



## E-84 Flame Spread Testing

*Submitted to:*

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**GARNICA**  **PLYWOOD**

*10 September 2015*





10 September 2015

Mike Simington  
North American Sales Manager  
Garnica Plywood

Dear Mike,

Benchmark International (BMI) would like to thank you for allowing us the opportunity to support Garnica Plywood with our testing, certification and consulting services.

This report is a revision of a report originally issued on June 18<sup>th</sup>, 2014. Revisions are as follows:

- A typo in the product name was corrected, from "Puma-Ply" to "Pluma-Ply."
- The resin designation "Type 1" was changed to "Type 2." The resin is the same; only the designation is different.

Beginning Below is the report on Pluma-Ply FR Hardwood Plywood as tested against ASTM E-84 requirements. The material passed easily and the engineering analysis indicates full compliance for an 'A' rating through all thicknesses.

BMI is proud to represent Garnica Plywood as your preferred testing and certifying agency.

Respectfully Submitted,

Travis R. Snapp  
Managing Director  
Benchmark International  
2710 West 5th Ave.  
Eugene, Oregon 97402  
Tel: 1.541.484.9212  
Fax: 1.541.344.2735  
[www.Benchmark-Intl.com](http://www.Benchmark-Intl.com)  
Travis.Snapp@Benchmark-Intl.com



10 September 2015

Mr. Mike Simington  
North American Sales Manager  
Garnica Plywood

**RE: Findings of E-84 Flame Tunnel Testing  
Proposal No. 14-100718**

Dear Mr. Simington:

Benchmark International (BMI) is pleased to submit the following results of ASTM E-84 Tests performed on Pluma-Ply FR Hardwood Plywood through our global partner laboratory services. Testing of your panel products fell under the ASTM E-84 Standard. Testing and reporting by our partner laboratory is in full compliance with ISO/IEC 17025 Accreditation Requirements specifically for E-84 protocols.

***DESCRIPTION OF TESTING SERVICES – E-84 Standard Test Method for Surface Burning Characteristics of Building Materials***

ASTM E-84 Flame Tunnel, 10 minute burn (each)

- Two (2) ASTM E-84 Tests: 6mm & 28mm

**Engineering Evaluation**

- Engineering Evaluation to Qualify the Following Thicknesses:
  - 8.00mm
  - 11.10mm
  - 12.70mm
  - 14.30mm
  - 15.00mm
  - 17.50mm
  - 18.00mm
  - 19.05mm
  - 23.80mm
  - 25.40mm



8385 White Oak Ave  
Rancho Cucamonga, CA 91730  
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**CLIENT:**

BMI "Benchmark International"  
2710 West 5<sup>th</sup> Avenue  
Eugene, OR 97402

**Engineering Evaluation Report No: RJ3279-EE-Rev1**

**Original Issue Date: June 17, 2014**  
**Revision Date: September 10, 2015**

**Product ID:**

The test samples were identified by the client as:

"PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue."

**AUTHORIZATION:** Signed Work Order by Travis Snapp, dated May 25, 2014.

**EVALUATION REQUESTED:**

Engineering evaluation to determine whether the "PLUMA-PLY™ FR HARDWOOD PLYWOOD" would demonstrate compliance to Class A requirement for the intermediate thicknesses available after testing the 6mm (minimum) & 28mm (maximum) thickness product with the requirements for the standard flame spread and smoke density developed classification in accordance with ASTM Designation E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials" and obtaining passing results.

**RESULTS:**

Based on submitted test data and rational analysis of standardized test method it is concluded that the PLUMA-PLY™ FR HARDWOOD PLYWOOD intermediate thicknesses for this product will meet the requirements for a "Class A" standard flame spread and smoke density developed classification in accordance with ASTM Designation E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".

The details of PLUMA-PLY™ FR HARDWOOD PLYWOOD have been included in the Engineering Recommendation Section of this report for evaluation to the following standards:

- ASTM E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".

**Prepared By**

**Alex Olmos**  
Project Engineer

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

  
**Jason Friedrich, EIT**  
Engineering Manager

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Client: BMI "Benchmark International"  
Job No.: RJ3279-EE-Rev 1  
Revision Date: September 10, 2015  
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### **EVALUATION PURPOSE**

The purpose of this evaluation is to determine whether the PLUMA-PLY™ FR HARDWOOD PLYWOOD (6mm & 28mm thicknesses) after obtaining passing results, qualifies the products intermediate available thicknesses when tested the minimum and maximum thicknesses of this product under the requirements for ASTM E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".

### **PRODUCT DESCRIPTION**

Product Description: PLUMA-PLY™ FR HARDWOOD PLYWOOD, Class-A Fire rated ASTM E-84, European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue.

1. Plywood 12 different sizes as follows:

1. **6.00mm (Tested to ASTM E84-14)**
2. 8.00mm
3. 11.10mm
4. 12.70mm
5. 14.30mm
6. 15.00mm
7. 17.50mm
8. 18.00mm
9. 19.05mm
10. 23.80mm
11. 25.40mm
12. **28.00mm (Tested to ASTM E84-14)**

- Plywood thicknesses tested under the requirements of ASTM E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Material" were 6.00mm and 28mm.

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Client: BMI "Benchmark International"  
Job No.: RJ3279-EE-Rev 1  
Revision Date: September 10, 2015  
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#### **REFERENCED STANDARDS AND REPORTS**

1. ASTM E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".
2. QAI Laboratories Test Report No.RJ3279-1, (June 12, 2012)-See Appendix A
3. QAI Laboratories Test Report No.RJ3279-2, (June 12, 2012)-See Appendix A

#### **TESTING SUMMARY**

The following table summarizes the test results of the two thicknesses tested.

**Table 1 – Summary of Test Reports**

<i>Test Standards</i>	<i>Testing Agency</i>	<i>Report / Listing Number</i>	<i>Date</i>	<i>Product</i>	<i>Flame Spread</i>	<i>Smoke Developed</i>	<i>IBC Class</i>
ASTM E84-14	QAI	RJ3279-1	06/12/14	PLUMA-PLY™ FR HARDWOOD PLYWOOD (6mm Plywood)	15	15	A
ASTM E84-14	QAI	RJ3279-2	06/12/14	PLUMA-PLY™ FR HARDWOOD PLYWOOD (28mm Plywood)	5	10	A

The test reports above indicate that PLUMA-PLY™ FR HARDWOOD PLYWOOD products tested have met the testing requirements for a "Class A" Flame Spread.

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Client: BMI "Benchmark International"  
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Revision Date: September 10, 2015  
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## **ENGINEERING EVALUATION**

### Objective

The objective of this evaluation is to conclude that the tested PLUMA-PLY™ FR HARDWOOD PLYWOOD (6mm & 28mm thicknesses), after obtaining passing results, shall demonstrate the products intermediate available thicknesses would achieve a Class A rating under the requirements for ASTM E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".

### Review of Test Data

- QAI Laboratories Test Report No.RJ3279-1, (June 12, 2012)
- QAI Laboratories Test Report No.RJ3279-2, (June 12, 2012)

### Conclusion

Both the thinnest and thickest product tested performed essentially the same, achieving a Class A rating. By evaluating the limits of the board thickness range we can determine from the results that any thickness produced in the same manner of layer size and glue application rate would also perform equivalently in an ASTM E84 test. The thinnest product results show that the material is able to resist heat and not breakdown exposing more fuel and increasing the flame rate. The thickest product results show that introducing more fuel in terms of wood quantity and glue amounts also did not have a negative effect on the results as the product still met the requirements of Class A.

Based on submitted test data and rational analysis of standardized test method it is concluded that PLUMA-PLY™ FR HARDWOOD PLYWOOD intermediate thicknesses consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue, would meet the requirements for a "Class A" standard flame spread and smoke density developed classification in accordance with ASTM Designation E84-14, "Standard Method of Test for Surface Burning Characteristics of Building Materials".

This evaluation is stating an assumption that based on the evidence from testing and QAI Laboratories understanding of the test method achieving a passing Class A result on the thinnest and thickest boards in the previously mentioned product range would demonstrate that the remaining thicknesses not tested could also meet a Class A requirement. This evaluation does constitute a certification by QAI Laboratories for this product in any thickness as a listed ASTM E84 Class A certified product.

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Revision History:

September 10, 2015:

In this revision the following changes have been made to this report:

1- Updated sample ID per client request from "PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue." To "PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue."

This report RJ3279-1-Rev 1 supersedes and replaces any previous reports under the name EJ3279-1.

End of Report  
\*\*\*\*\*

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**CLIENT: BMI "BENCHMARK INTERNATIONAL"**  
2710 West 5<sup>th</sup> Avenue  
Eugene, OR 97402  
Travis Snapp

<b>Test Report No: RJ3279-1</b>	<b>Date: June 12, 2014</b>
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**SAMPLE ID:** The test samples are identified as PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue.

**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 on May 28, 2014...

**TESTING PERIOD:** June 10, 2014.

**AUTHORIZATION:** Testing authorized by Travis Snapp

**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-14, "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>
	15	15

Detailed test results are presented in the subsequent pages of this report.

**CONCLUSION:** The submitted material meets the requirements for a "Class A" Flame Spread. See classification requirements on page 2.

**Prepared By**

Brian Ortega  
Test Technician

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

Greg Banasky  
Senior Technician

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CLIENT: BMI "BENCHMARK INTERNATIONAL"

Report No: RJ3279-1

June 12, 2014

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**PREPARATION:** The sample material was submitted in three pieces 24" wide by 8' long conforming to test chamber dimensions.

**CONDITIONING:** The test specimen was conditioned to a constant weight at a temperature of  $73.4 \pm 5^\circ \text{F}$  ( $23 \pm 2.8^\circ \text{C}$ ) and a relative humidity of  $50 \pm 5\%$ .

**CEMENT BOARD PLACEMENT:** The 1/4" cement boards were placed between the test specimen and the chamber lid

**E 84 TEST DATA SHEET:**

**CLIENT:** BMI "Benchmark International" **DATE:** 06/10/2014

**SAMPLE:** PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue.

**IGNITION:** 50 seconds.

**FLAME FRONT:** 4 feet maximum.

**TIME TO MAXIMUM SPREAD:** 5 minutes, 11 seconds.

**TEST DURATION:** 10 minutes.

**CALCULATION:**  $29.10 \times 0.515 = 14.99$

**SUMMARY: FLAME SPREAD:** 15      **SMOKE DEVELOPED:** 15 (14.11)

**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".
2. International Building Code, Chapter 8, Interior Finishes, Section 803.

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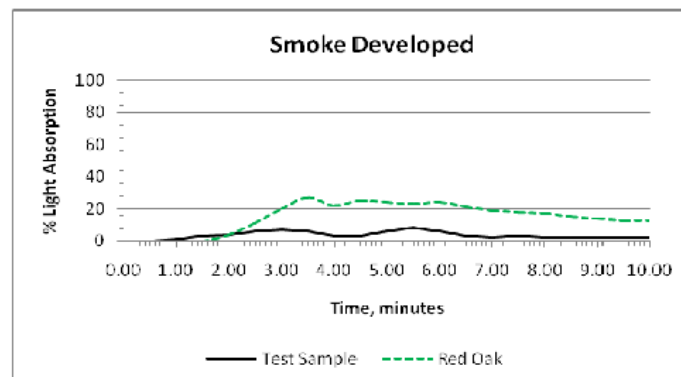
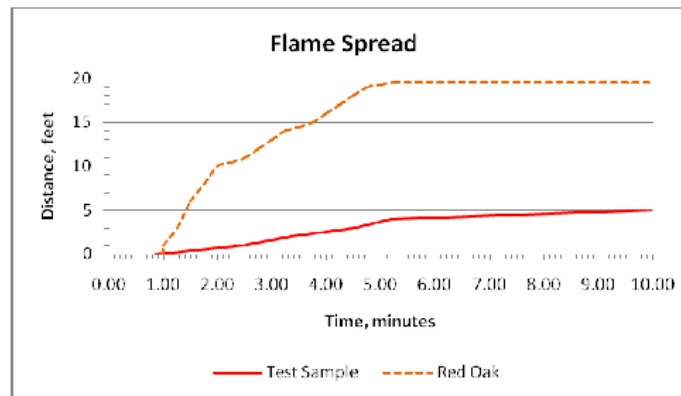


CLIENT: BMI "BENCHMARK INTERNATIONAL"

Report No: RJ3279-1

June 12, 2014

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**CLIENT: BMI "BENCHMARK INTERNATIONAL"**  
2710 West 5<sup>th</sup> Avenue  
Eugene, OR 97402  
Travis Snapp

**Test Report No: RJ3279-2**

**Date: June 12, 2014**

**SAMPLE ID:** The test samples are identified as PLUMA-PLY™ FR HARDWOOD PLYWOOD, 28mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue.

**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 on May 28, 2014...

**TESTING PERIOD:** June 11, 2014.

**AUTHORIZATION:** Testing authorized by Travis Snapp.

**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-14, "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>
	5	10

Detailed test results are presented in the subsequent pages of this report.

**CONCLUSION:** The submitted material meets the requirements for a "Class A" Flame Spread. See classification requirements on page 2.

**Prepared By**

Brian Ortega  
Test Technician

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

Greg Banasky  
Senior Technician

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CLIENT: BMI "BENCHMARK INTERNATIONAL"

Report No: RJ3279-2

June 12, 2014

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**PREPARATION:** The sample material was submitted in three pieces 24" wide by 8' long conforming to test chamber dimensions.

**CONDITIONING:** The test specimen was conditioned to a constant weight at a temperature of  $73.4 \pm 5^\circ \text{F}$  ( $23 \pm 2.8^\circ \text{C}$ ) and a relative humidity of  $50 \pm 5\%$ .

**CEMENT BOARD PLACEMENT:** The 1/4" cement boards were placed between the test specimen and the chamber lid

**E 84 TEST DATA SHEET:**

**CLIENT:** BMI "Benchmark International" **DATE:** 06/11/2014

**SAMPLE:** PLUMA-PLY™ FR HARDWOOD PLYWOOD, 28mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue.

**IGNITION:** 59 seconds

**FLAME FRONT:** 1 foot maximum

**TIME TO MAXIMUM SPREAD:** 1 minute, 29 seconds

**TEST DURATION:** 10 minutes

**CALCULATION:**  $8.77 \times 0.515 = 4.51$

**SUMMARY: FLAME SPREAD:** 5 **SMOKE DEVELOPED:** 10

**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".
2. International Building Code, Chapter 8, Interior Finishes, Section 803.

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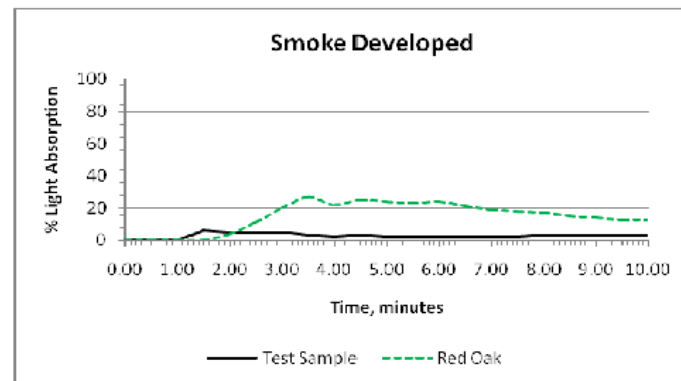
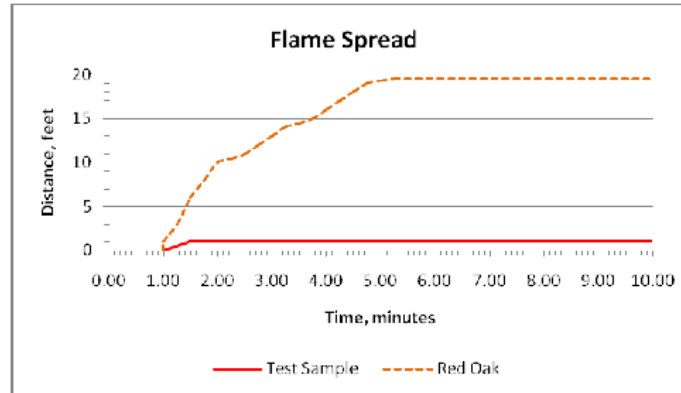


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June 12, 2014

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Eugene, OR 97402  
Travis Snapp

**Test Report No: RJ3279-1-Rev-1**

**Original Issue Date: June 12, 2014**  
**Revision Date: September 10, 2015**

**SAMPLE ID:** The test samples were identified by the client as:  
  
"PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue."

**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 on May 28, 2014...

**TESTING PERIOD:** June 10, 2014.

**AUTHORIZATION:** Testing authorized by Travis Snapp

**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-14, "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>
	15	15

Detailed test results are presented in the subsequent pages of this report.

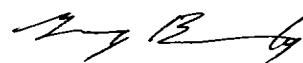
**CONCLUSION:** The submitted material meets the requirements for a "Class A" Flame Spread. See classification requirements on page 2.

**Prepared By**



Brian Ortega  
Test Technician

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



Greg Banasky  
Senior Technician

**PREPARATION:** The sample material was submitted in three pieces 24" wide by 8' long conforming to test chamber dimensions.

**CONDITIONING:** The test specimen was conditioned to a constant weight at a temperature of  $73.4 \pm 5^{\circ}\text{F}$  ( $23 \pm 2.8^{\circ}\text{C}$ ) and a relative humidity of  $50 \pm 5\%$ .

**CEMENT BOARD PLACEMENT:** The 1/4" cement boards were placed between the test specimen and the chamber lid

#### E 84 TEST DATA SHEET:

**CLIENT:** BMI "Benchmark International" **DATE:** 06/10/2014

**SAMPLE:** PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue.

**IGNITION:** 50 seconds.

**FLAME FRONT:** 4 feet maximum.

**TIME TO MAXIMUM SPREAD:** 5 minutes, 11 seconds.

**TEST DURATION:** 10 minutes.

**CALCULATION:**  $29.10 \times 0.515 = 14.99$

**SUMMARY: FLAME SPREAD:** 15 **SMOKE DEVELOPED:** 15 (14.11)

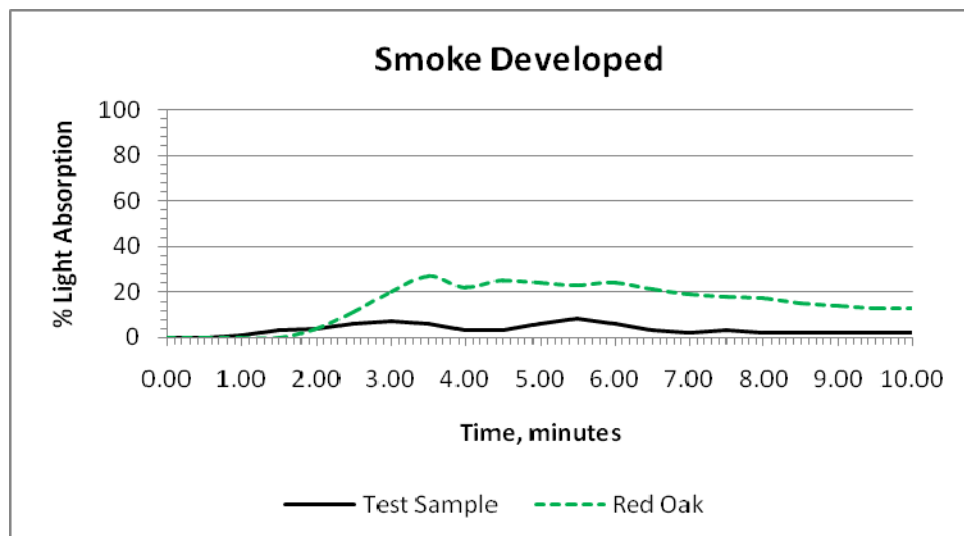
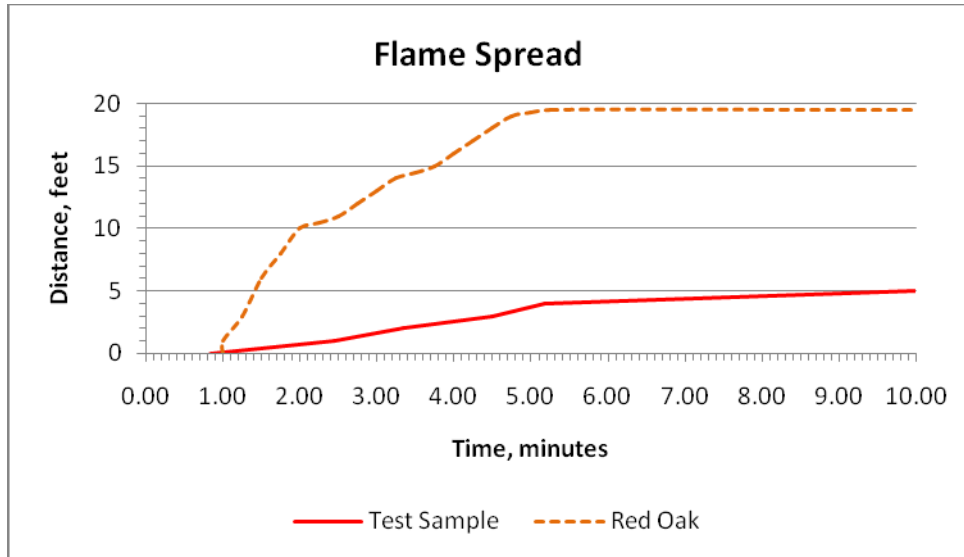
**SUMMARY OF ASTM E84 RESULTS:** Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

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".
2. International Building Code, Chapter 8, Interior Finishes, Section 803.



Revision History:

September 10, 2015:

In this revision the following changes have been made to this report:

1- Updated sample ID per client request from “PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 1 Glue.” To “PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue.”

This report RJ3279-1-Rev 1 supersedes and replaces any previous reports under the name EJ3279-1.

End of Report

**CLIENT: BMI "BENCHMARK INTERNATIONAL"**

2710 West 5<sup>th</sup> Avenue  
Eugene, OR 97402  
Travis Snapp

**Test Report No: RJ3279-2-Rev-1**

**Original Issue Date: June 12, 2014**  
**Revision Date: September 10, 2015**

**SAMPLE ID:** The test samples were identified by the client as:  
  
"PLUMA-PLY™ FR HARDWOOD PLYWOOD, 6mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue."

**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 on May 28, 2014...

**TESTING PERIOD:** June 11, 2014.

**AUTHORIZATION:** Testing authorized by Travis Snapp.

**TEST REQUESTED:** Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-14, "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>
	5	10

Detailed test results are presented in the subsequent pages of this report.

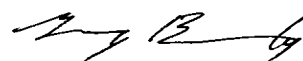
**CONCLUSION:** The submitted material meets the requirements for a "Class A" Flame Spread. See classification requirements on page 2.

**Prepared By**



Brian Ortega  
Test Technician

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



Greg Banasky  
Senior Technician

**PREPARATION:** The sample material was submitted in three pieces 24" wide by 8' long conforming to test chamber dimensions.

**CONDITIONING:** The test specimen was conditioned to a constant weight at a temperature of  $73.4 \pm 5^{\circ}\text{F}$  ( $23 \pm 2.8^{\circ}\text{C}$ ) and a relative humidity of  $50 \pm 5\%$ .

**CEMENT BOARD PLACEMENT:** The 1/4" cement boards were placed between the test specimen and the chamber lid

#### E 84 TEST DATA SHEET:

**CLIENT:** BMI "Benchmark International" **DATE:** 06/11/2014

**SAMPLE:** PLUMA-PLY™ FR HARDWOOD PLYWOOD, 28mm thick plywood, consisting of European Poplar Core Hardwood Plywood – CARB PHASE 2 Certified – Type 2 Glue.

**IGNITION:** 59 seconds.

**FLAME FRONT:** 1 foot maximum.

**TIME TO MAXIMUM SPREAD:** 1 minute, 29 seconds.

**TEST DURATION:** 10 minutes.

**CALCULATION:**  $8.77 \times 0.515 = 4.51$

**SUMMARY: FLAME SPREAD:** 5      **SMOKE DEVELOPED:** 10

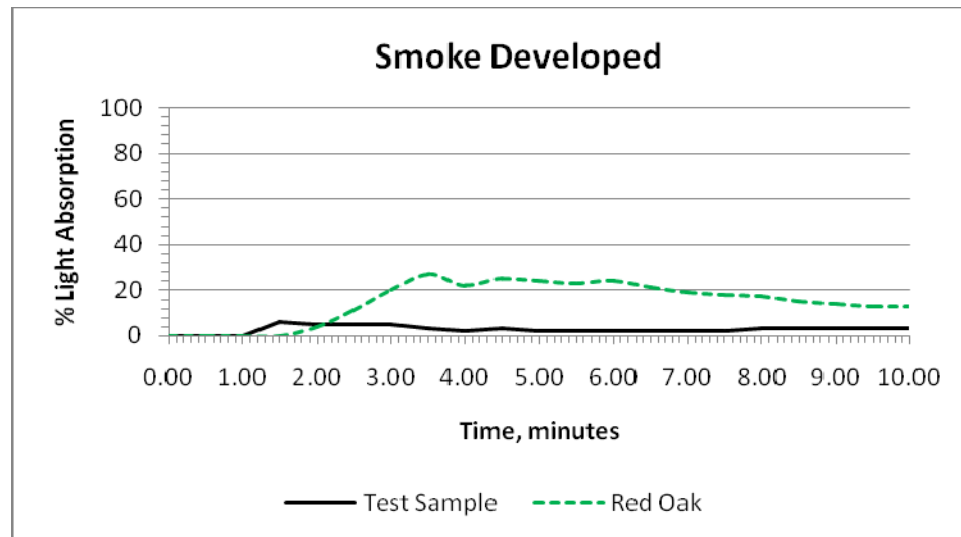
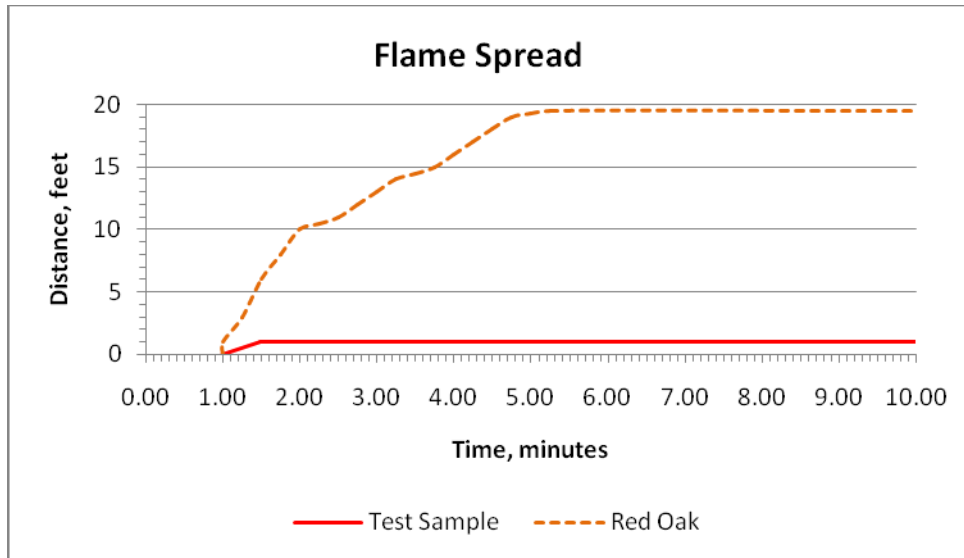
**SUMMARY OF ASTM E84 RESULTS:** Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

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".
2. International Building Code, Chapter 8, Interior Finishes, Section 803.



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This report RJ3279-2-Rev 1 supersedes and replaces any previous reports under the name EJ3279-2.

End of Report