

# CERTIFICATE

## Material Fire Test Certificate

IGNL-7234-05-01C I01 R01

DATE OF TEST 10/10/2023  
 ISSUE DATE 01/11/2023  
 EXPIRY DATE 19/10/2028

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

### SPONSOR

Belgotex  
 17/2-6 Focal Avenue  
 Coolool Beach, QLD 4573

### TEST BODY

Ignis Labs Pty Ltd  
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 3 Cooper Place  
 Queanbeyan NSW 2620  
 Australia  
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 (02) 6111 2909  
*Test body is the test location*



### Specimen Name

Avenue MR

### Specimen Description

The sponsor described the tested specimen as 100% SDN cut pile with a nominal composition of solution dyed nylon. It had a nominal thickness of 13 mm. Its end use was as residential flooring. The received specimens were 100% SDN cut pile. It was grey in colour. The specimens were tested on Dunlop Government Red underlay with conventional installation. The carpet had a measured nominal thickness of 12.58 mm and the nominal thickness of the underlay is 7 mm. The specimens had a combined nominal thickness of 16.48 mm. Specimens were fabricated to size by Ignis Labs. 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 (4) specimens were tested in accordance with Australia Standard AS ISO 9239.1-2003 Reaction to fire tests for floorings, Part 1: Determination of the burning behaviour using a radiant heat source. Specimens 1 to 3 were tested with production direction while specimen 4 was tested against the production direction. The specimens were tested until extinguishment.

### Observations

All four specimens exhibited similar behaviour. Sustained flaming was observed from 140, 154, 147, and 138 seconds for specimens 1 to 4 respectively. The specimens exhibited melting ahead of the main flame front. Specimens bubbled under the flames.

### Calculations

Parameters	Unit	Specimen			Against Product Direction
		1	2	3	
Specimen number		1	2	3	4
Test duration	min	39.63	45.75	47.37	39.02
Time to reach 50 mm	s	252	273	283	251
Flameout time	min	39.63	45.75	47.37	39.02
Flame spread at 10 min	mm	260	250	390	240
Flame spread at 20 min	mm	520	380	460	360
Flame spread at 30 min	mm	530	410	500	400
Flame spread at flameout	mm	540	440	550	410
Maximum light attenuation	%	42.86	42.19	56.25	63.10
HF-10	kW/m <sup>2</sup>	8.23	8.43	5.60	8.63
HF-20	kW/m <sup>2</sup>	3.41	5.81	4.36	6.21
HF-30	kW/m <sup>2</sup>	3.30	5.20	3.69	5.40
CHF	kW/m <sup>2</sup>	3.19	4.70	3.08	5.20
Critical heat flux	kW/m <sup>2</sup>	3.2	4.6	3.0	5.2
Smoke obscuration integration	%×min	232.00	139.82	441.54	213.88

### Result

Parameters	Unit	Results
Average flame spread	mm	510
Average critical heat flux	kW/m <sup>2</sup>	3.6
Average smoke obscuration integration	%×min	271.12

Note: This test certificate replaces Ignis Labs test certificate IGNL-7234-05-01C I01R00 Test Certificate 20102023.



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Version: IGNL-QF-031-Issue 03 Revision 01

**Disclaimer** These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test, and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use. The results of these fire tests may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions.

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