# **TEST REPORT**

CLIENT:	Mannington Commercial	REPORT NUMBER:	57025A
	PO Box 12281	LAB TEST NUMBER:	2505-5327
	Calhoun GA 30703-7004	DATE:	January 17, 2013

### **TEST MATERIAL:**

Style	Backing
Circ	Integra HP

SUBJECT:

Testing Services Inc was instructed by the client to perform a procedure for measuring the critical radiant flux of horizontally mounted floor-covering systems exposed to a flaming ignition source in a graded radiant heat energy environment in a test chamber.

SCOPE OF TEST:

This fire test standard is designed to provide a basis for estimating one aspect of the fire exposure behavior of a floor-covering system installed in a building corridor.

**TEST METHOD:** 

ASTM E648: Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source

**TEST INFORMATION:** 

Specimens of the sample were tested for critical radiant flux in accordance with ASTM Test Method E-648, NFPA 253 and FTM Standard 372. The value reported is the average of three specimens, reported as Critical Radiant Flux in units of watts per centimeter squared (W/cm²).

Mounting Board:

Astone Fabricators Inc. (AFI) Tunnel Board Z Calcium Silicate Board

Adhesive:

Integra 2-HPRE™

Trowel:

1/16" x 1/16" x 1/16"

Conditioning:

Minimum 96 hrs @ 70°F 50% RH

**CLASSIFICATIONS:** 

NFPA:

Class I = 0.45 W/cm<sup>2</sup> or higher Class II = 0.22 – 0.44 W/cm<sup>2</sup> No Classification = <0.21 W/cm<sup>2</sup>

### **TEST DATA:**

Specimen	Time	Distance	Critical Radiant Flux
#1	11 min	19.7 cm	0.90 W/cm <sup>2</sup>
#2	10 min	18.8 cm	0.92 W/cm <sup>2</sup>
#3	11 min	18.3 cm	0.93 W/cm <sup>2</sup>
Standard Deviation: 0.01 Coefficient of Variation: 1.52%			

## **TEST RESULTS:**

Average Critical Radiant Flux	NFPA Classification
0.91 W/cm <sup>2</sup>	

Approved By:

Erle Miles, Jr. VP Testing Services Inc.

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## **TEST REPORT**

CLIENT:	Mannington Commercial REPORT NUMBER:		57025B	
	PO Box 12281	LAB TEST NUMBER:	2505-5327	
V	Calhoun GA 30703-7004	DATE:	January 17, 2013	

### **TEST MATERIAL:**

Style	Backing
Circ	Integra HP

SUBJECT:

Testing Services Inc was instructed by the client to perform testing to determine the specific optical density of smoke generated by solid materials and assemblies mounted in a vertical position.

**TEST PROCEDURE:** 

ASTM E 662: Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials, also complies with NFPA 258.

SCOPE OF TEST:

This test method employs an electrically heated radiant-energy source where the test specimens are exposed to either flaming or non-flaming (or both modes) conditions within a closed chamber. A photometric system with a vertical light path is used to measure the varying light transmission as smoke accumulates. The light transmittance measurements are used to calculate specific optical density of the smoke generated during the time period to reach the maximum value.

**CHAMBER CONDITIONS:** 

Radiometer Output:

8.1 MV

Furnace Voltage:

117 V

Pressure:

Positive Under Three Inches of Water

Irradiance:

2.5 watts/cm.2

Burner Fuel:

Propane

### **TEST DATA:**

	FLAMING		
Specimen Number:	1	2	3
Time to Attain TM (Minutes)	5.3	6.4	6.2
Specific Optical Density (Ds) at 1.5 min.	145	89	129
Specific Optical Density (Ds) at 4.0 min.	339	330	334
Maximum Specific Optical Density (D <sub>M)</sub>	346	350	346
Clear Beam (DC)	59	50	62
DMC (Corrected D <sub>M</sub> )	287	300	284

## **TEST RESULTS:**

	FLAMING
Average D <sub>s</sub> , 1.5 Min.	121
Average D <sub>s</sub> , 4.0 Min.	334
Average D <sub>M</sub>	347
Average D <sub>M</sub> , (Corrected)	290

Million

Approved By

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