



Received:09/19/2016 Completed:09/21/2016 Letter: E2 AM P.O.#: 6898 Test Report #: 3-15461-2-RV

Client's Identification Ref: Rhino. Composition: PVC. Weight: 33 oz/lin.yd. Product End Use: Upholstery.

Tested For: **Louise Taylor** Key Test: ASTM E 662 RVNC  
 Camira Fabrics Ltd. Tel: 011 44 0 1924 481309 Ext:  
 The Watermill, Wheatley Park, Fax:  
 Mirfield W. Yorkshire WF14 8HE UK

Category: Smoke Density Specifier: Transit Guidelines & Regs. PC: 24H+ME /jd  
 Upholstery Fabric

LE: 2015; V: 09/15

APPROXIMATE THICKNESS OF MATERIAL (as measured by Govmark): 0.043 "

TEST PERFORMED: ASTM E 662 - Standard Test Method For Specific Optical Density of Smoke Generated by Solid Materials (NFPA Designation No. 258), as modified by the transportation industry (see "Acceptance Criteria")

RESULTS ARE REPORTED:

- Initially
- After 24 hours water leaching, as per FTM 5830 (Code +100)
- After 3 dry cleanings, as per ASTM D 2724 (Code +60)
- After 5 launderings (machine wash/tumble dry moderate), (Code +75)  
 as per ASTM D 2724:
  - 105°F (20% or more wool, acetate, modacrylic, acrylilc fabrics)
  - 120°F (tricot, circular knits, woven nylon, print fabrics)
  - 140°F (all other woven face fabrics)
- After alternately specified client's cleaning instructions

RESULTS:

Specific Optical Density Max:	Specimen #	FLAMING MODE	Flaming Dripping, or Flaming Running ** (yes/no)	NON FLAMING MODE	Flaming Dripping, or Flaming Running ** (yes/no)
90 seconds (Ds)	1	141	No	63	No
	2	134	No	60	No
	3	145	No	55	No
	Avg:	140		59	
4 minutes (Dm)	1	181	No	114	No
	2	173	No	115	No
	3	202	No	110	No
	Avg:	185		113	

NOTE: An asterisk (\*) next to a result indicates that the value is lower than the earlier value as a result of a correction for particle deposits on the glass which is part of the optical system.

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<b>Tested For: Louise Taylor</b> Camira Fabrics Ltd. The Watermill, Wheatley Park, Mirfield W.Yorkshire WF14 8HE UK	<b>Key Test: ASTM E 662 RVNC</b>  <b>Tel: 011 44 0 1924 481309 Ext:</b> <b>Fax:</b>
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REMARKS: None.

ACCEPTANCE CRITERIA: See page 3.

CONCLUSION:

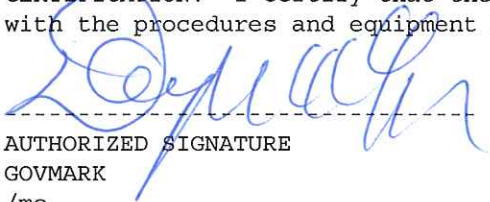
1. Based on the above Results and GROUP I Acceptance Criteria, the item tested:

Complies;  Does not comply

2. Based on the above Results and GROUP II Acceptance Criteria, the item tested:

Complies;  Does not comply

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment cited by ASTM E 662 (NFPA Designation No. 258).

  
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 AUTHORIZED SIGNATURE  
 GOVMARK  
 /mo

RV.10.14.16/mo

*Douglas W. Lipp*

OCT 14 2016



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Note: The acceptance criteria of the transit regulations are based on results at 4 minutes. In addition to the results at 4 minutes, this report gives results at 90 seconds, as this information is sometimes required for product evaluation by other agencies.

ACCEPTANCE CRITERIA: The acceptance criteria are cited by the listed specifiers:

Group I:

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 Specifiers: Federal Railroad Administration Test Procedures & Performance Criteria,  
 Federal Register Notice dated 6/25/02  
  
 Amtrak Specification #665 "Minimum Performance Requirements for  
 Upholstery Fabric" as revised 9/7/99  
  
 NFPA 130 Section 8.4 Flammability and Smoke Emmission; Table 8.4.1  
  
 Criteria: (No distinction is made between coated and uncoated materials.)

	4 Minutes	Flaming Dripping or Flaming Running
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Flaming Mode:	200 maximum	Not permitted
Non Flaming Mode:	200 maximum	Not permitted

Group II:

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 Specifiers: UMTA Recommended Fire Safety Practices for Transit Bus & Van Materials  
 Selection -- Docket #90-A published 10/20/93

Criteria:	<input type="checkbox"/> Uncoated	<input checked="" type="checkbox"/> Coated	Flaming Dripping or Flaming Running
	4 Minutes	4 Minutes	-----
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Flaming Mode:	100 maximum	250 maximum	Not permitted
Non Flaming Mode:	100 maximum	250 maximum	Not permitted

\*\* Flaming dripping, or flaming running are not normally reported during this test. However, the acceptance criteria established by the transportation industry require this additional reporting category.

Received:09/19/2016	Completed:09/21/2016	Letter: E	JB	P.O.#: 6898	Test Report #:	3-15461-0-RV
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<b>Tested For: Louise Taylor</b> Camira Fabrics Ltd. The Watermill, Wheatley Park, Mirfield W.Yorkshire WF14 8HE UK	<b>Key Test: FAA 12-sec.Vert FAR 25.853(a)</b> RVNC <b>Tel: 011 44 0 1924 481309 Ext:</b> <b>Fax:</b>
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Category: Vertical Flammability      Specifier: Transit Guidelines/Regs.      PC:24H  
 LE: 2016; V 03/16

TEST PERFORMED: 12 Second Vertical Flame Application FAR 25.853(a) and Appendix F Part I(a)(1)(ii) [previously 25.853(b)], as per Part 25 Appendix F Part I(b)(4), as modified by the transportation industry

RESULTS ARE REPORTED:

- Initially
- After 24 hours water leaching, as per FTM 5830 (Code +100)
- After 3 dry cleanings, as per ASTM D 2724 (Code +60)
- After 5 launderings (machine wash Tumble Dry Moderate), (Code +75)  
as per ASTM D 2724:
  - 105°F (20% or more wool, acetate, modacrylic, acrylic fabrics)
  - 120°F (tricot, circular knits, woven nylon, print fabrics)
  - 140°F (all other woven face fabrics)
- After alternately specified client's cleaning instructions

RESULTS:	Specimen #	Afterflame (seconds)	Burn Length (inches)	Melt Length* (inches)	Flaming Dripping, or Flaming Running (yes/no)
Length:	1	3.3	3.3	0	No
	2	1.0	3.1	0	No
	3	14.2	3.8	0	No
	Avg	6.2	3.4		
Width:	4	2.3	2.8	0	No
	5	0.8	3.3	0	No
	6	11.5	3.4	0	No
	Avg	4.9	3.2		

\* NOTE: IN CERTAIN INSTANCES A PORTION OF THE MATERIAL UNDER TEST WILL BE DAMAGED BY THE BURNING PROCESS AND A FURTHER DEGRADATION WILL BE ATTRIBUTABLE TO SHRINKAGE OR MELTING AWAY FROM THE IGNITING FLAME. THE ACTUAL DAMAGED DISTANCE ATTRIBUTABLE TO BURNING IS ENTERED IN THE "BURN LENGTH" COLUMN. THE MELTED/SHRINKAGE DISTANCE IS ENTERED IN THE "MELT LENGTH" COLUMN.

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<b>Tested For: Louise Taylor</b> Camira Fabrics Ltd. The Watermill, Wheatley Park, Mirfield W.Yorkshire WF14 8HE UK	<b>Key Test: FAA 12-sec.Vert FAR 25.853(a)</b> RVNC <b>Tel: 011 44 0 1924 481309 Ext:</b> <b>Fax:</b>
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ACCEPTANCE CRITERIA: For Upholstery Fabrics --

Afterflame: 10.0 seconds maximum average  
Burn Length: 6.0" maximum average  
Flaming Dripping or Flaming Running: Not permitted

Note: Melt Length, when observed, is reported; however, it is not factored into the Acceptance Criteria.

SPECIFIERS:

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1. Federal Railroad Administration Test Procedures & Performance Criteria, Federal Register Notice dated 6/25/02
  2. UMTA Recommended Fire Safety Practices for Transit Bus & Van Materials Selection Docket #90-A published 10/20/1993
  3. Amtrak Specification #352 Section 3.5 dated 1/29/1990
  4. NFPA 130 Section 8.4 Flammability and Smoke Emission; Table 8.4.1
  5. BART (Bay Area Rapid Transit)

REMARKS: None.

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

Complies;  Does not comply

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

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AUTHORIZED SIGNATURE  
GOVMARK  
/mo

RV.10.14.16/mo

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*Douglas W. Lipp*

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