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

designated according to Article 29 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

European Technical Assessment

ETA 15/0795
of 04/12/2015

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011:	**UL International (UK) Ltd**
Trade name of the construction product	K-FIRE Sealant A Plus
Product family to which the construction product belongs	Fire Stopping and Sealing Product: • Linear Joint and Gap Seals
Manufacturer	L' ISOLANTE K-FLEX UK Ltd Unit 9 Coalville Business Park, Jackson Street Coalville Leicestershire LE67 3NR
Manufacturing plant(s)	A/001
This European Technical Assessment contains	19 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	ETAG 026-3, edition 2011, used as European Assessment Document (EAD).

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

1) K-FIRE Sealant A Plus 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 K-FIRE Sealant A Plus is supplied in liquid form contained within 310 ml cartridges, 600ml foils or in 5, 10, 15 or 19 litre tubs. The sealant is gunned or trowelled 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.

3) The applicant has presented a 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.

4) The use catagory of K-FIRE Sealant A Plus in relation to BWR 3 (Health, hygeine and environment) is IA1, S/W3.

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): ETAG 026-3

Detailed information and data is given in Annex A.

The intended use of system K-FIRE Sealant A Plus 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 K-FIRE Sealant A Plus may be used to provide a gap or joint seal in, are as follows:

Flexible walls:	The wall must have a minimum thickness of 100 mm and comprise steel studs lined on both faces with minimum 2 layers of 12.5 mm thick boards.
Rigid walls:	The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m^3.
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/m^3.

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

2) The system K-FIRE Sealant A Plus 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 K-FIRE Sealant A Plus is 100 mm.

4) The maximum movement capability of system K-FIRE Sealant A Plus is ≤ 7.5%

5) The provisions made in this European Technical Assessment are based on an assumed working life of the K-FIRE Sealant A Plus of 10 years, provided that the conditions laid down in the manufacturer's instructions and 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, 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.

6) Type Z_1: Intended for use at internal conditions with high or other humidity classes, excluding temperatures below 0°C.

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

Product-type: Sealant	Intended use: Linear Joint & Gap Seal	
Basic requirement for construction work	Basic Requirement	Performance
BWR 1 Mechanical resistance and stability		
-	None	Not relevant
BWR 2 Safety in case of fire		
EN 13501-1	Reaction to fire	Class F
EN 13501-2	Resistance to fire	Annex A
BWR 3 Hygiene, health and environment		
EN 1026:2000	Air permeability (material property)	No performance determined
ETAG 026-3, Annex C	Water permeability (material property)	No performance determined
Declaration of manufacturer	Release of dangerous substances	Declaration of manufacturer
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	Adhesion	No performance determined
BWR 5 Protection against noise		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	No performance determined
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
BWR 6 Energy economy and heat retention		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined
General aspects relating to fitness for use		
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceability	Z_1
BWR 7 Sustainable use of natural resources		
-	-	No performance determined

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 http://eur-lex.europa.eu/JOIndex.do) 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 18th April 2011 relating to the European technical assessment ETA 15/0795 issued on 04/12/2015 which is part of the technical documentation of this European technical approval. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at UL International (UK) Ltd.

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 linear joint seal 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 joint seal
- Construction of the linear joint seal or penetration 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
- Stipulations on maintenance, repair and replacement

6 Issued on:

4th December 2015

Report by:

C. Johnson
Staff Engineer
Building and Life Safety Technologies

Reviewed by:

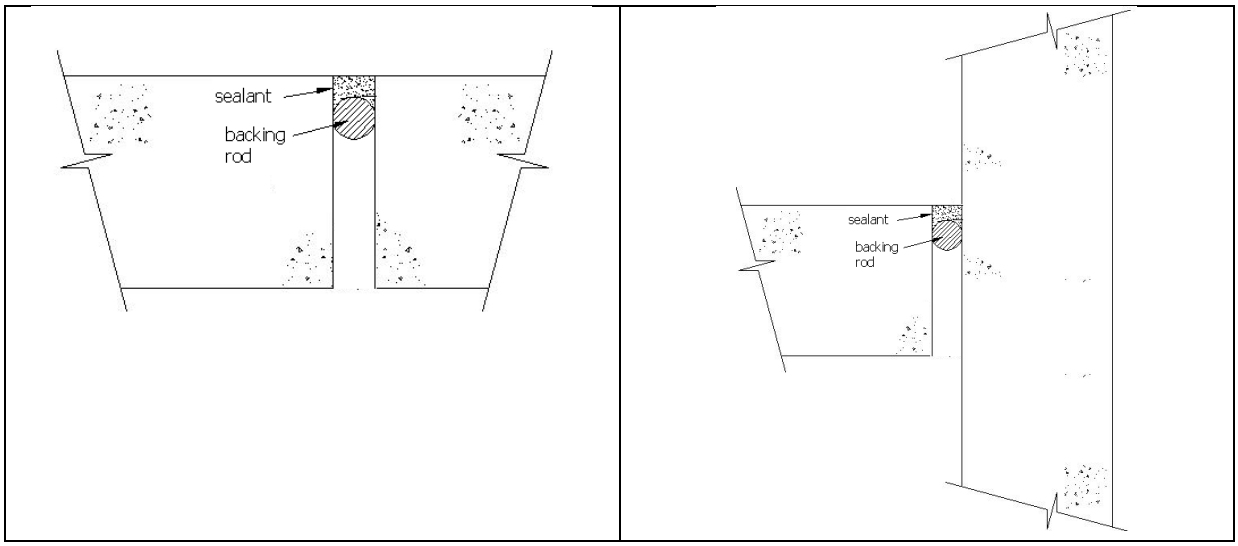
C. W. Miles
Business Manager – Europe & Latin America
Building and Life Safety Technologies

For and on behalf of UL International (UK) Ltd.

ANNEX A – Resistance to Fire Classification – K-FIRE Sealant A Plus

A.1 Rigid wall constructions with wall thickness of minimum 200 mm

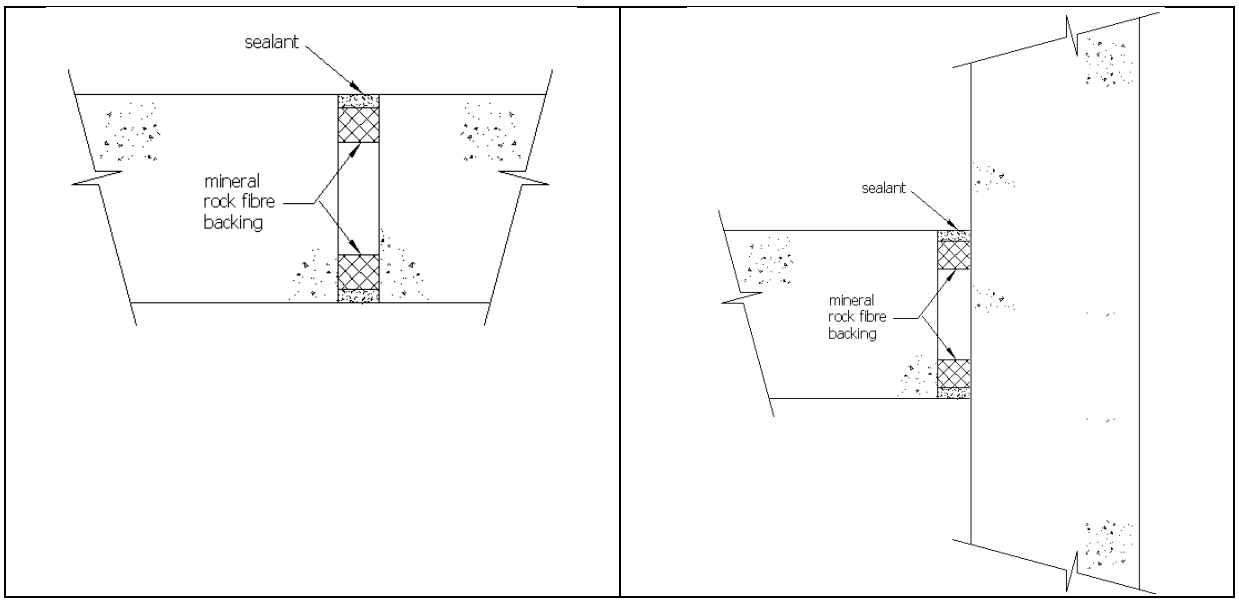
A.1.1 Linear joint or gap seal, vertically oriented with sealant to the exposed face



A.1.1.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Walls 200 mm thick (min.) – Sealant on the Exposed/Fire Side of the Seal Only			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	25 min.	Polyethylene rod	**E 240 – V – X – F – W 30** **EI 60 – V – X – F – W 30**
	20 min.		**E 240 – V – X – F – W 20** **EI 90 – V – X – F – W 20**
	10 min.		**E 240 – V – X – F – W 10** **EI 180 – V – X – F – W 10**

A.1.2 Linear joint or gap seal, vertically oriented with sealant to both faces

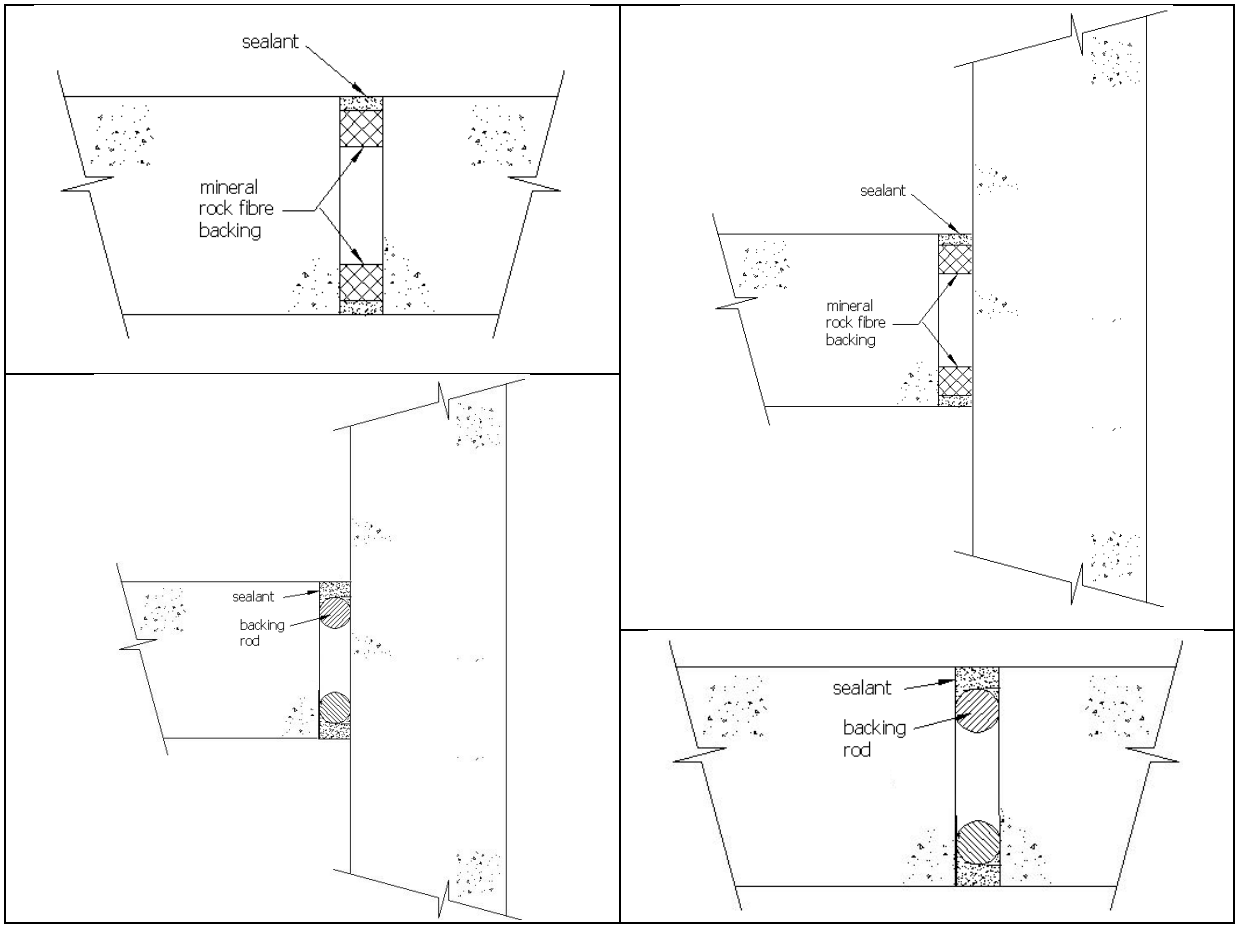


A.1.2.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Walls 200 mm thick (min.) – Sealant flush to both faces of the wall			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	20 min.	Stone wool 20 deep / 90 kg/m^3	**EI 240 – V – X – F – W 30**
	10 min.	Stone wool 10 deep / 90 kg/m^3	**EI 240 – V – X – F – W 10**

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

A.2.1 Linear joint or gap seal, vertically oriented with sealant to both faces

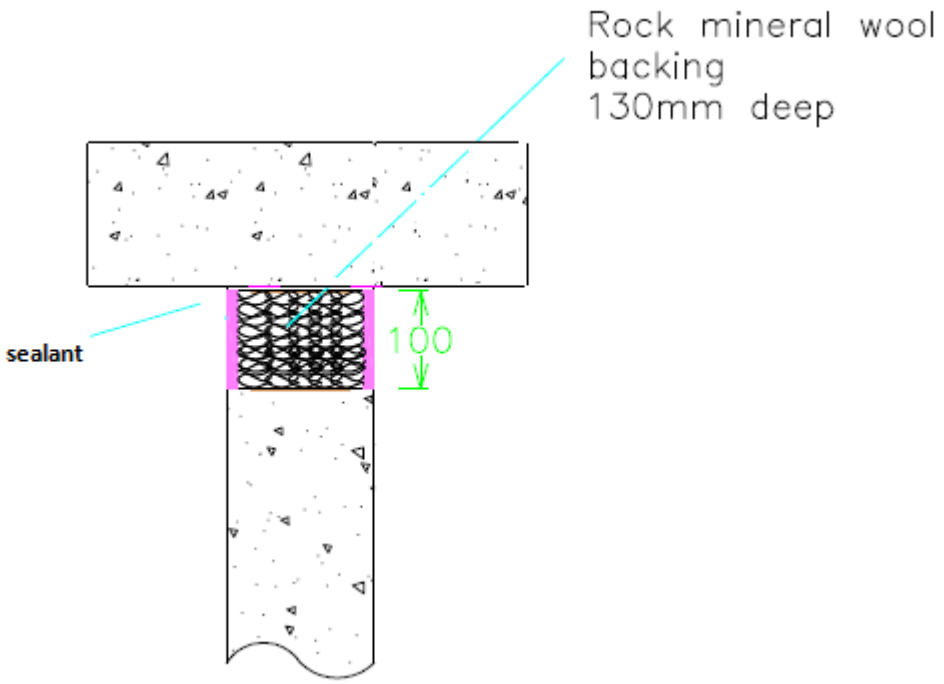


A.2.1.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Walls 150 mm thick (min.) – Sealant flush to both faces of the wall			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	15 min.	Polyethylene rod	**E 240 – V – X – F – W 30** **EI 180 – V – X – F – W 30**
	10 min.	Polyethylene rod	**E 240 – V – X – F – W 20** **EI 180 – V – X – F – W 20**
Masonry/ concrete to steel	10 min.	Polyethylene rod	**E 240 – V – X – F – W 30** **EI 90 – V – X – F – W 30**
	25 min.	50 mm Rockwool RW4 Stone wool	**EI 240 – V – X – F – W 50**
Masonry/ concrete to timber	20 min.	Polyethylene rod	**EI 120 – V – X – F – W 30**
	15 min.	Rockwool RW4 Stone wool, 120 mm deep min.	**EI 180 – V – X – F – W 30**
Timber/ Concrete	25 min.	50 mm Rockwool RW4 Stone wool	**EI 120 – V – X – F – W 50**

A.2.2 Linear joint or gap seal, horizontally oriented at the head of walls, with sealant to both faces

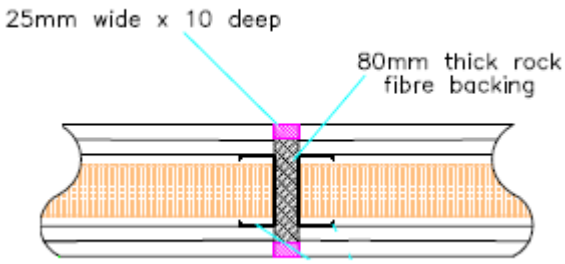
Construction details:



Substrate	Depth (mm)	Backing	Classification
Masonry/ Concrete	10 min.	130 mm Rockwool RW4 Stone wool	**EI 240 – T – X – F – W 20**

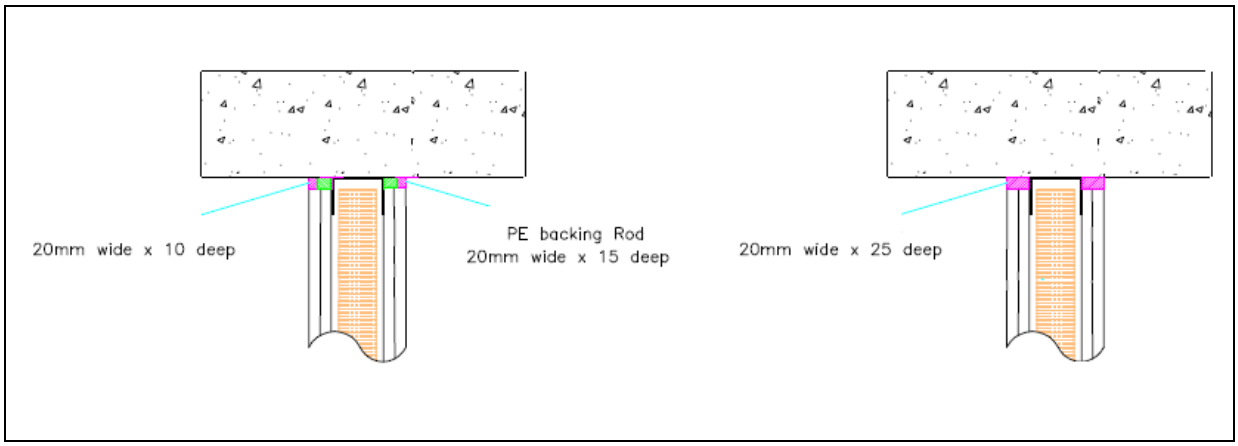
A.3 Flexible wall constructions up to 3m high, with wall thickness of minimum 100 mm

A.3.1 Linear joint or gap seal, vertically oriented with sealant to both faces



Substrate	Depth (mm)	Backing	Classification
Gypsum board / Gypsum board	10 min.	80 mm Rockwool RW4 Stone wool	**EI 120 – V – X – F – W 25**

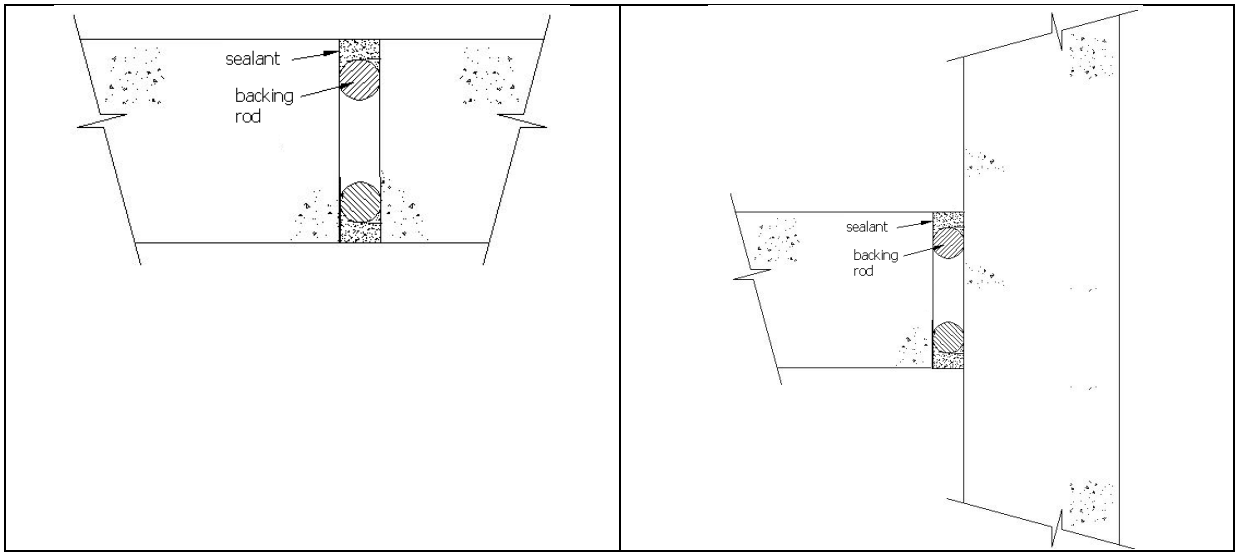
A.3.2 Linear joint or gap seal, horizontal linear joint seals, between the head of flexible walls minimum 100 mm thick and rigid floors



Substrate	Depth (mm)	Backing	Classification
plasterboard / Concrete	25 min.	50 mm steel head track	**EI 120 – T – X – F – W 20**
	10 min.	15 mm PE backer plus 50 mm steel head track	

Rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm

A.3.3 Linear joint or gap seal, vertically oriented with sealant to the exposed face

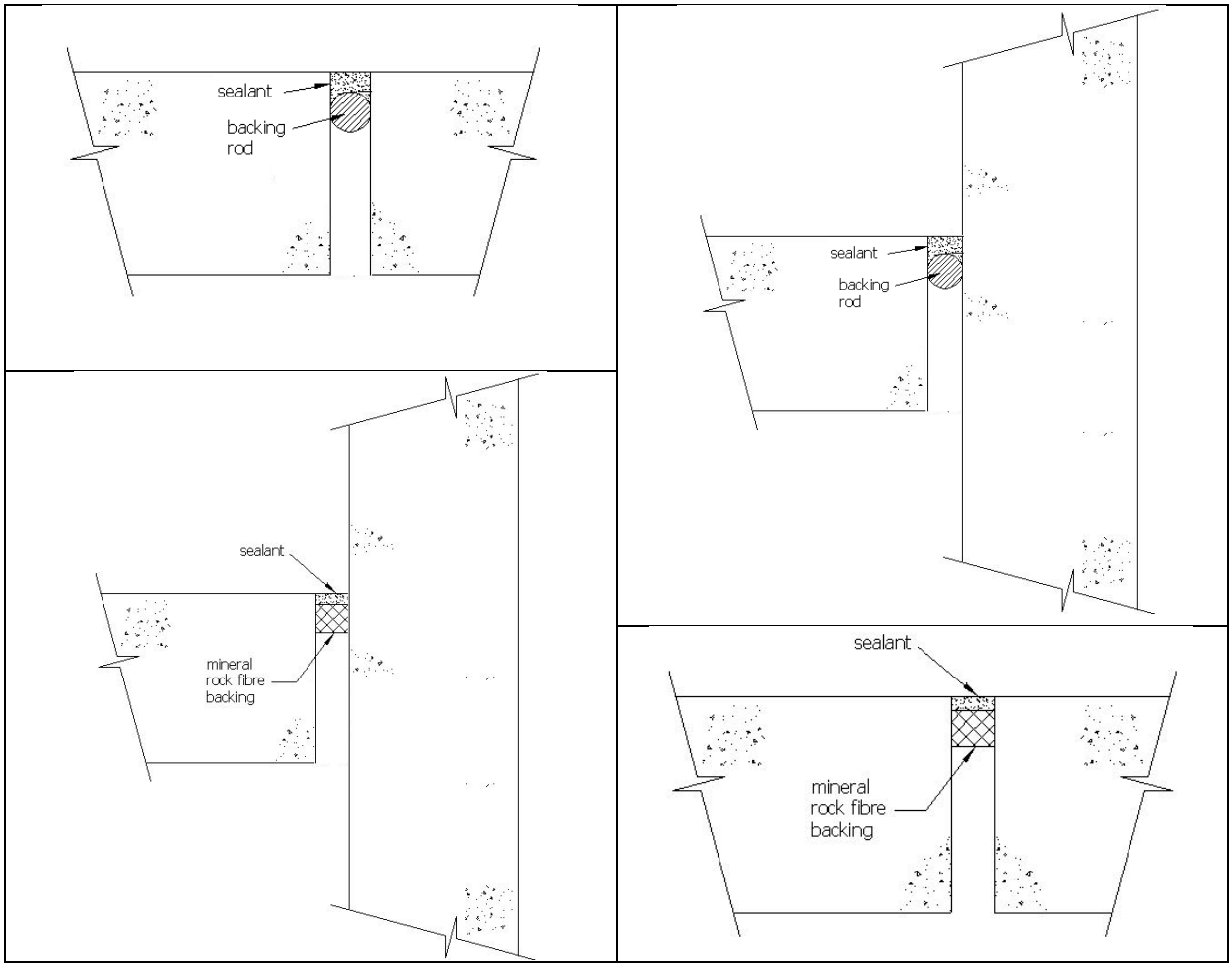


A.3.3.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Walls 100 mm thick (min.) – Sealant flush to both faces of the wall			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	15 min.	Polyethylene rod	**E 240 – V – X – F – W 00 to 30** **EI 120 – V – X – F – W 00 to 30**

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

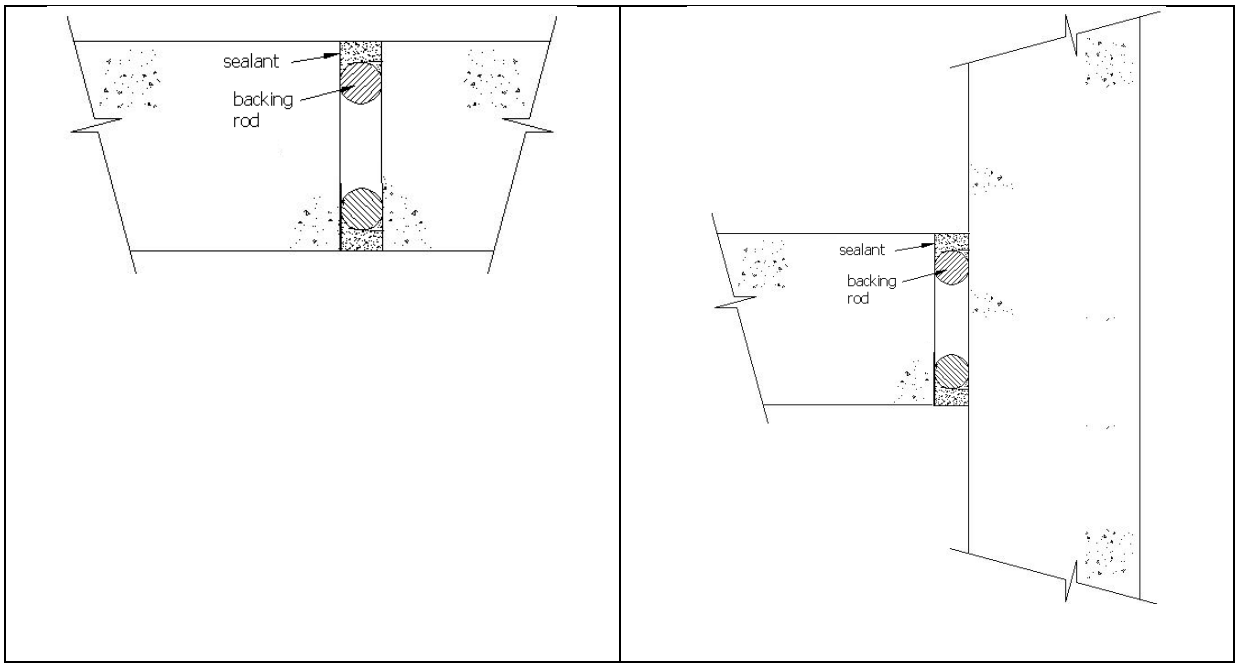
A.4.1 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only



A.4.1.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Floors 150 mm thick (min.) – Sealant to the top of the floor only			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	10 min.	Stone wool 90 kg/m^3 25 mm deep min.	**E 240 – H – X – F – W 00 to 30** **EI 180 – H – X – F – W 00 to 30**
	15 min.	Polyethylene rod	**E 90 – H – X – F – W 00 to 30** **EI 45 – H – X – F – W 00 to 30**
	10 min.	Polyethylene rod	**E 240 – H – X – F – W 00 to 20** **EI 60 – H – X – F – W 00 to 20**
	10 min.	Polyethylene rod	**E 240 – H – X – F – W 00 to 10** **EI 120 – H – X – F – W 00 to 10**

A.4.2 Linear joint or gap seal, between floor slabs or between floor slab and wall with sealant to the top face of the floor only

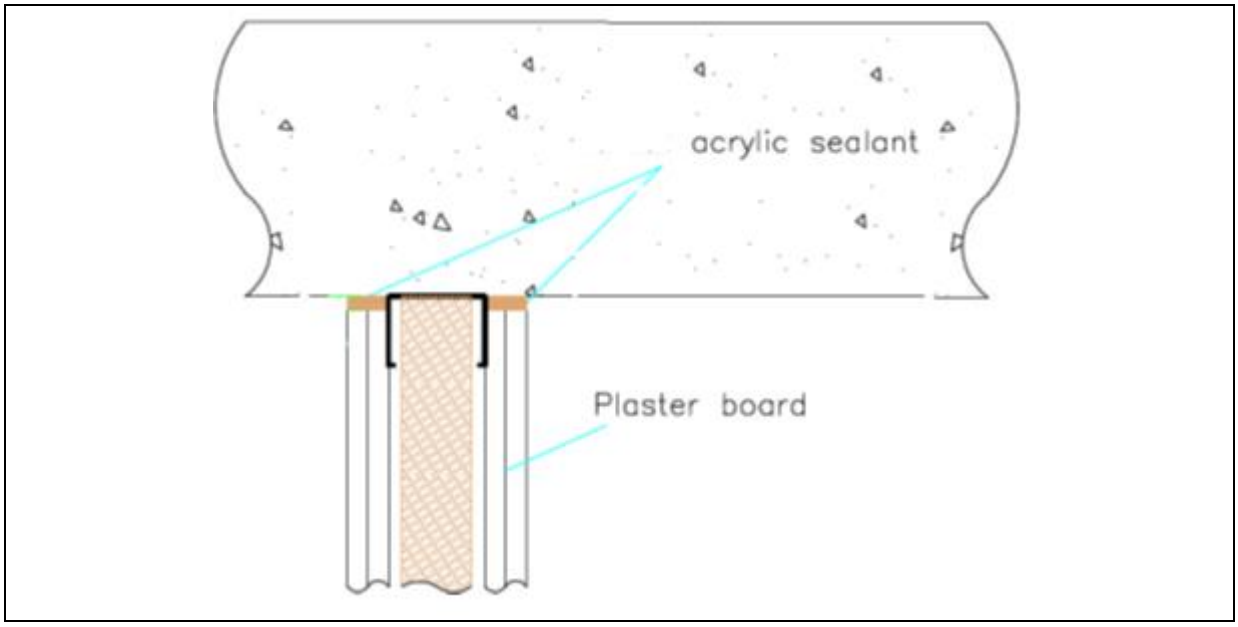


A.4.2.1

K-FIRE Sealant A Plus Linear Joint Seals in Rigid Floors 150 mm thick (min.) – Sealant flush to both faces of the floor			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ concrete	10 min.	Polyethylene rod	**E 240 – H – X – F – W 00 to 30** **EI 180 – H – X – F – W 00 to 30**
Masonry/ concrete to steel	10 min.	Polyethylene rod	**E 240 – H – X – F – W 00 to 30** **EI 90 – H – X – F – W 00 to 30**

A.5 Flexible wall constructions according to 1.2.1 with wall thickness of minimum 110 mm

A.5.1 Linear joint seal, between the top of the wall boards and the floor soffit, seal to both faces



A.5.1.1

K-FIRE Sealant A Plus Linear Joint Seals at the head of Flexible Walls 110 mm thick (min.) – Sealant flush to both faces of the wall			
Substrate	**Depth (mm)**	**Backing**	**Classification**
Masonry/ Concrete to gypsum board	30 min.	50 mm (min.) steel head track infilled with 50 mm stone wool	**EI 120 – T – X – F – W 00 to 10**