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WAYNE BUILDING SYSTEMS INC.
TEST REPORT

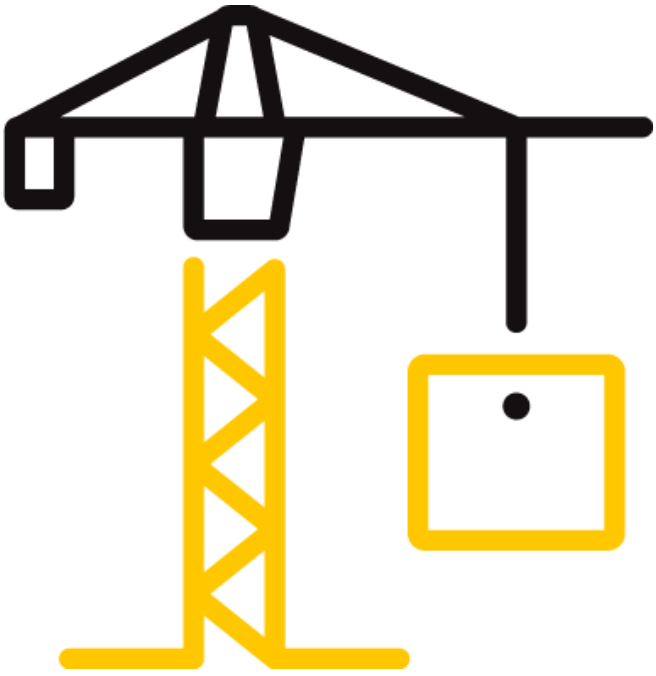
SCOPE OF WORK
REPORT OF TESTING 8 IN. WIDE ARMOURSIDE STEEL SIDING (WHITE) FOR COMPLIANCE WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CRITERIA: ASTM E84-19B STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS.

REPORT NUMBER
104175306COQ-003 R0
TEST DATE(S)
02/06/20 - 02/06/20

ISSUE DATE
02/24/20

PAGES
12

DOCUMENT CONTROL NUMBER
GFT-OP-10c (AUGUST 27, 2018)



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TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.
Report No.: 104175306COQ-003 R0
Date: 02/24/20

REPORT ISSUED TO
WAYNE BUILDING SYSTEMS INC.
12603- 123 STREET
EDMONTON, AB CAN T5L 0H9

SECTION 1
SCOPE

Intertek Building & Construction (B&C) was contracted by Wayne Building Systems Inc. to perform testing in accordance with ASTM E84-19b Standard Test Method for Surface Burning Characteristics of Building Materials on their 8 in. wide Armourside Steel Siding (White). Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek Testing Services NA Ltd. (Intertek) test facility in Coquitlam, BC Canada.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2
SUMMARY OF TEST RESULTS

The samples of Armourside Steel Siding (White) submitted by Wayne Building Systems Inc. were tested in accordance with ASTM E84-19b Standard Test Method for Surface Burning Characteristics of Building Materials.

The product test results are presented in Section 10 of this report.

For INTERTEK B&C:

COMPLETED BY:	Sean Fewer	**REVIEWED BY:**	Greg Philp
TITLE:	Technician – B&C	**TITLE:**	Reviewer – B&C
SIGNATURE:		**SIGNATURE:**	
DATE:	02/24/20	**DATE:**	02/24/20

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SECTION 3
TEST METHOD(S)

The specimens were evaluated in accordance with the following:

ASTM E84-19b Standard Test Method for Surface Burning Characteristics of Building Materials.

SECTION 4
MATERIAL SOURCE/INSTALLATION

Intertek representative Kevin Binksma selected test samples on December 16, 2019 at the client's facility located at 14525-112 Avenue Edmonton AB Canada. The inspector initialed material was received at the test facility on December 20, 2019.

SECTION 5
EQUIPMENT

ASSET #	DESCRIPTION	MODEL	CAL DUE DATE
WH 2189	Photocell	Huygen 856	11/27/20
WH 2190	Smoke Opacity Meter	Huygen	11/27/20
WH 2494	Data Logger	Yokogawa DA100	07/18/20

SECTION 6
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Sean Fewer	Intertek B&C
Greg Philp	Intertek B&C

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SECTION 7
TEST CALCULATIONS

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.

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.

SECTION 8
TEST SPECIMEN 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 $\pm$ 3°C (73.4 $\pm$ 5°F) and 50 $\pm$ 5% relative humidity.

The sample material was identified by the client as coated Armourside Steel Siding (White). 0.0157 in. thick by 8 in. wide by 12 ft. long.

For each trial run, six 12 ft. pieces of sample material were butted together and placed on the upper ledge of the flame spread tunnel to form the required 24 ft. sample length. A layer of 6 mm reinforced cement board was placed over top of the sample material, the tunnel lid was lowered into place, and the samples were then tested in accordance with ASTM E84-19b.

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SECTION 9
TEST RESULTS

(A) Flame Spread

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

Armourside Steel Siding (White)	Flame Spread	Flame Spread Index
Run 1	0	0
Run 2	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)

Armourside Steel Siding (White)	Smoke Developed	Smoked Developed Index
Run 1	45	45
Run 2	20	20

(C) Observations

During the test, there was no visible surface ignition.

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SECTION 10
CONCLUSION

The samples of Armourside Steel Siding (White) submitted by Wayne Building Products Inc. exhibited the following flame spread characteristics when tested in accordance with ASTM E84-19b Standard Test Method for Surface Burning Characteristics of Building Materials.

Armourside Steel Siding (White)	Flame Spread Index	Smoked Developed Index
Run 1	0	25
Run 2	0	55

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.

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SECTION 11

TEST DATA (4 PAGES)

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TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.
Report No.: 104175306COQ-003 R0
Date: 02/24/20

ASTM E84-19b DATA SHEETS

ASTM E84

Client: Wayne Building Products
Date: 02 06 2020
Project Number: 10417503
Test Number: 1
Operator: Sean Fewer

Specimen ID: Armourside Steel Siding (White)

TEST RESULTS

FLAMESPREAD INDEX: 0

SMOKE DEVELOPED INDEX: 45

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):	468
Time to Max Temperature (sec):	592
Total Fuel Burned (cubic feet):	45.70
FS*Time Area (ft*min):	0.0
Smoke Area (%A*min):	20.4
Unrounded FSI:	0.0
Unrounded SDI:	45.2

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec):	44.0
Red Oak Smoke Area (%A*min):	45.1

Tested by: SF

REVIEWED BY

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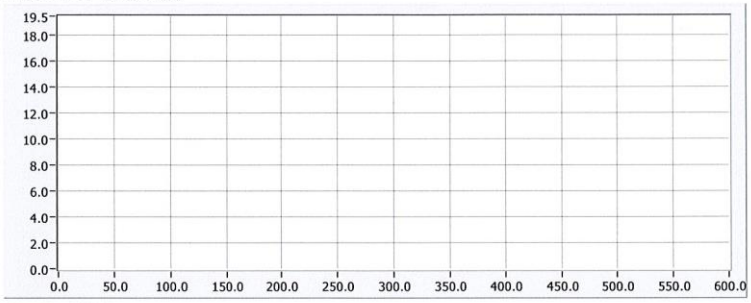
TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.
Report No.: 104175306COQ-003 R0
Date: 02/24/20

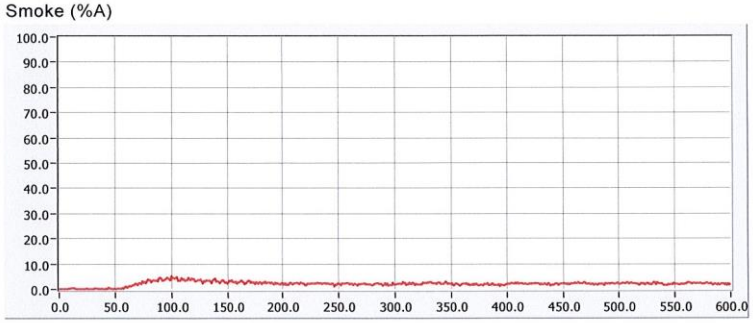
ASTM E84-19b DATA SHEETS

Project No: 10417503 Page 2 of 2

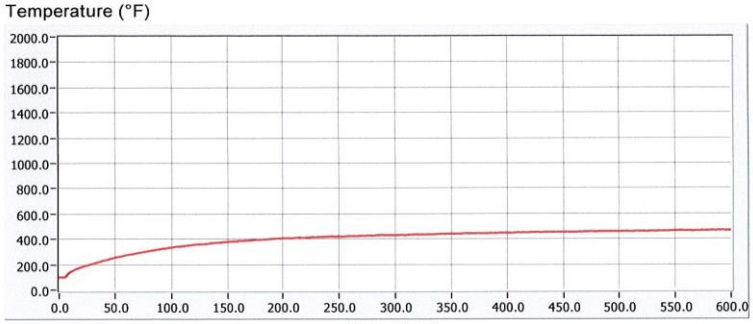
FLAME SPREAD (ft)



Smoke (%A)



Temperature (°F)



Time (sec)

600

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TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.
Report No.: 104175306COQ-003 R0
Date: 02/24/20

ASTM E84-19b DATA SHEETS

ASTM E84

Client: Wayne Building Products
Date: 02 06 2020
Project Number: 104175306
Test Number: 2
Operator: Sean Fewer

Specimen ID: Armourside Steel Siding (White)

TEST RESULTS

FLAMESPREAD INDEX: 0

SMOKE DEVELOPED INDEX: 20

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): 469
Time to Max Temperature (sec): 599
Total Fuel Burned (cubic feet): 45.70

FS*Time Area (ft*min): 0.0
Smoke Area (%A*min): 9.1
Unrounded FSI: 0.0
Unrounded SDI: 20.2

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 44.0
Red Oak Smoke Area (%A*min): 45.1

Tested by: SF

Reviewed By

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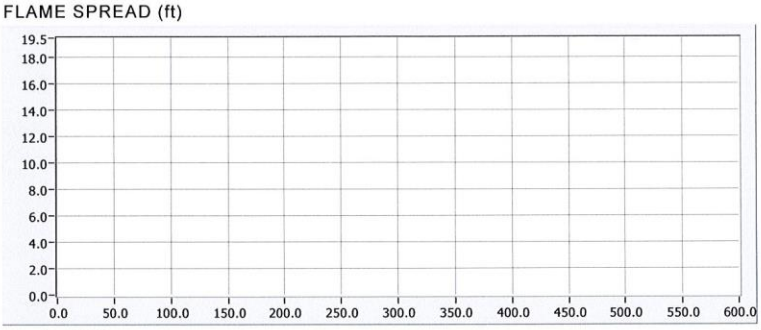
Report No.: 104175306COQ-003 R0
Date: 02/24/20

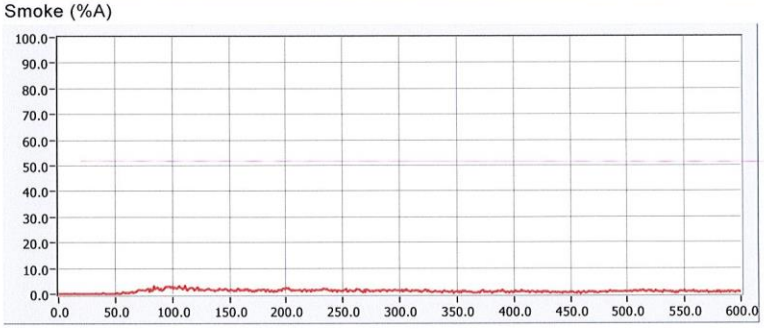
ASTM E84-19b DATA SHEETS

Project No: 104175306 Page 2 of 2

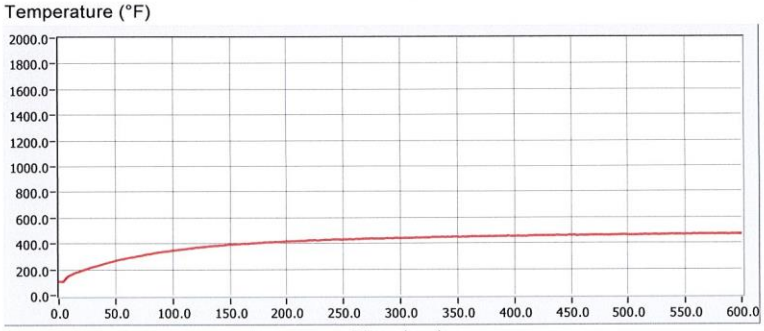
FLAME SPREAD (ft)



Smoke (%A)



Temperature (°F)



Time (sec)

600

SF

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SECTION 12
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	02/24/20	N/A	Original Report Issue