استانداردهای آنتی استاتیک

Laboratory Standards and Certifications

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استاندارد آنتی استاتیک

استاندارد الکترواستاتیک آمریکا

COMMERCIAL TESTING COMPANY
1215 South Hamilton Street • Post Office Box 985 • Dalton, GA 30722
Telephone (706) 278-3935 • Facsimile (706) 278-3936

Report Number 07-08302

Standard Carpets Ind. LLC
Sharjah, U.A.E.

Test Number 3926-9674
August 24, 2007

Electrostatic Propensity

Test Method: The test was conducted in accordance with the AATCC Test Method 134, *Electrostatic Propensity of Carpets*. The purpose of the test is to assess the static propensity of carpets under controlled laboratory conditions simulating those that may exist in actual installations. The most important factors in determining the static charge are: (1) the basic natures of the two materials being rubbed together or separated, i.e., shoe soles and carpet; (2) surface contamination on either; (3) the nature of the rubbing or separation, i.e., stepping or scuffing; and, (4) the ambient atmospheric contains. A sample is conditioned at 70°F and 20% relative humidity and the static properties characterized by performing the following tests:

- TEST I — The step test is performed by wearing AATCC TM 134 test sandals with Neolite™ soles and heels and walking on the carpet for one minute.
- TEST II — The scuff test is conducted by scuffing or wiping in a backward motion for one minute wearing test sandals with Neolite™ soles and heels.
- TEST III — The step test is performed by wearing test shoes with chrome tanned leather soles and heels and walking on the carpet for one minute.
- TEST IV — The scuff test is conducted by scuffing or wiping in a backward motion for one minute wearing test shoes with chrome tanned leather soles and heels.

Material Tested:

Identification:	Graphics A
Construction:	Loop Pile Carpet Tile
Secondary Backing:	Vinyl

Test Conditions:

Environmental:	21.7°C, 20.8% RH
Underlayment:	None
Shampoo:	None

Test Result:

Test Mode	Polarity	Voltages
Test I — Step	negative	0.2 kV
Test II — Scuff	positive	0.3 kV
Test III — Step	negative	0.7 kV
Test IV — Scuff	negative	1.0 kV

Classification: A carpet classified in accordance with the CRI *Carpet Specifiers Handbook*, Appendix A, Carpet Test Methods and Suggested Physical Requirements, page 72, is suitable for residential use if the maximum voltage is 5.0 kV, and suitable for commercial use if the maximum voltage is 3.5 kV.

Commercial Testing Company

Dewane Jackson

(Authorized Signature)

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Mystique - PP

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Report Number 07-08299

Standard Carpets Ind. LLC
Sharjah, U.A.E.

Test Number 3924-9578
August 24, 2007

Accelerated Soiling

Test Method: The material was tested in accordance with ASTM International Test Method D 6540-00, *Accelerated Soiling of Pile Yarn Floor Covering*, a procedure for assessing the propensity of pile yarn floor coverings to soiling in the absence of abrasive wear and texture changes, using a standard synthetic soil composition. It is applicable for use in testing unused pile yarn floor covering; it is not applicable for use in testing used floor covering. This test method will provide a uniformly soiled test specimen to evaluate and has been found to give results similar to the actual floor service soiling. However, its use is recommended only as a screening test method and not as a replacement for floor testing. The acceptance criteria of this method is set by mutual agreement between the purchaser and supplier. The carpet test specimens are secured to a backing sheet mounted inside a drum with the pile surface exposed, and are subjected to an accelerated soiling process. The degree of soiling is measured or assessed by comparing the change in color between soiled and original pile yarn floor covering using AATCC Evaluation Procedure 1, (Jumbo) Gray Scale for Color Change, a numeric rating process using AATCC terminology for Subjective Rating Processes where 5 = negligible or no change in color, 4 = slight change, 3 = noticeable change, 2 = considerable change, and 1 = much change in color.

Material Tested:

Identification:	Graphics A
Construction:	Loop Pile Carpet Tile
Secondary Backing:	Vinyl

Test Result:

Average Rating — 3-4

Commercial Testing Company

Jonathan Jackson

(Authorized Signature)

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استاندارد آنتی استاتیک

استاندارد آنتی استاتیک آمریکا

Independent Textile Testing Service, Inc.

Test No: 193591

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

Customer: Standard Carpets Ind. LLC

January 7, 2019

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

Sample Identification: Quality Name: Midlands
100% Solution Dyed Olefin Carpet Tile with PVC Backing

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. 0.3	Neg. 0.3	Neg. 0.3
Test II Scuff Test	Neolite	Plate	Neg. 0.1	Neg. 0.2	Neg. 0.2
Test III Step Test	Leather	Plate	Neg. 0.1	--	--
Test IV Scuff Test	Leather	Plate	Neg. 0.1	--	--

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**

President L. Kent Suddeth

Page 1 of 1

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استاندارد الکترواستاتیک آمریکا

CENTEXBEL

Mr. Upendra R. Oza
STANDARD CARPETS IND LLC
Industrial Area no.1 PO Box 27977
AE- SHARJAH
VERENIGDE ARABISCHE EMIRATEN

your delivery of	your reference	our reference	date
2009-05-12		PW/5484	Zwijnaarde, 2009-06-11

Analysis Report 68886

Required tests :

Determination of the electrical resistance
Assessment of static electrical propensity - walking test
Determination of sound absorption
Determination of impact sound insulation
Determination of thermal resistance by the guarded hot plate apparatus

Identification number	Information given by the client	Date of receipt
T905007	FRS Loop Pile Polypropylene Carpet Tile (Tetris)	2009-05-12

Petra Wittevrongel
order responsible

For further information, please contact our sectorial adviser Jo Wynendaele

ISO 17025
BELAC
056-TEST

VAT BE 0459.218.289 Fin. Acc. 210-0472965-45 IBAN BE44 2100 4729 6545

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Analysis Report 68886

our reference	date	page
PW/5484	2009-06-11	2 / 6

Reference : **T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)**

Determination of the electrical resistance

1. Method:

Applied standard	: ISO 10965 (year: 1998)
Deviations of the standard	: -
Testing atmosphere	: 23°C and 25 % relative humidity
Applied voltage	: 500 Volt
Number of specimens	: 3
Number of measurements	: 6 (2 measurements per specimen)

2. Results:

Date of ending the test: 25-05-2009

test specimen	surface resistance in Ω	vertical resistance in Ω
1	$1{,}67 \times 10^{12}$	$9{,}43 \times 10^{11}$
2	$5{,}00 \times 10^{12}$	$1{,}35 \times 10^{12}$
3	$5{,}00 \times 10^{12}$	$1{,}28 \times 10^{13}$
4	$3{,}33 \times 10^{12}$	$6{,}58 \times 10^{11}$
5	$4{,}55 \times 10^{12}$	$1{,}28 \times 10^{12}$
6	$2{,}50 \times 10^{12}$	$1{,}25 \times 10^{12}$
geometrical mean value	$3{,}41 \times 10^{12}\ \Omega$	$1{,}61 \times 10^{12}\ \Omega$

Performed in the physical lab under the responsibility of Petra Wittevrongel.

CEN TEX BEL

Analysis Report 68886

our reference	date	page
PW/5484	2009-06-11	3 / 6

Reference : **T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)**

Assessment of static electrical propensity - walking test

1. Method:

Applied standard	: ISO 6356 (year: 2000) method by walking
Deviations of the standard	: dimensions of the carpet 200 cm x 100 cm (assembly of 8 pieces of 50 cm x 50 cm)
Atmosphere for conditioning	: 23°C and 25% relative humidity
Conditioning time	: at least 7 days
Number of measurements	: 3

2. Results:

Date of ending the test: 25-05-2009

	body voltage (kVolts)
measurement	with Neolite sole
1	0.0
2	0.1
3	0.2
average	0.1

Performed under accreditation in the physical lab under the responsibility of Philippe Lemaire.

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Analysis Report 68886

our reference	date	page
PW/5484	2009-06-11	4 / 6

Reference : **T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)**

Determination of sound absorption

1. Method:

Performed in the external lab : Schall- und Wärmemeßstelle Aachen GmbH

2. Results:

Date of ending the test : 27-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.

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Analysis Report 68886

our reference	date	page
PW/5484	2009-06-11	5 / 6

Reference : **T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)**

Determination of impact sound insulation

1. Method:

Performed in the external lab : Schall- und Wärmemeβstelle Aachen GmbH

2. Results:

Date of ending the test : 27-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.

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Analysis Report 68886

our reference	date	page
PW/5484	2009-06-11	6 / 6

Reference : T905007 - FRS Loop Pile Polypropylene Carpet Tile (Tetris)

Determination of thermal resistance by the guarded hot plate apparatus

1. Method:

Performed in the external lab : Ghent University, Faculty of Engineering (Department of Textiles)

2. Results:

Date of ending the test : 29-05-2009

See analysis report enclosed.

Centexbel is not responsible for the test results.

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استاندارد الکترواستاتیک آمریکا

Schall- und Wärmemeßstelle Aachen GmbH

Institut für schalltechnische und wärmetechnische Prüfungen - Beratung - Planung

SWA GmbH
Im Grüntal 22 52 066 Aachen
Telefon (0241) 970 220
Telefax (0241) 572 956
Geschäftsführung:
Dipl.-Ing. Bernd Gebing
Dr.-Ing. Lothar Siebel
Amtsgericht Aachen HRB 2706

Labor: Hauptstr. 133 52 477 Alsdorf

VMPA Schallschutzprüfstelle DIN 4109
Staatlich anerkannte Sachverständige
für den Schall-u. Wärmeschutz IK-Bau NRW

Bankverbindung: Sparkasse Aachen
(BLZ 390 500 00) Kto.-Nr. 11 011 194

27.05.2009

TEST REPORT NO. : CT190509B TS

Impact sound insulation of ISO 140-8 : 1998 - 03

Date of test:	19.05.2009
Customer:	CENTEXBEL
Tested material:	T905007

laid loose on a 140 mm thick reinforced concrete floor slab

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Test results	Enclosure TS
Impact sound insulation of ISO 140-8 : 1998 - 03 Measurement of impact sound insulation by a floor covering - on a solid strings-floor Customer: **CENTEXBEL**	Page 2 of 2

Tested material: **T905007**
Test rooms: 02 u. K2, Hauptstraße 133, 52 477 Alsdorf
Test area: 4,24 m x 4,15 m Test area of slab
Date of test: 19.05.2009

Description of the test material:

Total thickness: **- mm**

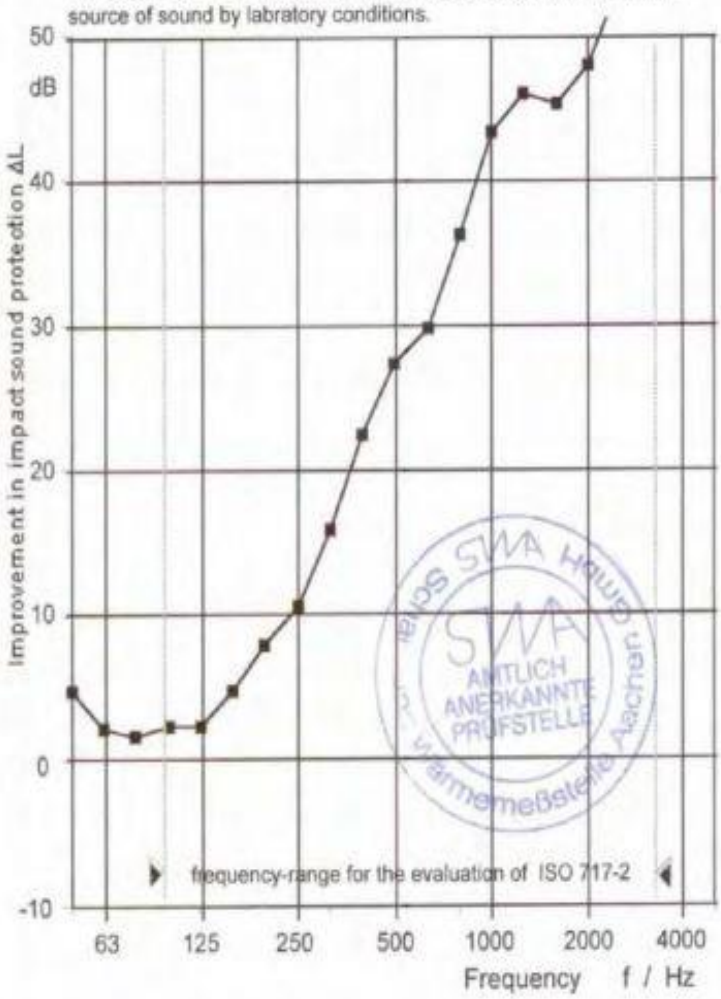
Mass / area: **- kg/m²**

laid loose on a 140 mm thick reinforced concrete floor slab

Receiving room:
Volume: 58,9 m³
Temperature: 20 °C
Humidity: 65 %

The results are based on tests, which were effected with on artificial source of sound by labratory conditions.

Frequency Hz	Ln Bare floor dB	ΔL dB
50		4,9
63		2,3
80		1,8
100	61,0	2,5
125	61,4	2,4
160	64,8	4,9
200	63,7	8,0
250	65,4	10,7
315	65,6	16,0
400	66,1	22,4
500	66,0	27,3
630	66,4	29,8
800	66,3	36,4
1000	66,2	43,4
1250	66,6	46,0
1600	67,2	45,3
2000	67,1	47,9
2500	67,0	53,7
3150	66,4	54,2
4000		---
5000		---



Reception filter: third-octave
Calculation according ISO 717-2:

Impact sound improvement index	non rated reduction of impact sound insulation	
ΔL_W = 24 dB	$\Delta L_{lin} = \Delta L_w + C_{I,\Delta}$	$C_{I,\Delta}$ = -12 dB
(VM = 24 dB)	ΔL_{lin} = 12 dB	$C_{I,r}$ = 1 dB
		$C_{I,r,50\text{-}2500}$ = 4 dB

Test report no.: **CT190509B TS**
Aachen 27.05.2009

SWA Schall- und Wärmemeßstelle Aachen GmbH

(Dipl.-Ing. A. Siebel) (Dr.-Ing. L. Siebel)

استاندارد آنتی استاتیک

استاندارد الکترواستاتیک آمریکا

SWA

Schall- und Wärmemeßstelle Aachen GmbH

Institut für schalltechnische und wärmetechnische Prüfungen - Beratung - Planung

SWA GmbH
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VMPA Schallschutzprüfstelle DIN 4109
Staatlich anerkannte Sachverständige
für den Schall-u. Wärmeschutz IK-Bau NRW

Bankverbindung: Sparkasse Aachen
(BLZ 390 500 00) Kto.-Nr. 11 011 194

27.05.2009

TEST REPORT NO. : CT190509B SA

Sound absorption of DIN EN ISO 354 : 2003 - 12

Date of test:	19.05.2009
Customer:	CENTEXBEL
Tested material:	T905007
	laid loose on the floor of the reverberation room

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4. Test results	Enclosure SA
Sound absorption DIN EN ISO 354 : 2003 - 12 Measurement of sound absorption in a reverberation room Customer: **CENTEXBEL**	Page 2 of 4

Tested material: **article:** **T905007**
Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf
Test area: 12,0 m²
Test method: method of reverberation room
Date of test: 19.05.2009

Description of the test material:

Total thickness: **- mm**

Mass / area: **- kg/m²**

laid loose on the floor of the reverberation room

Dimension of the test area:

length: 4,00 m
width: 3,00 m

Reverberation room:

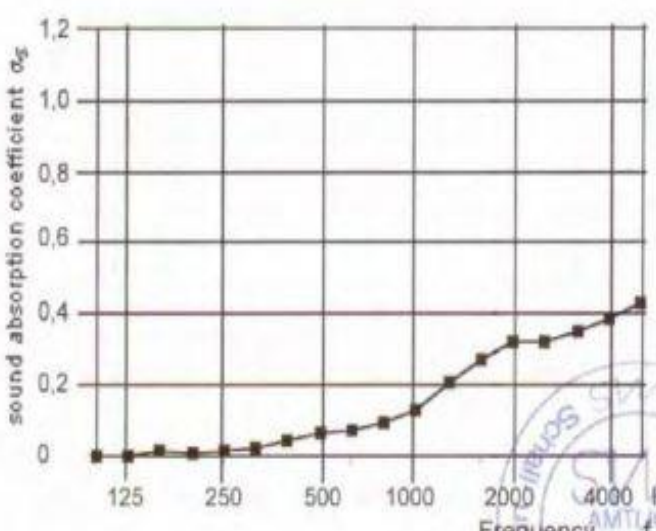
Basic plan: trapezoid
Volume: 211 m³
Temperature: 20 °C
Humidity: 65 %

f / Hz	125	250	500	1000	2000	4000
α_s	**0,00**	**0,01**	**0,06**	**0,13**	**0,32**	**0,39**

Surface areas of reverberation room: 213 m²

Surface areas of reflectors in reverberation room: 54,5 m²

Reflectors:
6 Alu panels of 1,0 m/ 2,0 m
7 Plywood panels of 1,5 m/ 1,3 m
1 Alu panels of 1,8 m/ 0,9 m



Test sound: third-octave noise
Reception filter: third-octave

Test report no.: CT190509B SA
Aachen 27.05.2009

SWA Schall- und Wärmemeßstelle Aachen GmbH

(Dipl.-Ing. A. Siebel) (Dr.-Ing. L. Siebel)

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4.1 Valuation of test results	Enclosure SA
Soundabsorber for the application in buildings - valuation of sound absorbtion **Sound absorption of DIN EN ISO 11654 : 1997- 07** Customer: **CENTEXBEL**	Page 3 of 4

Tested material: **article:** **T905007**
Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf
Test area: 12,0 m²
Test method: method of reverberation room
Date of test: 19.05.2009

Description of the test material:
Total thickness: - **mm**
Mass / area: - **kg/m²**
laid loose on the floor of the reverberation room

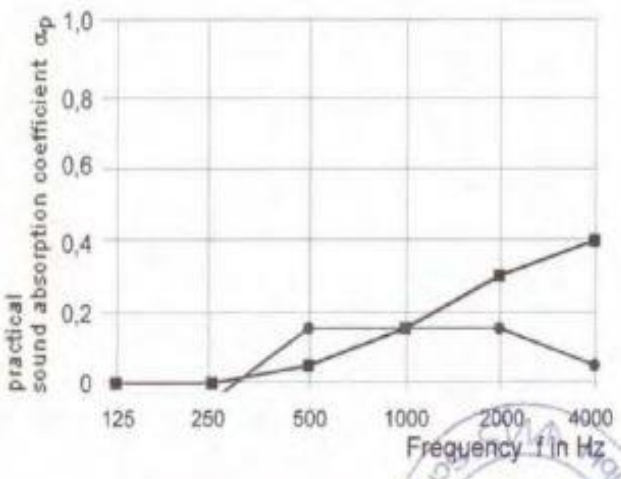
frequency - range of the "shapeindicators"	Frequency in Hz	pactical sound absorption coefficient
	125	0,00
L	250	0,00
M	500	0,05
M	1000	0,15
H	2000	0,30
H	4000	0,40

Results:
Relation - curve:

Reverberation room:
Basic plan: trapezoid
Volume: 211 m³
Temperature: 20 °C
Humidity: 65 %

Surfaces areas of reverberation room: 213 m²

Surfaces areas of reflectors in reverberation room: 54,5 m²



Evaluated sound absorptions grade α_w
α_w : 0,15 (- - H) *)

*) It is recommended insistently to use this singular valuation with complete curve of sound absorption garde.

Test report no.: CT190509B SA	SWA Schall- und Wärmemeßstelle Aachen GmbH
Aachen 27.05.2009	(Dipl.-Ing. A. Siebel) (Dr.-Ing. L. Siebel)

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4.2 Test results	Enclosure SA
Reverberation times Measurement of sound absorption in a reverberation room Customer: **CENTEXBEL**	Page 4 of 4

Tested material: **article:** **T905007**
Test room: reverberation room, Hauptstraße 133, 52 477 Alsdorf
Test area: 12,0 m²
Test method: method of reverberation room
Date of test: 19.05.2009

Description of the test material:

Total thickness: - **mm**

Mass / area: - **kg/m²**

laid loose on the floor of the reverberation room

Dimension of the test area:

length: 4,00 m
width: 3,00 m

Reverberation times:

f / Hz	T1 / s	T2 / s
100	9,96	9,91
125	7,82	7,79
160	6,73	6,48
200	7,29	7,10
250	7,20	6,98
315	6,22	5,95
400	6,57	6,02
500	6,89	6,00
630	6,93	5,67
800	6,55	5,39
1000	6,48	5,00
1250	6,31	4,34
1600	5,93	3,79
2000	5,42	3,38
2500	4,65	3,05
3150	3,99	2,68
4000	3,24	2,26
5000	2,59	1,86

SWA Schall- und Wärmemeßstelle Aachen GmbH
SWA AMTLICH ANERKANNTE PRÜFSTELLE

Number of loudspeaker positions: 2 Test sound: third-octave noise
Number of microphone positions: 2 x 6 Reception filter: third-octave

Test report no.: CT190509B SA Aachen 27.05.2009	SWA Schall- und Wärmemeßstelle Aachen GmbH

استاندارد آنتی استاتیک

استاندارد الکترواستاتیک آمریکا

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Technologiepark 7
9052 Zwijnaarde

contact	e-mail	date
Didier Van Daele	didier.vandaele@UGent.be	29/05/2009

TEST REPORT 09-297 B

Samples received :

Order 7489: T905007
Received on 12/05/09

Aim of the test :

determination of applicability with floorheating

Test conditions :

Applicability with floorheating by means of TECOSY : one plate method

Standard:	DIN 52 612 part 1 (1979)* in accordance with ISO 8302 (1991)*
Method:	A sample is placed between a cold and a warm plate. The cold and the warm plate are kept at the same temperature. The quantity of energy needed to keep the warm and cold plate on temperature, is an indication for the heat transmission of the sample.
Number of tests:	2 samples (3 measurements per sample)
Test conditions:	20 ± 2°C and 65 ± 4 % relative humidity

The tests were ended in week 22/2009

استاندارد آنتی استاتیک

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Independent Textile
TtJffilf
Service, Inc.

Test No: 193590

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

Customer: Standard Carpets Ind. LLC January 7, 2019

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

Identification: Quality Name: 100% Solution Dyed Nylon Carpet Tile with PVC Backing

Test Method Conducted
AATCC 134-2011
Electrostatic Propensity of Carpets

I 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. 0.6	Neg.1.0	Neg. 0.8
Test II Scuff Test	Neolite	Plate	Neg. 5.8	Neg. 5.9	Neg. 5.9
Test III Step Test	Leather	Plate	Neg. 0.2	—	—
Test IV Scuff Test	Leather	Plate	Neg. 0.5	—	—

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

President L. Kent Suddeth

Page 1 of 1