

**CLIENT:** CRANE COMPOSITES  
Attn: Mike Buhr  
23525 W. Eames Street  
Channahon, IL 60410

|                                 |                              |
|---------------------------------|------------------------------|
| <b>Test Report No: TJ1319-8</b> | <b>Date: October 3, 2013</b> |
|---------------------------------|------------------------------|

**SAMPLE ID:** The Client submitted and identified the following test material as "**Glasbord PWI .050**".

**SAMPLING DETAIL:** Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

**DATE OF RECEIPT:** Samples were received at QAI facilities on September 18, 2013

**TESTING PERIOD:** September 24, 2013


**AUTHORIZATION:** Proposal FB050213-1 R1 approved on September 11, 2013

**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-12, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

|                      |                            |                               |
|----------------------|----------------------------|-------------------------------|
| <b>TEST RESULTS:</b> | <b><u>Flame Spread</u></b> | <b><u>Smoke Developed</u></b> |
|                      | 55                         | 155                           |

**CLASSIFICATION:** The material tested resulted in a Class B. Detailed test results are presented in the subsequent pages of this report

**Prepared By**



Jared Weise  
Fire Test Technician

**Signed for and on behalf of  
QAI Laboratories, Inc.**



J. Brian McDonald  
Operations Manager



**PREPARATION AND CONDITIONING:** The sample was submitted in six 4 foot long panels measuring 24 inches wide and approximately 0.05 inches thick. The sample material was placed into conditioning at 73°F ( $\pm 5^\circ\text{F}$ ) and 50% ( $\pm 5\%$ ) relative humidity until day of testing.

**E 84 TEST DATA SHEET:**

**MOUNTING METHOD:** The sample was self-supporting and placed along the ledges of the tunnel during testing. No additional mounting method was used

**CLIENT:** Crane Composites **DATE:** September 24, 2013

**SAMPLE:** Glasbord PWI .050

**IGNITION:** 0 minutes, 29 seconds

**FLAME FRONT:** 6 feet maximum

**TIME TO MAXIMUM SPREAD:** 3 minutes, 00 seconds

**TEST DURATION:** 10 minutes, 00 seconds

**SUMMARY: FLAME SPREAD:** 55 (56.5 unrounded) **SMOKE DEVELOPED:** 105 (106 unrounded)

**OBSERVATIONS:**

Sample initially started to discolor and warp prior to ignition. Soon following ignition sample displayed signs of charring, flaking, and shrinking away from flame. Steady flame spread and smoke generation noted for duration of test. No afterflame was noted at test completion.

**CALIBRATION DATA:**

|   |       |
|---|-------|
| Time to Ignition of Last Red Oak (sec): | 57    |
| Red Oak Smoke Area (%A*Min):            | 111   |
| Total Fuel Burned (ft <sup>3</sup> )    | 59.68 |



**SUMMARY OF ASTM E84 RESULTS:**

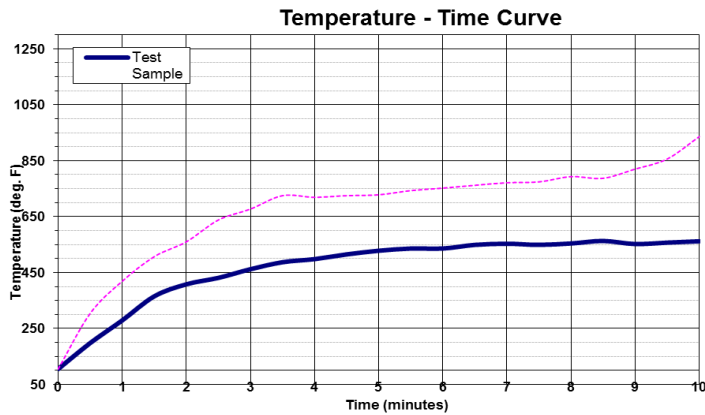
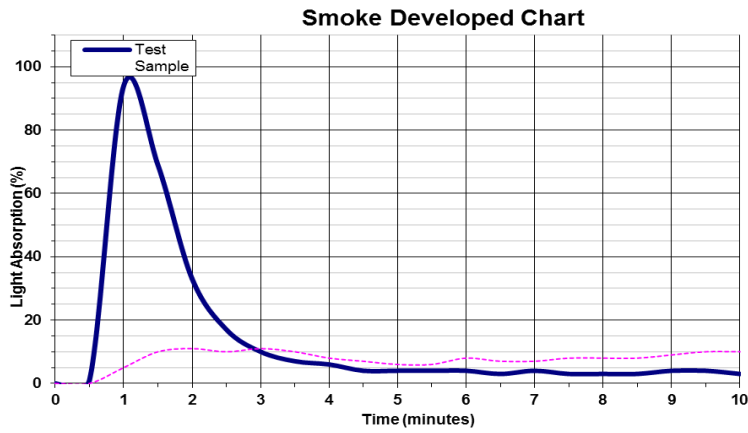
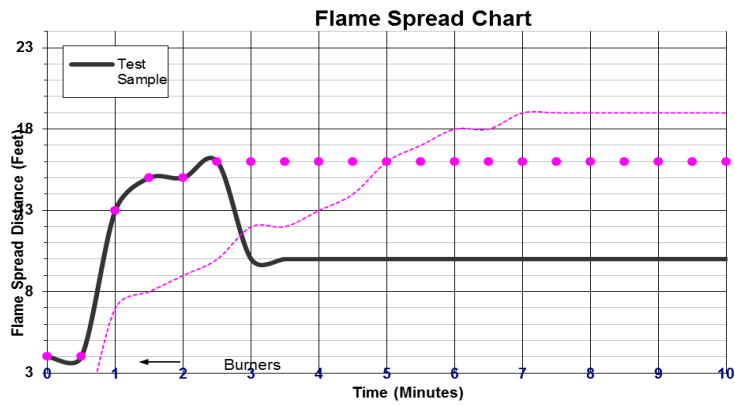
Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

| <u>NFPA CLASS</u> | <u>IBC CLASS</u> | <u>FLAME SPREAD</u> | <u>SMOKE DEVELOPED</u>    |
|-------------------|------------------|---------------------|---------------------------|
| A                 | A                | 0 through 25        | Less than or equal to 450 |
| B                 | B                | 26 through 75       | Less than or equal to 450 |
| C                 | C                | 76 through 200      | Less than or equal to 450 |

**BUILDING CODES CITED:**

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 2006 Edition.
2. International Building Code, 2006 Edition, Chapter 8, Interior Finishes, Section 803.



**END OF REPORT**

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