

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241
Auckland NEW ZEALAND Attn Mr Phil Leyland

TEST REPORT No. 137577

LABORATORY REF: P137577

CUSTOMER REFERENCE

INSCAPE 6510

Sample description as provided by customer

Mass/unit area **2374 g/m²**

Construction Details **Tufted** Secondary Backing **Jute**

Style **Cut Pile**

Order No. **PL**

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

Colour **Grey**

Pile Height / mm

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 specification C1.10a of the Building Code of Australia.

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Conditioning as specified in BS EN 13238.2001

Sample submitted Date **August 2013**

Test Date **24 Aug 2013**

ASSEMBLY SYSTEM: OVER UNDERLAY AIRSTEP STEPSMART

The UNDERLAY used was **AIRSTEP STEPSMART**.

Substrate: Non-Combustible

Substrate - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **9.8 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **8.8 kW/m²**
Full tests carried out in the **Width** Direction


SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	8.8	5.4	5.4	6.5
Smoke Development Rate (%.min)	317	388	394	366

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

MEAN CRITICAL RADIANT FLUX 6.5 kW/m²

MEAN SMOKE DEVELOPMENT RATE 366 percent-minutes


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



M. B. Webb
Technical Manager

DATE: 24 Aug 2013

Measurement Science & Technology No. 15393
Accredited for compliance with ISO/IEC 17025.



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The values on Page 2 have no relevance to the Code.

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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	285	287	642	755	893	/												
2	311	313	369	418	470	517	548	685	/									
3	209	211	350	475	499	522	558	652	/									

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	170	982	31	229
Specimen Tests: Width				
1	220	1,360	38	317
2	380	944	71	388
3	380	951	71	394
Mean	327	1,085	60	366



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M. B. Webb
Technical Manager

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2004 04 09 9969 21 August 2013

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241
Auckland NEW ZEALAND Attn Mr Phil Leyland

TEST REPORT No. 137579

LABORATORY REF: P137579

CUSTOMER REFERENCE

TEXTONE 6512

Sample description as provided by customer

Mass/unit area **1221 g/m²**
Construction Details **Tufted** Secondary Backing **Jute**
Style **Loop Pile**

Order No. **PL**

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

Colour **GREY**

Pile Height / mm

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Conditioning as specified in BS EN 13238.2001

Sample submitted Date **Aug 2013**

Test Date **23 Aug 2013**

ASSEMBLY SYSTEM: OVER UNDERLAY AIRSTEP STEPSMART.

The UNDERLAY used was **AIRSTEP STEPSMART**.

Substrate: Non-Combustible

Substrate - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **3.4 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **3.3 kW/m²**
Full tests carried out in the **Width** Direction


SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	3.3	2.4	2.6	2.8
Smoke Development Rate (%.min)	384	418	441	414

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MEAN CRITICAL RADIANT FLUX 2.8 kW/m²

MEAN SMOKE DEVELOPMENT RATE 414 percent-minutes

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



M. B. Webb
Technical Manager
DATE: 23 Aug 2013
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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	273	275	309	345	386	446	500	682	901	1381	/							
2	186	188	297	334	365	400	472	549	729	969	1452	2160	/					
3	234	236	272	322	341	399	467	548	685	877	1436	2158	/					

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	495	2,695	58	409
Specimen Tests: Width				
1	500	1,853	60	384
2	590	2,943	67	418
3	570	2,559	73	441
Mean	553	2,452	67	414



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2004 04 09 21574 3 July 2013

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241 Auckland
NEW ZEALAND Attn Mr Phil Leyland

TEST REPORT No. 137580

LABORATORY REF: P137580

CUSTOMER REFERENCE

STYLEX 6514

Sample description as provided by customer

Mass/unit area **1696 g/m²**

Construction Details **Tufted** Secondary Backing **Jute**

Style **Cut Pile**

Order No. **PL**

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

Colour **Light Fawn**

Pile Height / mm

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 specification C1.10a of the Building Code of Australia.

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Conditioning as specified in BS EN 13238.2001

Sample submitted Date **Aug 2013**

Test Date **24 Aug 2013**

ASSEMBLY SYSTEM: OVER UNDERLAY **AIRSTEP STEPSMART**

The UNDERLAY used was **AIRSTEP STEPSMART**.

Substrate: **Non-Combustible**

Substrate - **6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.**

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **5.4 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **4.5 kW/m²**
Full tests carried out in the **Width** Direction


SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	4.5	4.9	4.9	4.8
Smoke Development Rate (%.min)	414	386	363	388

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MEAN CRITICAL RADIANT FLUX 4.8 kW/m²

MEAN SMOKE DEVELOPMENT RATE 388 percent-minutes

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



M. B. Webb
Technical Manager
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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	240	242	296	335	363	386	429	583	648	/								
2	219	221	286	345	379	453	468	561	884	/								
3	300	302	357	414	448	471	666	751	884	/								

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	380	1,185	69	369
Specimen Tests: Width				
1	430	1,148	72	414
2	410	889	66	386
3	410	1,173	63	363
Mean	417	1,070	67	388



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2004 04 09 11931 21 August 2013

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241
Auckland NEW ZEALAND Attn Mr Phil Leyland

TEST REPORT No. 137578

LABORATORY REF: P137578

CUSTOMER REFERENCE

VERVE 6528

Sample description as provided by customer

Mass/unit area **1221 g/m²**

Construction Details **Tufted** Secondary Backing **Jute**

Style **Cut Pile**

Order No. **PL**

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

Colour **Grey**

Pile Height / mm

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 specification C1.10a of the Building Code of Australia.

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Conditioning as specified in BS EN 13238.2001

Sample submitted Date **Aug 2013**

Test Date **24 Aug 2013**

ASSEMBLY SYSTEM: OVER UNDERLAY AIRSTEP STEPSMART.

The UNDERLAY used was **AIRSTEP STEPSMART**.

Substrate: **Non-Combustible**

Substrate - **6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.**

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **3.3 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **3.2 kW/m²**
Full tests carried out in the **Width** Direction


SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	3.2	3.2	3.1	3.2
Smoke Development Rate (%.min)	392	408	416	405

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

MEAN CRITICAL RADIANT FLUX 3.2 kW/m²

MEAN SMOKE DEVELOPMENT RATE 405 percent-minutes


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



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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	217	219	259	302	333	392	432	510	622	938	1415	/						
2	285	287	308	345	372	398	448	489	552	893	1545	/						
3	243	245	262	304	358	377	439	489	584	767	1333	/						

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	503	1,461	69	399
Specimen Tests: Width				
1	510	1,422	70	392
2	510	1,546	70	408
3	520	1,618	69	416
Mean	513	1,529	70	405



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2004 04 09 16962 22 August 2013

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241 Auckland NEW ZEALAND
Attn Mr Terence Akroyd

TEST REPORT No. 148187

LABORATORY REF: P148187

CUSTOMER REFERENCE

6581 SANDPIPER

Sample description as provided by customer

Mass/unit area **36 oz/yd²**

Construction Details **Tufted** Secondary Backing **Jute**

Style **Cut Pile**

Order No. **TA**

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

Colour **Cream**

Pile Height **8.2 mm**

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 specification C1.10 of the Building Code of Australia.

The test values 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. Clause 9 of AS/ISO 9239 Part 1.

Conditioning as specified in BS EN 13238.2001

Sample submitted Date **June 2014**

Test Date **28 Jun 2014**

ASSEMBLY SYSTEM: OVER UNDERLAY **AIRSTEP BLACK RUBBER.**

The UNDERLAY used was **AIRSTEP BLACK RUBBER.**

Substrate: **Non-Combustible**

Substrate - **6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.**

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **2.3 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **2.2 kW/m²**
Full tests carried out in the **Width** Direction

SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	2.2	2.2	2.1	2.2
Smoke Development Rate (%.min)	445	437	393	425

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

MEAN CRITICAL RADIANT FLUX 2.2 kW/m²

MEAN SMOKE DEVELOPMENT RATE 425 percent-minutes

OBSERVATIONS: **The samples shrunk away from the heat source, ignited and burnt**



M. B. Webb
Technical Manager

DATE: 28/6/2014

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PAGE 1 of 2

Clause 9 of AS/ISO 9239 Part 1

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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	227	229	299	355	374	433	506	561	754	943	1322	1805	2440	/				
2	249	251	301	354	387	424	464	609	786	1243	1585	1874	2589	/				
3	239	240	288	352	391	466	528	612	748	1093	1496	2093						

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	605	2,481	60	395
Specimen Tests: Width				
1	620	2,593	62	445
2	620	3,103	64	437
3	631	2,753	63	393
Mean	624	2,816	63	425



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M. B. Webb
Technical Manager

DATE: 28 Jun 2014

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2004 04 09 21364 13 June 2014

m/s Cavalier Bremworth Ltd
PO BOX 97040 Manuka City 2241 Auckland NEW ZEALAND
Attn Mr Terence Akroyd

TEST REPORT No. 148186

LABORATORY REF: P148186

CUSTOMER REFERENCE

6584 WOODGRAIN

Sample description as provided by customer

Mass/unit area **36 oz/yd²**

Construction Details **Tufted** Secondary Backing **Jute**

Style **Cut and Loop**

Order No. **TA**

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

Colour **Cream**

Pile Height **7.6 mm**

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 specification C1.10 of the Building Code of Australia.

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Conditioning as specified in BS EN 13238.2001

Sample submitted Date **Jun 2014**

Test Date **28 Jun 2014**

ASSEMBLY SYSTEM: OVER UNDERLAY AIRSTEP BLACK RUBBER.

The UNDERLAY used was **AIRSTEP BLACK RUBBER**.

Substrate: **Non-Combustible**

Substrate - **6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.**

The Holding Torque on Specimen Frame was 2Nm.

Initial Test Specimen 1 Length Direction Critical Radiant Flux **5.3 kW/m²**
Specimen 1 Width Direction Critical Radiant Flux **4.9 kW/m²**
Full tests carried out in the **Width** Direction

SPECIMEN	Width #1	Width #2	Width #3	Mean
Critical Radiant Flux (kW/m ²)	4.9	4.9	5.3	5.0
Smoke Development Rate (%.min)	345	326	363	345

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

MEAN CRITICAL RADIANT FLUX 5.0 kW/m²

MEAN SMOKE DEVELOPMENT RATE 345 percent-minutes

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



M. B. Webb
Technical Manager

DATE: 28/6/2014

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PAGE 1 of 2

Clause 9 of AS/ISO 9239 Part 1

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1004 04 09

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	235	237	313	376	435	593	711	761	1125	/								
2	206	207	268	369	407	453	539	716	984	/								
3	246	248	355	397	438	529	576	849	/									

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	383	1,009	57	329
Specimen Tests: Width				
1	410	1,142	59	345
2	410	985	63	326
3	385	1,062	57	363
Mean	402	1,063	60	345



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Technical Manager

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