

# ROOS INTERNATIONAL LTD. TEST REPORT

## SCOPE OF WORK

REPORT OF TESTING WOVEN ROOS INTERNATIONAL GLASS TEXTILE WALLCOVERING PRODUCT TEXTURGLAS TG-4/NOVELIO T-1010 FOR COMPLIANCE WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING CEITERIA: CAN/ULC S102.2-18, STANDARD METHOD OF TESTING FOR SURFACE BURNING CHARACTERISTICS OF FLOORCOVERING, AND MISCELLANEOUS MATERIALS AND ASSEMBLIES.

## REPORT NUMBER

103985060COQ-002 R0

## TEST DATE(S)

07/16/19 - 07/16/19

## ISSUE DATE

07/18/19

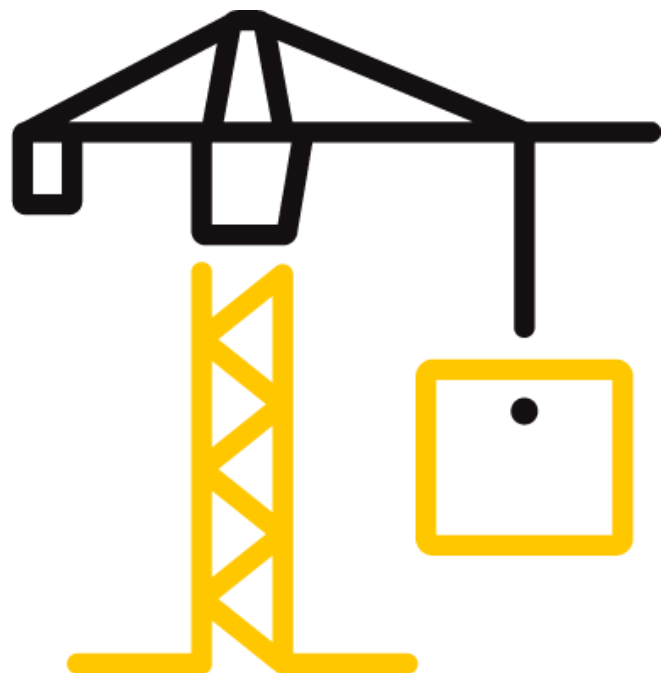
## PAGES

15

## DOCUMENT CONTROL NUMBER

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

© 2017 INTERTEK



## TEST REPORT FOR ROOS INTERNATIONAL LTD.

Report No.: 103985060COQ-002 R0

Date: 07/18/19

### REPORT ISSUED TO

Roos International Ltd.  
1020 NW 6th St STE H  
Deerfield Beach, FL 33442 USA

### SECTION 1

#### SCOPE

Intertek Building & Construction (B&C) was contracted by Roos International Ltd. to perform testing in accordance with S102.2-18 Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies., on their Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novellio T-1010. 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 Woven Roos International Glass Textile Wallcovering product (Texturglas TG-4 Novellio T-1010) submitted by Roos International Ltd. were tested in accordance with S102.2-18, Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies.

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

For INTERTEK B&C:

<b>COMPLETED BY:</b>	Sean Fewer
<b>TITLE:</b>	Technician – B&C
<b>SIGNATURE:</b>	
<b>DATE:</b>	07/18/19

<b>REVIEWED BY:</b>	Greg Philp
<b>TITLE:</b>	Senior Technician – B&C
<b>SIGNATURE:</b>	
<b>DATE:</b>	07/18/19

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 permit copying or distribution of this report and then only in its entirety. 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(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**SECTION 3****TEST METHOD(S)**

The specimens were evaluated in accordance with the following:

**CAN/ULC S102.2-18**, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies.*

**SECTION 4****MATERIAL SOURCE/INSTALLATION**

Samples were submitted to Intertek directly from the client and were not independently selected for testing and Intertek accepts no responsibility for any inaccuracies provided. The sample material was received at the Evaluation Center on June 18, 2019.

**SECTION 5****EQUIPMENT**

ASSET #	DESCRIPTION	MODEL	CAL DUE DATE
WH 2189	Photocell	Huygen 856	05/04/19
WH 2190	Smoke Opacity Meter	Huygen	05/04/19
WH 2494	Data Logger	Yokogawa DA100	07/18/19

**SECTION 6****LIST OF OFFICIAL OBSERVERS**

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

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**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 Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novelio T-1010.

For each trial run, 17 3/8 in. wide by 24 ft. of sample material was placed on the floor of the tunnel. A layer of 6mm reinforced cement board was placed on the upper ledges of the tunnel, the tunnel lid was lowered into place, and the samples were then tested in accordance with CAN/ULC S102.2-18.

## TEST REPORT FOR ROOS INTERNATIONAL LTD.

Report No.: 103985060COQ-002 R0

Date: 07/18/19

### SECTION 9

#### TEST RESULTS

##### (A) Flame Spread

The resultant flame spread ratings are as follows:

(Rating rounded to nearest 5)

Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novelio T-1010	Flame Spread	Flame Spread Rating
Run 1	5	5
Run 2	4	
Run 3	9	

##### (B) Smoke Developed

The areas beneath the smoke developed curve and the related classifications are as follows:

(Classification rounded to nearest 5)

Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novelio T-1010	Smoke Developed	Smoke Developed Classification
Run 1	12	10
Run 2	13	
Run 3	11	

##### (C) Observations

During the test runs, surface ignition occurred at approximately 2 to 3 seconds; the flame then began to progress along the sample length until it reached the maximum flame spread. This was the case for all three test runs.

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**SECTION 10****CONCLUSION**

The samples of Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novelio T-1010 submitted by Roos International Ltd. exhibited the following flame spread characteristics when tested in accordance with S102.2-18, Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous 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
Woven Roos International Glass Textile Wallcovering product Texturglas TG-4 Novelio T-1010	5	10

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.



Total Quality. Assured.

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

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 ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102.2-18 DATA SHEETS****Run 1**

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Roos International

Date: 07 16 2019

Project Number: 103985060

Test Number: 3

Operator: Sean Fewer

Specimen ID: Woven Roos international glass textile wallcovering product textureglas Notes

**TEST RESULTS****FLAMESPREAD INDEX: 5****SMOKE DEVELOPED INDEX: 10****SPECIMEN DATA . . .**

Time to Ignition (sec): 3

Time to Max FS (sec): 89

Maximum FS (mm): 321.6

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 230

Time to Max Temperature (sec): 595

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 2.8

Smoke Area (%A\*min): 18.6

Unrounded FSI: 5.2

Unrounded SDI: 11.8

**CALIBRATION DATA . . .**

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

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

Tested By: SFReviewed By: [Signature]

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102.2-18 DATA SHEETS**

**Run 1**

Page 2 of 2

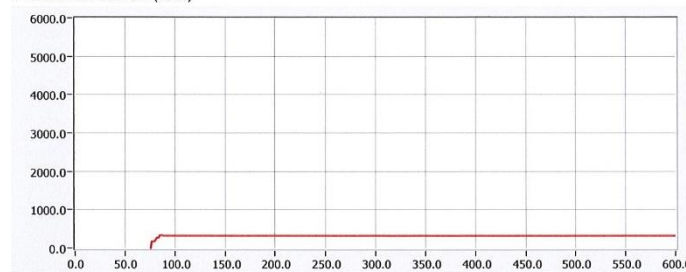
Client: Roos International

Specimen ID: Woven Roos international glass textile

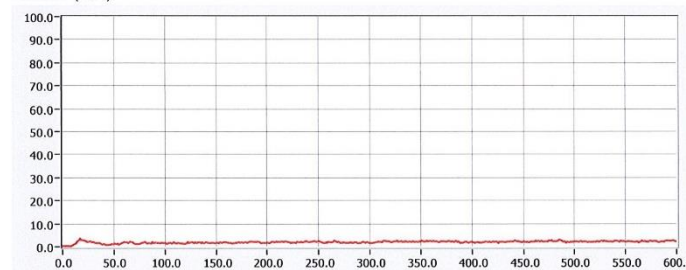
Test No.: 103985060

Standard: Canadian ULC S102.2

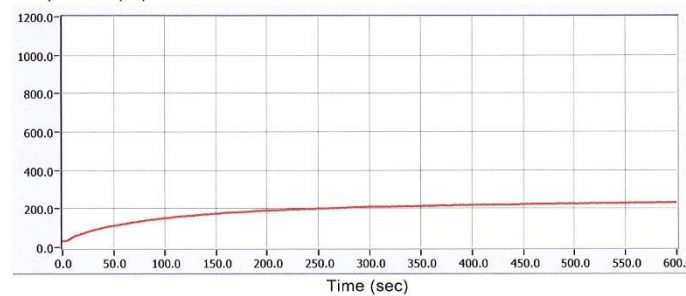
**FLAME SPREAD (MM)**



**Smoke (%A)**



**Temperature (°C)**



Time (sec)

600

Tested By: Sif

Reviewed By: [Signature]

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102.2-18 DATA SHEETS****Run 2**

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Roos International

Date: 07 16 2019

Project Number: 103985060

Test Number: 2

Operator: Sean Fewer

Specimen ID: Woven Roos international glass textile wallcovering product textureglas Notes

**TEST RESULTS****FLAMESPREAD INDEX: 5****SMOKE DEVELOPED INDEX: 15****SPECIMEN DATA . . .**

Time to Ignition (sec): 3

Time to Max FS (sec): 162

Maximum FS (mm): 301.4

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 226

Time to Max Temperature (sec): 590

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 2.3

Smoke Area (%A\*min): 20.3


Unrounded FSI: 4.3

Unrounded SDI: 12.9

**CALIBRATION DATA . . .**

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

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

Tested By: SPReviewed By: 

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102-18 DATA SHEETS**

**Run 2**

Page 2 of 2

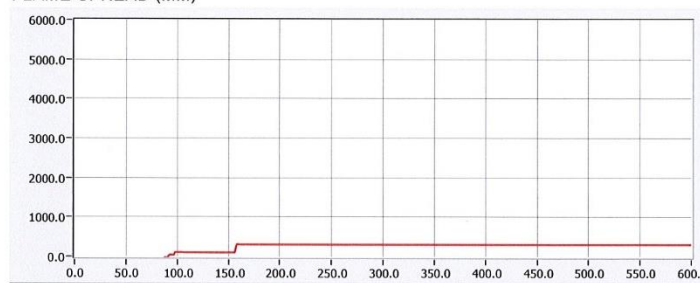
Client: Roos International

Specimen ID: Woven Roos international glass textile

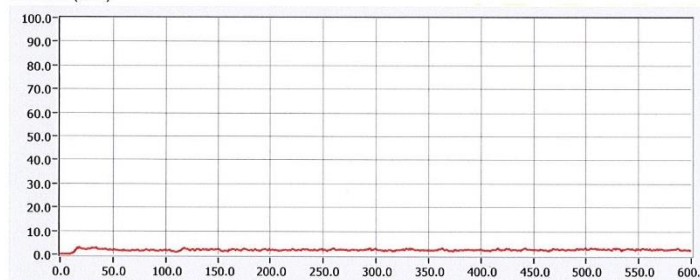
Test No.: 103985060

Standard: Canadian ULC S102.2

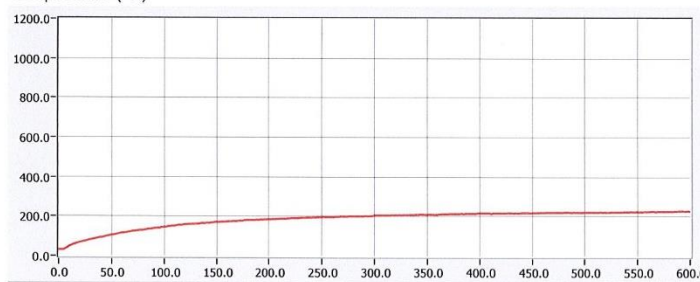
**FLAME SPREAD (MM)**



**Smoke (%A)**



**Temperature (°C)**



Time (sec)

600

Tested By: SF

Reviewed By: [Signature]

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102.2-18 DATA SHEETS****Run 3**

Standard: Canadian ULC S102.2

Page 1 of 2

Client: Roos International

Date: 07 16 2019

Project Number: 103985060

Test Number: 1

Operator: Sean Fewer

Specimen ID: Woven Roos International glass textile wallcovering product Textureglas  
Notes**TEST RESULTS****FLAMESPREAD INDEX: 10****SMOKE DEVELOPED INDEX: 10****SPECIMEN DATA . . .**

Time to Ignition (sec): 2

Time to Max FS (sec): 102

Maximum FS (mm): 543.7

Time to 527 C (sec): Never Reached

Time to End of Tunnel (sec): Never Reached

Max Temperature (C): 234

Time to Max Temperature (sec): 599

Total Fuel Burned (cubic feet): 45.70

FS\*Time Area (M\*min): 4.6

Smoke Area (%A\*min): 17.6

Unrounded FSI: 8.6

Unrounded SDI: 11.2

**CALIBRATION DATA . . .**

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

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

Tested By: SFReviewed By: [Signature]

**TEST REPORT FOR ROOS INTERNATIONAL LTD.**

Report No.: 103985060COQ-002 R0

Date: 07/18/19

**CAN/ULC S102.2-18 DATA SHEETS**

**Run 3**

Page 2 of 2

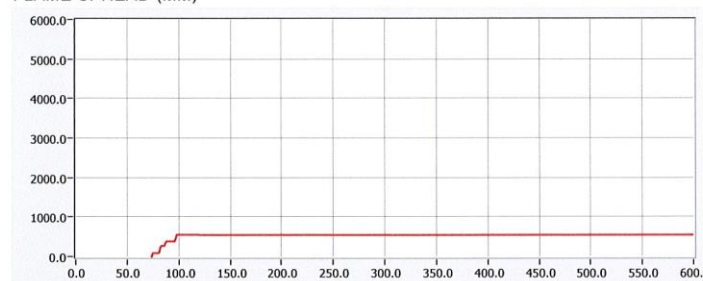
Client: Roos International

Specimen ID: Woven Roos International glass textile

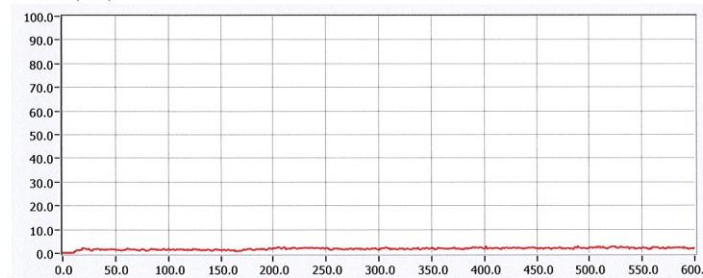
Test No.: 103985060

Standard: Canadian ULC S102.2

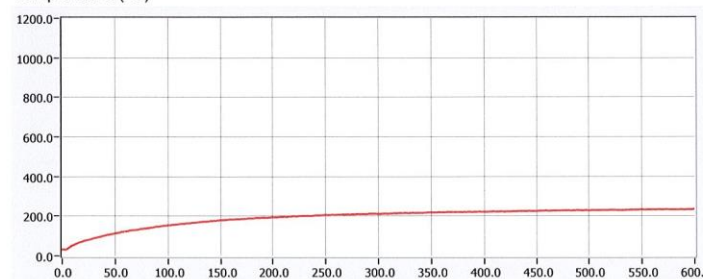
**FLAME SPREAD (MM)**



**Smoke (%A)**



**Temperature (°C)**



Time (sec)

600

Tested By: SF

Reviewed By: [Signature]

## TEST REPORT FOR ROOS INTERNATIONAL LTD.

Report No.: 103985060COQ-002 R0

Date: 07/18/19

### SECTION 12 PHOTOGRAPHS



**Photo No. 1**  
**Pre Test**



**Photo No. 2**  
**Post Test**



Total Quality. Assured.

1500 Brigantine Drive  
Coquitlam, BC V3K 7C1

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

## TEST REPORT FOR ROOS INTERNATIONAL LTD.

Report No.: 103985060COQ-002 R0

Date: 07/18/19

### SECTION 13

#### REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	07/18/19	N/A	Original Report Issue