI 45 U/C</b>

Service(s)	Insulation	Seal	Classification
<b>Mild Steel</b>			
40mm diameter and 1.7 – 14.2 mm wall	20mm thick foil faced glass wool insulation (min 80Kg/m <sup>3</sup> )	15mm deep x 15mm wide annulus HPE	<b>EI60 U/C</b>
40-150mm diameter and 2.3 – 14.2 mm wall	30mm thick foil faced glass wool insulation (min 80Kg/m <sup>3</sup> )	Sealant to both faces of the seal	



**A.1.2 Penetration seal with Astro PS Coat installed centrally within the wall**

- Cables fitted at any position within the aperture (min. 50mm from edge seal)
- Double layer of Astro PS Coating installed centrally within the wall.
- Max. Aperture size 730mm wide x 1200mm high



**A.1.2.1**

<b>Service(s)</b>	<b>Classification</b>
Electrical cables up to 21mm dia	<b>EI 60</b>
Electrical cables 22mm to 80mm dia	<b>E 60, EI 30</b>
Cable Trays and Ladders	<b>EI 60</b>
100 mm diameter bundle telecommunication cable type "F"	<b>EI 60</b>
Unsheathed electrical cables up to 17mm dia	<b>E 60, EI 15</b>
Unsheathed electrical cables 18-24mm dia	<b>E 60, EI 30</b>
Steel or Copper Conduits up to 16mm	<b>E 60, EI 15</b>
Plastic conduits up to 16mm	<b>EI 60</b>

## ANNEX B – Air Permeability – Astro PS Coat

<b>Astro PS Coat (1mm WFT both sides of 50 mm stone mineral wool batt 140 kg/m<sup>3</sup>: Air Permeability according to BS EN 1026: 2000</b>				
<b>Pressure (Pa)</b>	<b>Results under positive chamber pressure</b>		<b>Results under negative chamber pressure</b>	
	<b>Leakage (m<sup>3</sup>/h)</b>	<b>Leakage (m<sup>3</sup>/m<sup>2</sup>/ h)</b>	<b>Leakage (m<sup>3</sup>/h)</b>	<b>Leakage (m<sup>3</sup>/m<sup>2</sup>/ h)</b>
50	0.6	0.8	1.1	1.5
100	1.0	1.4	1.3	1.8
150	2.8	3.9	1.5	2.1
200	3.8	5.3	1.9	2.6
250	4.5	6.3	2.0	2.8
300	5.0	6.9	2.4	3.3
450	5.1	7.1	1.9	2.6
600	6.7	9.3	2.2	3.1