

# Wayne Building Products Inc. TEST REPORT

#### **REPORT ISSUED TO**

Wayne Building Products Inc. 12603-123 Street Edmonton, AB T5L 0H9

#### **SCOPE OF WORK**

Report of testing 6 in. wide Lux V Groove Steel Panels for compliance with the applicable requirements of the following criteria: CAN/ULC S102-10, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

**REPORT NUMBER** 103251249COQ-001

ISSUE DATE 11-October-2017 PAGES 14

DOCUMENT CONTROL NUMBER GFT-OP-10b (13-March-2017) © 2017 INTERTEK





Report No.: 103251249 Date: October 11, 2017

# CONCLUSION

1500 Brigantine Drive Coquitlam, BC, V3K 7C1

Telephone: 604-520-3321 Facsimile: 604-524-9186 www.intertek.com

The samples of 6 in. wide Lux V Groove Steel Panels, submitted by Wayne Building Products Inc., were tested in accordance with CAN/ULC S102-10, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

The product test results are presented in Section 7 of this report.

hullett.

Salvatore Balletta TECHNICIAN BUILDING PRODUCTS

Thiles Greg Philp

Reviewer BUILDING PRODUCTS CANADA

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute Intertek's Reports and then only in their entirety, and the Client shall not use the Reports in a misleading manner. In the event any portion of this report becomes public, including but not limited to press releases, articles, and marketing material, without prior written consent from Intertek, Intertek may enforce the reproduction of the report in its entirety by making the full report public. Client further agreement and understands that reliance upon the Reports is limited to the representations made therein. In the event any portion of this report becomes public, including but not limited to press releases, articles, and marketing material, without prior written consent from Intertek, Intertek will enforce the reproduction of the report in its entirety by making the full report public. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. Should Customer use an Intertek Report, in whole or in part, in such a manner as to involve Intertek in legal controversy or to adversely affect Intertek's custody and control which relate to the customer for the purpose of offering any necessary defense or rebuttal to such circumstances. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

# **SECTION 1**

# INDEX

SECTION NAMES	PAGE	
Objective	4	
Sample Selection	4	
Sample and Assembly Description	4	
Testing and Evaluation Methods 5		
Results and Observations	6	
Conclusion	7	
APPENDEX –A TEST DATA 6 Pa		
Revision Summary		

Date: October 11, 2017

## **SECTION 2**

### OBJECTIVE

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Wayne Building Products Inc. to evaluate the surface burning characteristics of 6 in. wide Lux V Groove Steel Panels. Testing was conducted in accordance with the standard methods of CAN/ULC S102-10, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

This evaluation began October 11, 2017 and was completed October 11, 2017.

## **SECTION 3**

#### SAMPLE SELECTION

Samples were submitted to Intertek directly from the client and were not independently selected for testing. The sample material was received at the Evaluation Center on September 20, 2017.

#### **SECTION 4**

## SAMPLE ASSEMBLY AND 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  $23 \pm 3^{\circ}$ C ( $73.4 \pm 5^{\circ}$ F) and  $50 \pm 5\%$  relative humidity.

The sample material was identified by the client as a 6 in. wide Lux V Groove Steel Panels.

For each trial run, Four 6 in. wide by 6 ft. long pieces were screwed together using steel splines to form 24 in. wide sample panels. Four panels 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 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 S102-10.

Date: October 11, 2017

# SECTION 5 TESTING AND EVALUATION METHODS

# **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 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 6 RESULTS AND OBSERVATIONS

#### (A) Flame Spread

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

6 in. wide Lux V Groove Steel Panels	Flame Spread	Flame Spread Rating
Run 1	0	
Run 2	2	0
Run 3	2	

#### (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 Lux V Groove Steel Panels	Smoke Developed	Smoked Developed Classification	
Run 1	5		
Run 2	4	5	
Run 3	6		

## (C) Observations

During the test runs, there was no visible surface ignition. This was the case for all three test runs.

Date: October 11, 2017

## **SECTION 7**

## CONCLUSION

The samples of 6 in. wide Lux V Groove Steel Panels submitted by Wayne Building Products Inc., exhibited the following flame spread characteristics when tested in accordance with CAN/ULC S102-10, 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 Lux V Groove Steel Panels	0	5	

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

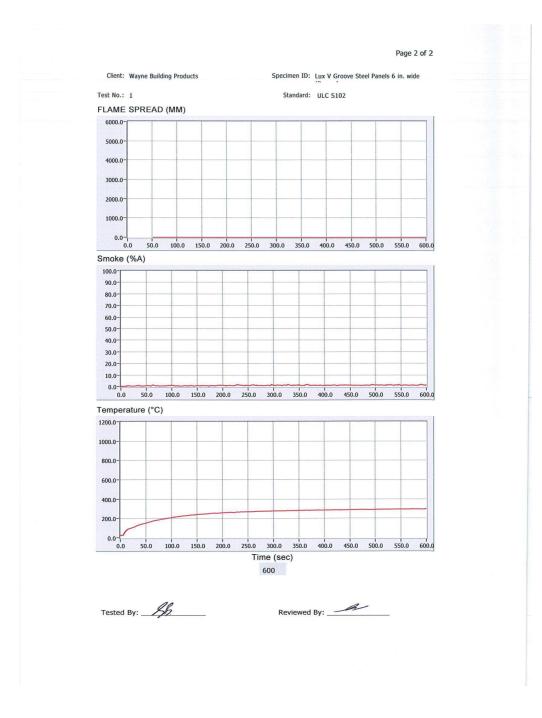
Date: October 11, 2017

Report No.: 1032512490Q-001

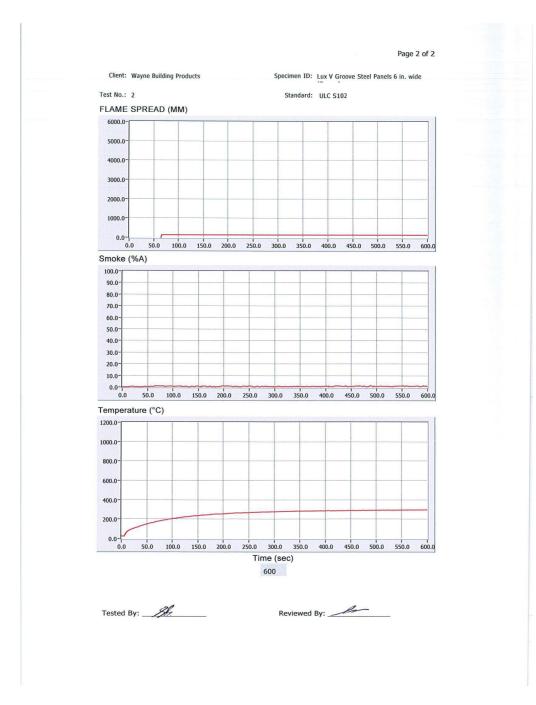
SECTION 8

APPENDIX A: TEST DATA (6 PAGES)

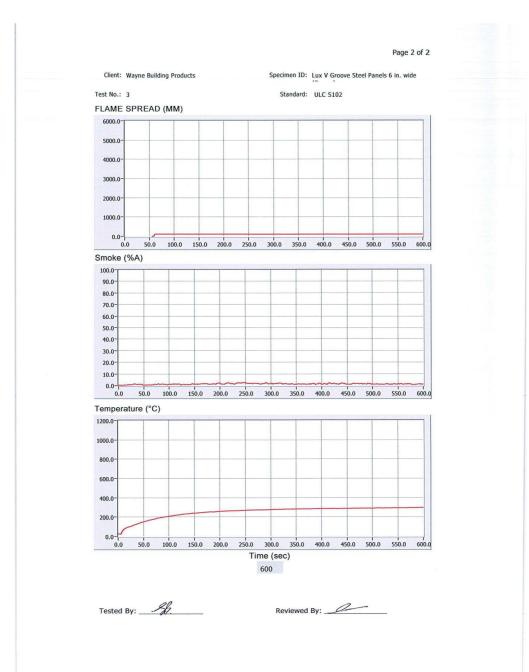
Standard:	ULC S	102		Page 1 of 2	
Client:	Wayne Building Products				
Date:	10 11 2017				
Project Number:	103251249				
Test Number:					
Operator:	Salvatore Balletta				
Creating and ID	Lun V Oregue Otagl Dangla	O la vuida (Daav			
Specimen ID:	Lux V Groove Steel Panels	6 In. wide (Brow	(n)		
TEST RESULTS					
IEST RESOLTS					
	FLAMESPREAD INDEX: (				
	FLAMESPREAD INDEA:	J			
SMO	KE DEVELOPED INDEX:	5			
SPECIMEN DATA	•				
	Time to Ignition (sec):	0			
	Time to Max FS (sec): (				
	Maximum FS (mm): (				
	Time to 527 C (sec): I				
Tie	ne to End of Tunnel (sec):				
100					
	Max Temperature (C): 2				
	Max Temperature (sec):				
Total	Fuel Burned (cubic feet):	46.01			
	FS*Time Area (M*min):				
	Smoke Area (%A*min):				
	Unrounded FSI:				
	Unrounded SDI:	5.2			
CALIBRATION DATA					
Time to Ignition	of Last Red Oak (Sec):	42.0			
Red Oak	Smoke Area (%A*min):	179.0			
ited bait					
00	,			0	
Tested By:			Reviewed By:	A	



Standard:	ULC S1	02		Page 1 of 2	
	ayne Building Products				
Date: 10					
Project Number: 10	3251249				
Test Number: 2					
Operator: Sa	Ivatore Balletta				
Specimen ID: Lu	x V Groove Steel Panels 6	in. wide (Brow	n)		
TEST RESULTS					
FL	AMESPREAD INDEX: 0				
SMOKE	DEVELOPED INDEX: 5				
SPECIMEN DATA					
of Ediment DATA					
	Time to Ignition (sec): 0				
	Time to Max FS (sec): 15	2			
	Maximum FS (mm): 13				
	Time to 527 C (sec): Ne				
Time t	o End of Tunnel (sec): Ne				
	Max Temperature (C): 29	6			
	ax Temperature (sec): 59				
Total Fu	el Burned (cubic feet): 46	.01			
	S*Time Area (M*min): 1.2				
S	moke Area (%A*min): 6.2 Unrounded FSI: 2.2				
	Unrounded SDI: 3.5				
		-			
CALIBRATION DATA					
Time to lanition of	Last Red Oak (Sec): 42	20			
	noke Area (%A*min): 17				
		0.0			
n			1	1	
Tested By:			Reviewed By:		



Standard:	ULC S102	Pa	ge 1 of 2
Client: Wayne Bu	ilding Products		
Date: 10 11 20	17		
Project Number: 10325124	49		
Test Number: 3			
Operator: Salvatore I	Balletta		
- Province Andrewski - Andrews			
Specimen ID: Lux V Gro	ove Steel Panels 6 in. wide	(Brown)	
TEST RESULTS			
FLAMESF	PREAD INDEX: 0		
SMOKE DEVEL	OPED INDEX: 5		
SPECIMEN DATA			
Time to	o Ignition (sec): 0		
Time to	Max FS (sec): 110		
Maxi	mum FS (mm): 109.2		
Time	to 527 C (sec): Never Reac	hed	
Time to End of	of Tunnel (sec): Never Reac	hed	
Max Te	emperature (C): 297		
Time to Max Tem	perature (sec): 595		
Total Fuel Burne	ed (cubic feet): 46.01		
	e Area (M*min): 1.0		
	Area (%A*min): 11.6		
	Jnrounded FSI: 1.8 Jnrounded SDI: 6.5		
	mounded ODI. 0.0		
CALIBRATION DATA			
Time to Ignition of Last Re	ed Oak (Sec): 42.0		
	rea (%A*min): 179.0		
Red Oak Shoke A	rea (%A mm). 179.0		
Tested By:		Reviewed By:	
rested by: <u>///</u> .		Reviewed By:	



#### **REVISION SUMMARY**

DATE	PAGE	SUMMARY
October 11, 2017	All	