



Report Number: 17-003887
Revision Number: 1
Date Order Received: 09/29/2017

For the Account of: Burch
4200 Brockton Dr SE
Grand Rapids, MI 49512

Client's Identification: Meridian

CERTIFICATE OF TESTING

TEST PERFORMED: California Technical Bulletin 117: June 2013 – Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of Materials Used in Upholstered Furniture – Cover Fabric Test

TEST RESULTS

	Specimen	Char Length (in)	Extinguished in 45 Minutes
Initial Test	1	Self Extinguished	Yes
	2	Self Extinguished	Yes
	3	Self Extinguished	Yes

NOTES

Test Conditions: 70 ±5°F, 50 ±5% Relative Humidity

ACCEPTANCE CRITERIA

A material is considered to pass or fail based on the following criteria:

1. A single mock-up test specimen fails to meet the requirements of this test procedure if any of the following criteria occurs:
 - a. The mock-up test specimen continues to smolder after the 45 minute test duration
 - b. A vertical char length of more than 1.8 inches (45mm) develops on the cover fabric
 - c. The mock-up test specimen transitions to open flaming
2. The cover fabric passes the test if three initial mock-up specimens pass the test, i.e. the cigarettes burn their full length and are no longer smoldering
3. If more than one initial specimen fails, the cover fabric fails the test
4. If any one of the three initial specimens fails, repeat the test on additional three specimens
5. If all three additional specimens pass the test, the cover fabric passes the test. If any one of the additional three specimens fails, the cover fabric fails the test

CONCLUSION Based on the above Results and Acceptance Criteria, the item tested is:

- ☒ Pass
☐ Fail

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above.

Chelsea Kypreos

Authorized Signature

Date Order Completed: 10/09/2017

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This laboratory test is not intended to reflect fabric performance under actual conditions. The certification procedure merely measures the performance of samples under the predetermined and specific test conditions prescribed by the standard specified. This certificate applies only to the standards or processing identified and to the random sample(s) tested. The test results are representative of the qualities of the piece or lot only to the extent the sample tested is representative of the piece or lot.

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CERTIFICATE OF TESTING

TEST PERFORMED: NFPA 260 Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture – 2013; Fabric Cover Test and UFAC Fabric Classification Test Method – 1990; Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture ASTM E 1353-08ae1 – Cover Fabric Test

TEST RESULTS

Specimen	Char Length (in)
1	Self Extinguished
2	Self Extinguished
3	Self Extinguished

NOTES

Test Conditions: 70 ±4°F, 65 ±5% Relative Humidity

ACCEPTANCE CRITERIA

1. If the test specimen has no ignition, or if no individual specimen yields a vertical char of 45 mm (1.75 in.; ASTM states 1.8 in.) or less, the fabric is classified a Class I cover fabric.
2. If the vertical char of the test specimen greater than 45 mm (1.75 in.; ASTM states 1.8 in), the fabric is classified a Class II cover fabric.
3. If an obvious ignition of the polyurethane substrate occurs on the test assembly, the fabric is classified a Class II cover fabric.

CONCLUSION Based on the above Results and Acceptance Criteria, the item tested is:

☒ Class I

☐ Class II

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above.

Chelsea Hyatt

Authorized Signature

Date Order Completed: 10/10/2017

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TEST CERTIFICATE

No. F18101/1

**Testing to BS 5852 : 2006, Methods of Test for the Assessment of the Ignitability
of Upholstered Seating by Smouldering and Flaming Ignition Sources****SAMPLE INFORMATION**

Client **Burch**
4200 Brockton Dr SE Grand Rapids, MI 49512

Fabric Reference **Meridian**

Dimensions **150cm by 139cm (Full width)**

Date Received **6/2/2018**

Pre-treatment **None - the fabric was stated to be inherently flame retardant**

Conditioning **BS 5852 : 2006, Clause 10.**

TESTING

Following the pre-treatment described above, the material was conditioned and tested according to **BS 5852 : 2006, Methods of Test for the Assessment of the Ignitability of Upholstered Seating by Smouldering and Flaming Ignition Sources, Clause 11, using Ignition Source 5.**

The results relate only to the ignitability of the combinations of upholstery composites (Clause 11) under the particular condition of test stated; they are not intended as a means of assessing the full potential fire hazard of the item in use.

COMBINATION OF MATERIALS

The sample was tested over with a density of kg/m³

The sample was tested over combustion modified foam with a density of 36 kg/m³, Carpenter RX36125.

RESULTS

Specimen number	1	2
Duration of flaming of ignition source (min)	3'40"	3'38"
Duration of flames (min)	5'12"	5'03"
Duration of smoke (min)	7'	7'
Extent of damage of horizontal component		
- width (mm)	131	116
- length (mm)	78	75
- depth (mm)	33	32
Extent of damage of vertical component		
- width (mm)	115	104
- depth (mm)	38	42
Progressive smouldering >100mm from ignition source	No	No
Result	Pass	Pass

CONCLUSION

Since both specimens showed non-ignition, the combination of materials is designated as BS 5852 : 2006, Rating NI5. This Rating represents a Pass for Crib 5.


Mr J Firth
Technical Manager
END OF REPORT



TEXTILE TESTING



TESTING CERT. #3193.01

Report Number: 18-000598

Revision Number: 1

Date Order Received: 02/01/2018

For the Account of: Burch
4200 Brockton Dr SE
Grand Rapids, MI 49512

Client's Identification: Meridian

CERTIFICATE OF TESTING

TEST PERFORMED: Federal Motor Vehicle Safety Standard (FMVSS) 302 – October 1991, Flammability of Interior Materials CMVSS 302 – 2007, 49 CFR 571.302, Flammability of Polymeric Interior Materials – Horizontal Test Method SAE J 369-2013, Standard Test Method for Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles ASTM D5132-17

TEST RESULTS

Specimen	Burn Time (s)	Burning Distance (mm)	Burning Rate (mm/min)	Code
1	0.0	0	N/A	SE0
2	0.0	0	N/A	SE0
3	0.0	0	N/A	SE0
4	0.0	0	N/A	SE0
5	0.0	0	N/A	SE0

Specimen	Burn Time (s)	Burning Distance (mm)	Burning Rate (mm/min)	Code
1	0.0	0	N/A	SE0
2	0.0	0	N/A	SE0
3	0.0	0	N/A	SE0
4	0.0	0	N/A	SE0
5	0.0	0	N/A	SE0

Specimen Tested:

- ☐ Standard
- ☒ Modified, 1 mm wire spaced at 25mm intervals across 51 mm width opening:
- ☐ Test item was less than 56 mm wide
- ☒ Specimen softens and bends at flaming end, which results in erratic burning

ABBREVIATIONS USED

- SE/(B)** Self-extinguishing with burn rate. Specimen ignites; Time of burning after passing 38 mm is greater than 60 seconds and 51 mm before extinguishing.
- DNI** Does not ignite. Specimen does not support combustion during or after ignition.
- SE/0** Self-Extinguishing. Specimen ignites but does not burn to the timing zone, which starts at 38 mm.
- SE/NBR** Self-Extinguishing/No burn rate. Specimen ignites; burning progresses to the 38 mm timing start line and extinguishes within 51 mm beyond the start line and 60 seconds.
- B** Specimen ignites. Burning progresses more than 51 mm beyond the 38 mm timing start line. Burn rate is calculated.
- RB** Material transmits a flame across either surface more than 51mm beyond the first scribed line at a rate too fast to measure accurately; therefore, no calculation is required.

NOTES

Test Conditions: 70 ±4°F, 65 ±5% Relative Humidity

Thickness of Material: 0.042 inches

Type of Specimen Tested: Textile

ACCEPTANCE CRITERIA

1. Burn rate must not exceed 102 mm/min for any specimen

CONCLUSION Based on the above Results and Acceptance Criteria, the item tested:

☒ Passes

☐ Fails

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above.



Authorized Signature

Date Order Completed: 02/27/2018

ASTM Note: In this procedure, the specimens are subjected to one or more specific laboratory test conditions. If different test conditions are substituted or the end-use conditions are changed, it is not always possible by or from this test to predict changes in the fire-test-response characteristics measured. Therefore, the results are valid only for the fire test exposure conditions described in this procedure.

SAE Note: This report is not intended to reflect hazards presented by this or any other material under actual fire conditions and shall not be used for fire risk assessment under actual fire conditions.



TEXTILE TESTING



TESTING CERT. #3193.01

Report Number: 18-000598

Revision Number: 1

Date Order Received: 02/01/2018

For the Account of: Burch
4200 Brockton Dr SE
Grand Rapids, MI 49512

Client's Identification: Meridian

CERTIFICATE OF TESTING

TEST PERFORMED: IMO 2010 FTP Code, Part 8 – Test for upholstered furniture

TEST RESULTS

Specimen	Progressive Smoldering (Y/N)	Flaming (Y/N)	Char Length (mm)
1	No	No	0
2	No	No	0

Specimen	Flaming* (s)	Glowing* (s)	Smoking* (s)	Smoldering* (s)	Char Length (mm)
1	0	0	0	0	0
2	0	0	0	0	0

NOTES

Test Conditions: 70 ±4°F, 65 ±5% Relative Humidity
Sampling Method: As Received
Deviations: None
Test Item Composite Filling Material -
☒ Standard filling material
☒ Non flame retardant flexible polyether foam, 22 kg/m3 (1.4 lb/ft3)
☐ Flame retardant polyurethane foam, CMHR, 35 kg/m3 (2.2 lb/ft3)
☐ Client's filling material

ACCEPTANCE CRITERIA

Smoldering Ignition Source

- Progressive smoldering or flaming must cease within one hour after start of test

Flaming Ignition Source

- Flaming, glowing, smoking or smoldering may not exceed 120 seconds

CONCLUSION Based on the above results and failure criteria, the item tested:

- ☒ Meets the requirements - May be labeled IMO FTPC Part 8
☐ Does not meet the requirement

CERTIFICATION I certify that the above results were obtained after testing specimen in accordance with the procedures and equipment specified by the standard stated above. The test results relate to the behavior 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.

Debra Simon

Authorized Signature

Date Order Completed: 02/09/2018

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APPENDIX

Company Submitting Testing	Burch
Manufacturer of Material	Burch 4200 Brockton Dr SE Grand Rapids, MI 49512
Product Identification	Meridian
Color Submitted	Oyster
Weight of Fabric	28 ounces persquare yard
End Use	Upholstery (Not Specified)
Material Thickness	
Coating Type + Weight	Silicone Silicone / Polyester
Method + Qty of Fire	
Retardant Treatment	
Content	
Weave Type	
Pick + End Count	
Yarn Type / Count	
Date Sample Arrived	2/1/18
Cleaning / Weathering Procedure	
Date of Test	2/9/18
Cigarette Used	NIST SRM 1196 Length: 70 ±4mm, Diameter: 8 ± 0.5mm, Mass: 0.95 ± 0.15g. Smoldering rate: 11 ± 4.0 min / 50mm