

# Progressive Engineering Inc.

## **CRANE COMPOSITES, INC.**

FMVSS and CMVSS 302 Flammability of Interior Materials Test

1/23/2017



This test report contains five (5) pages, including the cover sheet. Any additions to, alterations of, or unauthorized use of excerpts form this report are expressly forbidden.

2017-251

#### 1. TITLE

FMVSS and CMVSS 302 Flammability of Interior Materials Test

## 2. OBJECTIVE

To test the interior finish materials of the motor vehicle per the safety standards mentioned in Section 6 of this report.

This test report pertains only to the specimens tested. It remains the sole responsibility of the manufacturer to provide a product consistent to that which was tested.

## 3. TESTED FOR

Crane Composites, Inc. 23525 W. Eames Channahon, IL 60410

#### 4. TESTING ORGANIZATION

## Progressive Engineering Inc.

58640 State Road 15 Goshen, IN 46528 www.p-e-l.com

See IAS Evaluation Report TL-178 for ISO 17025 Accreditation.

## 5. TESTING PERSONNEL

Director of Testing - Jason R. Holdeman

Technician - Todd Miller

## 6. REFERENCE STANDARDS

**Federal Motor Vehicle Safety Standard (FMVSS) 302** - as stated in the Code of Regulations Title 49, Volume 5, Section S571.302 (10-1-12 Edition).

Joon R. K

Canadian Motor Vehicle Safety Standards (CMVSS) Standard 302 - Date Modified: 2012-02-06

## 7. TEST EQUIPMENT

- A. Pre-Conditioning Room
- B. Burn Chamber (PEI No. 269)
- C. Digital Timers (PEI No's. 812 and 813)

#### 8. TEST SPECIMEN

See attached data pages for specimen descriptions.

#### 9. TEST SPECIMEN CONSTRUCTION

The test specimens were cut into a  $4" \times 1/2"$  thick (maximum) piece for testing. (Where ideal specimen size could not be attained, the closest matching specimen size was used or the actual shape of the finished product.)

## 10. TEST SPECIMEN CONDITIONING

The test specimens were conditioned at 70 °F and 50% RH for a minimum of twenty-four (24) hours prior to testing.

## 11. TEST PROCEDURE

- A. Test specimen is mounted in between matching "U" brackets.
- B. Test specimen is then placed in metal cabinet.
- C. Bunsen burner flame is then exposed to end of test sample for fifteen (15) seconds.
- D. The time required for the flame to travel from 1-1/2" in from the open end of the "U" bracket to 1-1/2" in from the closed end of the "U" bracket is measured and recorded.
- E. The rate of burn is then calculated and recorded.

## 12. TEST RESULTS

See the attached data sheets for test results.

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## Progressive Engineering Inc.

## **FMVSS & CMVSS 302 FLAMMABILITY TEST**

Client: Crane Composites, Inc.

Sample CCI XLR 075 material with an average measured thickness of .073". The

**Description:** specimen was tested in the Machine Direction of the material. Specimen

details provided by Carol Sowa of Crane Composites, Inc.

Samples

**Received on:** 1/20/2017

## **PRECONDITIONING**

	Date	Time	Temp.	Rel. Hum.
Start	1/20/2017	10:45	72°F	48%
Stop	1/23/2017	2:38	72°F	51%

## **TEST DATA**

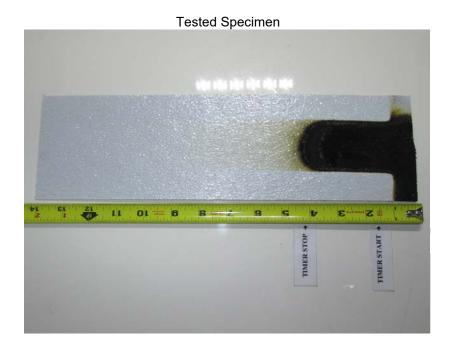
Date		Travel Time (s)	Travel Distance	Comments / Observations	
1/23/20	17	600.0 sec	2.5"	The specimen burned slowly producing black/dark gray smoke with no flaming drips.	

## **TEST RESULTS**

Based on the data above the following Burn Rate ( $B_r$ ) was obtained. Burn rate is defined as "Travel Distance" divided by the "Travel Time" (in minutes)

Burn Rate	Pass	Fail
0.25"/min	<b>&gt;</b>	

A PASS is considered a Burn Rate  $(B_r)$  of LESS than 4" per minute.



## Progressive Engineering Inc.

## **FMVSS & CMVSS 302 FLAMMABILITY TEST**

Client: Crane Composites, Inc.

Sample CCI XLR 075 material with an average measured thickness of .072". The

**Description:** specimen was tested in the Cross-Machine Direction of the material.

Specimen details provided by Carol Sowa of Crane Composites, Inc.

**Samples** 

**Received on:** 1/20/2017

## **PRECONDITIONING**

	Date	Time	Temp.	Rel. Hum.
Start	1/20/2017	10:45	72°F	48%
Stop	1/23/2017	2:38	72°F	51%

## **TEST DATA**

Date	Travel Time (s)	Travel Distance	Comments / Observations	
1/23/2017	600.0 sec	2.6"	The specimen burned slowly producing black/dark gray smoke with no flaming drips.	

## **TEST RESULTS**

Based on the data above the following Burn Rate ( $B_r$ ) was obtained. Burn rate is defined as "Travel Distance" divided by the "Travel Time" (in minutes)

Burn Rate	Pass	Fail
0.26"/min	<b>&gt;</b>	

A PASS is considered a Burn Rate  $(B_r)$  of LESS than 4" per minute.

