

TEST REPORT

Intertek

REPORT NUMBER: 100376821COQ-001
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EVALUATION CENTER
Intertek Testing Services NA Ltd.
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RENDERED TO

Domtek Inc.
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PO Box 20078
Brandon, MB R7A 6Y8

PRODUCT EVALUATED: Trusscore PVC Liner Panels - M
EVALUATION PROPERTY: Surface Burning Characteristics

Report of Testing Trusscore PVC Liner Panels - M for compliance with the applicable requirements of the following criteria: CAN/ULC S102.2-10, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies.*

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2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Domtek Inc., to evaluate the surface burning characteristics of Trusscore PVC liner panel - M. Testing was conducted in accordance with the standard methods of CAN/ULC S102.2-10, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies*.

This evaluation began April 12, 2011 and was completed the same day.

3 Test Samples

3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client and were not independently selected for testing. The sample materials were received at the Evaluation Center on April 8, 2011.

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

SAMPLE AND ASSEMBLY DESCRIPTION

The samples were described by the client as Trusscore PVC Liner Panel – M. These panels measured 5 ft. long by 13 in. wide by 1/2 in. thick.

For each trial run, five panels 13 in. wide and five panels 4-1/2 in. wide were placed on the floor to make up the required sample width of 17-1/2 in. and butted together for the full length of the tunnel (24 ft). A layer of 6mm reinforced cement board was placed on the upper ledge of the tunnel, the tunnel lid was lowered into place, and the samples were then tested in accordance with CAN/ULC S102.2-10.

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 asbestos-cement board.

(A) Flame Spread Classification:

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.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

(A) Flame Spread

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

Trusscore PVC Liner Panel - M	Flame Spread	Flame Spread Classification
Run 1	3	5
Run 2	4	
Run 3	3	

(B) Smoke Developed

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

Trusscore PVC Liner Panel - M	Smoke Developed	Smoke Developed Classification
Run 1	370	345
Run 2	311	
Run 3	357	

(C) Observations

During the tests, the sample surface ignited at 27 to 31 seconds, the flame began to progress along the sample until it reached the maximum flame spread.

6 Conclusion


The samples of Trusscore PVC Liner Panel - M, submitted by Domtek Inc., exhibited the following flame spread characteristics when tested in accordance with CAN/ULC S102.2-10, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies*.


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

Sample Material	Flame Spread Classification	Smoke Developed Classification
Trusscore PVC Liner Panel - M	5	345

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 – Construction Products Testing

Reviewed by: 
Scott Leduc, EIT
Reviewer, Fire Testing

GP

APPENDIX A

DATA SHEETS

CAN/ULC S102.2-10 DATA SHEETS
Run 1

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Domtek Manufacturing
Date: 04/12/2011
Project Number: G100376821
Test Number: 1
Operator: Greg Philp
Specimen ID: Trusscore PVC Liner Panel M

TEST RESULTS

FLAMESPREAD INDEX: 5
SMOKE DEVELOPED INDEX: 370

SPECIMEN DATA . . .

Time to Ignition (sec): 30
Time to Max FS (sec): 545
Maximum FS (mm): 423.7
Time to 527 C (sec): Never Reached
Time to End of Tunnel (sec): Never Reached
Max Temperature (C): 285
Time to Max Temperature (sec): 598
Total Fuel Burned (cubic feet): 44.00

FS*Time Area (M²*min): 1.5
Smoke Area (%A*min): 427.3
Unrounded FSI: 2.8
Unrounded SDI: 370.3

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 40.0
Red Oak Smoke Area (%A*min): 115.4

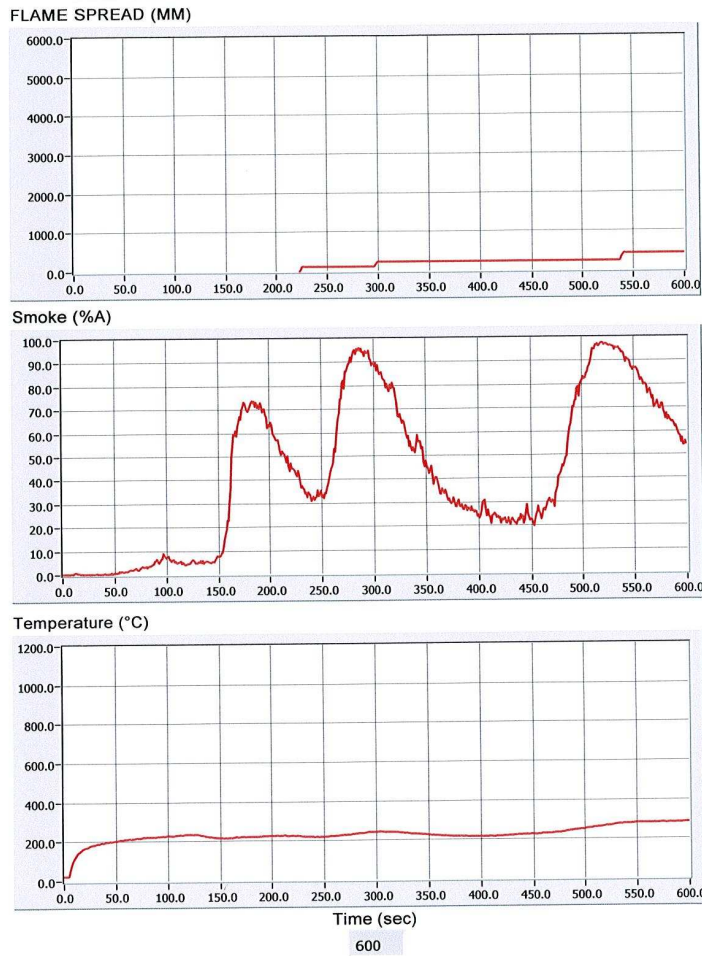
Tested By: GP

Reviewed By: SE

CAN/ULC S102.2-10 DATA SHEETS Run 1

Page 2 of 2

Client: Domtek Manufacturing Specimen ID: Trusscore PVC Liner Panel M
Test No.: **G100376821** Standard: Canadian ULC S102.2



Tested By: SP

Reviewed By: SL

CAN/ULC S102.2-10 DATA SHEETS
Run 2

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Domtek Manufacturing
Date: 04/12/2011
Project Number: G100376821
Test Number: 2
Operator: Greg Philp
Specimen ID: Trusscore PVC Liner Panel M

TEST RESULTS

FLAMESPREAD INDEX: 5
SMOKE DEVELOPED INDEX: 310

SPECIMEN DATA . . .

Time to Ignition (sec): 27
Time to Max FS (sec): 594
Maximum FS (mm): 403.5
Time to 527 C (sec): Never Reached
Time to End of Tunnel (sec): Never Reached
Max Temperature (C): 262
Time to Max Temperature (sec): 600
Total Fuel Burned (cubic feet): 44.00

FS*Time Area (M*min): 2.1
Smoke Area (%A*min): 358.5
Unrounded FSI: 3.9
Unrounded SDI: 310.7

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 40.0
Red Oak Smoke Area (%A*min): 115.4

Tested By: 

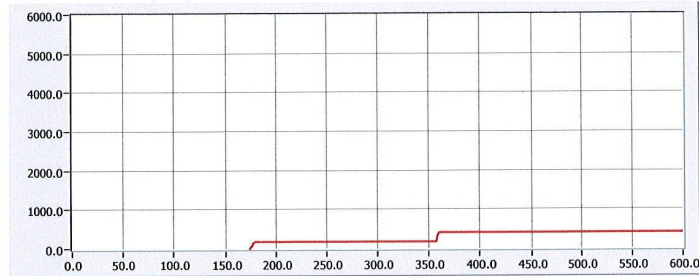
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CAN/ULC S102.2-10 DATA SHEETS
Run 2

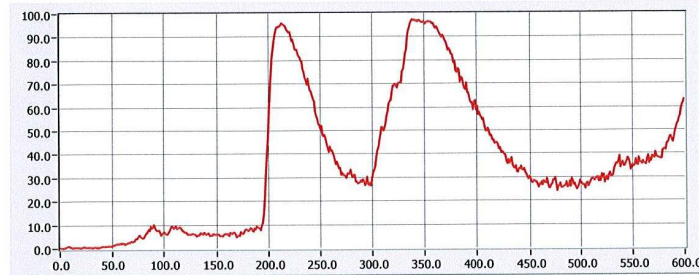
Page 2 of 2

Client: .Domtek Manufacturing Specimen ID: Trusscore PVC Liner Panel M
Test No.: **G100376821** Standard: Canadian ULC S102.2

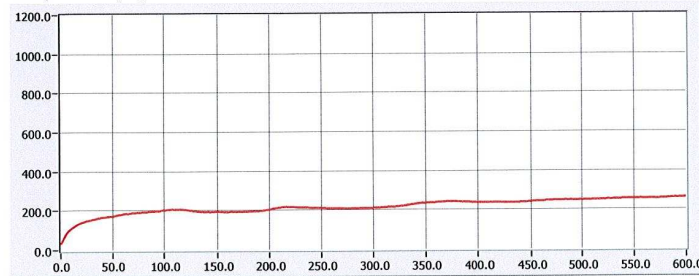
FLAME SPREAD (MM)



Smoke (%A)



Temperature (°C)



Time (sec)

600

Tested By:

Reviewed By:

CAN/ULC S102.2-10 DATA SHEETS
Run 3

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Domtek Manufacturing
Date: 04/12/2011
Project Number: G100376821
Test Number: 3
Operator: Greg Philp
Specimen ID: Trusscore PVC Liner Panel M

TEST RESULTS


FLAMESPREAD INDEX: 5
SMOKE DEVELOPED INDEX: 355

SPECIMEN DATA . . .

Time to Ignition (sec): 31
Time to Max FS (sec): 371
Maximum FS (mm): 336.3
Time to 527 C (sec): Never Reached
Time to End of Tunnel (sec): Never Reached
Max Temperature (C): 253
Time to Max Temperature (sec): 600
Total Fuel Burned (cubic feet): 44.00
FS*Time Area (M*min): 1.9
Smoke Area (%A*min): 411.9
Unrounded FSI: 3.5
Unrounded SDI: 356.9

CALIBRATION DATA . . .

Time to Ignition of Last Red Oak (Sec): 40.0
Red Oak Smoke Area (%A*min): 115.4

Tested By:  _____

Reviewed By:  _____

CAN/ULC S102.2-10 DATA SHEETS Run 3

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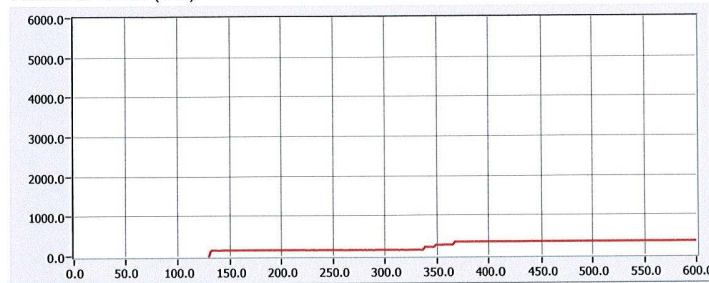
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Specimen ID: Trusscore PVC Liner Panel M

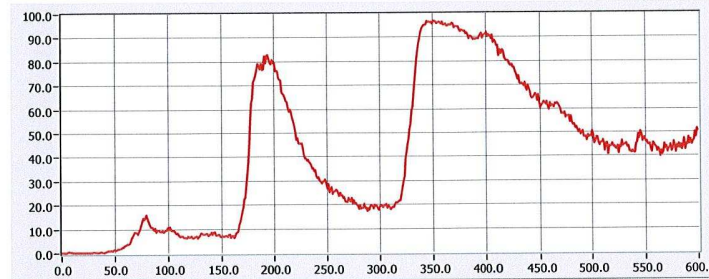
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Standard: Canadian ULC S102.2

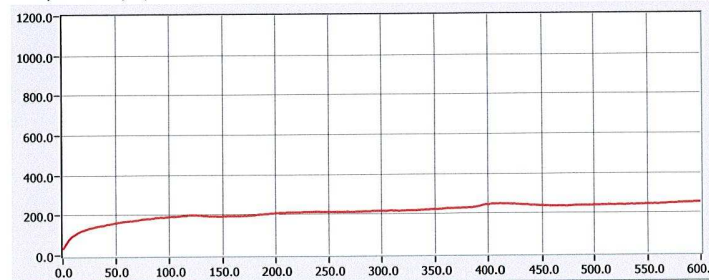
FLAME SPREAD (MM)



Smoke (%A)



Temperature (°C)



Time (sec)

600

Tested By: *[Signature]*

Reviewed By: *[Signature]*

REVISION SUMMARY

DATE	PAGE(S)	SUMMARY	Initial
April 13, 2011	All	Original Issue Date	
April 19, 2011	Cover, header, 3 and 6	Company name was corrected	<i>SL</i>