Determination of the ignitability according to EN ISO 11925-2:2010

Finnfoam F-29+



Requested by: Finnfoam Oy





Requested by

Finnfoam Oy

Satamakatu 5

FI-24100 Salo, Finland

Order

1 August 2011, Asso Erävuoma

Contact person at VTT

VTT Expert Services Ltd

Product Manager Tiia Ryynänen

Kivimiehentie 4, Espoo, P.O. Box 1001, FI-02044 VTT, Finland

Tel. + 358 20 722 4827, Email: tiia.ryynanen@vtt.fi

Assignment

Determination of the ignitability of a product

Product

The customer gave the following information about the product:

Name of product: Finnfoam F-29+

Manufacturer: Finnfoam Oy

Product description: External thermal insulation composite system with

rendering

Insulation board: XPS (Finnfoam F-29), 38 kg/m³, 20...400 mm

Base plastering: one component cementitious polymer modified mortar,

organic content 2,4 %, 0,5...1,5 mm, about 2 kg/dm³ Reinforcement: glass fibre net, 0,5 mm, about 150 g/m²

Finishing coat: weber.vetonit Silco Paint, silicone resin based water

soluble paint, 0,1...0,3 mm, about 1,5 kg/dm³

Decorative coat: weber.vetonit Silco Coat, silicone resin based water

soluble coating, 1,0...2,0 mm

Sample

Date of delivery: 2 April 2012

The sample was chosen and the test specimens of the product were made by

the customer.

Date of test

11 May 2012

Test method

EN ISO 11925-2:2010 Reaction to fire tests – Ignitability of products

subjected to direct impingement of flame - Part 2: Single-flame source test

(ISO 11925-2:2010)

The description of the test method is presented in Appendix 1.



The test results relate only to the sample tested.



Results

The test results are shown in Appendix 2.

Note

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Espoo, 22 May 2012

Tiia Ryynänen Product Manager

Katja Ruotanen

Kalja Ro

Expert

APPENDICES

Appendix 1, method description

Appendix 2, test results

DISTRIBUTION

Customer

Original (2)

Archive

Original



The test results relate only to the sample tested.



Appendix 1

DESCRIPTION OF THE METHOD

EN ISO 11925-2:2010 Reaction to fire tests – Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2:2010)

The specimens

Three specimens lengthwise and three crosswise with the dimensions of 250 mm x 90 mm. Specimens of normal thickness 60 mm or less are tested using their full thickness. Specimens of normal thickness greater than 60 mm are reduced to a thickness of 60 mm. If the product is not essentially flat, the specimens can be tested in the form as in end use. Each different surface which can be exposed in practice shall be tested (surface exposure). For multilayer products greater than 10 mm thick, an additional set of tests is carried out with the specimen turned at 90° round its vertical axis and the flame impinging at the bottom edge of each different layer.

The specimens are conditioned prior to the test to constant mass at a temperature of $(23 \pm 2 \, ^{\circ}\text{C})$ and relative humidy of $(50 \pm 5 \, ^{\circ}\text{RH})$.

The ignition flame

The specimens are ignited with a 20 mm high propane gas flame. The burner is inclined at 45°. The flame is impinged on the bottom edge of the specimen (edge exposure) or 40 mm above the bottom edge (surface exposure).

The specimen is exposed to flame for 15 s or 30 s as required.

Test procedure

The conditioned specimens are fixed vertically in the frame. The occurrence of burning particles is observed with filter paper placed below the specimen. If the flame application time is 15 s, the total test duration is 20 s from the time at which the flame is first applied. If the flame application time is 30 s, the total test duration is 60 s from the time at which the flame is first applied.

For each test specimen it is recorded whether an ignition* occurs, whether the flame tip reaches 150 mm above the flame application point and the time at which this occurs and whether ignition of the filter paper occurs.

* ignition: flaming for a period greater than 3 s

20.12.2011



Appendix 2

TEST RESULTS

Product name:

Finnfoam F-29+

Test method:

EN ISO 11925-2:2010

Test conditions:

21°C, 54 % RH

Flame application time: 30 s

Exposure conditions:

surface exposure

Specimen	Ignition* of specimen	The flame tip reaches 150 mm	Ignition of the filter paper
1 ↑	No	No	No
2 ↑	No	No	No
3 ↑	No	No	No
4 →	No	No	No
$5 \rightarrow 6 \rightarrow$	No	No	No
6 →	No	No	No

^{*} Flaming for a period greater than 3 s

[↑] and →: lengthwise and crosswise directions of the product