



SGS U.S. Testing Company Inc.

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REPORT NUMBER: 740961-2
DATE: 12/15/97
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REPORT OF TEST

CLIENT: ILLBRUCK, INC.
3800 Washington Avenue North
Minneapolis, MN 55412


SUBJECT: FLAME SPREAD CLASSIFICATION AND SMOKE DENSITY DEVELOPED

REFERENCES: 1. Our confirmation to the Client dated December 4, 1997.
2. Test samples received on December 3, 1997.
3. Testing conducted on December 4, 1997.
4. Testing authorized by Randy McCormick.
5. Client's Purchase Order No. RRM 11530.

SAMPLE ID: The Client submitted and identified the sample material as:

Natural Willtec

TEST PROCEDURE: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-95b, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

PREPARED BY:

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Test Technician

SIGNED FOR COMPANY BY:

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Manager/Fire Tech. Dept.

Member of the SGS Group

ANALYTICAL SERVICES • PERFORMANCE TESTING • STANDARDS EVALUATION • CERTIFICATION SERVICES
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**PREPARATION AND
 CONDITIONING:**

The sample material was submitted in six pieces, 24" wide by 48" long, conforming to test chamber dimensions. The samples were supported during testing by 2" hexagonal mesh poultry netting running the length of the test chamber and ¼" round metal rods placed at two foot intervals across the width.

Prior to testing, the samples were placed in the conditioning room (maintained at 73.4 ± 5°F and a relative humidity of 50 ± 5%) and allowed to reach moisture equilibrium.

**SUMMARY OF
 ASTM E84 RESULTS:**

Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5.

<u>SAMPLE IDENTIFICATION</u>	<u>FLAME SPREAD</u>	<u>SMOKE DENSITY</u>
Natural Willtec	5	50

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<u>NFPA CLASS</u>	<u>UBC CLASS</u>	<u>FLAME SPREAD</u>
A	I	0 through 25
B	II	26 through 75
C	III	76 through 200

BUILDING CODES CITED:

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 1994 Edition
2. Uniform Building Code, 1994 Edition, Chapter 8, Interior Finishes, Sections 801-807.

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E 84 TEST DATA SHEET: CLIENT: Illbruck, Inc. DATE: 12/4/97

SAMPLE: Natural Willtec

OVERALL THICKNESS: 1" nominal

FLAME SPREAD: IGNITION: 16 seconds

FLAME FRONT: 1 foot maximum

TIME TO MAXIMUM SPREAD: 25 seconds

TEST DURATION: 10 minutes

CALCULATION: $9.66 \times 0.515 = 4.97$

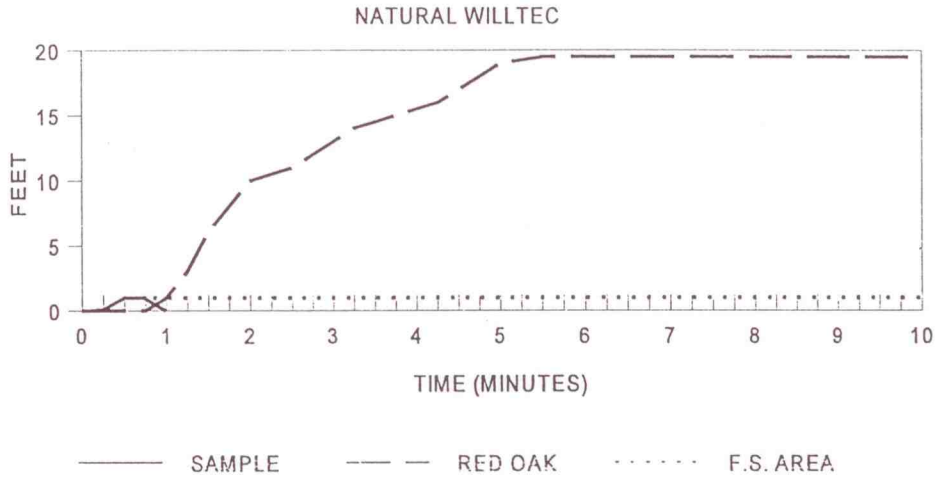
SUMMARY: FLAME SPREAD: 5

SMOKE DENSITY: 50

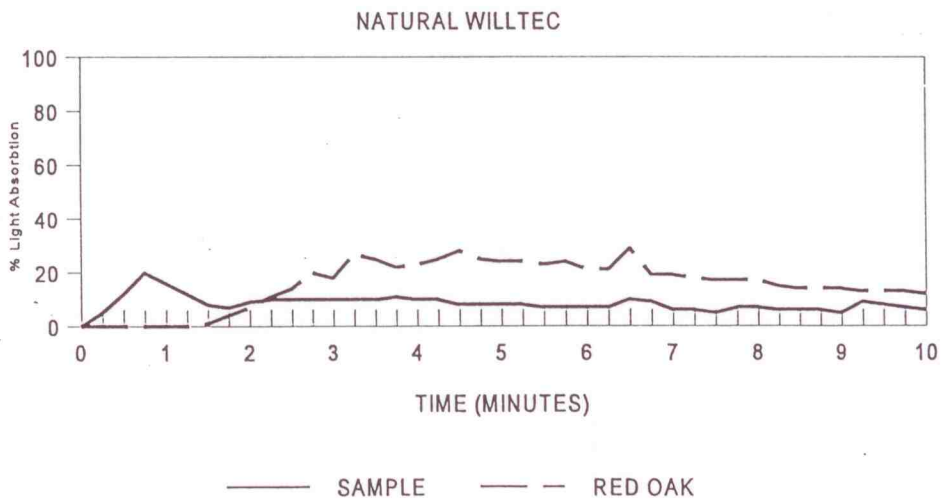
OBSERVATIONS: Sample surface ignition occurred at 16 seconds. A maximum flame front advance of 1 foot was observed at 25 seconds.

CLIENT: ILLBRUCK, INC.

FLAME SPREAD AREA



SMOKE DENSITY



End of Report

REPORT OF TEST