

ETA-Danmark A/S Göteborg Plads 1 DK-2150 Nordhavn Tel. +45 72 24 59 00 Internet www.etadanmark.dk Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011



European Technical Assessment ETA-20/1315 of 2021/01/01

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the Nullifire FS702 construction product: Fire Stopping and Sealing Product: **Product family to which** the above construction Linear Joint and Gap Seals product belongs: Manufacturer: Tremco CPG UK Limited **Torrington Avenue** Coventry CV4 9TJ United Kingdom Manufacturing plant: I/001 **This European Technical** 19 pages including 1 annexes which form an integral part Assessment contains: of the document **This European Technical** EAD 350141-00-1106 for Linear joint and gap seals, September 2017 Assessment is issued in accordance with **Regulation (EU) No** 305/2011, on the basis of: This version replaces:

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

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

- 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 or 600ml sausages. The sealant is gunned into the aperture in the separating element/elements, to a specified depth using various 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 <u>Specification of the intended uses of the product in accordance with the applicable European Assessment</u> Document: EAD 350141-00-1106, September 2017

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 flexible wall and 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/m³.
 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/m³
 c. Flexible walls: The wall must have a minimum thickness of 100 mm and comprise steel or wooden studs lined on both faces with a minimum 2 layers of

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 200 mm.

12.5 mm thick boards.

5) The maximum movement capability of system Nullifire FS702 is \leq 7.5% depending upon application.

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- 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 or by the Technical Assessment Body, 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 Z₁: intended for use at internal conditions with high humidity, excluding temperatures below 0°C. Includes lower categories i.e. Type Z₂.

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

Product-type: Sealant	Intended use: Linear Joint & Gap Seal				
Essential characteristic	Performance				
BWR 2 Safety	y in case of fire				
Reaction to fire	Class E				
Resistance to fire	Annex A				
BWR 3 Hygiene, hea	alth and environment				
Content, emission and/or release of dangerous substances	Use category: IA1, S/W2 Declaration of manufacturer				
Air permeability (material property)	Annex B				
Water permeability (material property)	No performance assessed				
BWR 4 Sa	ifety in use				
Mechanical resistance and stability	No performance assessed				
Resistance to impact/movement	No performance assessed				
Adhesion	No performance assessed				
Durability	Z ₁				
Movement capacity	No performance assessed				
Cycling of perimeter seals for curtain walls	No performance assessed				
Compression set	No performance assessed				
Linear expansion on setting	No performance assessed				
BWR 5 Protect	BWR 5 Protection against noise				
Airborne sound insulation	Annex C				
BWR 6 Energy econo	BWR 6 Energy economy and heat retention				
Thermal properties	No performance assessed				
Water vapour permeability	No performance assessed				

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 https://eur-lex.europa.eu/oj/direct-access.html) of the European Commission¹, 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>

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark A/S prior to CE marking

Issued in Copenhagen on 2021-01-01 by Thomas Bruur

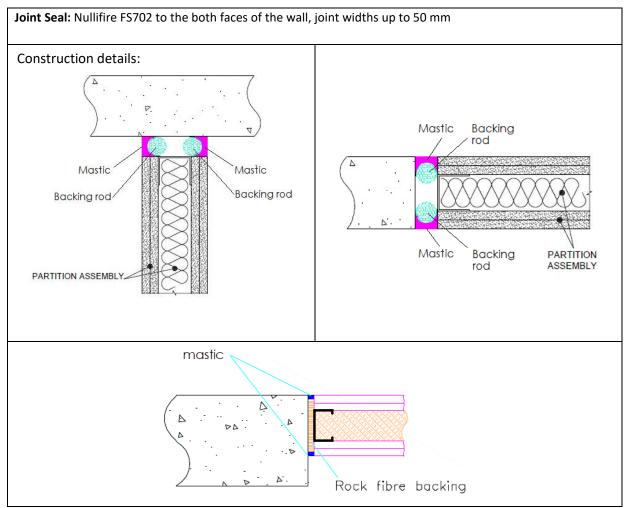
Managing Director, ETA-Danmark

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

ANNEX A – Resistance to Fire Classification – Nullifire FS702

A.1 Flexible or rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm

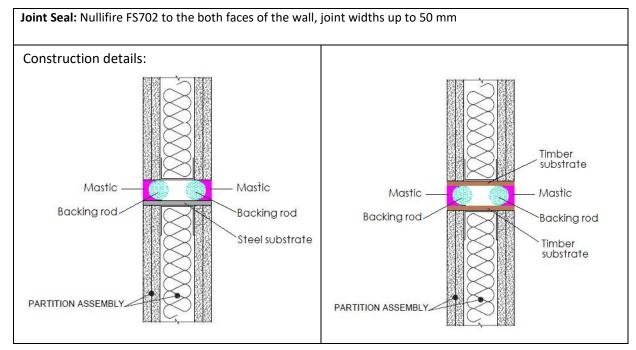
A.1.1 Linear joint or gap seals, between head of flexible wall and soffit of concrete floor and vertical end of flexible wall and concrete wall



A.1.1.1

Substrate	Min. Depth (mm)	Backing	Classification
	10		EI 120 – T – X – F – W 05 to W 10
	25	PE rod	EI 120 – T – X – F – W 05 to W 50
Plasterboard	10		EI 60 – V – X – F – W 05 to W 10
/ concrete	25		El 90 – V – X – F – W 05 to W 50
	6	88 mm deep stone wool, mineral fibre 33kg/m ³	EI 90 – V – X – F – W 05 to W 10
	15	70 mm deep stone wool, mineral fibre 33kg/m ³	E 90 – V – X – F – W 05 to W 35 El 60 – V – X – F – W 05 to W 35

A.1.2 Linear joint or gap seals, vertically or horizontally orientated with backing materials

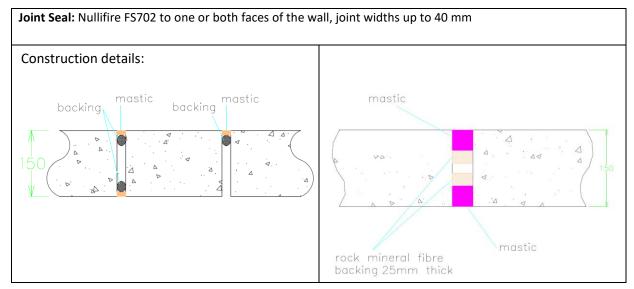


A.1.2.1

Substrate	Min. Depth (mm)	Backing	Classification
	10		E 120 – T – X – F – W 05 to W 10 El 90 – T – X – F – W 05 to W 10
Plasterboard	25		EI 90 – T – X – F – W 05 to W 50
/ Steel			E 90 – V – X – F – W 05 to W 10 El 60 – V – X – F – W 05 to W 10
	25		E 60 – V – X – F – W 05 to W 50 El 45 – V – X – F – W 05 to W50
	10	PE rod	EI 90 – T – X – F – W 05 to W 10
Timber /	25		EI 90 – T – X – F – W 05 to W 50
Timber	10		EI 90 – V – X – F – W 05 to W 10
	25		EI 90 – V – X – F – W 05 to W 50
Plasterboard / Plasterboard	15		EI 60 – V – X – F – W 05 to W 30

A.2 Rigid wall constructions with minimum thickness 150 mm

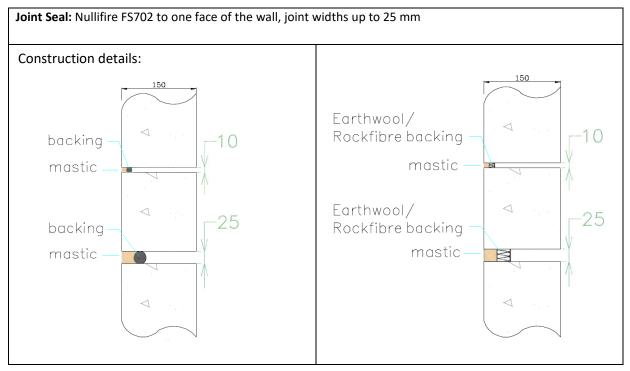
A.2.1 Vertical linear joint or gap seal between rigid walls



A.2.1.1

Substrate	Min. Depth	Backing	Classification
	(mm)		
	10		
	(both sides)		EI 60 – V – X – F – W 05 to W 10
	10	DE rod	E160 - V - X - F - W 0510 W 10
	(one side)	PE rod	
	10		EI 60 – V – X – F – W 05 to W 20
	(both sides)		E100 - V - X - F - W 03 10 W 20
Masonry/	5	25 mm deep Nullifire FI064	EI 240 – V – X – F – W 05 to W 10
concrete	(both sides)	rock mineral fibre 64 kg/m ³ ,	E1240 = V = X = F = W 03 10 W 10
concrete	17	compressed by 30%	EI 240 – V – X – F – W 05 to W 35
	(both sides)	compressed by 50%	EI 240 = V = X = F = W 03 10 W 33
	10		
	(both	25 mm deep stone wool, mineral fibre 33kg/m ³	EI 240 – V – X – F – W 05 to W 10
	sides)		
	40		EI 240 – V – X – F – W 05 to W 40
	(both sides)		

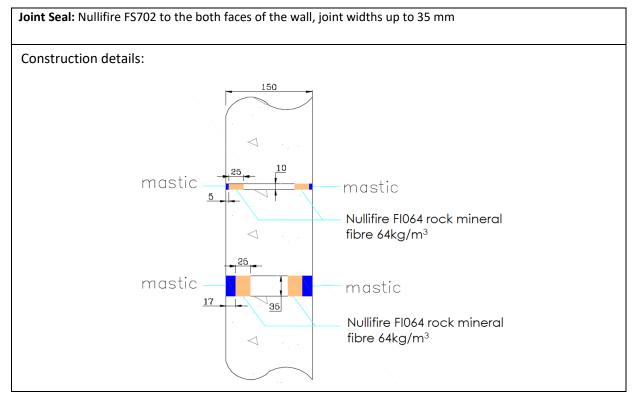
A.2.2 Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit



A.2.2.1

Substrate	Min. Depth (mm)	Backing	Classification
	10		E 240 – T – X – F – W 05 to W 10
	10	PE rod	EI 30– T – X – F – W 05 to W 10
	25		E 240 – T – X – F – W 05 to W 25
Masonry/			EI 120– T – X – F – W 05 to W 25
concrete	10	10 mm deep stone wool,	E 240 – T – X – F – W 05 to W 10
	10	mineral fibre 33kg/m ³	EI 90– T – X – F – W 05 to W 10
	25	25 mm deep stone wool,	E 240 – T – X – F – W 05 to W 25
25	mineral fibre 33kg/m ³	EI 180– T – X – F – W 05 to W 25	

A.2.3 Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit

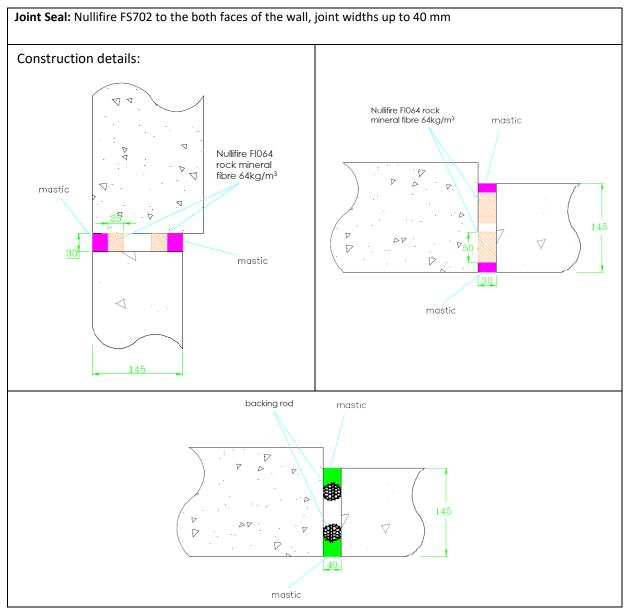


A.2.3.1

Substrate	Min. Depth (mm)	Backing	Classification
Masonry/	5	25 mm deep Nullifire FI064	EI 240 – T – X – F – W 05 to W 10
concrete	17	rock mineral fibre 64kg/m ³ , compressed by 30%	EI 240 – T – X – F – W 05 to W 35

A.3 Rigid wall constructions with minimum thickness 145 mm

A.3.1 Linear joint or gap seals, between head of rigid wall and soffit of concrete floor and vertical end of rigid wall and concrete wall

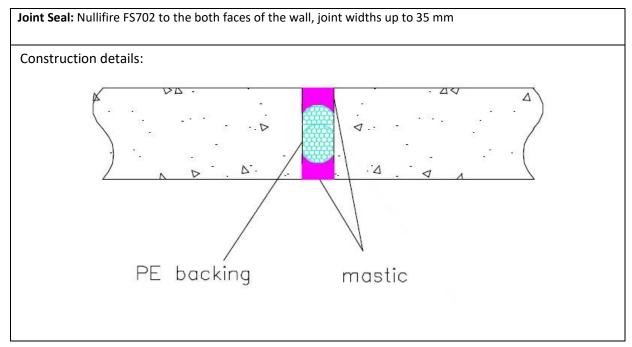


A.3.1.1

Substrate	Min. Depth (mm)	Backing	Classification
	25	25 mm deep Nullifire FI064 rock mineral fibre 64kg/m ³	EI 120 – T – X – F – W 05 to W 30
Masonry/ concrete	15	50 mm deep Nullifire FI064 rock mineral fibre 64kg/m ³	EI 120 – V – X – F – W 05 to W 30
	25	PE backing rod	EI 120 – V – X – F – W 05 to W 40

A.4 Rigid wall constructions with minimum thickness 100 mm

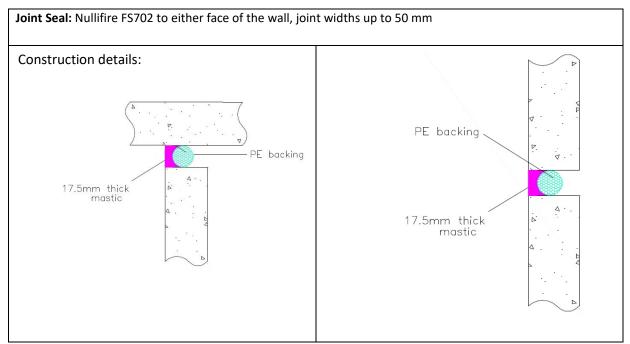
A.4.1 Vertical linear joint or gap seal between rigid walls



A.4.1.1

Substrate	Min. Depth (mm)	Backing	Classification
masonry/ concrete	17.5		EI 240 – V – X – F – W 05 to W 35
masonry/ concrete / Steel	17.5	PE rod	E 240 – V – X – F – W 05 to W 35 El 120 – V – X – F – W 05 to W 35
masonry/ concrete /	17.5		EI 120 – V – X – F – W 05 to W 35
Timber	35		EI 180 – V – X – F – W 05 to W 35

A.4.2 Horizontal linear joint or gap seal in rigid walls or between head of wall and concrete floor soffit

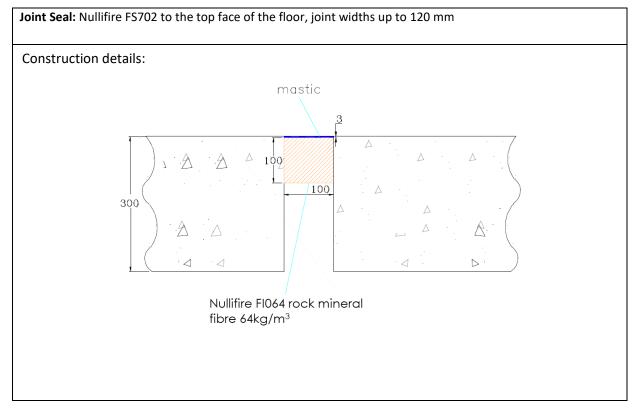


A.4.2.1

Substrate	Min. Depth (mm)	Backing	Classification
masonry/ concrete	17.5	PE rod	E 240 – T – X – F – W 05 to W 50 El 90 – T – X – F – W 05 to W 50

A.5 Rigid floor constructions with minimum thickness 300 mm

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



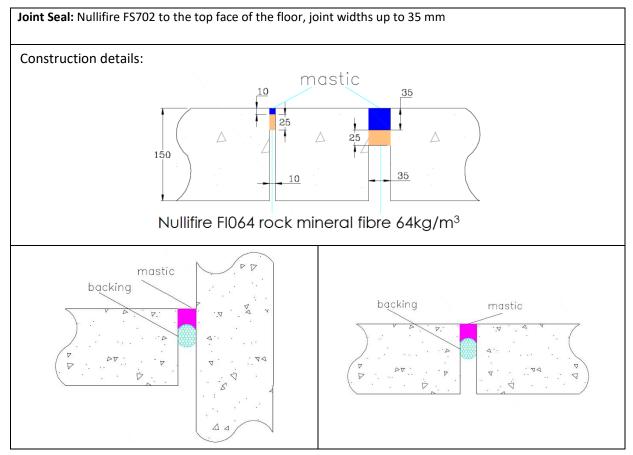
A.5.1.1

Substrate	Min. Depth (mm)	Backing	Classification
Masonry/ concrete	3	100 mm deep Nullifire FI064 rock mineral fibre 64kg/m ³ , compressed by 30%	EI 240 – H – X – F – W 05 to W 100
Masonry/ concrete	3*	100 mm deep Nullifire FI064 rock mineral fibre 64kg/m ³ , compressed by 17%	EI 240 – H – X – F – W 05 to W 120

*Mastic to overlap on each edge of the supporting construction, nominal 1 mm thick by 25 mm wide

A.6 Rigid floor constructions with minimum thickness 150 mm

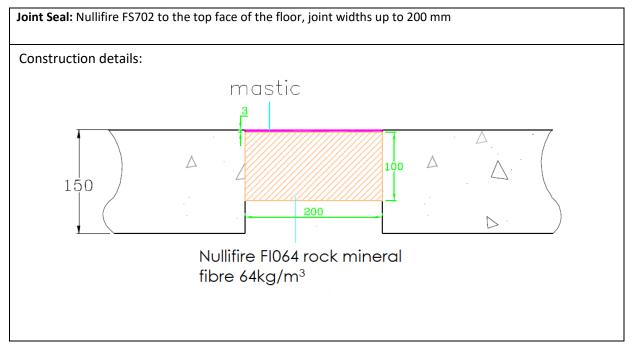
A.6.1 Horizontal linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only



A.6.1.1

Substrate	Min. Depth (mm)	Backing	Classification
	10	25 mm deep Nullifire Fl064	EI 240 – H – X – F – W 05 to W 10
Masonry/	35	rock mineral fibre 64kg/m ³ , compressed by 30%	EI 240 – H – X – F – W 05 to W 35
concrete	30		EI 120 – H – X – F – W 05 to W 35
	50		EI 240 – H – X – F – W 05 to W 35
masonry/	30	PE rod	E 240 – H – X – F – W 05 to W 35 El 30 – H – X – F – W 05 to W 35
concrete / Steel	50	PETOU	E 240 – H – X – F – W 05 to W 35 El 45 – H – X – F – W 05 to W 35
Masonry	30		El 90 – H – X – F – W 05 to W 35
/concrete / timber	50		EI 180 – H – X – F – W 05 to W 35

A.6.2 Horizontal 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.6.2.1

Substrate	Min. Depth (mm)	Backing	Classification
Masonry/ concrete	3	100 mm deep Nullifire FI064 rock mineral fibre 64kg/m ³ , compressed by 5%	El 240 – H – X – F – W 05 to W 200

ANNEX B – Air Permeability - Nullifire FS702

Product tested	Linear mastic sealant panel with 35 mm thick Nullifire FS702 sealant			
Sui	Result			
	Pressure (Pa)	Leakage (m ³ /h)	Leakage (m ³ /m ² /h)	
	50	0.00	0.00	
	100	0.00	0.00	
	150	0.01	0.06	
Poculto undor pogativo	200	0.01	0.06	
Results under negative	250	0.01	0.06	
chamber pressure	300	0.02	0.11	
	450	0.04	0.22	
	600	0.03	0.17	
	2000	0.74	4.11	
	50	0.00	0.00	
	100	0.02	0.11	
	150	0.03	0.17	
Desults under nesitive	200	0.03	0.17	
Results under positive	250	0.02	0.11	
chamber pressure	300	0.03	0.17	
	450	0.03	0.17	
	600	0.05	0.28	
	2000	1.28	7.11	

ANNEX C – Airborne sound insulation– Nullifire FS702

