

# TEST REPORT

CLIENT:	Mannington Commercial	REPORT NUMBER:	63584A
	PO Box 12281	LAB TEST NUMBER:	2697-2992
	Calhoun GA 30703-7004	DATE:	April 20, 2015

### **TEST MATERIAL:**

Style	Backing
Variations 4	Infinity Modular

Test Scope:

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. 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 E648-10e1: Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source

Pre-Test:

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:

Infinity

Trowel: Conditioning:

1/16" X 1/16" X 1/16" Minimum 96 hrs @ 70°F 50% RH

Classifications:

NFPA:

Class I= 0.45 W/cm<sup>2</sup> or higher Class II =  $0.22 - 0.44 \text{ W/cm}^2$ No Classification = < 0.21 W/cm<sup>2</sup>

#### Test Data:

Specimen	Time	Distance	Critical Radiant Flux
#1	35 min	34.0 cm	0.62 W/cm <sup>2</sup>
#2	30 min	34.9 cm	0.60 W/cm <sup>2</sup>
#3	24 min	30.0 cm	0.71 W/cm²
Standard Deviation: 0.06			
Coefficient of Variation: 8.72%			

#### **Test Results:**

Average Critical Radiant Flux	NFPA Classification
0.64 W/cm²	

TSi Accreditation:

Approved By

Erle Miles, Jr V.P., Testing Services Inc.

Our laboratory is accredited with US Dept of Commerce, National Institute of Standards and

Technology: ISO/IEC 17025:2005. Our code # is NVLAP 100108-0. However, it should be noted that some or all of the tests performed are not under our scope of accreditation due to the work not

fully conforming to the standard, or it being outside the scope of our accreditation, or

subcontracted. The above testing was under our scope of accreditation,

Uncertainty:

We undertake all assignments for our clients on a best effort basis. Our findings and judgments are

based on the information to us using the latest test methods available.

OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, THESE LETTERS AND REPORTS ARE FOR THE USE ONLY OF THE CLIENT TO WHOM THEY ARE ADDRESSED AND THEIR COMMUNICATION TO ANY OTHERS OR THE USE OF THE NAME TESTING SERVICES, Inc., MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. THE REPORTS AND LETTERS, AND OUR NAME, OUR SEALS, OR OUR INSIGNIA ARE NOT UNDER ANY CIRCUMSTANCES TO BE USED IN ADVERTISING TO THE GENERAL PUBLIC.

## **TEST REPORT**

CLIENT:	Mannington Commercial	REPORT NUMBER:	63584B
	PO Box 12281	LAB TEST NUMBER:	2697-2992
	Calhoun GA 30703-7004	DATE:	April 20, 2015

#### **TEST MATERIAL:**

Style	Backing
Variations 4	Infinity Modular

**Test Scope:** 

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. 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.

**Test Method:** 

ASTM E 662-13: Standard Test Method for Specific Optical Density of Smoke Generated by Solid

Materials, also complies with NFPA 258.

**Chamber Conditions:** 

Radiometer Output:

8.1 MV

Furnace Voltage:

117 V

Pressure: Irradiance:

Positive Under Three Inches of Water

Burner Fuel:

2.5 watts/cm.<sup>2</sup> Propane

**Test Data:** 

	FLAMING		
Specimen Number:	. 1	2	3
Time to Attain TM (Minutes)	6.7	7.7	7.3
Specific Optical Density (Ds) at 1.5 min.	35	25	34
Specific Optical Density (Ds) at 4.0 min.	166	166	136
Maximum Specific Optical Density (D <sub>M</sub> )	194	187	158
Clear Beam (DC)	18	18	17
DMC (Corrected D <sub>M</sub> )	176	169	141

#### **Test Results:**

	FLAMING
Average D <sub>s</sub> , 1.5 Min.	31
Average D <sub>s</sub> , 4.0 Min.	156
Average D <sub>M</sub>	180
Average D <sub>M</sub> , (Corrected)	162

Approved By:

Erle Miles, Jr V.P., Testing Services Inc

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