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Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011

European Technical Assessment ETA-23/0324 of 202305/26

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 66 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:	HENSOMASTIK® Acrylic for linear joints and gaps
Product family to which the above construction product belongs:	Linear joint seals
Manufacturer:	Rudolf Hensel GmbH Lauenburger Landstraße 11 DE-21039 Börnsen Telephone: +49 40 72106210 www.rudolf-hensel.de
Manufacturing plant:	Rudolf Hensel GmbH Lauenburger Landstraße 11 DE-21039 Börnsen
This European Technical Assessment contains:	15 pages including 2 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, based on:	European Assessment Document (EAD) No. 350141-00-1106: Linear joint and gap seals
This version replaces:	-

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product.

The HENSOMASTIK® Acrylic for linear joint and gaps is an acrylic penetrations sealant with ablative fillers used to form a fire penetration seal in linear joints and gaps in wall and floor constructions where wall and floor constructions adjoin.

The HENSOMASTIK® Acrylic for linear joint and gaps may be used to provide a linear joint or gap fire penetration seal with specific supporting constructions and substrates, for details see Annex A.

The maximum movement capability of HENSOMASTIK® Acrylic for linear joint and gaps is ≤ 7.5 %. Max deformation (ISO 8339) is 14 %. Resilience (ISO 7389 B) is 28 %.

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

The construction product HENSOMASTIK® Acrylic for linear joint and gaps is assessed on the basis of EAD 350141-00-1106, as an acrylic sealant.

The specific elements of construction that HENSOMASTIK® Acrylic for linear joint and gaps may be used to provide linear joint or gap fire penetration seal in, are:

Flexible walls: The wall must have a minimum thickness of 100 mm and consist of a wooden or steel stud structure lined on both faces with at least two layers of 12.5 mm thick boards. A minimum distance of 100 mm must be maintained between the seal and the studs, and the gap between the stud and the seal must be closed with at least 100 mm of insulation material of class A1 or A2 according to EN 13501-1.

Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 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 450 kg/m^3.

Steel: Room-enclosing building components made of steel, or building components made of aerated concrete, concrete, hollow blocks or masonry, which are clad on one side with steel.

Wood: Room-enclosing building components made of massive wood or cross-laminated timber (CLT) with minimum 25 mm thickness.

Installation positions 1, 2, 3, 4 and 5 according to DIN EN 1366-4 figure 17.

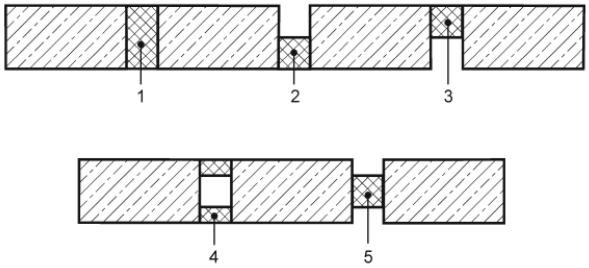


Figure 1 HENSOMASTIK® Acrylic for linear joint and gaps sealing positions

More information in table 3: “Performance of the product and references to the methods used for its assessment”.

The fire sealing product is to be installed according to the manufacturer’s installation manual.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the HENSOMASTIK® Acrylic for linear joint and gaps of 10 years, provided the manufacturers conditions laid down in the manufacturers data sheet for the packaging, transport, storage, installation, use, maintenance and repair are met.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by the Technical Assessment Body issuing an ETA based on the EAD No. 350141-00-1106 but are regarded only as means for expressing the expected economically reasonable working life of the product.

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 (BWR2)	
Reaction to fire	The product is classified as **E** in accordance with EN 13501-1 and Commission Delegated Regulation 2016/364
Resistance to fire	The product is classified according to EN 13501-2, information can be found in annex A-B
3.3 Hygiene, health and the environment (BWR3)	
Content, emission and/or release of dangerous substances*	**Release scenario: IA2** **HENSOMASTIK® Acrylic** / **After 3 days** [µg/m³] / **After 28 days** [µg/m³] **TSVOC** / **< 5** / **< 5** **TVOC** / **< 150** / **< 20**
Air permeability (material property)	**No performance assessed**
Water Permeability (material property)	**No performance assessed**
3.4 Safety in use (BWR4)	
Mechanical resistance and stability	**No performance assessed**
Resistance to impact/movement	**No performance assessed**
Adhesion	**No performance assessed**
Durability	**Use condition: Y_1** Effects of over-painting with epoxy resin, polyurethane acrylic, alkyd resin, or plastic dispersion is assessed to have no direct influence on the surface hardness of the test specimen.
Movement capability	**Not relevant** Movement capacity < 7,5%
Cycling of perimeter seals for curtain walls	**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})= 63 (-1;-3) 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 3.9 – 3.10.

*) 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.

3.9 Methods of verification

The characteristic values of the joint sealing system are based on the EAD 350141-00-1106.

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

The verification of durability is part of testing the essential characteristics. HENSOMASTIK® Acrylic for linear joints and gaps may be used in end-use applications according to the provisions for use category Y_1 (intended for use at temperatures below 0°C with exposure to UV, but no exposure to rain) without expecting significant changes of the characteristics relevant for fire protection. Products that meet the requirements for type Y_1 also meet the requirement for type Y_2, 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.

HENSOMASTIK® Acrylic for linear joints and gaps is 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 Assessment 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, as amended, the system(s) of assessment and verification of constancy of performance is system 1 (see Annex V to Regulation (EU) No 305/2011).

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

Issued in Copenhagen on 2023-05-26 by

Thomas Bruun
Managing Director, ETA-Danmark

A.1. Linear joint or gap seal, flexible wall ≥ 100 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic 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 or wooden studs lined on both faces with minimum 2 layers of 12.5 mm thick boards. The wall is permitted with or without insulation material between the boards.

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

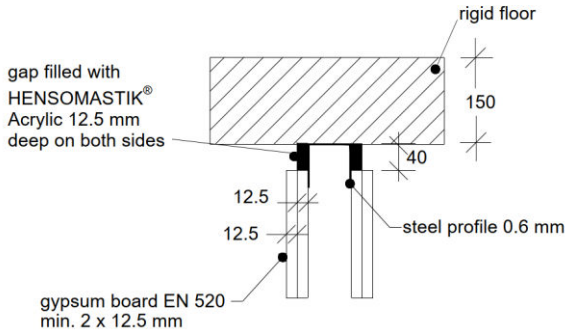
Construction details: Joints in vertical construction elements, such as wall joints in flexible walls connecting to a rigid floor, suspended ceiling or roof, other room-enclosing building components and wall joints without connection to a ceiling, suspended ceiling or roof.

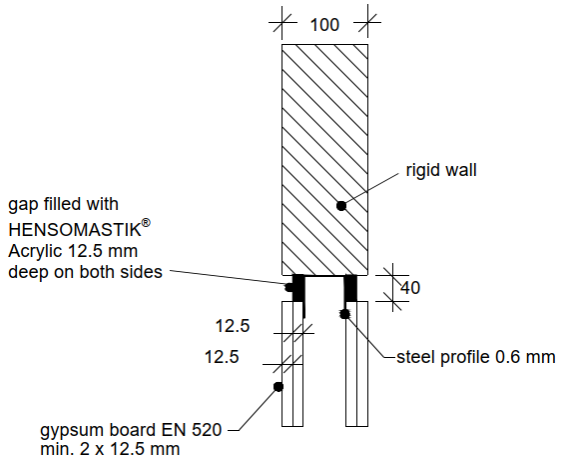
In the max 40 mm wide gap, from both sides of the wall, HENSOMASTIK® Acrylic is applied at least 12.5 mm deep on the connecting steel profile which must have a minimum thickness of 0.6 mm.

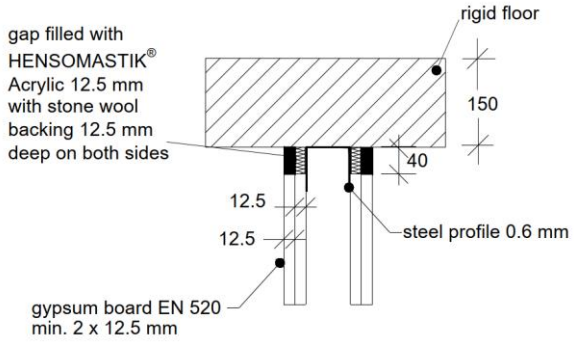
Alternatively, an optional max 12.5 mm deep backfill of darning wool (mineral wool class A1 or A2 according to EN 13501-1, density ≥ 40 kg/m^3) is first applied to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 12.5 mm deep, and flush with the wall surface. The density and filling depth of the mineral wool may be increased in practice, but not reduced.

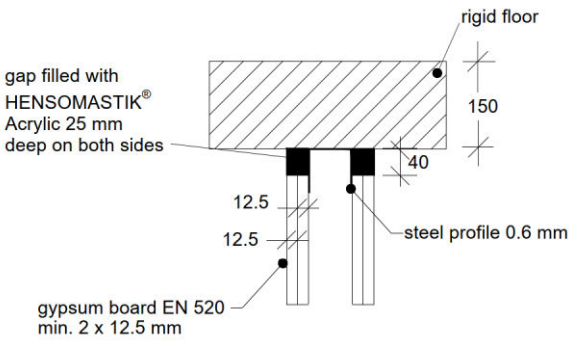
Alternatively, HENSOMASTIK® Acrylic is applied in full depth and flush with the wall surface.

Classification applies to installation positions 2, 3 and 5 of DIN EN 1366-4 figure 17.









A.1.1. Linear joint or gap seal, flexible wall ≥ 100 mm

Construction elements / Substrate	**Min. filling depth HENSOMASTIK® Acrylic [mm]**	**Classification**
Flexible wall / rigid floor	12.5	EI 120 – T – X – F – W0 to W40

A.2. Linear joint or gap seal, rigid wall ≥ 150 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

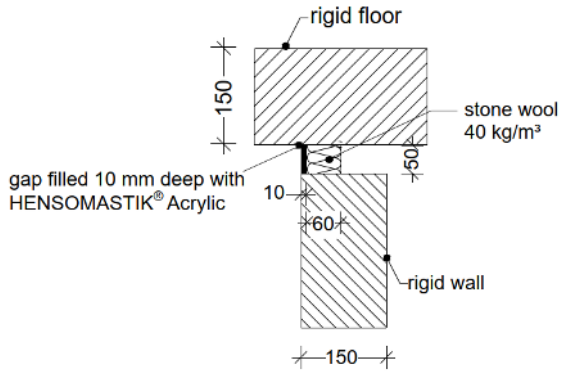
Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m3.

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

Construction details: Joints in vertical construction elements, such as wall joints in rigid walls connecting to a rigid floor, suspended ceiling or roof, other room-enclosing building components and wall joints without connection to a ceiling, suspended ceiling or roof.

From either one side of the wall, a minimum 60 mm deep backfill of darning wool (mineral wool class A1 or A2 according to EN 13501-1, density ≥ 40 kg/m^3) is first placed in the max 50 mm wide gap, at a distance of at least 10 mm from the wall surface to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 10 mm deep, and flush with the wall surface. The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation positions 2, 3 and 5 of DIN EN 1366-4 figure 17.



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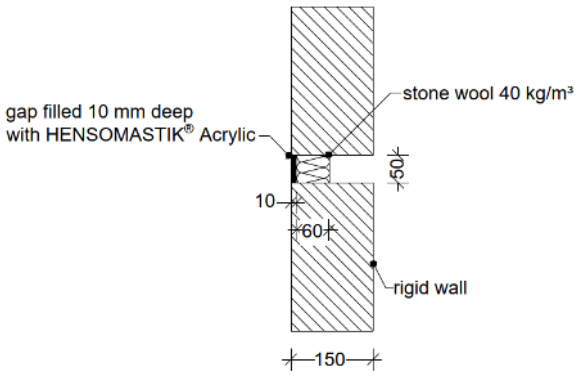

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A.2.1. Linear joint or gap seal, rigid wall ≥ 150 mm

Construction elements / Substrate	Min. filling depth mineral wool ≥ 40 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid wall / rigid wall	60	10	EI 90 – T – X – F – W0 to W50
Rigid wall / rigid floor	60	10	EI 90 – T – X – F – W0 to W50

A.3. Linear joint or gap seal, rigid wall ≥ 150 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

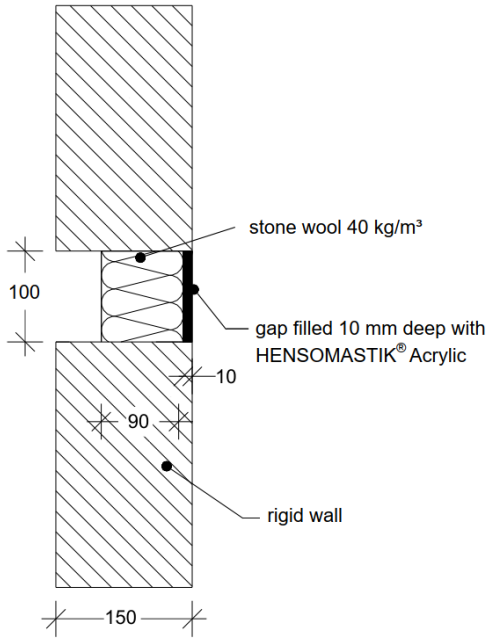
Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m3.

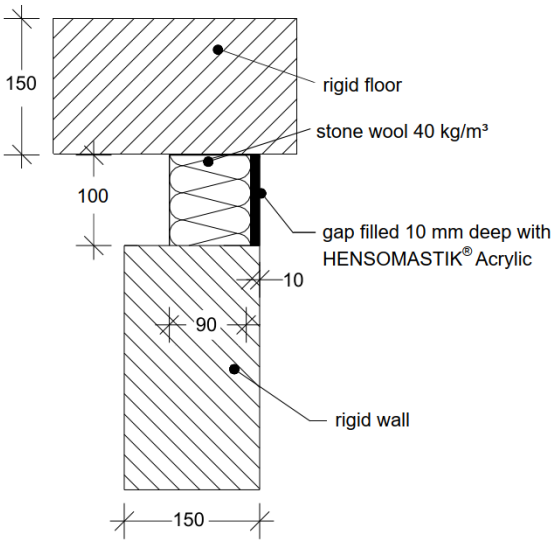
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Construction details: Joints in vertical construction elements, such as wall joints in rigid walls connecting to a rigid wall or floor, suspended ceiling or roof, other room-enclosing building components and wall joints without connection to a ceiling, suspended ceiling or roof.

From either one side of the wall, a minimum 90 mm deep backfill of darning wool (mineral wool class A1 or A2 according to EN 13501-1, density ≥ 40 kg/m^3) is first placed in the max 100 mm wide gap, at a distance of at least 10 mm from the wall surface to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 10 mm deep, and flush with the wall surface. The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation position 3 of DIN EN 1366-4 figure 17.





all dimensions in mm

A.3.1. Linear joint or gap seal, rigid wall ≥ 150 mm

Construction elements / Substrate	Min. filling depth mineral wool ≥ 40 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid wall / rigid wall	90	10	EI 120 – T – X – F – W0 to W100
Rigid wall / rigid floor	90	10	EI 120 – T – X – F – W0 to W100

A.4. Linear joint or gap seal, rigid wall ≥ 150 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m3.

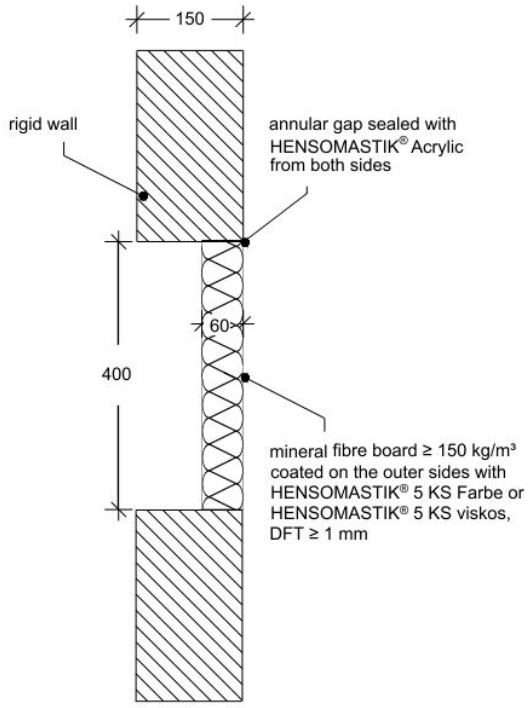
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

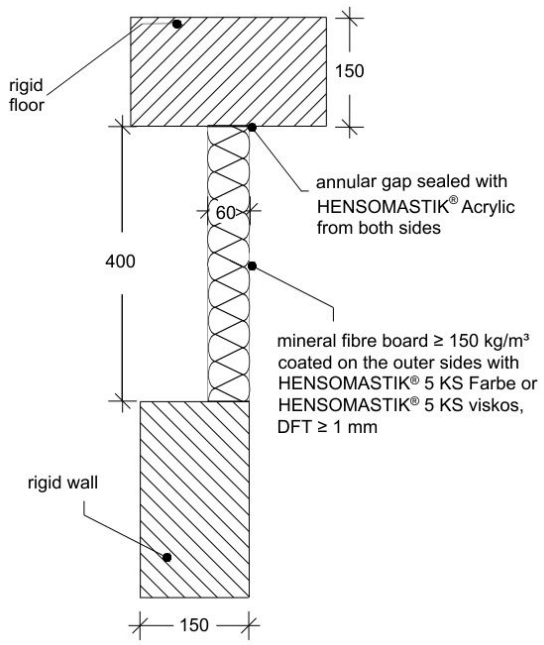
Construction details: Joints in vertical construction elements, such as wall joints in rigid walls connecting to a rigid wall or floor, suspended ceiling or roof, other room-enclosing building components and wall joints without connection to a ceiling, suspended ceiling or roof.

From either one side of the wall, a minimum 60 mm thick mineral fibre board, density ≥ 150 kg/m³, coated on the outer sides with HENSOMASTIK® 5 KS Farbe or HENSOMASTIK® 5 KS viskos in dry film thickness (DFT) ≥ 1 mm, positioned flush with the wall surface and fixed by friction is first placed in the max 400 mm wide gap. The annular gap between mineral fibre board and wall/floor is closed from both sides with HENSOMASTIK® Acrylic.

The density and thickness of the mineral fibre board may be increased in practice, but not reduced.

Classification applies to installation position 3 of DIN EN 1366-4 figure 17.





all dimensions in mm

A.4.1. Linear joint or gap seal, rigid wall ≥ 150 mm

Construction elements / Substrate	Min. thickness mineral fibre board ≥ 150 kg/m³ [mm]	Min. DFT coating HENSOMASTIK® 5 KS [mm]	Classification
Rigid wall / rigid wall	60	1	EI 120 – T – X – F – W0 to W400
Rigid wall / rigid floor	60	1	EI 120 – T – X – F – W0 to W400

A.5. Linear joint or gap seal, rigid wall ≥ 150 mm and wooden construction elements

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

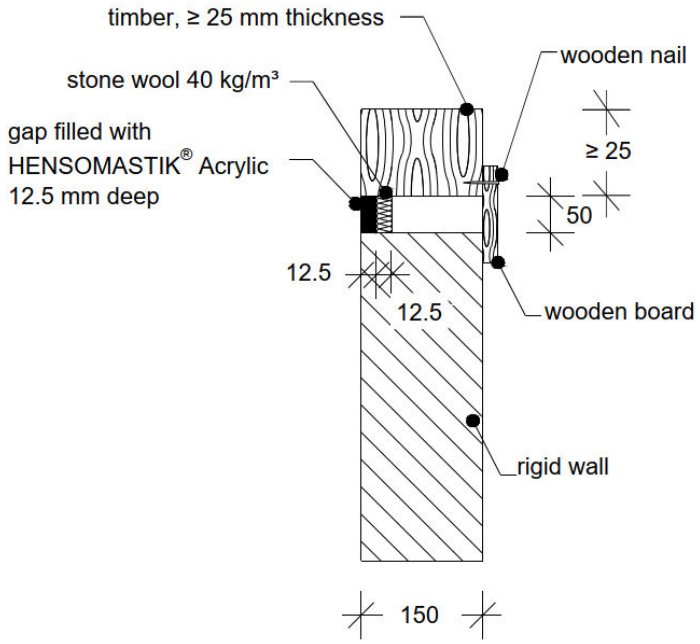
Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m3.

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

Construction details: Joints in vertical construction elements, such as wall joints in rigid walls connecting to a wooden construction element with minimum 25 mm thickness.

From either one side of the wall, a minimum 12.5 mm deep backfill of darning wool (mineral wool class A1 or A2 according to EN 13501-1, density ≥ 40 kg/m^3) is first placed in the max 50 mm wide gap, at a distance of at least 12.5 mm from the wall surface to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 12.5 mm deep, and flush with the wall surface. The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation positions 2, 3 and 5 of DIN EN 1366-4 figure 17.



all dimensions in mm

A.5.1. Linear joint or gap seal, rigid wall ≥ 150 mm and wooden construction elements

Construction elements / Substrate	Min. filling depth mineral wool ≥ 40 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid wall / wood	12.5	12.5	EI 60 – T – X – F – W0 to W50

A.6. Linear joint or gap seal, rigid wall ≥ 150 mm and steel

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m3.

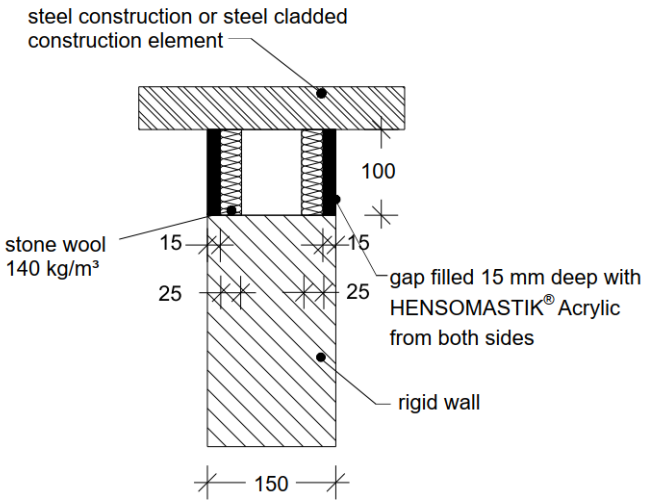
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Construction details: Joints in vertical construction elements, such as floor joints in rigid floors connecting to steel construction elements or space-enclosing building components made of aerated concrete, concrete, hollow blocks or masonry, which are clad on one side with steel.

From both sides of the floor, a minimum 25 mm deep backfill of mineral wool (class A1 or A2 according to EN 13501-1, density ≥ 140 kg/m^3) or a minimum 25 mm thick friction-fitted mineral fibre board, density ≥ 140 kg/m³, is first placed in the max 100 mm wide gap, at a distance of at least 15 mm from the wall surfaces to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 15 mm deep from both sides, and flush with the wall surface.

The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation position 4 of DIN EN 1366-4 figure 17.



all dimensions in mm

A.6.1. Linear joint or gap seal, rigid wall ≥ 150 mm and steel

Construction elements / Substrate	Min. filling depth mineral wool ≥ 140 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid wall / steel	25	15	EI 60 – T – X – F – W0 to W100

B.1. Linear joint or gap seal, rigid floor ≥ 150 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 450 kg/m3.

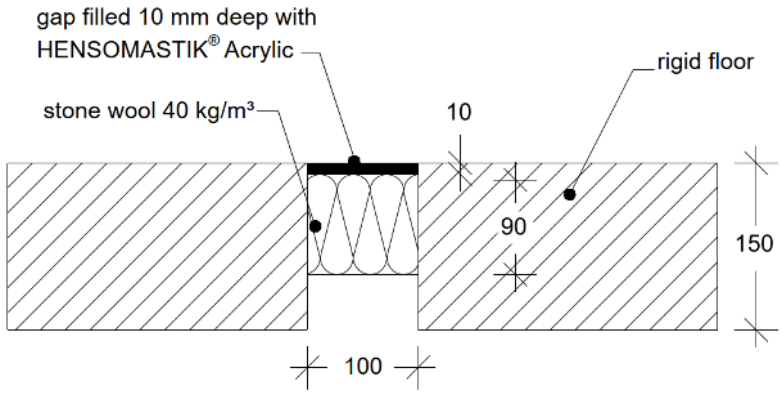
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Construction details: Joints in horizontal construction elements, such as floor joints in rigid floors connecting to a rigid floor.

From the topside of the floor, a minimum 90 mm deep backfill of darning wool (mineral wool class A1 or A2 according to EN 13501-1, density ≥ 40 kg/m^3) is first placed in the max 100 mm wide gap, at a distance of at least 10 mm from the floor surface to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 10 mm deep, and flush with the floor surface.

The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation position 3 of DIN EN 1366-4 figure 17.



all dimensions in mm

B.1.1. Linear joint or gap seal, rigid floor ≥ 150 mm

Construction elements / Substrate	Min. filling depth mineral wool ≥ 40 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid floor / rigid floor	90	10	EI 120 – H – X – F – W0 to W100

B.2. Linear joint or gap seal, rigid floor ≥ 150 mm

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 450 kg/m3.

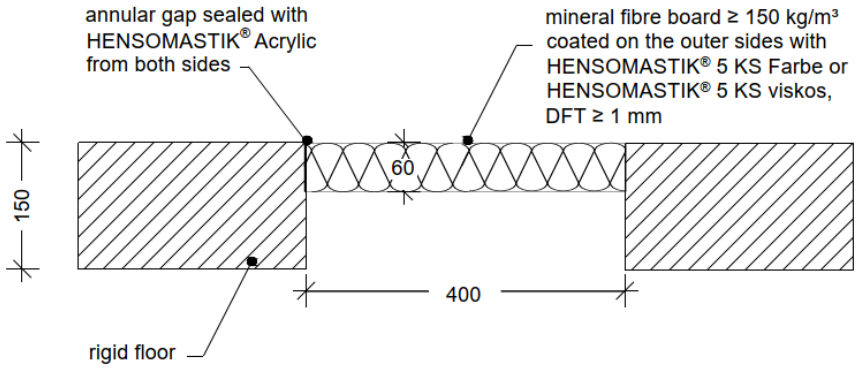
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Construction details: Joints in horizontal construction elements, such as floor joints in rigid floors connecting to a rigid floor.

From the top of the floor, a minimum 60 mm thick mineral fibre board, density ≥ 140 kg/m³, coated on the outer sides with HENSOMASTIK® 5 KS Farbe or HENSOMASTIK® 5 KS viskos in dry film thickness (DFT) ≥ 1 mm, positioned flush with the topside of the floor and fixed by friction is first placed in the max 400 mm wide gap. The annular gap between mineral fibre board and floor is closed from both sides with HENSOMASTIK® Acrylic.

The density and thickness of the mineral fibre board may be increased in practice, but not reduced.

Classification applies to installation position 3 of DIN EN 1366-4 figure 17.



all dimensions in mm

B.2.1. Linear joint or gap seal, rigid floor ≥ 150 mm

Construction elements / Substrate	Min. thickness mineral fibre board ≥ 150 kg/m³ [mm]	Min. DFT coating HENSOMASTIK® 5 KS [mm]	Classification
Rigid floor / rigid floor	60	1	EI 120 – H – X – F – W0 to W400

B.3. Linear joint or gap seal, rigid floor ≥ 150 mm and steel

Permissible construction elements: The specific elements of construction that HENSOMASTIK® Acrylic may be used to provide a gap or joint seal in, are as follows:

Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 450 kg/m3.

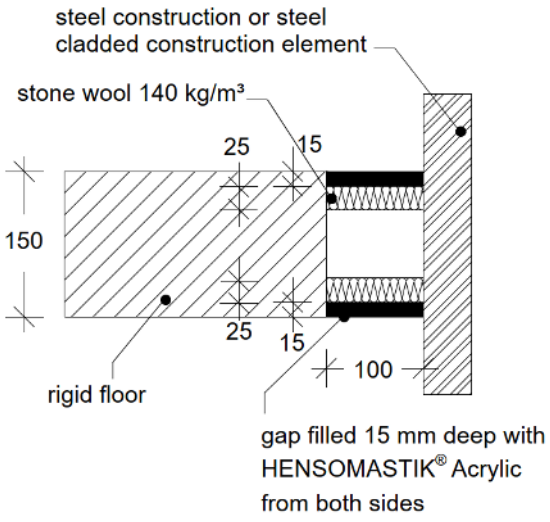
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Construction details: Joints in horizontal construction elements, such as floor joints in rigid floors connecting to steel construction elements or space-enclosing building components made of aerated concrete, concrete, hollow blocks or masonry, which are clad on one side with steel.

From both sides of the floor, a minimum 25 mm deep backfill of mineral wool (class A1 or A2 according to EN 13501-1, density ≥ 140 kg/m^3) or a minimum 25 mm thick friction-fitted mineral fibre board, density ≥ 140 kg/m³, is first placed in the max 100 mm wide gap, at a distance of at least 15 mm from the floor surfaces to ensure the correct filling depth of HENSOMASTIK® Acrylic, which is applied at least 15 mm deep from both sides, and flush with the topside and underside of the floor.

The density and filling depth of the mineral wool may be increased in practice, but not reduced.

Classification applies to installation position 4 of DIN EN 1366-4 figure 17.



all dimensions in mm

B.3.1. Linear joint or gap seal, rigid floor ≥ 150 mm and steel

Construction elements / Substrate	Min. filling depth mineral wool ≥ 140 kg/m^3 [mm]	Min. filling depth HENSOMASTIK® Acrylic [mm]	Classification
Rigid floor / steel	25	15	EI 60 – H – X – F – W0 to W100