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No 305/2011 of the European Parliament and of the Council of 9 March 2011



European Technical Assessment ETA-23/0161 of 2023/09/21

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:

Siderise FR-A Fire Rated Acrylic Sealant

Product family to which the above construction product belongs:

Fire Stopping and Sealing Product:

Linear Joint and Gap Seals

Manufacturer:

Siderise Insulation Limited Forge Industrial Estate, Maesteg, Mid Glamorgan, CF34 0AH UK

Manufacturing plant:

A/003

This European Technical Assessment contains:

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

This European Technical Assessment is issued in accordance with Regulation (EU) No

EAD 350141-00-1106

This version replaces:

The ETA with the same number issued on 2023-03-09

Page 2 of 16 of European Technical Assessment ETA-23/0161 issued on 2023-09-21

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Page 3 of 16 of European Technical Assessment ETA-23/0161 issued on 2023-09-21

Table of Contents

ı.	S	PECI	IFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT	. 4
	1	Te	echnical description of the product	. 4
	2		pecification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter AD): EAD 350141-00-1106, September 2017	. 5
	3	P	erformance of the product and references to the methods used for its assessment	. 6
	4		SSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE	. 7
	5	Te	echnical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD	. 7
ΑI	NNEX	A –	Resistance to Fire Classification – Siderise FR-A Fire Rated Acrylic Sealant	. 8
	A.1		Flexible wall constructions according to 2 1) with wall thickness of minimum 75 mm and minimum 1 x layer of 12.5 mm board per side	
	Α	.1.1	Linear joint seals, between head of flexible wall and soffit of concrete floor and vertical end of flexible wall and concrete wall	. 8
	A.2		Flexible wall constructions according to 1.2.1 with wall thickness of minimum 100 mm and minimum 2 x layer of 12.5 mm board p side	
	Α	.2.1	Linear joint seals, between head of flexible wall and soffit of concrete floor and vertical end of flexible wall and concrete wall	. 9
	Α	.2.2	Flexible wall construction with wall thickness of minimum 100 mm and timber substrates and architraves	10
	Α	.2.2.	.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials	10
	A.2.3	3	Flexible wall construction with wall thickness of minimum 100 mm and timber substrates	11
	Α	.2.3.	.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials	11
	A.2.4	4	Flexible wall construction with wall thickness of minimum 100 mm and steel substrates	12
	Α	.2.4.	.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials	12
	Α	.2.5	Linear joint or gap seals, vertically or horizontal orientated with backing materials	13
	A.3		Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm	14
	Α	.3.1	Linear joint or gap seal, between head of rigid wall and soffit of concrete floor / between rigid walls	14
	A.4		Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm	15
	Α	.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.	15
	Α	.4.2	Linear joint or gap seals, in or between rigid floors	16

I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) Siderise FR-A Fire Rated Acrylic Sealant is an intumescent acrylic 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 Siderise FR-A Fire Rated Acrylic Sealant is supplied in liquid form contained within 310 & 380 ml cartridges and 600 ml foil packs. The sealant is gunned into the aperture in the separating element/elements and around the service or services, to a specified depth utilising a backing material.
- 3) Siderise FR-A Fire Rated Acrylic Sealant contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant has submitted a written declaration that Siderise FR-A Fire Rated Acrylic Sealant 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.
- 5) The use category of Siderise FR-A Fire Rated Acrylic Sealant in relation to BWR 3 (Hygiene, health and environment) is IA1.

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): EAD 350141-00-1106, September 2017

Detailed information and data is given in Annex A.

The intended use of system Siderise FR-A Fire Rated Acrylic Sealant 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.

1) The specific elements of construction that the system Siderise FR-A Fire Rated Acrylic Sealant may be used to provide a gap or joint seal in, are as follows:

Flexible walls: The wall must have a minimum thickness of 75 mm and comprise steel or

wooden studs lined on both faces with minimum 1 layers of 12.5 mm thick boards. The wall is permitted with or without insulation material between the

boards.

Rigid walls: The wall must have a minimum thickness of 75 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 system Siderise FR-A Fire Rated Acrylic Sealant may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).

Siderise Insulation Limited Fire Protection Systems which involve linear seals on both sides of a flexible wall may also be used in the situation where the linear seal is on one side of the wall only and the remaining side of the wall is not punctured at the same point. All fire integrity and thermal insulation ratings for such single-sided linear seals remain the same as for the equivalent double-sided linear seal.

- 3) The maximum permitted joint/gap width for system Siderise FR-A Fire Rated Acrylic Sealant is 100 mm.
- The maximum movement capability of system Siderise FR-A Fire Rated Acrylic Sealant is \leq 7.5% (not tested to EAD 350141-00-1106).
- The provisions made in this European Technical Assessment are based on an assumed working life of the Siderise FR-A Fire Rated Acrylic Sealant of 30 years, provided that the conditions laid down in sections 4.2/5.1/5.2 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.
- Type Z₂: Intended for uses in internal conditions with humidity lower than 85 % RH excluding temperatures below 0°C, without exposure to rain or UV.

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	in case of fire	
Reaction to fire	Class D-s1, d1	
Resistance to fire	Annex A	
BWR 3 Hygiene, heal	th and environment	
Content, emission and/or release of dangerous substances	Use categories: IA1 Declaration of manufacturer	
Air permeability (material property)	No performance assessed	
Water permeability (material property)	No performance assessed	
BWR 4 Safety in use		
Mechanical resistance and stability	No performance assessed	
Resistance to impact/movement	No performance assessed	
Adhesion	No performance assessed	
Durability	Z ₂	
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 Protectio	n against noise	
Airborne sound insulation	Rw(C;Ctr)= 62 (-1;-5) dB*	
BWR 6 Energy econom	ny and heat retention	
Thermal properties	No performance assessed	
Water vapour permeability	No performance assessed	

^{*} At 12 mm depth

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 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 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 2023-09-21 by

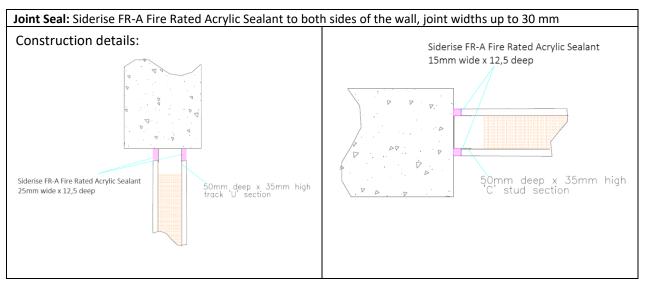
Thomas Bruun

Managing Director, ETA-Danmark

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

ANNEX A – Resistance to Fire Classification – Siderise FR-A Fire Rated Acrylic Sealant

- A.1 Flexible wall constructions according to 2 1) with wall thickness of minimum 75 mm and minimum 1 x layer of 12.5 mm board per side
- A.1.1 Linear joint seals, between head of flexible wall and soffit of concrete floor and vertical end of flexible wall and concrete wall

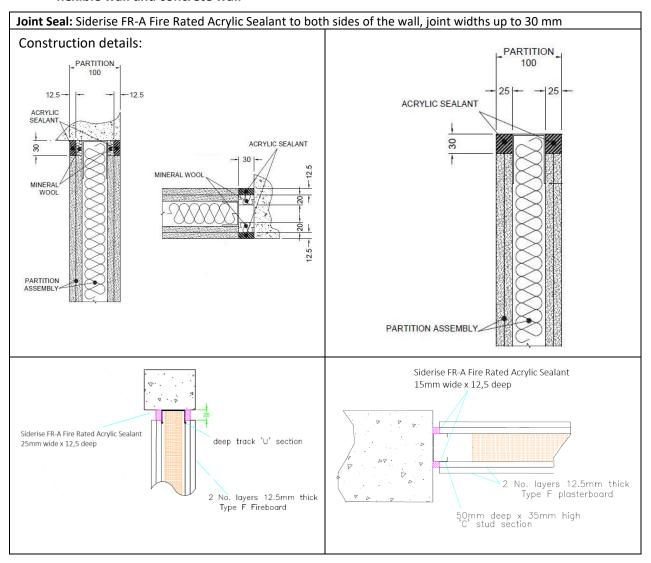


A.1.1.1

Substrate	Depth (mm)	Backing (minimum)	Classification
Plasterboard /	12.5 min.	50 mm steel partition head track/ stud	E 60 – T – X – F – W 25 EI 45 – T – X – F – W 25
concrete			E 60 - V - X - F - W 15 EI 45 - V - X - F - W 15

A.2 Flexible wall constructions according to 1.2.1 with wall thickness of minimum 100 mm and minimum 2 x layer of 12.5 mm board per side

A.2.1 Linear joint seals, between head of flexible wall and soffit of concrete floor and vertical end of flexible wall and concrete wall

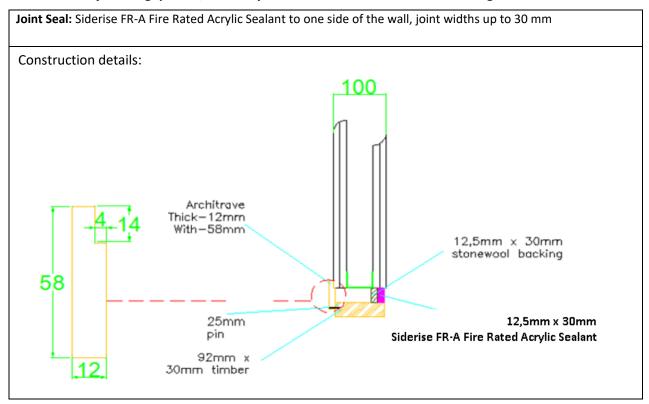


A.2.1.1

Substrate	Depth (mm)	Backing (minimum)	Classification
Disstantage	12.5 min.	12.5 mm Stone wool 35 kg/m³ plus 50 mm steel partition head track	EI 120 – T – X – F – W 30
Plasterboard /		20 mm Stone wool 35 kg/m³	EI 120 – V – X – F – W 30
concrete	25 min.	50 mm steel partition head track	EI 120 – T – X – F – W 30
	12.5 min.	/stud	EI 90 – T – X – F – W 25
			EI 90 – V– X – F – W 15

A.2.2 Flexible or rigid wall construction with wall thickness of minimum 100 mm and timber substrates and architraves

A.2.2.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials

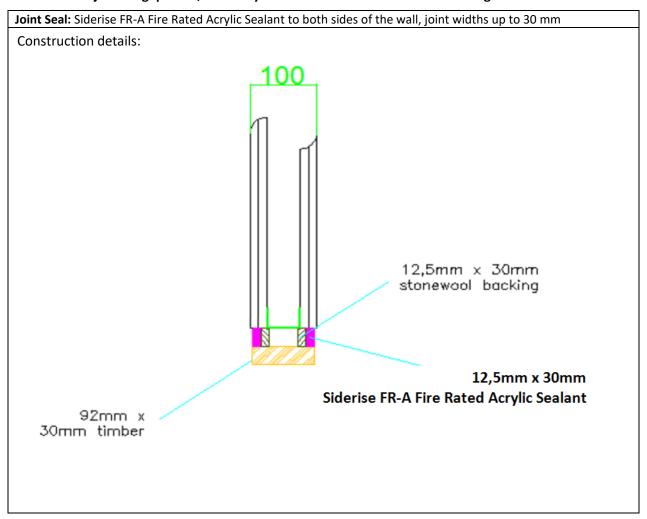


A.2.2.2

Substrate	Depth (mm)	Facing (minimum)	Backing	Classification
		Single sided linear seals in flexible or rigid walls against wooden frames		EI 60 – V – X – F – W 30
Flexible or rigid wall / Timber	12.5 min.	covered with architraves on the other side fixed with 25 mm steel pins at nominal 300 mm centres.	Stonewool, 12.5 mm deep min. 35 kg/m ³	EI 60 – T – X – F – W 30

A.2.3 Flexible or rigid wall construction with wall thickness of minimum 100 mm and timber substrates

A.2.3.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials

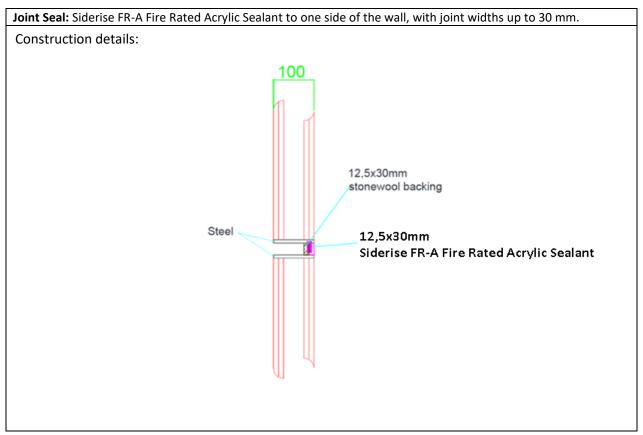


A.2.3.2

Substrate	Depth (mm)	Backing	Classification
Flexible or rigid wall /	12.5 min.	Stonewool, 12.5 mm deep min. 35	E 90 - V - X - F - W 30 EI 60 - V - X - F - W 30
Timber		kg/m³	E 90 – T – X – F – W 30 EI 60 – T – X – F – W 30

A.2.4 Flexible or rigid wall construction with wall thickness of minimum 100 mm and steel substrates

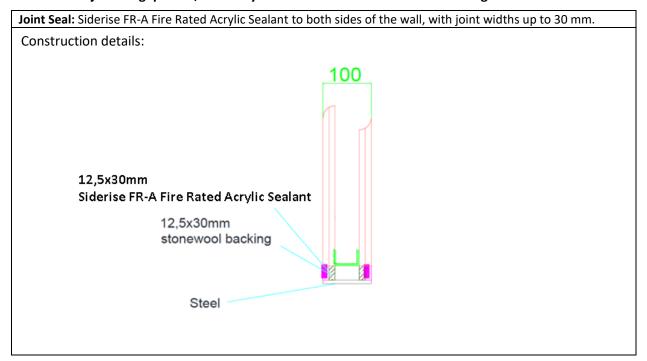
A.2.4.1 Linear joint or gap seals, vertically or horizontal orientated with backing materials



A.2.4.2

Substrate	Depth (mm)	Backing	Classification
Steel / steel	12.5 min.	Stonewool, 12.5 mm deep min. 35	E 120 - V - X - F - W 30 EI 30 - V - X - F - W 30
steery steer	12.3	kg/m³	E 120 – T – X – F – W 30 EI 30 – T – X – F – W 30

A.2.5 Linear joint or gap seals, vertically or horizontal orientated with backing materials



A.2.5.1

Substrate	Depth (mm)	Backing	Classification
Flexible or	10.5	Stonewool, 12.5 mm deep min. 35	E 120 – V – X – F – W 30 ¹ EI 30 – V – X – F – W 30 ²
rigid wall / Steel	12.5 min.	kg/m³	E 120 – T – X – F – W 30 ³ EI 45 – T – X – F – W 30 ⁴

^{*}Additional and for information only.

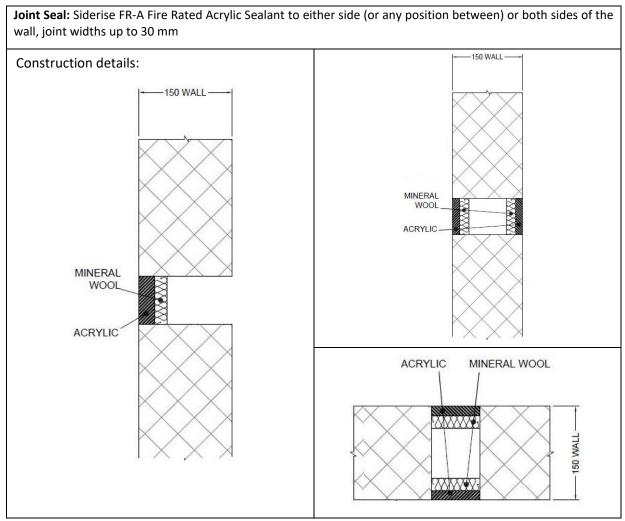
The classifications provided in Table A.2.5.1 consider the insulation performance of all components within the firestopping system as per the requirements of EN 1366-4. This includes temperature evaluation of the steel substrate.

In relation to each of the above classifications, temperatures recorded on the seal (exclusive of the supporting construction) exceeded the maximum allowable after the following times (rounded down):

¹120, ²90, ³120, ⁴60

A.3 Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm

A.3.1 Linear joint or gap seal, between head of rigid wall and soffit of concrete floor / between rigid walls

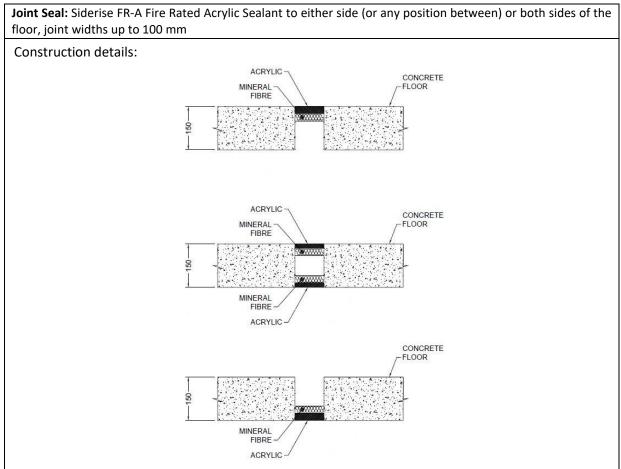


A.3.1.1

Substrate	Depth (mm)	Backing (minimum)	Classification
	25 min. (one side)	20 mm Stone wool 40 kg/m³	E 240 – T – X – F – W 30 EI 60 – T – X – F – W 30
masonry/	15 min. (both sides)	Ç.	EI 240 - V - X - F - W 30 EI 240 - T - X - F - W 30
concrete	10 min. (one side)	60 mm Stone wool 33 kg/m³	E 240 – T – X – F – W 50 EI 60 – T – X – F – W 50 EI 120 – V – X – F – W 50
	25 min. (one side)	48 mm AES fibre ≥ 128kg/m3	E 240 – T – X – F – W 30 EI 120 – T – X – F – W 30

A.4 Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

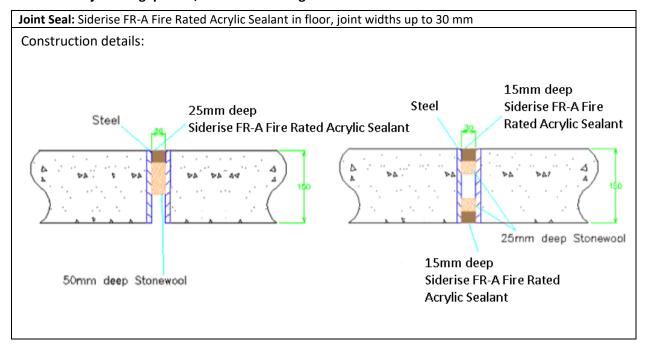
A.4.1 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only



A.4.1.1

Substrate	Depth (mm)	Backing (minimum)	Classification
	25 min. (any position)	25 mm AES fibre ≥ 128kg/m3	E 120 – H – X – F – W 100 EI 60 – H – X – F – W 100
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	25 min (top face)		EI 180 – H – X – F – W 100
masonry/ concrete	15 min.	25 mm Stone wool 40 kg/m ³	EI 120 – H – X – F – W 100
Concrete	(both sides)	25 mm Stone wool 140 kg/m³	EI 180 – H – X – F – W 100
	15 min. (both sides)	25 mm stone wool 35 kg/m³ insulation	EI 240 – H – X – F – W 30
	10 min. (top face)	90 mm Stone wool 33 kg/m³	EI 240 – H – X – F – W 100

A.4.2 Linear joint or gap seals, in or between rigid floors



A.4.2.1

Substrate	Depth (mm)	Backing	Position	Classification
Ctool/atool	25 min.	Stonewool, 50 mm	Тор	E 240 – H – X – F – W 30 ¹
Steel/ steel or Steel/	23 111111	deep min. 35 kg/m ³	. • •	EI 30 – H – X – F – W 30 ²
concrete	15 min.	Stonewool, 25 mm	Both	E 240 – H – X – F – W 30 ³
	13 111111.	deep min. 35 kg/m ³	2011	EI 45 – H – X – F – W 30 ⁴
Aluminium	25 min.	Stonewool, 50 mm	Тор	E 180 – H – X – F – W 30 ⁵
/ concrete		deep min. 35 kg/m ³		EI 20 – H – X – F – W 30 ⁶

^{*}Additional and for information only.

The classifications provided in Table A.4.2.1 consider the insulation performance of all components within the firestopping system as per the requirements of EN 1366-4. This includes temperature evaluation of the steel substrate.

In relation to each of the above classifications, temperatures recorded on the seal (exclusive of the supporting construction) exceeded the maximum allowable after the following times (rounded down):

¹240, ²60, ³240, ⁴120, ⁵180, ⁶60