

Zulassung

ISIFLEX Brandschutzsilikon
Wand / Stahl
Klassifizierungsbericht nach EN
13501-2 / 2013-Efectis-R0206f



Linear joint sealed with HBT-ISIFLEX-Fugensilikon
Classification of the fire resistance according to
EN 13501-2:2007+A1:2009

| | |
|-----------------|--|
| Report number | 2013-Efectis-R0206f |
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TABLE OF CONTENTS

| | |
|--|----------|
| 1. SUBJECT | 3 |
| 2. DETAILS OF CLASSIFIED PRODUCT | 3 |
| 2.1. General | 3 |
| 2.2. Separating element | 3 |
| 2.3. Linear joint seals | 3 |
| 3. SAMPLING AND MANUFACTURING OF THE CONSTRUCTION | 5 |
| 4. TEST REPORT & TET RESULTS IN SUPPORT OF CLASSIFICATION | 5 |
| 4.1. Test report | 5 |
| 4.2. Test results | 5 |
| 5. CLASSIFICATION AND DIRECT FIELD OF APPLICATION | 5 |
| 5.1. Reference of classification | 5 |
| 5.2. Classification | 6 |
| 5.3. Field of application | 6 |
| 6. LIMITATIONS | 6 |
| 7. FIGURES | 7 |

1. SUBJECT

This classification report defines the resistance to fire classification assigned to a vertical linear joint sealed with a HBT type HBT-ISIFLEX-Fugensilikon sealant, applied in an aerated concrete wall construction abutting a steel element in accordance with the procedures given in EN 13501-2:2007+A1:2009.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. GENERAL

The element, HBT type HBT-ISIFLEX-Fugensilikon sealant, is defined as a linear joint seal.

2.2. SEPARATING ELEMENT

2.2.1. Wall

The standard aerated concrete wall construction according to EN 1366-4, had dimensions of 1500 x 1500 x 100 mm (w x h x t).

2.3. LINEAR JOINT SEALS

2.3.1. Supporting construction

The wall was built according to paragraph 7.2.2.1 in EN 1366-4, being an aerated concrete wall construction with a thickness of 100 mm at the right side of the joint and 70 mm at the left side of the wall (seen from the unexposed side).

According to paragraph 7.2.2.3 and figure 14 in EN 1366-4 the steel face joint is simulated. Below the figure given in the standard, the test specimen was in detail built according to this figure.

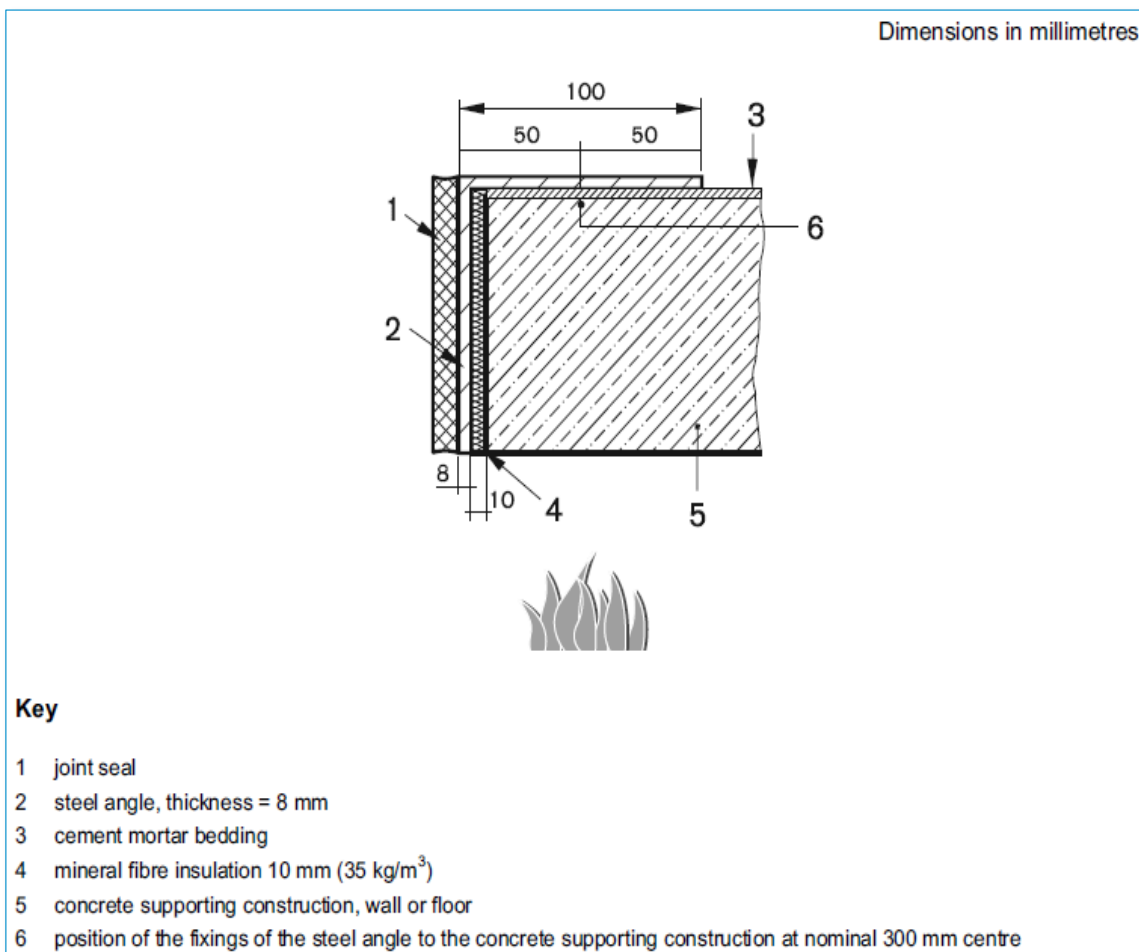


Figure 1: Seal details

2.3.2. Joint seal

Before applying the HBT-ISIFLEX-Fugensilikon sealant the surfaces were degreased with HBT Cleaner and primed with HBT Primer. The polyethylene backing material (approx. Ø 30 mm) was applied at a depth of 20 mm.

The HBT-ISIFLEX-Fugensilikon sealant is applied up to a width and depth of 20 mm and a length of min. 900 mm. The surface of the sealant was smoothed with HBT Finish. The sealant had a drying period of two weeks before testing.

3. SAMPLING AND MANUFACTURING OF THE CONSTRUCTION

Table 1:

| | |
|--|---|
| HBT GmbH | <ul style="list-style-type: none"> Sealant and backing material Applying sealant and backing material |
| Efectis Nederland BV Centre for Fire Safety | <ul style="list-style-type: none"> Test frame Aerated concrete wall |

For the execution of the fire test, the materials stated in table 2 have been sampled. The sampling form is hold on file at Efectis Nederland.

Table 2:

| Material | Sampled by | Sampled for | Sampling date |
|---|-------------------------|-------------|----------------|
| HBT-ISIFLEX- Fugensilikon sealant | Efectis Nederland BV | HBT GmbH | March 12, 2013 |

4. TEST REPORT & TET RESULTS IN SUPPORT OF CLASSIFICATION

4.1. TEST REPORT

| Name of laboratory | Name of sponsor | Test report no. | Test method |
|---|-----------------|---------------------|----------------------------|
| Efectis Nederland BV, Centre for Fire Safety | HBT GmbH | 2013-Efectis-R0206e | EN 1366- 4:2006+A1:2010 |

4.2. TEST RESULTS

Table 3: Summary of test results

| | | |
|--------------------------------------|-------------|------------|
| Integrity, (E) | | |
| - Cotton pad | 240 minutes | No failure |
| - Gap Gauge Ø 25 mm | 240 minutes | No failure |
| - Flames present longer than 10 sec. | 240 minutes | No failure |
| Insulation, (I) | | |
| - Max. temperature rise | 38 minutes | Failure |

5. CLASSIFICATION AND DIRECT FIELD OF APPLICATION

5.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 7 of EN 13501-2:2007+A1:2009.

5.2. CLASSIFICATION

The fire resistance of a vertical linear joint sealed with a HBT type HBT-ISIFLEX-Fugensilikon sealant, applied in an aerated concrete wall construction abutting a steel element.

Fire resistance classification of:

EI 30 – V - X
E 240 – V - X

5.3. FIELD OF APPLICATION

The results of the fire test are directly applicable to similar constructions, where one or more of the changes listed below are made and the construction continues to comply with the appropriate design code for its stiffness and stability.

5.3.1. Orientation

Test orientation 'B' is tested; a vertical linear joint in a vertical test construction. The test results only apply to the same orientation.

5.3.2. Supporting construction

The test results are valid for concrete, block work and masonry separating elements of a thickness (min. 100 mm) and density (min. 600 kg/m³) equal to or greater than that tested forming one joint face and separating element constructions (min. 70 mm) made of metals with a melting point higher than 1000 °C forming the other joint face.

5.3.3. Seal position

The test results are valid for the position in which the seal was tested.

5.3.4. Joint width and depth


The width of the joint is restricted to 20 mm, with a depth of 20 mm.

6. LIMITATIONS

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



W. Scheffer BBE
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7. FIGURES

Figure 1: Detail of specimen

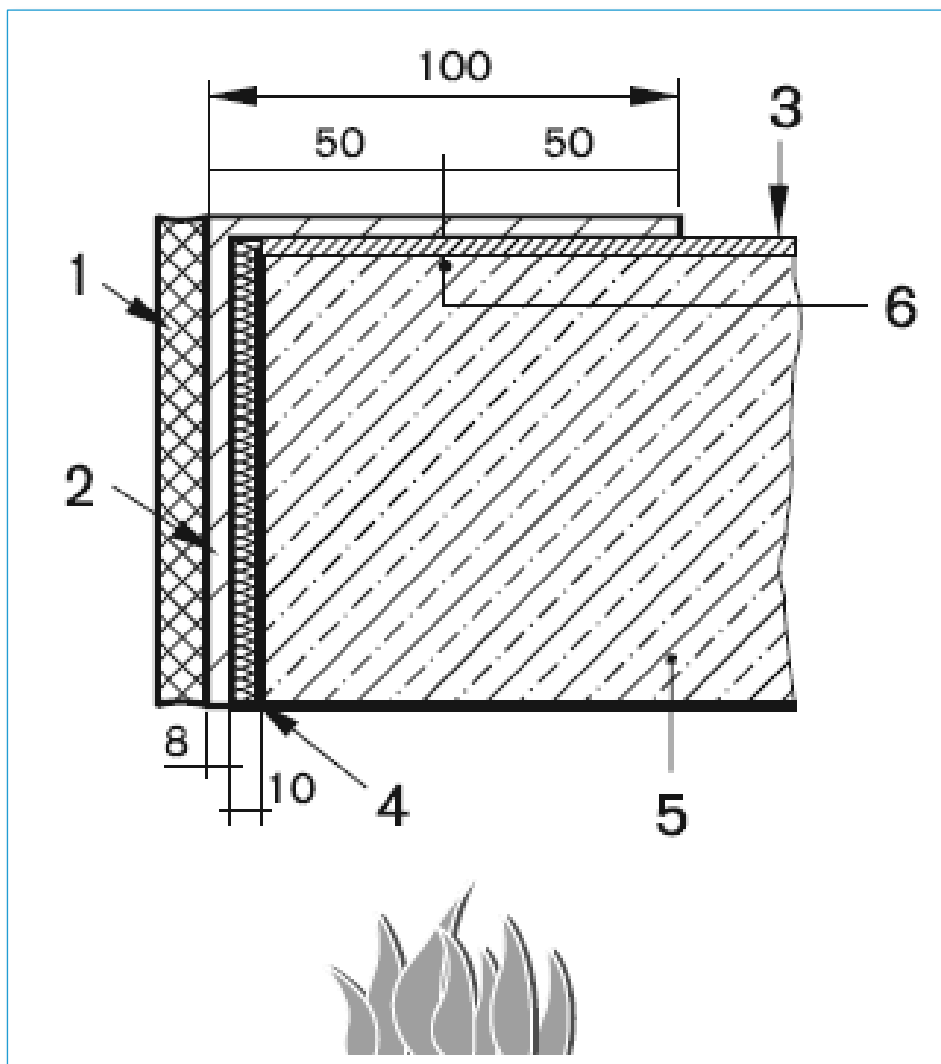


Figure 1: Detail of specimen

1. Joint seal, width 20 mm, depth 20 mm on both sides of the wall
2. Steel angle profile with dimensions of 100 x 70 x 8 mm
3. Wall surface
4. Mineral fibre insulation 10 mm, 35 kg/ m³
5. Aerated concrete wall with a thickness of 70 mm, the aerated concrete wall abutting the joint had a thickness of 100 mm
6. Fixings of the steel angle profile with a nominal 300 mm centre