

# WAYNE BUILDING SYSTEMS INC. TEST REPORT

## SCOPE OF WORK

REPORT OF TESTING 6 IN. WIDE ARMOURSIDE STEEL SIDING (WHITE) FOR COMPLIANCE WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CRITERIA: CAN/ULC S102-18, STANDARD METHOD OF TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS AND ASSEMBLIES.

## REPORT NUMBER

104175306COQ-002 R0

## TEST DATE(S)

01/16/20 - 01/16/20

## ISSUE DATE

02/24/20

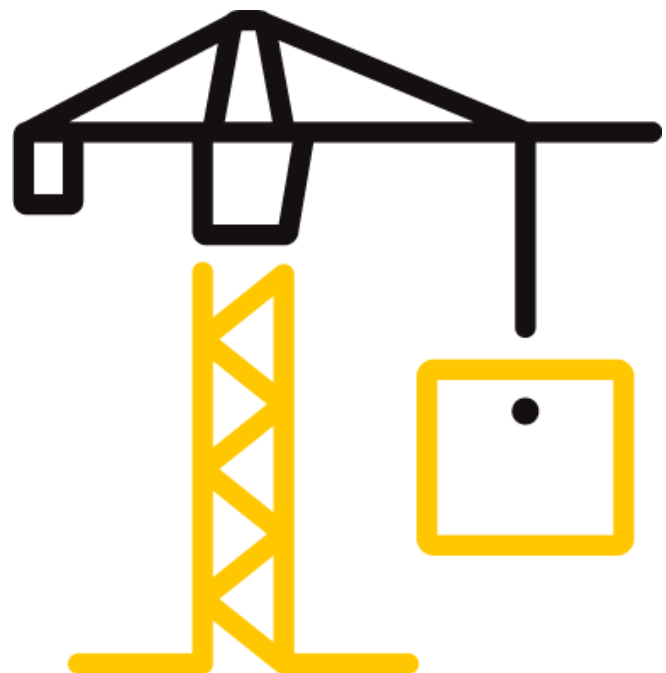
## PAGES

14

## DOCUMENT CONTROL NUMBER

GFT-OP-10c (AUGUST 27, 2018)

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## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

Report No.: 104175306COQ-002 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 CAN/ULC S102-18, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies., on their 6 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 6 in. wide Armourside Steel Siding (White) were tested in accordance with CAN/ULC S102-18, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

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

For INTERTEK B&C:

**COMPLETED BY:** Sean Fewer

**TITLE:** Technician – B&C

**SIGNATURE:**

**DATE:** 02/24/20



**REVIEWED BY:** Greg Philp

**TITLE:** Reviewer- B&C

**SIGNATURE:**

**DATE:** 02/24/20



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**SECTION 3**

**TEST METHOD(S)**

The specimens were evaluated in accordance with the following:

**CAN/ULC S102-18, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.**

**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
WH2189	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

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 Rating:

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  $23 \pm 3^{\circ}\text{C}$  ( $73.4 \pm 5^{\circ}\text{F}$ ) 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 6 in. wide by 12 ft. long.

For each trial run, eight 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 samples, the tunnel lid was lowered into place, and the samples were then tested in accordance with CAN/ULC S102-18.

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**SECTION 9**  
**TEST RESULTS**

**(A) Flame Spread**

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

6 in. wide Armourside Steel Siding (White)	Flame Spread	Flame Spread Rating
Run 1	0	0
Run 2	0	
Run 3	0	

**(B) Smoke Developed**

The areas beneath the smoke developed curve and the related classifications are as follows:  
(Classification rounded to nearest 5)

6 in. wide Armourside Steel Siding (White)	Smoke Developed	Smoke Developed Classification
Run 1	8	10
Run 2	13	
Run 3	9	

**(C) Observations**

During the tests, there was no visible surface ignition.

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**SECTION 10**

**CONCLUSION**

The samples of 6 in. wide Armourside Steel Siding (White) submitted by Wayne Building Systems Inc. exhibited the following flame spread characteristics when tested in accordance with CAN/ULC S102-18, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

A series of three test runs of material was conducted to conform to the requirements of the National Building Code of Canada.

Sample Material	Flame Spread Rating	Smoke Developed Classification
6 in. wide Armourside Steel Siding (White)	0	10

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.



Total Quality. Assured.

**TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.**

Report No.: 104175306COQ-002 R0

Date: 02/24/20

1500 Brigantine Drive  
Coquitlam, BC V3K 7C1

Telephone: 604-520-3321  
[www.intertek.com/building](http://www.intertek.com/building)

**SECTION 11**

**TEST DATA (6 PAGES)**

## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

Report No.: 104175306COQ-002 R0

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### CAN/ULC S102-18 DATA SHEETS

#### Run 1

Standard: ULC S102

Page 1 of 2

Client: Wayne Building Products

Date: 01 16 2020

Project Number: 104175306

Test Number: 1

Operator: Sean Fewer

Specimen ID: 6 in. wide Armourside Steel Siding White

#### TEST RESULTS

FLAMESPREAD INDEX: 0

SMOKE DEVELOPED INDEX: 10

#### SPECIMEN DATA . . .

Time to Ignition (sec): 0

Time to Max FS (sec): 0

Maximum FS (mm): 0.0

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 238

Time to Max Temperature (sec): 591

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 0.0

Smoke Area (%A\*min): 12.9

Unrounded FSI: 0.0

Unrounded SDI: 8.2

#### CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 48.0

Red Oak Smoke Area (%A\*min): 157.5

Tested By: SF

Reviewed By: [Signature]



## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

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Date: 02/24/20

### CAN/ULC S102-18 DATA SHEETS

#### Run 1

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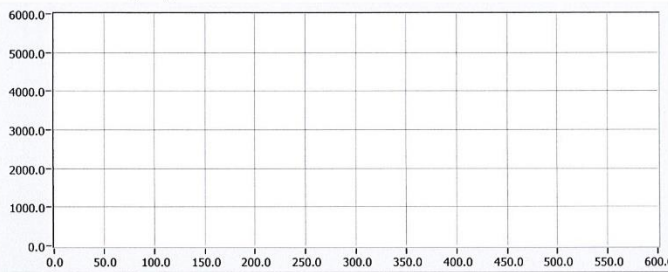
Client: Wayne Building Products

Specimen ID: 6 in. wide Armourside Steel Siding White

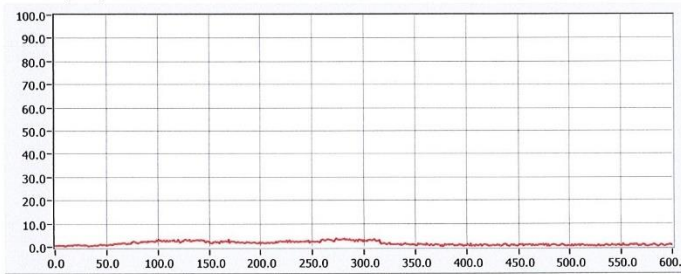
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Standard: ULC S102

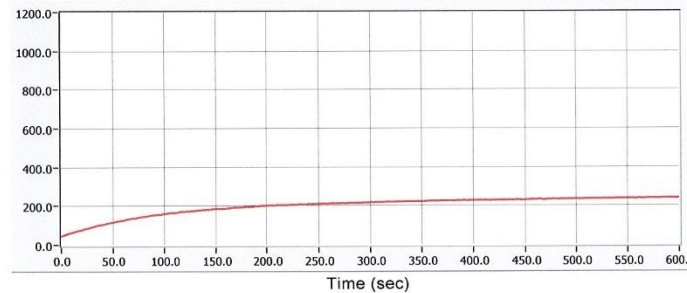
FLAME SPREAD (MM)



Smoke (%A)



Temperature (°C)



Tested By: SF

Reviewed By: [Signature]

## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

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### CAN/ULC S102-18 DATA SHEETS

#### Run 2

Standard: ULC S102

Page 1 of 2

Client: Wayne Building Products

Date: 01 16 2020

Project Number: 104175306

Test Number: 2

Operator: Sean Fewer

Specimen ID: 6 in. wide Armourside Steel Siding White

#### TEST RESULTS

**FLAMESPREAD INDEX: 0**

**SMOKE DEVELOPED INDEX: 15**

#### SPECIMEN DATA . . .

Time to Ignition (sec): 0

Time to Max FS (sec): 0

Maximum FS (mm): 0.0

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 243

Time to Max Temperature (sec): 598

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 0.0

Smoke Area (%A\*min): 20.2

Unrounded FSI: 0.0

Unrounded SDI: 12.8

#### CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 48.0

Red Oak Smoke Area (%A\*min): 157.5

Tested By: SF

Reviewed By: [Signature]

## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

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### CAN/ULC S102-18 DATA SHEETS

#### Run 2

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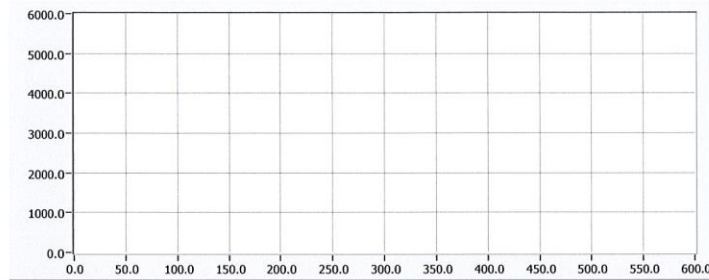
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Specimen ID: 6 in. wide Armourside Steel Siding White

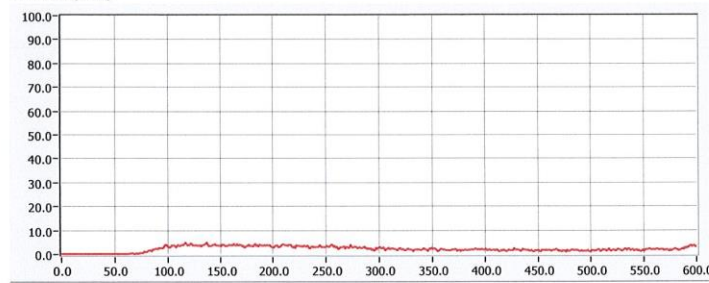
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Standard: ULC S102

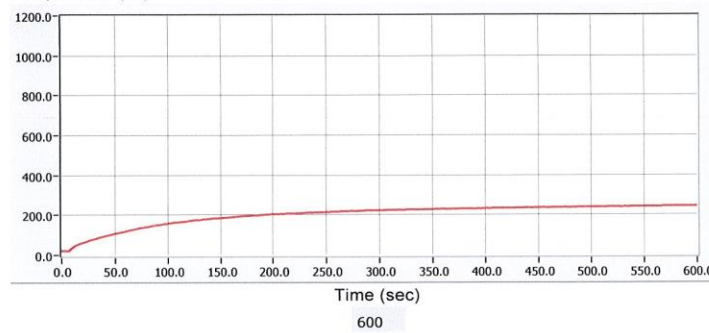
#### FLAME SPREAD (MM)



#### Smoke (%A)



#### Temperature (°C)



Tested By: SF

Reviewed By: [Signature]

## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

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Date: 02/24/20

### CAN/ULC S102-18 DATA SHEETS

#### Run 3

Standard: ULC S102

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Client: Wayne Building Products

Date: 01 16 2020

Project Number: 104175306

Test Number: 3

Operator: Sean Fewer

Specimen ID: 6 in. wide Armourside Steel Siding White

#### TEST RESULTS

**FLAMESPREAD INDEX: 0**

**SMOKE DEVELOPED INDEX: 10**

#### SPECIMEN DATA . . .

Time to Ignition (sec): 0

Time to Max FS (sec): 0

Maximum FS (mm): 0.0

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 243

Time to Max Temperature (sec): 572

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 0.0

Smoke Area (%A\*min): 14.8

Unrounded FSI: 0.0

Unrounded SDI: 9.4

#### CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 48.0

Red Oak Smoke Area (%A\*min): 157.7

Tested By: SF

Reviewed By: [Signature]

## TEST REPORT FOR WAYNE BUILDING SYSTEMS INC.

Report No.: 104175306COQ-002 R0

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### CAN/ULC S102-18 DATA SHEETS

#### Run 3

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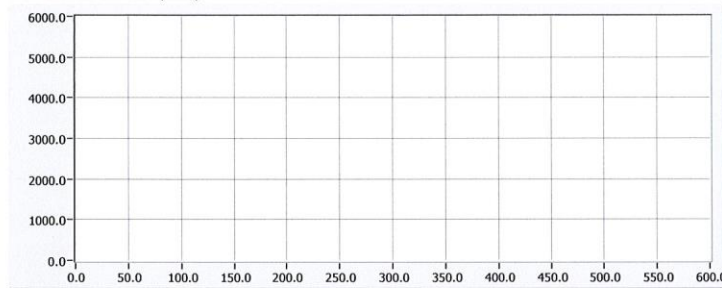
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Specimen ID: 6 in. wide Armourside Steel Siding White

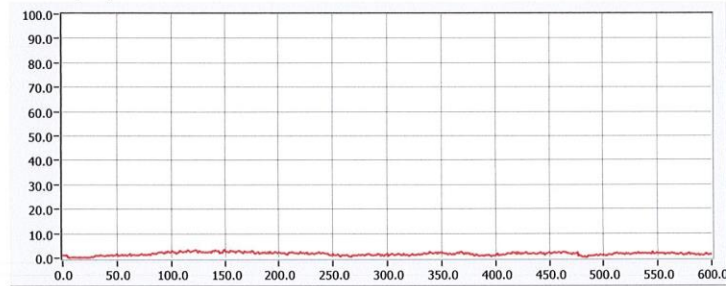
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Standard: ULC S102

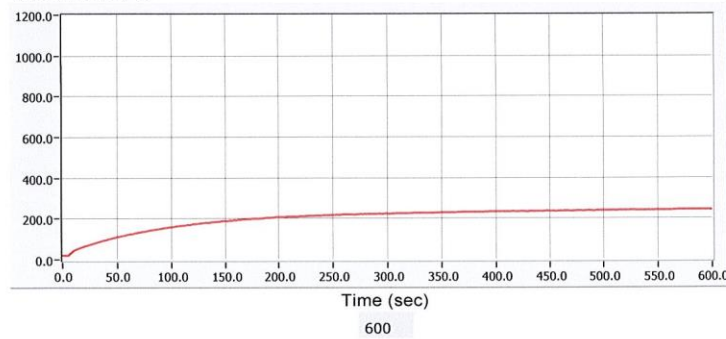
#### FLAME SPREAD (MM)



#### Smoke (%A)



#### Temperature (°C)



Tested By: SF

Reviewed By: [Signature]



Total Quality. Assured.

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1500 Brigantine Drive  
Coquitlam, BC V3K 7C1

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[www.intertek.com/building](http://www.intertek.com/building)

**SECTION 12**  
**REVISION LOG**

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