

CLIENT: Nova Industries
8011 North 154th East Avenue
Owasso, OK 74055

Attn: Tim Borgne

Test Report No: TJ1409

Date: July 23, 2013

SAMPLE ID: The client submitted and identified the following test material as “**Duct Armor**”

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 6/20/13

TESTING PERIOD: July 1, 2013

AUTHORIZATION: Signed Proposal No. SP060713-2

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM E2768-11 “Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test). This method is similar to UBC No. 8-1 per Chapter 7A of the 2001 California Building Code, Ignition-Resistant Material 30 minute test

TEST RESULTS: Flame Spread Smoke Developed
10 @ 10:00 30 @ 10:00

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

PREPARED BY



David Bauchmoyer
Fire Test Technician

**SIGNED FOR AND ON BEHALF OF
QAI LABORATORIES, INC.**



J. Brian McDonald
Operations Manager



E 84 TEST DATA SHEET:

CLIENT: Nova Industries **DATE:** July 1, 2013

SAMPLE: Duct Armor

FLAME SPREAD:

IGNITION: 3 Min. and 3 Sec.

FLAME FRONT: 4 feet maximum

TIME TO MAXIMUM FLAME SPREAD: 4 feet at 6 minutes

TEST DURATION: 10 minutes

SUMMARY: FLAME SPREAD: 10 @ 10:00 **SMOKE DEVELOPED:** 30 @ 10:00

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:

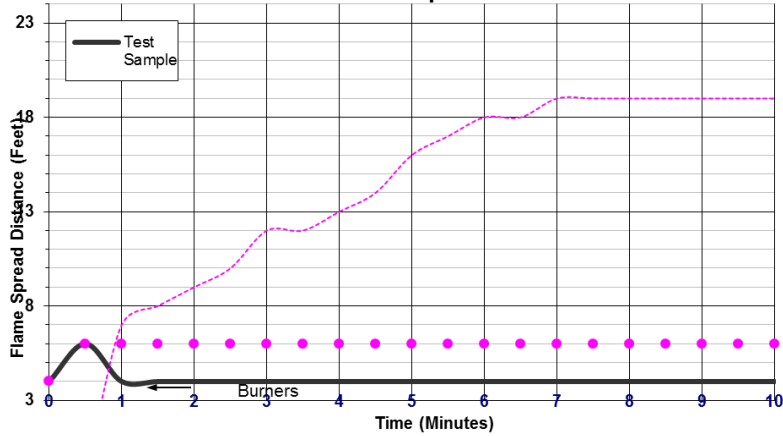
<u>NFPA CLASS</u>	<u>IBC CLASS</u>	<u>FLAME SPREAD</u>	<u>SMOKE DEVELOPED</u>
A	A	0 through 25	Less than or equal to 450
B	B	26 through 75	Less than or equal to 450
C	C	76 through 200	Less than or equal to 450

BUILDING CODES CITED:

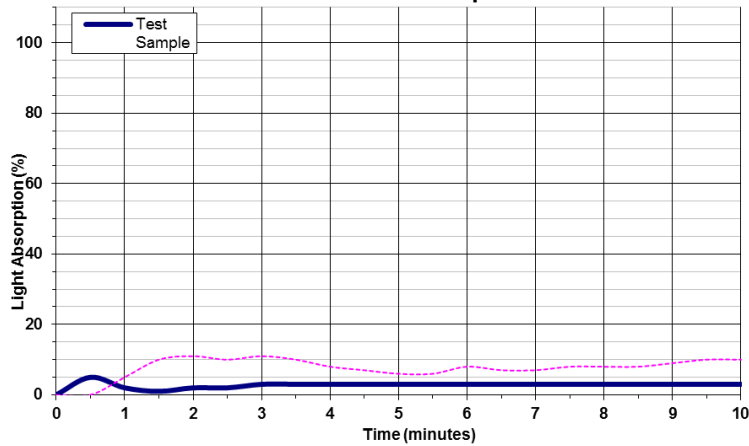
1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 2006 Edition.
2. International Building Code, 2006 Edition, Chapter 8, Interior Finishes, Section 803.

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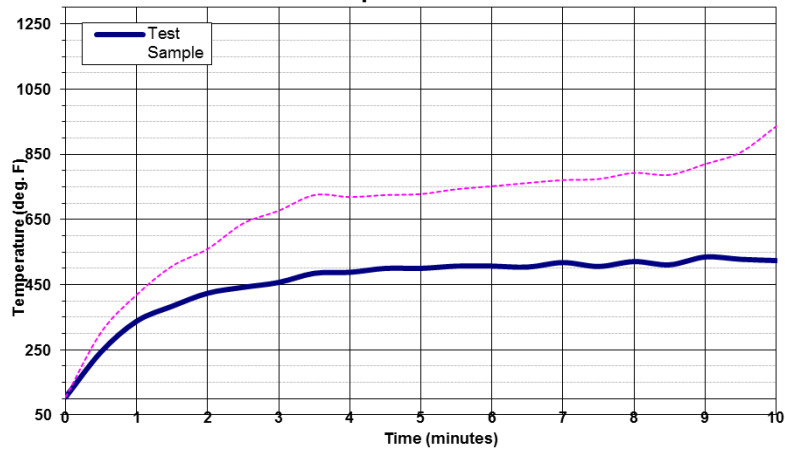
Flame Spread Chart



Smoke Developed Chart



Temperature - Time Curve



END OF REPORT

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