

CLIENT: NEWMAT USA LTD.
Attn: Pascal Gicquel
81 Mahan Street
W. Babylon, NY 11704

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|-----------------------------------|-------------------------------|
| Test Report No: TJ1619-1-R | Date: October 29, 2013 |
|-----------------------------------|-------------------------------|

SAMPLE ID: The Client submitted and identified the following test material as “Newmat PVC membrane in white matte finish”

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 October 3, 2013

TESTING PERIOD: October 6, 2013

AUTHORIZATION: Proposal SP-2013-100101 approved on October 1, 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.


| | | |
|----------------------|----------------------------|-------------------------------|
| TEST RESULTS: | <u>Flame Spread</u> | <u>Smoke Developed</u> |
| | 20 | 85 |

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

REVISION: The thickness of the membrane listed on page two of this report was corrected

Prepared By

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


Jared Weise
Fire Test Technician


J. Brian McDonald
Operations Manager



PREPARATION AND CONDITIONING: The sample was submitted in one 24 foot long pieces measuring 24 inches wide and approximately 19/100 mm 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 during testing by 2" hexagonal mesh poultry netting running the length of the test chamber and ¼" round metal rods placed at 2' intervals across the width of the test chamber.

CLIENT: Newmat USA **DATE:** October 7, 2013

SAMPLE: Newmat PVC membrane in white matte finish

IGNITION: 0 minutes, 6 seconds

FLAME FRONT: 4 feet maximum

TIME TO MAXIMUM SPREAD: 0 minutes, 30 seconds

TEST DURATION: 10 minutes, 00 seconds

SUMMARY: FLAME SPREAD: 20 (20.3 unrounded) **SMOKE DEVELOPED:** 85 (84 unrounded)

OBSERVATIONS:

At three seconds after ignition product began to shrink. Shortly after that it began to sag and ignite. Relatively fast flame spread and then immediate recession. No after flame 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 ³) | 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.

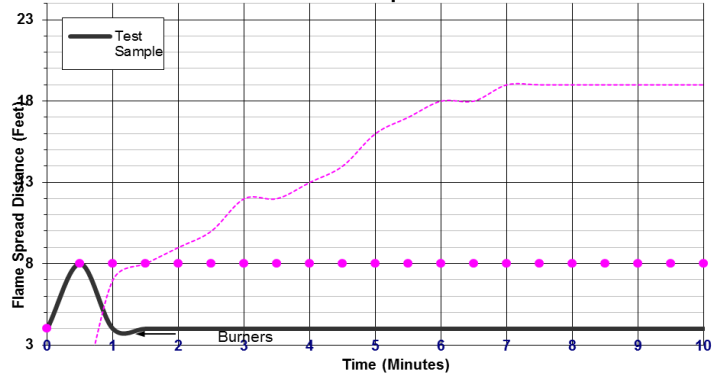
In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

| <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 |

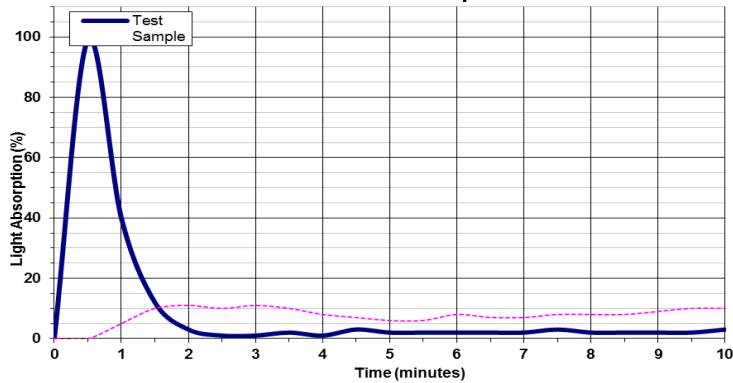
BUILDING CODES CITED:

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.

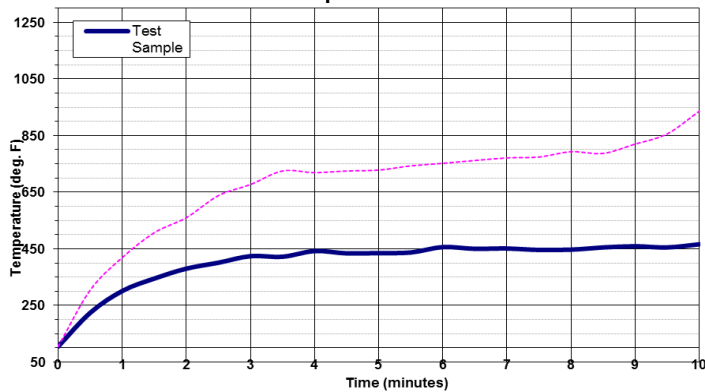
Flame Spread Chart



Smoke Developed Chart



Temperature - Time Curve



END OF REPORT

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