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

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European Technical Assessment

ETA 22/0751 of 26/04/2023

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011:	**UL International (Netherlands) B.V.**
Trade name of the construction product	Protecta FR IPT
Product family to which the construction product belongs	Fire Stopping and Sealing Product: • Linear Joint and Gap Seals
Manufacturer	Polyseam Ltd 15. St. Andrews Road Huddersfield, West Yorkshire HD1 6SB, UK www.protecta.co.uk
Manufacturing plant(s)	Polyseam Ltd 15. St. Andrews Road Huddersfield, West Yorkshire HD1 6SB, UK
This European Technical Assessment contains	16 pages including 1 Annex which forms 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, September 2017.

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

1) Protecta FR IPT is a sealant used to form linear gap seals where gaps are present. The intended use is to reinstate the fire resistance performance of floor to floor/ floor to wall joints and wall gaps. Typical locations of linear joints include floors, the perimeter of floors, walls, ceilings and roofs.

2) The Protecta FR IPT is supplied in liquid form contained within 200 ml, 300 ml, 380 mm and 600 ml containers. The sealant is gunned into the aperture in the separating element/elements and around the service or services, to a specified depth.

3) Protecta FR IPT contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.

4) Polyseam AS 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.

5) The use catagory of Protecta FR IPT in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W2

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): EAD 350454-00-1104: 2017

Detailed information and data is given in Annex A.

The intended use of system Protecta FR IPT 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 Protecta FR IPT 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 studs or timber studs* lined on both faces with minimum 1 layer of 12.5 mm thick boards. The wall is permitted with or without insulation. Flexible wall solutions may also be used in rigid walls, with a minimum density of 350 kg/m3.
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.

* no part of the penetration seal may be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.

Where a backing material is described in Annex A, this can be replaced with Protecta FR IPT if the total seal depth is the same or greater.

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

2) The system Protecta FR IPT may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).

3) The maximum permitted joint/gap width for system Protecta FR IPT is 30 mm.

4) The maximum movement capability of system Protecta FR IPT when used as a linear joint or gap seal within the scope of this ETA is ≤ 7.5%

5) Where single sided top face seals are described in Annex A, these can also be used in composite floors (e.g., concrete filled, steel trapezoidal decking).

6) The provisions made in this European Technical Assessment are based on an assumed working life of the Protecta FR IPT of 25 years, provided that the conditions laid down in the manufacturers datasheet and instructions 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 X: intended for use at conditions exposed to weathering and all lower classes.

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

Product-type: Sealant	Intended use: Linear Joint & Gap Seal	
Assessment method	Essential characteristic	Product Performance
BWR 2 Safety in case of fire		
EN 13501-1	Reaction to fire	Class B-s1, d0
EN 13501-2	Resistance to fire	Annex A
BWR 3 Hygiene, health and environment		
Declaration of manufacturer & EN 16516	Content, emission and/or release of dangerous substances	Use categories: IA1, S/W2 Declaration of manufacturer
EN 1026:2000	Air permeability (material property)	Annex B
EAD 350141-00-1106, Annex C & EN 12390-8	Water permeability (material property)	No performance determined
BWR 4 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 & EAD 350141-00-1106, Clause 2.2.13	Adhesion	No performance determined
EAD 350141-00-1106, Clause 2.2.12	Durability	X
EAD 350141-00-1106, Clause 2.2.13	Movement capacity	No performance determined
EAD 350141-00-1106, Clause 2.2.14	Cycling of perimeter seals for curtain walls	No performance determined
EAD 350141-00-1106, Clause 2.2.15	Compression set	No performance determined
EAD 350141-00-1106, Clause 2.2.16	Linear expansion on setting	No performance determined
BWR 5 Protection against noise		
EN 10140-1,2,4,5/ EN ISO 717-1	Airborne sound insulation	Rw (C;Ctr)= 62 (0;-4) dB*
BWR 6 Energy economy and heat retention		
EN 12664, EN 12667, EN 12939, EN ISO 8990, EN ISO 6946, EN ISO 10456	Thermal properties	No performance determined
EN ISO 12572, EN 12086, EN ISO 10456	Water vapour permeability	No performance determined

* At minimum 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 https://eur-lex.europa.eu/oj/direct-access.html) of the European Commission[1], 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

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 7th February 2023 relating to the European Technical Assessment ETA 22/0751 issued on 26/04/2023 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 (Netherlands) B.V.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

[1] 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. pipe trays)

(b) Installation instruction:

- Steps to be followed
- Procedure in case of retrofitting
- Stipulations on maintenance, repair and replacement

6 Issued on:

26th April 2023

Report by:	Verified by:	Validated by:
D. Yates Staff Engineer Built Environment	C. Johnson Senior Staff Engineer Built Environment	Erik Teubler Head of TAB Built Environment

For and on behalf of UL International (Netherlands) B.V.

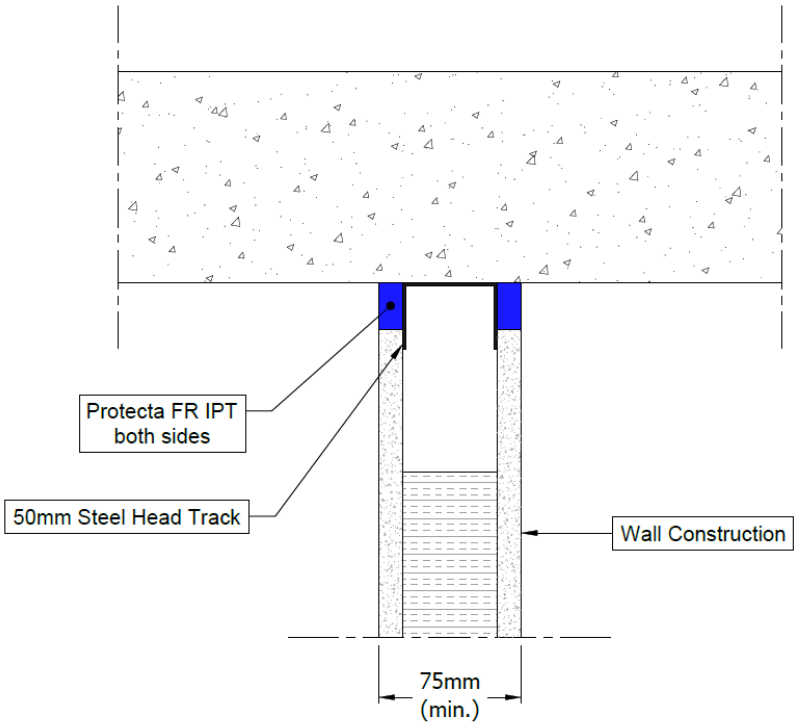
ANNEX A – Resistance to Fire Classification – Protecta FR IPT

A.1 Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 75 mm

A.1.1 Linear horizontal wall joints abutting a floor, ceiling or roof

Joint Seal: Protecta FR IPT to both sides of the wall, joint widths up to 25 mm

Construction details:



A.1.1.1

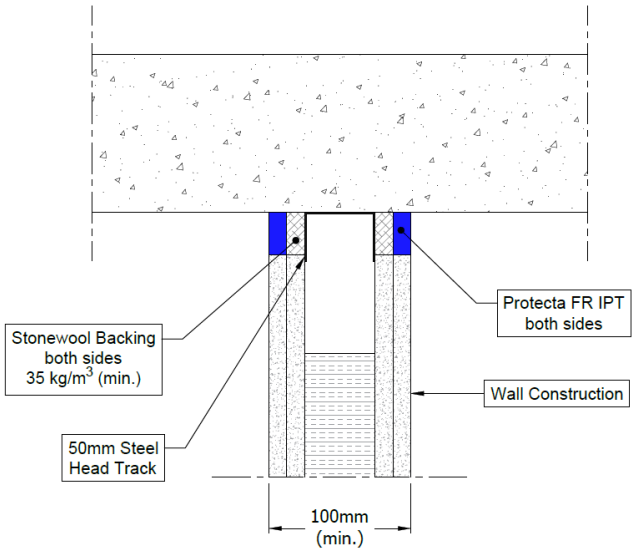
Substrate	Depth (mm)	Backing	Classification
Wall/Floor	12.5 min.	Minimum 50 mm steel partition head track/ stud	**E 60 – T – X – F – W 25** **EI 45 – T – X – F – W 25**

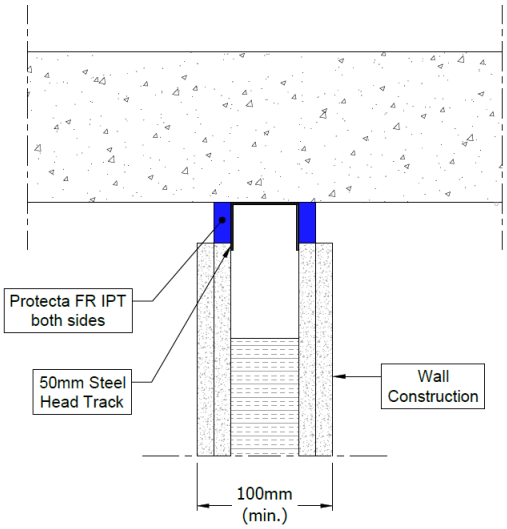
A.2 Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm

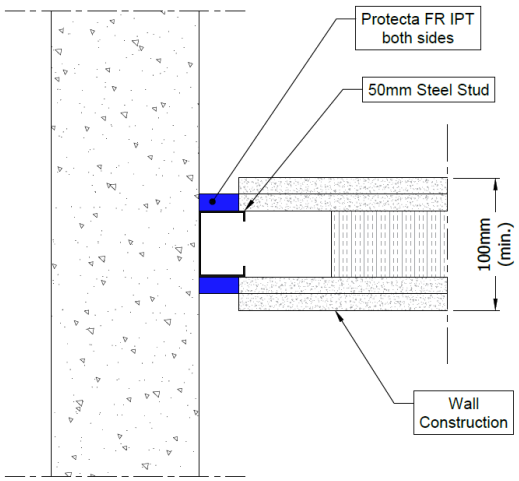
A.2.1 Linear joints in a vertical construction and horizontal wall joints abutting a floor, ceiling or roof

Joint Seal: Protecta FR IPT to both sides of the wall, joint widths up to 30 mm

Construction details:







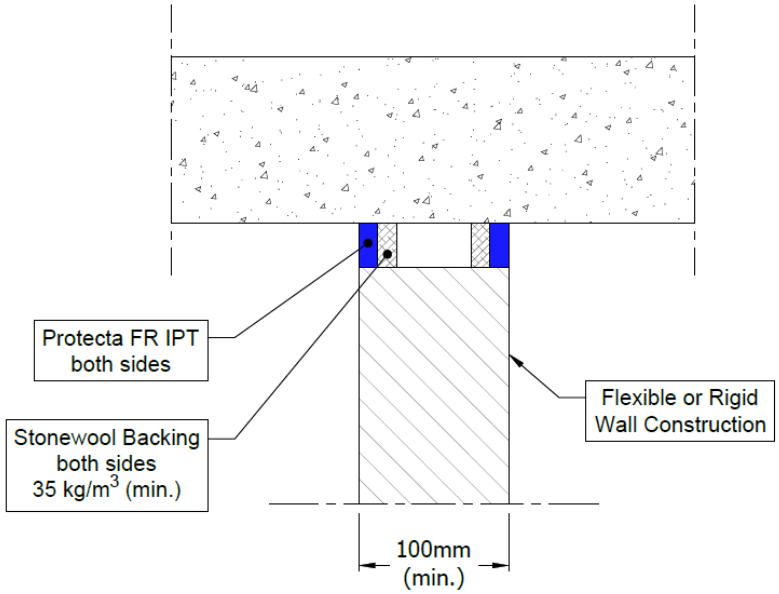
A.2.1.1

Substrate	Depth (mm)	Backing	Classification
Wall/Floor	12.5 min.	12.5 mm stonewool minimum 35 kg/m³ plus minimum 50 mm steel partition head track	**EI 120 – T – X – F – W 30**
		Minimum 50 mm steel partition head track /stud	**E 90 – T – X – F – W 25** **EI 60 – T – X – F – W 25**
			EI 120 – V– X – F – W 15

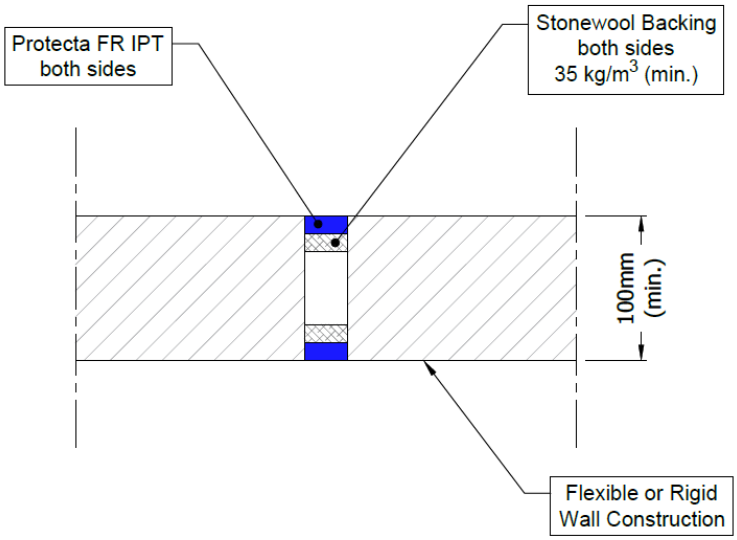
A.2.2 Linear joints in a vertical construction and horizontal wall joints abutting a floor, ceiling or roof

Joint Seal: Protecta FR IPT to both sides of the wall, joint widths up to 30 mm

Construction details:



Construction details:



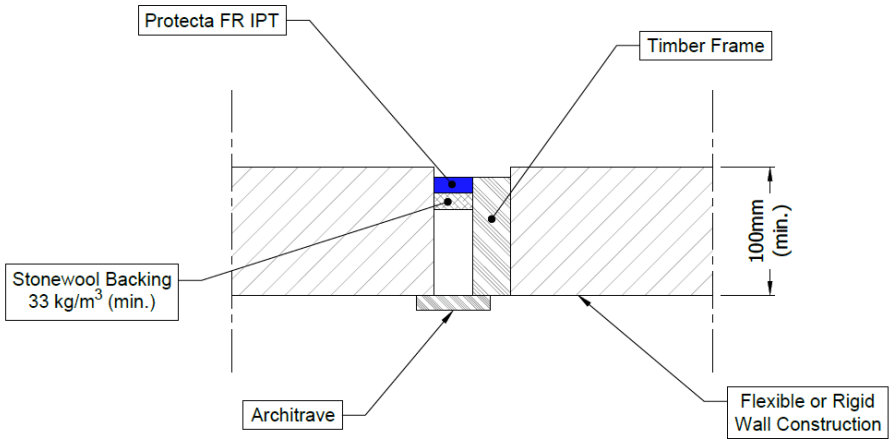
A.2.2.1

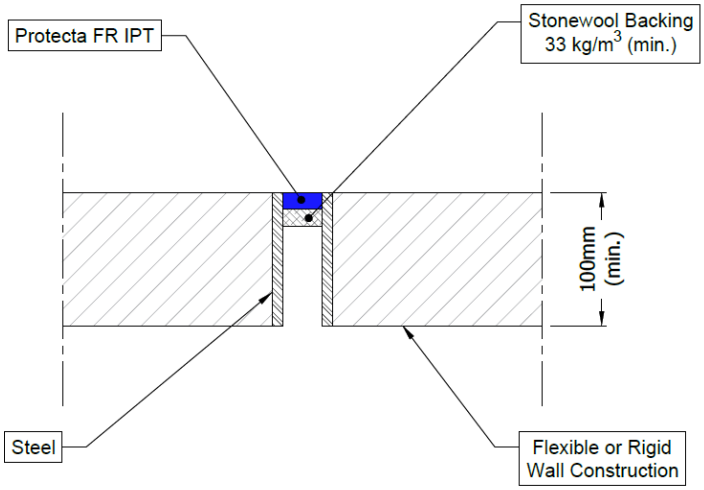
Substrate	Depth (mm)	Backing	Classification
Wall/Floor	12.5 min.	12.5 mm stonewool minimum 35 kg/m^3	**EI 120 – T – X – F – W 30** **EI 120 – V – X – F – W 30**

A.2.3 Linear joint or gap seals, vertically or horizontal orientated with backing materials

Joint Seal: Protecta FR IPT to one side of the wall, joint widths up to 30 mm

Construction details:





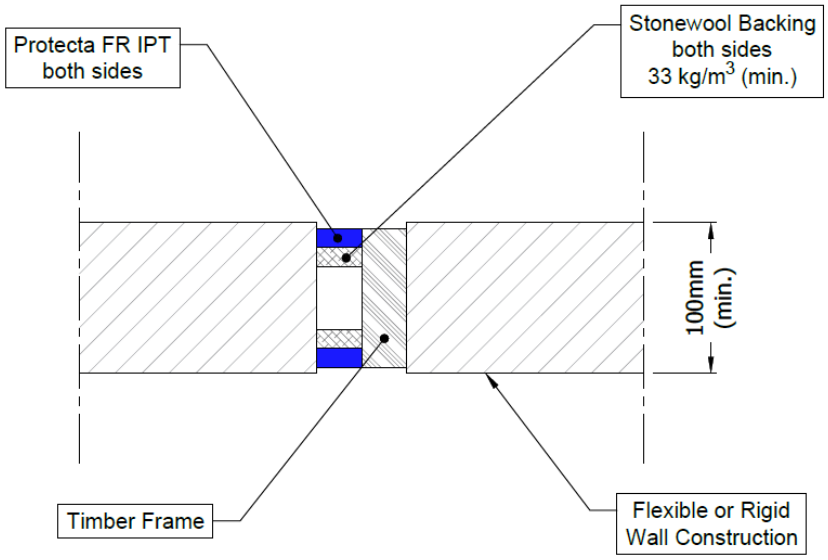
A.2.3.1

Substrate	Depth (mm)	Facing (minimum)	Backing	Classification
Flexible or rigid wall / Timber	12.5 min.	Single sided linear seals in flexible or rigid walls against wooden frames covered with architraves on the other side fixed with 27 mm steel pins at nominal 280 mm centres	12.5 mm stone-wool min. 33 kg/m^3	**EI 30 – T – X – F – W 30**
Flexible or rigid wall / Steel	12.5 min.	Single sided linear seals in flexible or rigid walls against steel frames, or in-between two steel surfaces	12.5 mm stone-wool min. 33 kg/m^3	**E 120 – T – X – F – W 30** **EI 30 – T – X – F – W 30**

A.2.4 Linear joint or gap seals, vertically or horizontal orientated with backing materials

Joint Seal: Protecta FR IPT to both sides of the wall, joint widths up to 30 mm

Construction details:



A.2.4.1

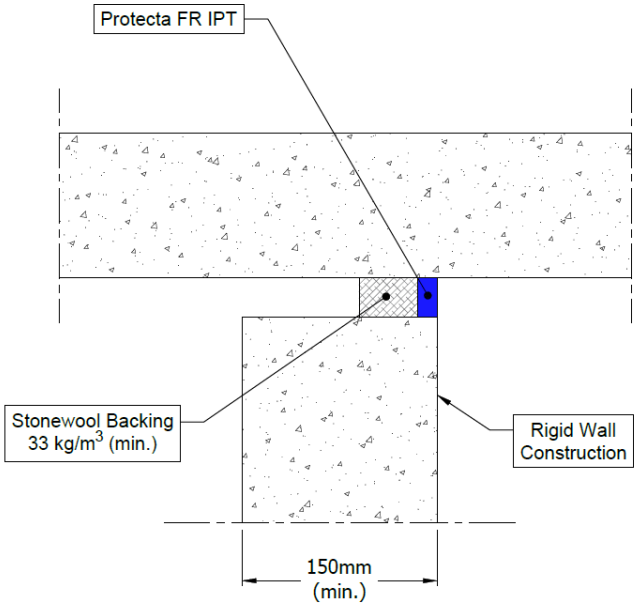
Substrate	Depth (mm)	Facing	Backing	Classification
Flexible or rigid wall / Timber	12.5 min.	Double sided linear seals in flexible or rigid walls against wooden frames	12.5 mm stone-wool min. 33 kg/m^3	**EI 60 – V – X – F – W 30**
				EI 90 – T – X – F – W 30

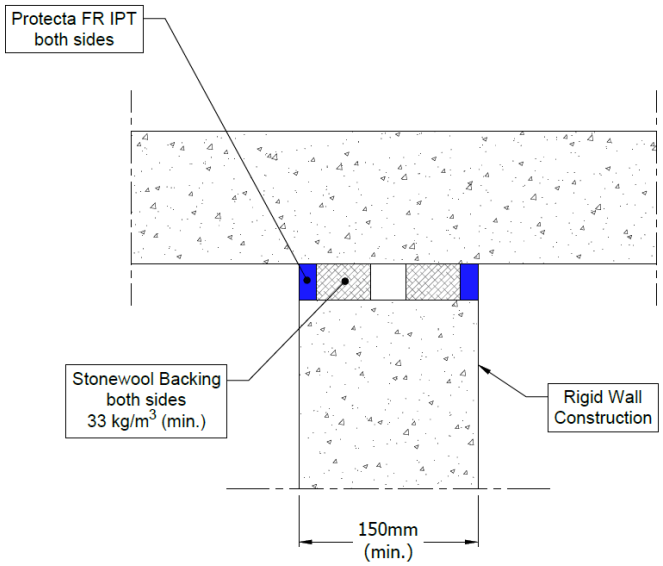
A.3 Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm

A.3.1 Linear horizontal wall joints abutting a floor, ceiling or roof

Joint Seal: Protecta FR IPT to one or both sides of the wall, joint widths up to 30 mm

Construction details:





A.3.1.1

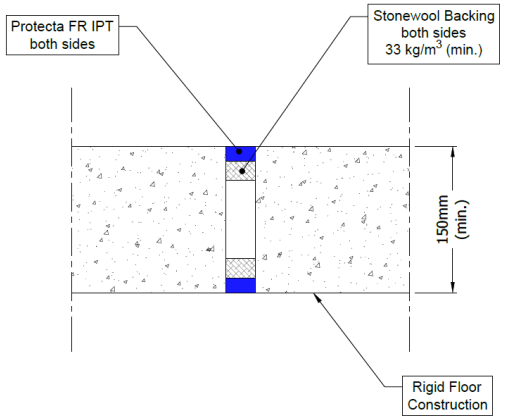
Substrate	Depth (mm)	Backing	Classification
Concrete/ masonry	15 min. (one side)	45 mm stone wool minimum 33 kg/m^3	**E 240 – T – X – F – W 30** **EI 60 – T – X – F – W 30**
	15 min. (both side)	45 mm stone wool minimum 33 kg/m^3	**EI 240 – T – X – F – W 30**

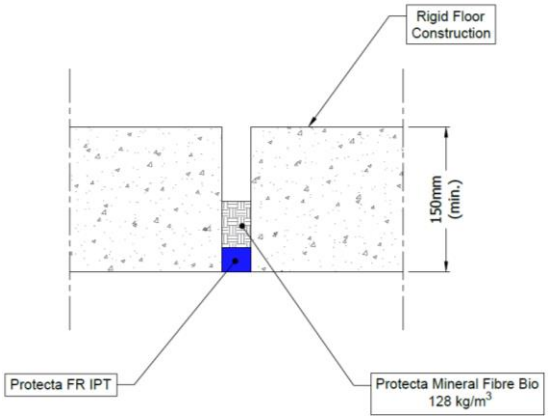
A.4 Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

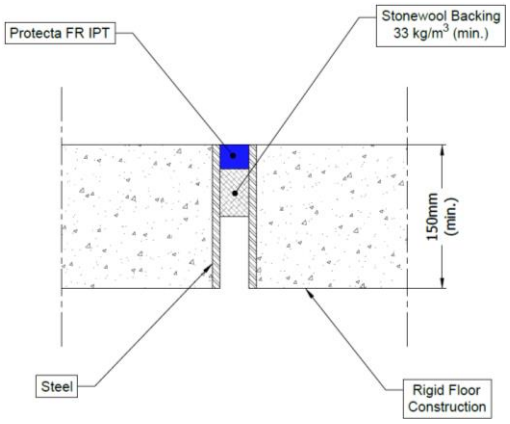
A.4.1 Linear joints in a horizontal construction, horizontal linear joints in a vertical construction and horizontal floor joints abutting a wall

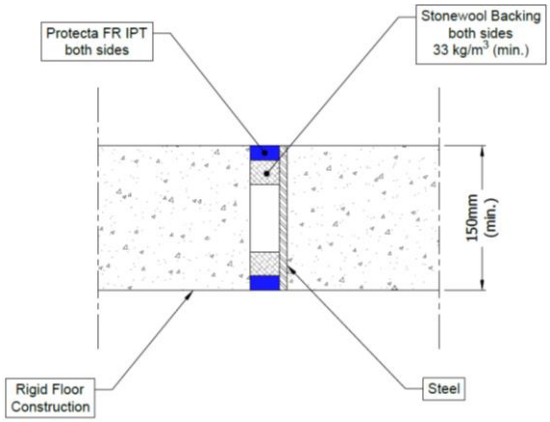
Joint Seal: Protecta FR IPT to one or both sides of the floor, joint widths up to 30 mm

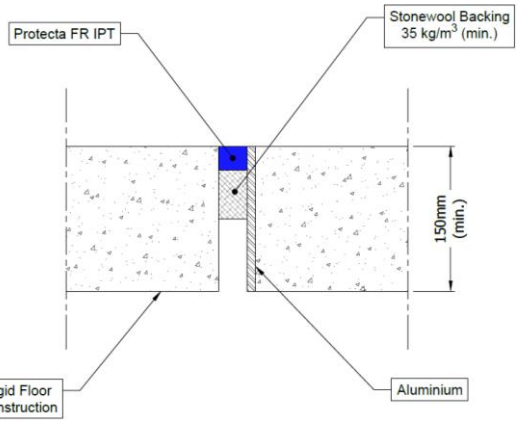
Construction details:











A.4.1.1

Substrate	Depth (min)	Backing	Position	Classification
Concrete	15 mm	20 mm stonewool minimum 33 kg/m^3	Both	**EI 240 – H – X – F – W 30**
	25 mm	48 mm Protecta Mineral Fibre BIO 128 kg/m^3	Any	**E 240 – H – X – F – W 30** **EI 180 – H – X – F – W 30**
Steel/steel or steel/ concrete	25 mm	50 mm stonewool minimum 33 kg/m^3	Top	**E 240 – H – X – F – W 30** **EI 20 – H – X – F – W 30** [1]
	15 mm	25 mm stonewool minimum 33 kg/m^3	Both	**E 180 – H – X – F – W 30** **EI 45 – H – X – F – W 30** [2]
Aluminium / concrete	25 mm	50 mm stonewool minimum 35 kg/m^3	Top	**E 240 – H – X – F – W 30** **EI 15 – H – X – F – W 30** [3]

*Additional and for information only.

The classifications provided in Table A.3.1.1 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):

[1] 60, [2] 120, [3] 90

ANNEX B – Air Permeability – Protecta FR IPT

Product tested	10mm deep x 30mm wide Protecta FR IPT		
Summary of testing procedure			Result
	Pressure (Pa)	Leakage (m^3/h)	Leakage ($m^3/m^2/h$)
Results under negative chamber pressure	25	0.00	0.00
	50	0.00	0.00
	100	0.00	0.00
	200	0.00	0.00
	300	0.02	0.56
	450	0.03	0.83
	600	0.1	2.78
Results under positive chamber pressure	25	0.00	0.00
	50	0.00	0.00
	100	0.00	0.00
	200	0.01	0.28
	300	0.03	0.83
	450	0.06	1.67
	600	0.11	3.06