TECHNICAL SPECIFICATIONS

Quality	: KT-31
Yarn Fiber	: 100% Polypropylene (PP) Solution Dyed
Gauge and Structure	: 1/12" Multi-Level Loop Machine Tufted
Size	: 50cm x 50cm
Packing	: 20pcs./box ($5m^2$)
Pile Weight	: ± 20oz./yd^2 (680g/m^2)
Total Weight	: ± 4,800g./m^2
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	: 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.

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

Test Number: 182123-1

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)

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

Average Critical Radiant Flux	0.49	watts/cm^2
Estimated Standard Deviation	0.08	watts/cm^2
	15.4%	coefficient of variation

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Test Number: 180967-2

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^2	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_2O			
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

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Test No: 180967-1

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./yd2 rubberized Hair/Jute cushion

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Test No: 180967-1

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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Test No: 180967-1

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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Test No: 180967-2

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_0	19.7050	
MT_1	19.6975	-0.038
MT_2	19.7000	-0.025
MT_3	19.6950	-0.051
MT_4	19.7000	-0.025 -0.0050"

Test Condition	Measurement	Percent Change
C_0	19.7175	
CT_1	19.7113	-0.032
CT_2	19.7163	-0.006
CT_3	19.6938	-0.120
CT_4	19.7125	-0.025 -0.0050"

Test Condition Key

M_0	Machine Direction Original Measurement
C_0	Cross Direction Original Measurement
T_1	Two (2) hours in an oven at 60° C
T_2	Two (2) hours in a .1% solution at 20° C
T_3	Twenty-four (24) hours in an oven at 60° C
T_4	Forty-eight (48) hours in standard climate at 21° C & 65% RH

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Test No: 180967-2

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 D 3936 Delamination Strength of Secondary Backing of Pile Floor Coverings

Scope:

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

TEST RESULTS			
	-	-	-
	Average: No Separation		

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Test Number: 180967-1

Independent Textile Testing Service, Inc.

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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
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

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Test No: 180967-1

Test Report

August 15, 2018

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

Sample Identification: PP Carpet Tiles

Test Method Conducted
ASTM D 1335 Tuft Bind of Pile Floor Coverings

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

GREEN LABEL PLUS

INDOOR AIR QUALITY TESTING PROGRAM
THIS CERTIFIES THAT

Address: No.198 Nanxing Road, Jiashan Country,
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/m³ or less

Product Type: Modular Tile

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

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

To view all GLP-Certified products visit www.carpet-rug.org/glpproducts.

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

CRI GREEN LABEL +PLUS Indoor Air Quality Testing Program carpet-rug.org

GLP100036

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

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

ANSI ACCREDITED

ISO/IEC 17065 Product Certification Body #0754

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 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).

IAF CNAS 中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C001-M

Signed by: Lu Mei

IQNet

CHINA QUALITY CERTIFICATION CENTRE 中国质量认证中心

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

A 0076252

2018年版

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 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).

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Signed by: Lu Mei

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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 for checking validity of the certificate.
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Signed by: Lu Mei

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