

TEST REPORT

FOR

Fellert Acoustical Ceilings AB

Kyrkängsgatan 6
SE-503 38 Borås
SWEDEN

Standard Test Method for Surface Burning Characteristics of Building Materials ASTM E84 – 14

Test for Surface Burning Characteristics of Building Materials UL 723

Test Report No: FH-2546-A

Assignment No: H-1116

Test Date: 11/26/2014

Report Date: 10/21/2016

Subject Material: Fellert Even Better System

Prepared by: _____

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Reviewed by: _____

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Director, Laboratory Facilities and Testing Services

The results reported in this document apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. The laboratory's test report in no way constitutes or implies product certification, approval or endorsement by this laboratory. This report may not be reproduced, except in full, without the written approval of the laboratory.

TEST REPORT REVISION HISTORY:

DATE	SUMMARY
October 21, 2016	Original issue date. Original NGCTS report FH-2546-A.

INTRODUCTION:

This report presents the results of a specimen tested in accordance with the requirements of ASTM E84-14 Standard Test Method for Surface Burning Characteristics of Building Materials and UL 723 Test for Surface Burning Characteristics of Building Materials. This test method is also published under the designations NFPA 255 and UBC 8-1.

The purpose of this test method is to determine the relative behavior of the material by observing the flame spread along the specimen. Flame spread and smoke developed indexes are reported. However, there is not necessarily a relationship between these two measurements.

This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled laboratory conditions. It should not alone be used for fire hazard or fire risk assessment of the materials, products, or assemblies under actual fire conditions.

TEST SAMPLE:

The test sample was submitted directly to NGC Testing Services (NGCTS) for testing by the client. The test sample was identified by the client as:

“Fellert Even Better System”

The test sample was received in good condition by NGCTS on November 10, 2014. Upon receipt of the test sample at NGCTS, it was placed in a conditioning room where it remained in an atmosphere of $73.4 \pm 5^{\circ}\text{F}$ and $50 \pm 5\%$ relative humidity until tested.

The test sample was submitted as six (6) nominally 2 ft. wide x 4 ft. long x 1 in. thick fiberglass acoustical ceiling panels. The face side only of each submitted ceiling panel was finished with a plaster application. This “plaster side” of each panel was exposed to the burner flames during testing.

MOUNTING METHOD:

The (6) test sample panels were placed end-to-end, directly on the tunnel ledges (plaster side down), and butted tightly together to achieve the required 24 ft. length.

Non-combustible, fiber-reinforced cement board (1/4 in. thick) was placed over the specimen panels as lid protection.

TEST RESULTS:

The test results, computed on the basis of observed flame front advance and electronic smoke density measurements are presented in the table below.

The reported flame spread and smoke developed indices, as presented below, are the computed comparison to the standard calibration materials – mineral fiber-reinforced cement board and select grade red oak flooring. The cement board is used to establish relative 0 values for flame spread and smoke developed; the red oak flooring are used to establish relative 100 values for flame spread and smoke developed.

<u>TEST NO.</u>	<u>MATERIAL TESTED</u>	<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>CALCULATED FLAME SPREAD</u>	<u>CALCULATED SMOKE DEVELOPED</u>	
1	Fellert Even Better System	Plaster	Self-Supporting	0.00	1.08	
<u>MATERIAL TESTED</u>			<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>FLAME SPREAD INDEX *</u>	<u>SMOKE DEVELOPED INDEX*</u>
RED OAK FLOORING		FINISHED	SELF-SUPPORTING	100	100	
REINFORCED CEMENT BOARD		SYMMETRICAL	SELF-SUPPORTING	0	0	
1	Fellert Even Better System	Plaster	Self-Supporting	0	0	
<u>CLASSIFICATION</u>				<u>FSI</u>	<u>SDI</u>	
* Flame Spread / Smoke Developed Index is the result (or the average of the results of multiple tests), rounded to the nearest multiple of 5. Smoke developed results in excess of 200 are rounded to the nearest multiple of 50.				CLASS A or I	0 - 25	0 - 450
				CLASS B or II	26 - 75	0 - 450
				CLASS C or III	76 - 200	0 - 450

ADC DRAFT (IN. H₂O) 0.080
GAS PRESS. (IN. H₂O) 0.295
GAS VOL (CF) 50.53
BTU/cf 1001
SHUTTER (IN.) 3.00
TEMP. 13° BURIED 108 F

Flame Spread: 0.00
Area under Flame Curve (ft-min): 0.00

TEST#: FH-2546-A DATE: 11/26/2014

TEST METHOD: ASTM E84-14

CLIENT: Fellert Acoustical Ceilings AB

PROJECT#: H-1116

SAMPLE: Fellert Even Better System

MATERIAL: (6) 24" x 48" Panels

SUPPORT: Self-Supporting

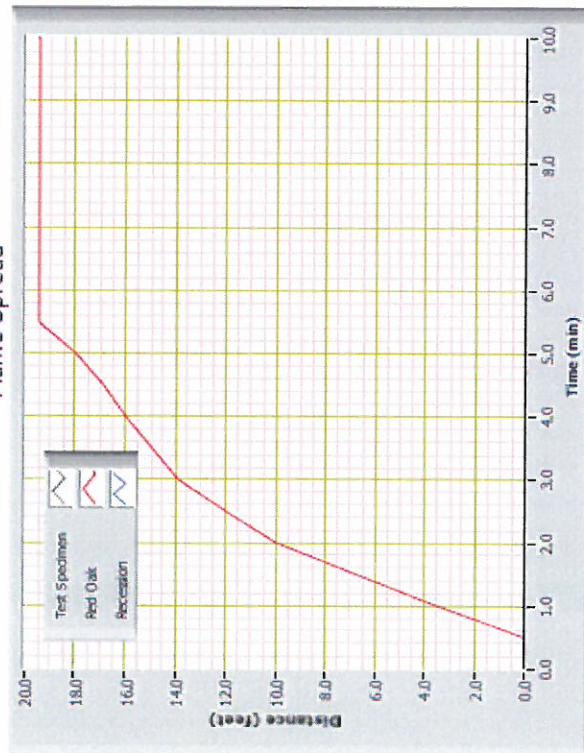
REMARKS: Ignition Time: 0:00

Max Flame Front: 0.00 FT. @ 0:00

Exposed surface over burners blackened and cracked, but no ignition was observed.

Smoke Developed: 1.08
Area under Smoke Curve (%A-min): 0.55

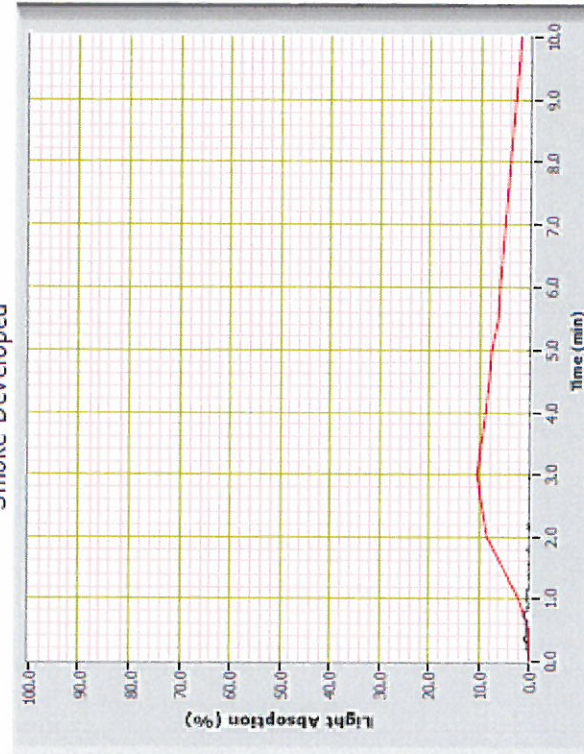
Flame Spread



1650 MILITARY ROAD, BUFFALO, 14127

TEL: 716-873-9750

Smoke Developed



FAX: 716-873-9753

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The following data sheet is an actual printout of the computerized data system which monitors the tunnel furnace. The sheet contains all calibration and specimen data needed to calculate the test results.