

UL INTERNATIONAL (UK) LTD Wonersh House, Building C, The Guildway, Old Portsmouth Road, Guildford. GU3 1LR. United Kingdom.





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 17/0390 of 14/07/2017

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 Nullifire FS702

Product family to which the construction product belongs

Fire Stopping and Sealing Product:Linear Joint and Gap Seals

Manufacturer tremco-illbruck Ltd

Coupland Rd Hindley Green Wigan WN2 4HT

Manufacturing plant(s) 1/001

**This European Technical Assessment**contains
15 pages including 1 Annex which forms an integral part of this assessment.

This European Technical Assessment is ETAG 026-3, edition 2011, used as

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

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.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may be made, with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

### Table of Contents

I.	SPECII	FIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT	3
1	Te	echnical description of the product	3
2	Sp	pecification of the intended uses of the product in accordance with the applicable European Assessment Document: ETAG 026-3	3
3	Pe	erformance of the product and references to the methods used for its assessment	5
4		SSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO S LEGAL BASE	6
5	Te	echnical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD	6
6	Iss	sued on:	7
ANN	EX A – F	Resistance to Fire Classification – Nullifire FS702	8
A.	1	Rigid floor constructions with minumum thickness 150 mm	8
	A.1.1	Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only	8
A.	2	Rigid wall constructions with minumum thickness 150 mm	9
	A.2.1	Vertical linear joint or gap seal between rigid walls	9
	A.2.2	Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit	10
A.	3	Rigid wall constructions with minumum thickness 100 mm	1
	A.3.1	Vertical linear joint or gap seal between rigid walls	1
	A.3.2	Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit	12
A.	4	Rigid floor constructions with minumum thickness 300 mm	13
	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.	13
A.	5	Rigid floor constructions with minumum thickness 150 mm	14
	A.5.1	Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only.	14
	A.5.2	Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only.	15
ANN	EX B – <i>A</i>	Airborne sound insulation – Nullifire FS702	16

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

#### 1 Technical description of the product

- 1) Nullifire FS702 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) The Nullifire FS702 is supplied in liquid form contained within 310 ml cartridges. The sealant is gunned into the aperture in the separating element/elements, to a specified depth using varius backing materials, as specified in Annex A.
- 3) The applicant has submitted a written declaration that Nullifire FS702 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.

### 2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document: ETAG 026-3

Detailed information and data is given in Annex A.

- 1) The intended use of Nullifire FS702 is to reinstate the fire resistance performance of gaps in and joints in and between rigid wall constructions, gaps in and joints between rigid floor constructions.
- 2) The specific elements of construction that the system Nullifire FS702 may be used to provide a gap or joint seal in, are as follows:

a. 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>.

b. 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<sup>3</sup>

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

- 3) The System Nullifire FS702 may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).
- 4) The maximum permitted joint/gap width for system Nullifire FS702 is 100 mm.
- 5) The maximum movement capability of system Nullifire FS702 is ≤ 7.5% depending upon application.

- 6) The provisions made in this European Technical Assessment are based on an assumed working life of the Nullifire FS702 of 10 years, provided that the conditions laid down in the product datasheet 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  $Z_1$ : intended for use at internal conditions with high humidity, excluding temperatures below 0°C. Includes lower categories i.e. Type  $Z_2$ .

### 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 E
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	Annex B
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 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 27/04/2017 relating to the European technical assessment ETA 17/0390 issued on 14/07/2017 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 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. cable trays)
- (b) Installation instruction:
  - Steps to be followed
  - Procedure in case of retrofitting
  - Stipulations on maintenance, repair and replacement

#### 6 Issued on:

14<sup>th</sup> July 2017

Report by:

Reviewed by:

C. Johnson Staff Engineer

**Building and Life Safety Technologies** 

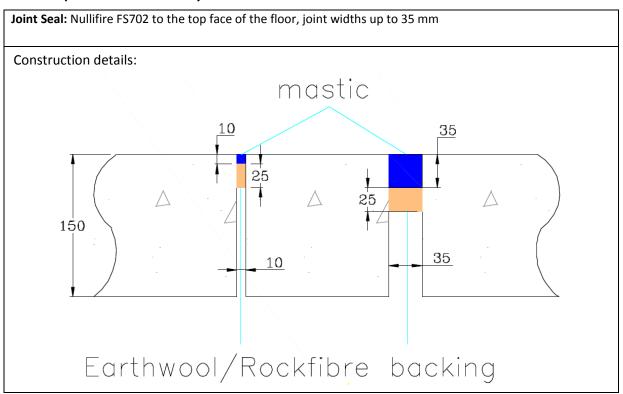
C. W. Miles
Business Manager – Europe & Latin America
Building and Life Safety Technologies

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

### ANNEX A - Resistance to Fire Classification - Nullifire FS702

### A.1 Rigid floor constructions with minumum thickness 150 mm

### A.1.1 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only

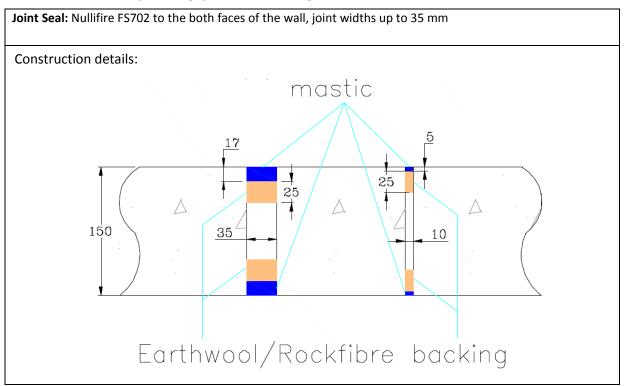


#### A.1.1.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	10 min.	25 mm deep stone wool, mineral fibre 64kg/m³,	EI 240 – V – X – F – W 10
concrete	35 min.	mineral fibre 64kg/m <sup>-</sup> , compressed by 30%	E 180 – H – X – F – W35
		compressed by 50%	EI 120 – H – X – F – W35

### A.2 Rigid wall constructions with minumum thickness 150 mm

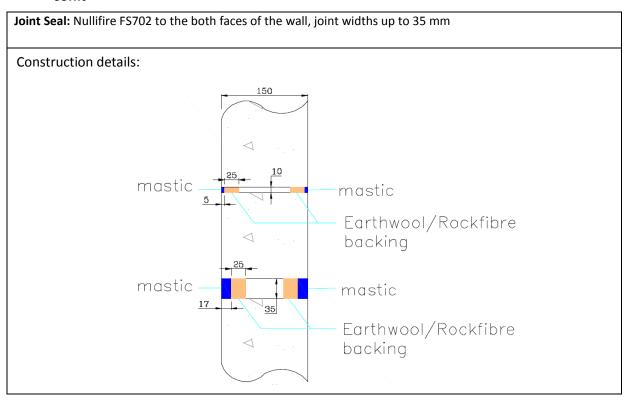
### A.2.1 Vertical linear joint or gap seal between rigid walls



### A.2.1.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	5 min.	25 mm deep stone wool, mineral fibre 64kg/m³,	EI 240 – V – X – F – W10
concrete	17 min.	compressed by 30%	EI 240 – V – X – F – W35

### A.2.2 Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit

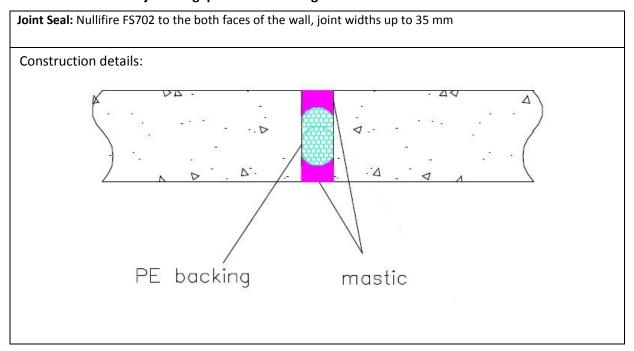


### A.2.2.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	5 min.	25 mm deep stone wool, mineral fibre 64kg/m³,	EI 180 – T – X – F – W10
concrete	17 min.	compressed by 30%	EI 180 – T – X – F – W35

### A.3 Rigid wall constructions with minumum thickness 100 mm

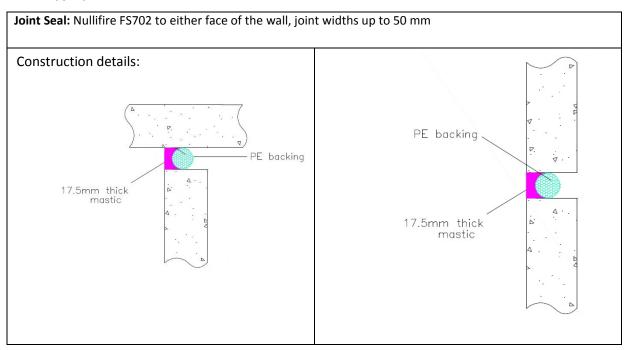
### A.3.1 Vertical linear joint or gap seal between rigid walls



### A.3.1.1

Substrate	Depth (mm)	Backing	Classification
masonry/	17.5		EI 240 – V – X – F – W35
concrete	35		L1240 V X 1 W33
masonry/	17.5		EI 240 – V – X – F – W35
concrete /			EI 120 – V – X – F – W35
Steel	35	PE rod	E 240 – V – X – F – W35
			EI 90 – V – X – F – W35
masonry/	17.5		EI 120 – V – X – F – W35
concrete / Timber	35	35	EI 180 – V – X – F – W35

### A.3.2 Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit

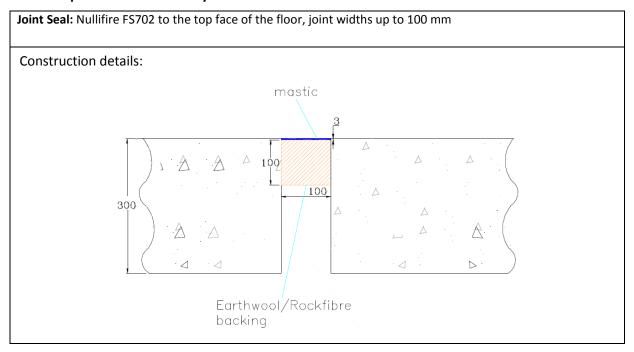


### A.3.2.1

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete	17.5	PE rod	E 240 – T – X – F – W50 EI 90 – T – X – F – W50

### A.4 Rigid floor constructions with minumum thickness 300 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

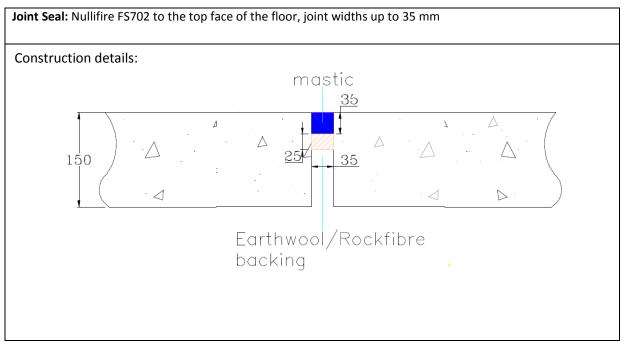


#### A.4.1.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	3 min.	100 mm deep stone wool, mineral fibre 64kg/m³,	51240 H V 5 W400
concrete	3	compressed by 30%	EI 240 – H – X – F – W100

### A.5 Rigid floor constructions with minumum thickness 150 mm

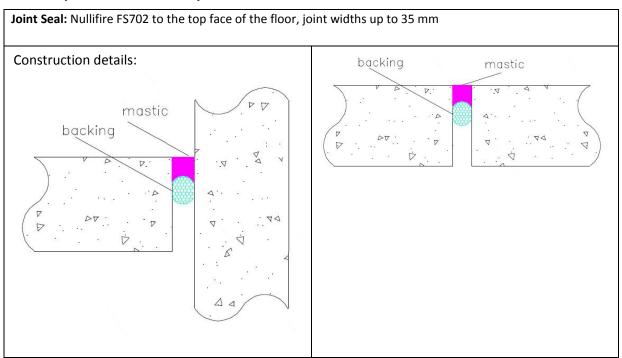
# A.5.1 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only



#### A.5.1.1

Substrate	Depth (mm)	Backing	Classification
Masonry/	35 min.	25 mm deep stone wool, mineral fibre 64kg/m³,	
concrete	33 111111.	compressed by 22%	EI 240 – H – X – F – W35

## A.5.2 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only



#### A.5.2.1

Substrate	Depth (mm)	Backing	Classification
masonry/	30		EI 120 – H – X – F – W35
concrete	50		EI 240 – H – X – F – W35
masonry/	30		E 240 – H – X – F – W35
concrete /			EI 30 – H – X – F – W35
concrete / Steel	50	PE rod	E 240 – H – X – F – W35
			EI 45 – H – X – F – W35
masonry/	30		EI 90 – H – X – F – W35
concrete / timber	50		EI 180 – H – X – F – W35

### ANNEX B – Airborne sound insulation– Nullifire FS702

Configuration	Performance
maate (35mm deep)	Dnew - 59 (-1;-5) dB Rw (1.87m2) - 52 (-1;-6) dB Rw (14.2m2) - 61 (-1;-6) dB
mastic (25mm deep)	Dnew - 58 (-1;-5) dB Rw (1.87m2) - 50 (-0;-4) dB Rw (14.2m2) - 59 (-1;-4) dB