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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 14/0241 of 24/07/2014

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 Firewise Collar

(FireCollar 55 /Firewise Collar 82 /Firewise Collar 110 /Firewise Collar 125 /Firewise

Collar 160)

Product family to which the construction

product belongs

Fire Stopping and Sealing Product:

Penetration Seals

**Manufacturer** Firewise Supplies

Brewery Road Pampisford Cambridge England CB22 3HG

Manufacturing plant(s) A/006

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).

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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# **Table of Contents**

I. SI	CIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT	3
1	Technical description of the product	3
2 EAD)	Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Herein TAG 026-2	
3	Performance of the product and references to the methods used for its assessment	4
4 ITS L	ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCIAL BASE	
5	Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD	5
	- Resistance to Fire Classification - Firewise Collar 55 / Firewise Collar 82 / Firewise Collar 110 / Firewise Collar 125 / Firewise C	
A.1	Flexible or rigid wall constructions with wall thickness of minimum 100 mm	7
A	Penetration seals, in drywalls and concrete/masonry walls	7
A.2	Rigid floor constructions with floor thickness of minimum 150 mm	8
A	Penetration seals, in concrete floors	8

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

#### 1 Technical description of the product

- 1) FireCollar is a pipe closure device used to form penetration seals where combustible pipes penetrate walls and floors.
- 2) The Firewise Collar is supplied with intumescent liner complete within powder coated metal steel shell, to be clamped around the service and screw fixed back to the supporting element. The has two half shells with slide together fixing. Firewise Collar is available in 5 sizes Firewise Collar 55 /Firewise Collar 82 /Firewise Collar 110 /Firewise Collar 125 /Firewise Collar 160.
- 3) The applicant has submitted a written declaration that the product and/or constituents of the product contains no substances which have been 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.

4) The use catagory of Firewise Collar 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 026-2

Detailed information and data is given in Annex A.

The intended use of system Firewise Collar is to reinstate the fire resistance performance of flexible wall and rigid wall and floor constructions, where they are penetrated by services.

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

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.

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/m3.

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/m3.

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

2) The systemFirewise Collar may be used to provide a penetration seal with specific supporting constructions and substrates (for details see Annex A).

- The provisions made in this European Technical Assessment are based on an assumed working life of the Firewise Collar of 10 years, provided that the conditions laid down in the manufacturers datasheet and instructions 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.
- 4) Type Z<sub>2</sub>: intended for use at internal conditions with humidity classes other than Z1, excluding temperatures below 0°C.

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

Product-type: Pipe Collar Intended use: Penetration Seal			netration Seal
Basic requirement for construction work	Basic Requirement		Performance
	BWR 1 Mechanical re	sistance and stabilit	у
-	Nor	ne	Not relevant
	BWR 2 Safety	in case of fire	
EN 13501-1	Reaction	n to fire	Class F
EN 13501-2	Resistanc	ce to fire	Annex A
	BWR 3 Hygiene, hea	lth and environment	
EN 1026:2000	Air permeability (n	naterial property)	No performance determined
ETAG 026-2, Annex C	Water permeability	(material property)	No performance determined
Declaration of manufacturer	Release of dangerous substances		Use categories: IA1, S/W3  Declaration of manufacturer
	BWR 4 Saf	fety in use	
EOTA TR 001:2003	Mechanical resista	ance and stability	No performance determined
EOTA TR 001:2003	Resistance to imp	pact/movement	No performance determined
EOTA TR 001:2003	Adhesion		No performance determined
	BWR 5 Protection	on against noise	
EN 10140-2/ EN ISO 717-1	2/ EN ISO 717-1 Airborne sound insulation		No performance determined
	BWR 6 Energy econon	ny and heat retentio	n
EN 12664, EN 12667 or EN 12939	Thermal p	roperties	No performance determined
EN ISO 12572 EN 12086	Water vapour	permeability	No performance determined
General aspects relating to fitness for use			
EOTA TR 024:2009, clause 3.1.11 & 3.1.12	Durability and	serviceability	Z <sub>2</sub>
BWR 7 Sustainable use of natural resources			
-	-		No performance determined

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

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 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 13<sup>th</sup> May 2014 relating to the European Technical Assessment ETA 14/0241 issued on 24/07/14 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 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 <u>Issued on:</u>

24<sup>th</sup> July 2014

Report by:

C. Johnson Staff Engineer

**Building and Life Safety Technologies** 

Reviewed by:

C. W. Miles

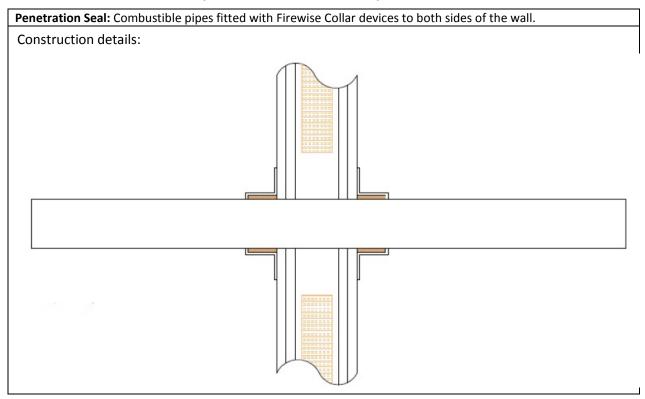
Business Manager – Europe & Latin America Building and Life Safety Technologies

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

# ANNEX A - Resistance to Fire Classification - Firewise Collar

# A.1 Flexible or rigid wall constructions with wall thickness of minimum 100 mm

# A.1.1 Penetration seals, in drywalls and concrete/masonry walls



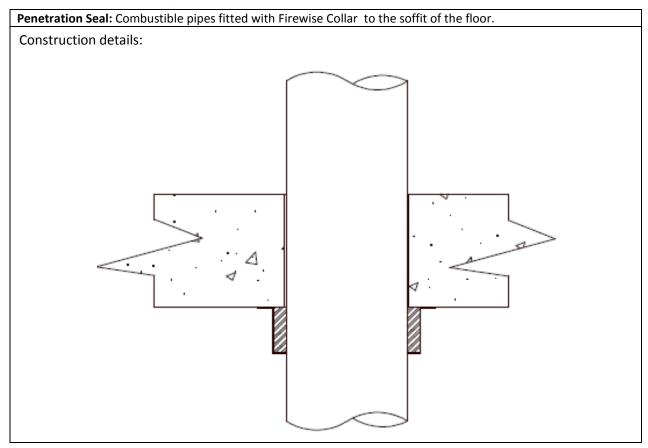
# A.1.1.1

uPVC* Pipes	Firewise Collar Internal Diameter x Length	Inlay	Classification
50-55 mm Ø and 2 – 3.7 mm wall thickness	55 x 50 mm	4 mm	
82 mm Ø and 3 – 3.5 mm wall thickness	82 x 50 mm	6 mm	
110 mm Ø and 2.2 – 8.1 mm wall thickness	110 x 50 mm	8 mm	EI 120 C/U
125 mm Ø and 3.7 – 9.2 mm wall thickness	125 x 60 mm	12 mm	
160 mm Ø and 3.2 – 11.8 mm wall thickness	160 x 60 mm	16 mm	

<sup>\*</sup> According to EN 1452-1, EN 1329-1 or EN 1453-1. In Germany the pipe must additionally comply with DIN 19531-10

# A.2 Rigid floor constructions with floor thickness of minimum 150 mm

# A.2.1 Penetration seals, in concrete floors



A.2.1.1

uPVC* Pipes	Firewise Collar Internal Diameter x Length	Inlay	Classification
50 mm Ø and 2.5 – 3.7 mm wall thickness	55 x 50 mm	4 mm	EI 240 C/U
82 mm Ø and 3 – 3.5 mm wall thickness	82 x 50 mm	6 mm	EI 180 C/U
110 mm Ø and 2.2 – 8.1 mm wall thickness	110 x 50 mm	8 mm	EI 180 C/O
125 mm Ø and 3.7 – 9.2 mm wall thickness	125 x 60 mm	12 mm	EI 120 C/U
160 mm Ø and 3.2 – 11.8 mm wall thickness	160 x 60 mm	16 mm	EI 180 C/U

<sup>\*</sup> According to EN 1452-1, EN 1329-1 or EN 1453-1. In Germany the pipe must additionally comply with DIN 19531-10

PE* Pipes	Firewise Collar Internal Diameter x Length	Inlay	Classification
160 mm Ø and 10 mm wall thickness	160 x 60 mm	16 mm	EI 60 U/C

<sup>\*</sup> PE According to EN 12201-2, EN 1519-1 and EN 12666-1. In Germany the pipes have additionally to comply with DIN 19535-10

Composite Combustible* Pipes	Firewise Collar Internal Diameter x Length	Inlay	Classification
110 mm Ø and 5.3 mm wall thickness	110 x 50 mm	8 mm	EI 180 U/C

<sup>\*</sup> ABS inner/PVC outer

PP* Pipes	Firewise Collar Internal Diameter x Length	Inlay	Classification
110 mm Ø and 3.8 mm wall thickness	110 x 60 mm	16 mm	EI 240 U/C

<sup>\*</sup> PE According to EN 12201-2, EN 1519-1 and EN 12666-1. In Germany the pipes have additionally to comply with DIN 19535-10