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August 23, 2023

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Reference:	File SV32110	Project 4790921866
Subject:	Surface Burning Characteristics of Be Shine Wall Fabric with Flame Retardant applied to gypsum wallboard	

The following is a summary of the test results obtained on a product designated by Be Shine Textile Inc as "Be Shine Wall Fabric with Flame Retardant applied to gypsum wallboard" under Project 4790921866. The testing was conducted at UL Solutions' test facility in Toronto, ON and completed on August 17, 2023.

The tests were conducted in accordance with the Standard, CAN/ULC-S102:2018-REV1, *Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*, Eighth Edition (including Revision 1), dated March 2019 and CAN/ULC-S102.2:2018-REV1, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*, Eighth Edition (including Revision 1), dated March 2019.

The issuance of this Report does not imply Listing, Classification, or Recognition by UL Solutions and does not authorize the use of UL or ULC Marks or any other reference to UL Solutions on or in connection with the product or assembly.

UL Solutions did not witness the production of the test samples nor were we provided with information relative to the formulation or identification of component materials used in the test samples. The test results relate only to the items tested and may not apply to subsequently produced samples or assemblies.

The sole purpose of this investigation was to provide fire test data for the product submitted, in accordance with the requirements of CAN/ULC-S102:2018-REV1 and CAN/ULC-S102.2:2018-REV1. This data should not be considered representative of test results for other similar products in the absence of testing in accordance with CAN/ULC-S102:2018-REV1 and CAN/ULC-S102.2:2018-REV1.

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Very truly yours,

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SAMPLE DESCRIPTION AND PREPARATION:

“Be Shine Wall Fabric with Flame Retardant” wall covering was white in colour. Details of the materials used in the construction of the tile were not provided nor investigated. The product consisted of the 0.4 mm thick fabric adhered to 15.5 mm gypsum board. Each piece measured 15.9 mm thick × 562 mm wide × 2440 mm long.

The test specimens were conditioned to constant mass at a temperature of 23 ± 3°C and at a relative humidity of 50 ± 5 percent prior to testing.

TEST METHOD:

The tests were conducted in accordance with the Standard, CAN/ULC-S102:2018-REV1, *Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies*, Eighth Edition (including Revision1), dated March 2019 and CAN/ULC-S102.2:2018, *Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*, Eighth Edition (including Revision 1), dated March 2019.

This method defines the relative surface burning characteristics under specific test conditions. Although the procedure is applicable to materials, products and assemblies used in building construction for development of comparative surface spread of flame data, test results may not reflect the relative surface burning characteristics of tested materials under all building fire conditions. Test results relate only to the items tested.

For each test, three pieces were laid end to end to create a 7320 mm long sample. The fabric side of the product was exposed to the test flame. A total of 4 tests were conducted.

The first test was conducted in accordance with CAN/ULC-S102. Due to the rigidity of the test samples, supplementary means of support was not required. The test specimens were installed on the ceiling of the tunnel furnace. A 350 mm long by 560 mm wide by 1.6 mm thick, uncoated, steel plate was placed on the specimen mounting ledge at the fire end of the tunnel furnace “upstream” from the gas burners to complete the 7620 mm chamber length. An airtight water seal was maintained around the furnace lid during the test.

During the test, it was observed that the entire layer of fabric melted and dripped to the floor resulting in no ignition or flame travel.

Clause 1.2 of CAN/ULC-S102 states that materials which melts or drips, or otherwise disintegrates and continues to burn on the floor of the test chamber shall be tested in accordance to CAN/ULC-S102.2.

In accordance with Clause 1.2 of CAN/ULC-S102, the samples were cut down to 420 mm wide and three tests are conducted in accordance with CAN/ULC-S102.2.

The test specimens were laid on the floor of the tunnel furnace on top of ceramic paper. A 350 mm long by 560 mm wide by 1.6 mm thick, uncoated, steel plate was placed on the specimen mounting ledge at the fire end of the tunnel furnace “upstream” from the gas burners to complete the 7620 mm chamber length. An airtight water seal was maintained around the furnace lid during the test.

RESULTS:

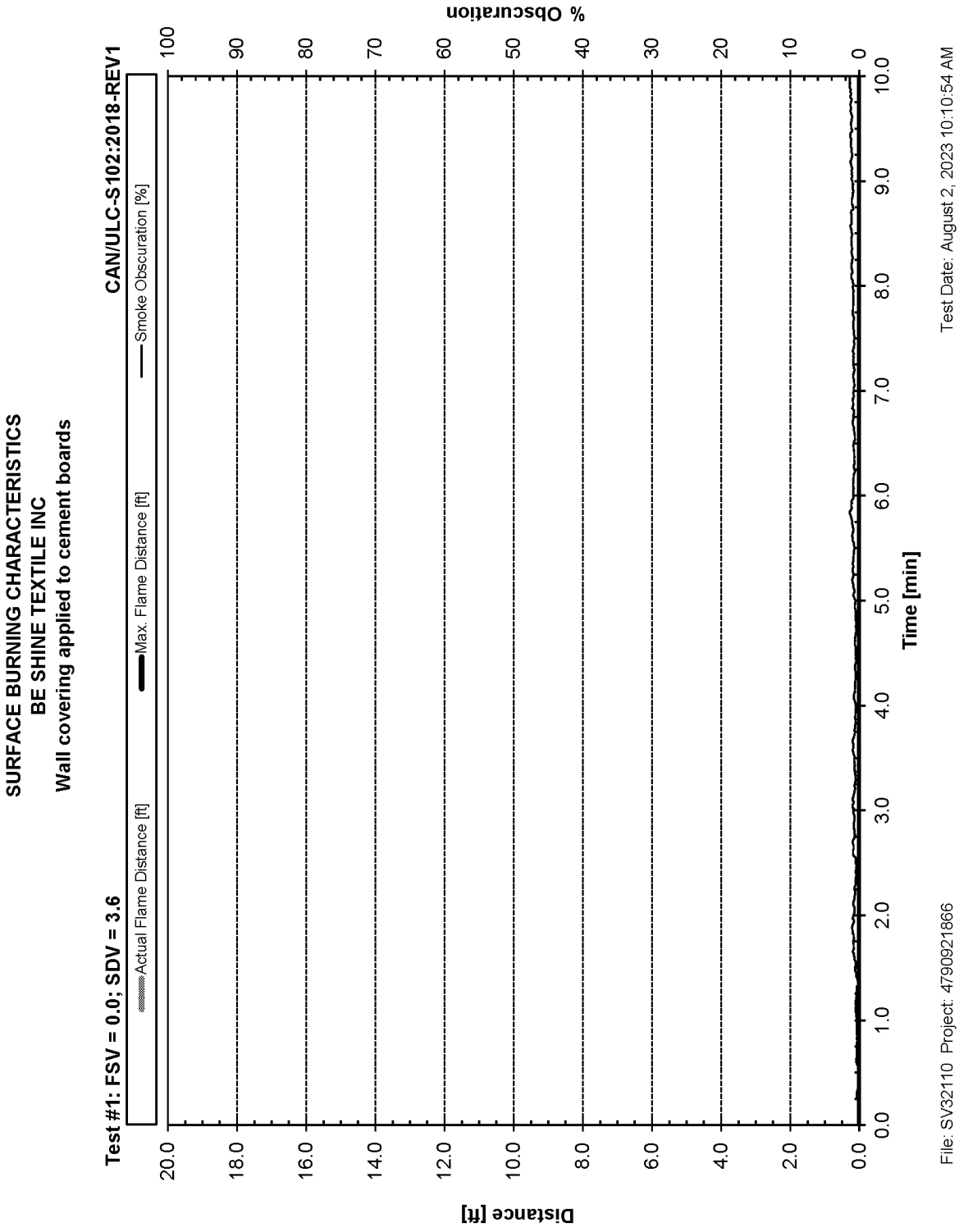
A summary of test results is tabulated below. Graphical plots of flame spread and light transmission data are attached. The test results relate only to the actual samples tested.

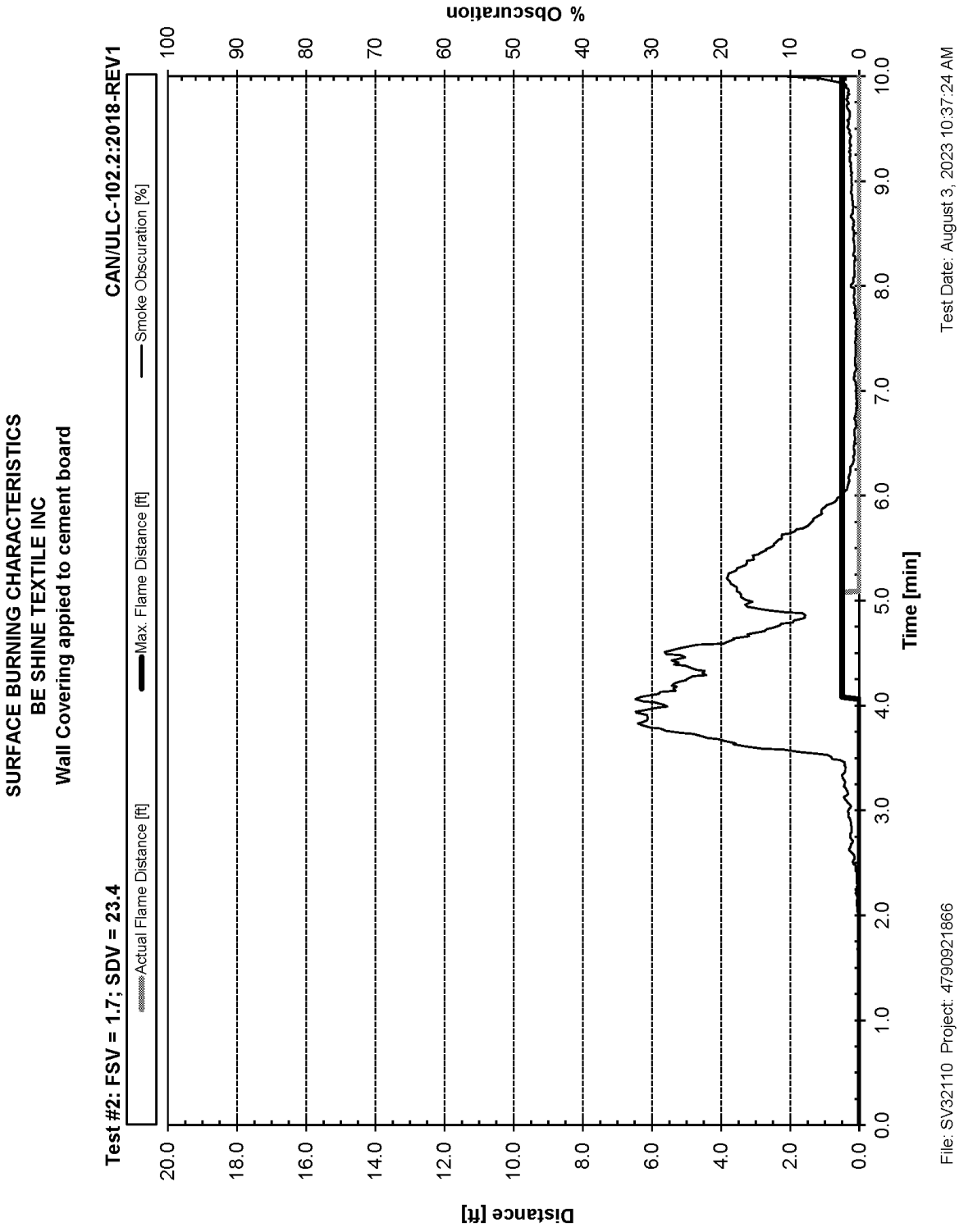
Test No.	Sample Description	Calculated Values	
		Flame Spread Value (FSV)	Smoke Developed Value (SDV)
1	(CAN/ULC-S102) Wall covering applied to substrate – 562 mm wide	0.0	3.6
2	(CAN/ULC-S102.2) Wall covering applied to substrate – 420 mm wide	1.7	23.4
3	(CAN/ULC-S102.2) Wall covering applied to substrate – 420 mm wide	5.4	28.8
4	(CAN/ULC-S102.2) Wall covering applied to substrate – 420 mm wide	0.0	22.1

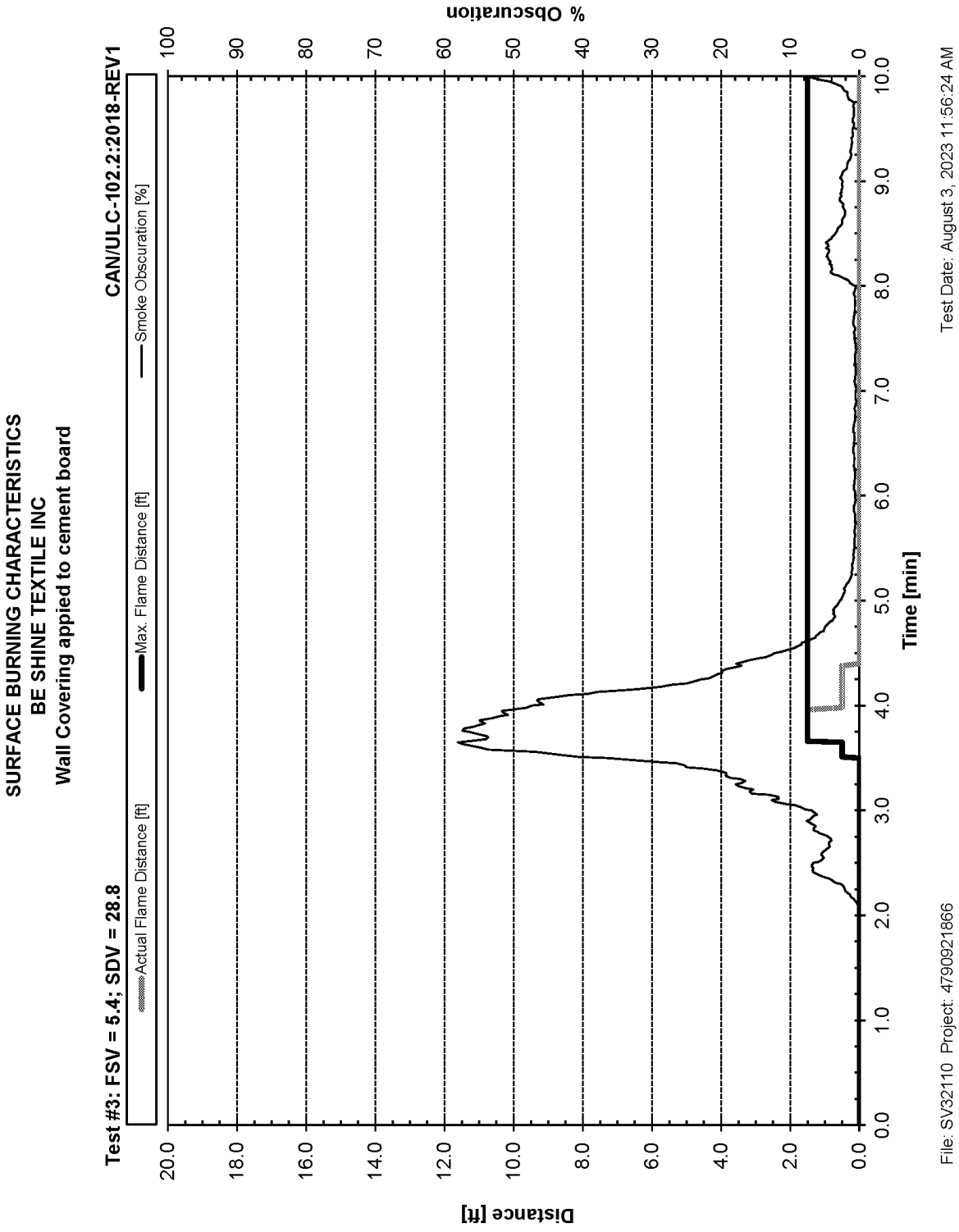
Clause 9.4 of CAN/ULC-S102.2:2018-REV1, stipulates that the Flame Spread Rating (FSR) and Smoke Developed Classification (SDC) of a product or assembly shall be determined from the results of not less than three identical test specimens. Since only one test was conducted, the product does not warrant the assignment of a rating or classification.

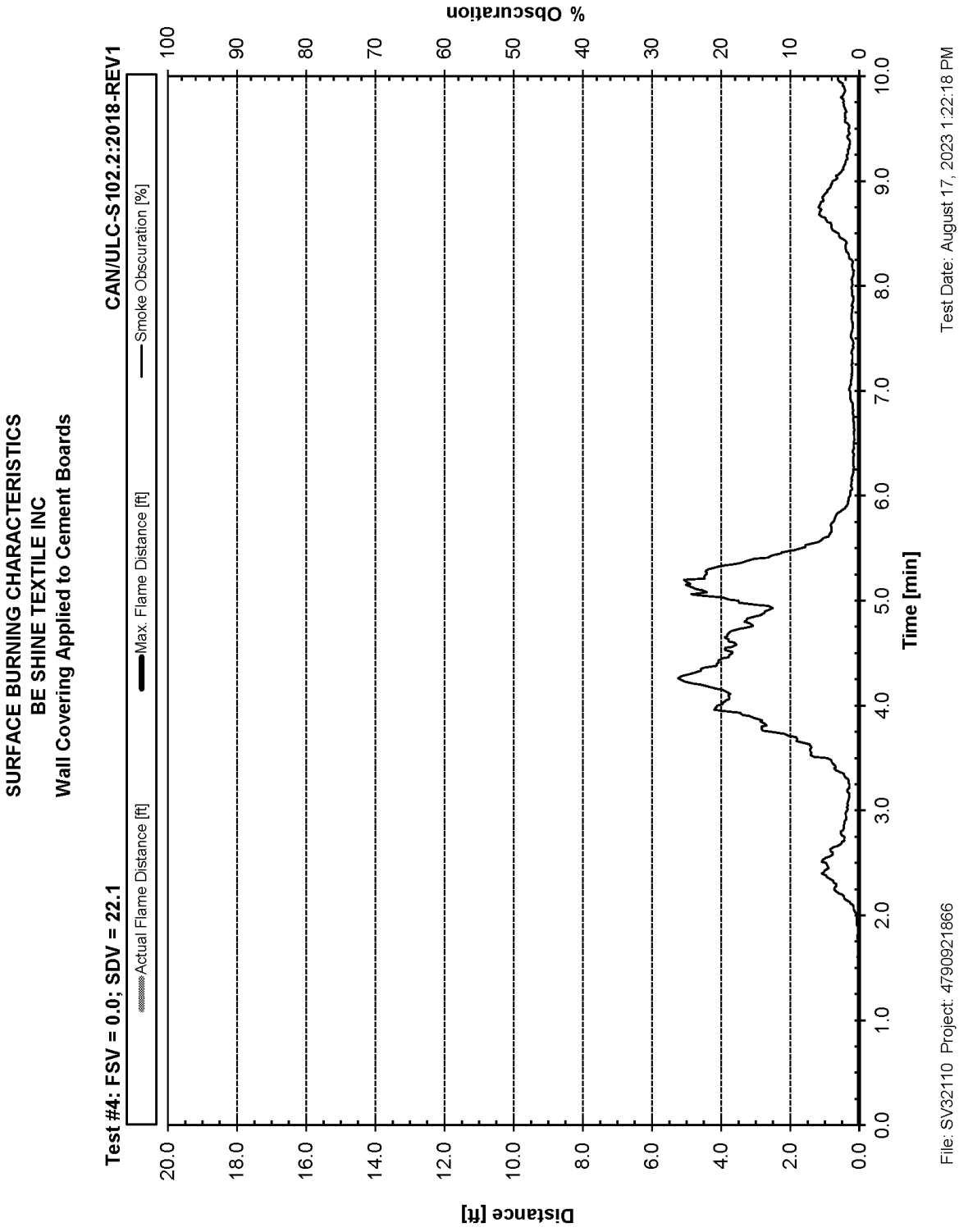
The surface burning characteristics of the “Be Shine Wall Fabric with Flame Retardant applied to gypsum wallboard” described herein warrants the assignment of the following rating or classification in comparison to untreated red oak as 100 and inorganic reinforced cement board as 0.

Material Details	Rating or Classification	
	Flame Spread Rating (FSR)	Smoke Developed Classification (SDC)
Be Shine Wall Fabric with Flame Retardant applied to gypsum wallboard	0	25


SURFACE BURNING CHARACTERISTICS
BE SHINE TEXTILE INC
Wall covering applied to cement boards
Test #1: FSV = 0.0; SDV = 3.6
CAN/ULC-S102:2018-REV1
Actual Flame Distance [ft]
Max. Flame Distance [ft]
Smoke Obscuration [%]
Distance [ft]
% Obscuration
Time [min]
Test Date: August 2, 2023 10:10:54 AM
File: SV32110 Project: 4790921866


SURFACE BURNING CHARACTERISTICS
BE SHINE TEXTILE INC
Wall Covering appied to cement board
Test #2: FSV = 1.7; SDV = 23.4
CAN/ULC-102.2:2018-REV1
Actual Flame Distance [ft]
Max. Flame Distance [ft]
Smoke Obscuration [%]
Distance [ft]
% Obscuration
Time [min]
Test Date: August 3, 2023 10:37:24 AM
File: SV32110 Project: 4790921866


SURFACE BURNING CHARACTERISTICS
BE SHINE TEXTILE INC
Wall Covering appied to cement board
Test #3: FSV = 5.4; SDV = 28.8
CAN/ULC-102.2:2018-REV1
Actual Flame Distance [ft]
Max. Flame Distance [ft]
Smoke Obscuration [%]
Distance [ft]
% Obscuration
Time [min]
Test Date: August 3, 2023 11:56:24 AM
File: SV32110 Project: 4790921866


SURFACE BURNING CHARACTERISTICS
BE SHINE TEXTILE INC
Wall Covering Applied to Cement Boards
Test #4: FSV = 0.0; SDV = 22.1
CAN/ULC-S102.2:2018-REV1
Actual Flame Distance [ft]
Max. Flame Distance [ft]
Smoke Obscuration [%]
Distance [ft]
% Obscuration
Time [min]
Test Date: August 17, 2023 1:22:18 PM
File: SV32110 Project: 4790921866