CERTIFICATE

Material Fire Test Certificate

IGNL-8009-05-02C I01 R00

DATE OF TEST	06.12.2023
ISSUE DATE	03.01.2024
EXPIRY DATE	02.01.2029

AS ISO 9239.1-2003 Determination of the burning behaviour using a radiant heat source

SPONSOR
Quest Carpets
43-55 Mark Anthony Drive
Dandenong South, VIC 3175

TEST BODY
Ignis Labs Pty Ltd
ABN 36 620 256 617
3 Cooper Place
Queanbeyan NSW 2620
Australia
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(02) 6111 2909
Test body is the test location

Specimen Identification

Pacific AB – Dunlop Supergreen underlay

Specimen Description

The sponsor described the test specimen as 32 oz Solution Dyed Nylon twist pile carpet. It is composed of solution dyed nylon. It is to be tested conventionally on Dunlop Supergreen underlay.
The specimen was received as a roll of brown-coloured twist pile carpet attached to a beige woven backing on a multicoloured underlay with a green facing. As directed by the sponsor, Ignis Labs fabricated the specimens to the test dimensions from the raw material provided. The carpet had a measured nominal thickness of 9.53 mm, and the underlay had a measured nominal thickness of 8.90 mm. The test specimens had a total nominal thickness of 18.42 mm.
Ignis Labs was not responsible for the sampling stage. All specimens were sampled by the test sponsor. The test results apply to the specimens as received.

Test Method

Four specimens were tested in accordance with Australia Standard AS 9239.1-2003 Reaction to fire tests for floorings, Part 1: Determination of the burning behaviour using a radiant heat source. Specimens 1-3 were tested along the production direction and specimen 4 was tested against the production direction. As requested by the test sponsor, the specimens were tested for 30 minutes only.

Observations

Comparing the critical heat flux values of specimens tested in two directions, the specimen with the production direction demonstrated a worse result and as such an additional two tests were completed in that direction. All specimens with the production direction exhibited equivalent performance. None of the specimens reached flameout within the 30-minute test duration. Sustained flaming of specimens was observed starting from 156, 142, 134, and 148 seconds for specimens 1 to 4 respectively. Melting was observed ahead of the flame front. Charring and melting were observed on the carpet surface after testing.

Calculations

Parameters	Unit	Specimen			
		With Product Direction			Against Product Direction
Specimen number		1	2	3	4
Test duration	min	30.00	30.00	30.00	30.00
Time to reach 50mm	s	166	146	137	149
Flameout time	min	-	-	-	-
Flame spread at 10 min	mm	410	370	460	360
Flame spread at 20 min	mm	510	490	580	470
Flame spread at 30 min	mm	580	580	650	560
Flame spread at flameout	mm	580	580	650	560
Maximum light attenuation	%	20.50	23.05	49.00	30.02
HF-10	kW/m²	5.12	5.93	4.35	6.14
HF-20	kW/m²	3.58	3.88	2.87	4.19
HF-30	kW/m²	2.87	2.87	2.23	3.07
CHF	kW/m²	-	-	-	-
Critical heat flux	kW/m²	2.8	2.8	2.2	3.0
Smoke obscuration integration	%×min	85.17	99.64	233.05	72.15

Result

Parameters	Unit	Results
Average flame spread	mm	603.33
Average critical heat flux	kW/m²	2.6
Average smoke obscuration integration	%×min	139.29

Test Supervisor
Darren Laker

Technical Lead
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