

## ARCTIC SURVEY ( ISOTHERM / SHACKLETON )

Sample description as provided by customer

Pile weight mass/unit area 30 oz/yd<sup>2</sup> 1017 g/m<sup>2</sup>

Construction Details Tufted Secondary Backing Cushion Backing

Style Multi Level Loop

The Samples Tested Were Modular Carpet with Cushion Backing Dimensions 250 mm X 1000 mm

Order No. 6700534264

Pile Fibre Content 100% SOLUTION DYED NYLON

Colour Various

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 C3.4 (b) (April 2012). Sample conditioning as specified in BS EN 13238.2010.

Sample Submitted Date Jun 2017

Test Date 03 Jul 2017

Total Thickness 8.5 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 6.2 kW/m<sup>2</sup>  
Width Direction Critical Radiant Flux 5.3 kW/m<sup>2</sup>

Specimen Tests conducted in the Width Direction				
	Specimen #1	Specimen #2	Specimen #3	Mean
Critical Radiant Flux (kW/m <sup>2</sup> )	5.3	5.7	6.4	5.8

The value quoted below is as required by the New Zealand Building Code Clause C3.4 (b) (April 2012) "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 **5.8** kW/m<sup>2</sup>

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



M. B. Webb  
Technical Manager

DATE: 03 Jul 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	193	194	276	319	372	412	496	551	/									
2	245	246	323	411	486	583	741	881	/									
3	195	196	270	324	358	391	502	/										

**TESTS**

**BURNING CHARACTERISTICS**

Specimen	Burn Length (mm) at Flame Out/ Extinguishment	Time To Burn Out (s)
Initial Test: <b>Length</b>	<b>350</b>	<b>859</b>
Specimen Tests: <b>Width</b>		
1	390	872
2	370	978
3	340	814
Mean	367	888




**M. B. Webb**  
 Technical Manager

DATE: 03 Jul 2017

Performance and Approvals  
 Accreditation No. 15393  
 Accredited for compliance  
 with ISO/IEC 17025.

2004 04 09 8965 3 July 2017