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

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European Technical Assessment **ETA-20/1338 of 2020/12/22**

General Part

Technical Assessment Body Issuing the European Technical Assessment:	**Element Materials Technology Rotterdam B.V.**
Trade Name of the Construction Product:	**Nullifire FF170, FF177, FF197 Fire Rated Foam**
Product Family to Which the Construction Product Belongs:	EC PAC 35 – Fire Stopping, Fire Sealing & Fire Protective Products. Fire Retardant Products
Manufacturer:	**Tremco CPG UK Limited** Torrington Avenue Coventry CV4 9TJ UK
Manufacturing Plant(s):	H/006
This European Technical Assessment Contains:	13 pages including 1 Annex(es) which form an integral part of this assessment.
This European Technical Assessment is Issued in Accordance with Regulation (EU) No 305/2011, On the Basis Of:	EAD 350141-00-1106 Firestopping and Fire Sealing Products: Linear joint and gap seals, Issued September 2017
This Version Replaces:	ETA 15/0172, issued on 09/10/2019

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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1. Technical Description of the Product

1) Nullifire FF170, FF177, FF197 Fire Rated Foam (Three brands one product) is a Polyurethane Foam used to form linear gap seals where gaps are present in floor and wall constructions.

2) The Nullifire FF170, FF177, FF197 Fire Rated Foam is supplied in 750ml and 880ml canisters

3) Nullifire FF170, FF177, FF197 Fire Rated Foam Three brands of the same product with slightly different delivery methods:-

I. Nullifire FF170- Straw 1 standard straw delivery method

II. Nullifire FF177- Straw 2 HYD adapter delivery method

III. Nullifire FF197- Gunn delivery method

4) The Nullifire FF170, FF177, FF197 Fire Rated Foam may be coated with Nullifire FS711 Sealant for certain applications. Nullifire FS711 Sealant is subject to a separate ETA.

5) 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.

The use catagory of FF170, FF177, FF197 Fire Rated Foam in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3.

2. Specification of the Intended Use(s) in Accordance with the Applicable European Assessment Document (hereinafter EAD)

2.1 Intended Use

The intended use of system Nullifire FF170, FF177, FF197 Fire Rated Foam is to reinstate the fire resistance performance of gaps in and joints between joints in rigid wall and floor constructions.

1) The specific elements of construction that the system Nullifire FF170, FF177, FF197 Fire Rated Foam may be used to provide a gap or joint seal in, are as follows:

Rigid Floors:	The floor must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 600 kg/m^3.
Rigid walls:	The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 600 kg/m3.
Rigid walls:	The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 600 kg/m3.

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

2) The system Nullifire FF170, FF177, FF197 Fire Rated Foam may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).

3) The provisions made in this European Technical Assessment are based on an assumed working life of the Nullifire FF170, FF177, FF197 Fire Rated Foam Sealant of 10 years, 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.

2.2 Use Category

Type Y^2: Intended for use at temperatures below 0^0C, but with no exposure to rain or UV.

3. Performance of the Product and References to the Methods Used for its Assessment

BWR	Characteristic	Assessment of Characteristic
BWR 2 Safety in case of fire		
	Reaction to fire	See Clause 1.1
	Resistance to fire	See Clause 1.2
BWR 3 Hygiene, Health and the Environment		
	Release of dangerous substances	See Clause 2.1
	Durability and serviceability	See Clause 2.2

3.1 Safety in case of Fire

3.1.1 Reaction to Fire

System Astro Intu Mastic is classified **E** in accordance with EN13501-1

3.1.2 Resistance to Fire

See Annex A

3.2 Hygiene, Health and the Environment

3.2.1 Release of Dangerous Substances

Nullifire / Temco Illbruck Astroflame (fireseals) Limited has presented a declaration that Nullifire FF170, FF177, FF197 Fire Rated Foam (Three brands one product) does not contain any substance of high concern with regards to REACH Regulations and are compliant with the requirements reference to http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm

Confirmation has further been declared that 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 labeling of dangerous substances) are stated in the Nullifire FF170, FF177, FF197 Fire Rated Foam (Three brands one product) safety data sheets (according to91/155/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 of67/548/EEC.

In addition to the specific clauses relating to dangerous substances contained in this European technical approval, 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.

3.2.2 Durability and Serviceability

Nullifire FF170, FF177, FF197 Fire Rated Foam (Three brands one product) has been tested in accordance with EOTA Technical Report - TR024 – Edition November 2006, for the type Y2 use category specified in EAD 350141-00-1106 , and the results of the tests have demonstrated

suitability for penetration seals intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0°C, without exposure to rain or UV.

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 of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) given in the following table apply:

Products	Intended use/s	System
Fire stopping and fire sealing products	For fire compartmentation and / or fire protection or fire performance	System 1

5. Technical Details Necessary for the Implementation of the AVCP System, as Provided for in the Applicable EAD

5.1 Tasks for the Manufacturer

5.1.1 Factory production control

The manufacturer has a Factory Production Control System (FPC) and exercises permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer are documented in a systematic manner in the form of policies, procedures and work instructions. This FPC system ensures that the product is in conformity with this European Technical Assessment.

The manufacturer shall only use raw materials or components that are supplied with the relevant inspection documents as laid down in the Control Plan. All incoming raw materials shall be subject to inspection, verification, controls and tests (as applicable) by the manufacturer.

The Control Plan, Reference, 4.10.13, which is part of the technical documentation of this European Technical Assessment includes details of the extent, nature and frequency of testing and controls to be performed within the FPC system and has been agreed between the Assessment holder and Element Materials Technology Rotterdam B.V. Any changes to the FPC; Control Plan or the Product shall only be made following approval by Element Materials Technology Rotterdam B.V.

The results of FPC are recorded and evaluated. These records include but are not limited to:

- Product specification and designation, basic materials and components
- Type(s) of Control testing
- Date of manufacture of the product and date of testing of the product or basic material and components;
- Result of control and testing and, if appropriate, comparison with requirements;
- Signature of the person responsible for FPC

These records shall be presented to Element Materials Technology Rotterdam B.V. upon request.

The manufacturer shall, on the basis of a contract, involve a body (bodies) which is (are) approved for the tasks referred to in section 5.2 of this ETA. For this purpose, the "Control Plan" referred to in sections 5.1.1 and 5.2 shall be handed over by the manufacturer to the approved body or bodies involved.

5.1.2 Other tasks of manufacturer

5.1.2.1 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 linear joint 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.

The manufacturer shall, on the basis of a contract, involve a body which is approved for the tasks referred to in section 3.1 in the field of linear joint seals seals in order to undertake the actions laid down in section 3.3. For this purpose, the "control plan" referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the approved body or bodies involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this European technical assessment.

5.2 Tasks of notified body

5.2.1 Initial Type Testing of the Product

For initial type-testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between TAB and the Notified Body.

5.2.2 Initial Inspection of Factory and of Factory Production Control

The Notified Body shall ascertain that, in accordance with the provisions laid down in the Control Plan, Reference 4.10.13, the factory and the factory production control are suitable to ensure continuous and orderly manufacturing of the product according to the specifications mentioned in Section 2, as well as to the Annexes to this European Technical Assessment.

5.2.3 Continuous Surveillance

The Notified Body shall visit the factory twice a year for regular inspection. It shall be verified that the system of factory production control and the specified manufacturing process is maintained in accordance with the provisions of this European Technical Assessment and the Control Plan.

Continuous surveillance and assessment of factory production control shall be performed in accordance with the provisions laid down in the agreed Control Plan.

The results of product certification and continuous surveillance shall be made available on demand by the certification or inspection body or to Element Materials Technology Rotterdam B.V. In cases where the provisions of this European Technical Assessment and the prescribed Control Plan are no longer fulfilled, the conformity certificate shall be withdrawn and the relevant authority/ies shall be informed.

Issued in Amsterdam, Netherlands on 2020/12/22

By

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Deputy TAB Manager

Annex A

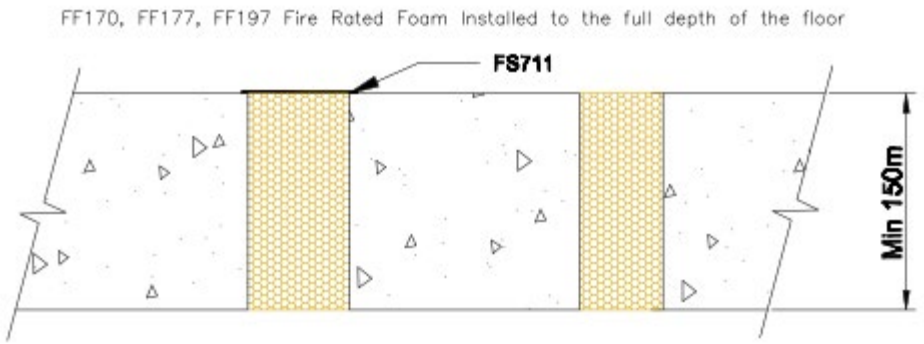
Resistance to Fire Classification of Nullifire FF170, FF177, FF197 Fire Rated Foam

A.1 Rigid floor constructions according to 2.2.1 with floor thickness of minimum 150 mm

A.1.1 Linear joint or gap seal, horizontally orientated

Construction details:

- Nullifire FF170, FF177, FF197 Fire Rated Foam Instaled to the full depth of the floor
- Nullifire FS711 DFT 1mm to the unexposed face (where required)



A.1.1.1

Substrates	Foam Depth	Coating	Classification
Concrete / Concrete	150mm	N/A	**EI90 – H – X – F – W 00-30**
			EI240 – H – X – F – W 00-05
		1mm Nullifire FS711 to the upper face	**EI240 – H – X – F – W 00-05**
			EI60 – H – X – F – W 00-40

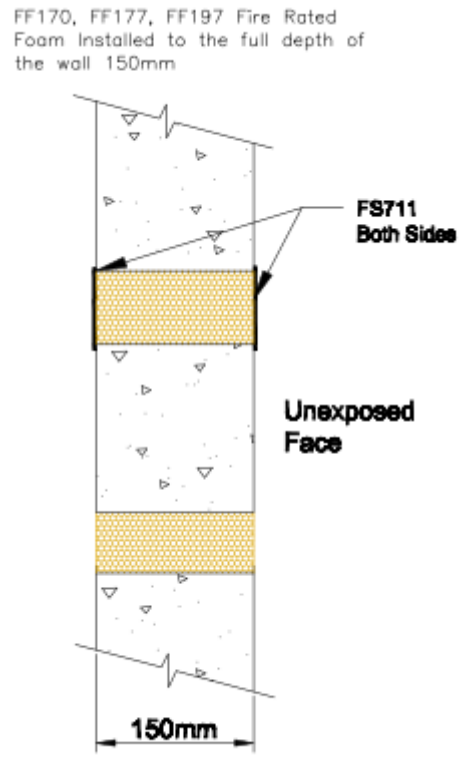
Resistance to Fire Classification of Nullifire FF170, FF177, FF197 Fire Rated Foam

A.2 Rigid wall constructions according to 2.2.1 with wall thickness of minimum 150 mm

A.2.1 Linear joint or gap seal, vertically orientated

Construction details:

- Nullifire FF170, FF177, FF197 Fire Rated Foam Instaled to the full depth of the wall
- Nullifire FS711 DFT 1mm to the both faces (where required)



A.2.1.1

Substrates	Foam Depth	Coating	Classification
Concrete / Concrete	150mm	N/A	**EI240 – V – X – F – W 00-05**
			EI90 – V – X – F – W 00-30
			EI60 – V – X – F – W 00-40
		1mm Nullifire FS711 to both faces	**EI240 – V – X – F – W 00-20**

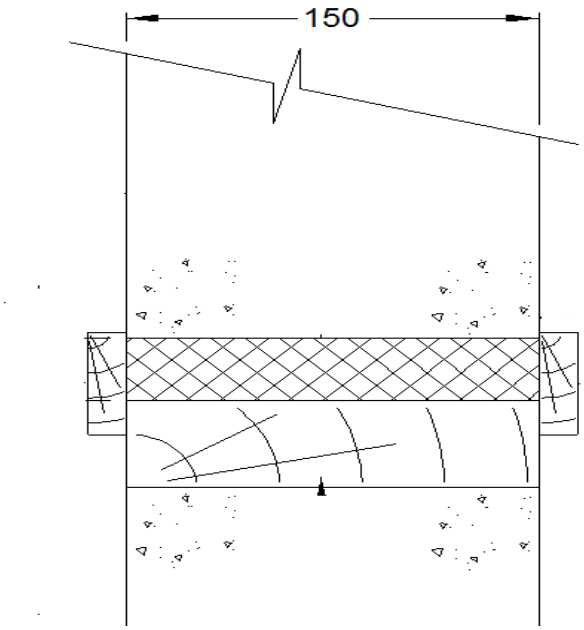
Resistance to Fire Classification of Nullifire FF170, FF177, FF197 Fire Rated Foam

A.3 Rigid wall constructions according to 2.2.1 with wall thickness of minimum 150 mm

A.3.1 Linear joint or gap seal, vertically orientated

Construction details:

- Nullifire FF170, FF177, FF197 Fire Rated Foam Instaled to the full depth of the wall
- Softwood minimum density 510kg/m^3



A.3.1.1

Substrates	Foam Depth	Coating	Classification
Concrete / Softwood	150mm	N/A	**EI180 – V – X – F – W 00-10**
		Softwood Architrave both faces 50mm wide x 15mm thick	**EI180 – V – X – F – W 00-30**

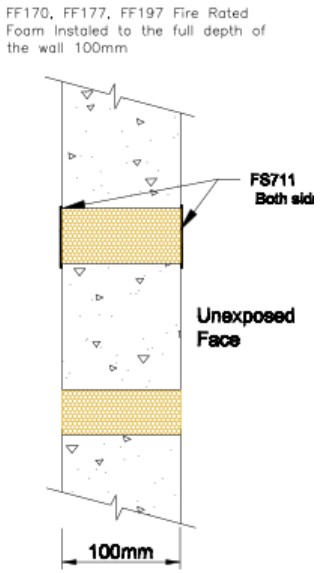
Resistance to Fire Classification of Nullifire FF170, FF177, FF197 Fire Rated Foam

A.4 Rigid wall constructions according to 2.2.1 with wall thickness of minimum 100 mm

A.4.1 Linear joint or gap seal, vertically orientated

Construction details:

- Nullifire FF170, FF177, FF197 Fire Rated Foam Instaled to the full depth of the wall
- Nullifire FS711 DFT 1mm to both faces (where required)



A.4.1.1

Substrates	Foam Depth	Coating	Classification
Concrete / Concrete	100mm	N/A	**EI180 – V – X – F – W 00-05**
			EI45 – V – X – F – W 00-30
		1mm Nullifire FS711 to both faces	**EI180 – V – X – F – W 00-05**