Flammability Certificate
6555 Keshi

DESIGNTEX

6555 Keshi was tested and met the following flammability requirements:

ASTM E84 Adhered Class A
CAN/ULC-S102
IMO FTPC 5

©2025 Designtex
800.221.1540
designtex.com
Updated 12.02.25

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

SGS

Tested For:	**Teesha Prezeau**	**Phone:**	(201) 917-7738	**Received:**	5/24/2023
	Designtex	**Fax:**		**Completed:**	5/30/2023
	357 County Avenue	**Mobile:**		**Code:**	J
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-51710-0
	USA	**Email:**	tprezeau@designtex.com		

Key Test: ASTM E84/ACT 735

Client's Identification:

Style: Vinyl WC 20oz. Composition: 100% Vinyl. Finish: Cotton/Polyester Osnaburg. Weight: 20 oz/Lin yd Product End Use: Wallcovering.

Test Category: Tunnel Test Specifier: ACT LE 2023; V 3/23 BG PC: ME

TEST PERFORMED: ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials [LE 2018a; V 9/18] --

As cited by the Association of Contract Textiles (ACT) Voluntary Performance Guidelines (December 2021)

APPROXIMATE THICKNESS OF SPECIMEN (as measured by SGS North America): .020"

SPECIMEN WEIGHT (to include substrate when applicable):

Prior to Conditioning: 97.2 lbs.

Stabilized Weight (taken twice within 24 hours): 96.0 lbs.

PRODUCT CATEGORY:

☐ Textile Type Product
☒ Vinyl Type Product
☐ Other than Textile Type or Vinyl Type Product: _____

BRIEF DESCRIPTION OF TEST: This test method is used to determine the relative burning behavior of a material under defined test conditions. The test is performed in a 25 ft. long tunnel/duct-like apparatus and is often referred to as the "tunnel test". The test contemplates a calibration where Red Oak burns to the 24 ft. mark in 5.5 minutes ± 15 seconds. During the actual test, a 24 ft. long x 23" wide specimen rests horizontally in a ceiling configuration inside the test chamber facing downward and toward two upward oriented burners. A furnace lid that rests in a water trough seals the chamber tight. A cement board placed on the backside of each specimen assembly protects the furnace lid during the test. The near face of the specimen is subjected to a 4.5 ft. flame insult of approximately 88 kW for ten minutes. The time and distance of the spread of flame along the length of the specimen and the smoke developed as read by the photometric system are all recorded. The Flame Spread and Smoke Developed are reported as an Index.

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

SGS

Tested For:	**Teesha Prezeau**	**Phone:**	(201) 917-7738	**Received:**	5/24/2023
	Designtex	**Fax:**		**Completed:**	5/30/2023
	357 County Avenue	**Mobile:**		**Code:**	J
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-51710-0
	USA	**Email:**	tprezeau@designtex.com		

Key Test: ASTM E84/ACT 735

SPECIMEN MOUNTING:

☐ Self-supporting: The test specimen was rigid enough to be self-supporting when placed into test position. No additional support was required.

☒ Adhered to IRC: The test specimen was bonded to ¼" Inorganic Reinforced Cement (IRC) boards.

☐ Adhered to Gypsum: The test specimen was adhered to $^{5}/_{8}$" thick Type X gypsum board.

☐ Unadhered: The specimen was not adhered to any substrate. Instead, it was laid over a 2" hexagonal wire mesh screen and ¼" rods.

☐ Other: _____

SPECIMEN LENGTH: The 24 ft. length was comprised of:

☐ Continuous unbroken 24 ft. length
☒ Sections: ☐ Three 8 ft. sections butted end to end
☐ Three 8 ft. sections positively joined
☒ Four 5 ft. and one 4 ft. sections butted end to end
☐ Other: _____

ADHESIVE (applied by SGS North America): ☐ No
☒ Yes (specify): Roman Pro-880

OBSERVATIONS: ☒ No unusual observations
☐ Burning Drips to Floor further qualified as: ☐ Minor; ☐ Moderate; ☐ Major
☐ Delamination
☐ Sagging
☐ Shrinkage
☐ Fallout (specimen displacement from ceiling mount)
☐ Other: _____

REMARKS: ☒ None
☐ Other: _____

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

SGS

Tested For:	**Teesha Prezeau**	**Phone:**	(201) 917-7738	**Received:**	5/24/2023
	Designtex	**Fax:**		**Completed:**	5/30/2023
	357 County Avenue	**Mobile:**		**Code:**	J
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-51710-0
	USA	**Email:**	tprezeau@designtex.com		

Key Test: ASTM E84/ACT 735

RESULTS: Flame Spread Index: 0
Smoke Developed: 0

ROUNDING: Flame Spread Index value has been rounded to the nearest multiple of 5.
Smoke Developed value has been rounded to:

Raw Data	Rounded
Less than 200	Nearest multiple of 5
200 or more	Nearest multiple of 50

ACCEPTANCE CRITERIA (as cited by ACT):

	Flame Spread Index	Smoke Developed
Class A	0 - 25	450 or less

NOTE: Class A is also known as Class 1 and may be so specified in some Codes.

CONCLUSION: Based on the reported Results and cited Acceptance Criteria, the item tested:

☒ Complies ☐ Does not comply

DATA SUMMARY:

Time to Ignition (minutes:seconds): 02:06
Maximum Flame Spread "Distance" (feet): 0.8
Maximum Flame Spread "Time" (seconds): 437

CODE CLASSIFICATION: Based on the reported Results and cited Code Classification System, the item tested is assigned a:

☒ Class I or A rating
☐ Class II or B rating
☐ Class III or C rating
☐ Fails to achieve a minimum classification thereby rendering the product unsuitable in terms of code requirement.
☐ Based on product performance*, ASTM E84 is not a suitable test method for the material.

* Severe melt, drip, delamination or other behavior that destroys the continuity of the flame front such that a valid flame spread is unobtainable (See "Remarks" on Page 2 of 4.)

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

96 Allen Boulevard Suite D, Farmingdale, NY 11735 USA • Phone: (631) 293-8944 • Email: govmark.test.reports@sgs.com

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

Tested For:	**Teesha Prezeau**	**Phone:**	(201) 917-7738	**Received:**	5/24/2023
	Designtex	**Fax:**		**Completed:**	5/30/2023
	357 County Avenue	**Mobile:**		**Code:**	J
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-51710-0
	USA	**Email:**	tprezeau@designtex.com		

Key Test: ASTM E84/ACT 735

CODE CLASSIFICATION SYSTEM:

	Flame Spread Index	Smoke Developed
Class I or A:	0 - 25	450 or less
Class II or B:	26 - 75	450 or less
Class III or C:	76 - 200	450 or less

LIMITATIONS OF THE ASTM E84 CLASSIFICATION SCHEME: Most building codes will accept the ASTM E84 classifications when the interior finish product is used in a sprinklered area. Certain local authorities such as NYC have more stringent requirements, i.e. Smoke Developed ranges from a maximum 25 to 100.

If the interior finish product is a textile or vinyl wall covering used in a non-sprinklered area, the NFPA 265 room corner fire test applies.

Certain products which give off excessive heat such as but not limited to cellular plastics, cellular foam (either with or without coverings as applicable), polypropylene, and high density polyethylene should be tested by NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth. In SGS North America's opinion, the codes require NFPA 286 for such products, even in sprinklered areas.

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

DocuSigned by:
Bobby Brown
B50EB94D593C454...

5/31/2023

AUTHORIZED SIGNATURE
SGS NORTH AMERICA
/jab /gb

Test Engineer: Chris Gangi

DS
BB

Enclosure: Graphs

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

96 Allen Boulevard Suite D, Farmingdale, NY 11735 USA • Phone: (631) 293-8944 • Email: govmark.test.reports@sgs.com

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

Program: Steiner Tunnel (Version 1.0.3.0)

Test Method	:	ASTM E84
Report #	:	3-51710-0-J
Test Date	:	5/30/2023
Client	:	Designtex
Operator	:	Chris Gangi
Details of Preparation	:	The test specimen was bonded to 1/4'' IRC (Inorganic Reinforced Cement) boards. The 24 ft. length was comprised of four 5 ft. and one 4 ft. sections butted end to end.
Observations	:	No unusual observations.

Results

Area Under Flame Curve (ft min)	:	2.60
Raw Flame Spread Index	:	1.34
Ignition Time (mm:ss)	:	02:06
Area Under Smoke Curve (%A min)	:	1.40
Raw Smoke Developed Index	:	1.77
Total Gas Flow (ft^3)	:	56.4
Maximum Flame Front Achieved (ft)	:	0.8 @ 437s
Flame Spread Index	:	**0**
Smoke Developed Index	:	**0**
Material Classification	:	**A**

CERTIFICATION : I certify that the above results were obtained after testing the specimens in accordance with the procedures and equipment specified by ASTM E84

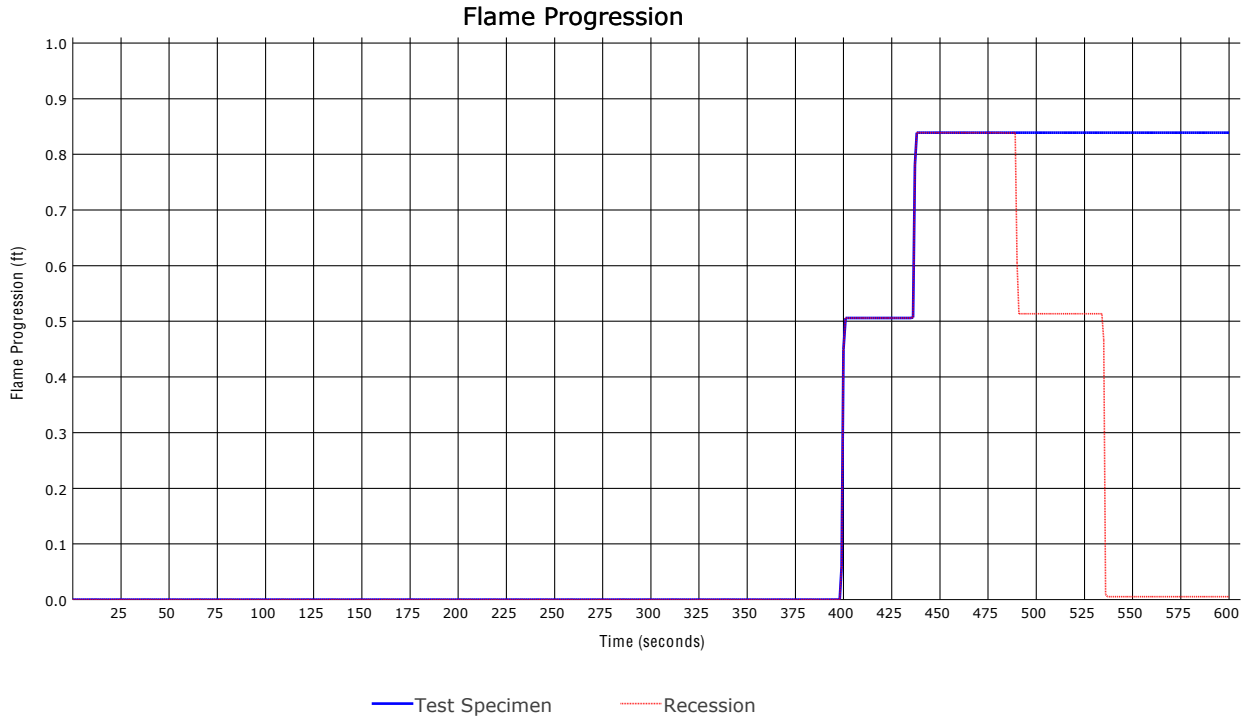
Chris Gangi

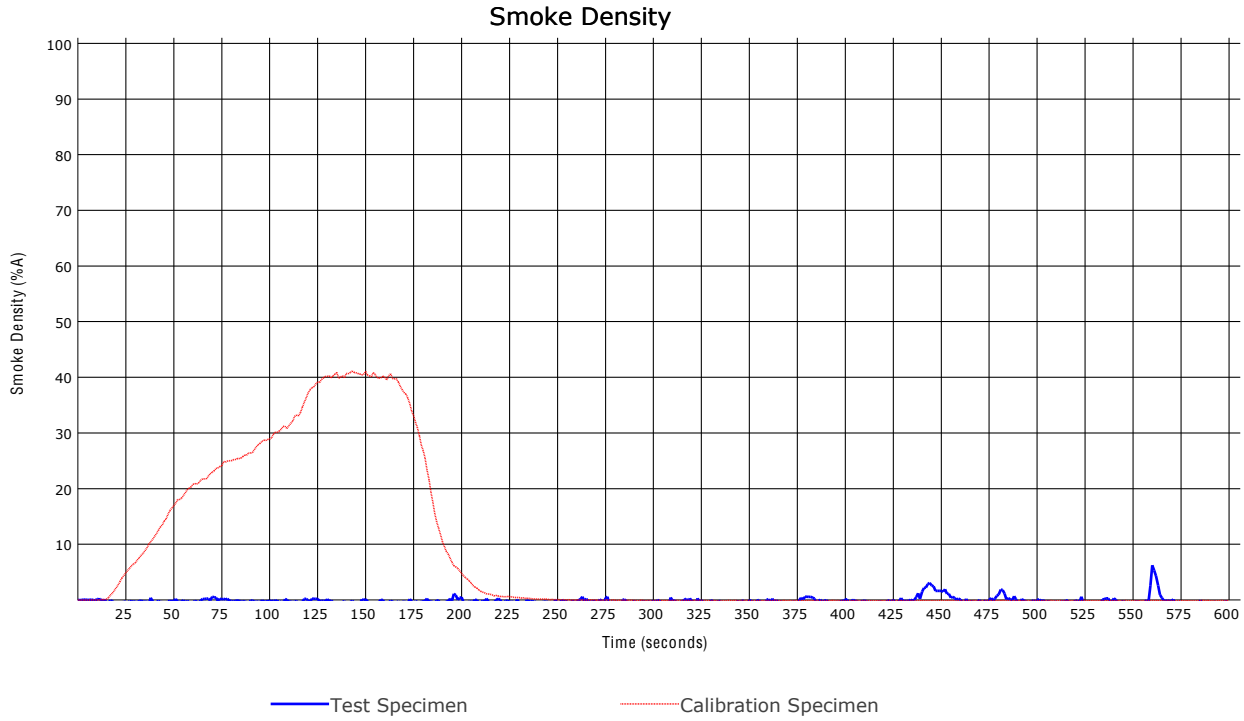
AUTHORIZED SIGNATURE

DocuSign Envelope ID: 9669DAE5-ACAB-4935-9BFA-8DC973A10FF1

Program: Steiner Tunnel (Version 1.0.3.0)

Test Method : ASTM E84
Test Report # : 3-51710-0-J





Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

SGS

Tested For:	**Adity Phadnis**	**Phone:**	(201) 917-7743	**Received:**	4/8/2024
	Designtex	**Fax:**		**Completed:**	4/16/2024
	357 County Avenue	**Mobile:**		**Code:**	L
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-55419-0-RV
	USA	**Email:**	aphadnis@designtex.com		

Key Test: CAN/ULC-S102 90

Client's Identification:

Style: Vinyl WC 20oz Composition 100% Vinyl. Finish: Cotton/Polyester Osnaburg. Weight: 20oz/Lin yd. Product End Use: Wallcovering.

LE: 2018 V 02/23 BG PC: ME CODE: I=1520 F=3230 CLEAN=1105 /dv

TEST PERFORMED: CAN/ULC-S102-18 - Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

TEST CONDUCTED:

☐ Indicative
☒ Formal

PRODUCT CATEGORY: ☐ Composite Panel Material
☐ Textile Type Product
☒ Vinyl Type Product

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^2min, FSV=1.85$^{\cdot}$ 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.

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

SGS

Tested For:	**Adity Phadnis**	**Phone:**	(201) 917-7743	**Received:**	4/8/2024
	Designtex	**Fax:**		**Completed:**	4/16/2024
	357 County Avenue	**Mobile:**		**Code:**	L
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-55419-0-RV
	USA	**Email:**	aphadnis@designtex.com		

Key Test: CAN/ULC-S102 90

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.

☒ Adhered to IRC: The test specimen was bonded to ¼" Inorganic Reinforced Cement (IRC) boards.

☐ Adhered to Gypsum: The test specimen was bonded to 5/8" thick Type X gypsum board.

☐ Other: _____

ADHESIVE (applied by SGS North America): ☐ No
☒ Yes – specify: Roman Pro-880

REPORTED AS:

☐ INDICATIVE (Single Specimen Test):

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

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

Flame Spread Rating (FSR): 5
Smoke Developed Classification (SDC): 25

RESULTS:

Specimen #	Flame Spread Value	Smoke Developed Value	Burn Distance (meters)	Time (seconds)
1	4.1	21.5	0.2	34
2	3.6	15.6	0.2	54
3	5.6	34.1	0.3	30

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

SGS

Tested For:	**Adity Phadnis**	**Phone:**	(201) 917-7743	**Received:**	4/8/2024
	Designtex	**Fax:**		**Completed:**	4/16/2024
	357 County Avenue	**Mobile:**		**Code:**	L
	Secaucus, NJ 07094	**PO#:**		**Test Report:**	3-55419-0-RV
	USA	**Email:**	aphadnis@designtex.com		

Key Test: CAN/ULC-S102 90

OBSERVATIONS:

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

REMARKS: None.

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

Signed by:
branden gallagher 1/29/2025
BC915566495A4BD...
AUTHORIZED SIGNATUR/
SGS NORTH AMERICA
/sj /sp

RV: 01/29/25 /bg

Enclosure: 3 Graph Chart (Formal)

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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.

Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

Program: Steiner Tunnel (Version 1.0.3.0)

Test Method	:	CAN/ULC - S102
Report #	:	3-55419-0-RV-L
Test Date	:	4/16/2024
Client	:	Designtex
Operator	:	Chris Gangi
Details of Preparation	:	The test specimen was bonded to 1/4" Inorganic Reinforced Cement (IRC) boards using Roman Pro 880 adhesive.
Observations	:	No unusual observations

	Specimen 1	Specimen 2	Specimen 3
Area Under Flame Curve (m min)	2.2	2.0	3.0
Flame Spread Value	4.1	3.6	5.6
Ignition Time (mm:ss)	00:12	00:17	00:21
Area Under Smoke Curve (%A min)	9.2	6.7	14.6
Smoke Developed Value	21.5	15.6	34.1
Total Gas Flow (L)	1596.0	1596.0	1596.0
Maximum Flame Front Achieved (m)	0.2 @ 34s	0.2 @ 54s	0.3 @ 30s

Flame Spread Rating : 5

Smoke Developed Classification : 25

CERTIFICATION : I certify that the above results were obtained after testing the specimens in accordance with the procedures and equipment specified by CAN/ULC - S102

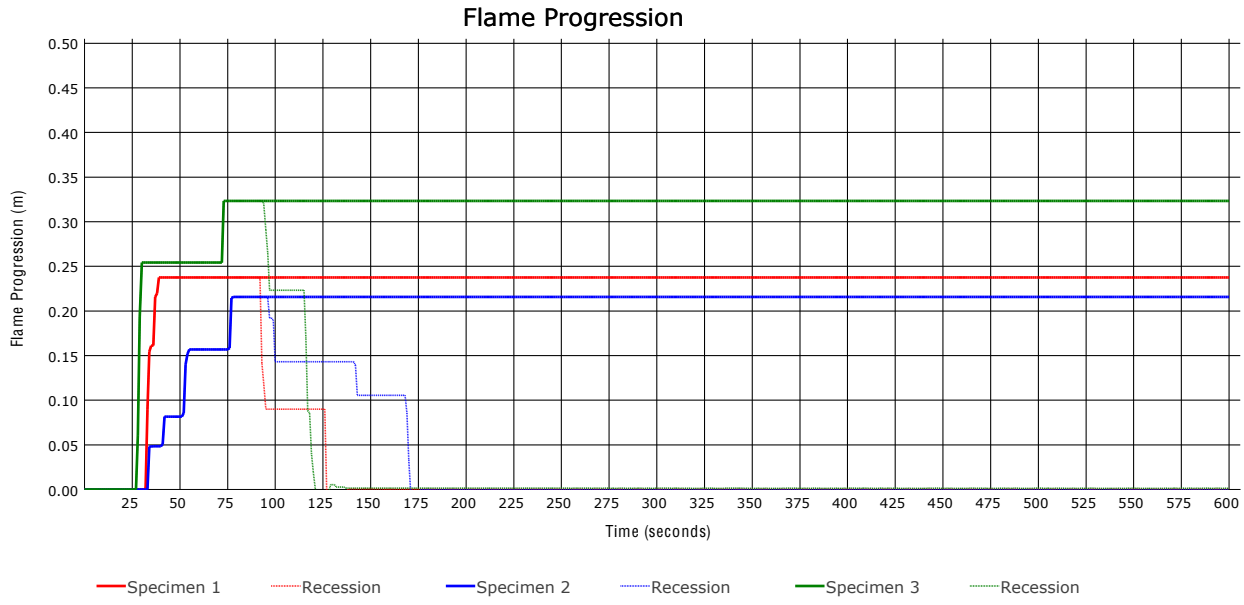
Chris Gangi

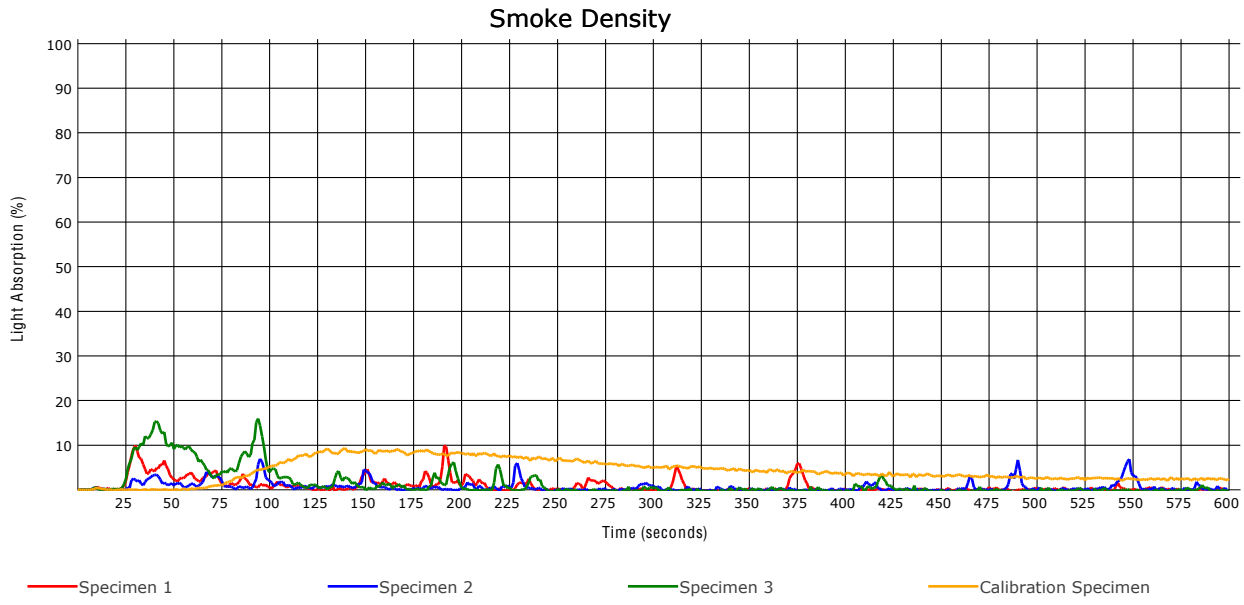
AUTHORIZED SIGNATURE

Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

Program: Steiner Tunnel (Version 1.0.3.0)

Test Method : CAN/ULC - S102
Test Report # : 3-55419-0-L





Docusign Envelope ID: AA72934A-ED7F-45EC-B94C-1EABEB0D0295

Program: Steiner Tunnel (Version 1.0.3.0)

Test Method : CAN/ULC - S102
Test Report # : 3-55419-0-L

