

## **TECHNICAL SPECIFICATIONS**

Quality	: MSN-2200
Yarn Fiber	: 100% Polypropylene ( PP ) Solution Dyed
Gauge and Structure	: 1/12" Multi-Level Loop Machine Tufted
Size	: 25cm x 100cm
Packing	: 20pcs./box (5m <sup>2</sup> )
Pile Weight	: ± 20oz./yd <sup>2</sup> (680g/m <sup>2</sup> )
Total Weight	: ± 4,800g./m <sup>2</sup>
Pile Height	: ± 3.5 / 4.0 / 4.5mm
Total Height	: ± 7.0mm
Primary Backing	: 100% Spun Bonded Polyester ( Non-Woven )
Secondary Backing	: PVC with Glass Fiber
Flooring Radiant Panel	: BS-4790 / ASTM E648-17 / NFPA 253
Smoke Density	: ASTM E662-15a / NFPA 258
Electrostatic Propensity	: AATCC-134-2011 ≤ 1.9kv
Colorfastness	: AATCC 16.3 (Light) / AATCC 107 (Water) ≥ 5.0
Dimensional Stability	: ASTM D7570 / AACHEN / ISO2551
Delamination Strength	: ASTM D 3936 ( No Separation of Secondary Backing )
Tuft Bind of Pile	: ASTM D 1335 ( Average : 8.1 lbs )
Hexapod Drum Test	: ASTM-D5252 / ASTM D-7330 / ISO/TR 10361
Environmental Cert.	: C R I Green Label Plus GLP100036
Quality Management	: ISO-9001:2015 / ISO-14001:2015 / ISO45001:2018

Independent  Textile  
**Testing**  
Service, Inc.

Test Number: 182123-1

PO Box 1948 - 1503 East Morris Street - Dalton, GA 30722  
Phone: 706-278-3013 • Fax: 706-272-7057 • E-mail: info@ittslab.com

Test Report

September 26, 2018

**Subject:** Specimens of the submitted sample were prepared and tested in accordance with  
ASTM E 648-17 and/or Federal Test Method 372. NFPA 253

**FLOORING RADIANT PANEL TEST**

**Sample Description**

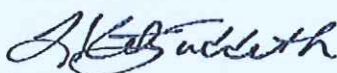
PP Carpet Tiles  
(PVC Backing)

**Test Assembly**

Mounted on 6mm FRC Board  
(Using Premium Multi Purpose Adhesive)

<u>Test Results</u>	<u>Specimen No. 1</u>	<u>Specimen No. 2</u>	<u>Specimen No. 3</u>
Critical Radiant Flux	0.56 watts/cm <sup>2</sup>	0.41 watts/cm <sup>2</sup>	0.50 watts/cm <sup>2</sup>
Total Burn Length	37.0 cm	46.0 cm	40.0 cm
Flame Front Out	21.0 minutes	21.0 minutes	20.0 minutes

<b><u>Average Critical Radiant Flux</u></b>	<b>0.49 watts/cm<sup>2</sup></b>
Estimated Standard Deviation	0.08 watts/cm <sup>2</sup>
	15.4% coefficient of variation



President L. Kent Suddeth



# Independent Textile Testing Service, Inc.

Test Number: 180967-2

PO Box 1948 - 1503 East Morris Street - Dalton, GA 30722  
Phone: 706-278-3013 • Fax: 706-272-7057 • E-mail: info@ittslab.com

## Test Report

August 15, 2018

**Subject:** Specimens of the submitted sample were prepared and tested in accordance with the procedures proposed by the National Institute of Standards and Technology (formerly National Bureau of Standards), Technical Note 708 and NFPA 258, ASTM E 662-15a.

### SMOKE DENSITY TEST (NIST)

#### Operating Conditions

Irradiance:	2.5 watts/cm <sup>2</sup>	G Factor	132
Thermal Exposure:	Flaming		
Furnace Voltage:	98		
Burner Fuel:	Propane		

#### Sample Description

PP Carpet Tiles (PVC backing)

#### Test Results

	#1	#2	#3	Average
Chamber Temperature, °F (start)	95	95	95	
Chamber Pressure	Maintained positive, under 3" H <sub>2</sub> O			
Minimum Transmittance (TM), %	83%	16%	11%	
at, minutes	9.02	2.65	9.83	7.17
Maximum Specific Optical Density (DM)	275	237	259	257
Clear Beam, (DC)	53	45	37	45
DM, CORRECTED (DMC)	222	192	222	212
Specific Optical Density at 1.5 minutes	109	127	113	116
Specific Optical Density at 4.0 minutes	249	216	171	212
Time to 90% DM, minutes	6.73	2.32	7.18	5.41
Time to DS = 16, minutes	0.83	0.70	0.85	0.79



President L. Kent Suddeth

# Independent Textile Testing Service, Inc.

Test No: 180967-1

PO Box 1948 - 1503 East Morris Street - Dalton, GA 30722  
Phone: 706-278-3013 • Fax: 706-272-7057 • E-mail: info@ittslab.com

## Test Report

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles

**Test Method Conducted**  
AATCC 134-2011  
Electrostatic Propensity of Carpets

### Purpose and Scope

This test method is designed to assess the static generating propensity of carpets developed when a person walks across them by controlled laboratory simulation of conditions which may be met in practice, and more particularly, with respect to those conditions which are known from experience to be strongly contributory to excessive accumulation of static charges.

### Test Conditions:

**Chamber Temperature:** 70° F.

**Chamber Relative Humidity:** 20%

Test Results:	Sole	Underlay	Maximum Voltage 1 (kV)	Maximum Voltage 2 (kV)	Averages (kV)
Test I Step Test	Neolite	Plate	Neg. 0.1	Neg. 0.1	Neg. 0.1
Test II Scuff Test	Neolite	Plate	Pos. 2.0	Pos. 1.8	Pos. 1.9
Test III Step Test	Leather	Plate	Pos. 0.4	--	--
Test IV Scuff Test	Leather	Plate	Pos. 0.4	--	--

### Soles:

- a) Neolite XS 664
- b) Suede Leather

### Underlayment:

- a) Plate: Earth grounded metal plate
- b) H/J: Standard 40 oz./yd<sup>2</sup> rubberized Hair/Jute cushion



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## Test Report

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles

**Test Method Conducted**  
**AATCC Test Method 107**  
**Colorfastness to Water**

### Purpose and Scope

This test method is designed to measure the resistance to water of dyed, printed, or otherwise colored textile yarns and fabrics of all kinds.

### Procedure

The specimen, backed by multifiber test fabric, is immersed in water under specified conditions of temperature and time, and then placed between glass or plastic plates under specified conditions of pressure, temperature and time. The change in color of the specimen and the staining of the attached multifiber test fabric are observed.

Test Specimen Identification	Gray Scale	Transference Scale
See Above:	5	5

Key to Ratings	
5	Negligible or no stain (change)
4	Slight stain (change)
3	Noticeable stain (change)
2	Considerable stain (change)
1	Severe stain (change)

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President L. Kent Suddeth

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## Test Report

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles

**Test Method Conducted**  
**AATCC Test Method 16.3**  
**Colorfastness to Light (Water-Cooled Xenon Arc)**

### Purpose and Scope

This test method provides the general principles and procedures which are currently in use for determining the colorfastness, to light of textile materials.

### Procedure

Samples of the textile material to be tested and the agreed upon comparison standard(s) are exposed simultaneously to a light source under specified conditions. The colorfastness to light of the specimen is evaluated by comparison of the color change of the exposed portion to the masked or control portion of the test specimen using the AATCC Gray Scale for Color Change or by instrumental color measurement.

Test Specimen Identification	Number of Cycles	Rating
See Above	2 (40 AFU's)	5

Key to Ratings	
5	Negligible or no change
4	Slight change
3	Noticeable change
2	Considerable change
1	Severe change

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# Independent Textile Testing Service, Inc.

Test No: 180967-2

PO Box 1948 - 1503 East Morris Street - Dalton, GA 30722  
Phone: 706-278-3013 • Fax: 706-272-7057 • E-mail: info@ittslab.com

## Test Report

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles (PVC backing)

**Test Method Conducted**  
**ASTM D7570**  
**Standard Test Method for Evaluation of Dimensional Stability of Pile Yarn Floor Covering**  
**(AACHEN/ISO2551)**

### Purpose and Scope

This test method covers the determination of dimensional changes in the lengthwise and widthwise direction and distortion likely to occur when pile floor coverings are exposed to various conditions of moisture and heat.

Test Condition	Measurement	Percent Change
M <sub>0</sub>	19.7050	
MT <sub>1</sub>	19.6975	-0.038
MT <sub>2</sub>	19.7000	-0.025
MT <sub>3</sub>	19.6950	-0.051
MT <sub>4</sub>	19.7000	-0.025 -0.0050"

### Test Condition Key

- M<sub>0</sub> Machine Direction Original Measurement
- C<sub>0</sub> Cross Direction Original Measurement
- T<sub>1</sub> Two (2) hours in an oven at 60° C
- T<sub>2</sub> Two (2) hours in a .1% solution at 20° C
- T<sub>3</sub> Twenty-four (24) hours in an oven at 60° C
- T<sub>4</sub> Forty-eight (48) hours in standard climate at 21° C & 65% RH

Test Condition	Measurement	Percent Change
C <sub>0</sub>	19.7175	
CT <sub>1</sub>	19.7113	-0.032
CT <sub>2</sub>	19.7163	-0.006
CT <sub>3</sub>	19.6938	-0.120
CT <sub>4</sub>	19.7125	-0.025 -0.0050"

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Test Report

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles (PVC backing)

<b>Test Method Conducted</b> <b>ASTM D 3936 Delamination Strength of Secondary Backing of Pile Floor Coverings</b>
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**Scope:**

This method covers the determination of the delamination strength of secondary backing adhered to a finished pile floor covering.

<b>TEST RESULTS</b>			
	-	-	-

<b>Average: No Separation</b>
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Testing  
Service, Inc.**

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 Phone: 706-278-3013 • Fax: 706-272-7057 • E-mail: info@ittslab.com

August 15, 2018

**Subject:** Sample(s) of carpet submitted for testing by the Customer and identified below:

**Sample Identification:** PP Carpet Tiles

<b>Test Method Conducted</b>
ASTM D-5252 Hexapod Drum Tester
ISO/TR 10361 Hexapod Tumbler
Ratings Based on CRI TM-101 Photographic Scales
ASTM D-7330 Assessment of Surface Appearance Change in Pile Floor Coverings

**APPARATUS:** WIRA INSTRUMENTATION HEXAPOD TUMBLER CARPET TESTER

**PROCEDURE:**

The test specimen described above was subjected to the reported cycles of "Hexapod" tumbling, removing the specimen every 2,000 cycles for restoration by vacuuming.


A 6.7 Amp Shark handheld w/rotary brush was used, making four (4) forward and backward passes along the length of the specimen.

The samples were assessed using day-light equivalent vertical lighting (1500 lux). Samples were viewed at an angle of 45 degrees from 1½ meter distance, judging from all directions.

**TEST RESULTS:**

Number of Hexapod cycles	OVERALL APPEARANCE CHANGE
12,000	2.0

Key to Ratings
5 = Negligible or no change
4 = Slight change
3 = Moderate change
2 = Considerable change
1 = Severe change



President L. Kent Suddeth

Our letters and reports are for the exclusive use of the customer to whom they are addressed, and their communication to any others or the use of the name of Independent Textile Testing Service, Inc., must receive our prior written approval. Our letters and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar products. The reports and letters and the name of Independent Textile Testing Service, Inc., are not to be used under any circumstances in advertising to the general public.

Independent  Textile  
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Test No: 180967-1

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Test Report

August 15, 2018

**Subject:** Sample(s) submitted for testing by the customer and identified below:

**Sample Identification:** PP Carpet Tiles

<p><b>Test Method Conducted</b> <b>ASTM D 1335 Tuft Bind of Pile Floor Coverings</b></p>
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**Scope:**

This test method covers the determination of the force required to pull a tuft completely out of a cut pile floor covering or to pull one or both legs of a loop free from the backing of looped pile floor coverings.

***Test Results***

1)	7.3	6)	6.9	11)	9.4
2)	10.1	7)	6.9	12)	10.3
3)	8.7	8)	8.5	13)	8.6
4)	7.6	9)	8.8	14)	6.6
5)	6.9	10)	7.7	15)	7.4

**Average Tuft Bind: 8.1 lbs.**



President L. Kent Suddeth

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# QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 00120Q36369R4M/3600

We hereby certify that

Unified Social Credit Code: 91360500763355520R

Dongxing Road, High-Tech Industrial Development Zone, Xinyu City, Jiangxi Province China

by reason of its  
**Quality Management System**  
has been awarded this certificate for compliance with the standard  
**GB/T 19001-2016 / ISO 9001:2015**  
The Quality Management System Applies in the following area:

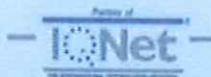
Design and Production of Carpets

**Certified since: October 13, 2008    Valid from: August 17, 2020    Valid until: September 25, 2023**

After a surveillance cycle, the certificate is valid only when used together with an Acceptance Notice of Surveillance Audit issued by CQC.  
Please access [www.cqc.com.cn](http://www.cqc.com.cn) for checking validity of the certificate.  
This certificate and its relevant information can query in the website of Certification and Accreditation Administration of the People's Republic of China ( [www.cnca.gov.cn](http://www.cnca.gov.cn) ).



陆梅  
Signed by: Lu Mei



**CHINA QUALITY CERTIFICATION CENTRE**

Section 9, No.188, Nansibuan(the South Fourth Ring Road) Xilu(West Road), Beijing 100070,China  
<http://www.cqc.com.cn>

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2018年版





# ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 00120E32742R4M/3600

We hereby certify that

Dongxing Road, High-Tech Industrial Development Zone, Xinyu City, Jiangxi Province China

by reason of its

## Environmental Management System

has been awarded this certificate for compliance with the standard

**GB/T 24001-2016 / ISO 14001:2015**

The Environmental Management System Applies in the following area:

Design and Production of Carpets and Related Management Activities

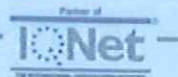
**Certified since: October 9, 2008    Valid from: August 19, 2020    Valid until: September 23, 2023**

After a surveillance cycle, the certificate is valid only when used together with an Acceptance Notice of Surveillance Audit issued by CQC.  
Please access [www.cqc.com.cn](http://www.cqc.com.cn) for checking validity of the certificate.

This certificate and its relevant information can query in the website of Certification and Accreditation Administration of the People's Republic of China ( [www.cnca.gov.cn](http://www.cnca.gov.cn) ).



陆梅  
Signed by: Lu Mei



## CHINA QUALITY CERTIFICATION CENTRE

Section 9, No.188, Nansihuan(the South Fourth Ring Road) Xilu(West Road), Beijing 100070,China

<http://www.cqc.com.cn>





# OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 00118S31114R2M/3600

We hereby certify that

Dongxing Road, High-Tech Industrial Development Zone, Xinyu City, Jiangxi Province China

has been awarded this certificate for compliance with the standard

**GB/T 45001-2020 / ISO45001:2018**

The Occupational Health and Safety Management applies in the following area:

**Design and Production of Carpets and Related Management Activities**

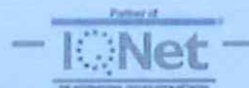
**Certified since: November 14, 2012    Valid from: August 18, 2020    Valid until: October 13, 2021**

After a surveillance cycle, the certificate is valid only when used together with an Acceptance Notice of Surveillance Audit issued by CQC.  
Please access [www.cqc.com.cn](http://www.cqc.com.cn) for checking validity of the certificate.

This certificate and its relevant information can query in the website of Certification and Accreditation Administration of the People's Republic of China ( [www.cnca.gov.cn](http://www.cnca.gov.cn) ).



  
Signed by: Lu Mei



**CHINA QUALITY CERTIFICATION CENTRE**

Section 9, No.188, Nansihuan(the South Fourth Ring Road) Xilu(West Road), Beijing 100070,China

<http://www.cqc.com.cn>

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2018年版



# GREEN LABEL PLUS

INDOOR AIR QUALITY TESTING PROGRAM  
THIS CERTIFIES THAT



Address: No.198 Nanxing Road, Jashan County,  
Jiaxing, Zhejiang China

HAS MET THE REQUIREMENTS OF  
THE CARPET AND RUG INSTITUTE'S GREEN  
LABEL PLUS PROGRAM FOR CATEGORY:

**31X Pre-dyed Polypropylene with PVC Backing**

Range of Total VOCs  
0.5 mg/m<sup>3</sup> or less

Product Type: Modular Tile

Joe W. Yarbrough, President  
The Carpet and Rug Institute, Inc

Certification Date: 01/31/2018  
Expiration Date: 12/31/2021

To view all GLP-Certified products visit [www.carpet-rug.org/glp/products](http://www.carpet-rug.org/glp/products).



THE CARPET AND RUG INSTITUTE  
100 SOUTH HAMILTON STREET  
DALTON GA 30720-4612 UNITED STATES



**GLP100036**

This product complies with  
California DPH Section 01350  
Version 1.2  
Private Office Scenario.

A USGBC<sup>®</sup> recognized third  
party certification program  
for LEED v4 EQ Credit  
Low-Emitting Materials.



ISO/IEC 17065  
Product Certification Body  
#0754