MFPA Leipzig GmbH

Testing, Inspection and Certification Authority for
Construction Products and Construction Types

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Classification Report No. KB 3.2/18-006-1

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Classification of fire resistance acc. to
DIN EN 13501-2:2016-12

Subject matter:	Sealing of linear, horizontal structural joints with a mineral wool insulation and with the joint sealing system "HENSOMASTIK®5 KS viskos" in the version for use as a membrane or seal on the joint surface on solid ceilings.
Applicant:	Rudolf Hensel GmbH Lauenburger Landstr. 11 21039 Börnsen
Person in charge:	C. Kramer, M.Eng.

This classification report is valid for an unlimited period.

This document consists of 13 pages.

Testing laboratory accredited by DAkkS GmbH according to DIN EN ISO/IEC 17025. The accreditation only applies to the test methods listed in the certificate (in this document marked with *) which can be seen on www.mfpa-leipzig.de

Deutsche Akkreditierungsstelle D-PL-11021-01-00

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1 Introduction

This fire resistance classification report defines the classification that can be assigned to the ceiling construction part with a horizontal structural joint, consisting of a joint seal with mineral wool insulation and with the joint sealing system "HENSOMASTIK®5 KS viskos" in the version for use as a membrane or seal on the joint surface, in compliance with the procedure pursuant to DIN EN 13501-2: 2016-12 in the area of joint flanks of solid ceilings.

2 Details of the classified product of a joint seal

2.1 Type of function

The joint seal with a mineral wool insulation and with the joint sealing system "HENSOMASTIK®5 KS viskos" in the version for use as a membrane or seal on the joint surface is defined as a horizontal structural joint in solid ceiling constructions. Its function consists of ensuring a fire resistance pursuant to sections 5.2.2 and 5.2.3 of DIN EN 13501-2: 2016-12.

2.2 Description of the joint seal as a membrane in the connection area of flank joints on solid structural parts in conjunction with a movement absorption capacity

The joint systems were installed in supporting structures of sections of cellular concrete slabs (bulk density class 0.4, stability class 2) with a thickness of 125 mm and 200 mm.

The joints (12 mm and 75 mm) in the supporting structure were initially filled with mineral wool (Termarock 50, melting point > 1000 °C, bulk density approx. 50 kg/m³, building material classification A1, thickness 40 mm) with a corresponding allowance (allowance of 3 mm for a joint width of 12 mm and 25 mm allowance for a joint width of 75 mm) depending on the joint width and desired movement absorption capacity (compressed in the transverse direction of the slab and oriented in a longitudinal direction, compression direction C-C pursuant to Figure 2.4.1, ETAG 026-3: 08-2011). The mineral wool was level with the lower edge of the supporting structure on the side facing the fire. The butt joints of the mineral wool were abutted and not offset in the different layers.

With a joint width of 12 mm, the mineral wool was inserted into the joint without any orientation.

The joints were then coated with "HENSOMASTIK®5 KS viskos" with a 20 mm overlap on each side of the cellular concrete on the side that was exposed to fire. An aqueous undercoat of the coating was initially applied to the mineral wool. The coating materials was then applied on two consecutive days in two operations with a wet thickness of 1,300µm for each layer. The overall wet layer thickness of 2,600µm produced a dry layer thickness of 2,000µm. The coating material was applied over the entire surface using an airless method.

In addition, a movement absorption capacity of 25% was produced, consisting of an expansion (x_e) and shear movement (x_s) relative to the initial width.

Further structural details can be found in the corresponding test report PB 3.2/ 12-275-1 (joint system 1) of MFPA Leipzig GmbH.

2.3 Description of the joint seal as a seal in the connection area of flank joints on solid structural parts with no additional movement absorption capacity

The joint systems were installed in supporting structures of sections of cellular concrete slabs (bulk density class 0.4, stability class 2) with a thickness of 200 mm.

The joints (12 mm and 100 mm) in the supporting structure were initially filled with mineral wool (Termarock 50, melting point > 1000 °C, bulk density approx. 50 kg/m³, building material classification A1, thickness 40 mm) with a corresponding allowance (allowance of 3 mm for a joint width of 12 mm and 15 mm allowance for a joint width of 100 mm) depending on the joint width (compressed in the transverse

direction of the slab and oriented in a longitudinal direction, compression direction C-C pursuant to Figure 2.4.1, ETAG 026-3: 08-2011). The mineral wool was inserted into the joint to a depth of approx. 2 mm to achieve a flush surface between the lower edge of the supporting structure and the subsequent coating. The butt joints in the mineral wool were abutted and not offset in the different layers.

With a joint width of 12 mm, the mineral wool was inserted into the joint without any orientation.

The mineral wool was then coated on the side exposed to the fire with "HENSOMASTIK®5 KS viskos". An aqueous undercoat of the coating was initially applied to the mineral wool. The coating materials was then applied on two consecutive days in two operations with a wet thickness of 1,300µm for each layer. The overall wet layer thickness of 2,600 µm produced a dry layer thickness of 2,000µm. The coating material was applied over the entire surface using an airless method.

Further structural details can be found in the corresponding test report PB 3.2/ 12-275-1 (joint system 2) of MFPA Leipzig GmbH.

2.4 Description of the joint seal as a seal in the connection area of flank joints on solid structural parts with no additional movement absorption capacity

The joint systems were installed in supporting structures of sections of cellular concrete slabs (bulk density class 0.6, stability class 2) with a thickness of 150 mm.

The joints (30 mm and 100 mm) in the supporting structure were initially filled with mineral wool (Termarock 100, melting point > 1000 °C, bulk density approx. 100 kg/m³, building material classification A1, thickness 40 mm) with a corresponding allowance (allowance of 10 mm for a joint width of 30 mm and 20 mm allowance for a joint width of 100 mm) depending on the joint width (compressed in the transverse direction of the slab and oriented in a transversal direction, compression direction A-A pursuant to Figure 2.4.1, ETAG 026-3: 08-2011). The mineral wool was inserted into the joint to a depth of approx. 2 mm to achieve a flush surface between the lower edge of the supporting structure and the subsequent coating. The butt joints in the mineral wool were abutted.

The mineral wool was then coated on the side exposed to the fire with "HENSOMASTIK®5 KS viskos". An aqueous undercoat of the coating was initially applied to the mineral wool. The coating materials was then applied on two consecutive days in two operations with a wet thickness of 1,300µm for each layer. The overall wet layer thickness of 2,600 µm produced a dry layer thickness of 2,000µm. The coating material was applied over the entire surface using an airless method.

Further structural details can be found in the corresponding test report PB 3.2/ 16-182-1 of MFPA Leipzig GmbH.

2.5 Tabular summary of the tested joint systems

Table 1 Parameters for the tested joint seals

Joint system acc. to Fig.		2.2				2.3		2.4	
Coating system	Material Manufacturer's designation	5 KS viskos (in short: 5KS V)							
	Layer thickness, dry (mm)	2	2	2	2	2	2	2	2
	Reaction	ablativ	ablativ	ablativ	ablativ	ablativ	ablativ	ablativ	ablativ
	Variant:	Membrane				Seal			
Joint parameter	Joint design pursuant to DIN EN 1366-4 Fig. 3; (No.)	2	2	2	2	2	2	1	1
	Nominal joint width (mm)	12	75	12	75	12	100	30	100
	Test piece thickness (mm)	125	125	200	200	200	200	150	150
	Movement absorption capacity (%)	25	25	25	25	No movement			
	Expansion x_e (mm)	2.5	17	2.5	17				
	Shear movement x_s (mm)	2.9	6	2.9	6				
	Total deflection Δ	3	18.8	3	18.8				
Insulation	Material	Termarock 50						Termarock 100	
	Insulation thickness [mm]	80[1)]	80[1)]	120[1)]	160[1)]	120[1)]	160[1)]	40[1)]	120[1)]
	Joint width allowance provided (mm)	3[2)]	25	3[2)]	25	3[2)]	15	10	20

1) Multi-layer design of the mineral wool with a thickness of 40 mm

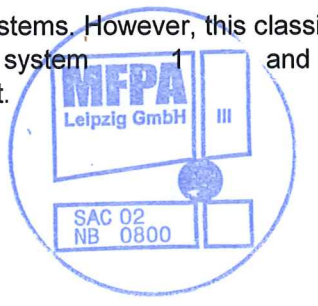
2) Installed without orientation, the value quoted + the initial joint width reflects the amount of stuffing.

3 Test reports and test results supporting this classification

3.1 Test report

Name of the test lab	Applicant	Number of the test report	Test method
MFPA Leipzig GmbH Hans-Weigel-Str. 2b 04319 Leipzig	Rudolf Hensel GmbH	PB 3.2/12 – 275-1[1)] from 24.01.2014	DIN EN 1366-4: 2010-08 based on DIN EN 1363-1:1999-10
MFPA Leipzig GmbH Hans-Weigel-Str. 2b 04319 Leipzig	Rudolf Hensel GmbH	PB 3.2/16–182-1 from 16.06.2017	DIN EN 1366-4: 2010-08 based on DIN EN 1363-1:1999-10

1) The aforementioned test report deals with several different joint systems. However, this classification report only relates to the joint system 1 and 2 "HENSOMASTIK®5 KS viskos" from the aforementioned test report.



3.2 Suitability of the fire resistance

Table 2 *Joint seal with mineral wool insulation and a coating of "HENSOMASTIK®5 KS viskos" in the version for use as a membrane and a movement absorption capacity of 25% (combination of expansion and shear movement) of the linear butt joint pursuant to section 2.2 (125 mm thick solid structural part)*

Test method	Parameter	Result	
		Joint width b = 12 mm	Joint width 12 mm < b ≤ 75 mm
DIN EN 1366-4: 2006-08 in conjunction with DIN EN 1363-1: 1999-10	**Integrity**		
	Combustion of the cotton ball	No combustion > 120 minutes	
	Appearance of gaps	-[1)]	
	Appearance of flames on the opposite side	no sustained appearance of flames > 120 minutes	
	Thermal insulation		
	max. single value > 180 K	Not exceeded over a test period of 120 minutes	Not exceeded over a test period of 45 minutes

[1)] *Pursuant to DIN EN 1366-4 2010-08 use of feeler gauges not allowed*

Table 3: *Joint seal with mineral wool insulation and a coating of "HENSOMASTIK®5 KS viskos" in the design as membrane and a movement absorption capacity of 25% (combination of expansion and shear movement) of the linear butt joint pursuant to section 2.2 (200 mm thick solid structural part)*

Test method	Parameter	Result	
		Joint width b = 12 mm	Joint width 12 mm < b ≤ 75 mm
DIN EN 1366-4: 2006-08 in conjunction with DIN EN 1363-1: 1999-10	**Integrity**		
	Combustion of the cotton ball	No combustion > 240 minutes	No combustion > 120 minutes
	Appearance of gaps	-[1)]	-[1)]
	Appearance of flames on the opposite side	no sustained appearance of flames > 240 minutes	no sustained appearance of flames > 120 minutes
	Thermal insulation		
	max. single value > 180 K	Not exceeded over a test period of > 240 minutes	Not exceeded over a test period of > 90 minutes

[1)] *Pursuant to DIN EN 1366-4 2010-08 use of feeler gauges not allowed*

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Table 4: Joint seal with mineral wool insulation and a coating of "HENSOMASTIK®5 KS viskos" in the version for use as a seal for the linear butt joint pursuant to section 2.3 (200 mm thick solid structural part)

Test method	Parameter	Result	
		Joint width b = 12 mm	Joint width 12 mm < b ≤ 100 mm
DIN EN 1366-4: 2006-08 in conjunction with DIN EN 1363-1: 1999-10	Integrity		
	Combustion of the cotton ball	No combustion > 240 minutes	No combustion > 180 minutes
	Appearance of gaps	-[1)]	-[1)]
	Appearance of flames on the opposite side	no sustained appearance of flames > 240 minutes	no sustained appearance of flames > 180 minutes
	Thermal insulation		
	max. single value > 180 K	Not exceeded over a test period of > 240 minutes	Not exceeded over a test period of > 180 minutes

[1)] *Pursuant to DIN EN 1366-4 2010-08 use of feeler gauges not allowed*

Table 5: Joint seal with mineral wool insulation and a coating of "HENSOMASTIK®5 KS viskos" in the version for use as a seal for the linear butt joint pursuant to section 2.4 (150 mm thick solid structural part)

Test method	Parameter	Result	
		Joint width b = 30 mm	Joint width 30 mm < b ≤ 100 mm
DIN EN 1366-4: 2006-08 in conjunction with DIN EN 1363-1: 1999-10	Integrity		
	Combustion of the cotton ball	No combustion > 240 minutes	No combustion > 240 minutes
	Appearance of gaps	-[1)]	-[1)]
	Appearance of flames on the opposite side	no sustained appearance of flames > 240 minutes	no sustained appearance of flames > 240 minutes
	Thermal insulation		
	max. single value > 180 K	Not exceeded over a test period of > 240 minutes	Not exceeded over a test period of > 180 minutes

[1)] *Pursuant to DIN EN 1366-4 2010-08 use of feeler gauges not allowed*

4 Classification and direct field of application

4.1 Reference

This classification has been carried out in compliance with section 7.5.9 "Classification of structural joints" of DIN EN 13501-2: 2016-12.

4.2 Classification of the structural joints pursuant to section 2.2 for a structural part that is 125 mm thick

The structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, in the version for use as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 125 mm) in conjunction with a movement absorption capacity of ± 25% (movement consisting of an expansion and shear movement) as a linear butt

joint has been classified in accordance with the following combinations of the general performance parameters pursuant to DIN EN 13501-2: 2016-12 and Table 2.

The following classifications apply for joint widths w = 12 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	120	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	120	-	-	-	-	-	-	-	-

The following classifications apply for joint widths 12 mm < w ≤ 75 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	45	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	120	-	-	-	-	-	-	-	-

Furthermore, the structural part has been classified as a horizontal joint seal in accordance with different test set-ups listed in the test standard.

Table 6 Classification of structural joints pursuant to DIN EN 13501-2, section 7.5.9.4

Test conditions	**Joint widths w = 12 mm**	**Joint widths 12 mm < w ≤ 75 mm**
Alignment of the sample - horizontal supporting structure - vertical supporting structure –vertical joints - vertical supporting structure –horizontal joints	 H -- --	 H -- --
Mobility - lateral - No mobility - Forced mobility (%)	 -- M25.0	 -- M25.0
Type of joint - prefabricated - made on site - both prefabricated and made on site	 -- F --	 -- F --
Range of joint widths (in mm)	W 12	W >12 to 75

Consequently, the structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 125 mm) in conjunction with a movement absorption capacity of ± 25 % (movement consisting of an expansion and shear movement) as a linear butt joint is classified in accordance with the aforementioned parameters as follows for the test parameters:

- In terms of the integrity and insulation:

Fire-resistance rating: EI 120-H-M 25.0-F-W 12

Fire-resistance rating: EI 45-H-M 25.0-F-W >12 to 75

- In terms of the integrity:

Fire-resistance rating: E 120-H-M 25.0-F-W 12

Fire-resistance rating: E 120-H-M 25.0-F-W >12 to 75

4.3 Classification of the structural joints pursuant to section 2.2 for a structural part that is 200 mm thick

The structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 200 mm) in conjunction with a movement absorption capacity of ± 25 % (movement consisting of an expansion and shear movement) as a linear butt joint has been classified in accordance with the following combinations of the general performance parameters pursuant to DIN EN 13501-2: 2016-12 and Table 3.

The following classifications apply for joint widths w = 12 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	240	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	240	-	-	-	-	-	-	-	-

The following classifications apply for joint widths 12 mm < w ≤ 75 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	90	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	120	-	-	-	-	-	-	-	-

Furthermore, the structural part has been classified as a horizontal joint seal in accordance with different test set-ups listed in the test standard.

Table 7 Classification of structural joints pursuant to DIN EN 13501-2, section 7.5.9.4

Test conditions	**Joint widths w = 12 mm**	**Joint widths 12 mm < w ≤ 75 mm**
Alignment of the sample - horizontal supporting structure - vertical supporting structure –vertical joints - vertical supporting structure –horizontal joints	 H -- --	 H -- --
Mobility - lateral - No mobility - Forced mobility (%)	 -- M25.0	 -- M25.0
Type of joint - prefabricated - made on site - both prefabricated and made on site	 -- F --	 -- F --
Range of joint widths (in mm)	W 12	W >12 to 75

Consequently, the structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" in the connec-

tion area of flank joints on solid structural parts on solid structural parts (thickness t = 200 mm) in conjunction with a movement absorption capacity of ± 25 % (movement consisting of an expansion and shear movement) as a linear butt joint is classified in accordance with the aforementioned parameters as follows for the test parameters:

- In terms of the integrity and insulation:

  Fire-resistance rating: EI 240-H-M 25.0-F-W 12

  Fire-resistance rating: EI 90-H-M 25.0-F-W >12 to 75

- In terms of the integrity:

  Fire-resistance rating: E 240-H-M 25.0-F-W 12

  Fire-resistance rating: E 120-H-M 25.0-F-W >12 to 75

4.4 Classification of the structural joints pursuant to section 2.3 for a structural part that is 200 mm thick

The structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a seal with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 200 mm) as a linear butt joint has been classified in accordance with the following combinations of the general performance parameters pursuant to DIN EN 13501-2: 2016-12 and Table 4.

The following classifications apply for joint widths w = 12 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	240	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	240	-	-	-	-	-	-	-	-

The following classifications apply for joint widths 12 mm < w ≤ 100 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	180	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	180	-	-	-	-	-	-	-	-

Furthermore, the structural part has been classified as a horizontal joint seal in accordance with different test set-ups listed in the test standard.

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Table 8 Classification of structural joints pursuant to DIN EN 13501-2, section 7.5.9.4

Test conditions	**Joint widths w = 12 mm**	**Joint widths 12 mm < w ≤ 100 mm**
Alignment of the sample - horizontal supporting structure - vertical supporting structure –vertical joints - vertical supporting structure –horizontal joints	 H -- --	 H -- --
Mobility - lateral - No mobility - Forced mobility (%)	 X --	 X --
Type of joint - prefabricated - made on site - both prefabricated and made on site	 -- F --	 -- F --
Range of joint widths (in mm)	W 12	W >12 to 100

Consequently, the structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a seal, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 200 mm) as a linear butt joint is classified in accordance with the aforementioned parameters as follows for the test parameters:

- In terms of the integrity and insulation:

  Fire-resistance rating: EI 240-H-X-F-W 12

  Fire-resistance rating: EI 180-H-X-F-W >12 to 100

- In terms of the integrity:

  Fire-resistance rating: E 240-H-X-F-W 12

  Fire-resistance rating: E 180-H-X-F-W >12 to 100

4.5 Classification of the structural joints pursuant to section 2.4 for a structural part that is 150 mm thick

The structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a seal with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 150 mm) as a linear butt joint has been classified in accordance with the following combinations of the general performance parameters pursuant to DIN EN 13501-2: 2016-12 and Table 4.

The following classifications apply for joint widths w = 30 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	240	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	240	-	-	-	-	-	-	-	-

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The following classifications apply for joint widths 30 mm < w ≤ 100 mm:

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	I	-	-	180	-	-	-	-	-	-	-	-

R	E	I	W	-	t	-	M	C	S	IncSlow	sn	ef	r
-	E	-	-	-	240	-	-	-	-	-	-	-	-

Furthermore, the structural part has been classified as a horizontal joint seal in accordance with different test set-ups listed in the test standard.

Table 9 Classification of structural joints pursuant to DIN EN 13501-2, section 7.5.9.4

Test conditions	**Joint widths w = 30 mm**	**Joint widths 30 mm < w ≤ 100 mm**
Alignment of the sample - horizontal supporting structure - vertical supporting structure –vertical joints - vertical supporting structure –horizontal joints	 H -- --	 H -- --
Mobility - lateral - No mobility - Forced mobility (%)	 X --	 X --
Type of joint - prefabricated - made on site - both prefabricated and made on site	 -- F --	 -- F --
Range of joint widths (in mm)	W 30	W >30 to 100

Consequently, the structural part joint seal with mineral wool insulation and a seal on the underside of the ceiling, designed as a seal, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts (thickness t = 150 mm) as a linear butt joint is classified in accordance with the aforementioned parameters as follows for the test parameters:

- In terms of the integrity and insulation:

  Fire-resistance rating: EI 240-H-X-F-W 30

  Fire-resistance rating: EI 180-H-X-F-W >30 to 100

- In terms of the integrity:

  Fire-resistance rating: E 240-H-X-F-W 30

  Fire-resistance rating: E 240-H-X-F-W >30 to 100

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4.6 Direct field of application

This classification is valid for the following applications:

4.6.1 Joint seal – mineral wool insulation with a seal on the underside of the ceiling, designed as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" and a joint flank from solid structural parts

- This type of joint seal may only be used in horizontal joints of horizontal structural parts. The field of application as regards the tested alignment applies for A, D and E pursuant to DIN EN 1366-4:2010-08, section 13.1.
- The solid ceiling constructions must have a thickness/strength of 125 mm or more (depending on the classification times). The joint seals may be used in space-enclosing structural parts of concrete, hollow blocks and masonry with a density of ≥ 400 kg/m³ (pursuant to DIN EN 1366-4:2010-08, section 13.2).
- The joint seal is to be positioned in accordance with item 2 of DIN EN 1366-4:2010-08, section 13.3.
- The joints with a mineral wool insulation and a seal on the underside of the ceiling, designed as a membrane, with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts may display a max. permissible movement absorption capacity (from a lateral movement + shear movement) of 25.0% relative to the installed state (pursuant to DIN EN 1366-4:2010-08, section 13.4).
- The mineral wool insulation joints should be executed as butt joints. The gap between the mineral wool insulation joints should be ≥ 1000 mm.

No further changes are allowed in any of the name installation situations.

4.6.2 Joint seal – mineral wool insulation with a seal on the underside of the ceiling, designed as a seal, with the coating system "HENSOMASTIK®5 KS viskos" and a joint flank from solid structural parts

- This type of joint seal may only be designed in horizontal joints of horizontal structural parts. The field of application as regards the tested alignment applies for A and D pursuant to DIN EN 1366-4:2010-08, section 13.1.
- The solid ceiling constructions must have a thickness/strength of 150 mm or more respectively 200 mm or more. The joint seals may be used in space-enclosing structural parts of concrete, hollow blocks and masonry with a density of ≥ 600 kg/m³ respectively ≥ 400 kg/m³ (pursuant to DIN EN 1366-4:2010-08, section 13.2).
- The joint seal is to be positioned in accordance with item 1 for solid ceiling constructions with a thickness ≥ 150 mm respectively item 2 for solid ceiling constructions with a thickness ≥ 200 mm of DIN EN 1366-4:2010-08, section 13.3.
- The joints with a mineral wool insulation and a seal on the underside of the ceiling, designed as a seal with the coating system "HENSOMASTIK®5 KS viskos" in the connection area of flank joints on solid structural parts may display a max. permissible movement absorption capacity of 7.5 % relative to the installed state (pursuant to DIN EN 1366-4: 2010-08, section 13.4).
- The mineral wool insulation joints should be executed as butt joints. The gap between the mineral wool insulation joints should be ≥ 1000 mm.

No further changes are allowed in any of the named installation situations.

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5 Limits

This classification report is not a type approval or certification of the product. It does no replace any building authority certificate that may be necessary according to German building laws (state building code) and is only valid in conjunction with the corresponding test report.

This classification report is valid for an unlimited period. It is the responsibility of the certification body to check whether the relevant test and classification standards are valid and/or that no significant changes have been made that may have an effect on the safety level.

The results of the tests exclusively relate to the items tested. This document does not replace a certificate of conformity or suitability according to national and European building codes.

Leipzig, 26 January 2018

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Head of Business Division	*Head of Work Group*	*Testing Engineer*