DECLARATION OF PERFORMANCE

DoP-FS-1017

for fischer FiAM Plus Acoustic Mastic (Fire stopping and fire sealing products: Linear Joint and Gap Seals) EN

1. Unique identification code of the product-type: **DoP-FS-1017**

2. Intended use/es: **Maintenance of the integrity and insulation performance of one or more fire separating elements at linear discontinuities for a specified duration, see appendix, especially annexes, 1-4.**

3. Manufacturer: **fischerwerke GmbH & Co. KG, Klaus-Fischer-Str. 1, 72178 Waldachtal, Germany**

4. Authorised representative: **-**

5. System/s of AVCP: **1**

6. European Assessment Document: **EAD 350141-00-1106**
   European Technical Assessment: **ETA-23/0165; 2024-01-04**
   Technical Assessment Body: **ETA-Danmark A/S**
   Notified body/ies: **0800 - MFPA Leipzig**

7. Declared performance/s:

Safety in case of fire (BWR 2)

Reaction to fire: D-s1, d0
Resistance to fire: Annexes 5-21

Hygiene, health and the environment (BWR 3)

Air permeability (material property): Annex 2
Water permeability (material property): Annex 2
Content, emission and/or release of dangerous substances: Annex 2

Safety and accessibility in use (BWR 4)

Mechanical resistance and stability: NPD
Resistance to impact/movement: NPD
Adhesion: Annex 2
Durability: Annex 2

Protection against noise (BWR 5)

Airborne sound insulation: Annex 2

Energy economy and heat retention (BWR 6)

Thermal properties: NPD
Water vapour permeability: NPD

8. Appropriate Technical Documentation and/or Specific Technical Documentation: **-**

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Dr.-Ing. Oliver Geibig, Managing Director Business Units & Engineering

Jürgen Grün, Managing Director Chemistry & Quality

Tumlingen, 2024-01-11

This DoP has been prepared in different languages. In case there is a dispute on the interpretation the English version shall always prevail.

The Appendix includes voluntary and complementary information in English language exceeding the (language-neutrally specified) legal requirements.

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

fischer FiAM Plus is a one-part water based acrylic sealant system used to reinstate the fire resistance performance of linear joint gaps in rigid or flexible wall constructions and rigid floor constructions.

fischer FiAM Plus is supplied in cartridges, foil packs and buckets and can be applied with a dispenser gun or troweled on a suitable backing material specified in Annex B of this document.

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

The intended use of fischer FiAM Plus is to reinstate the fire resistance performance of rigid or flexible wall constructions and rigid floor constructions.

The specific elements of construction that the system fischer FiAM Plus may be used to provide a linear joint seal:

Drywalls:
The wall must have a minimum thickness of 100 mm and comprise minimum 1 layer of gypsum board, steel or wood studs and stone wool insulation or no insulation.

Rigid Walls:
The wall must have a minimum thickness of 115 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 concrete or aerated 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.

The individual requirements for walls and floors are detailed in the respective systems in Annex B of this document.

fischer FiAM Plus may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex B of this document).

The fire resistance of fischer FiAM Plus is tested according to EN 1364-4.

The maximum permitted joint/gap width for fischer FiAM Plus is 100 mm.

The maximum movement capability of fischer FiAM Plus is 25%

The provisions made in this European Technical Assessment are based on an assumed intended working life of the sealant system of 25 years, provided that the conditions laid down in the product data sheet for the packaging/transport/storage/installation/use/repair are met.

The indications given on the intended 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 selecting the appropriate 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.

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR 2)	
Reaction to fire	The product is classified as **D-s1, d0** in accordance with EN13501-1, and the EC Delegated regulation 2016/364/EU.
Resistance to fire	**See Annex B**
3.3 Hygiene, Health and the Environment (BWR 3)	
Air permeability	**Leakage rate per unit area of the seal: Q < 0,10 m^3/hm^2**
Water permeability	

Clear opening [mm]	Result [Pa]
Ø 300	Watertight to **1.050 Pa**
550x200	Watertight to **600 Pa**
100x1000	Watertight to **600 Pa**

Content, emission and/or release of dangerous Substances*)

Release scenario	**IA1: Product with direct contact to indoor air.**	
	3 days [mg/m^3]	28 days [mg/m^3]
SVOC	**0**	**0**
VOC	**0,005**	**0,005**

3.4 Safety and accessibility in use (BWR4)	
Mechanical resistance and stability	**No performance assessed**
Resistance to impact/movement	**No performance assessed**
Adhesion	

Elastic recovery	**19 %**
Loss of volume	**16.2 %**
Flow of sealant	**No performance assessed**

Durability	Use category: **Type Y_2**
Movement capability	**See Annex B**
Cycling of perimeter seals for curtain wall	**No performance assessed**
Compression set	**No performance assessed**
Linear expansion on setting	**No performance assessed**
3.5 Protection against noise (BWR5)	
Airborne sound insulation	**$R_{s,w}$ (C; C_{tr}) = 55 (-2; -5) dB**
3.6 Energy economy and heat retention (BWR6)	
Thermal properties	**No performance assessed**
Water vapour permeability	**No performance assessed**

See additional information in section 3.7-3.8

*) 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.

3.7 Methods of verification

The assessment of fischer FiAM Plus for the declared intended use has been made in accordance with EAD 350141-00-1106 Firestopping and fire sealing products, Linear Joint Seals.

3.8 General aspects related to the fitness for use of the product.

The verification of durability is part of testing the essential characteristics. fischer FiAM Plus may be used in end-use applications according to the provisions for use category Y_2 (intended for use at temperatures below 0°C, but with exposure to UV, but no exposure to rain or UV radiation) without expecting significant changes of the characteristics relevant for fire protection. Products that meet the requirements for type Y_2 also meet the requirement for type Z_1 and Z_2.

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

The fischer FiAM Plus for firestopping and fire sealing purposes are manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

4 Attestation and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base.

4.1 AVCP system

According to the decision 1999/454/EC of the European Commission, the system of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is: **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 prior to CE marking.

Annex B

Resistance to Fire Classification of fischer FiAM Plus

B.1 Rigid wall constructions with wall thickness of minimum 115 mm

B.1.1 Backer rod systems

B.1.1.1 Single sided wall joint seal, unexposed side

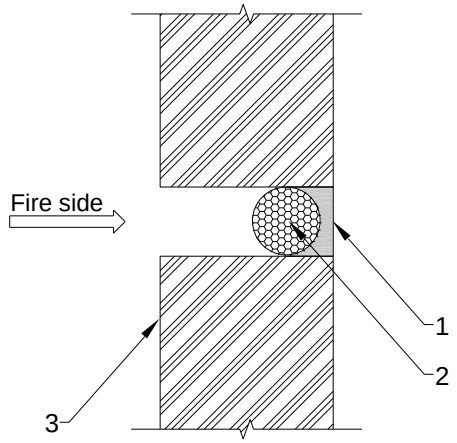
Joint Seal: fischer FiAM Plus sealant to one side of the wall, backed with backer rod or stone wool, installed flush with surface of wall, wall thickness ≥115 mm, with movement capability	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Wall

Table B.1.1.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³)	≥10 mm	±12.5 %	PE backer rod	E 240–V–M12.5-F W 0 to W 20 EI 45–V–M12.5–F W 0 to W 20
	≥20 mm			E 240–V–M12.5-F W 0 to W 50 EI 60–V–M12.5–F W 0 to W 50

fischer FiAM Plus	**Annex B.1.1.1**
Single sided wall joint seal, unexposed side	

B.1.1.2 Single sided wall joint seal, exposed side

Joint Seal: fischer FiAM Plus sealant to one side of the wall, backed with backer rod or stone wool, installed flush with surface of wall, wall thickness ≥115 mm, with movement capability

Construction details:

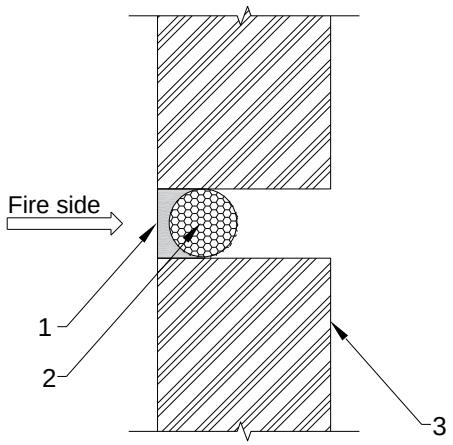


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Wall

Table B.1.1.2

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³)	≥10 mm	±12.5 %	PE backer rod	E 240–V–M12.5-F–W 0 to W 20 EI 30–V–M12.5–F–W 0 to W 20
	≥20 mm			E 240–V–M12.5-F–W 0 to W 50 EI 45–V–M12.5–F–W 0 to W 50

fischer FiAM Plus	Annex B.1.1.2
Single sided wall joint seal, exposed side	

B.2 Rigid wall constructions with wall thickness of minimum 124 mm

B.2.1 Backer rod systems

B.2.1.1 Double sided wall joint seal

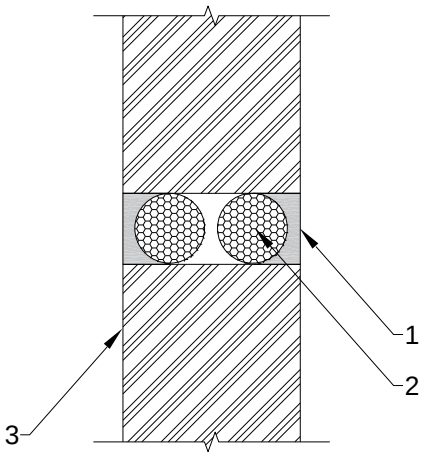
Joint Seal:	fischer FiAM Plus sealant to both sides of the wall, backed with backer rod or stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm, with movement capability
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Wall

Table B.2.1.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³)	≥10 mm	±25 %	PE backer rod	E 240–V–M25-F–W 0 to W 60 EI 120–V–M25–F–W 0 to W 60

fischer FiAM Plus	**Annex B.2.1.1**
Double sided wall joint seal	

B.2.1.2 Double sided wall joint seal, timber one side

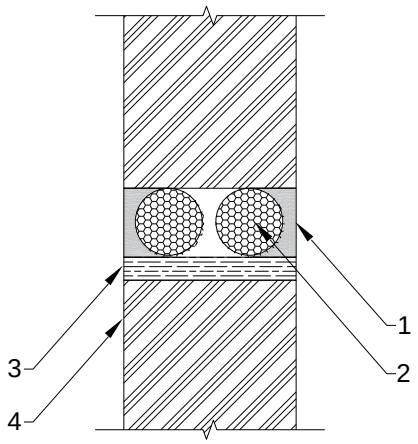
Joint Seal: fischer FiAM Plus sealant to both sides of the wall, backed with backer rod or stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Timber 4. Wall

Table B.2.1.2

Substrate	Seal thickness	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³) / timber	≥10 mm	PE backer rod	EI 90–V–X–F–W 0 to W 50

fischer FiAM Plus	**Annex B.2.1.2**
Double sided wall joint seal, timber one side	

B.2.1.3 Double sided wall joint seal, timber double side

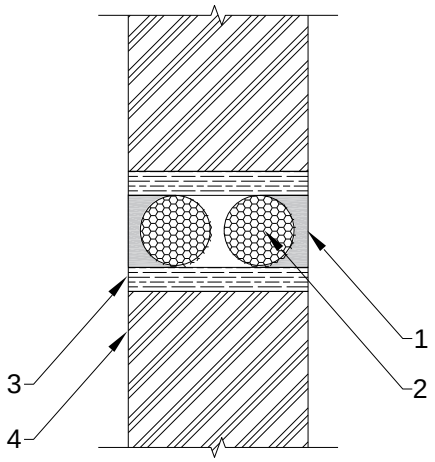
Joint Seal: fischer FiAM Plus sealant to both sides of the wall, backed with backer rod or stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Timber 4. Wall

Table B.2.1.3

Substrate	Seal thickness	Backing material	Classification
Timber	≥10 mm	PE backer rod	EI 90–V–X–F–W 0 to W 50

fischer FiAM Plus	**Annex B.2.1.3**
Double sided wall joint seal, timber double side	

B.2.2 Stone wool systems

B.2.2.1 Single sided wall joint seal, unexposed side

Joint Seal: fischer FiAM Plus sealant to one side of the wall, backed with stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm, with movement capability

Construction details:

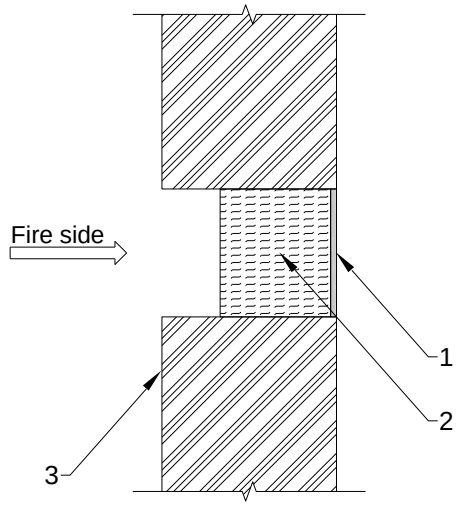


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Wall

Table B.2.2.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³)	≥5 mm	±25 %	Stone wool, thickness ≥ 100mm ρ ≥ 60kg/m³, compressed ≥30 %	E 240–V–M25–F–W 5 to W 60 EI 180–V–M25–F–W 5 to W 60

fischer FiAM Plus	**Annex B.2.2.1**
Single sided wall joint seal, unexposed side	

B.2.2.2 Single sided wall joint seal, exposed side

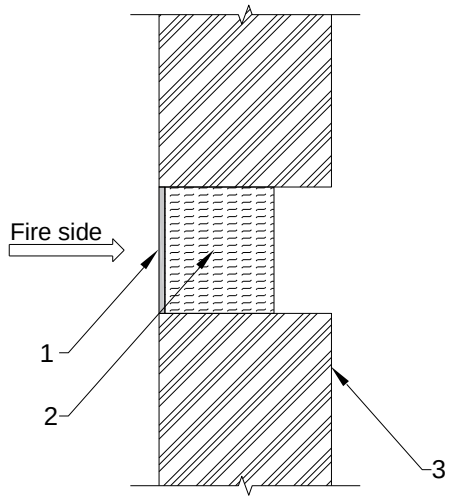
Joint Seal: fischer FiAM Plus sealant to one side of the wall, backed with stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm, with movement capability	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Wall

Table B.2.2.2

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³)	≥5 mm	±25 %	Stone wool, thickness ≥ 100mm ρ ≥60kg/m³, compressed ≥30 %	E 240–V–M25–F–W 5 to W 60 EI 120–V–M25–F–W 5 to W 60

fischer FiAM Plus	**Annex B.2.2.2**
Single sided wall joint seal, exposed side	

B.2.2.3 Double sided wall joint seal

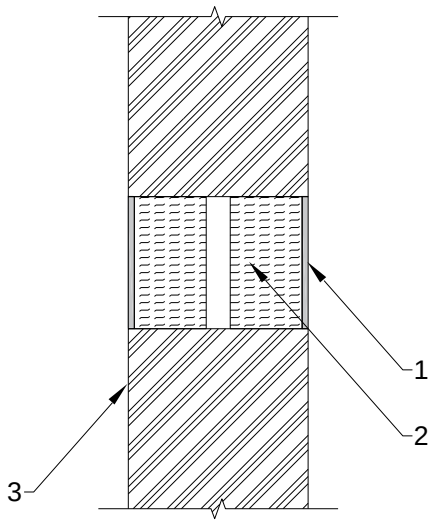
Joint Seal: fischer FiAM Plus sealant to both sides of the wall, backed with stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm, with movement capability	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Wall

Table B.2.2.3

Substrate	Seal thickness	Movement capability	Backing material*	Classification
Rigid wall (ρ ≥650 kg/m³)	≥5 mm	±12.5 %	Stone wool, thickness ≥ 50mm on both sides*, ρ ≥ 60kg/m³, compressed ≥30 %	EI 120–V–M12.5–F–W 5 to W 100

* ≥5 mm air gap between layers of insulation

fischer FiAM Plus	**Annex B.2.2.3**
Double sided wall joint seal	

B.2.2.4 Double sided wall joint seal, steel one side

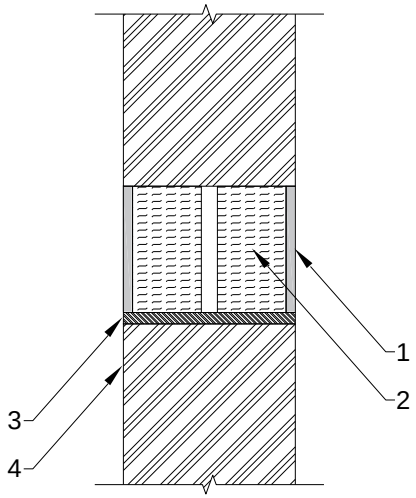
Joint Seal: fischer FiAM Plus sealant to both sides of the wall, backed with stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Steel 4. Wall

Table B.2.2.4

Substrate	Seal thickness	Backing material	Classification
Rigid wall (ρ ≥650 kg/m³) / steel	≥10 mm	Stone wool, thickness ≥ 50mm on both sides*, ρ ≥ 60kg/m³, compressed ≥30 %	E 240–V–X–F–W 5 to W 70 EI 45–V–X–F–W 5 to W 70

* ≥5 mm air gap between layers of insulation

fischer FiAM Plus	**Annex B.2.2.4**
Double sided wall joint seal, steel one side	

B.2.2.5 Double sided wall joint seal, steel double side

Joint Seal: fischer FiAM Plus sealant to both sides of the wall, backed with stone wool, installed flush with surface of wall, rigid wall thickness ≥124 mm

Construction details:

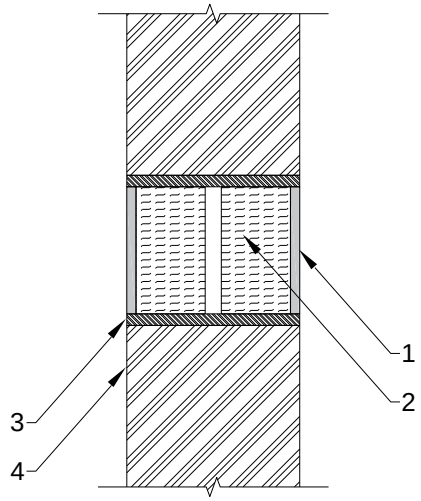


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Steel
4. Wall

Table B.2.2.5

Substrate	Seal thickness	Backing material	Classification
Steel	≥10 mm	Stone wool, thickness ≥ 50mm on both sides*, ρ ≥ 60kg/m³, compressed ≥30 %	E 240–V–X–F–W 5 to W 70 EI 45–V–X–F–W 5 to W 70

* ≥5 mm air gap between layers of insulation

fischer FiAM Plus	Annex B.2.2.5
Double sided wall joint seal, steel double side	

B.3 Head of wall construction with rigid wall and floor, minimum floor thickness 150mm

B.3.1 Backer rod systems

B.3.1.1 Double sided head of wall joint seal

Joint Seal: fischer FiAM Plus sealant to both sides of the wall as head of wall joint, backed with backer rod or stone wool wool, installed flush with surface of wall, rigid wall thickness ≥115 mm, with movement capability

Construction details:

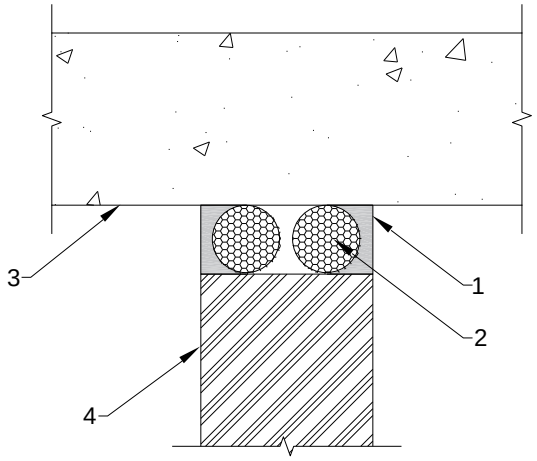


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Floor
4. Wall

Table B.3.1.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³) / Rigid wall (ρ ≥650 kg/m³)	≥10 mm	±25 %	PE backer rod	E 240–T–M25–F–W 0 to W 60 EI 180–T–M25–F–W 0 to W 60

fischer FiAM Plus	**Annex B.3.1.1**
Double sided head of wall joint seal	

B.3.2 Stone wool systems

B.3.2.1 Double sided head of wall joint seal

Joint Seal: fischer FiAM Plus sealant to both sides of the wall as head of wall joint, backed with stone wool, installed flush with surface of wall, wall thickness ≥115 mm, with movement capability

Construction details:

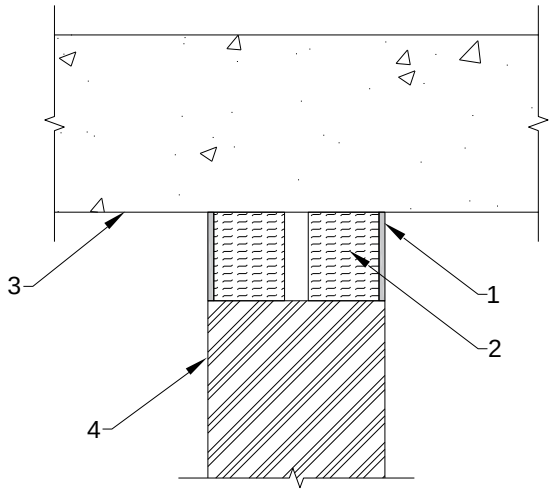


Figure not to scale

Key:

1. FiAM Plus
2. Backing material*
3. Floor
4. Wall

Table B.3.2.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³) / Rigid wall (ρ ≥650 kg/m³)	≥5 mm	±25 %	Stone wool, thickness ≥ 50mm on both sides*, ρ ≥ 60kg/m³, compressed ≥30 %	EI 240–T–M25–F–W 5 to W 60
	≥3 mm			EI 240–T–M25–F–W 5 to W 40

* ≥5 mm air gap between layers of insulation

fischer FiAM Plus	Annex B.3.2.1
Double sided head of wall joint seal	

B.4 Rigid floor construction with floor thickness of minimum 150mm

B.4.1 Backer rod systems

B.4.1.1 Single sided floor joint seal

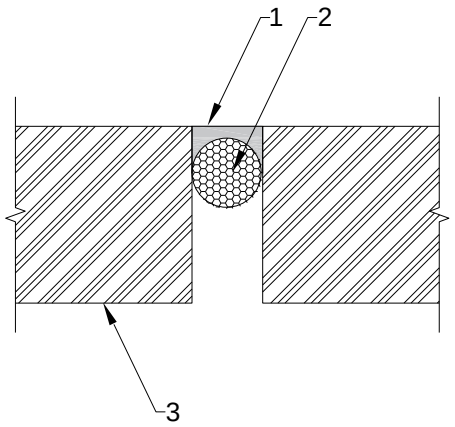
Joint Seal: fischer FiAM Plus sealant to upper side of floor, backed with backer rod or stone wool, installed flush with surface of floor, floor thickness ≥150 mm, with movement capability	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Floor

Table B.4.1.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³)	≥15 mm	±25 %	PE backer rod	E 240–H–M25–F–W 0 to W 40 EI 60–H–M25–F–W 0 to W 40
	≥10 mm	±20 %		E 180–H–M20–F–W 0 to W 50 EI 20–H–M20–F–W 0 to W 50
	≥8 mm			E 240–H–M20–F–W 0 to W 20 EI 45–H–M20–F–W 0 to W 20

fischer FiAM Plus	**Annex B.4.1.1**
Single sided floor joint seal	

B.4.1.2 Single sided floor joint seal, timber one side

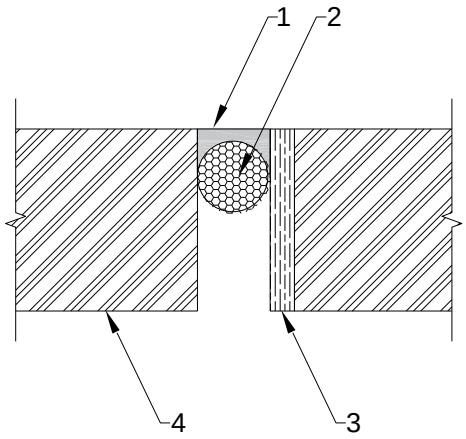
Joint Seal: fischer FiAM Plus sealant to upper side of floor, backed with PE backer rod or stone wool, installed flush with surface of floor, floor thickness ≥150 mm	
Construction details:  Figure not to scale	Key: 1. FiAM Plus 2. Backing material 3. Timber 4. Floor

Table B.4.1.2

Substrate	Seal thickness	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³) / timber	≥12.5 mm	PE backer rod	EI 60–H–X–F–W 0 to W 50

fischer FiAM Plus	**Annex B.4.1.2**
Single sided floor joint seal, timber one side	

B.4.1.3 Single sided floor joint seal, steel one side

Joint Seal:	fischer FiAM Plus sealant to upper side of floor, backed with backer rod or stone wool, installed flush with surface of floor, floor thickness ≥150 mm

Construction details:

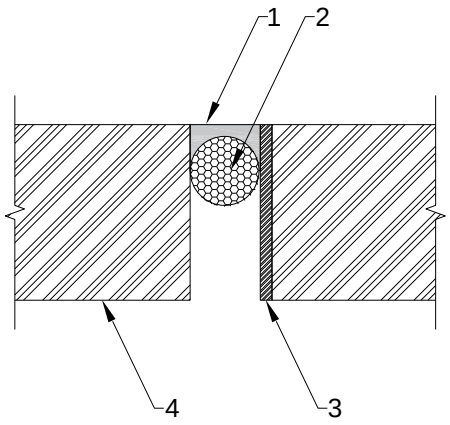


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Steel
4. Floor

Table B.4.1.3

Substrate	Seal thickness	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³) / steel	≥10 mm	PE backer rod	E 240–H–X–F–W 0 to W 20 EI 30–H–X–F–W 0 to W 20

fischer FiAM Plus	**Annex B.4.1.3**
Single sided floor joint seal, steel one side	

B.4.2 Backer rod systems

B.4.2.1 Single sided floor joint seal

Joint Seal: fischer FiAM Plus sealant to upper side of floor, backed with stone wool, installed flush with surface of floor, floor thickness ≥150 mm, with movement capability

Construction details:

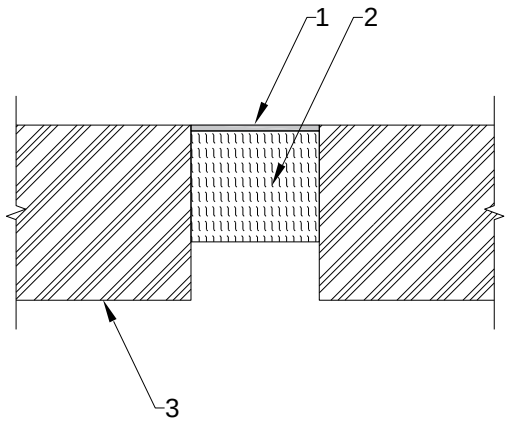


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Floor

Table B.4.2.1

Substrate	Seal thickness	Movement capability	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³)	≥5 mm	±25 %	Stone wool, thickness ≥ 100mm ρ ≥ 60kg/m³, compressed ≥30 %	EI 240–H–M25–F–W 5 to W 60
		±25 %		EI 120–H–M25–F–W 5 to W 100
		±12.5 %		E 240–H–M12.5–F–W 5 to W 100 EI 120–H–M12.5–F–W 5 to W 100

fischer FiAM Plus	Annex B.4.2.1
Single sided floor joint seal	

B.4.2.2 Single sided floor joint seal, steel one side

Joint Seal: fischer FiAM Plus sealant to upper side of floor, backed with stone wool, installed flush with surface of floor, floor thickness ≥150 mm

Construction details:

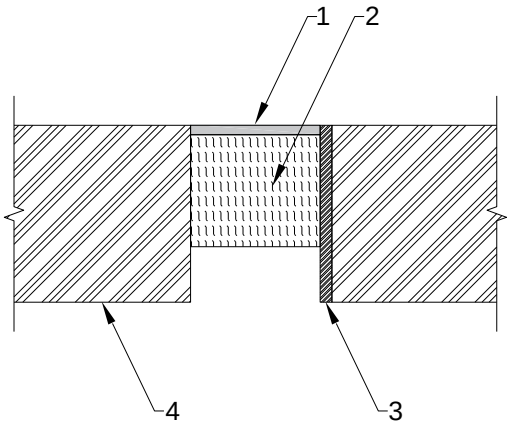


Figure not to scale

Key:

1. FiAM Plus
2. Backing material
3. Steel
4. Floor

Table B.4.2.2

Substrate	Seal thickness	Backing material	Classification
Rigid floor (ρ ≥650 kg/m³) / steel	≥10 mm	Stone wool, thickness ≥ 100mm ρ ≥ 60kg/m³, compressed ≥30 %	E 180–H–X–F–W 5 to W 60 EI 20–H–X–F–W 5 to W 60

fischer FiAM Plus	**Annex B.4.2.2**
Single sided floor joint seal, steel one side	