TEST REPORT

FOR

PROFLEX PRODUCTS, INC.

2500 Drane Field Road
Suite #105
Lakeland, FL 33811

Surface Burning Characteristics of Building Materials

ASTM E - 84-11a

Test Report No: FH-2332-3-5
Assignment No: H-915
Test Date: 09/20/2012
Report Date: 09/24/2012

Subject Material: White oak 3/4" hardwood flooring adhered to Proflex MSC 90 underlayment
White oak 3/4" hardwood flooring adhered to Proflex RCU 250 underlayment
White oak 3/4" hardwood flooring adhered to Proflex LV-100 underlayment

Prepared by: _______________________
Michael J. Rizzo
Test Engineer

Reviewed by: _______________________
Robert J. Menchetti
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. This report may not be reproduced, except in full, without the written approval of the laboratory. The laboratory's test reports in no way constitutes or implies product certification, approval or endorsement by this laboratory.
MATERIAL TESTED:
Material submitted by Proflex Products, Inc. of Lakeland, FL, was described by the clients as:

Composite Sample No. 3: White Oak 3/4" Hardwood Flooring
Moisture Cured PU Adhesive
Proflex MSC 90 Underlayment – 0.090" Thick
Hardy Cement Backer Board

Composite Sample No. 4: White Oak 3/4" Hardwood Flooring
Moisture Cured PU Adhesive
Proflex RCU 250 Underlayment – 0.250" Thick
Moisture Cured PU Adhesive
Hardy Cement Backer Board

Composite Sample No. 5: White Oak 3/4" Hardwood Flooring
Moisture Cured PU Adhesive
Proflex LV-100 Underlayment – 0.100" Thick
Moisture Cured PU Adhesive
Hardy Cement Backer Board

Each composite sample was submitted in (6) 2 ft. wide x 4 ft. long decks, assembled in the order as listed above. The white oak hardwood flooring side was exposed to the fire.

METHOD OF SUPPORT:
The specimen decks were placed end to end, and butted tightly together, to achieve the required 24 ft. length. No additional support was required.

LID PROTECTION:
1/4 in. thick non-combustible fiber reinforced cement board was placed over the specimen as lid protection.

RESULTS:
The results can be found on page 3 of this report.
### RESULTS:

<table>
<thead>
<tr>
<th>TEST NO</th>
<th>MATERIAL TESTED</th>
<th>SIDE</th>
<th>SUPPORT</th>
<th>CALCULATED FLAME SPREAD</th>
<th>CALCULATED SMOKE DEVELOPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Composite Sample No. 4</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>50.16</td>
<td>152.64</td>
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<tr>
<td>2</td>
<td>Composite Sample No. 5</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>46.35</td>
<td>119.98</td>
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<td>3</td>
<td>Composite Sample No. 3</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>57.26</td>
<td>132.14</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL TESTED</th>
<th>SIDE</th>
<th>SUPPORT</th>
<th>FLAME SPREAD INDEX *</th>
<th>SMOKE DEVELOPED INDEX *</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED OAK FLOORING</td>
<td>NA</td>
<td>DECKS</td>
<td>100</td>
<td>100</td>
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<tr>
<td>REINFORCED CEMENT BOARD</td>
<td>NA</td>
<td>SELF</td>
<td>0</td>
<td>0</td>
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<tr>
<td>1 Composite Sample No. 4</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>50</td>
<td>155</td>
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<td>2 Composite Sample No. 5</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>45</td>
<td>120</td>
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<tr>
<td>3 Composite Sample No. 3</td>
<td>WHITE OAK</td>
<td>DECKS</td>
<td>60</td>
<td>130</td>
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</tbody>
</table>

* Flame Spread/Smoke Developed Index is the result (or average of the results of multiple tests), rounded to the nearest multiple of 5. Smoke Developed in excess of 200, rounded to the nearest 60.

### CLASSIFICATION

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>FSI</th>
<th>SDI</th>
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<tbody>
<tr>
<td>CLASS &quot;A&quot;</td>
<td>&lt; 25</td>
<td>0 - 450</td>
</tr>
<tr>
<td>CLASS &quot;B&quot;</td>
<td>26 - 75</td>
<td>0 - 450</td>
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<tr>
<td>CLASS &quot;C&quot;</td>
<td>76 - 200</td>
<td>0 - 450</td>
</tr>
</tbody>
</table>
Test:

FH-2332-3

Date: 9/20/2012

Test Method: ASTM E84-11a

Client: Proflex Products, Inc.

Project #: K-915

Sample: Sample No. 4

Material: (6) 2' x 4' panels

Support: Wire & Rods

Remarks:

Ignition Time: 0:56
Max Flame Front: 14.09 ft. @ 8:09

Flame Spread:

Distance (ft) vs. Time (min)

1. Test Specimen
2. Red Oak
3. Recession

Smoke Developed:

Distance (ft) vs. Time (min)

1. Test Specimen
2. Red Oak
3. Recession

Flame Spread:

Distance (ft) vs. Time (min)

1. Test Specimen
2. Red Oak
3. Recession

Smoke Developed:

Distance (ft) vs. Time (min)

1. Test Specimen
2. Red Oak
3. Recession

Smoke Developed:

Area under Flame Curve (ft2-min): 50.16

Area under Smoke Curve (%A-min): 152.64

Flame Spread:

Area under Flame Curve (ft2-min): 97.40

Smoke Developed:

Area under Smoke Curve (%A-min): 77.85
Fire Testing Laboratory

TEST#: PH-2332-4  DATE: 9/20/2012

TEST METHOD: ASTM-E84-11a

CLIENT: Proflex Products, Inc.

PROJECT#: H-915

SAMPLE: Sample No. 5

MATERIAL: (6) 2' x 4' panels

SUPPORT: Wire & Rods

REMARKS:

Ignition Time: 0:46
Max Flame Front: 13.88 FT. @ 9:16

Smoke Developed:
Area under Smoke Curve (%A-min): 119.98

Flame Spread:
Area under Flame Curve (ft-min): 89.99

Flame Spread

Smoke Developed

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1650 MILITARY ROAD, BUFFALO, 14127
TEL: 716-873-9750
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Fire Testing Laboratory

TEST#: FH-2332-5
DATE: 9/21/2012

TEST METHOD: ASTM-E84-11a

CLIENT: Proflex Products, Inc.

PROJECT#: H-915

SAMPLE: Sample No. 3

MATERIAL: (6) 2' x 4' panels

SUPPORT: Wire & Rods

REMARKS:
Ignition Time: 0:38
Max Flame Front: 16.57 ft. @ 9:15

Flame Spread:
Area under Flame Curve (ft-min): 57.26
Area under Smoke Curve (%A-min): 132.14

Smoke Developed:
Area under Smoke Curve (%A-min): 67.39