

CLIENT: [REDACTED]

Test Report No: TJ5161	Date: November 2, 2017
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SAMPLE ID: The client identified the following test material as

NTA Project Number:	WFMS102417-32
Manufacturer:	[REDACTED]
Product Description:	4 mm Plyfelt 12.5 Poly

SAMPLING DETAIL: Sampling was performed by **the manufacturer**. No special sampling conditions or sample preparation were observed by QAI.

REFERENCE: NTA, Inc. contracted QAI Laboratories to perform testing on behalf of [REDACTED], reference # WFMS102417-32.

DATE OF RECEIPT: Samples were received at QAI facilities on October 25, 2017


TESTING PERIOD: October 27, 2017


AUTHORIZATION: Signed work order 17SP102601

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-09, "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.

TEST RESULTS: Flame Spread 10                      Smoke Developed 130

CLASSIFICATION: The material results in a class "A" rating. Detailed test results are presented in the subsequent pages of this report

Prepared By  
  
Daniel Barnett  
Project Engineer

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 strips of material measuring 24 inches wide and 0.239 inches thick. The sample material was placed into conditioning at 73°F (±5°F) and 50% (±5%) relative humidity until day of testing.

**E 84 TEST DATA SHEET:**

**MOUNTING METHOD:** The sample was supported using two inch hexagonal mesh poultry netting running the length of the test chamber and 1/4" round metal rods were placed at 2' intervals across the width of the test chamber. The samples were placed with the face side exposed to the burner flames, butted end to end in the test chamber, and with cement board place between the lid and sample.

**IGNITION:** 0 minutes, 22 seconds

**FLAME FRONT:** 5 foot maximum

**TIME TO MAXIMUM SPREAD:** 9 minutes, 00 seconds

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

**SUMMARY:**    **FLAME SPREAD:** 10 (11.8 unrounded)    **SMOKE DEVELOPED:** 130 (132 unrounded)

**OBSERVATIONS:**

The sample began to display signs of charring at 8 seconds followed by the sample sustaining ignition 22 seconds from the start of the test. The technician noted flame dripping occurring at 1 minute. The majority of material had burned away near the burner by 1 minute 20 seconds. No other changes occurred for the remainder of the test. The sample continued to burn after the conclusion of the test.

**CALIBRATION DATA:**

Time to Ignition of Last Red Oak (sec):	39
Red Oak Smoke Area (%A*Min):	111.0
Total Fuel Burned (ft <sup>3</sup> )	61.0

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**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:

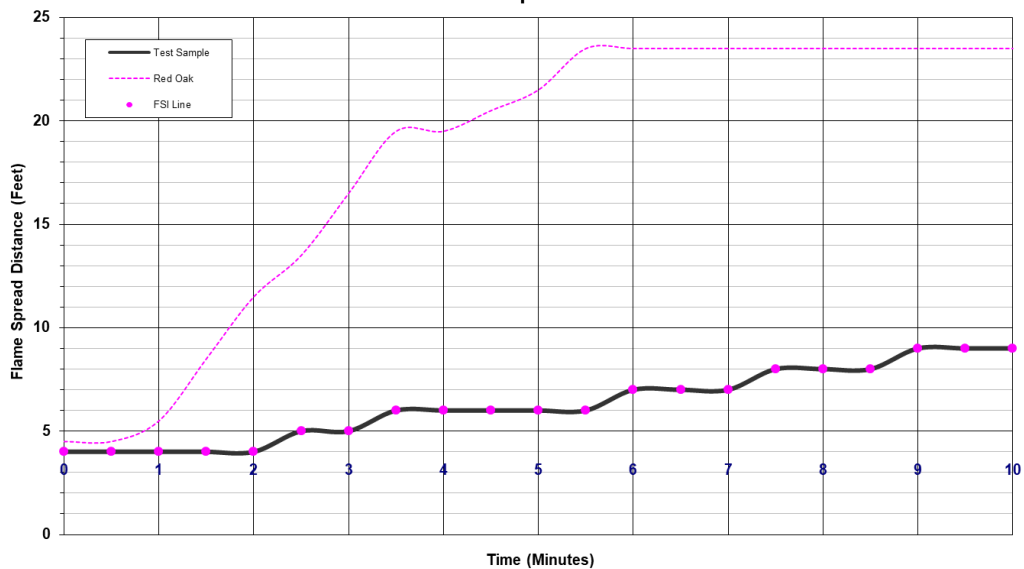
<u>NFPA CLASS</u>	<u>IBC CLASS</u>	<u>FLAME SPREAD SMOKE DEVELOPED</u>	
A	A	0 through 25	Less than or equal to 450
B	B	26 through 75	Less than or equal to 450
C	C	76 through 200	Less than or equal to 450

**BUILDING CODES CITED:**

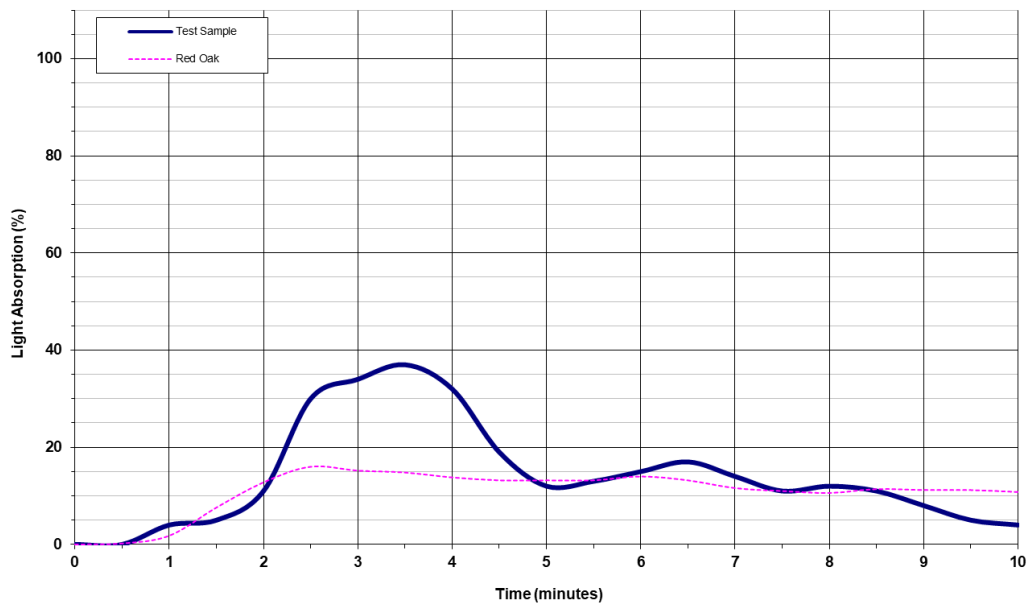
1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 2006 Edition.
2. International Building Code, 2006 Edition, Chapter 8, Interior Finishes, Section 803.

Graphical Data

Flame Spread Chart

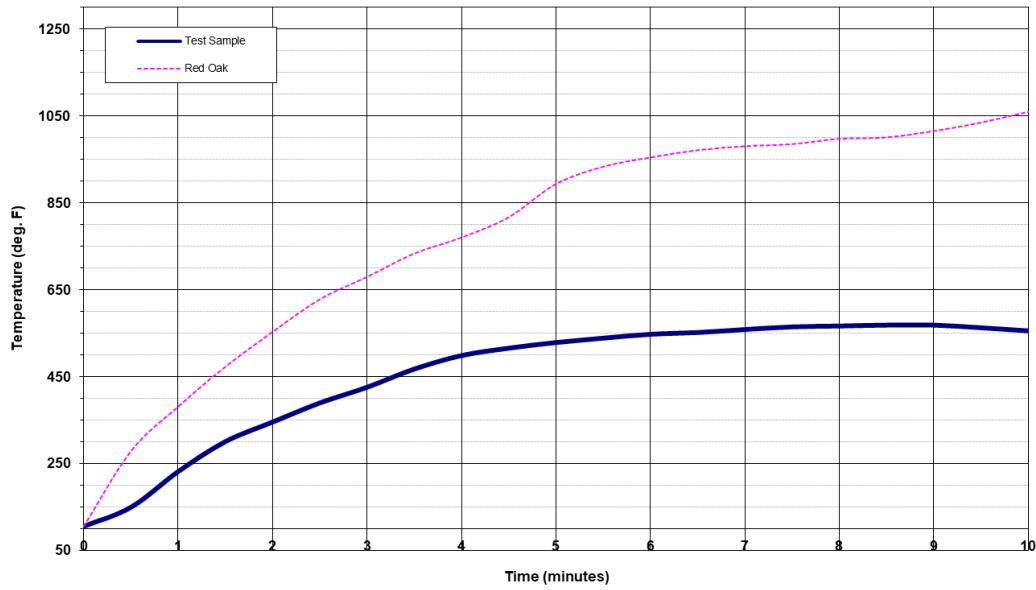


Smoke Developed Chart



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### Temperature - Time Curve



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Post Test Images



**\*\*\*END OF TEST REPORT\*\*\***

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