



## HENSOMASTIK® Acrylic

### Fire resistant sealing compound for linear joints and gaps

#### Technical Data Sheet and Installation Manual

Ready-for-use acrylic based liquid filler from cartridge used to form a fire penetration seal in linear joints and gaps in wall and floor constructions where wall and floor constructions adjoin.

- Fire resistance tested according to EN 1366-4 up to EI 120 in walls and floors
- For gaps up to 400 mm and one-sided construction variants
- Simple to apply with a smooth surface finish
- Durability classes Y1 / Y2 / Z1 / Z2
- Low emissions – environmental and user friendly
- High sound insulation formula



Member of  
**DGNB**  
Deutsche Gesellschaft für Nachhaltiges Bauen  
German Sustainable Building Council



# TECHNICAL INFORMATION

## Intended Use

The **HENSOMASTIK® Acrylic** is a flexible white acrylic sealant especially formulated to provide excellent fire resistance and acoustic performance, supplied in liquid form in cartridges or sleeves.

**HENSOMASTIK® Acrylic** for linear joints and gaps [see ETA 23/0324 according to EN 1366-4, assessed on the basis of EAD 350141-00-1106 and construction material ETA 21/0816] is used for sealing horizontal and vertical linear joints (structural joints as stepped joints and linear butt joints) with or without shear stress between fire-resistant separating rigid walls and floors, and intended to maintain or reinstate the fire resistance performance of separating building elements where they are interrupted or separated by joints. **HENSOMASTIK® Acrylic** may be used to provide a fire penetration seal with specific supporting constructions and substrates for linear joints or gaps up to 400 mm width, for details see construction details and classification.

**HENSOMASTIK® Acrylic** is not intended for load transmission.

For use in fire penetration seals for single and multiple penetrating services, see the dedicated technical data sheet and installation manual.

## Technical Assessment Document

|   |                              |
|---|------------------------------|
| European Technical Assessment:<br>In accordance with: | ETA Nr. 23/0324<br>EN 1366-4 |
|---|------------------------------|

## Construction Elements / Min. Thickness

|  |        |
|--|--------|
| Flexible walls (min. 2 x 12.5 mm)          | 100 mm |
| Rigid walls (min. 450 kg/m <sup>3</sup> )  | 150 mm |
| Rigid floors (min. 450 kg/m <sup>3</sup> ) | 150 mm |

## Product Characteristics

### HENSOMASTIK® Acrylic

|  |   |
|--|---|
| Giscode:                               | M-DF01  |
| Reaction to fire (EN 13501-1):         | Euroclass E   |
| Building material class (DIN 4102):    | B2  |
| Colour:                                | White<br>NCS S 0502-Y<br>RAL 9010                                 |
| Curing time                            | 5 to 15 days  |
| Skinning time                          | 15 to 60 minutes  |
| Max movement capability:               | ≤ 7.5 %   |
| Max deformation (ISO 8339):            | 14 %  |
| Resilience (ISO 7389 B):               | 28 %  |
| Durability classes:                    | Y <sub>1</sub> / Y <sub>2</sub> / Z <sub>1</sub> / Z <sub>2</sub> |
| Intended end-use temperature range:    | - 5 °C to + 40 °C   |
| Shelf life (at 20° C and dry storage): | min. 12 months  |
| Storage and transport temperature:     | + 5°C to + 30°C<br>Keep free from frost!                          |
| Application temperature range:         | + 5 C to + 40°C   |
| Density (wet):                         | 1.5 gr./cm <sup>3</sup>   |
| Airborne sound insulation (ISO 717-1): | R <sub>w,max</sub> = 66 dB  |

## Product Properties and Advantages



- Fire resistance tested according to EN 1366-4 up to EI 120 in walls and floors
- Simple to apply, surface can be smoothed out with a spatula
- No priming necessary, surfaces just need to be dusted off
- Moistening of absorbent substrates before application recommended for better adhesion
- Application temperature range from +5°C to +40°C
- The seal will retain a degree of elasticity for joint movement
- Non-toxic, low smoke, and halogen-free
- Hardens quickly and tack free after 1 hour (the final fire performance specification has been derived when the filler has been let to cure for a month)
- Also usable for fire penetration seals for single and multiple penetrating services
- High-end formula made in Germany – designed for worldwide use



# TECHNICAL INFORMATION

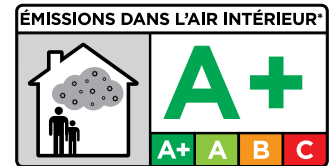
## Single Products in this Product System

### HENSOMASTIK® Acrylic

| Product Name   | Container / Packing Size                    | Article Number / EAN Code        |
|--|---|----------------------------------|
|  HENSOMASTIK® Acrylic | 310 ml cartridge<br>(20 cartridges per box) | 4250153545903<br>(4250153545910) |
|  HENSOMASTIK® Acrylic | 300 ml sleeve<br>(20 sleeves per box)       | 4250153545927<br>(4250153545934) |
|  | 600 ml sleeve<br>(20 sleeves per box)       | 4250153545941<br>(4250153545958) |

### Environment and Emission Data

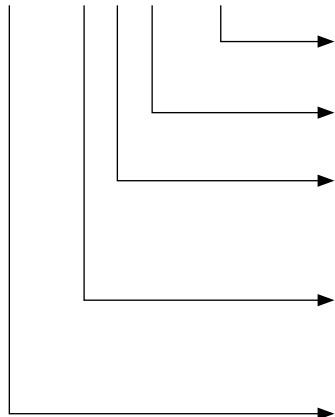
**HENSOMASTIK® Acrylic** has certified low emissions, is environmental and user friendly, free of solvents, APEO, halogens, borates, plasticisers or silicone, has certified low emissions, and is compliant to most common regulations and protocols for building materials and sustainable construction. Please do not hesitate to contact us if you are aiming for a specific certification that may not yet be available. We are confident that we meet the criteria!



| Regulation or Protocol                   | Assessment | Compound     | Emission rate after 3 days | Emission rate after 28 days |
|--|------------|--------------|----------------------------|-----------------------------|
| French VOC regulation                    | A+         | TVOC         | ≤ 150 µg/m <sup>3</sup>    | ≤ 20 µg/m <sup>3</sup>      |
| French CMR components                    | Compliant  | TSVOC        | ≤ 5 µg/m <sup>3</sup>      | ≤ 5 µg/m <sup>3</sup>       |
| ABG / AgBB guidelines DIBt               | Compliant  | R value      | 0.11                       | < 1                         |
| Leed v4.1                                | Compliant  | Carcinogenic | < 1 µg/m <sup>3</sup>      | < 1 µg/m <sup>3</sup>       |
| Emission class M1 for building materials | Compliant  |              |                            |                             |

### Classification of Linear Joint and Gap Seals

The seal construction variants with **HENSOMASTIK® Acrylic** for linear joints and gaps are classified as follows:

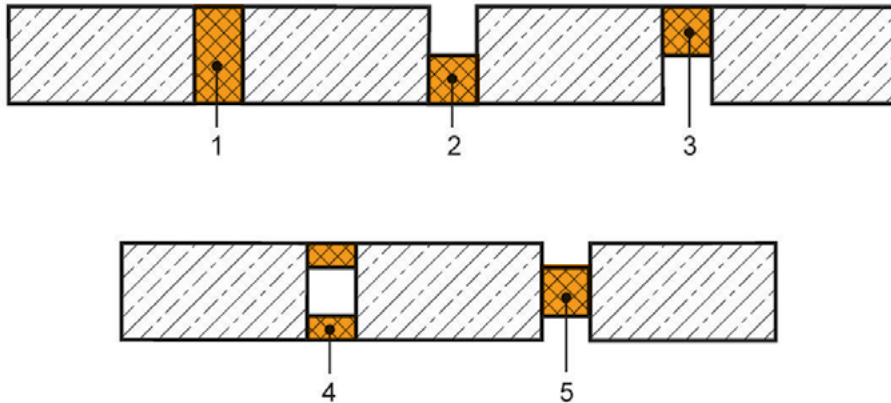
| Classification  | Explanation   |
|---|---|
| EI 120 – H – X – F – W0 to W400   |   |
|  | Allowed range of the min. and max. joint width (W) in mm, here 0 to 400mm.  |
|   | F = Seal produced on site.  |
|   | X = Tested without additional shear stress between fire-resistant separating construction elements. The maximum movement capacity is ≤ 7.5%.  |
|   | The alignment of joint seals can be divided into five cases A to E, see page 4.<br>H = Joint in a horizontal construction element (floor)<br>V = Vertical joint in a vertical construction element (wall)<br>T = Horizontal joint in a vertical construction element (wall) |
|   | Compliance with the room closure (E) and temperature insulation (I) criterion according to EN 1366-4 for the stated period in minutes, here at least 120 minutes.   |

# TECHNICAL INFORMATION

## Construction Variants and Application

The seal is formed by inserting a backfill of darning wool, mineral wool or a friction-fitted mineral fibre board with given minimum density, thickness and depth in the gap to ensure the correct filling depth of **HENSOMASTIK® Acrylic**, which is applied from only one or both sides, depending on the use case and classification of the seal. For each construction variant, the stated minimum density and filling depth of the mineral wool backing and **HENSOMASTIK® Acrylic** may be increased in practice, but not reduced.

In some construction variants, when stated, the seal can be formed in different positions according to DIN EN 1366-4 figure 17, which is shown below. Depending on the seal position and the prevailing fire load, the sealant is subjected to more or less stress, so that the fire resistance can vary greatly which is reflected in the installation instructions for the different seal construction variants. It is important that this is taken into account for the seal construction before execution and installation.



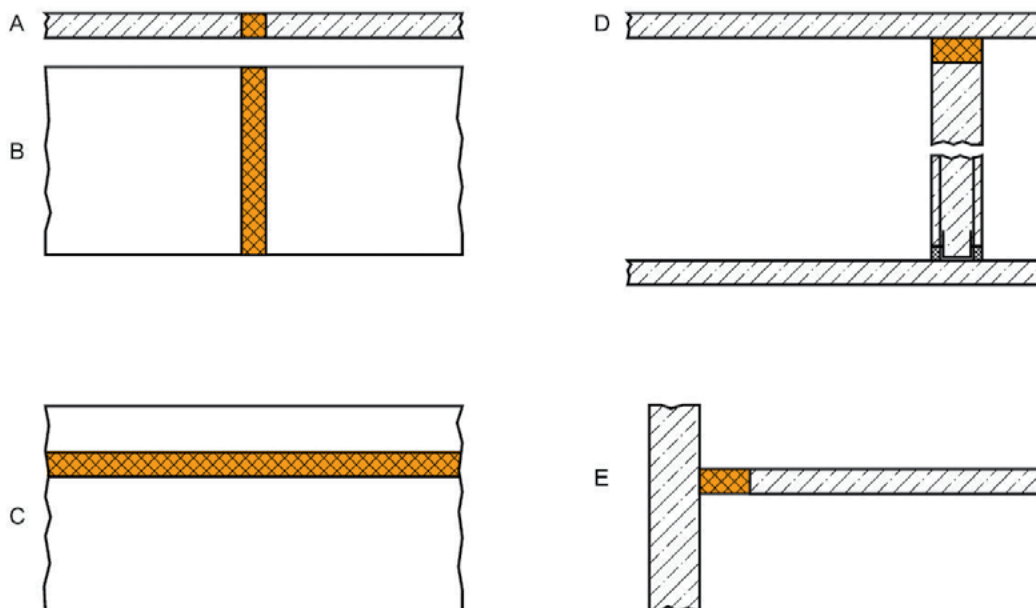
Seal positions 1 to 5 according to DIN EN 1366-4 figure 17

Before application, no priming of the substrates is necessary, all surfaces just need to be dusted off. However, moistening high absorbent substrates such as concrete, aerated concrete or masonry before application can achieve better adhesion.

Use a trowel to smooth out the surface of **HENSOMASTIK® Acrylic** and masking tape around apertures for a nice and clean final result. After complete curing, **HENSOMASTIK® Acrylic** can be painted over with most paints, e.g. emulsion paints, alkyd resins.

According to DIN EN 1366-4 Figure 28, the alignment of joint seals can be divided into five cases in practice:

- A** Joint in a horizontal construction element, e.g. a rigid floor (classified as "H").
- B** Vertical joint in a vertical construction element, e.g. a rigid or flexible wall (classified as "V").
- C** Horizontal joint in a vertical construction element, e.g. a rigid or flexible wall (classified as "T").
- D** Horizontal joint in a vertical construction element, e.g. a rigid or flexible wall, connecting to a horizontal construction element, e.g. floor, ceiling, subceiling or roof at the upper or lower part of the wall (classified as "T").
- E** Joint in a horizontal construction element, e.g. a rigid floor, connecting to a vertical construction element, e.g. a rigid wall (classified as "H").



Seal and construction element orientation A to E according to DIN EN 1366-4 figure 28

# TECHNICAL INFORMATION

## Permitted Construction Elements

The specific elements of construction that **HENSOMASTIK® Acrylic** may be used to provide a 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<sup>3</sup>.

**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<sup>3</sup>.

**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 a minimum thickness of 25 mm.

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

The permitted maximum gap width depends on the supporting elements and substrates as well as the construction variant.

## Material Consumption

The theoretical joint length that can be sealed with a 310 ml cartridge, 300 ml or 600 ml sleeve varies with filling depth and joint width. For calculating the number of **HENSOMASTIK® Acrylic** cartridges or sleeves required, you may use the following formula for approximation.

|  |  |
|--|--|
| <b>Required cartridges or sleeves:</b> | $\frac{\text{Joint Width [mm]} \times \text{Filling Depth [mm]} \times \text{Joint Length [m]}}{\text{Container Size [ml]}}$ |
|--|--|

### Theoretical joint length in meters [m] per 310 ml cartridge or 300 ml sleeve

| Filling Depth [mm] | Joint Width [mm] |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 10               | 15  | 20  | 25  | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  | 100 |
| 10                 | 3.1              | 2.1 | 1.6 | 1.2 | 1   | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 |
| 12.5               | 2.5              | 1.7 | 1.2 | 1   | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 |
| 15                 | 2.1              | 1.4 | 1   | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 |
| 25                 | 1.2              | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |

### Theoretical joint length in meters [m] per 600 ml sleeve

| Filling Depth [mm] | Joint Width [mm] |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 10               | 15  | 20  | 25  | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  | 100 |
| 10                 | 6                | 4   | 3   | 2.4 | 2   | 1.7 | 1.5 | 1.3 | 1.2 | 1   | 0.9 | 0.8 | 0.7 | 0.6 |
| 12.5               | 4.8              | 3.2 | 2.4 | 1.9 | 1.6 | 1.4 | 1.2 | 1.1 | 1   | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 |
| 15                 | 4                | 2.7 | 2   | 1.6 | 1.3 | 1.1 | 1   | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 |
| 25                 | 2.4              | 1.6 | 1.2 | 1   | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 |

# TECHNICAL INFORMATION

## Construction details and classification

### A. Joints in vertical construction elements / Walls

| A. | Application / Construction Elements | Flexible Wall 100 mm | Rigid Wall 150 mm | Max Joint Width | Sealed on one side | Sealed on both sides | Page |
|----|-------------------------------------|----------------------|-------------------|-----------------|--------------------|----------------------|------|
| 1. | Flexible wall   Rigid floor         | ●                    | -                 | 40mm            | -                  | ●                    | 7    |
| 2. | Rigid wall   Rigid wall             | -                    | ●                 | 50mm            | ●                  | -                    | 8    |
|    | Rigid wall   Rigid floor            | -                    | ●                 |                 | ●                  | -                    |      |
| 3. | Rigid wall   Rigid wall             | -                    | ●                 | 100 mm          | ●                  | -                    | 9    |
|    | Rigid wall   Rigid floor            | -                    | ●                 |                 | ●                  | -                    |      |
| 4. | Rigid wall   Rigid wall             | -                    | ●                 | 400mm           | ●                  | -                    | 10   |
|    | Rigid wall   Rigid floor            | -                    | ●                 |                 | ●                  | -                    |      |
| 5. | Rigid wall   Wood                   | -                    | ●                 | 50mm            | ●                  | -                    | 11   |
| 6. | Rigid wall   Steel                  | -                    | ●                 | 100mm           | -                  | ●                    | 12   |

### B. Joints in horizontal construction elements / Floors

| B. | Application / Construction Elements | Rigid Floor 150 mm | Max Joint Width | Sealed on one side | Sealed on both sides | Page |
|----|-------------------------------------|--------------------|-----------------|--------------------|----------------------|------|
| 1. | Rigid floor   Rigid floor           | ●                  | 100mm           | ●                  | -                    | 13   |
| 2. | Rigid floor   Rigid floor           | ●                  | 400mm           | ●                  | -                    | 14   |
| 3. | Rigid floor   Steel                 | ●                  | 100mm           | -                  | ●                    | 15   |



# TECHNICAL INFORMATION

## Flexible wall $\geq 100$ mm

### A.1. Linear joint or gap seal, flexible wall $\geq 100$ mm

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

**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.

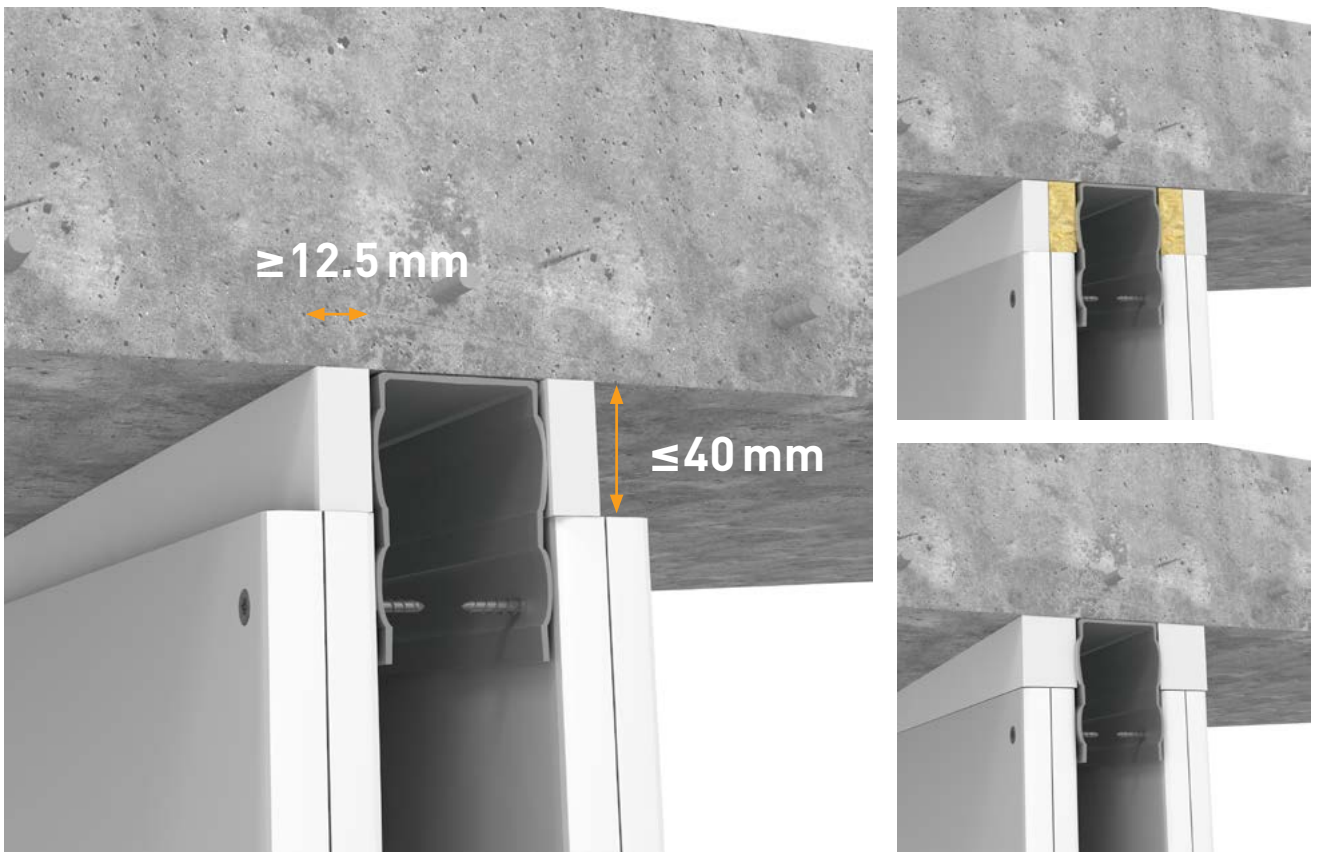
**Construction details:** Joints in vertical construction elements, such as wall joints in flexible walls connecting to a rigid floor, suspended ceiling or roof, other room-enclosing building components and wall joints without connection to a ceiling, suspended ceiling or roof.

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  $\geq 40$  kg/m<sup>3</sup>) 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 $\geq 100$ 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 |

# TECHNICAL INFORMATION

## Rigid Wall $\geq 150$ mm

### A.2. Linear joint or gap seal, rigid wall $\geq 150$ mm

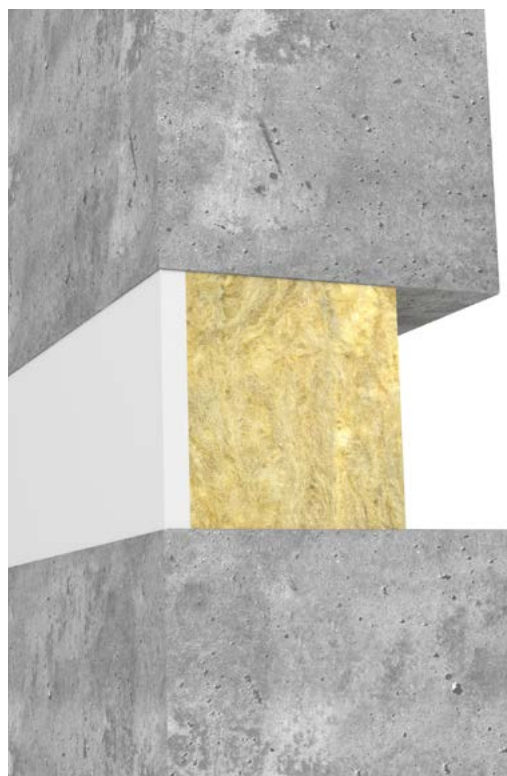
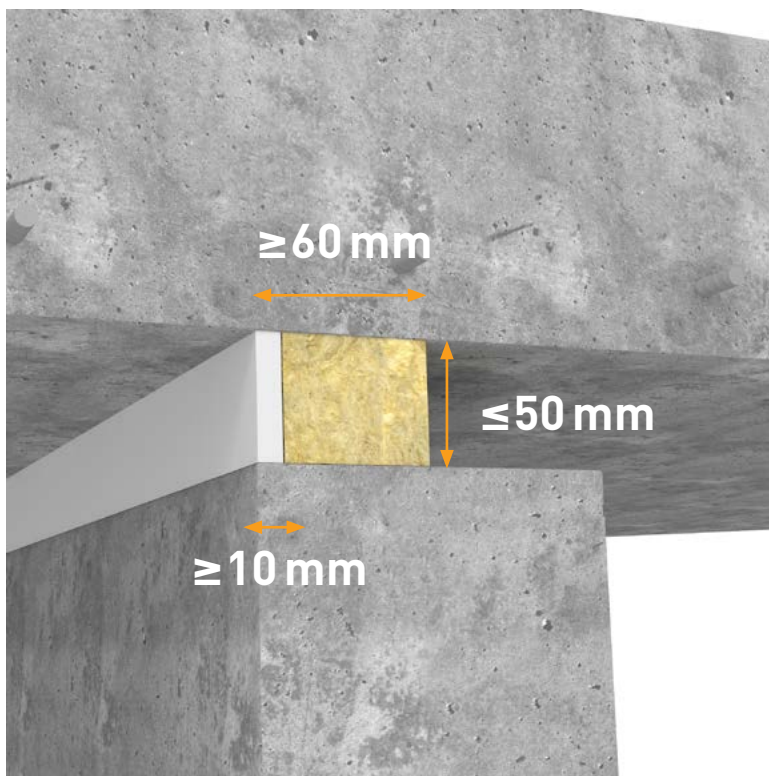
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

**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<sup>3</sup>.

**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  $\geq 40$  kg/m<sup>3</sup>) 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.



#### A.2.1. Linear joint or gap seal, flexible wall $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 40$ kg/m <sup>3</sup> [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 |



# TECHNICAL INFORMATION

## Rigid Wall $\geq 150$ mm

### A.3. Linear joint or gap seal, rigid wall $\geq 150$ mm

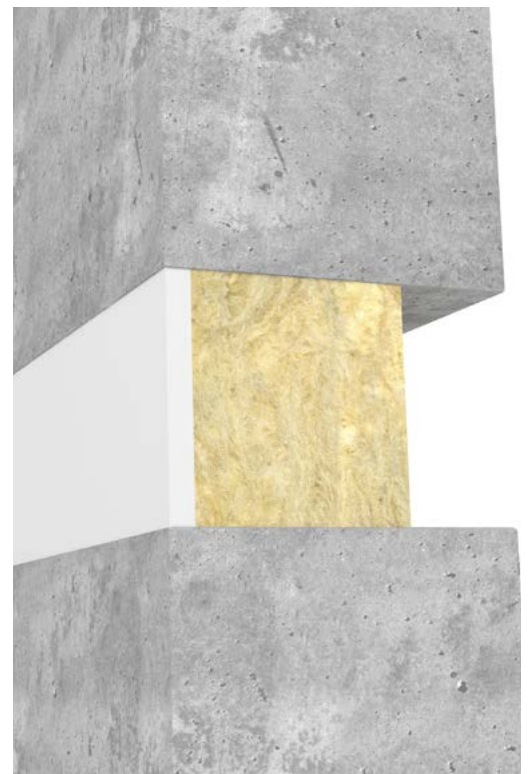
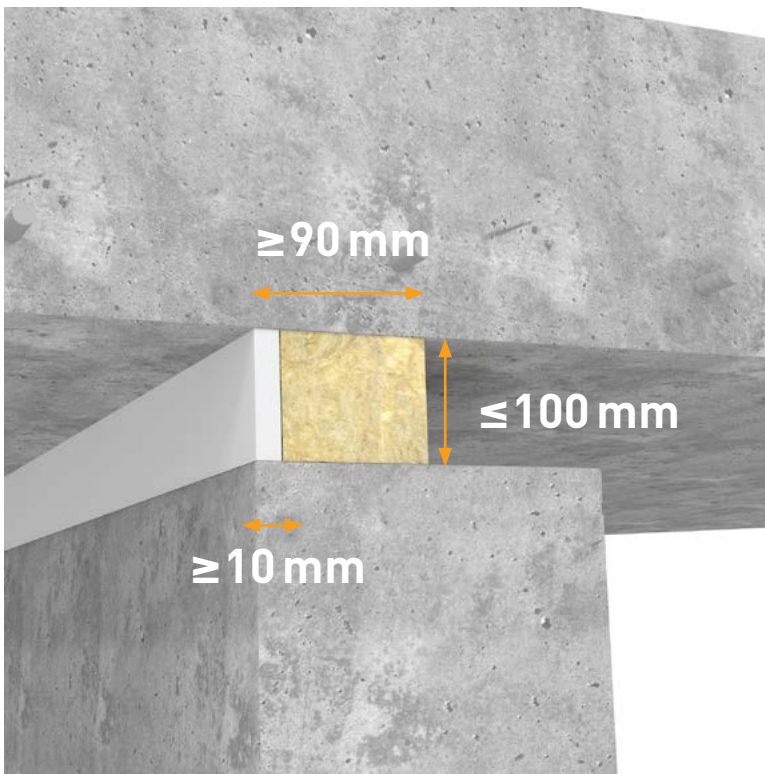
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

**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<sup>3</sup>.

**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  $\geq 40$  kg/m<sup>3</sup>) 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.



#### A.3.1. Linear joint or gap seal, flexible wall $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 40$ kg/m <sup>3</sup> [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 |

# TECHNICAL INFORMATION

## Rigid Wall $\geq 150$ mm

### A.4. Linear joint or gap seal, rigid wall $\geq 150$ mm

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

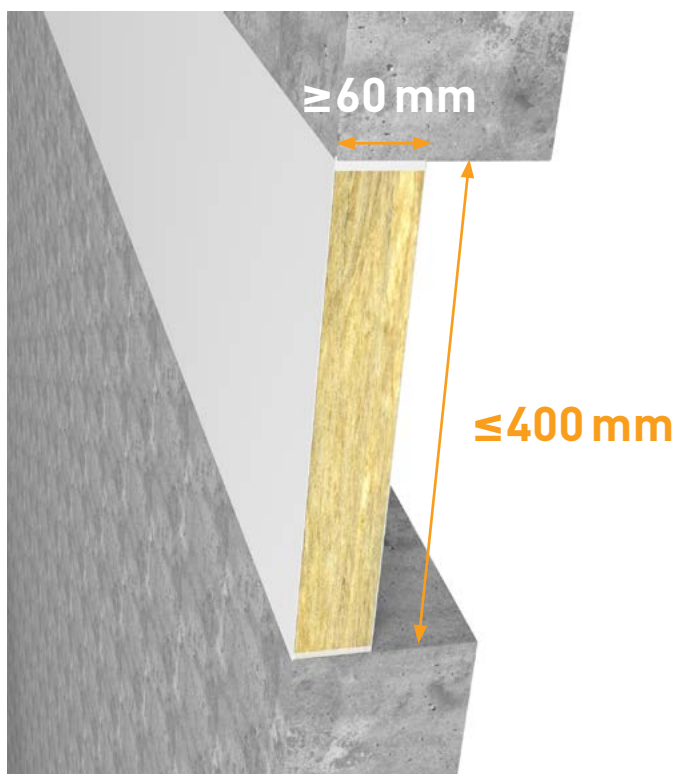
**Rigid walls:** The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m<sup>3</sup>.

**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  $\geq 150$  kg/m<sup>3</sup>, coated on the outer sides with HENSOMASTIK® 5 KS Farbe or HENSOMASTIK® 5 KS viskos in dry film thickness (DFT)  $\geq 1$  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.



#### A.4.1. Linear joint or gap seal, flexible wall $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 150$ kg/m <sup>3</sup> [mm] | Min. filling depth HENSOMASTIK® Acrylic [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 |

# TECHNICAL INFORMATION

## Rigid Wall $\geq 150$ mm | Wood

### A.5. Linear joint or gap seal, rigid wall $\geq 150$ mm and wooden construction elements

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

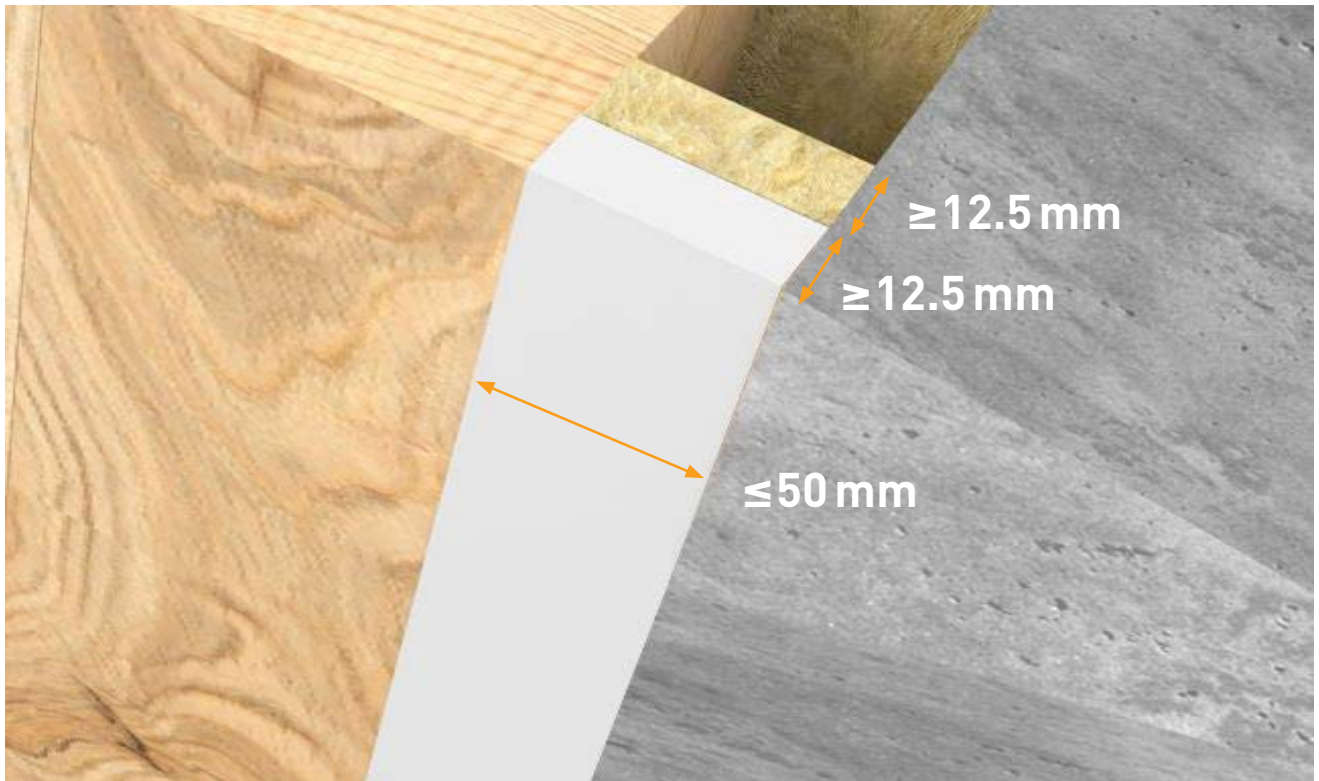
**Rigid walls:** The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m<sup>3</sup>.

**Construction details:** Joints in vertical construction elements, such as wall joints in rigid walls connecting to a wooden construction element (timber) 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  $\geq 40$  kg/m<sup>3</sup>) 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.

On the opposite side of the wall, the joint is closed with a minimum 10 mm thick wooden board, overlapping the supporting construction elements minimum 3 mm on both sides.

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 $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 40$ kg/m <sup>3</sup> [mm] | Min. filling depth HENSOMASTIK® Acrylic [mm] | Classification                |
|-----------------------------------|--|--|-------------------------------|
| Rigid wall   Wood                 | 12.5   | 12.5   | EI 60 – T – X – F – W0 to W50 |

# TECHNICAL INFORMATION

## Rigid Wall $\geq 150$ mm | Wood

### A.6. Linear joint or gap seal, rigid wall $\geq 150$ mm and steel

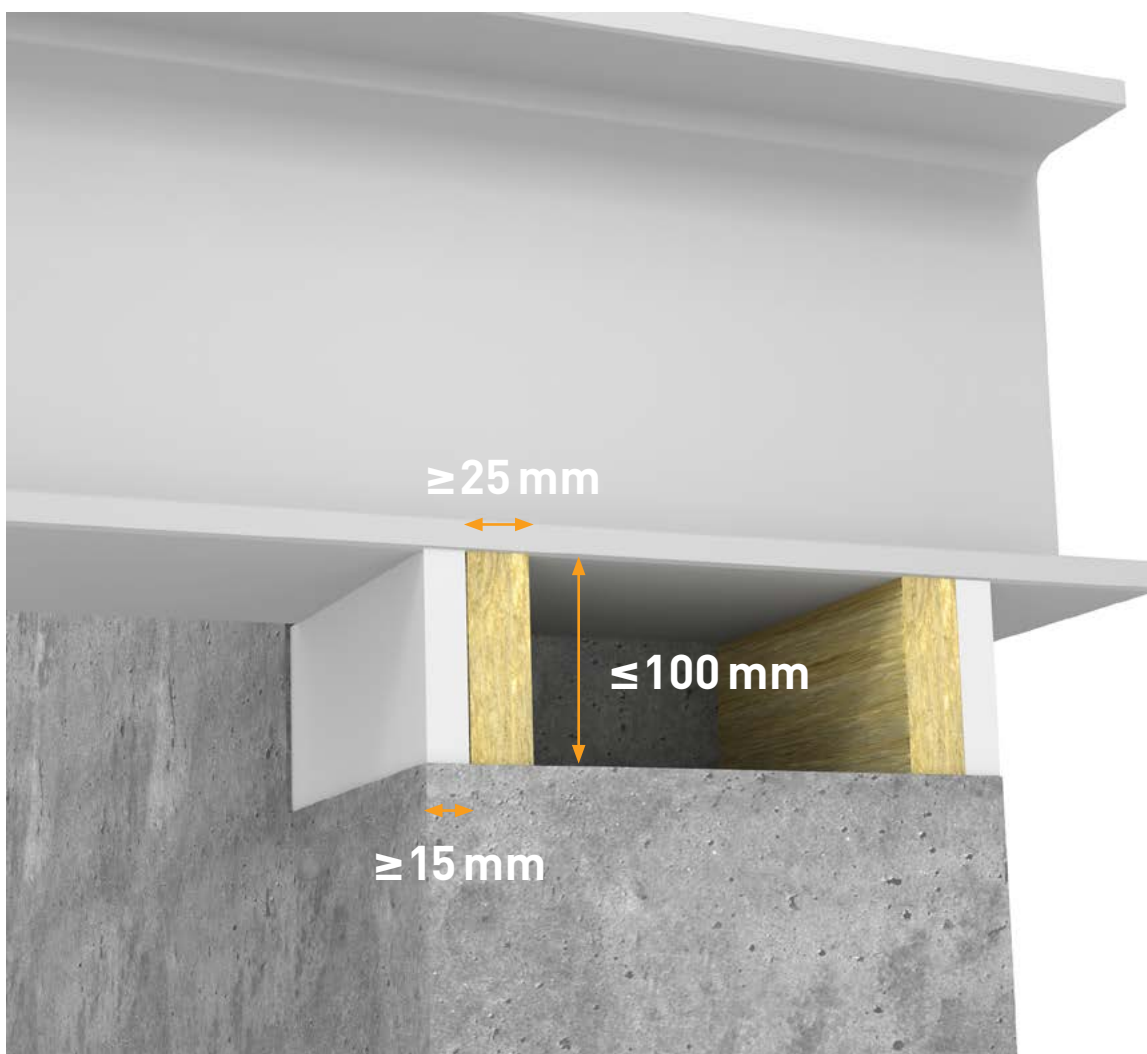
The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

**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<sup>3</sup>.

**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  $\geq 140$  kg/m<sup>3</sup>) or a minimum 25 mm thick friction-fitted mineral fibre board, density  $\geq 140$  kg/m<sup>3</sup>, 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.



#### A.1.1. Linear joint or gap seal, flexible wall $\geq 150$ mm and steel

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 40$ kg/m <sup>3</sup> [mm] | Min. filling depth HENSOMASTIK® Acrylic [mm] | Classification                 |
|-----------------------------------|--|--|--------------------------------|
| Rigid wall   Steel                | 25   | 15   | EI 60 – T – X – F – W0 to W100 |



# TECHNICAL INFORMATION

## Rigid Floor $\geq 150$ mm

### B.1. Linear joint or gap seal, rigid floor $\geq 150$ mm

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

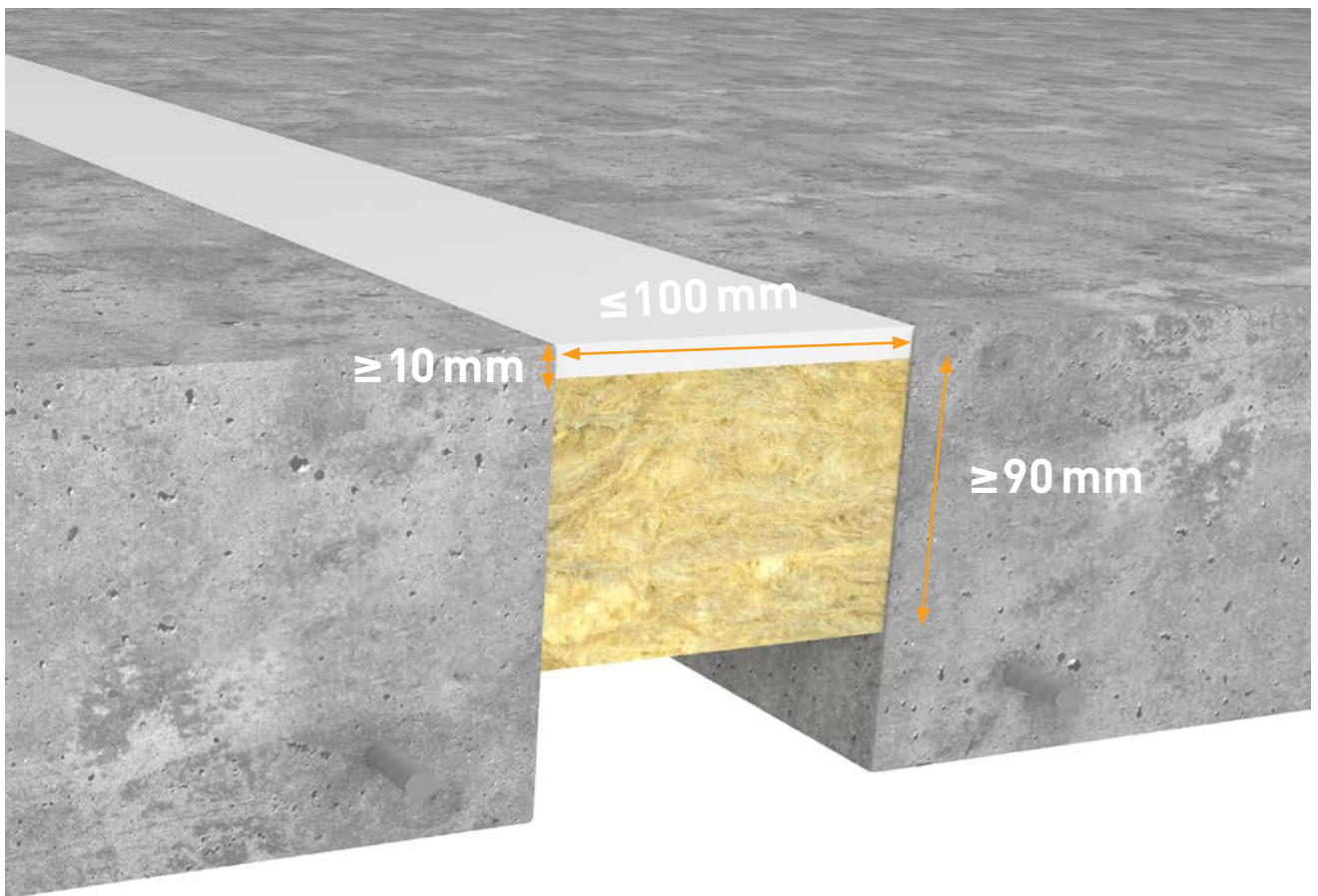
**Rigid walls:** The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m<sup>3</sup>.

**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  $\geq 40$  kg/m<sup>3</sup>) 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.



#### B.1.1. Linear joint or gap seal, rigid floor $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 40$ kg/m <sup>3</sup> [mm] | Min. filling depth HENSOMASTIK® Acrylic [mm] | Classification                  |
|-----------------------------------|--|--|---------------------------------|
| Rigid floor   Rigid floor         | 90   | 10   | EI 120 – H – X – F – W0 to W100 |

# TECHNICAL INFORMATION

## Rigid Floor $\geq 150$ mm

### B.2. Linear joint or gap seal, rigid floor $\geq 150$ mm

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

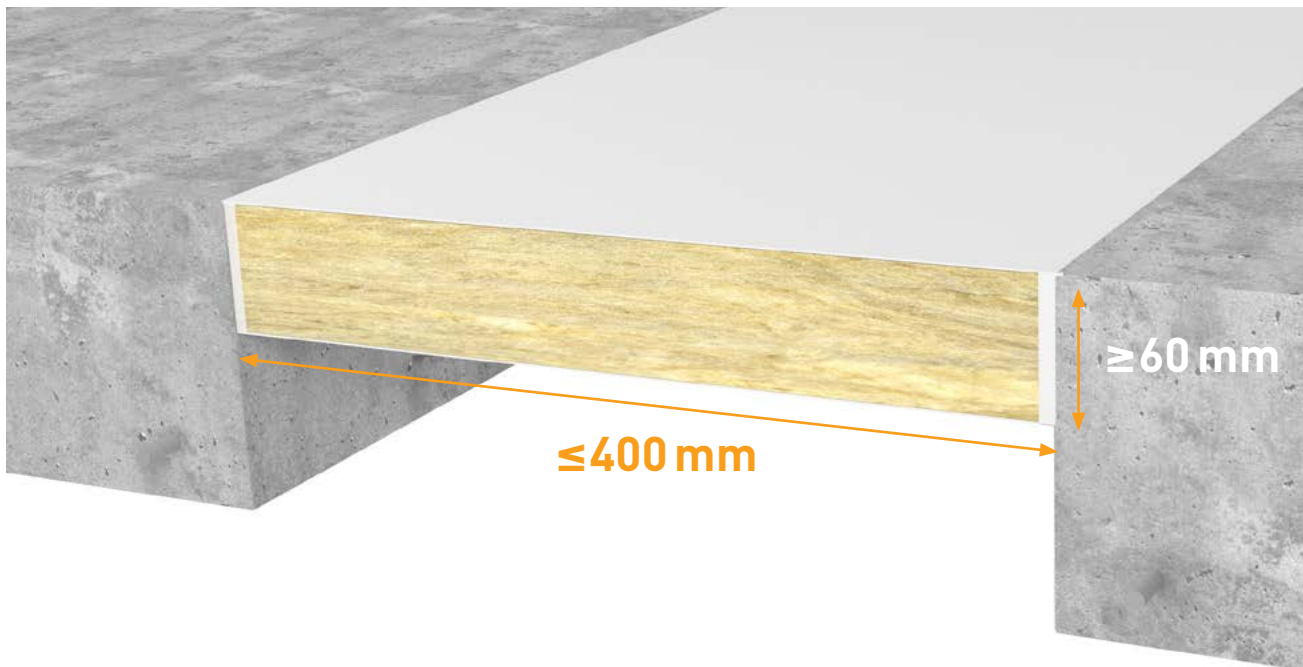
**Rigid walls:** The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m<sup>3</sup>.

**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  $\geq 140$  kg/m<sup>3</sup>, coated on the outer sides with HENSOMASTIK® 5 KS Farbe or HENSOMASTIK® 5 KS viskos in dry film thickness (DFT)  $\geq 1$  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.



#### B.2.1. Linear joint or gap seal, rigid floor $\geq 150$ mm

| Construction elements / Substrate | Min. filling depth mineral wool $\geq 150$ kg/m <sup>3</sup> [mm] | Min. DFT coating HENSOMASTIK® A5 KS [mm] | Classification                  |
|-----------------------------------|---|--|---------------------------------|
| Rigid floor   Rigid floor         | 60  | 1  | EI 120 – H – X – F – W0 to W400 |



# TECHNICAL INFORMATION

## Rigid Floor $\geq$ 150 mm | Steel

### B.3. Linear joint or gap seal, rigid floor $\geq$ 150 mm and steel

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

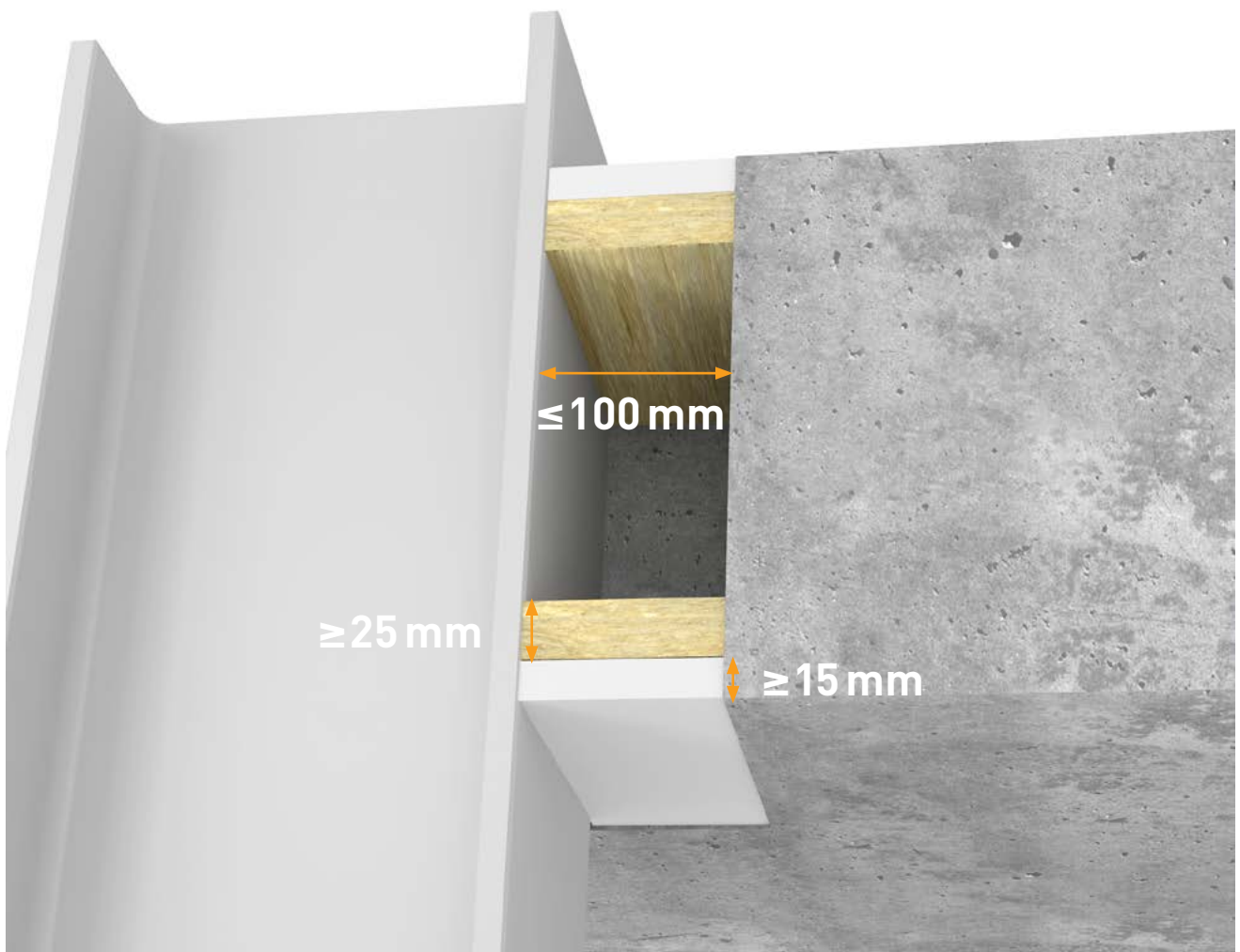
**Rigid walls:** The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 450 kg/m<sup>3</sup>.

**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  $\geq$  140 kg/m<sup>3</sup>) or a minimum 25 mm thick friction-fitted mineral fibre board, density  $\geq$  140 kg/m<sup>3</sup>, 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.



#### B.3.1. Linear joint or gap seal, rigid floor $\geq$ 150 mm and steel

| Construction elements / Substrate | Min. filling depth mineral wool $\geq$ 140 kg/m <sup>3</sup> [mm] | Min. filling depth HENSOMASTIK® Acrylic [mm] | Classification                 |
|-----------------------------------|---|--|--------------------------------|
| Rigid floor   Steel               | 25  | 15   | EI 60 – H – X – F – W0 to W100 |

## Work Safety

Use **HENSOMASTIK® Acrylic** in accordance with all applicable local and national regulations. Wear protective clothing and avoid contact with eyes and skin. See Material Safety Data Sheet (MSDS) for further information.



**Giscode: M-DF01**

## Retrofitting

Linear joints and gaps sealed with **HENSOMASTIK® Acrylic** may be retrofitted. Following a retrofit, the seal must be returned to its intended state. The specifications in the technical assessment document (ETA) and installation instructions must be observed.

## Inspection and Maintenance

The fire protection properties of **HENSOMASTIK® Acrylic** seals are safeguarded over the service life only when the system is maintained in proper working condition, a regular inspection for possible damage and maintenance is recommended. All penetrations seals which are subsequently damaged or modified should be made good using **HENSOMASTIK® Acrylic** only. The developer/principal must be referred thereto by the applicator/commissioning company.

## Disposal

The materials of **HENSOMASTIK® Acrylic** seal must be handled like waste paints and varnishes. The applicable national laws and regulations must be observed.

Our technical advisers will be pleased to assist you with your enquiries.

Further details can be downloaded from: [www.rudolf-hensel.de](http://www.rudolf-hensel.de)

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