





designated according to Article 29 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

## European Technical Assessment

### ETA 13/0659 of 19/12/2017

Technical Assessment Body issuing the E 29 of the Regulation (EU) No 305/2011:	TA and designated according to Article UL International (UK) Ltd
Trade name of the construction product	Pyroplex CE Intumescent Acrylic
Product family to which the construction product belongs	<ul><li>Fire Stopping and Sealing Product:</li><li>Linear Joint and Gap Seals</li></ul>
Manufacturer	Pyroplex Ltd The Furlong Droitwich Worcestershire WR9 9BG
Manufacturing plant(s)	A/001
This European Technical Assessment contains	15 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 026-3, edition 2011, used as European Assessment Document (EAD).
This version replaces	ETA 13/0659 issued on 21/06/2013

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#### Table of Contents

I.	SPEC	IFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT	3
1	. т	echnical description of the product	3
2		pecification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter AD): ETAG 026-3	
3	P	erformance of the product and references to the methods used for its assessment	4
4		SSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO IS LEGAL BASE	
5	т	echnical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD	5
6	i Is	ssued on:	6
	IEX A –	Resistance to Fire Classification – Pyroplex CE Intumescent Acrylic Linear Joint/Gap Seals	7
A	.1	Rigid wall constructions according to 2.1 with wall thickness of minimum 200 mm	7
	A.1.1	Linear joint or gap seal, vertically oriented with sealant to the exposed face	7
	A.1.2	Linear joint or gap seal, vertically oriented with sealant to the both faces	8
A	.2	Rigid wall constructions according to 2.1 with wall thickness of minimum 150 mm	9
	A.2.1	Linear joint or gap seal, vertically oriented with sealant to both faces	9
A	.3	Rigid wall constructions according to 2.1 with wall thickness of minimum 100 mm	. 11
	A.3.1	Linear joint or gap seal, vertically oriented with sealant to the exposed face	. 11
A	.4	Rigid floor constructions according to 2.1 with wall thickness of minimum 150 mm	. 12
	A.4.1	Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only	. 12
	A.4.2	Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only	. 14
A	.5	Flexible wall construction according to 2.1 with wall thickness of minimum 110 mm	. 15
A	.5.1	Linear joint seal, between the top of the wall boards and the floor soffit, seal to both faces	. 15

#### I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

#### 1 <u>Technical description of the product</u>

- 1) Pyroplex CE Intumescent Acrylic is a sealant used to form linear gap seals where gaps are present in wall and floor constructions and linear joint seals where wall and floor constructions abut.
- 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.

1) 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 gaps at the head of flexible wall constructions, gaps in and joints between rigid wall constructions, gaps in and joints between rigid floor constructions and joints between rigid wall and floor constructions.

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

Flexible walls:	The wall must have a minimum thickness of 110 mm and comprise steel studs
	lined on both faces with minimum 2 layers of 15 mm thick boards.
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> .
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 <sup>3</sup> .

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 linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).

- 3) The maximum permitted joint/gap width for system Pyroplex CE Intumescent Acrylic is 50 mm.
- 4) The maximum movement capability of system Pyroplex CE Intumescent Acrylic is  $\leq$  7.5%
- 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 sections 4.2/5.1/5.2 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<sub>1</sub>: 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: Linea	r 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		
EN 10140-3/ EN ISO 717-2	Impact 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 <sub>1</sub>		

#### 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<sup>1</sup>, 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 <u>Technical details necessary for the implementation of the AVCP system, as provided for in the applicable</u> <u>EAD</u>

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 18<sup>th</sup> April 2011 relating to the European technical assessment ETA 13/0659 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.

<sup>&</sup>lt;sup>1</sup> 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 linear joint 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 joint or penetration seal
  - Construction of the linear joint 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:

19<sup>th</sup> December 2017

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

Reviewed by:

Min

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# ANNEX A – Resistance to Fire Classification – Pyroplex CE Intumescent Acrylic Linear Joint/Gap Seals

A.1 Rigid wall constructions according to 2.1 with wall thickness of minimum 200 mm

#### A.1.1 Linear joint or gap seal, vertically oriented with sealant to the exposed face

**Joint seal:** Pyroplex CE Intumescent Acrylic linear joint seals in rigid walls 200 mm thick (min.) – sealant on the exposed/fire side of the seal only



#### A.1.1.1

Substrate	Depth (mm)	Backing	Classification
	25 min.		E 240 – V – X – F – W 00 to 30 El 60 – V – X – F – W 00 to 30
Masonry/ concrete	20 min.	Polyethylene rod	E 240 – V – X – F – W 00 to 20 El 90 – V – X – F – W 00 to 20
	10 min.		E 240 – V – X – F – W 00 to 10 El 180 – V – X – F – W 00 to 10





#### A.1.2.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	20 min.	Stone wool 20 deep / 90 kg/m <sup>3</sup>	EI 240 – V – X – F – W 00 to 30
concrete	10 min.	Stone wool 10 deep / 90 kg/m <sup>3</sup>	EI 240 – V – X – F – W 00 to 10

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

#### A.2.1 Linear joint or gap seal, vertically oriented with sealant to both faces

Joint Seal: Pyroplex CE Intumescent Acrylic linear joint seals in rigid walls 150 mm thick (min.) – Sealant flush to both faces of the wall



#### A.2.1.1

Substrate	Depth (mm)	Backing	Classification
masonry/	15 min.	Polyethylene rod	E 240 – V – X – F – W 00 to 30 El 180 – V – X – F – W 00 to 30
concrete	10 min.	Polyethylene rod	E 240 – V – X – F – W 00 to 20 El 180 – V – X – F – W 00 to 20
masonry/ concrete to steel	10 min.	Polyethylene rod	E 240 – V – X – F – W 00 to 30 El 90 – V – X – F – W 00 to 30
masonry/	20 min.	Polyethylene rod	EI 120 – V – X – F – W 00 to 30
concrete to timber	15 min.	Stone wool 90 kg/m3 120 mm deep min.	EI 180 – V – X – F – W 00 to 30

#### A.3 Rigid wall constructions according to 2.1 with wall thickness of minimum 100 mm

#### A.3.1 Linear joint or gap seal, vertically oriented with sealant to the exposed face

**Joint Seal:** Pyroplex CE Intumescent Acrylic linear joint seals in rigid walls 100 mm thick (min.) – Sealant flush to both faces of the wall



#### A.3.1.1

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete	15 min.	Polyethylene rod	E 240 – V – X – F – W 00 to 30 El 120 – V – X – F – W 00 to 30

#### A.4 Rigid floor constructions according to 2.1 with wall thickness of minimum 150 mm

# A.4.1 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only

Joint Seal: Pyroplex CE Intumescent Acrylic linear joint seals in rigid floors 150 mm thick (min.) – Sealant to the top of the floor only Construction details: 10 1 10 sealant -. . . 12 backing rod 2.20 sealant backing rod 1.80 1 82 5.52 1.20 sealarit sealant mineral rock fibre backing 2. • \* mineral rock fibre backing  $i \in \mathcal{I}$ 

#### A.4.1.1

Substrate	Depth (mm)	Backing	Classification
	10 min.	Stone wool 90 kg/m <sup>3</sup> 25 mm deep min.	E 240 – H – X – F – W 00 to 30 El 180 – H – X – F – W 00 to 30
masonry/	15 min.	Polyethylene rod	E 90 – H – X – F – W 00 to 30 El 45 – H – X – F – W 00 to 30
concrete	10 min.	Polyethylene rod	E 240 – H – X – F – W 00 to 20 El 60 – H – X – F – W 00 to 20
	10 min.	Polyethylene rod	E 240 – H – X – F – W 00 to 10 EI 120 – H – X – F – W 00 to 10

# A.4.2 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only

Joint Seal: Pyroplex CE Intumescent Acrylic linear joint seals in rigid floors 150 mm thick (min.) – Sealant flush to both faces of the floor Construction details: 5. 1 4 sealant 1  $t_i$ backing rod 10 sealant 1 backing rod 20 2

#### A.4.2.1

Substrate	Depth (mm)	Backing	Classification
Masonry/ concrete	10 min.	Polyethylene rod	E 240 – H – X – F – W 00 to 30 El 180 – H – X – F – W 00 to 30
Masonry/ Concrete to steel	10 min.	Polyethylene rod	E 240 – H – X – F – W 00 to 30 El 90 – H – X – F – W 00 to 30

#### A.5 Flexible wall construction according to 2.1 with wall thickness of minimum 110 mm

# Sealant flush to both faces of the wall Construction details: sealant Plaster board

#### A.5.1 Linear joint seal, between the top of the wall boards and the floor soffit, seal to both faces

Joint Seal: Pyroplex CE Intumescent Acrylic linear joint seals at the head of flexible walls 110 mm thick (min.) -

#### A.5.1.1

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete to gypsum board	30 min.	50 mm (min.) steel head track infilled with 50 mm stone wool	EI 120 – T – X – F – W 00 to 10