

CERTIFICATE OF TESTING

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

Contact: **Customer Service**

Client's Identification: **Flicker**

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? (Y/N)
1	Self-extinguished	Y
2	Self-extinguished	Y
3	Self-extinguished	Y

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.


Authorized Signature CR

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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 J369-2013, Standard Test Method for Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles ASTM D5132-11

TEST RESULTS

	Specimen	Burning Time Beyond 38 mm (s)	Burn Distance Beyond 38 mm (mm)	Burn Rate (mm/min)	Code
Length	1	214.7	254.0	71.0	B
	2	220.0	254.0	69.3	B
	3	209.9	254.0	72.6	B
	4	194.5	254.0	78.4	B
	5	197.3	254.0	77.2	B
Width	6	202.6	254.0	75.2	B
	7	200.3	254.0	76.1	B
	8	200.9	254.0	75.9	B
	9	195.0	254.0	78.2	B
	10	197.3	254.0	77.2	B

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/O** 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: 0.046"

Type of Specimen Tested: Textile

Prior Treatment, if applicable: None

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TEXTILE TESTING



TESTING CERT. #3193.01

Report Number: 84659
Date: 1-23-2017

CERTIFICATE OF TESTING

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.

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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



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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 E1353-08ae1 – 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.


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

TEST RESULTS

Smoldering Ignition Source

	Progressive Smoldering (Yes / No)	Flaming (Yes / No)	Char (mm)
Initial Test	No	No	Self-extinguished
Retest	No	No	Self-extinguished

Flaming Ignition Source

	Flaming* (s)	Glowing* (s)	Smoking* (s)	Smoldering* (s)	Char (mm)
Initial Test	120+	0	0	0	Obvious ignition
Retest	NT	NT	NT	NT	NT

*Values are reported after removal of burner tube ignition source.

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.

Berta Stiver

Authorized Signature CR