## TEST REPORT

**DATE: 12/13/2004 TEST NUMBER**: 092801

CLIENT	Corporate/Div. of Shaw Industries

TEST METHOD CONDUCTED AATCC 134-01 Electrostatic Propensity of Carpets

DESCRIPTION OF TEST SAMPLE		
IDENTIFICATION	5A035 Java UPAT	
COLOR		
ROLL	549208J	
CONSTRUCTION	Multi-Level Loop Pile	
FIBER		
BACKING	UltraLoc Pattern	
REFERENCE	TEST NO: 113004-2	

## **GENERAL PRINCIPLE**

This method is designed to assess the static propensity of flooring material by controlled laboratory simulation of conditions which are known from experience to be strongly contributory to excessive accumulation of static charges.

A flooring material preconditioned to equilibrium at controlled atmospheric conditions is walked on by a test subject in a specified manner with specified shoe soles. The static charges which build up on the tester are monitored continuously by a recorder.

A neolite shoe sole has been chosen as the primary reference material because its static performance is much like that of many common leathers. It is a commonly used shoe sole material and can be easily cleaned, while its chemical and physical properties are quite uniform.

A chrome tanned leather shoe sole has been chosen for a secondary reference material because it is representative of a certain class of leathers whose performance differs significantly from that of neolite soles on certain carpet fiber. Statistically, chrome tanned leather comprises a very small percentage of the shoe sole market, but must be considered in critical applications.

TEST CONDITIONS		
TEST CONDITIONS	The sample is conditioned to equilibrium and tested at 70 $\pm$ 2° F and 20 $\pm$ 2% relative	
	humidity	
SAMPLE PREPARATION	MPLE PREPARATION Tested As Received	
SUBSTRATE	40 Ounce Rubberized Jute/Hair Pad	

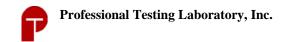
	DAY 1	DAY 2	AVERAGE
TEST I: Step Test/Neolite Sole	-0.9 KV	-1.0 KV	-1.0 KV
TEST II: Scuff Test/Neolite Sole	-2.1 KV	-1.9 KV	-2.0 KV
TEST III: Step Test/Leather Sole	+0.6 KV	+0.8 KV	+0.7 KV
TEST IV: Scuff Test/Leather Sole	+1.3 KV	+1.4 KV	+1.4 KV
MAXIMUM AVERAGE VOLTAGE		NEG 2.0	KV

"The results of this test relate to the sample of flooring material tested. Its static performance may be altered in service as a result of wear, soiling, cleaning, temperature, relative humidity, etc..."

APPROVED BY:

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 100297. This accreditation does not constitute an endorsement, certification, or approval by NIST or any agency of the United States Government for the product tested. This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to those samples tested and is not necessarily indicative of apparently identical of similar products. This report, or the name of Professional Testing Laboratory Inc. shall not be used under any circumstance in advertising to the general public.

714 Glerawood Place Dalton, GA 30721 Phone: 706-226-3283 Fax: 706-226-6787 email: protest@optlink.us



## **TEST REPORT**

**DATE: 12/13/2004 TEST NUMBER**: 092801

CLIENT Corporate/Div. of Shaw Industries
------------------------------------------

	ASTM E648-03 Standard Test Method for Critical Radiant Flux of
TEST METHOD CONDUCTED	Floor Covering Systems Using A Radiant Heat Energy Source, also
	referenced as NFPA 253 and FTM Standard 372

	DESCRIPTION OF TEST SAMPLE
IDENTIFICATION	5A035 Java UPAT
COLOR	
ROLL	549208J
CONSTRUCTION	Multi-Level Loop Pile
FIBER	
BACKING	UltraLoc Pattern
REFERENCE	TEST NO: 113004-2

### **GENERAL PRINCIPLE**

This procedure is designed to measure the critical radiant flux at flame out of horizontally mounted floor covering systems exposed to a flaming ignition in a test chamber which provides a graded radiant heat energy environment. The imposed radiant flux simulates the thermal radiation levels likely to impinge on the floors of a building whose upper surfaces are heated by flames from a fully developed fire in an adjacent room or compartment. The test result is an average critical radiant flux (watts/square cm) which indicates the level of radiant heat energy required to sustain flame propagation in the flooring system once it has been ignited. A minimum of three test specimens are tested and the results are averaged. Theoretically, if a room fire does not impose a radiant flux that exceeds this critical level on a corridor floor covering system, flame spread will not occur.

The NFPA Life Safety Code 101 specifies as Class 1 Critical Radiant Flux of .45 watts/sq cm or higher and Class 2 Critical Radiant Flux as .22 - .44 watts/sq cm.

FLOORING SYSTEM ASSEMBLY				
SUBSTRATE	Mineral-Fiber/Cement Board UNDERLAYMENT Direct Glue Down			
ADHESIVE	Subset 1000	<b>CONDITIONING</b> Minimum of 96 hours at 70 ± 5° F and 50 ± 5		
			relative humidity	

This test report relates to the installation in accordance with the criteria set forth in the report. Any variation in the installation criteria may produce different results.

	Distance Burned	Time To Flame Out	Critical Radiant Flux
Specimen 1	41 cm	16 minutes	0.46 watts/square cm
Specimen 2	37 cm	26 minutes	0.52 watts/square cm
Specimen 3	41 cm	19 minutes	0.46 watts/square cm

Average Critical Radiant Flux	0.48 Watts/Square Cm
Standard Deviation	0.04 Watts/Square Cm
Coefficient of Variation	7 %

<sup>\*</sup> NOTE: Meets or exceeds Class 1 rating as specified in NFPA Life Safety Code 101.

APPROVED BY: Lary Coffeery

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 100297. This accreditation does not constitute an endorsement, certification, or approval by NIST or any agency of the United States Government for the product tested. This report is provided for the exclusive of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to those samples tested and is not necessarily indicative of apparently identical of similar products. This report, or the name of Professional Testing Laboratory Inc., shall not be used under any circumstance in advertising to the general public.

714 Glerawood Place Dalton, GA 30721 Phone: 706-226-3283 Fax: 706-226-6787 email: protest@optilink.us

# **TEST REPORT**

**DATE: 12/13/2004 TEST NUMBER**: 092801

CLIENT	Corporate/Div. of Shaw Industries
--------	-----------------------------------

	ASTM E662-03 Smoke Density (Flaming) Standard Test Method for
TEST METHOD CONDUCTED	Specific Optical Density of Smoke Generated by Solid Materials also
	referenced as NFPA 258

DESCRIPTION OF TEST SAMPLE		
IDENTIFICATION	5A035 Java UPAT	
COLOR		
ROLL	549208J	
CONSTRUCTION	Multi-Level Loop Pile	
FIBER		
BACKING	UltraLoc Pattern	
REFERENCE	TEST NO: 113004-2	

#### **GENERAL PRINCIPLE**

This procedure is designed to measure the specific optical density of smoke generated by the test specimen within a closed chamber. Each specimen is exposed to an electrically heated radiant-energy source positioned to provide a constant irradiance level of 2.5 watts/square cm on the specimen surface. Measurements are recorded through a photometric system employing a vertical beam of light and a photo detector positioned to detect the attenuation of light transmittance caused by smoke accumulation within the chamber. The light transmittance measurements are used to calculate specific optical density, a quantitative value which can be factored to estimate the smoke potential of materials. Two burning conditions can be simulated by the test apparatus. The radiant heating in the absence of ignition is referred to as the Non-Flaming Mode. A flaming combustion in the presence of supporting radiation constitutes the Flaming Mode.

CONDITIONS					
PREDRYING OF TEST SAMPLE	24 Hours at 140° F				
CONDITIONING OF TEST SAMPLE	24 Hours at 70° F and 50% Relative Humidity				
FURNACE VOLTAGE	116 V	IRRADIANCE	2.5 watts/sq cm		
CHAMBER TEMPERATURE	95° F	CHAMBER PRESSURE	3″ H₂O		
TEST MODE	Flaming				

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc) FLAMING			213
AVERAGE SPECIFIC OPTICAL DENSITY AT 4	227		
	Specimen 1	Specimen 2	Specimen 3
Maximum Density (Dm)	266.0	227.0	219.0
Time to Dm (minutes)	3.0	3.0	3.0
Clear Beam (Dc)	33.0	20.0	19.0
Corr. Max Density (Dmc)	233.0	207.0	200.0
Density at 1.5 minutes	92.0	92.0	109.0
Density at 4.0 minutes	254.0	221.0	207.0
Time to 90% Dm (minutes)	2.5	2.0	2.0
Specimen Weight (grams)	13.3	13.4	13.3

APPROVED BY:

Lang atluny

This facility is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 100297. This accreditation does not constitute an endorsement, certification, or approval by NIST or any agency of the United States Government for the product tested. This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to shose samples tested and is not necessarily indicative of apparently identical of similar products. This report, or the name of Professional Testing Laboratory Inc. shall not be used under any circumstance in advertising to the general public.

714 Glenwood Place Dalton, GA 30721 Pho

Phone: 706-226-3283

Fax: 706-226-6787

email:protest@optilinkus