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**Title:**

The Fire Resistance Performance Of Four Specimens Of Floor Mounted Linear Gap Sealing Systems, When Tested In Accordance With EN 1366-4: 2006 +A1:2010

**Report No:**

381296

**Prepared for:**

**Saudi International Insulation Manufacturing Company,**  
Yanbu Al Sinaiyah,  
P.O.Box 57774,  
Yanbu Industrial City  
11574,

**Date:**

4<sup>th</sup> July 2017

**Notified Body No:**

0833



0249

## Summary

**Objective** A fire resistance test has been conducted to assess the ability of four horizontally orientated, specimens of linear gap sealing systems, to reinstate the fire resistance of a pre-cast, aerated concrete floor when tested in accordance with EN 1366-4: 2006 +A1:2010.

**Sponsor** **Saudi International Insulation Manufacturing Company,**  
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**Summary of the Tested Specimens** For the purpose of the test the specimens were referenced as Specimen A, B, C and D.

The section of floor had overall dimensions of 2240 mm long by 1730 mm wide by 150 mm thick and was made up of autoclaved aerated slabs arranged to provide four apertures 150 mm wide by 1500 mm long .

Specific details of each of the seals are given in the tables below:

| Specimen | Floor specimen seal details  |
|----------|--|
| A        | 100 mm thick, formed from a double layer of 50 mm thick, 50kg/m <sup>3</sup> density mineral wool based linear joint seal referenced 'Comfort SA Slab 50 U (50)', cut 20 mm oversize to allow for compression at longitudinal edges. The specimen was installed flush with the exposed face of the floor. The Specimen incorporated one joint.     |
| B        | 100 mm thick, formed from a single layer of 100 mm thick' 150kg/m <sup>3</sup> density mineral wool based linear joint seal referenced 'Comfort SA Slab 150 U (100)', cut 10 mm oversize to allow for compression at longitudinal edges. The specimen was installed flush with the exposed face of the floor. The Specimen incorporated one joint. |
| C        | 50 mm thick, formed from a single layer of 50 mm thick, 150kg/m <sup>3</sup> density mineral wool based linear joint seal referenced 'Comfort SA Slab 150 U (50)', cut 10 mm oversize to allow for compression at longitudinal edges. The specimen was installed flush with the exposed face of the floor. The Specimen incorporated one joint.    |
| D        | 50 mm thick, formed from a single layer of 50 mm thick, 50kg/m <sup>3</sup> density mineral wool based linear joint seal referenced 'Comfort SA Slab 50 U (50)', cut 20 mm oversize to allow for compression at longitudinal edges. The specimen was installed flush with the exposed face of the floor. The Specimen incorporated one joint.      |

Full details of the specimens and installation methods are given in the Schedule of Components.

**Test Results**

| Specimen | Integrity (mins) |                   | Insulation (mins) |
|----------|------------------|-------------------|-------------------|
|          | Cotton Pad       | Sustained flaming |                   |
| A        | 169*             | 192*              | 23                |
| B        | 189*             | 192*              | 47                |
| C        | 61               | 61                | 22                |
| D        | 42               | 42                | 10                |

\* The test duration. The test was discontinued after a period of 192 minutes.


**Date of Test**

16<sup>th</sup> May 2017


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# Signatories


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\* For and on behalf of **Exova Warringtonfire**.

Report Issued  
Date : 4<sup>th</sup> July 2017

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