

## **CLASSIFICATION OF FIRE RESISTANCE**

### **FIRES-CR-113-24-AUPE**

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**Linear joint seals made with use of Fire Guard MS 567 installed in wall**

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# **CLASSIFICATION OF FIRE RESISTANCE IN ACCORDANCE WITH EN 13501-2: 2023 with direct field of application FIRES-CR-113-24-AUPE**

**Name of the product:** Linear joint seals made with use of Fire Guard MS 567 installed in wall

**Sponsor:** Dana Lim A/S  
Københavnsvej 220  
DK- 4600 Køge  
Denmark

**Prepared by:** FIRES, s.r.o.  
Notified Body No. 1396  
Osloboditeľov 282  
059 35 Batizovce  
Slovak Republic

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Copy No. 2 Dana Lim A/S, Københavnsvej 220, DK- 4600 Køge, Denmark

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1. INTRODUCTION

This classification report defines the resistance to fire classification assigned to element Linear joint seals made with use of Fire Guard MS 567 installed in wall in accordance with the procedures given in EN 13501-2: 2023.

2. DETAILS OF CLASSIFIED PRODUCT

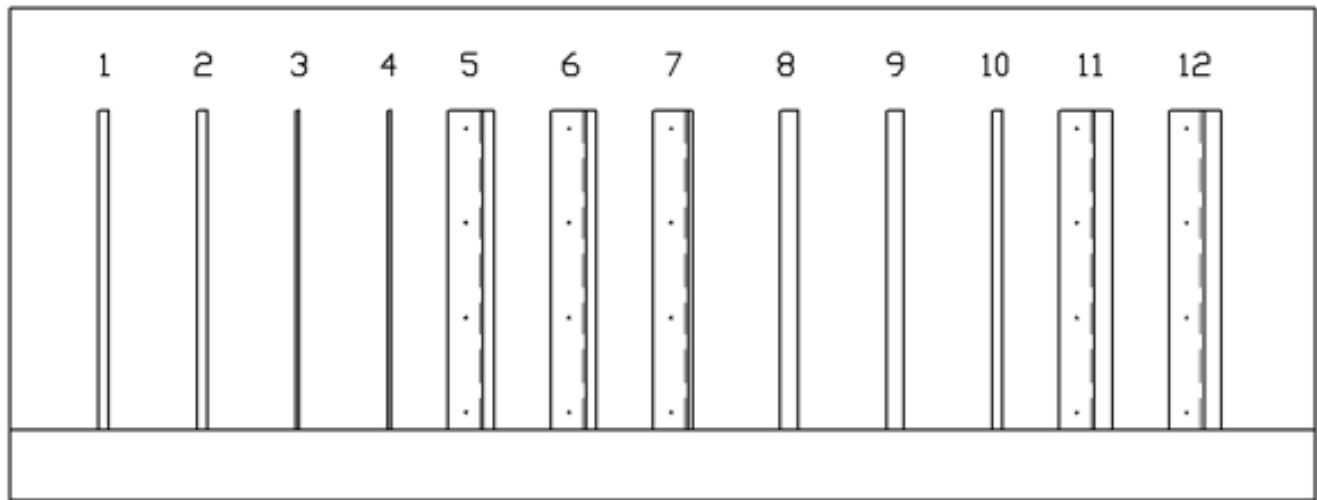
2.1 GENERAL

The element, Linear joint seals made with use of Fire Guard MS 567 installed in wall, is defined as a vertical and horizontal linear sealing system with the fire separating function positioned in joints, voids, gaps or other discontinuities within one or between two or more construction elements.

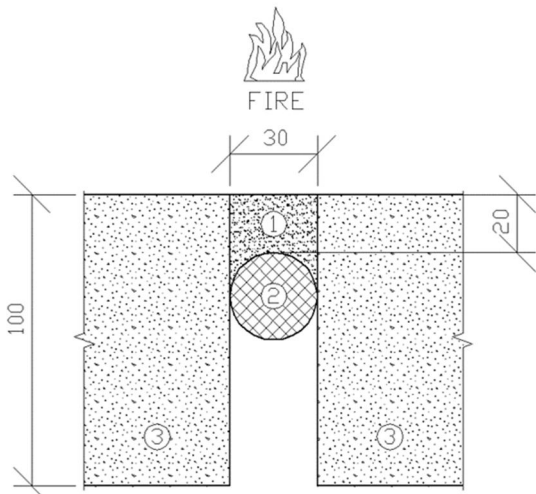
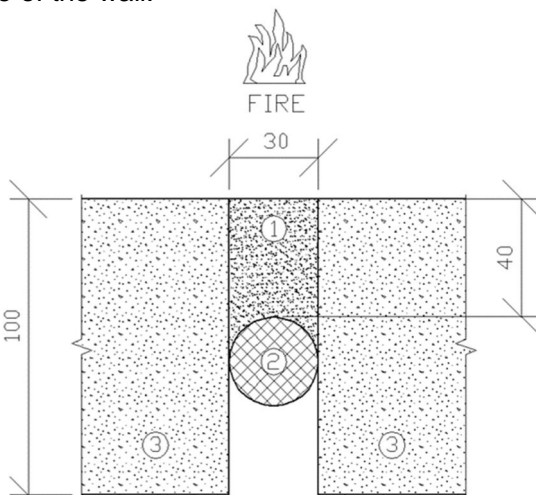
2.2 PRODUCT DESCRIPTION

The element, Linear joint seals made with use of Fire Guard MS 567 installed in wall are vertically oriented sealing system with a length of 900 mm, installed in standard low-density rigid wall construction with dimensions (4000 x 2300) mm (width x height). The thickness of the supporting construction for specimens is 100 mm.

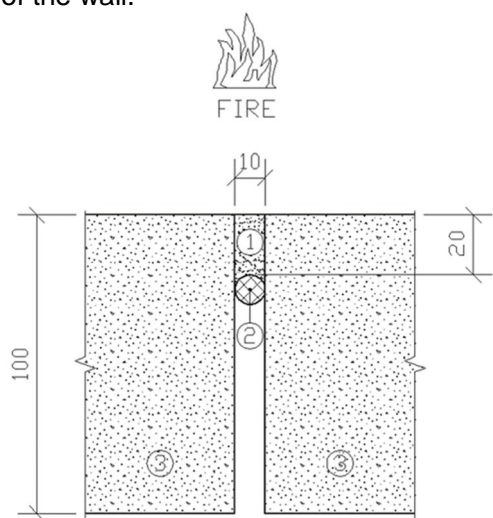
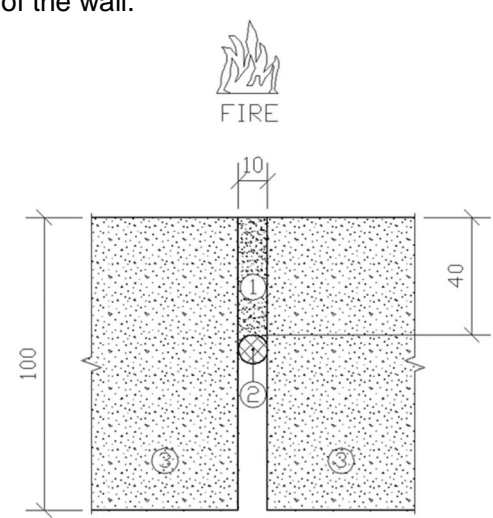
Figure 1 position of the test specimens in supporting construction from unexposed side:





| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification   | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|---|-------------|
| 1         | 30                                  | 20                       | AC / AC                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 40 mm<br/>3- Aerated concrete</p>  | vertical    |
| 2         | 30                                  | 40                       | AC / AC                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 40 mm<br/>3- Aerated concrete</p> | vertical    |

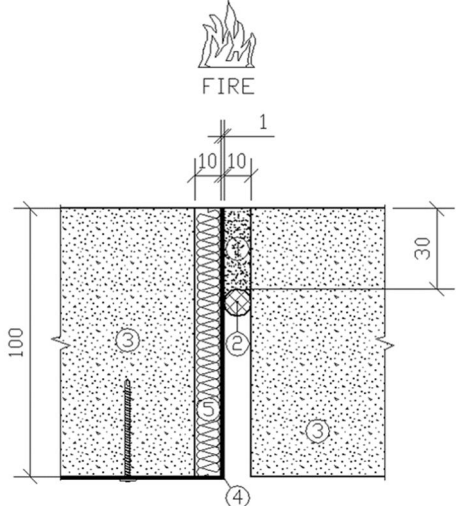
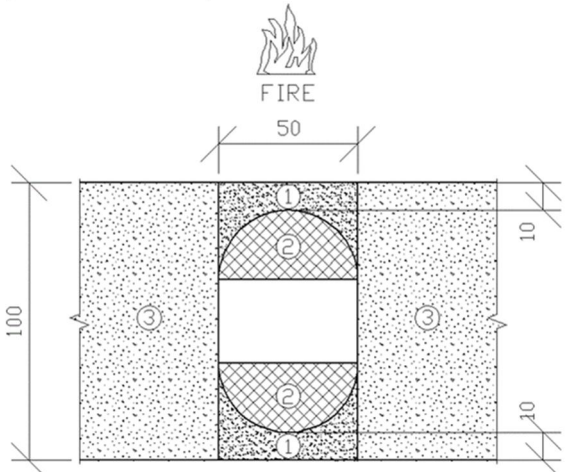


| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification   | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|---|-------------|
| 3         | 10                                  | 20                       | AC / AC                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 15 mm<br/>3- Aerated concrete</p>  | vertical    |
| 4         | 10                                  | 40                       | AC / AC                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 15 mm<br/>3- Aerated concrete</p> | vertical    |



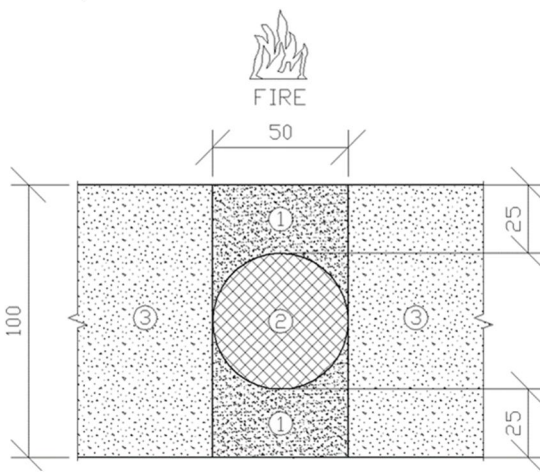
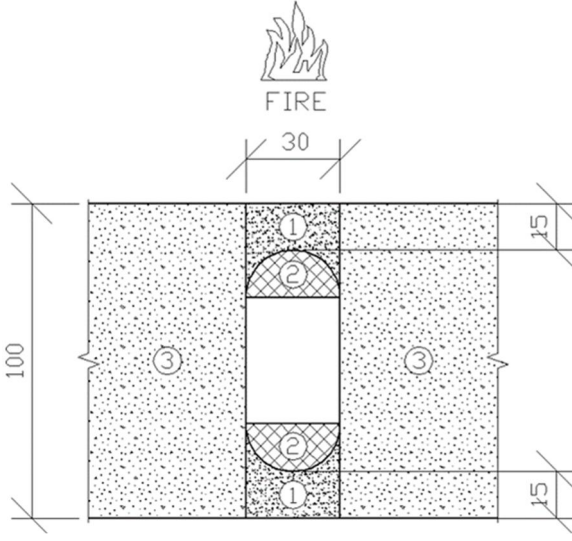
| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification  | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|--|-------------|
| 5         | 30                                  | 30                       | AC / ST                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p> <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 40 mm<br/>3- Aerated concrete<br/>4- Steel sheet 1,0 mm thick<br/>5- Mineral wool 10 mm thick</p> | vertical    |
| 6         | 30                                  | 50                       | AC / ST                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p> <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 40 mm<br/>3- Aerated concrete<br/>4- Steel sheet 1,0 mm thick<br/>5- Mineral wool 10 mm thick</p> | vertical    |



| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification   | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|---|-------------|
| 7         | 10                                  | 30                       | AC / ST                          | <p>One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 15 mm<br/>3- Aerated concrete<br/>4- Steel sheet 1,0 mm thick<br/>5- Mineral wool 10 mm thick</p>            | vertical    |
| 8         | 50                                  | 10                       | AC / AC                          | <p>Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords <math>\frac{1}{2}</math> Ø 55 mm with bulk density <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord 2 x <math>\frac{1}{2}</math> Ø 55 mm<br/>3- Aerated concrete</p> | vertical    |

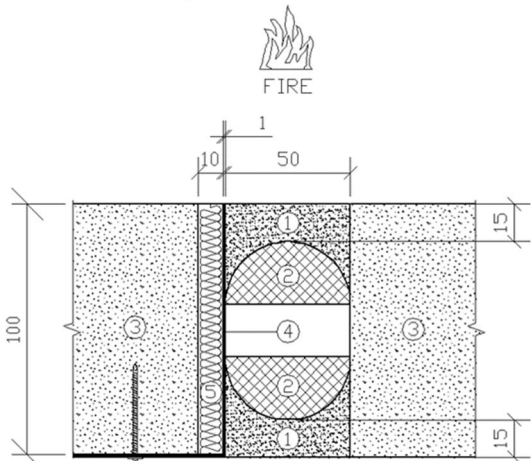
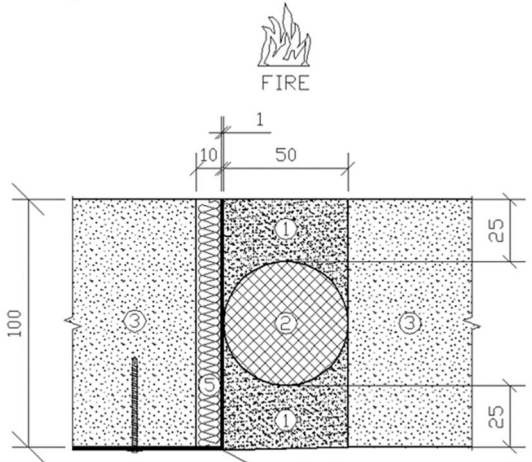




| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification   | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|---|-------------|
| 9         | 50                                  | 25                       | AC / AC                          | <p>Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cords Ø 55 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 55 mm<br/>3- Aerated concrete</p>  | vertical    |
| 10        | 30                                  | 15                       | AC / AC                          | <p>Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords <math>\frac{1}{2}</math> Ø 40 mm with bulk density <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord <math>2 \times \frac{1}{2}</math> Ø 40 m<br/>3- Aerated concrete</p> | vertical    |





| Joint No. | Width of opening (joint width) [mm] | Depth <sup>1)</sup> [mm] | Type of joint face <sup>2)</sup> | Specification  | Orientation |
|-----------|-------------------------------------|--------------------------|----------------------------------|--|-------------|
| 11        | 50                                  | 15                       | AC / ST                          | <p>Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords <math>\frac{1}{2}</math> Ø 55 mm with bulk density <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord 2 x <math>\frac{1}{2}</math> Ø 55 mm<br/>3- Aerated concrete<br/>4- Steel sheet 1,0 mm thick<br/>5- Mineral wool 10 mm thick</p> | vertical    |
| 12        | 50                                  | 25                       | AC / ST                          | <p>Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cords Ø 55 mm with bulk density of <math>20 \pm 2 \text{ kg.m}^{-3}</math> (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.</p>  <p>1- Fire Guard MS 567<br/>2- PU open cell round cord Ø 55 mm<br/>3- Aerated concrete<br/>4- Steel sheet 1,0 mm thick<br/>5- Mineral wool 10 mm thick</p>  | vertical    |



- 1) Joint seal depth stated without backing material acc. to EN 1366-4 cl. 7.2.6 (reaction to fire of backing materials - Class F);
- 2) AC – aerated concrete;  
 ST – standard configuration with the steel angle thickness of 1,0 mm on one joint face combined with mineral wool, type STEPLOCK ND (manufacturer: Rockwool), with dimensions (10 x 100) mm (width x height) and bulk density of 130 kg.m<sup>-3</sup> (stated by mineral wool manufacturer).

More detailed information is shown in the drawings which form an integral part of test report [1].

## 2.2.1 DESCRIPTION AND PROPERTIES OF LINEAR JOINT SEALS COMPONENTS

The characteristics of seal material:

Elastic SMP based joint seal, type Fire Guard MS 567

- is a flame-retardant made of silane modified polymer
- free foamed density (dry): (1,47 ±0,05) g.cm<sup>-3</sup>
- applied with gun
- temperature resistance after curing: - 40 °C to + 90 °C
- application temperature: + 5 °C to + 40 °C
- reaction to fire: Class E

PU round cords

- grey polyurethane foam round cords with open cells
- bulk density declared by manufacturer: (20,0 ±2) kg.m<sup>-3</sup>
- range of thicknesses: (15 – 55) mm
- reaction to fire: Class F

## 2.3 PRODUCT INSTALLATION

The test specimens are installed in standard rigid supporting construction made by aerated concrete blocks 100 mm thick with bulk density in according to EN 1363-1: 650 kg.m<sup>-3</sup> ±200 kg.m<sup>-3</sup> (the manufacturer's stated value in the dried steady-state is 450 kg.m<sup>-3</sup>).

The specimens No. 5, 6, 7, 11, 12 simulated steel joint face – standard configuration with steel angles on one joint face with thickness of 1,0 mm combined with mineral wool, type STEPLOCK ND (manufacturer: Rockwool), with dimensions (10 x 100) mm (width x height) and bulk density of 130 kg.m<sup>-3</sup> (stated by mineral wool manufacturer).

## 3. TEST REPORTS IN SUPPORT OF CLASSIFICATION

### 3.1 TEST REPORTS

| No. | Name of laboratory              | Test report No.      | Date of the test | Test method        | Type of the test |
|-----|---------------------------------|----------------------|------------------|--------------------|------------------|
| [1] | FIRES, s.r.o.,<br>Batizovce, SR | FIRES-FR-316-22-AUNE | 21. 11. 2022     | EN 1366-4:<br>2021 | A                |

Type of the test:

- A – accredited,  
N – non-accredited

[1] Test specimens were conditioned according to EN 1363-1 before the fire resistance test



### 3.2 TEST SPECIMENS

| Test report No. | Samples information   | Conditioning   | Pre-fire tests |
|-----------------|---|--|----------------|
| [1]             | <p>FIRES, s.r.o., Certification Body for Products carried out sampling of individual component Fire Guard MS 567 (black). Sampling data are recorded in Sampling report No. FIRES-SR-066-22.</p> <p>and</p> <p>FIRES, s.r.o., Certification Body for Product carried out sampling of test specimens. Sampling data are recorded in Sampling report No. FIRES-SR-067-22.</p> | <p>The specimens were stored in the hall of testing laboratory and conditioned according to EN 1363-1 under following climatic conditions:</p> <p>Ambient air temperature: 18,7°C, st. deviation 1,0°C</p> <p>Relative air humidity: 52,6%, st. deviation 5,4%</p> | -              |

### 3.3 TEST RESULTS

| No./<br>Test<br>method  | Parameter                        | Results   |
|---|----------------------------------|---|
| [1]<br><br>Linear joint<br><b>No. 1</b> /<br>EN 1366-4:<br>2021 | supporting construction          | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density 650 kg.m <sup>-3</sup> ±200 kg.m <sup>-3</sup> ; straight joint, 900 mm long |
|   | temperature curve                | standard temperature time curve   |
|   | integrity                        | cotton pad  |
|   |                                  | sustained flaming   |
|   | thermal insulation               | I   |
|   | Induced movement                 | NO  |
|   | type of joint face <sup>3)</sup> | AC - AC   |
| [1]<br><br>Linear joint<br><b>No. 2</b> /<br>EN 1366-4:<br>2021 | supporting construction          | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density 650 kg.m <sup>-3</sup> ±200 kg.m <sup>-3</sup> ; straight joint, 900 mm long |
|   | temperature curve                | standard temperature time curve   |
|   | integrity                        | cotton pad  |
|   |                                  | sustained flaming   |
|   | thermal insulation               | I   |
|   | Induced movement                 | NO  |
|   | type of joint face <sup>3)</sup> | AC - AC   |
| [1]<br><br>Linear joint<br><b>No. 3</b> /<br>EN 1366-4:<br>2021 | supporting construction          | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density 650 kg.m <sup>-3</sup> ±200 kg.m <sup>-3</sup> ; straight joint, 900 mm long |
|   | temperature curve                | standard temperature time curve   |
|   | integrity                        | cotton pad  |
|   |                                  | sustained flaming   |
|   | thermal insulation               | I   |
|   | Induced movement                 | NO  |
|   | type of joint face <sup>3)</sup> | AC - AC   |



| No./<br>Test<br>method  | Parameter                        |                   | Results  |
|---|----------------------------------|-------------------|--|
| [1]<br><br>Linear joint<br><b>No. 4</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|   | temperature curve                |                   | standard temperature time curve  |
|   | integrity                        | cotton pad        | 127 minutes no failure   |
|   |                                  | sustained flaming | 127 minutes no failure   |
|   | thermal insulation               | I                 | 96 minutes   |
|   | Induced movement                 |                   | NO   |
|   | type of joint face <sup>3)</sup> |                   | AC - AC  |
| [1]<br><br>Linear joint<br><b>No. 5</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|   | temperature curve                |                   | standard temperature time curve  |
|   | integrity                        | cotton pad        | 54 minutes   |
|   |                                  | sustained flaming | 54 minutes   |
|   | thermal insulation               | I                 | 54 minutes <sup>4)</sup>   |
|   | Induced movement                 |                   | NO   |
|   | type of joint face <sup>3)</sup> |                   | AC - ST  |
| [1]<br><br>Linear joint<br><b>No. 6</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|   | temperature curve                |                   | standard temperature time curve  |
|   | integrity                        | cotton pad        | 94 minutes   |
|   |                                  | sustained flaming | 94 minutes   |
|   | thermal insulation               | I                 | 91 minutes   |
|   | Induced movement                 |                   | NO   |
|   | type of joint face <sup>3)</sup> |                   | AC - ST  |
| [1]<br><br>Linear joint<br><b>No. 7</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|   | temperature curve                |                   | standard temperature time curve  |
|   | integrity                        | cotton pad        | 127 minutes no failure   |
|   |                                  | sustained flaming | 127 minutes no failure   |
|   | thermal insulation               | I                 | 30 minutes   |
|   | Induced movement                 |                   | NO   |
|   | type of joint face <sup>3)</sup> |                   | AC - ST  |
| [1]<br><br>Linear joint<br><b>No. 8</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|   | temperature curve                |                   | standard temperature time curve  |
|   | integrity                        | cotton pad        | 69 minutes   |
|   |                                  | sustained flaming | 69 minutes   |
|   | thermal insulation               | I                 | 69 minutes <sup>4)</sup>   |
|   | Induced movement                 |                   | NO   |
|   | type of joint face <sup>3)</sup> |                   | AC - AC  |



| No./<br>Test<br>method   | Parameter                        |                   | Results  |
|--|----------------------------------|-------------------|--|
| [1]<br><br>Linear joint<br><b>No. 9</b> /<br>EN 1366-4:<br>2021  | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|  | temperature curve                |                   | standard temperature time curve  |
|  | integrity                        | cotton pad        | 127 minutes no failure   |
|  |                                  | sustained flaming | 127 minutes no failure   |
|  | thermal insulation               | I                 | 127 minutes no failure   |
|  | Induced movement                 |                   | NO   |
|  | type of joint face <sup>3)</sup> |                   | AC - AC  |
| [1]<br><br>Linear joint<br><b>No. 10</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|  | temperature curve                |                   | standard temperature time curve  |
|  | integrity                        | cotton pad        | 110 minutes  |
|  |                                  | sustained flaming | 110 minutes  |
|  | thermal insulation               | I                 | 107 minutes  |
|  | Induced movement                 |                   | NO   |
|  | type of joint face <sup>3)</sup> |                   | AC - AC  |
| [1]<br><br>Linear joint<br><b>No. 11</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|  | temperature curve                |                   | standard temperature time curve  |
|  | integrity                        | cotton pad        | 59 minutes   |
|  |                                  | sustained flaming | 59 minutes   |
|  | thermal insulation               | I                 | 59 minutes   |
|  | Induced movement                 |                   | NO   |
|  | type of joint face <sup>3)</sup> |                   | AC - ST  |
| [1]<br><br>Linear joint<br><b>No. 12</b> /<br>EN 1366-4:<br>2021 | supporting construction          |                   | standard rigid supporting construction made of aerated concrete blocks, 100 mm thick with bulk density $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ; straight joint, 900 mm long |
|  | temperature curve                |                   | standard temperature time curve  |
|  | integrity                        | cotton pad        | 85 minutes   |
|  |                                  | sustained flaming | 85 minutes   |
|  | thermal insulation               | I                 | 80 minutes   |
|  | Induced movement                 |                   | NO   |
|  | type of joint face <sup>3)</sup> |                   | AC - ST  |

3) Note: AC – aerated concrete;

ST – standard configuration with the steel angle thickness of 1,0 mm on one joint face combined with mineral wool.

4) Note: The performance criteria of insulation are automatically assumed not to be satisfied when the criterion of integrity ceases to be satisfied (acc. to clause 11.4.2 of EN 1363-1).

[1] The test was terminated after period of 128<sup>th</sup> minute of test.



## 4. CLASSIFICATION AND FIELD OF APPLICATION

### 4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 7.5.8 of EN 13501-2: 2023.

### 4.2 CLASSIFICATION

The element, Linear joint seals made with use of Fire Guard MS 567 installed in wall, is classified according to the following combinations of performance parameters and classes as appropriate.

| Joint No. | Width of opening (joint width) [mm] | Depth [mm] | Type of joint face | Element   | Classification   |
|-----------|-------------------------------------|------------|--------------------|---|--|
| 1         | 30                                  | 20         | AC / AC            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>EI 30-V-X-B-W 00 to W 30</b>                                    |
| 2         | 30                                  | 40         | AC / AC            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>E 120-V-X-B-W 00 to W 30</b><br><b>EI 90-V-X-B-W 00 to W 30</b> |
| 3         | 10                                  | 20         | AC / AC            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>E 120-V-X-B-W 00 to W 10</b><br><b>EI 45-V-X-B-W 00 to W 10</b> |





| Joint No. | Width of opening (joint width) [mm] | Depth [mm] | Type of joint face | Element   | Classification   |
|-----------|-------------------------------------|------------|--------------------|---|--|
| 4         | 10                                  | 40         | AC / AC            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>E 120-V-X-B-W 00 to W 10</b><br><b>EI 90-V-X-B-W 00 to W 10</b> |
| 5         | 30                                  | 30         | AC / ST            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>EI 45-V-X-B-W 00 to W 30</b>                                    |
| 6         | 30                                  | 50         | AC / ST            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 40 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>EI 90-V-X-B-W 00 to W 30</b>                                    |
| 7         | 10                                  | 30         | AC / ST            | One layer of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cord Ø 15 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from exposed side of the wall. Fire Guard MS 567 sealant in one line with exposed side of the wall. | <b>E 120-V-X-B-W 00 to W 30</b><br><b>EI 30-V-X-B-W 00 to W 30</b> |



| Joint No. | Width of opening (joint width) [mm] | Depth [mm] | Type of joint face | Element   | Classification            |
|-----------|-------------------------------------|------------|--------------------|---|---------------------------|
| 8         | 50                                  | 10         | AC / AC            | Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords $\frac{1}{2}$ Ø 55 mm with bulk density $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall. | EI 60-V-X-B-W 00 to W 50  |
| 9         | 50                                  | 25         | AC / AC            | Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cords Ø 55 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall.                     | EI 120-V-X-B-W 00 to W 50 |
| 10        | 30                                  | 15         | AC / AC            | Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords $\frac{1}{2}$ Ø 40 mm with bulk density $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall. | EI 90-V-X-B-W 00 to W 30  |
| 11        | 50                                  | 15         | AC / ST            | Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by 2 pcs of PU open-cell round cords $\frac{1}{2}$ Ø 55 mm with bulk density $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall. | EI 45-V-X-B-W 00 to W 50  |



| Joint No. | Width of opening (joint width) [mm] | Depth [mm] | Type of joint face | Element   | Classification           |
|-----------|-------------------------------------|------------|--------------------|---|--------------------------|
| 12        | 50                                  | 25         | AC / ST            | Two layers of permanently elastic SMP based joint sealant Fire Guard MS 567 applied on backing material formed by PU open-cell round cords Ø 55 mm with bulk density of $20 \pm 2 \text{ kg.m}^{-3}$ (reaction to fire Class F) from both sides of the wall. Fire Guard MS 567 sealant in one line with exposed and unexposed side of the wall. | EI 60-V-X-B-W 00 to W 50 |

### 4.3 FIELD OF APPLICATION

This classification is valid according to EN 1366-4: 2021 for the following end use applications:

|                                  |   |
|----------------------------------|---|
| Construction                     | Construction of linear joint shall not be changed as tested;<br>Depth of linear seal may be increased;  |
| Orientation of linear joint seal | Vertically oriented linear joint in vertical wall (see clause 2.2);   |
| Supporting construction          | The results are valid for aerated concrete, concrete, blockwork and masonry separating elements (wall) of a minimal thickness of 100 mm and density equal to or greater than $650 \text{ kg.m}^{-3} \pm 200 \text{ kg.m}^{-3}$ ;<br><br>The results of linear joint seals No. 5, 6, 7, 11, 12 are valid for steel angle standard supporting construction on one joint face apply to separating elements made of aerated concrete, concrete, blockwork and masonry faced on one side with steel of a thickness equal to or greater than 1,0 mm (see clause 2.2); |
| Seal position                    | The results of linear joint seals No. 1 to No. 7 are valid for positions as is written in clause 2.2 (joint seal at bottom of joint) and also for joint seal at top of joint and joint seal centred in joint (position 3 and 5 of Figure 17 of standard 1366-4);<br><br>The results of linear joint seals No. 8 to No. 12 are valid only for positions as is written in clause 2.2;   |



## 5. LIMITATIONS

This classification document does not represent type approval or certification of the product.

The classification is valid provided that the product, field of application and standards and regulations are not changed.

Approved by:

Ing. Marek Gorlický  
*Head of the Testing Laboratory*

Prepared by:

Bc. Matúš Korenko  
*Technician of the Testing Laboratory*

