Área Anardi 5,
E-20730 Azpeitia
Gipuzkoa-Spain
Tel: +34 946 430 850
Lab_services@tecnalia.com
www.tecnalia.com

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

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European Technical Assessment — ETA 20/1350 of 18/05/2021

I General Part

Technical Assessment Body issuing the ETA:	**TECNALIA RESEARCH & INNOVATION**
Trade name of the construction product	KF-JOINT
Product family to which the construction product belongs	Fire Stopping and Sealing Product: Linear Joints
Manufacturer	KNAUF di Knauf S.r.l S.a.s Via Livornese 20 IT-56040 Castellina Marittima (PI) ITALY www.knauf.it
Manufacturing plant	PLANT A
This European Technical Assessment contains	12 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 “Fire stopping and fire sealing products. Linear joints and gap seals.”

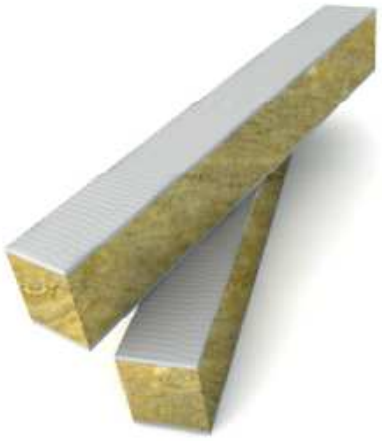
Table of contents

Specific Parts

1. Technical description of the product

KF-JOINT is a linear joint seal designed to maintain the fire separating function of a joint within one or between two or more fire resisting elements and, if necessary, to absorb a specific degree of movement (<7,5 %) within the linear joint.

KF-JOINT consist of one rockwool board treated with an ablative coating on both faces.



When exposed to a temperature exceeding 180 °C, AF JOINT coating release water vapor by lowering the temperature. This action increases the thermal insulation of the product and creates a barrier to flames and heat.

Components:

a) Ablative coating KF-SEAL T2.
b) Board of rockwool with nominal density of 100 kg/m^3. The classification of reaction to fire accordint to EN 13501-1 is A1.
c) Ablative coating KF-SEAL T2.

Dimensions on request: from (1000 x 100 x 30) mm to (1000 x 100 x 660) mm.

2. Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)

2.1. Intended use

KF-JOINT is a specific element designed to protect expansion/ structural joints, width between 30 mm and 600 mm, from fire. KF-JOINT is compressed slightly, from 5% to 10% their volume, and is inserted symmetrically to the width joints.

If the joint is wider than KF-JOINT width it is possible to compose different layers of KF-J OINT and connect them between each other by compression. For joint widths up to 200 mm is not necessary to use any liquid sealant, nor on top, nor on the side. For widths greater than 200 mm it is required to spread KF-SEAL W between each KF-JOINT and on their surface connections.

It is a system designed to prevent the spread of fire through horizontal and vertical joints (for floors and walls) resistant to fire that occur in buildings in the following situations:

a) acceptable dimensional tolerances between two or more elements of the buildings;
b) by design to accommodate the different movements induced by thermal differences, earthquakes and movements induced by wind loads; for movements less than 7,5 %.
c) as a result of inadequate design, inaccurate assembly, repairs or damage to the building.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period. Limits of applicability are stated in Annex A.

2.2. Use category

KF-JOINT is intended for use at temperatures below 0ºC with casual exposure to UV but no exposure to rain. Since the requirements for Type Y_1 are met, also are met requirements for Type Y_2, Z_1 and $Z_{.2,}$ so KF-JOINT is intended for use in internal conditions with humidity lower, equal to or higher than 85% RH.

2.3. Working life

The provisions made in this European Technical Assessment are based on an assumed working life of 10 years as minimum, provided that KF-JOINT are subject to appropriate use and maintenance.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or 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.

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

Basic requirement for construction work	Essential characteristics	Performance
BWR 2 Safety in case of fire	Reaction to fire	Clause 3.1.1.
	Resistance to fire	Clause 3.1.2.
BWR 3 Hygiene, health and environment	Release of dangerous substances	Clause 3.2.1.
	Air permeability	Clause 3.2.2.
	Water permeability	Clause 3.2.3.
BWR 4 Safety in use	Mechanical resistance and stability	Clause 3.3.1.
	Resistance to impact/movement	Clause 3.3.2.
	Adhesion	Clause 3.3.3.
	Durability	Y_1. Clause 3.3.4
	Movement Capability	Clause 3.3.5
	Cycling of perimeter seals of curtain walls	Clause 3.3.6
	Compression set	Clause 3.3.7
	Linear expansion on setting	Clause 3.3.8
BWR 5 Protection against noise	Airborne sound insulation	Clause 3.4.1.
BWR 6 Energy economy and heat retention	Thermal insulation	Clause 3.5.1.
	Water vapour permeability	Clause 3.5.2.

3.1. Safety in case of fire (BWR 2)

3.1.1. Reaction to fire

No performance assessed.

3.1.2. Resistance to fire

The resistance to fire performance according to EN 13501-2 of lineal joint seals is given in Annex A of this document. The tests were carried out according to EN 1366-4.

3.2. Hygiene, health and environment (BWR 3)

3.2.1. Release of dangerous substances

No performance assessed.

3.2.2. Air permeability

No performance assessed.

3.2.3. Water permeability

No performance assessed.

3.3. Safety and accessibility in use (BWR 4)

3.3.1. Mechanical resistance and stability

Not relevant because the use of mechanical fixings.

3.3.2. Resistance to impact/movement

Not relevant because the use of mechanical fixings.

3.3.3. Adhesion

Not relevant because the use of mechanical fixings.

3.3.4. Durability

KF-JOINT fulfills the requirements of use category Y_1 in accordance with EAD 350141-00-1106, Section 2.2.12. The tests were carried out in accordance with EOTA TR 024 and clause 4.2.2 for Type Y_1.

3.3.5. Movement capability

No performance is assessed.

3.3.6. Cycling of perimeter seals for curtain walls

No performance is assessed.

3.3.7. Compression set

KF-JOINT movement capability has been assessed according to annex B.14 of EAD 350141-00-1106. The specimens are recovered at least 99,0%.

3.3.8. Linear expansion on setting

Not relevant.

3.4. Protection against noise (BWR 5)

3.4.1. Airborne sound insulation

No performance is assessed.

3.5. Energy economy and heat retention (BWR 6)

3.5.1. Thermal resistance

No performance is assessed.

3.5.2. Water vapour permeability

No performance is assessed.

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 22 June 1999 (OJ L 178/52 of 14/07/99, p. 3), as amended by Decision of the Commission 2001/596/EC of 8 January 2001 (OJ L 209/33 of 2/8/2001, p.2) the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011 and EC Delegated Act No 568/2014 of 18 February 2014) given in the following table 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

All the necessary technical details for the implementation of the AVCP system are laid down in the Control Plan deposited at Tecnalia Research and Innovation, with which the Factory Production Control shall be in accordance.

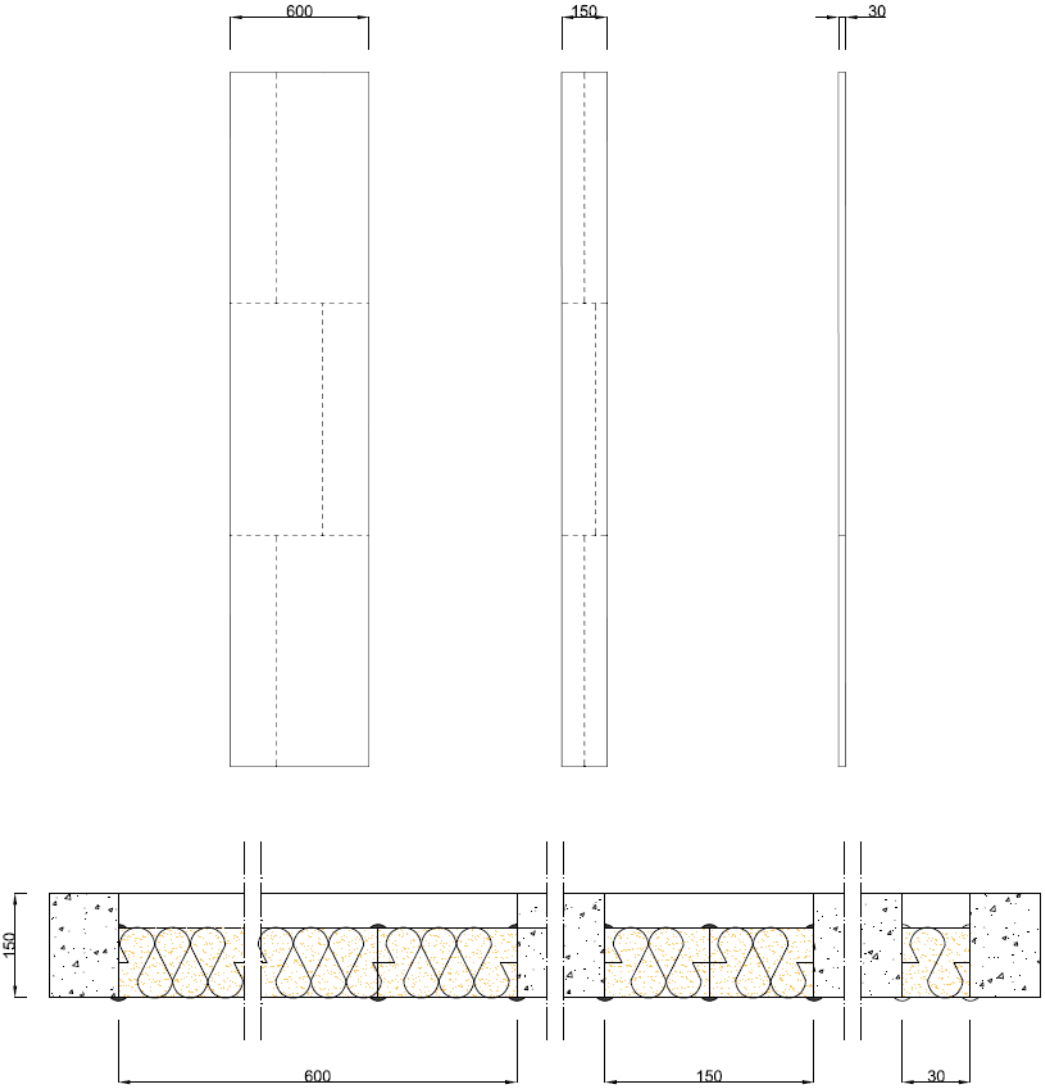
The Control Plan is a confidential part of the ETA and is only handed over to the notified body involved in the assessment and verification of constancy of performance.

Issued in Azpeitia, on 18/05/2021

Miguel Mateos
Innovation and Conformity Assessment Point
Tecnalia Research & Innovation

Annex A: Resistance to fire classification of KF-JOINT

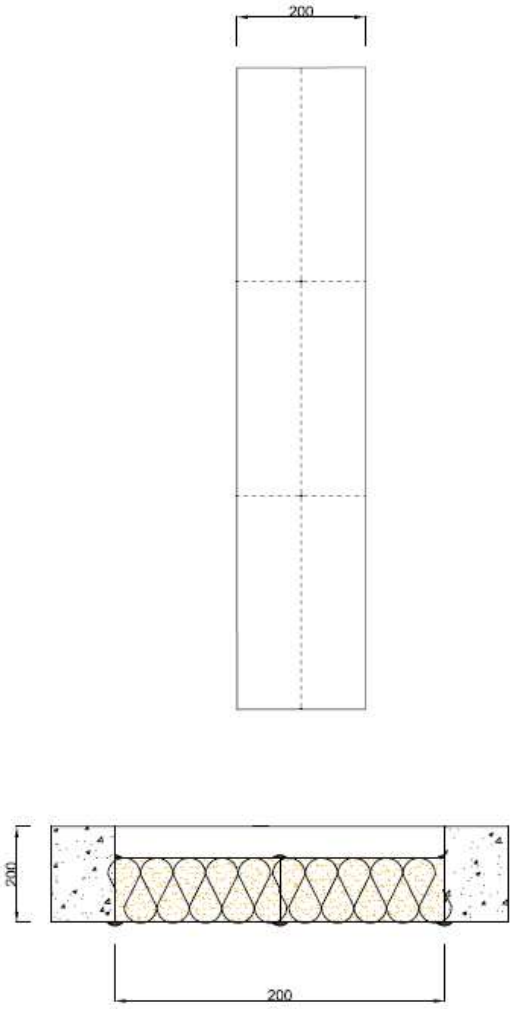
A.1 Horizontal supporting constructions with thickness of minimum 150 mm



Joint width	Fire Resistance Classification
600 mm	EI180-H-X-B
150 mm	EI180-H-X-B
30 mm	EI180-H-X-B

Field of application	Limits of applicability according to EN 1366-4:
Orientation	Results obtained with orientation of the linear joints are valid for A, and D orientations of the linear joints.
Supporting construction	Results obtained with lightweight concrete elements of expanded clay supporting constructions apply to same separating elements of a 150 mm thickness or greater, and 1600 kg/m^3 density or greater.
Seal position	Results obtained with seal position are valid for all configurations specified in Annex E.
Mechanically induced movement	Results obtained without mechanically induced movement during the tests, are only valid for movement capability ± 7,5% or lower.

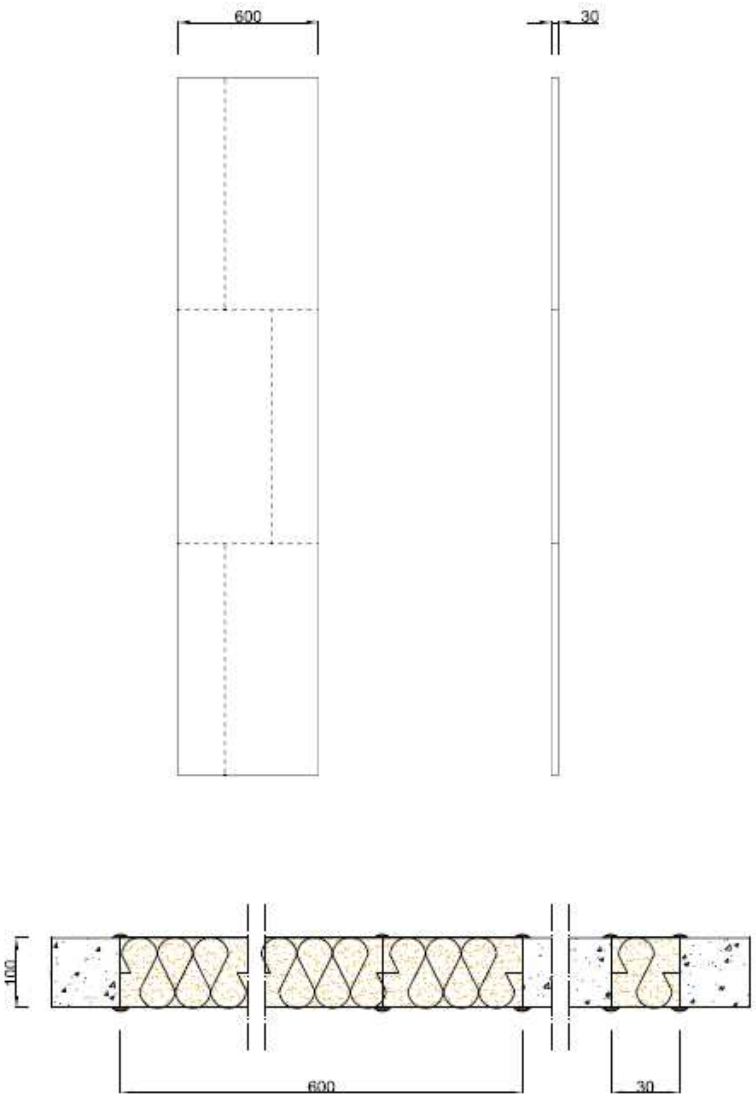
A.2 Horizontal supporting constructions with thickness of minimum 200 mm



Joint width	Fire Resistance Classification
200 mm	EI180-H-X-B

Field of application	Limits of applicability according to EN 1366-4:
Orientation	Results obtained with orientation of the linear joints are valid for A and D orientations of the linear joints.
Supporting construction	Results obtained with normal concrete standard supporting constructions apply to concrete and block work separating elements of a 200 mm thickness or greater, and 2200 kg/m^3 density or greater.
Seal position	Results obtained with seal position are valid for all configurations specified in Annex E.
Mechanically induced movement	Results obtained without mechanically induced movement during the tests, are only valid for movement capability ± 7,5% or lower.

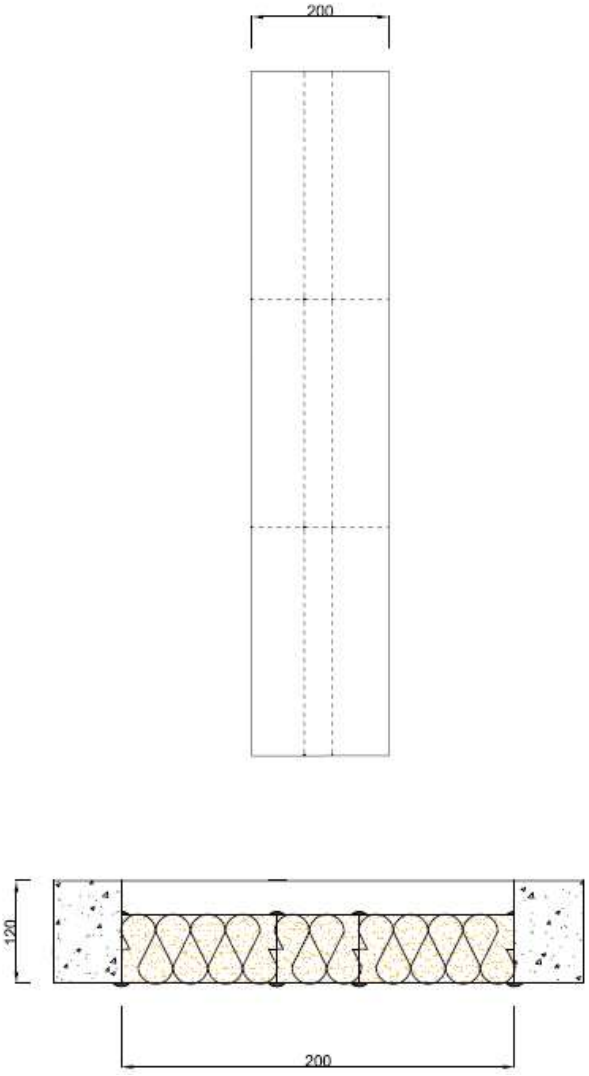
A.3 Rigid wall constructions with thickness of minimum 100 mm



Joint width	Fire Resistance Classification
600 mm	EI 180-V-X-B
30 mm	EI 180-V-X-B

Field of application	Limits of applicability according to EN 1366-4:
Orientation	Results obtained with orientation of the linear joints are only valid for B orientation of the linear joint.
Supporting construction	Results obtained with autoclaved aerated concrete standard supporting constructions apply to concrete, block work and masonry separating elements of a 100 mm thickness or greater, and 500 kg/m^3 density equal to or greater.
Seal position	Results obtained with seal position are valid for all configurations specified in Annex E.
Mechanically induced movement	Results obtained without mechanically induced movement during the tests, are only valid for movement capability ± 7,5% or lower.

A.4 Rigid wall constructions with thickness of minimum 120 mm



Joint width	Fire Resistance Classification
200 mm	EI 180-V-X-M

Field of application	Limits of applicability according to EN 1366-4:
Orientation	Results obtained with orientation of the linear joints are only valid for B orientation of the linear joint.
Supporting construction	Results obtained with autoclaved aerated concrete standard supporting constructions apply to concrete, block work and masonry separating elements of a 120 mm thickness or greater, and 500 kg/m^3 density equal to or greater.
Seal position	Results obtained with seal position are valid for all configurations specified in Annex E.
Mechanically induced movement	Results obtained without mechanically induced movement during the tests, are only valid for movement capability ± 7,5% or lower.