

Received: 08/11/2006	Completed: 08/16/2006	Letter: A	rb	P.O.#: 000267607 0	Test Report #: 2-63748-0-
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Client's Identification	Busart V 400 F White A-69 90 PFW
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<b>Tested For: Joann Dupre</b> Flexcon Co, Inc 1 Flexcon Industrial Park, Office #4 Spencer, MA 01562-2642	<b>Key Test: ASTM E 162</b>  <b>Tel: 1-(508)-885-8247</b> <b>Fax: 1-(508)-885-8399</b>	495  <b>Ext:</b>
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Category: Radiant Panel      Specifier: Transit Guidelines & Regs.      PC: 24H+ME

APPROXIMATE THICKNESS OF MATERIAL (as measured by Govmark): 0.004"

TEST PERFORMED: ASTM E 162 - Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source

**SPECIMEN PREPARATION:**

Specimens were mounted to a steel plate 0.06" thick (with self adhesive backing). The test specimen composite was then backed with a 0.5" etera board (a cement asbestos substitute).

**BRIEF DESCRIPTION OF TEST:** The test specimen faces a radiant heat source. At the beginning of the test period an igniting flame impinges at the top of the specimen. Visual observation is made of the downward progression of the flame front. The heat given off by the burning specimen is automatically recorded. The combination of the two factors, flame front progression and heat, results in a Flame Spread Index.

RESULTS:	Flame Progression (mm:ss)					Net Stack Rise°C	Q	FS	Flame Spread Index	Flaming Dripping, or Flaming Running (yes/no)
	3.0"	6.0"	9.0"	12.0"	15.0"					
Specimen										
1	01:48	FN	FN	FN	FN	23.0	5.5	1.6	8.8	No
2	01:48	02:27	FN	FN	FN	18.1	4.3	2.6	11.2	No
3	01:50	02:16	FN	FN	FN	18.1	4.3	2.8	12.0	No
4	01:47	02:38	FN	FN	FN	9.3	2.2	2.5	5.5	No
Avg:									9.4	

**ABBREVIATIONS USED:**

F = Flashed beyond benchmark.

FN = Flame front did not reach this benchmark.

**CALCULATION FACTORS:**

Etera board correction factor: 0.21

Beta: 23.83

FLUX: 3.08 - 1.7 - 0.84 (Flux Transducer # 6024)

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REMARKS:	Non Sustained			
	Flame Front	Sustained	All	Drips

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Specimen #	Off Gas Ignition (yes/no)	Flame Front Ignition at (mm:ss)	Flaming Out (mm:ss)	Test End (mm:ss)	Flame on Test Floor (yes/no)
1	Yes	01:22	02:15	03:15	No
2	Yes	01:31	03:35	04:35	No
3	Yes	01:17	03:30	04:30	No
4	Yes	01:25	03:00	04:00	No

ACCEPTANCE CRITERIA: For panels\*, seats, mattress frames --

1. Flame Spread Index shall not exceed 35.
2. Flaming dripping, or flaming running is not permitted.

(\* Panels include: Walls, ceilings, partition tables & shelves, HVAC ducting, windows, and light diffusers)

SPECIFIERS:

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 10/20/93
3. Amtrac Specification #352 Section 3.5 dated 1/29/90
4. NFPA 130 Section 4.2.4 Interior Fire Propagation Resistance

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

☒ [x] Complies ☐ [ ] Does not comply

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified by ASTM E 162.

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AUTHORIZED SIGNATURE  
THE GOVMARK ORGANIZATION, INC. /jd

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<b>Received:</b> 08/11/2006	<b>Completed:</b> 08/16/2006	<b>Letter:</b> A1	rb	<b>P.O.#:</b> 000267607 0	<b>Test Report #:</b> 2-63748-1-
<b>Client's Identification</b>	Busart V 400 F White A-69 90 PFW				
<b>Tested For: Joann Dupre</b>			<b>Key Test:</b> ASTM E 662		465
Flexcon Co, Inc 1 Flexcon Industrial Park, Office #4 Spencer, MA 01562-2642			<b>Tel:</b> 1-(508)-885-8247 <b>Fax:</b> 1-(508)-885-8399		<b>Ext:</b>

Category: Smoke Density      Specifier: Transit Guidelines/Regs.      PC: 24H+ME

APPROXIMATE THICKNESS OF MATERIAL (as measured by Govmark): 0.004"

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:			Flaming Dripping, or Flaming Running**	Non Flaming	Flaming Dripping, or Flaming Running **
Specific Optical Density at:	Specimen #	Flaming Mode	(yes/no)	Mode	(yes/no)
-----	-----	-----	-----	-----	-----
90 Seconds:	1	1	No	2	No
	2	1	No	0	No
	3	2	No	0	No
		-----		-----	
	Avg:	1		Avg:	1
4 Minutes:	1	37	No	10	No
	2	29	No	4	No
	3	35	No	6	No
		-----		-----	
	Avg:	33		Avg:	6

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.

REMARKS: Specimens were mounted to a steel plate 0.06" thick (with self adhesive).

ACCEPTANCE CRITERIA: For panels\*\*\*, seat frames & shrouds, mattress frames --

	Specific Density at 90 seconds	Specific Density at 4 minutes
Flaming Mode:	100 maximum	200 maximum
Non Flaming Mode:	100 maximum	200 maximum

Flaming dripping, or flaming running is not permitted.

(\*\*\* Panels include: Walls, ceilings, partition tables & shelves, HVAC ducting, windows, and light diffusers)

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Flexcon Co, Inc		Tel: 1-(508)-885-8247			Ext:
1 Flexcon Industrial Park, Office #4		Fax: 1-(508)-885-8399			
Spencer, MA 01562-2642					

**SPECIFIERS:**

1. Federal Railroad Administration Test Procedures & Performance Criteria  
Federal Register Notice dated 6/26/02
2. UMTA Recommended Fire Safety Practices for Transit Bus & Van Materials Selection  
Docket #90-A published 10/20/93
3. Amtrac Specification #352 Section 3.5 dated 1/29/90
4. NFPA 130 Section 4.2.4 Interior Fire Propagation Resistance

(\*\* 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.)

**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 by ASTM E 662 (NFPA Designation No. 258).

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AUTHORIZED SIGNATURE  
THE GOVMARK ORGANIZATION, INC. /jd

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