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European Technical Assessment

ETA 13/0660
of 19/12/2017

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011:	**UL International (UK) Ltd**
Trade name of the construction product	Pyroplex CE Intumescent Acrylic
Product family to which the construction product belongs	Fire Stopping and Sealing Product: • Penetration Seals
Manufacturer	Pyroplex Ltd The Furlong Droitwich Worcestershire WR9 9BG
Manufacturing plant(s)	A/001
This European Technical Assessment contains	13 pages including 1 Annex which forms an integral part of this assessment.
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of	ETAG 026-2, edition 2011, used as European Assessment Document (EAD).
This version replaces	ETA 13/0660 issued on 21/06/2013

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

1) Pyroplex CE Intumescent Acrylic is a sealant used to form penetration seal around metallic pipes and electrical cables to reinstate the fire resistance of wall and floor constructions, where they have been provided with apertures for the penetration of services.

2) Pyroplex CE Intumescent Acrylic has slight intumescent properties that cause it to swell on heating.

3) The Pyroplex CE Intumescent Acrylic is supplied in liquid form contained within 310 ml cartridges, 600ml foils or in 5, 10, 15 or 19 litre tubs. The sealant is gunned or trowelled into the aperture in or between the separating element/elements and where appropriate around the service or services, to a specified depth utilising various backing materials.

4) The applicant has presented a declaration that Pyroplex CE Intumescent Acrylic does not contain substances which have to be classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No 1272/2008 and listed in the "Indicative list on dangerous substances" of the EGDS - taking into account the installation conditions of the construction product and the release scenarios resulting from there.

   In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

5) The use catagory of Pyroplex CE Intumescent Acrylic in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): ETAG 026-3

Detailed information and data is given in Annex A.

The intended use of system Pyroplex CE Intumescent Acrylic is to reinstate the fire resistance performance of rigid wall constructions and rigid floor constructions where they are penetrated by various metal pipe services with and without combustible insulation and electric cables.

1) The specific elements of construction that the system Pyroplex CE Intumescent Acrylic may be used to provide a penetration seal in, are as follows:

   Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m^3.

   Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m^3.

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

2) The system Pyroplex CE Intumescent Acrylic may be used to provide a penetration seal with specific single insulated metal pipes, uninsulated metal pipes and with specific electric cables, single or in a bundle (for details see Annex A).

3) Apertures in the separating element shall be maximum 150 mm diameter or 300 x 300 mm. The annular space/gap around the services shall be infilled with stone wool insulation material backing material and Pyroplex CE Intumescent Acrylic sealant. Blank seals (without services) are not permitted. For full details, see Annex A.

4) The Pipes shall be supported at maximum 350 mm away from both faces of the wall constructions and from the upper face of floor constructions.

5) The provisions made in this European Technical Assessment are based on an assumed working life of the Pyroplex CE Intumescent Acrylic 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.

6) Type Z_1: Intended for use at internal conditions with high or other humidity classes, excluding temperatures below 0°C.

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

Product-type: Sealant	Intended use: Linear Joint & Gap Seal	
Basic requirement for construction work	Essential characteristic	Performance
	Mechanical resistance and stability	
-	None	Not relevant
Safety in case of fire		
EN 13501-1	Reaction to fire	Class 'F'
EN 13501-2	Resistance to fire	Annex A
Hygiene, health and environment		
EN 1026:2000	Air permeability (material property)	No performance determined
ETAG 026-3, Annex C	Water permeability (material property)	No performance determined
Declaration of manufacturer	Release of dangerous substances	Declaration of manufacturer
Safety in use		
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 ISO 11600	Adhesion	No performance determined
Protection against noise		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	No performance determined
Energy economy and heat retention		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined
General aspects relating to fitness for use		
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389	Durability and serviceability	Z_1

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

According to the decision 1999/454/EC – Commission Decision of date 22nd June 1999 on on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see http://eur-lex.europa.eu/JOIndex.do) of the European Commission[1], as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
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 European technical Assessment.

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

The factory production control shall be in accordance with the Control Plan of 18th April 2011 relating to the European technical assessment ETA 13/0660 issued on 19/12/2017 which is part of the technical documentation of this European 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.

[1] Official Journal of the European Communities L178/52 of 14/7/1999

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.

(b) Installation instruction:

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

6 Issued on:

19th December 2017

Report by:

D. Yates
Project Engineer
Building and Life Safety Technologies

Reviewed by:

C. Johnson
Staff Engineer
Building and Life Safety Technologies

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

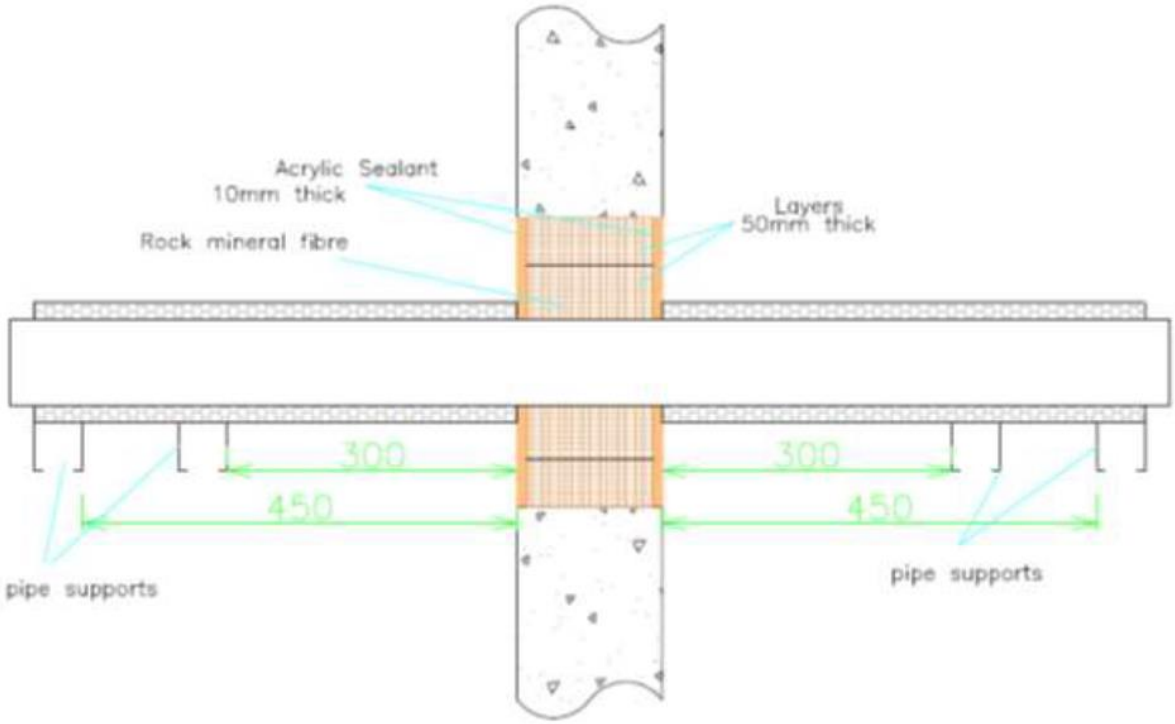
ANNEX A – Resistance to Fire Classification – Pyroplex CE Intumescent Acrylic Penetration Seals

A.1 Rigid wall constructions according to 2.1 with wall thickness of minimum 150 mm

A.1.1 Penetration seal with metallic pipe including combustible insulation

Penetration seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid walls 150 mm thick (min.)

Construction details:



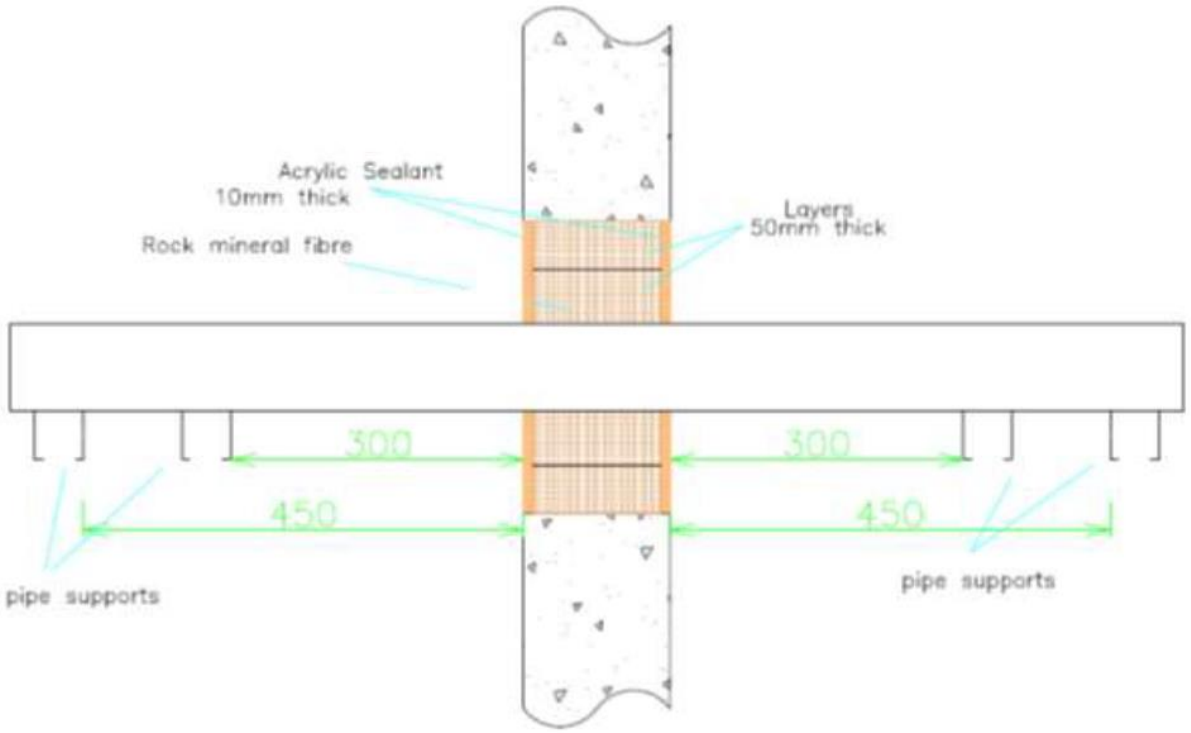
A.1.1.1 Pipes with local interrupted (minimum 500 mm) or continuous 19 mm thick Armacell 'Class O Armaflex' Insulation

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
300 x 300	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single mild steel pipe 89 mm diameter and 3 – 14.2 mm wall	Central	**EI 120 C/U**
		Single copper or mild steel pipe 35 mm diameter and 1 – 14.2 mm wall		**EI 90 C/U**

A.1.2 Penetration seal with metal pipe without insulation

Penetration seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid walls 150 mm thick (min.)

Construction details:



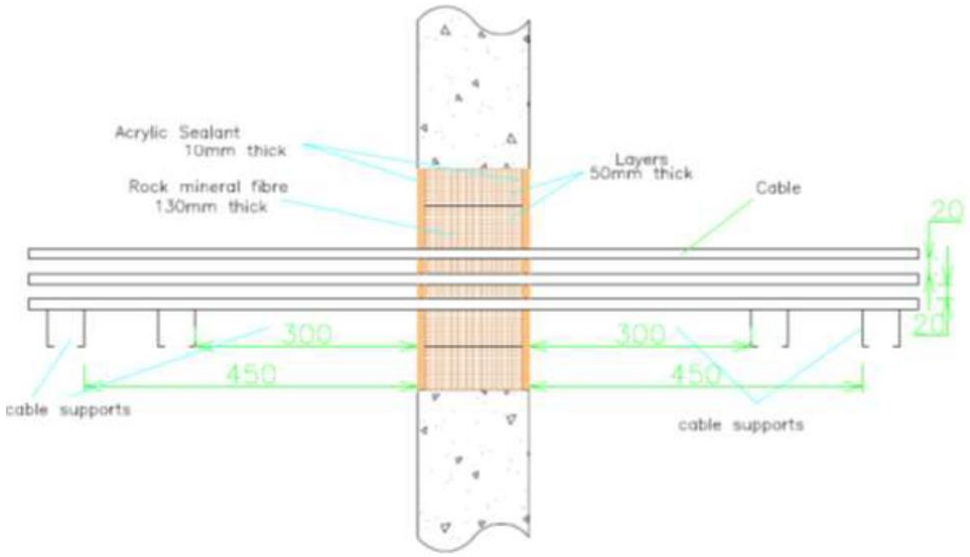
A.1.2.1 Pipes without insulation

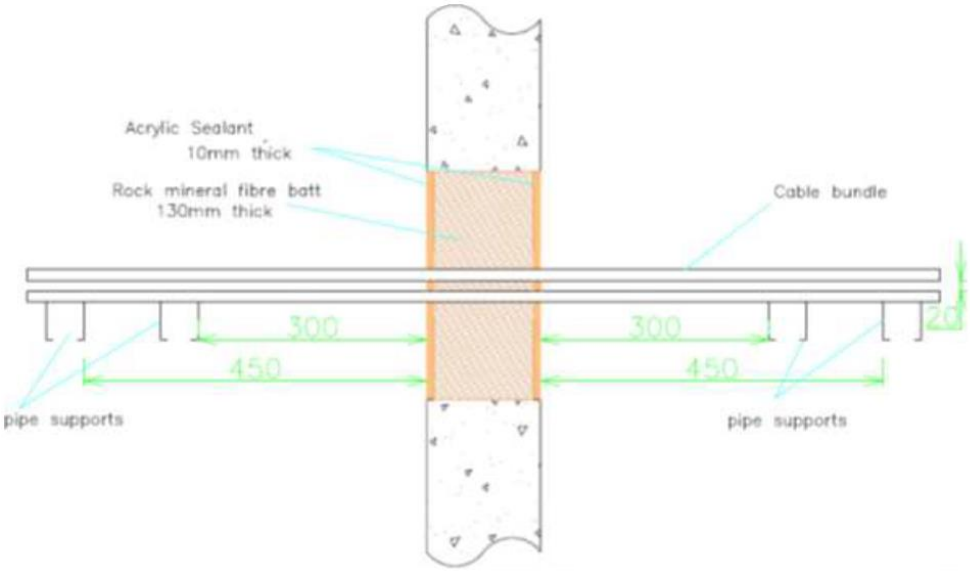
Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
300 x 300	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single mild steel pipe 89 mm diameter and 3 – 14.2 mm wall	Central	**E 120 C/U** **EI 30 C/U**
		Single copper or mild steel pipe 35 mm diameter and 1 – 14.2 mm wall		**E 90 C/U**

A.1.3 Penetration seal with cables

Penetration Seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid walls 150 mm thick (min.)

Construction details:





A.1.3.1 Cables

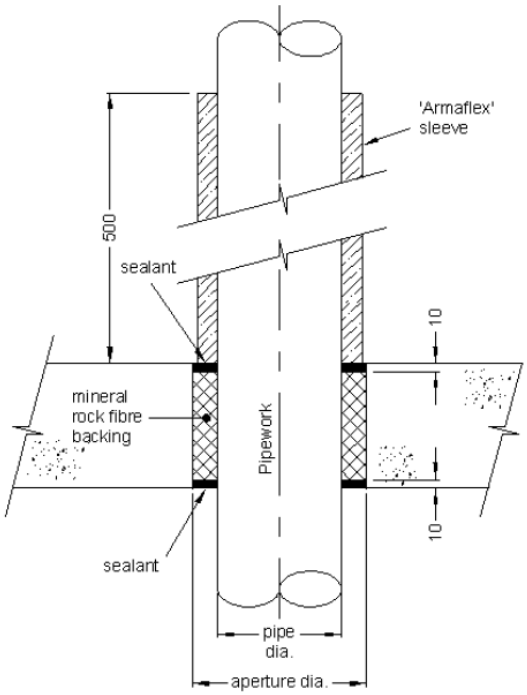
Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
300 x 300	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Up to 21 x 16 mm diameter – 3 x 6 mm copper core, steel armoured cables – (BS7671-6943XLH) with minimum 20 mm separation	Central	**E 120** **EI 60**
		Single bundle of 9 x 30mm diameter– 4 x 25 mm copper core, steel armoured cables – (BS7671-6944XLH)	Central	

A.2 Rigid floor constructions according to 2.1 with floor thickness of minimum 150 mm

A.2.1 Penetration seal with metal pipe including combustible insulation

Penetration Seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid floors 150 mm thick (min.)

Construction details:



A.2.1.1 Pipes with local interrupted (minimum 500 mm) or continuous interrupted 25 mm thick Armacell 'Class O Armaflex' insulation

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
150 diameter	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single mild steel pipe 89 mm diameter and 3 – 14.2 mm wall	Central	**E 240 C/U** **EI 120 C/U**

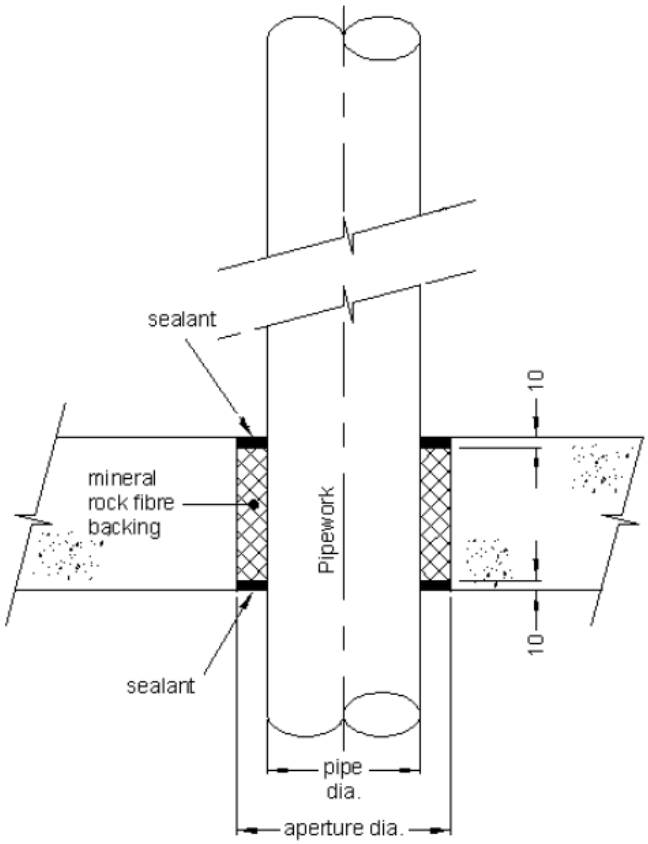
A.2.1.2 Pipes with local interrupted (minimum 500 mm) or continuous interrupted 19 mm thick Armacell 'Class O Armaflex' insulation

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
150 diameter	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single copper or mild steel pipe 35 mm diameter and 1.2 – 14.2 mm wall with local (500 mm long) or continuous/interrupted 19 mm thick Armaflex insulation	Central	**E 240 C/U** **EI 180 C/U**

A.2.2 Penetration seal with metal pipe without insulation

Penetration Seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid floors 150 mm thick (min.)

Construction details:



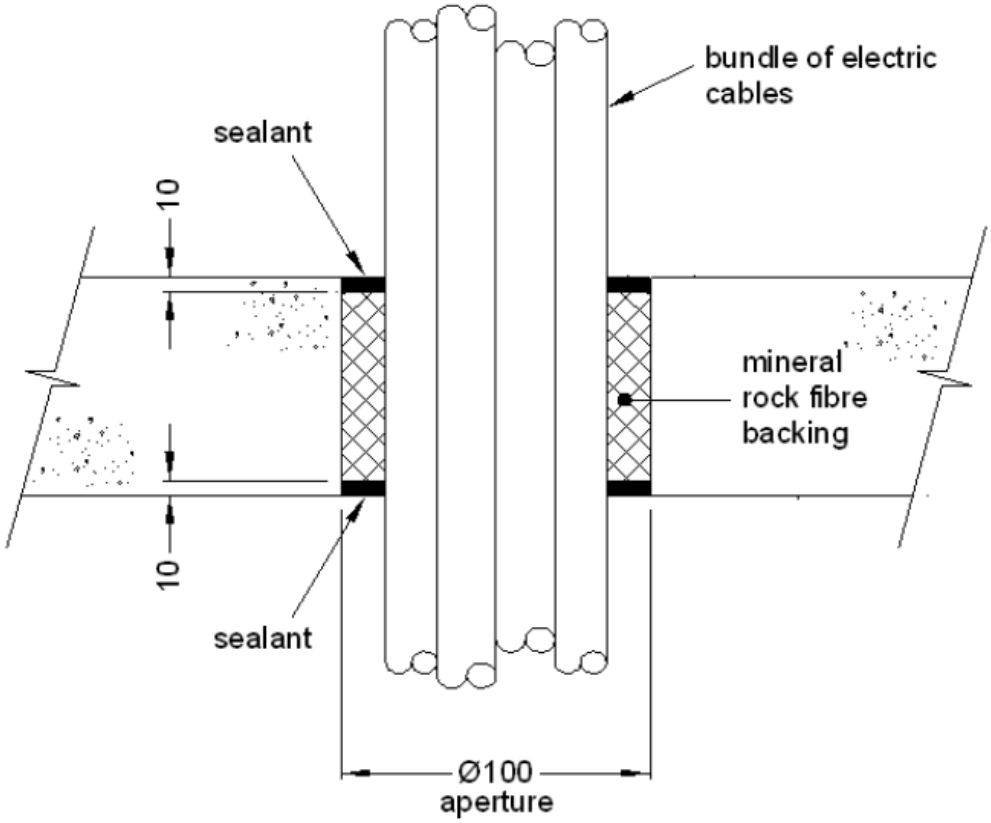
A.2.2.1 Pipes without insulation

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
150 diameter	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single mild steel pipe 89 mm diameter and 3 – 14.2 mm wall	Central	**E 240 C/U EI 15 C/U**
		Single copper or mild steel pipe 35 mm diameter and 1.2 – 14.2 mm wall		**E 240**

A.2.3 Penetration seal with cables

Penetration Seal: Pyroplex CE Intumescent Acrylic penetration seals in rigid floors 150 mm thick (min.)

Construction details:



A.2.3.1 Cables

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
100 diameter	10 mm deep Pyroplex CE Intumescent Acrylic flush to both faces of the wall backed with 130 mm deep Stone wool (90 kg/m^3)	Single bundle of 21 x 14 mm diameter - 3 x 1.5 mm^2 copper core/steel armoured cables (BS7671-6944XLH)	Central	**E 240** **EI 120**
		Single bundle of 4 x 25 mm diameter - 4 x 16 mm^2 core copper/steel armoured cables (BS7671-6944XLH), and 5 x 19 mm diameter - 4 x 6.0 mm^2 core copper/steel armoured cables (BS7671- 6944LSH)		**E 240** **EI 90**