

## ARCTIC SURVEY ( EXPEDITION )

Sample description as provided by customer

Order No. **PO 6700561675**

Pile weight mass/unit area **26 oz/yd<sup>2</sup> 882 g/m<sup>2</sup>**

Pile Fibre Content **100% SOLUTION DYED NYLON**

Construction Details **Tufted Secondary Backing Tile CUSHION BACKING**

Colour **Multi**

Style **Loop Pile**

Pile Height **mm**

The Samples Tested Were Modular Carpet

TEST METHOD: AS.ISO 9239.1 2003 Reaction To Fire Tests For Floorings Part 1 Determination of the Burning Behaviour Using a Radiant Heat Source. As required by the Building Code of Australia (BCA) and National Construction Code 2015 (NCC) specifications C1.10. Sample conditioning as specified in BS EN 13238.2010.

Sample Submitted Date **Sep 2017**

Test Date **03 Oct 2017**

Total Thickness **mm**

### Assembly System: DIRECT STICK (Details Below).

The floor covering was directly stuck to the substrate using **WATER BASED SURFACE CONTACT** adhesive.

**Substrate: Non-Combustible** - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring. The Holding Torque on Specimen Frame was 2Nm.

The standard requires two Initial Tests be conducted on samples mounted in both Length and Width directions. Two further samples are then tested in whichever direction has the lowest Critical Radiant Flux.

Initial Tests: **Length** Direction Critical Radiant Flux **7.3 kW/m<sup>2</sup>**  
**Width** Direction Critical Radiant Flux **7.1 kW/m<sup>2</sup>**

	Specimen Tests conducted in the <b>Width</b> Direction			
	Specimen #1	Specimen #2	Specimen #3	Mean
Critical Radiant Flux (kW/m <sup>2</sup> )	7.1	6.6	7.1	6.9
Smoke Development Rate (%.min)	291	320	294	302

The values quoted below are as required by BCA and NCC Specification C1.10 Fire Hazard Properties (Floors). The Critical Radiant Flux quoted is the value at Flame-Out/Extinguishment (BCA General Provisions A1.1).

**Mean Critical Radiant Flux 6.9 kW/m<sup>2</sup>**

**Mean Smoke Development Rate 302 %.min**

Observations: **The samples shrunk away from the heat source, ignited and burnt a short distance.**

AS.ISO 9239.1 Clause 9(o) 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.

All information required for compliance with the BCA and NCC is given on this test report page.

 <small>ACCREDITED FOR TECHNICAL COMPETENCE</small>	<b>M. B. Webb</b> Technical Manager	
	DATE: 03 Oct 2017	
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**TIME FOR EACH SPECIMEN TO REACH EACH MARKER IN SECONDS**

Specimen	50	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810	860
1	211	212	265	316	403	421	579	/										
2	197	198	277	335	395	445	522	/										
3	216	217	297	322	352	408	587	/										

**TESTS**

**BURNING CHARACTERISTICS**

**SMOKE PRODUCTION**

Specimen	Burn Length (mm) at Flame Out/ Extinguishment	Time To Burn Out (s)	Maximum Light Attenuation (%)	Smoke Development Rate (%.min)
Initial Test: Length	300	739	74	301
Specimen Tests: Width				
1	310	734	75	291
2	330	723	76	320
3	310	750	78	294
Mean	317	736	76	302




**M. B. Webb**  
 Technical Manager

DATE: 03 Oct 2017

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