

CERTIFICATE OF COMPLIANCE

Certificate Number 20121114-R4616
Report Reference R4616-20121113
Issue Date 2012-NOVEMBER-14

Issued to: RJF INTERNATIONAL CORP
BF GOODRICH RD, PO BOX 657
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This is to certify that representative samples of WALL COVERINGS
A fabric backed vinyl material designated "Type II-J."

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

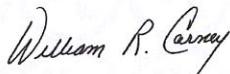
Standard(s) for Safety: UL 723, Standard for Surface Burning Characteristics for Building Materials;
CAN/ULC-S102-10, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

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The UL Classification Mark includes: the UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and the product category name (product identity) as indicated in the appropriate UL Directory. The UL Classification Mark for Canada includes: the UL Classification Mark for Canada:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and the product category name (product identity) in English, French, or English/French as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product.

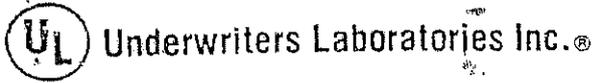


William R. Carney, Director, North American Certification Programs

UL LLC

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File R4616
Project 94NK15185

September 9, 1994

REPORT

on

WALL COVERINGS

Under The

CLASSIFICATION PROGRAM

RJF International Corp.
Marietta, OH

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dedicated to public safety and
committed to quality service

D E S C R I P T I O N

PRODUCT COVERED:

The product covered by this Report is a wall covering material, applied to inorganic reinforced cement board, identified as "Type II-J" wall covering.

The product is Classified as to Surface Burning Characteristics only.

USE:

The product is intended for use as a building material as permitted by authorities having jurisdiction.

T E S T R E C O R D N O. 1EXAMINATION OF MATERIALS:

The materials used in this investigation were produced under the observation of a representative of Underwriters Laboratories Inc., in a ready-to-use form. The composition of the finished materials is of a proprietary nature. Data on the composition is on file at the Laboratories for use in the Follow-Up Service Program.

Various physical and chemical tests were conducted on the components and finished products. The results developed from these tests were employed in establishing specifications for use in the factory Follow-Up Service Program.

SURFACE BURNING CHARACTERISTICS:

SAMPLES

The samples consisted of a vinyl wall covering identified as "Type II-J" which was applied to inorganic reinforced cement board with Koroseal "A-848-B" adhesive at an application rate of 150 ft²/gal.

Each test sample consisted of three 8 by 2 ft wide sections of the wall covering adhered to inorganic reinforced cement board, butted end-to-end to form the required 24 ft long surface.

For each test a piece of 1 ft long by 22 in. wide by 1/16 in. thick uncoated steel plate was placed at the fire end of the tunnel furnace "upstream" from the gas burners to complete the 25 ft chamber length.

The test samples were allowed to condition at a temperature of 73 ± 4°F and a relative humidity of 50 ± 5 percent prior to testing.

METHOD

The tests were conducted in accordance with the Standard of Underwriters Laboratories Inc. for Test for Surface Burning Characteristics of Building Materials, UL 723 and the Standard Method of Test For Surface Burning Characteristics of Building Materials and Assemblies, CAN/ULC-S102M.

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RESULTS

Data on flame spread and smoke developed appears in the following tabulations.

Flame Spread Index

The maximum distance the flame spreads along the length of the sample from end of the igniting flame is determined by observation.

The Flame Spread Index of the material is derived by determining the area under the flame spread distance (ft) versus time (min) curve, ignoring any flame front recession, and using one of the calculation methods as described below.

UL 723:

1. If the total area (A_T) is less than or equal to 97.5 min-ft, the Flame Spread Index shall be 0.515 times the total area ($FSI = 0.515 A_T$).
2. If the total area (A_T) is greater than 97.5 min-ft, the Flame Spread Index is to be 4900 divided by 195 minus the total area ($FSI = 4900/(195-A_T)$).

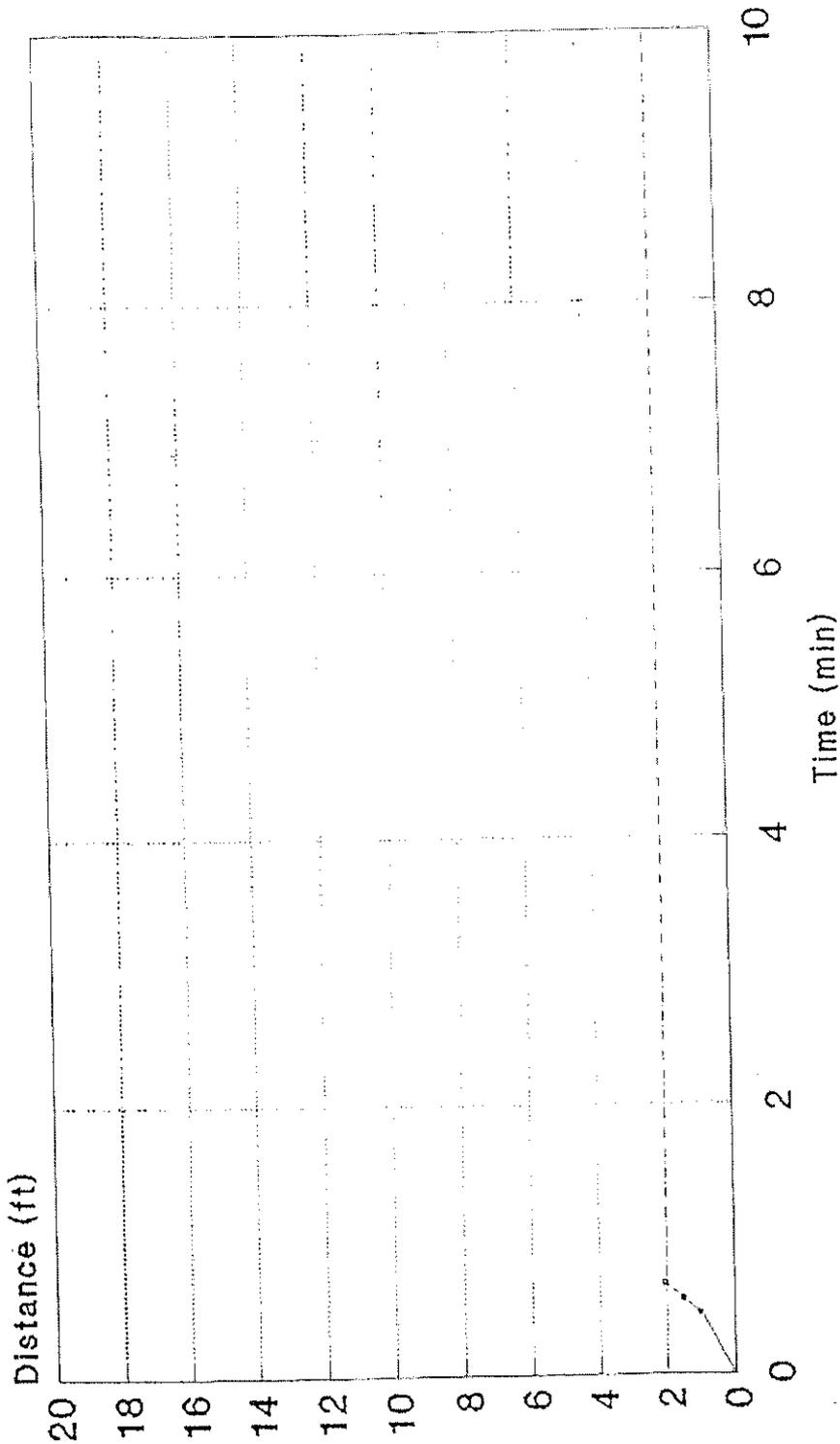
CAN/ULC-S102M:

1. If the total area (A_T) is less than or equal to 29.7 m.min, the Flame Spread Index (FSI) shall be 1.85 times the total area ($FSI = 1.85 A_T$).
2. If the total area (A_T) is greater than 29.7 m.min, the Flame Spread Index (FSI) shall be 1640 divided by the difference of 59.4 minus the total area (A_T). ($FSI = 1640/(59.4-A_T)$).

Test No.	Test Sample	Maximum Flame Spread		Time of Maximum Flame Spread (min:s)	Time-Distance Area		Calculated Value for Flame Spread Index	
		(ft)	(m)		(ft-min)	(m-min)	UL 723	CAN/ULC-S102M
1	"Type II-J" wall covering	2.0	0.61	0:40	19.2	5.84	9.9	10.8
2	"Type II-J"	1.5	0.46	0:45	14.2	4.32	7.3	8.0

Flame Travel Results

R.J.F. INTERNATIONAL CORP. #01
TYPE II J



FSI = 9.9 (UL723); 10.8 (CAN/ULC-S102)
Test Code = 09079401
Project R4616-94NK15185

Smoke Developed Index

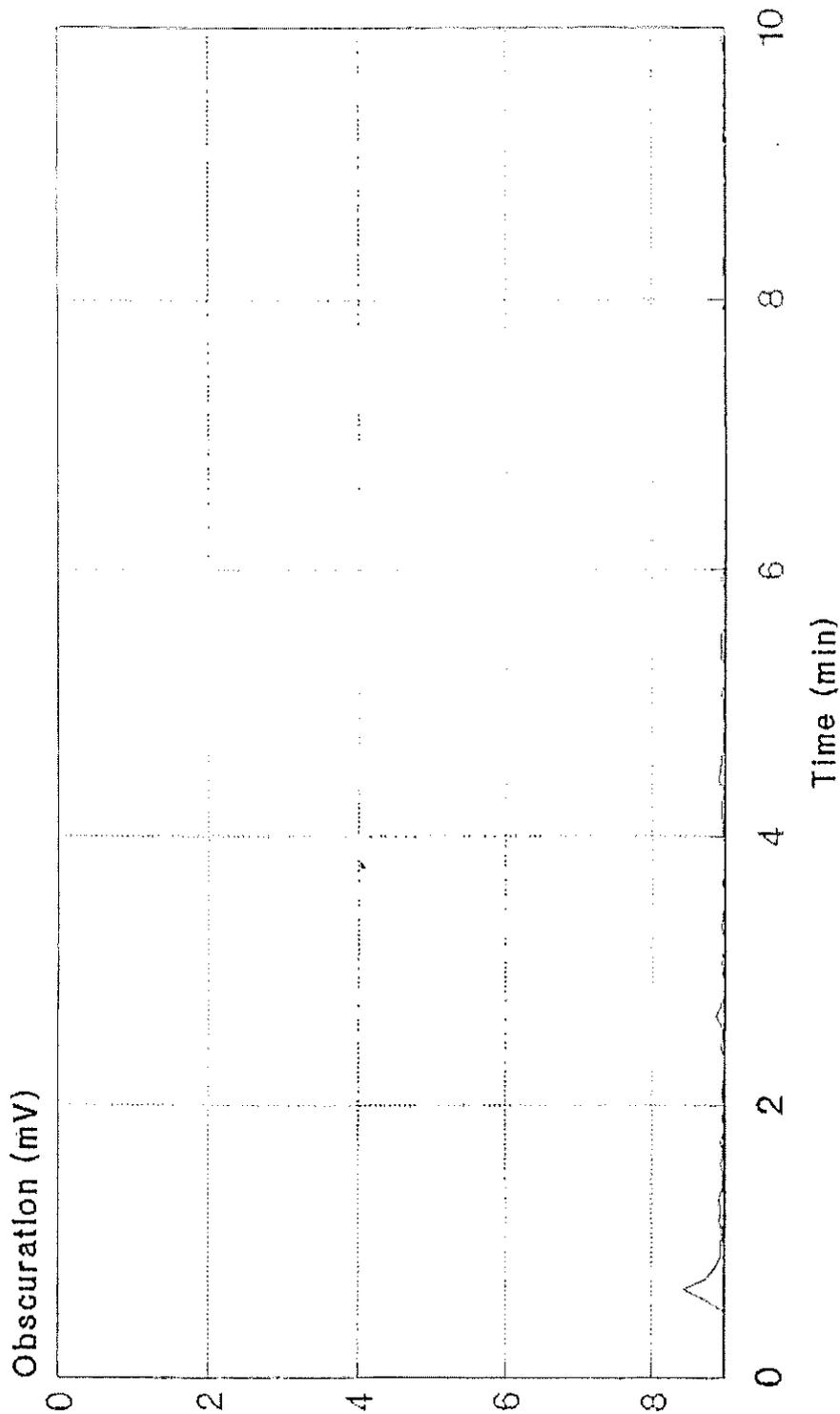
The smoke developed during the test is indicated by the output of a photoelectric circuit operating across the furnace flue pipe. A curve is developed by plotting values of light absorption (decrease in cell output) against time. The calculated value for Smoke Developed Index is derived by expressing the net area under the curve for this material as a percentage of the net area under the curve for untreated red oak.

<u>Test No.</u>	<u>Test Sample</u>	<u>Calculated Value for UL 723 and CAN/DLC-S102M</u>
1	"Type II-J" wall covering	7.6
2	"Type II-J" wall covering	7.0

Smoke Results

R.J.F. INTERNATIONAL CORP. #01

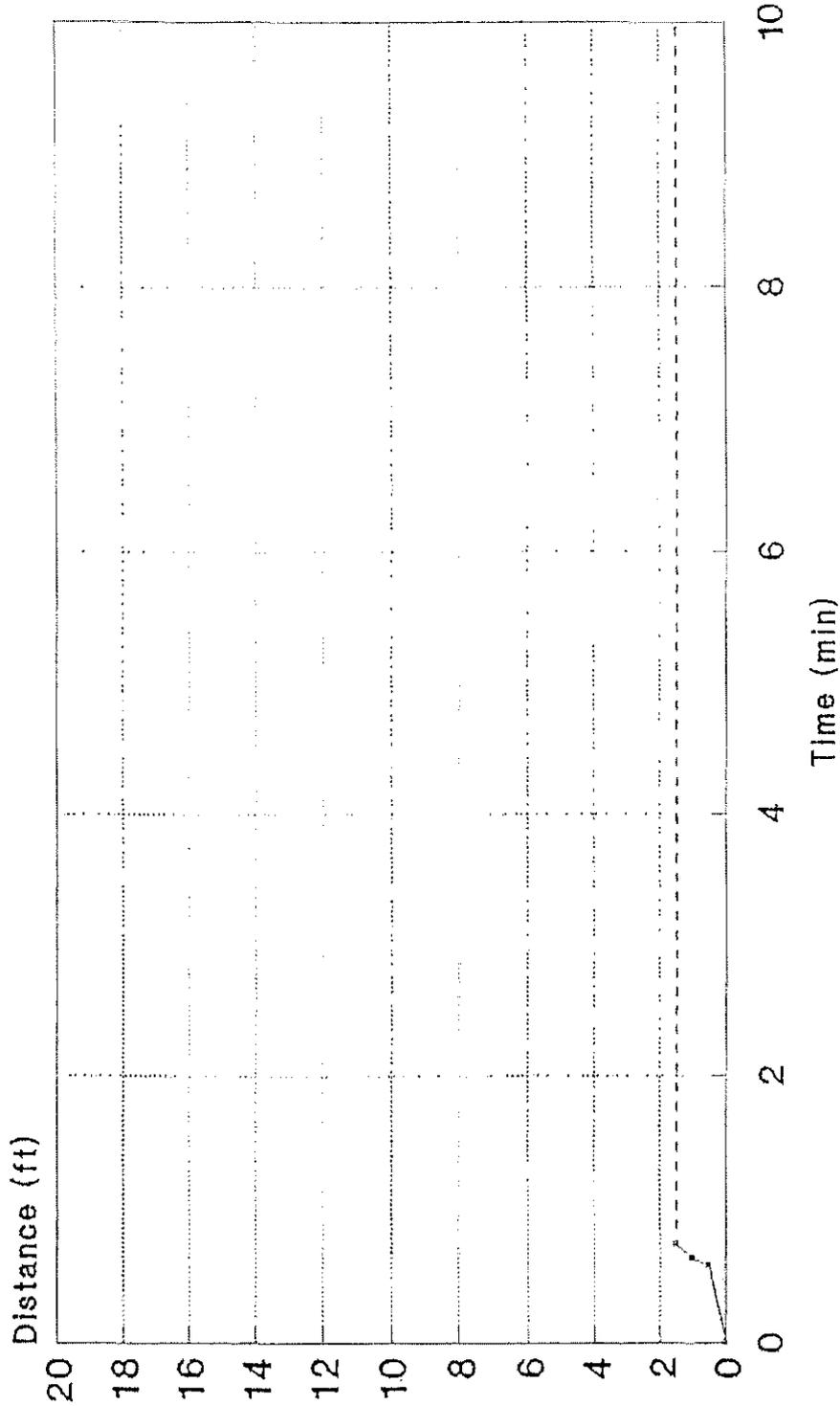
TYPE II J



SDI = 7.6 (UL723 & CAN/ULC S102M)
Test Code = 09079401
Project R4616-94NK15185

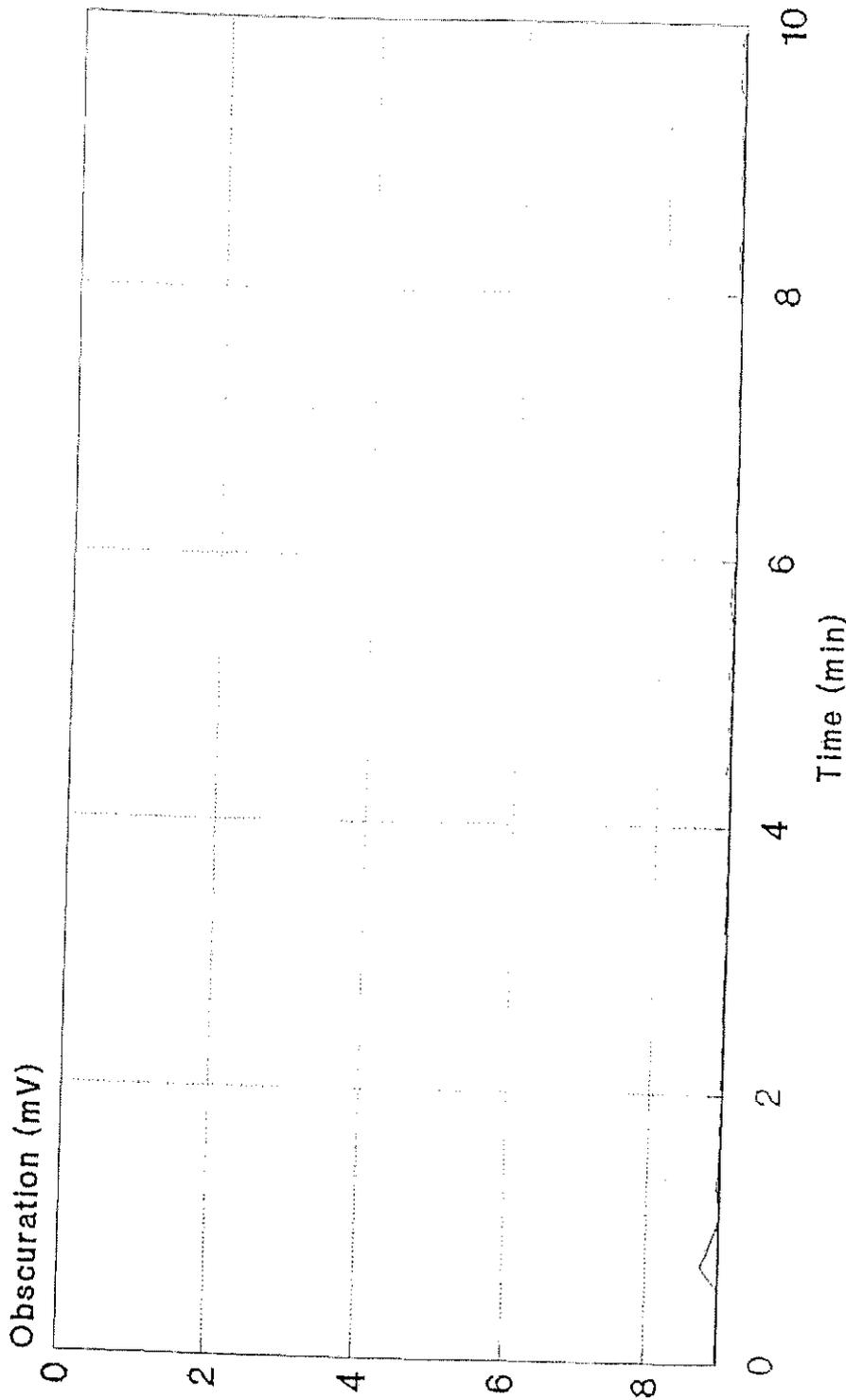
Flame Travel Results

R.J.F. INTERNATIONAL CORP. #02
TYPE II J



FSI = 7.3 (UL723); 8.0 (CAN/ULC-S102)
Test Code = 09079402
Project R4616-94NK15185

Smoke Results
R.J.F. INTERNATIONAL CORP. #02
TYPE II J



SDI = 7.0 (UL723 & CAN/ULC S102M)
Test Code = 09079402
Project R4616-94NK15186