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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-21/0212 of 2021/01/15

### 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 construction product:**

Firebreak 44  
Sealfire W300  
Sealfire W350  
(3 references for the same product)

**Product family to which the above construction product belongs:**

Fire Stopping and Sealing Product:  
• Penetration Seals

**Manufacturer:**

Neutron Fire Technologies Limited  
Shire Hall  
Quay Street  
Lostwithiel  
Cornwall  
PL22 0BS  
[www.neutronfire.com](http://www.neutronfire.com)

**Manufacturing plant:**

B/001

**This European Technical Assessment contains:**

12 pages including 1 annex which form an integral part of the document

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

EAD 350454-00-1104, September 2017

**This version replaces:**

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

1 **Technical description of the product**

- 1) Firebreak 44 / Sealfire W300/350 (3 references for the same product) is a fire resistant, expanding foam used to form a penetration seal around metallic 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. Firebreak 44, Sealfire W300 and Sealfire W350 are identical products but are branded and packaged differently.
- 2) The Firebreak 44 / Sealfire W300/350 is supplied contained, premixed within steel canisters providing a yield of up to 38 litres. The foam is sprayed into the aperture in or between the separating element/elements and where appropriate around the service or services, to a specified depth utilising various backing materials or in some cases no backing material.
- 3) Neutron Fire Technologies Limited has presented a declaration that Firebreak 44 / Sealfire W300/350 are compliant with the requirements of current EU legislation on Chemical Safety and specifically that:
  - All requirements of the REACH regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals with its most recent adaptations to the technical progress are met:
  - The products don't contain any substance requiring an authorisation according to Annex XIV of this regulation and no substance of the candidate list of substances of very high concern above the acceptable limit of 0.1 %.
  - Further the requirements of annex XVII no. 56 for mixtures containing methylenediphenyl-diisocyanate are met, according to the regulation (EC) No 552/2009 (packaging containing protective gloves and being marked with additional precautionary text).
  - The safety data sheets are compliant with annex II of the REACH regulation in its most recent version, according to regulation (EU) No 453/2010.
  - All requirements of the EU DPD directive 1999/45/EC concerning the classification, packaging and labelling of Dangerous Preparations, including amendments are met:
  - All dangerous chemical substances  $\geq 1.0$  % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances  $\geq 0.1$  % w/w (Status: annexe VI, table 3.2 of the CLP regulation and regulation (EC) No 790/2009 - the first adaptation to the technical progress) are stated in the safety data sheets.
  - All these substances have been considered for the classification and labelling of the products according to the DPD directive.

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 following information regarding the product contained within the aerosol before installation and the finished product has also been provided:

**Product in aerosol in liquid state before final chemical reaction to produce the foam once the contents have been extruded**

- No ingredients contained have been classified as Mutagenic
- The aerosol contains MDI (Isocyanates) which have been classified as "POSSIBLE" carcinogens
- TCPP (Tris (chloro propyl) phosphate) is included as a fire retardant. CAS number 13674 – 84 – 5
- No microbiological agents are contained

**Cured foam once the final polymerising reaction has taken place after the contents have been extruded.**

- After the reaction the contents have changed into a different final product. The Isocyanates have reacted to form the foam and are no longer there in their own right. They have changed into the foam which is safe.
- The fire retardants still remain but they are “Locked-in” to the cured foam.

**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 Firebreak 44 / system Sealfire W300/350 is to reinstate the fire resistance performance of rigid wall constructions constructions where they are penetrated by various metal pipe services with and without combustible insulation and electrical cables.
- 2) The specific elements of construction that the system Firebreak 44 / Sealfire W300/350 may be used to provide a penetration seal in, are as follows:

- a. 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 Firebreak 44 / system Sealfire W300/350 may be used to provide a penetration seal with specific single insulated metal pipes, uninsulated metal pipes and with specific electrical cables, single or in a bundle (for details see Annex A).
- 4) Apertures in the separating element shall be maximum 100 mm diameter. Depending upon the requirements specified in Annex A the annular space/gap around the services shall be infilled with stone wool insulation material backing material and Firebreak 44 / Sealfire W300/350 foam or just with Firebreak 44 / Sealfire W300/350 foam. Blank seals (without services) are not permitted. For full details, see Annex A.
- 5) Pipes shall be supported at maximum 350 mm away from both faces of the wall construction.
- 6) The provisions made in this European Technical Approval are based on an assumed working life of the Firebreak 44 / Sealfire W300/350 of 10 years, provided that the conditions laid down in the manufacturer's instructions/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 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 Y<sub>2 (-5°/70°C)</sub>: Intended for use at internal or external sheltered conditions with high or other humidity classes, including temperatures below 0°C but without exposure to rain or UV. Includes classes Z<sub>1</sub> & Z<sub>2</sub>.

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

Product-type: Sealant	Intended use: Penetration Seal
Essential characteristic	Performance
Mechanical resistance and stability	
None	Not relevant
Safety in case of fire	
Reaction to fire	No performance assessed
Resistance to fire	Annex A
Hygiene, health and environment	
Air permeability (material property)	No performance assessed
Water permeability (material property)	No performance assessed
Release of dangerous substances	Declaration of manufacturer
Safety in use	
Mechanical resistance and stability	No performance assessed
Resistance to impact/movement	No performance assessed
Adhesion	No performance assessed
Protection against noise	
Airborne sound insulation	No performance assessed
Energy economy and heat retention	
Thermal properties	No performance assessed
Water vapour permeability	No performance assessed
General aspects relating to fitness for use	
Durability and serviceability	Y <sub>2</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 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 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

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 2021-01-15 by

Thomas Bruun

Managing Director, ETA-Danmark

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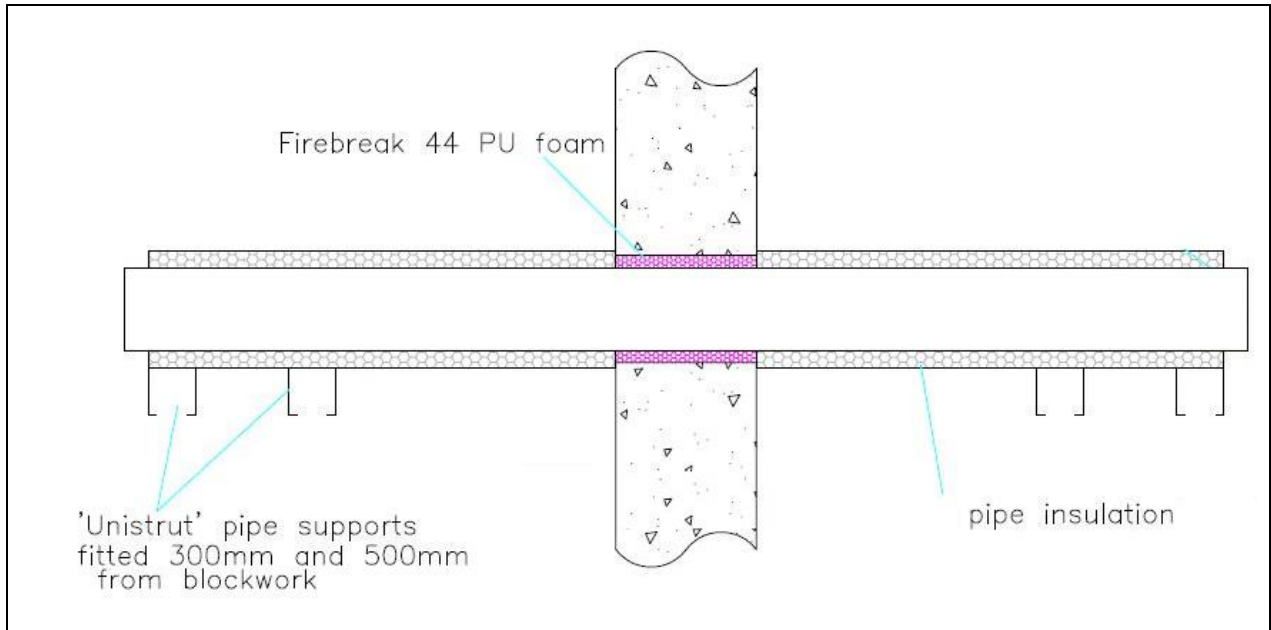
<sup>1</sup> Official Journal of the European Communities L178/52 of 14/7/1999



## ANNEX A – Resistance to Fire Classification – Firebreak 44 / Sealfire W300/350

### A.1 Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm

#### A.1.1 Penetration seal with metal pipe including continued interrupted (CI) or min. 500 mm long local interrupted (LI) combustible insulation

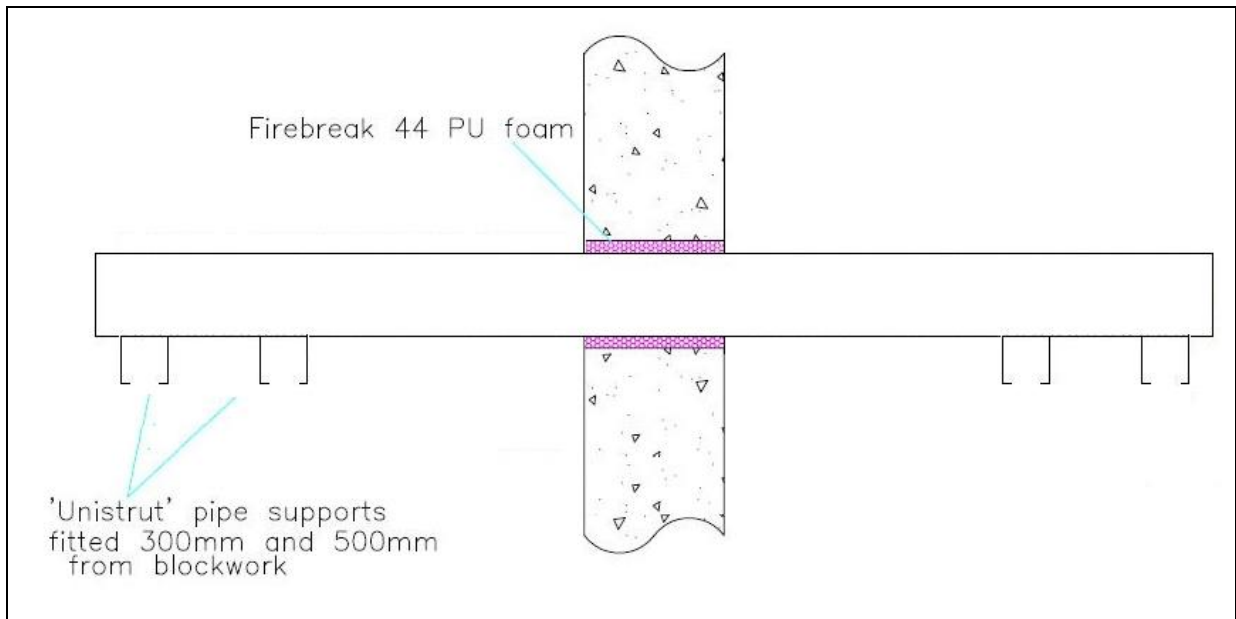


#### A.1.1.1

Firebreak 44 / Sealfire W300/350 Penetration Seals in Rigid Walls 150 mm thick (min.)				
Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
100 diameter	Minimum 150 mm deep Firebreak 44 / Sealfire W300/350	Single steel pipe 89 mm diameter and 5.0 – 14.2 mm wall, insulated with 25 mm thick 'Class B*' Nitrile Rubber insulation	Central	<b>EI 90 C/U</b>
50 mm diameter		Single copper pipe 35 mm diameter and 1.2 – 14.2 mm wall, insulated with 19 mm thick 'Class B*' Nitrile Rubber insulation		

\* Classified to EN 13501-1

**A.1.2 Penetration seal with uninsulated metal pipe**

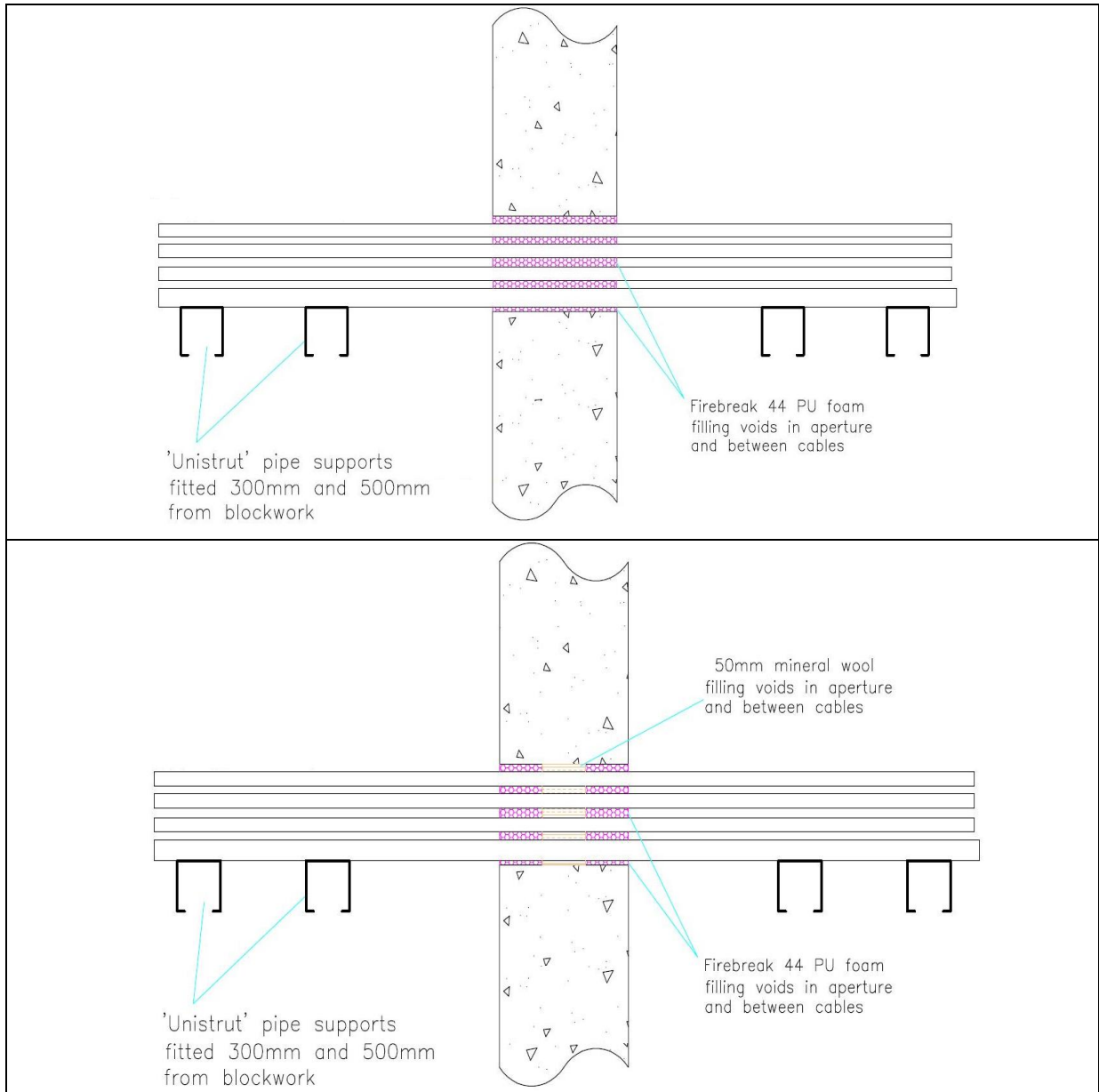


**A.1.2.1**

**Firebreak 44 / Sealfire W300/350 Penetration Seals in Rigid Walls 150 mm thick (min.)**

Aperture size (mm)	Seal composition	Service(s)	Position of service(s)	Classification
100 diameter	Minimum 150 mm deep Firebreak 44 / Sealfire W300/350	Single steel pipe 89 mm diameter and 5.0 – 14.2 mm wall	Central	<b>E 90 C/U</b> <b>EI 30 C/U</b>
50 diameter		Single copper pipe 35 mm diameter and 1.2 – 14.2 mm wall		<b>E 90 C/U</b> <b>EI 15 C/U</b>

### A.1.3 Penetration seal with cables



## A.1.3.1

<b>Firebreak 44 / Sealfire W300/350 Penetration Seals in Rigid Walls 150 mm thick (min.)</b>				
<b>Aperture size (mm)</b>	<b>Seal composition</b>	<b>Service(s)</b>	<b>Position of service(s)</b>	<b>Classification</b>
100 diameter	50 mm deep Firebreak 44 / Sealfire W300/350 to both faces of 50 mm deep Stone wool (90 kg/m <sup>3</sup> ) backing	Bundle of up to 15 x 15 mm diameter 'A3' + 4 x 20 mm diameter 'H6943 XL2 525 H' armoured electrical cables	Central	<b>EI 120</b>
50 mm diameter		Bundle of up to 3 x 15 mm diameter 'A3' + 1 x 20 mm diameter 'H6943 XL2 525 H' armoured electrical cables		
	150 mm deep Firebreak 44 / Sealfire W300/350	Bundle of up to 7 x 15 mm diameter 'A3' + 1 x 20 mm diameter 'H6943 XL2 525 H' armoured electrical cables		
40 mm diameter		Single 30 mm H6943 XL735 H' armoured electrical cable		<b>E 120</b> <b>EI 90</b>

A3 cable = 5 x 1.5 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 15 mm diameter

H6943 XL2 525 H cable = 16 mm<sup>2</sup> core, armoured electrical cable to BS 5476: 1997 with XLPE insulation, PVC sheath and 20 mm diameter

H6943 XL735 H cable = 35 mm<sup>2</sup> core, armoured electrical cable to BS 5476: 1997 with XLPE insulation, PVC sheath and 30 mm diameter