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Designated according to Article 29 of Regulation (EU) No 305/2011

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European Technical Assessment

ETA 16/0236
of 13/06/2016

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	Wurth Fire Resistant Acrylic
Product family to which the construction product belongs	Fire Stopping and Sealing Product: • Penetration Seals
Manufacturer	Würth International AG Aspermontstrasse 1 CH- 7000 Chur Switzerland
Manufacturing plant(s)	A/003
This European Technical Assessment contains	9 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 16/0236 issued on 12/04/2016

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

1) Wurth Fire Resistant Acrylic is a sealant used to form a penetration seal around metallic pipes, plastic pipes and electrical cables to reinstate the fire resistance performance of wall constructions, where they have been provided with apertures for the penetration of services.

2) The Wurth Fire Resistant Acrylic is supplied in liquid form contained within 310 ml cartridges. The sealant is gunned into the aperture in the separating element/elements and around the service or services, to a specified depth utilising mineral fibre insulation backing material.

3) The applicant has submitted a written declaration that Wurth Fire Resistant Acrylic is in compliance with Council Directive 76/769/EEC of 27th July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (incl. all amendments and adaptations).

   All dangerous chemical substances ≥ 1.0 % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances ≥ 0.1 % w/w (Status: 29. adaption – 2004/73/EG – of the EU directive 67/548/EEC - classification, packaging and labelling of dangerous substances) are stated in Polyseam's safety data sheet (according to 91/155/EEC including amendments) and have been considered for the classification of the products according to the directive 1999/45/EG (classification of preparations, including amendments).

   All dangerous chemical substances are below the classification limits of 67/548/EEC..

   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.

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

Detailed information and data is given in Annex A.

1) The intended use of system Wurth Fire Resistant Acrylic is to reinstate the fire resistance performance of flexible wall constructions, rigid wall constructions and rigid floor constructions where they are penetrated by various metal pipe services with and without combustible insulation, plastic pipes and electrical cables.

2) The specific elements of construction that the system Wurth Fire Resistant Acrylic may be used to provide a penetration seal in, are as follows:

   a. Flexible walls: The wall must have a minimum thickness of 100 mm and comprise steel studs lined on both faces with minimum 2 layers of 12.5 mm thick boards.

   b. 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^3.

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

3) The system Wurth Fire Resistant Acrylic may be used to provide a penetration seal with specific, uninsulated metal pipes, plastic pipes and single electrical cables (for details see Annex A).

4) Apertures in the separating element shall be maximum 62 mm diameter. The annular space/gap around the services shall be infilled with mineral fibre insulation backing material and Wurth Fire Resistant Acrylic. Blank seals are not permitted. For full details, see Annex B.

5) Pipes shall be supported at maximum 180 mm away from both faces of the wall constructions and from the upper face of floor constructions.

6) The provisions made in this European Technical Assessment are based on an assumed working life of the Wurth Fire Resistant 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.

7) Type Z_2: Intended for uses in internal conditions with humidity lower 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: Sealant	Intended use: Penetration 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 (untested)
EN 13501-2	Resistance to fire	Annex A
Hygiene, health and environment		
EN 1026:2000	Air permeability (material property)	No performance determined
ETAG 026-2, 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	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_2

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 11th September 2013 relating to the European technical assessment ETA 16/0236 issued on 13/06/2016 which is part of the technical documentation of this European technical approval. 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 linear joint seal or 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 joint or penetration seal
- Construction of the linear joint seal or 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. cable trays)

(b) Installation instruction:

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

6 Issued on:

13th June 2016

Report by:

C. Johnson
Staff Engineer
Building and Life Safety Technologies

Reviewed by:

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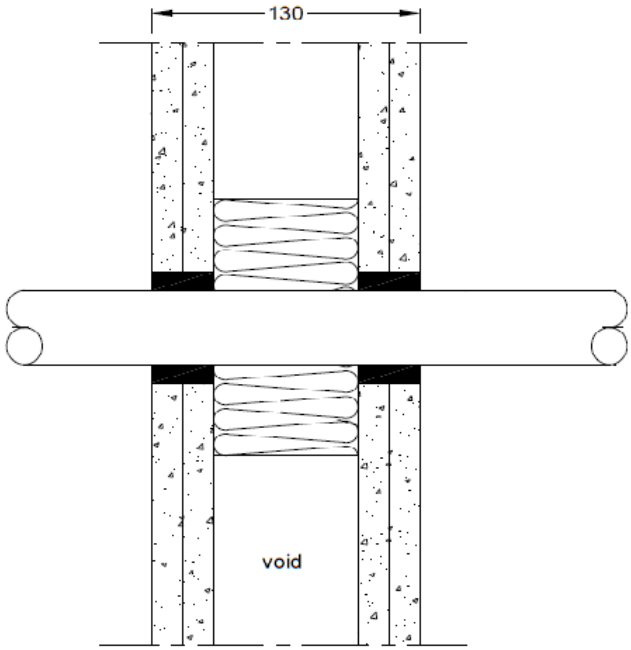
For and on behalf of UL International (UK) Ltd.

ANNEX A – Resistance to Fire Classification – Wurth Fire Resistant Acrylic

A.1 Flexible and rigid wall constructions according to 2.1 with wall thickness of minimum 130 mm

A.1.1 Double side penetration seal

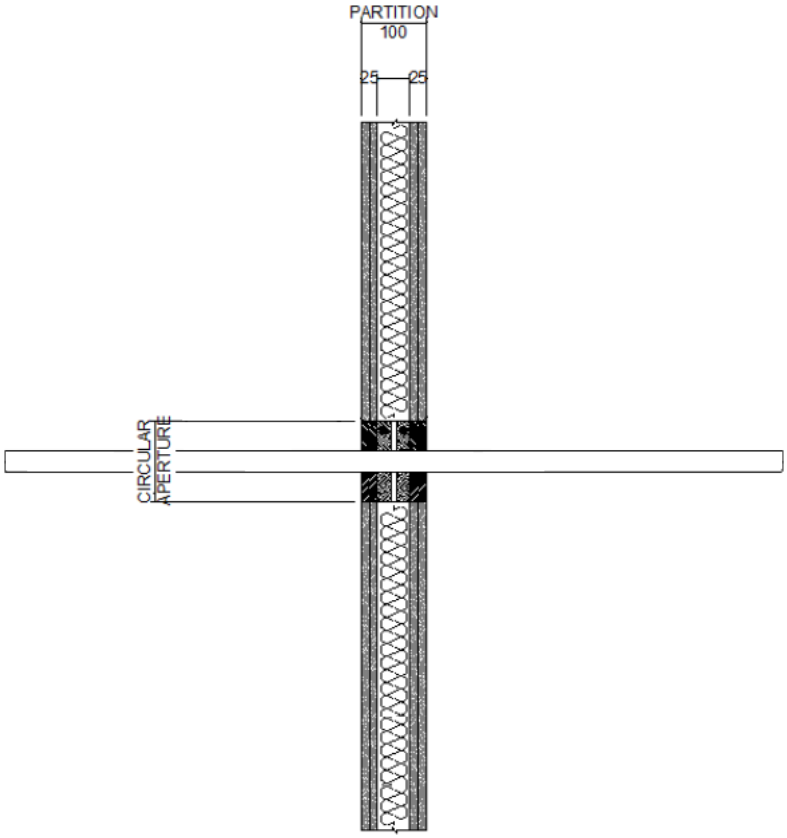
Penetration Seal: Pipe (single) fitted centrally within the aperture, with 30 mm deep Wurth Fire Resistant Acrylic Sealant to both sides of the wall, backed to full depth (min. 70 mm) Knauf Rocksill 33, stone wool insulation.
Flexible wall construction: Minimum 2 layers of 15 mm thick Type F (EN520) gypsum board on both sides of 70 mm deep steel studs, with no cavity insulation.
Construction details: 

A.1.1.1

Services	Sealant depth	Backing	Aperture Ø	Classification
Steel pipe 42 -219 mm diameter and 7.5 – 14.2 mm wall	30 mm	Full depth (min. 70 mm) Knauf Rocksill 33	Pipe + 20 mm	**E 120 C/U** **EI 15 C/U**
Copper pipe 28 mm diameter and 1.0 – 14.0 mm wall				**E 120 C/U** **EI 90 C/U**
Copper pipe 42 mm diameter and 1.0 – 14.0 mm wall				**E 120 C/U**
PP-HT (EN 1451-1: 1998) 42 mm diameter and 4.0 mm wall				**EI 120 U/C, EI 120 C/C**
MDPE (EN 12202-2: 2003) 32 mm diameter and 3.0 mm wall				

A.2 Flexible and rigid wall constructions according to 2.1 with wall thickness of minimum 100 mm

A.2.1 Double side penetration seal

Penetration Seal: Type 'E' cable* (single) fitted centrally within the aperture, with 25 mm deep Wurth Fire Resistant Acrylic Sealant to both sides of the wall, backed with min. 25 mm, stone wool insulation 35 kg/m^3.
Flexible wall construction: Minimum 2 layers of 12.5 mm thick Type F (EN520) gypsum board on both sides of 50 mm deep steel studs.
Construction details: 

A.2.1.1

Services	Sealant depth	Backing	Aperture Ø	Classification
1 No. 'E' type8 electrical cable	25 mm	min. 25 mm, stone wool insulation 35 kg/m^3	85 mm	**E 120** **EI 45**

E cable = 1 x 185 mm^2 core HD603.3 electrical cable with PVC insulation, PVC sheath and 23-27 mm diameter