TEST REPORT

REPORT NUMBER: 101706010COQ-008
ORIGINAL ISSUE DATE: July 9, 2014

EVALUATION CENTER
Intertek Testing Services NA Ltd.
1500 Brigantine Drive
Coquitlam, BC V3K 7C1

RENDERED TO

Mayne Coatings Corp.
27575 50th Ave
Langley, BC
V4W 0A2

PRODUCT EVALUATED: Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish
EVALUATION PROPERTY: Surface Burning Characteristics

Report of testing Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish for compliance with the applicable requirements of the following criteria: ASTM E2768-11, *Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min Tunnel Test)*

1 Table of Contents

2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Mayne Coatings Corp, to evaluate the surface burning characteristics of Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish. Testing was conducted in accordance with the standard methods of ASTM E2768-11, *Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min Tunnel Test)*.

This evaluation began July 8, 2014 and was completed the same day. Testing was witnessed by Mr. Mike Heppell and Ms. Christi Dunkley representing Mayne Coatings Corp.

3 Test Samples

3.1. SAMPLE SELECTION

Intertek representative, Emma Amiralaei selected test samples on July 4, 2014. The sampling was conducted at Mayne Coatings Corp, located at 27575 50th Ave, Langley, B.C.

The subject test specimen is a traceable sample selected from the manufacturer's facility. Intertek selected the specimen and has verified the composition, manufacturing techniques and quality assurance procedures.

The sample materials were received at the Evaluation Center on July 4, 2014.

3.2. SAMPLE AND ASSEMBLY DESCRIPTION

Upon receipt of the samples at the Intertek Coquitlam laboratory, they were placed in a conditioning room where they remained in an atmosphere of 23 ± 3°C (73.4 ± 5°F) and 50 ± 5% relative humidity.

The specimens consisted of 0.069 in. thick by 6 in. wide by 6 ft. long aluminum panels, and were identified by the client as "Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish".

Four 6 in. wide by 6 ft. long pieces were snapped together to form 24 in. wide sample decks. Four decks were then butted together end to end to form the required 24 ft. sample length and placed on the upper ledge of the flame spread tunnel. A layer of 6mm reinforced cement board was placed over top of the samples, the tunnel lid was lowered into place, and the samples were then tested in accordance with ASTM E2768-11.

4 Testing and Evaluation Methods

4.1. TEST STANDARD

The results of the tests are expressed by indexes, which compare the characteristics of the sample under tests relative to that of select grade red oak flooring and inorganic-cement board.

(A) Flame Spread Index:

This index relates to the rate of progression of a flame along a sample in the 25 foot tunnel. A natural gas flame is applied to the front of the sample at the start of the test and drawn along the sample by a draft kept constant for the duration of the test. An observer notes the progression of the flame front relative to time. This information is plotted on a graph (flame spread curve).

The test apparatus is calibrated such that the flame front for red oak flooring passes out the end of the tunnel in five minutes, thirty seconds (plus or minus 15 seconds).

(B) Smoke Developed:

A photocell is used to measure the amount of light, which is obscured by the smoke passing down the tunnel duct. When the smoke from a burning sample obscures the light beam, the output from the photocell decreases. This decrease with time is recorded and compared to the results obtained for red oak, which is defined to be 100.

(C) Extended 20 minute Burn:

In accordance with ASTM E2768, the test must be continued for an additional 20 minutes in accordance with the general procedures of ASTM E84. At the end of the additional 20 minute period, the flame front shall be measured from the centerline of the burners.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

(A) Flame Spread

The resultant flame spread indexes are as follows:
(Index rounded to nearest 5)

Sample Material	Flame Spread	Flame Spread Index
Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish	0	0

(B) Smoke Developed

The areas beneath the smoke developed curve and the related indexes are as follows:
(For smoke developed indexes 200 or more, index is rounded to the nearest 50. For smoke developed indexes less than 200, index is rounded to nearest 5)

Sample Material	Smoke Developed (value taken at 10 minutes)	Smoked Developed Index
Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish	3	5

(C) Extended 20 minute Burn

The flame front did not exceed 5 ft past the centreline of the burners. This result meets the requirement of the extended 20 minute burn in Section 2303.2 of the 2012 International Building Code of a maximum flame spread of 10.5 feet past the centerline of the burners

(D) Observations

There was no visible surface ignition on the sample material.

6 Conclusion

The samples of "Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish" submitted by Mayne Coatings Corp., met the requirements when tested in accordance with ASTM E2768-11, *Standard Test Method for Extended Duration Surface Burning Characteristics for Building Materials (30 min Tunnel Test)*.

Sample Material	Flame Spread Index	Smoke Developed Index	Maximum Flame Front after 30-minutes (ft)
Coated Aluminum Extrusions with Mayne Coating's Aluminate Finish	0	5	5 feet

The conclusions of this test report may be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

INTERTEK TESTING SERVICES NA LTD.

Tested and Reported by: 
Greg Philp
Technician – Building Products

Reviewed by: 
Riccardo DeSantis
Manager – Building Products

APPENDIX A

DATA SHEETS

ASTM E2768-11DATA SHEETS

ASTM E84

Client: Mayne Coatings
Date: 07 08 2014
Project Number: 101706010
Test Number: 1
Operator: Greg Philp

Specimen ID: Coated Aluminum Extrusions with Mayne Coatings Aluminate Finish

TEST RESULTS

FLAMESPREAD INDEX: 0

SMOKE DEVELOPED INDEX: 5

SPECIMEN DATA . . .

Time to Ignition (sec):	0
Time to Max FS (sec):	0
Maximum FS (feet):	0.0
Time to 980 F (sec):	Never Reached
Time to End of Tunnel (sec):	Never Reached
Max Temperature (F):	528
Time to Max Temperature (sec):	1794
Total Fuel Burned (cubic feet):	0.00
FS*Time Area (ft*min):	0.0
Smoke Area (%A*min):	3.8
Unrounded FSI:	0.0
Unrounded SDI:	3.2

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec):	41.0
Red Oak Smoke Area (%A*min):	118.6

Tested By

Reviewed By

R.D.

ASTM E2768-11DATA SHEETS

Project No: 101706010

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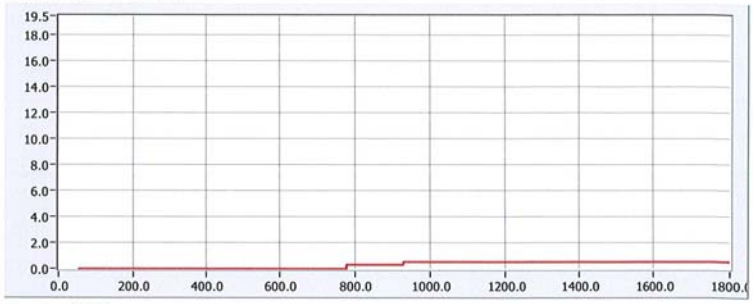
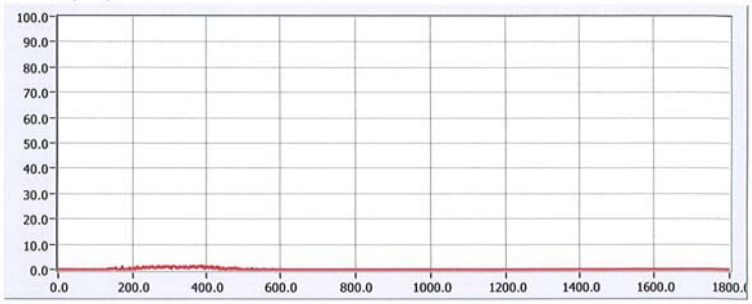
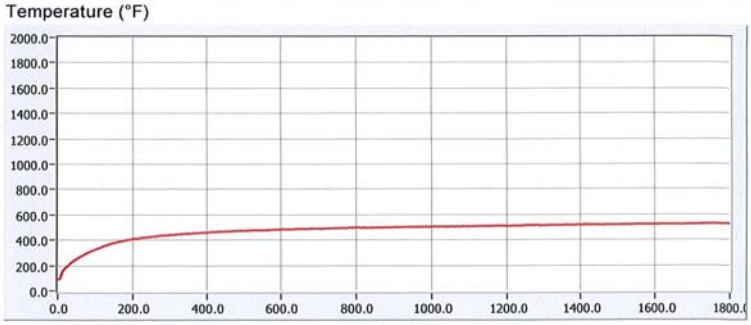
FLAME SPREAD (ft)



Smoke (%A)



Temperature (°F)



Time (sec)

600

REVISION SUMMARY

DATE	PAGE	SUMMARY
July 9, 2014	--	Original Issue Date