



TNO Quality Services BV
Enschede

Return address: P.O. box 337, 7500 AH Enschede, The Netherlands

Estillon B.V.
Att.: mr. J. Thijssen
Postbus 121
6600 AC WIJCHEN
The Netherlands

Postal address:
P.O. Box 337
7500 AH Enschede
The Netherlands

Parking and delivery:
Josink Esweg 10
7545 PN Enschede
The Netherlands

www.tno-quality.com

T +31-88-8887888
F +31-88-8887859

Jan.brinks@quality.tno.nl

Report

Projectnumber: T09.25507.04

Date
29 October 2009

Received: T6, Floor covering "Axminster carpet with Black Pearl, 5mm underlay";
TNO reference: MT09.25507.04

Project number
T09.25507.04

Request: Reaction to fire (radiant panel) according to EN ISO 9239-1:2002.

Phone number client
+31-24 648 5348

Fax number client
+31-24 648 5349

Your reference
-

Article
T6

Appendix
1

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Test results:

Radiant Panel test EN ISO 9239-1:2002

Conditioning time, climate : 3 days, 23 ± 2 °C and 50 ± 5 %
Description of substrate : Fibre cement board, 6 ± 1 mm, 1800 ± 200 kg/m³
conforming to EN 13238:2001
Sampling procedure : by contractor.
Description of cleaning used : none.
Fixing method : loose laid.

Quality	Test specimen, orientation	Flame spread (cm)	CRF (kW/m ²)	peak light attenuation (%)	Smoke production (%.min)	Indicative classification ¹
T6	↑	26	8.3*	27.5	61.7	Bfl s1

Remarks: no flashing, transitory- or sustained flaming,
* specimen extinguished naturally
¹ the recorded CRF-value would imply this classification could be achieved, according to EN 13501:2007. It is only based on one sample, while four samples are required for a final classification.

The test results only relate to the behaviour of the test specimens of the examined product under the particular conditions of the test in laboratory conditions; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use. The method might not be suitable if the product is exposed to much larger flames or heat radiant sources.

Project leader:

Mr. J. Brinks

Author:

Mrs. I. Pierik



Report produced with the Fire Testing Technology FRPSoft software

Flooring Radiant Panel Single Specimen Report

Standard : EN ISO 9239-1:2002
Laboratory : TNO - Quality Services BV
Sponsor : Estillon - T6 (underlay w-carpet)
Date of test : Oct. 26 2009

Specimen description : (M) T09.25507.04
Test name : Prod.
File name : D:\FRPFILES\09100011.CSV
Test number in series : 1

Flux calibration file name : C:\FRPSOFT\CALIB\FLX09002.CSV

Thickness (mm) :
Density (kg/m³) :

Test duration : 13 minutes 42 seconds (822 s)
Substrate used? : Yes
Substrate : Calcium silicate
Fixing method : adhesive
Conditioned? : Yes
Conditioning temp. (°C) : 20
Conditioning RH (%) : 65

Test Results

Time to ignition : 2 minutes 02 seconds (122 s)
Time to flameout : 13 minutes 41 seconds (821 s)
Extent of burning (mm) : 260
Critical flux at extinguishment (kW/m²) : 8.26
HF-10 (kW/m²) : 8.26
HF-20 (kW/m²) : >= 10.9
HF-30 (kW/m²) : >= 10.9
Flame spread at 10 minutes (mm) : 260
Flame spread at 20 minutes (mm) : -1
Flame spread at 30 minutes (mm) : -1
Peak light attenuation (%) : 27.45
Time to peak light attenuation : 3 minutes 38 seconds (218 s)
Total integrated smoke (%.min) : 61.71

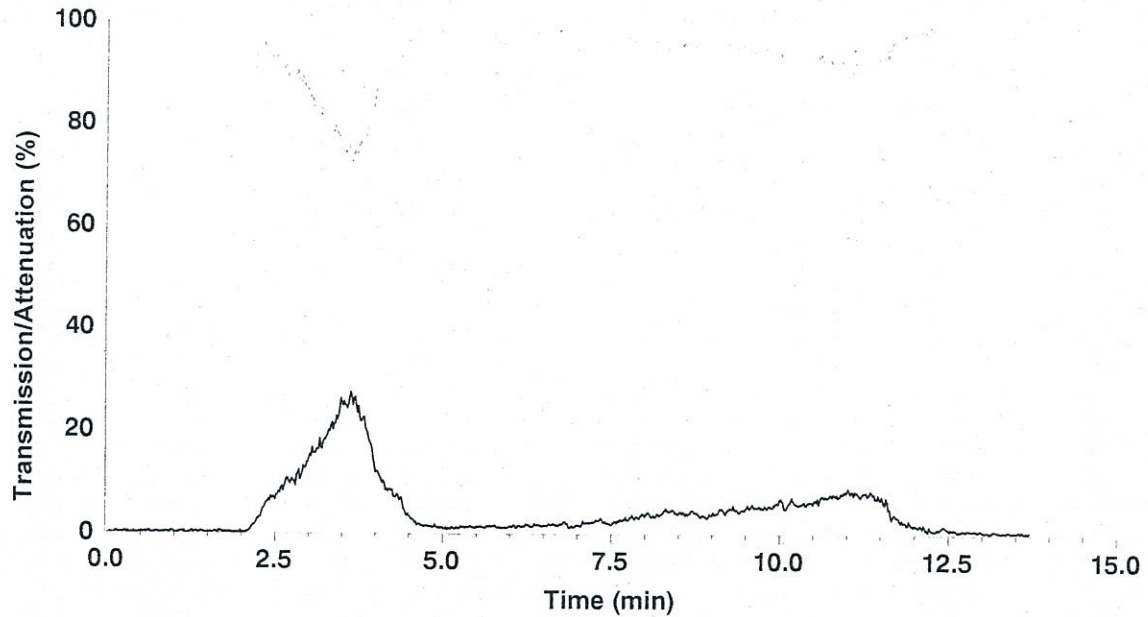
Potential classification : A2(fl)/B(fl)
Smoke production classification : s1

These results relate only to the behaviour of the specimens of the 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.



Report produced with the Fire Testing Technology FRPSoft software

Smoke Graph



Test name : Prod.

File name : D:\FRPFILES\09100011.CSV

Rake Results

Position (mm)	Time (s)	Flux (kW/m ²)	Qsb (MJ/m ²)	Position (mm)	Time (s)	Flux (kW/m ²)	Qsb (MJ/m ²)
60	129	11.2	1.359	510	-	3.6	-
110	146	10.5	1.453	560	-	3.0	-
160	176	10.0	1.628	610	-	2.6	-
210	202	9.3	1.669	660	-	2.3	-
260	237	8.3	1.737	710	-	2.0	-
310	-	7.3	-	760	-	1.7	-
360	-	6.3	-	810	-	1.5	-
410	-	5.3	-	860	-	1.3	-
460	-	4.4	-	910	-	1.2	-

Comments

-van 0-260mm 'flame-out' bij 286s-
Specimen extinguished naturally.

These results relate only to the behaviour of the specimens of the 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.