

## ARCTIC SURVEY ( EXPEDITION )

Sample description as provided by customer

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

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

Style **Loop Pile**

The Samples Tested Were **Modular Carpet**

Order No. **PO 6700561675**

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

Colour **Multi**

Pile Height **mm**

TEST METHOD: ISO 9239-1(2010 06-15) Determination of the Burning Behaviour Using a Radiant Heat Source. As required by the New Zealand Building Code Clause C2.1 (January 2017). 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

The value quoted below is as required by the New Zealand Building Code Clause C2.1 (January 2017) "Minimum critical radiant flux when tested to ISO 9239-1:2010". Hence the Radiant Flux quoted is the value at Flame-Out/Extinguishment Not after a 30 minute burn as used in Europe.

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

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

ISO 9239-1:2010 Clause 10(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 BCNZ is given on this test report page.

	<b>M. B. Webb</b> Technical Manager	
	DATE: 03 Oct 2017	
	Performance & Approvals Accreditation No. 15393	
	Accredited for compliance with ISO/IEC 17025.	

**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**

Specimen	Burn Length (mm) at Flame Out/ Extinguishment	Time To Burn Out (s)
Initial Test: <b>Length</b>	<b>300</b>	<b>739</b>
Specimen Tests: <b>Width</b>		
1	310	734
2	330	723
3	310	750
Mean	317	736




**M. B. Webb**  
 Technical Manager

DATE: 03 Oct 2017

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