Lone Henriksen

Phone: 011 45 89 53 18 60

Received:

Completed:

10/28/2021

Kvadrat A/S

Fax: Mobile:

Code:

11/3/2021

Lundbergsvej 10 DK-8400 Ebeltoft

PO#:

**Test Report:** 

3-45692-0

Email:

lh@kvadrat.dk

Denmark

**Key Test:** 

CAN/ULC-S102

3072

Client's Identification:

Style: Ease. Composition: 100% Polyester FR. Weight: 11 g/m<sup>2</sup>.

LE: 2018 V 7/21 DK

PC: ME

CODE: I=1444 F=3072 CLEAN=1050 /dv

TEST PERFORMED: CAN/ULC-S102-10 - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

TEST CONDUCTED:

□ Indicative

PRODUCT CATEGORY: 

Composite Panel Material

BRIEF DESCRIPTION OF TEST METHOD: The method is designed to determine the relative burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical specimens produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification (SDC).

SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 85°C, as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C, as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised, and the test sample is placed along the ledges of the tunnel so as to form a continuous ceiling above the floor and then the lid is lowered. Upon ignition of the gas burners, the flame spread distance is observed and recorded every second. Flame spread distance versus time is plotted, ignoring any flame front recessions. Calculations are based on comparison with flame spread characteristics of select red oak, determined in calibration trials and arbitrarily established as 100. If the area under the curve (AT) is less than or equal to 29.7 m<sup>2</sup>min, FSV=1.85 AT; if greater, FSV=1640/(59.4-AT). The Smoke Developed Value is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, established as 0 and 100, respectively.

JG Ver. 2021-03-09 10:35 Page 1 of 3

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http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/terms-e-document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for a maximum of 45 days only.



Lone Henriksen

Phone: 011 45 89 53 18 60

Received:

Test Report:

10/28/2021

Kvadrat A/S

Fax:

Completed:

11/3/2021

Lundbergsvej 10 DK-8400 Ebeltoft

Mobile: PO#:

Code:

3-45692-0

Email:

lh@kvadrat.dk

Denmark

**Key Test:** 

CAN/ULC-S102

3072

### SAMPLE PREPARATION:

☐ The sample consisted of two sections of materials, each approximately 445 mm in width by 3658 mm in length butted together to form the requisite specimen length. The specimen was free laid (no adhesive) on top of a 6 mm fiberglass reinforced cement board substrate.

☑ Other: The sample consisted of three 8 ft. sections butted end to end to make the 24 ft. length. The specimen was laid over 2" hexagonal wire mesh screen and 1/4" rods.

### REPORTED AS:

□ INDICATIVE (Single Specimen Test):

Flame Spread Value (FSV): Smoke Developed Value (SDV):

Second Formal (Average Value of three replicate tests rounded to the nearest multiple of five points):

Flame Spread Rating (FSR):

Smoke Developed Classification (SDC): 10

# **RESULTS:**

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	0	13	0	0
2	0	10	0	0
3	0	8	0	0

## **OBSERVATIONS:**

- 1. No unusual observations
- 2. No unusual observations
- No unusual observations

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Page 2 of 3

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Lone Henriksen

Phone: 011 45 89 53 18 60

Received:

10/28/2021

Kvadrat A/S

Fax: Mobile: Completed:

11/3/2021

M

Lundbergsvej 10 DK-8400 Ebeltoft

PO#:

Code:

Email:

lh@kvadrat.dk

**Test Report:** 3-45692-0

Denmark

**Key Test:** 

CAN/ULC-S102

3072

REMARKS: None.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

AUTHORIZED SIGNATURE SGS NORTH AMERICA

/jab/dv

Theresa **MacMillan** 

NOV 1 1 2021

Enclosure: 3 Graph Chart (Formal)

IG

Ver. 2021-03-09 10:35

Page 3 of 3

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Test Method

: CAN S-102

Test Report #

: 3-45692-0-M

Date

: 11/3/2021

Client

: Kvadrat A/S

Operator

: Jillian Guillem

Details of Preparation

: The test sample consisted of three 8 ft. sections butted end to end to make the 24 ft. length. The specimen was laid over

2" hexagonal wire mesh screen and 1/4" rods.

Observations

: No unusual observations

	Specimen 1	Specimen 2	Specimen 3
Area Under Flame Curve (m min)	0.00	0.00	0.00
Raw Flame Spread Value (m min)	0.00	0.00	0.00
Rounded Flame Spread Value (m min)	0	0	0
Ignition Time	00:11 mm:ss	00:10 mm:ss	00:15 mm:ss
Area Under Smoke Curve (%A min)	16.40	11.92	9.41
Raw Smoke Developed Value	13.27	9.64	7.62
Rounded Smoke Developed Value	13	10	8
Total Gas Flow(L)	1287.1	1287.1	1287.2
Total Gas Flow(ft³)	45.5	45.5	45.5
Maximum Flame Front Achieved(m)	0 (@0s)	0 (@0s)	0 (@0s)

Flame Spread Rating

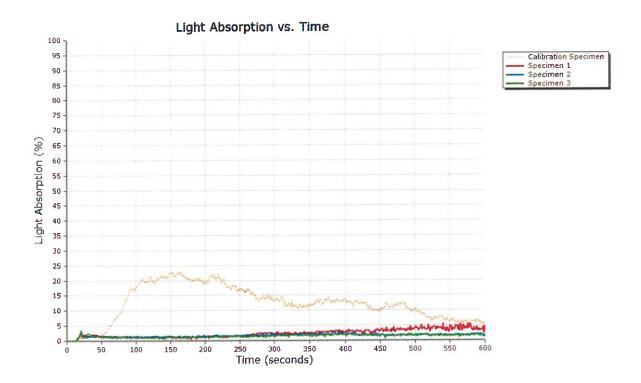
: 0

**Smoke Developed Classification** 

: 10



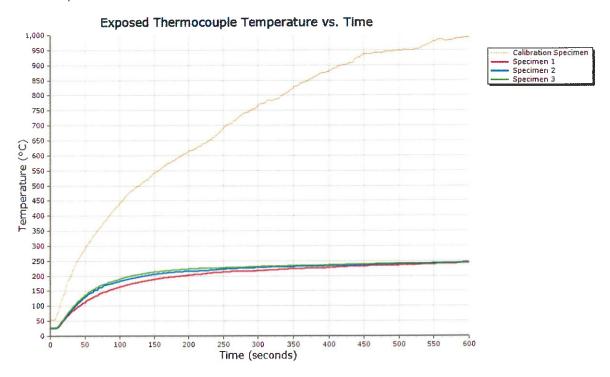
Test Method Test Report # : CAN S-102 : 3-45692-0-M

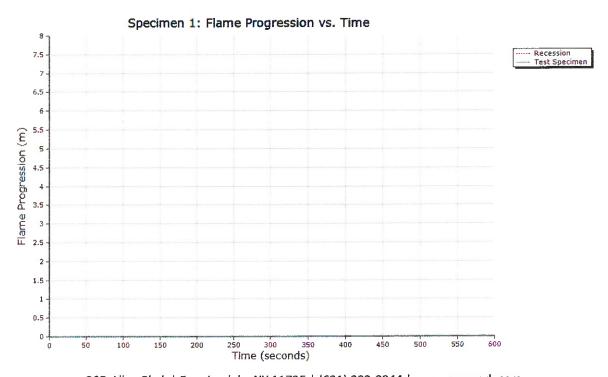




Test Method
Test Report #

: CAN S-102 : 3-45692-0-M

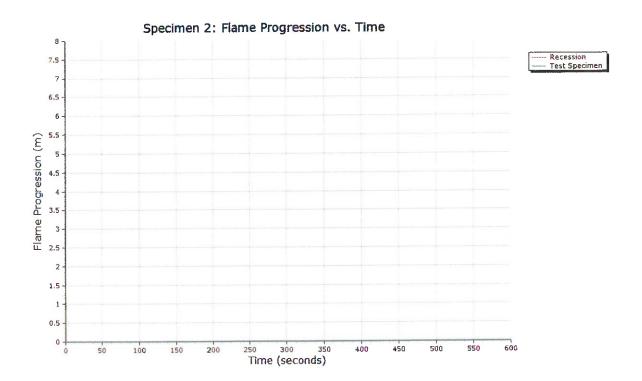




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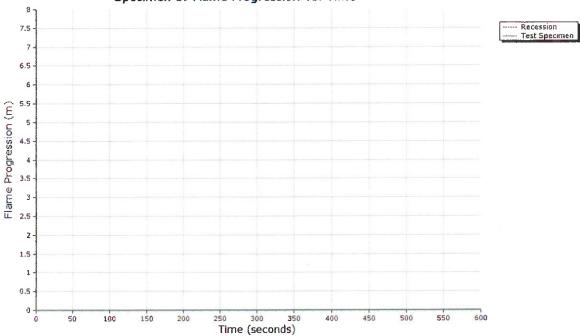
Test Method Test Report # : CAN S-102 : 3-45692-0-M





Test Method Test Report # : CAN S-102 : 3-45692-0-M

Specimen 3: Flame Progression vs. Time





Lone Henriksen

Phone: 011 45 89 53 18 60

Received:

Completed:

10/28/2021

Kvadrat A/S

Fax:

Code:

11/3/2021 N

Lundbergsvej 10 DK-8400 Ebeltoft

Mobile: PO#: Email:

lh@kvadrat.dk

Test Report: 3-45693-0

Denmark

**Key Test:** 

CAN/ULC-S102

1444

Client's Identification:

Style: Sosa. Composition: 100% Polyester FR. Weight: 586 g/m<sup>2</sup>.

LE: 2018 V 7/21 DK

PC: ME

CODE: I=1444 F=3072 CLEAN=1050 /dv

TEST PERFORMED: CAN/ULC-S102-10 - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

**TEST CONDUCTED:** 

Formal

PRODUCT CATEGORY: 

Composite Panel Material

BRIEF DESCRIPTION OF TEST METHOD: The method is designed to determine the relative burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical specimens produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification (SDC).

SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 85°C, as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C, as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised, and the test sample is placed along the ledges of the tunnel so as to form a continuous ceiling above the floor and then the lid is lowered. Upon ignition of the gas burners, the flame spread distance is observed and recorded every second. Flame spread distance versus time is plotted, ignoring any flame front recessions. Calculations are based on comparison with flame spread characteristics of select red oak, determined in calibration trials and arbitrarily established as 100. If the area under the curve (AT) is less than or equal to 29.7 m²min, FSV=1.85 AT; if greater, FSV=1640/(59.4-AT). The Smoke Developed Value is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, established as 0 and 100, respectively.

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Lone Henriksen

Kvadrat A/S

Lundbergsvei 10 DK-8400 Ebeltoft

Fax:

Phone: 011 45 89 53 18 60

Received:

10/28/2021

Completed:

11/3/2021

Code:

Mobile: PO#: Email:

lh@kvadrat.dk

Test Report:

3-45693-0

Denmark

**Key Test:** 

CAN/ULC-S102

1444

# SAMPLE PREPARATION:

☐ The sample consisted of two sections of materials, each approximately 445 mm in width by 3658 mm in length butted together to form the requisite specimen length. The specimen was free laid (no adhesive) on top of a 6 mm fiberglass reinforced cement board substrate.

☑ Other: The test sample consisted of three 8 ft. sections butted end to end to make the 24 ft. length. Test specimen was laid over 2" hexagonal wire mesh and 1/4" steel rods.

### REPORTED AS:

☑ INDICATIVE (Single Specimen Test):

Flame Spread Value (FSV):

Smoke Developed Value (SDV): 90

☐ FORMAL (Average Value of three replicate tests rounded to the nearest multiple of five points):

Flame Spread Rating (FSR):

Smoke Developed Classification (SDC):

# RESULTS:

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	0	90	0	0
2	NT	NT	NT	NT
3	NT	NT	NT	NT

### **OBSERVATIONS:**

- 1. Flaming drip and burning on chamber floor.
- 2. NT
- 3. NT

ΑN

Page 2 of 3

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Lone Henriksen

Kvadrat A/S

Lundbergsvej 10 DK-8400 Ebeltoft

Phone: 011 45 89 53 18 60

Received:

10/28/2021

Completed:

11/3/2021

Code:

**Test Report:** 

3-45693-0

PO#:

Fax:

Email:

Mobile:

lh@kvadrat.dk

Denmark

**Key Test:** 

CAN/ULC-S102

1444

REMARKS: NT = Not tested.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

**AUTHORIZED SIGNATURE** SGS NORTH AMERICA

/jab /dv

AN

Theresa MacMillan

NOV 1 1 2021

Enclosure: 3 Graph Chart (Formal)

Page 3 of 3

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**Test Method** 

: CAN S-102

Test Report #

: 3-45693-0-N

Date

: 11/3/2021

: Kvadrat A/S

Client

Operator

: Andrew Niemczyk

**Details of Preparation** 

: The test sample consisted of three 8 ft. sections butted end

to end to make the 24 ft. length. The specimen was laid over

2" hexagonal wire mesh screen and 1/4" rods.

Observations

: Flaming drip and burning on chamber floor

	Specimen 1
Area Under Flame Curve (m min)	0.00
Raw Flame Spread Value (m min)	0.00
Rounded Flame Spread Value (m min)	0
Ignition Time	00:07 mm:ss
Area Under Smoke Curve (%A min)	333.12
Raw Smoke Developed Value	269.46
Rounded Smoke Developed Value	269
Total Gas Flow(L)	1287
Total Gas Flow(ft³)	45.5
Maximum Flame Front Achieved(m)	0 (@0s)

Flame Spread Rating

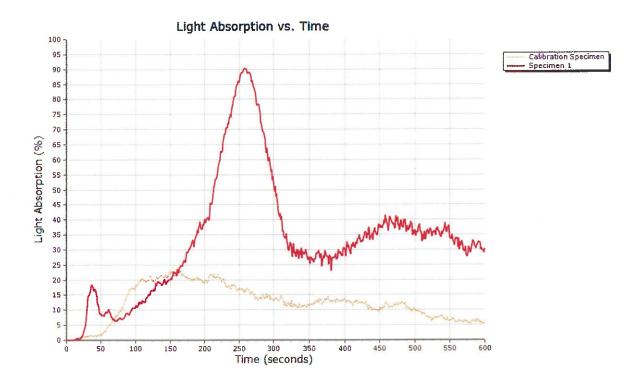
: 0

**Smoke Developed Classification** 

: 90

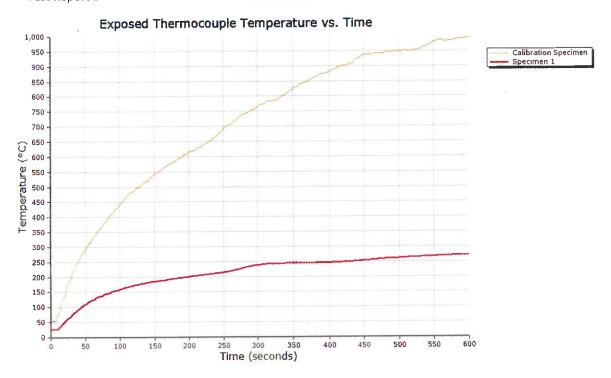


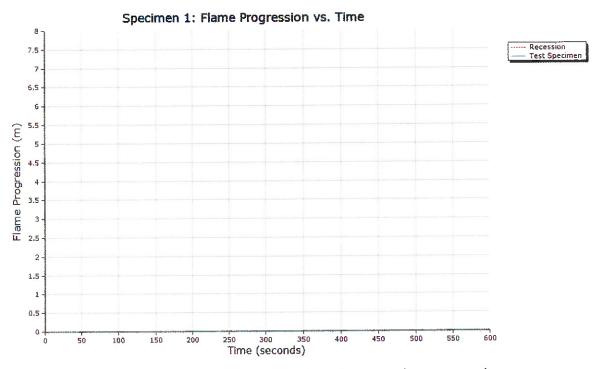
Test Method Test Report # : CAN S-102 : 3-45693-0-N





Test Method Test Report # : CAN S-102 : 3-45693-0-N





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011 45 89 53 18 60 Received: 10/28/2021 **Tested For:** Lone Henriksen Phone: 11/4/2021 Kvadrat A/S Fax: Completed: Mobile: Code: N1 Lundbergsvej 10 DK-8400 Ebeltoft PO#: **Test Report:** 3-45693-1 Emall: lh@kvadrat.dk **Denmark Key Test:** CAN/ULC-S102.2 **Client's Identification:** Style: Sosa. Composition: 100% Polyester FR. Weight: 586 g/m<sup>2</sup>. LE: 2018 V 09/18 PC: ME CODE: I=1375 F=2925 CLEAN=1000 /rb /dv TEST PERFORMED: CAN/ULC-S102.2-18 - Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials TEST CONDUCTED: □ Indicative PRODUCT CATEGORY: 

Composite Panel Material

3072

BRIEF DESCRIPTION OF TEST METHOD: The method is designed to determine the relative burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical specimens produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification

(SDC).

SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 85°C, as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C, as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised, and the test sample is placed along the floor of the tunnel so as to form a continuous surface and then the lid is lowered. Upon ignition of the gas burners, the flame spread distance is observed and recorded every second. Flame spread distance versus time is plotted, ignoring any flame front recessions. Calculations are based on comparison with flame spread characteristics of select red oak, determined in calibration trials and arbitrarily established as 100. If the area under the curve (AT) is less than or equal to 29.7 m²min, FSV=1.85 AT; if greater, FSV=1640/(59.4-AT). The Smoke Developed Value is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, established as 0 and 100, respectively.

JP Ver. 2021-03-09 10:35 Page 1 of 3

The results contained in this report relate only to the item(s) tested. The test report shall not be reproduced except in full, without written approval from SGS North America.



Lone Henriksen

Phone: Fax: 011 45 89 53 18 60

Received: Completed: 10/28/2021 11/4/2021

Kvadrat A/S

Lundbergsvej 10 DK-8400 Ebeltoft

Mobile: PO#: Code:

**Test Report:** 

N1 3-45693-1

Email:

Ih@kvadrat.dk

: lh@kva

Denmark

**Key Test:** 

CAN/ULC-S102.2

3072

# SAMPLE PREPARATION:

☐ The sample consisted of two sections of materials, each approximately 445 mm in width by 3658 mm in length butted together to form the requisite specimen length. The specimen was free laid (no adhesive) on top of a 6 mm fiberglass reinforced cement board substrate.

☑ Other: The specimen was laid on the oven floor. The 7315 mm length was consisted of three 2438 mm sections butted end to end.

### REPORTED AS:

☐ INDICATIVE (Single Specimen Test):

Flame Spread Value (FSV): Smoke Developed Value (SDV):

Flame Spread Rating (FSR): 5 Smoke Developed Classification: 115

## **RESULTS:**

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	5	97	0.5	274
2	9	126	0.6	149
3	7	121	0.6	299

### **OBSERVATIONS:**

JP

- 1. No unusual observations
- 2. No unusual observations
- 3. No unusual observations

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Page 2 of 3

The results contained in this report relate only to the Item(s) tested. The test report shall not be reproduced except in full, without written approval from SGS North America.



Lone Henriksen

Phone:

011 45 89 53 18 60

Received: Completed: 10/28/2021

Kvadrat A/S

Lundbergsvej 10 DK-8400 Ebeltoft Mobile:

11/4/2021 N1

PO#: Email:

Fax:

Code: Test Report:

3-45693-1

Denmark

**Key Test:** 

**CAN/ULC-S102.2** 

lh@kvadrat.dk

3072

REMARKS: None.

ACCEPTANCE CRITERIA: None cited.

CONCLUSION: Not applicable.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

AUTHORIZED SIGNATURE SGS NORTH AMERICA

/jab/dv

Theresa MacMillan

NOV 1 1 2021

Enclosure: Graphs

JP Ver. 2021-03-09 10:35 Page 3 of 3

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**Test Method** 

: CAN S-102

Test Report #

: 3-45693-1-N1

Date

: 11/4/2021

Client

: Kvadrat A/S

Operator

: Joe Philippas

**Details of Preparation** 

: The specimen was laid on the oven floor. The 7315 mm length consisted of three 2438 mm sections butted end to

and

Observations

: No unusual observations.

	Specimen 1	Specimen 2	Specimen 3
Area Under Flame Curve (m min)	2.62	4.70	4.02
Raw Flame Spread Value (m min)	4.85	8.69	7.44
Rounded Flame Spread Value (m min)	5	9	7
Ignition Time	04:16 mm:ss	02:20 mm:ss	03:17 mm:ss
Area Under Smoke Curve (%A min)	120.29	155.22	149.87
Raw Smoke Developed Value	97.30	125.55	121.23
Rounded Smoke Developed Value	97	126	121
Total Gas Flow(L)	1287.9	1287.9	1288.3
Total Gas Flow(ft³)	45.5	45.5	45.5
Maximum Flame Front Achieved(m)	0.5 (@274s)	0.6 (@149s)	0.6 (@299s)

Flame Spread Rating

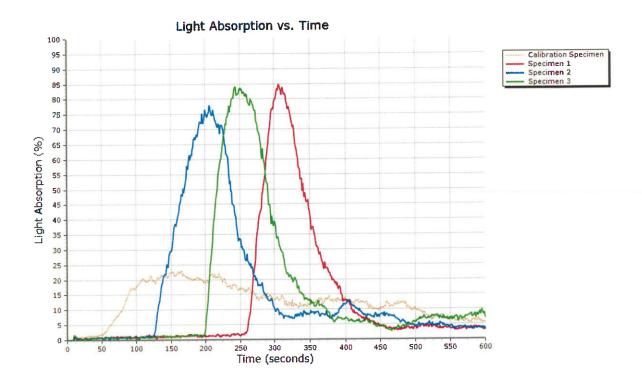
: 5

**Smoke Developed Classification** 

: 115

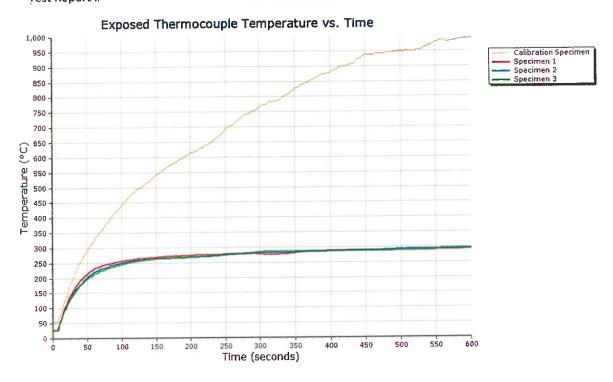


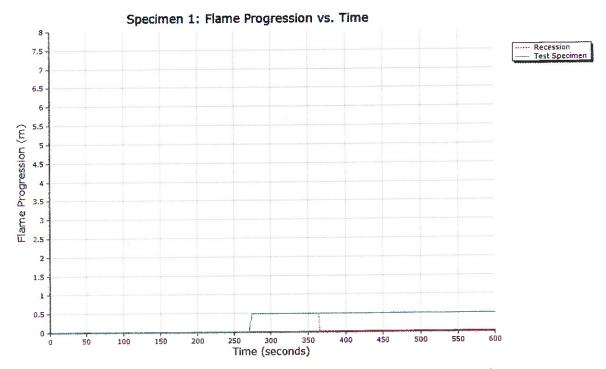
Test Method Test Report # : CAN S-102 : 3-45693-1-N1





Test Method Test Report # : CAN S-102 : 3-45693-1-N1

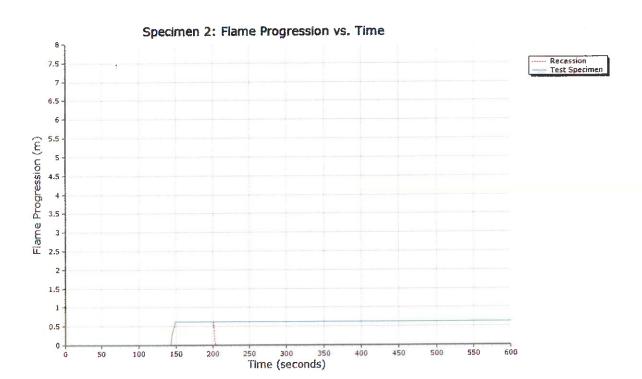




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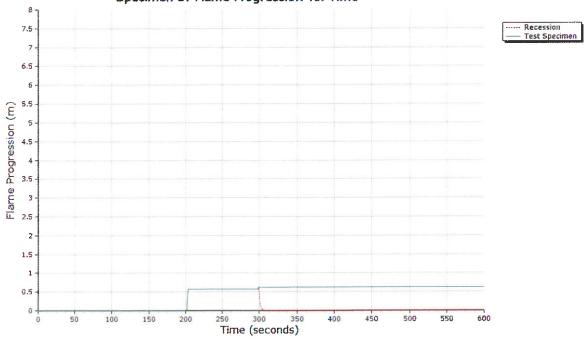
Test Method Test Report # : CAN S-102 : 3-45693-1-N1





Test Method Test Report # : CAN S-102 : 3-45693-1-N1

Specimen 3: Flame Progression vs. Time





Received: 10/28/2021 Phone: 011 45 89 53 18 60 Tested For: Lone Henriksen 11/3/2021 Fax: Completed: Kvadrat A/S Mobile: Code: 0 Lundbergsvej 10 DK-8400 Ebeltoft PO#: Test Report: 3-45694-0 Email: Ih@kvadrat.dk Denmark **Key Test:** CAN/ULC-S102 Client's Identification: Style: Mountain. Composition: 100% Polyester FR. Weight: 286 g/m<sup>2</sup>. CODE: I=1444 F=3072 CLEAN=1050 /dv LE: 2018 V 7/21 DK PC: ME TEST PERFORMED: CAN/ULC-S102-10 - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

1444

TEST CONDUCTED:

☑ Indicative

□ Formal

PRODUCT CATEGORY: 

Composite Panel Material

BRIEF DESCRIPTION OF TEST METHOD: The method is designed to determine the relative burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical specimens produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification (SDC).

SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 85°C, as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C, as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised, and the test sample is placed along the ledges of the tunnel so as to form a continuous ceiling above the floor and then the lid is lowered. Upon ignition of the gas burners, the flame spread distance is observed and recorded every second. Flame spread distance versus time is plotted, ignoring any flame front recessions. Calculations are based on comparison with flame spread characteristics of select red oak, determined in calibration trials and arbitrarily established as 100. If the area under the curve (AT) is less than or equal to 29.7 m<sup>2</sup>min, FSV=1.85 AT; if greater, FSV=1640/(59.4-AT). The Smoke Developed Value is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, established as 0 and 100, respectively.

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Lone Henriksen

Kvadrat A/S

Mobile:

Phone: 011 45 89 53 18 60

Received:

10/28/2021

Completed:

11/3/2021

Code:

O

Test Report:

3-45694-0

Lundbergsvej 10 DK-8400 Ebeltoft

PO#:

Fax:

Ih@kvadrat.dk

Email:

Denmark

**Key Test:** 

CAN/ULC-S102

1444

### SAMPLE PREPARATION:

☐ The sample consisted of two sections of materials, each approximately 445 mm in width by 3658 mm in length butted together to form the requisite specimen length. The specimen was free laid (no adhesive) on top of a 6 mm fiberglass reinforced cement board substrate.

☑ Other: The test sample consisted of three 8 ft. sections butted end to end to make the 24 ft. length. The test specimen was laid over 2" hexagonal wire mesh and 1/4" steel rods.

## REPORTED AS:

☑ INDICATIVE (Single Specimen Test):

Flame Spread Value (FSV):

Smoke Developed Value (SDV): 35

☐ FORMAL (Average Value of three replicate tests rounded to the nearest multiple of five points):

Flame Spread Rating (FSR):

Smoke Developed Classification (SDC):

### RESULTS:

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	0	35	0	0
2	NT	NT	NT	NT
3	NT	NT	NT	NT

## **OBSERVATIONS:**

- 1. Flaming drip and burning on chamber floor.
- 2. NT
- 3. NT

AN

Ver. 2021-03-09 10:35

Page 2 of 3

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Lone Henriksen

Kvadrat A/S

Lundbergsvej 10 DK-8400 Ebeltoft

Fax:

Mobile:

Phone: 011 45 89 53 18 60

Received:

10/28/2021

3-45694-0

Completed:

11/3/2021

Code:

Test Report:

PO#: Email:

Ih@kvadrat.dk

Denmark

**Key Test:** 

CAN/ULC-S102

1444

REMARKS: NT = Not tested.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

AUTHORIZED SIGNATURE SGS NORTH AMERICA

/jab /dv

AN

Theresa MacMillan

NOV 1 1 2021

Enclosure: 3 Graph Chart (Formal)

Page 3 of 3

Ver. 2021-03-09 10:35

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The results contained in this report relate only to the item(s) tested. The test report shall not be reproduced except in full, without written approval from SGS North America.



**Test Method** 

: CAN S-102

Test Report #

: 3-45694-0-0

Date

: 11/3/2021

Client

: Kvadrat A/S

Operator

: Andrew Niemczyk

**Details of Preparation** 

: The test sample consisted of three 8 ft. sections butted end  $\,$ 

to end to make the 24 ft. length. The specimen was laid over

Observations

2" hexagonal wire mesh screen and 1/4" rods. : Flaming drip and burning on chamber floor

	Specimen 1
Area Under Flame Curve (m min)	0.00
Raw Flame Spread Value (m min)	0.00
Rounded Flame Spread Value (m min)	0
Ignition Time	00:09 mm:ss
Area Under Smoke Curve (%A min)	134.79
Raw Smoke Developed Value	109.03
Rounded Smoke Developed Value	109
Total Gas Flow(L)	1287.7
Total Gas Flow(ft³)	45.5
Maximum Flame Front Achieved(m)	0 (@0s)

Flame Spread Rating

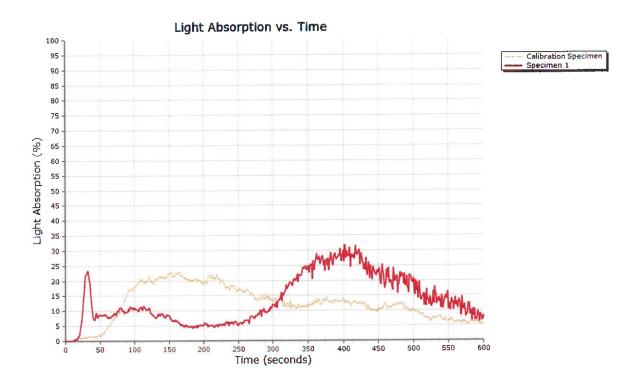
: 0

**Smoke Developed Classification** 

: 35

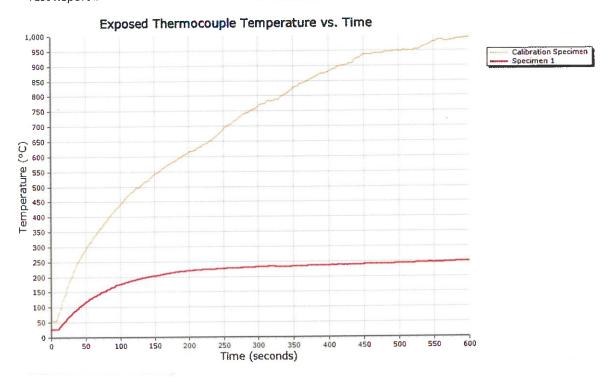


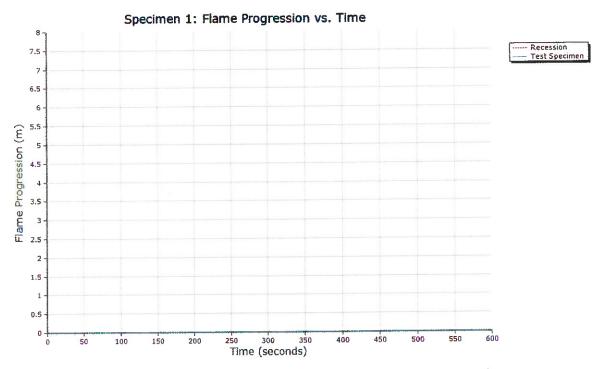
Test Method Test Report # : CAN S-102 : 3-45694-0-0





Test Method Test Report # : CAN S-102 : 3-45694-0-0





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AN

**Tested For:** Lone Henriksen Phone: 011 45 89 53 18 60 Received: 10/28/2021 Kvadrat A/S Fax: Completed: 11/10/2021 Lundbergsvei 10 DK-8400 Ebeltoft Mobile: Code: PO#: **Test Report:** 3-45694-1 Emall: Ih@kvadrat.dk Denmark **CAN/ULC-S102.2 Key Test:** 3072 Client's identification: Style: Mountain. Composition: 100% Polyester FR. Weight: 286 g/m<sup>2</sup>. LE: 2018 V 09/18 PC: ME CODE: I=1375 F=2925 CLEAN=1000 /rb /dv TEST PERFORMED: CAN/ULC-S102.2-18 - Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials TEST CONDUCTED: □ Indicative PRODUCT CATEGORY: 

Composite Panel Material BRIEF DESCRIPTION OF TEST METHOD: The method is designed to determine the relative burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical specimens produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification (SDC). SUMMARY OF TEST PROCEDURE: The tunnel is preheated to 85°C, as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C, as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised, and the test sample is placed along the floor of the tunnel so as to form a continuous surface and then the lid is lowered. Upon ignition of the gas burners, the flame spread distance is observed and recorded every second. Flame spread distance versus time is plotted, ignoring any flame front recessions. Calculations are based on comparison with flame spread characteristics of select red oak, determined in calibration trials and arbitrarily established as 100. If the area under the curve (AT) is less than or equal to 29.7 m<sup>2</sup>min, FSV=1.85 AT; if greater, FSV=1640/(59.4-AT). The Smoke Developed Value is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, established as 0 and 100, respectively.

Ver. 2021-03-09 10:35 Page 1 of 3

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Lone Henriksen Kvadrat A/S Phone: 011

011 45 89 53 18 60

Received:

10/28/2021

Fax: Mobile: Completed:

11/10/2021 01

P0#:

Code: Test Report:

3-45694-1

Email:

lh@kvadrat.dk

Denmark

**Key Test:** 

CAN/ULC-S102.2

Lundbergsvei 10 DK-8400 Ebeltoft

3072

### SAMPLE PREPARATION:

☐ The sample consisted of two sections of materials, each approximately 445 mm in width by 3658 mm in length butted together to form the requisite specimen length. The specimen was free laid (no adhesive) on top of a 6 mm fiberglass reinforced cement board substrate.

☑ Other: The sample consisted of three sections butted end to end to make the 7316 mm length that was tested in the flooring configuration due to melting and dripping when tested in the ceiling configuration.

### REPORTED AS:

□ INDICATIVE (Single Specimen Test):

Flame Spread Value (FSV): Smoke Developed Value (SDV):

☑ FORMAL (Average Value of three replicate tests):

Flame Spread Rating (FSR): 0 Smoke Developed Classification: 70

### RESULTS:

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	0	65	0	0
2	0	66	0	0
3	0	72	0	0

## **OBSERVATIONS:**

- Specimen melted away then ignited.
- 2. Specimen melted away then ignited.
- 3. Specimen melted away then ignited.

AN Ver. 2021-03-09 10:35 Page 2 of 3

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Lone Henriksen

Kvadrat A/S

Lundbergsvej 10 DK-8400 Ebeltoft

Phone: Fax:

011 45 89 53 18 60

lh@kvadrat.dk

Received: Completed: 10/28/2021

Mobile:

Code:

11/10/2021 01

PO#: Emall: **Test Report:** 

3-45694-1

Denmark

**Key Test:** 

CAN/ULC-S102.2

3072

REMARKS: None.

ACCEPTANCE CRITERIA: None cited.

CONCLUSION: Not applicable.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified above.

AUTHORIZED SIGNATURE SGS NORTH AMERICA /iab / QV

Theresa **MacMilla**n

NOV 1 1 2021

Enclosure: Graphs

Page 3 of 3 AN Ver. 2021-03-09 10:35 The results contained in this report relate only to the item(s) tested. The test report shall not be reproduced except in full, without written approval from SGS North America.



**Test Method** 

: CAN S-102

Test Report #

: 3-45694-1-Q1

Date

: 11/10/2021

Client

: Kvadrat A/S

Operator

: Andrew Niemczyk

**Details of Preparation** 

: The sample consisted of three sections butted end to end to make the 7316 mm length that was tested in the flooring configuration due to melting and dripping when tested in the

ceiling configuration.

Observations

: Specimen melted away then ignited

	Specimen 1	Specimen 2	Specimen 3
Area Under Flame Curve (m min)	0.00	0.00	0.00
Raw Flame Spread Value (m min)	0.00	0.00	0.00
Rounded Flame Spread Value (m min)	0	0	0
Ignition Time	04:15 mm:ss	03:20 mm:ss	03:15 mm:ss
Area Under Smoke Curve (%A min)	79.94	81.53	89.04
Raw Smoke Developed Value	64.67	65.95	72.02
Rounded Smoke Developed Value	65	66	72
Total Gas Flow(L)	1287.9	1287.8	1287.8
Total Gas Flow(ft³)	45.5	45.5	45.5
Maximum Flame Front Achieved(m)	0 (@0s)	0 (@0s)	0 (@0s)

Flame Spread Rating

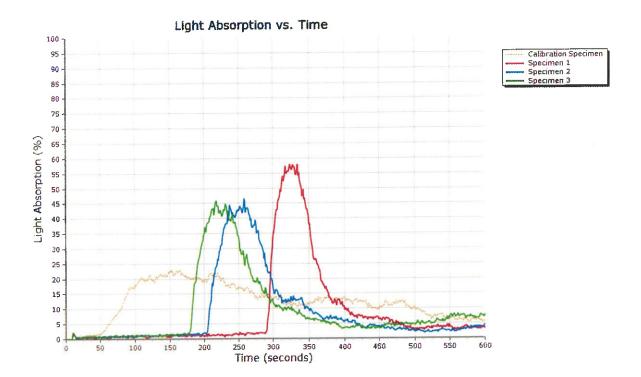
:0

**Smoke Developed Classification** 

: 70

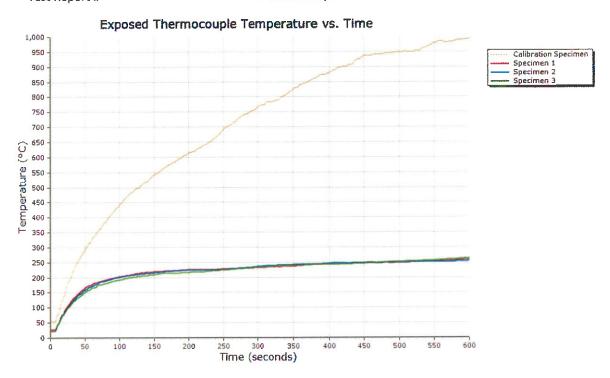


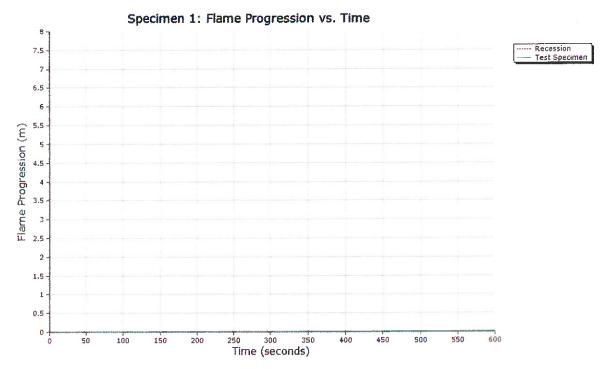
Test Method Test Report # : CAN S-102 : 3-45694-1-Q1





Test Method Test Report # : CAN S-102 : 3-45694-1-Q1

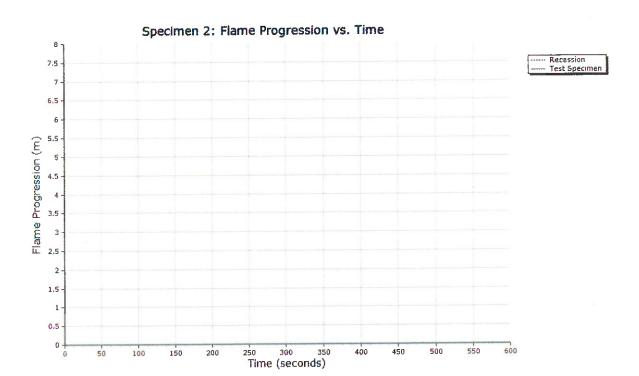




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Test Method Test Report # : CAN S-102 : 3-45694-1-Q1





Test Method
Test Report #

: CAN S-102 : 3-45694-1-Q1

Specimen 3: Flame Progression vs. Time

