

Test report

Derbigum SP 4 FR on a substrate of Expanded Polystyrene (EPS)



Name of client: Imperbel SA
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Approval holder information

Approval holder: Imperbel SA
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The results relate only to the items tested. The test report should only be reproduced in extenso - in extracts only with a written agreement with this institute.

Running control

1. Product

Roof covering class T
Euroclass B_{ROOF}(t2).

Trade name

Derbigum SP 4 FR.

2. Manufacturer

The client is the manufacturer.

3. Licenses/Approvals

SP Certificate 0034/06 dated 2016-07-01 (S)
Agrément nr. AGR. 1998/0015 dated 2012-03-05 (DK)
SINTEF Technical Approval nr. 2055 dated 2011-11-18 (N).

4. Nature of test

With reference to SECO sampling report file No. BA-310-00305 dated 2016-06-06 and to the conditions of the above mentioned approvals an audit test of the sampled material was carried out.

5. Test specimens

On 2016-07-12 DBI-Danish Institute of Fire and Security Technology received the following sample:

- One roll of Derbigum SP 4 FR with dimensions 7284 x 1098 x 4 mm.

The weight per unit area was determined to be 4.6 kg/m².

The sample was marked "JFL – SECO – BA-310-00305/20160606-07 DERBIGUM 446K14 SP FR".

The test specimens were constructed as follows (seen from the top):

- One layer of Derbigum SP 4 FR laid loose on to a standard substrate of
- 50 mm Expanded Polystyrene (EPS) with density 16.5 kg/m³ (taken from DBI's stock)

The test specimens were supported by 10 mm thick fibre reinforced calcium silicate board with dry density 680 ± 50 kg/m³.

6. Conditioning

On 2016-08-08 the specimens were placed in a room having an atmosphere with a relative humidity of $50 \pm 5 \%$ at a temperature of $23 \pm 2 \text{ }^\circ\text{C}$. The specimens were kept in this room until the tests were performed.

7. Test method

The test was performed in accordance with:

CEN/TS 1187:2012 Test methods for external fire exposure to roofs
Test 2: Method with burning brands and wind
(identical with Nordtest method NT FIRE 006)

8. Test results

Date of test: 2016-09-13.

The test results are shown in the following table.

Observations for specimens No.	1	2	3
Air velocity (m/s)	4	4	4
End of flaming after (min.sec.)	2:44	2:48	3:00
End of glowing after (min.sec)	5:08	5:34	5:46
Damaged length, mm (as measured from the centre of the source of the fire)			
- of the roof covering	475	500	490
- of the substrate	430	435	450

9. Conclusion

The investigated specimens satisfy the requirements of EN 13501-5:2005+A1 regarding

- length of damage in the roof covering
- length of damage in the underlay

The investigated sample of Derbigum SP4 FR laid loose on a substrate of Expanded Polystyrene (EPS) has fire technical properties as stated in the approvals.

10. Statement

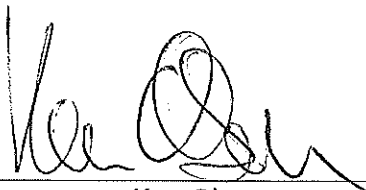
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11. Copy

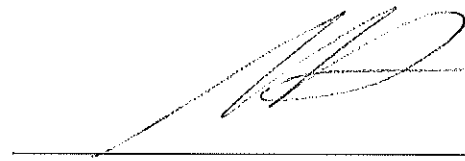
ETA-Danmark A/S

SINTEF Certifikation

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