

Product Specification Sheet

Performance Putt

USES:

Putting Green
Driving Ranges
Bocce Ball
Tennis Court
Landscape
Medium-Heavy Traffic

SPECIFICATIONS:

Pile Height: 1/2"
Turf Gauge: 3/16"
Face Weight: 44 oz./yd²
Backing Weight: 13 oz./yd²
Total Weight: 57 oz./yd²
Stitch Rate: 34/10cm
Stitches/m²: 21420
Material/Dtex: PP6000
Color: Medium Bi-Color Green
Type Of Fiber: Polypropylene
Monofilament

Summary Report

Watersavesrs Turf
4316 Redwood Hwy, Ste 100
San Rafael, CA 94903

Report Date: September 5, 2014

Work Order: 14082407



Project Location: U.S.A.

Project Name: Turf Test

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
372766	Performance Putt	Turf	2014-08-20	00:00	2014-08-22

Sample: 372766 - Performance Putt

	Flag	Result	Units	RL
Total Lead		<1.00	mg/Kg	1



Certificate of Analysis Summary 627495

Watersavers Turf, San Rafael, CA

Project Name: Turf Testing



Project Id: Turf Testing Series 11

Project Location: USA

Date Received in Lab: Tue Jun-11-19 04:00 pm

Report Date: 20-JUN-19

Project Manager: John Builes

Analysis Requested	Lab Id:	627495-001					
	Field Id:	Turf Series 11					
	Depth:						
	Matrix:	SOLID					
	Sampled:	Jun-07-19 00:00					
Total Lead SUB: T104704215-19-29	Extracted:	Jun-16-19 14:30					
	Analyzed:	Jun-17-19 23:00					
	Units/RL:	mg/kg RL					
Lead		1.35 1.11					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

John Builes
Project Manager

CERTIFICATE OF ANALYSIS

Client: Watersavers Turf
Product: Performance Putt
Xenco Sample #: 627495
Lead Results: one point three five part per million (1.35ppm)

Synthetic fibers from turf product Performance Putt, taken by Watersavers Turf 06-07-19, and received by Xenco Labs 06-11-19, were analyzed by Xenco Labs 06-17-19 for total lead by method ASTM G 2765-09 (EPA 6010). The results were one point three five milligram lead per kilogram synthetic fiber (1.35 mg/Kg).



Dr. Blair Leftwich, Director

06/18/19

Date



TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	67993B
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	2836-9370
	San Rafael, CA 94903	Test Completion Date:	7/11/2016
		Report Date:	7/20/2016
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	7/7/2016
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Turf ID:	Performance Putt		

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM F1551	Test Method:	Standard Test Methods for Comprehensive Characterization of Synthetic Turf Playing Surfaces and Materials: Suffix-DIN 18-035, Part 6: Water Permeability of Synthetic Turf Systems and Permeable Bases

SAMPLING PLAN:

Sampling Date:	7/7/2016
<ul style="list-style-type: none"> Specimen sampling is performed in the sampling department at TSI. The sampling size of specimens is determined by the test method requirements. In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager. All samples are subjected to the outside environmental conditions of temperature and relative humidity. Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested 	

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
none

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT
ASTM F1551; Suffix-DIN 18-035, Part 6	Average Rainfall Capacity (Water Permeability)	71.0 inches/hour

* Test data values represent drainage rates for the turf and infill only, and do not take into account the percolation properties of a sub-base or padding.

Infill System: 1.2 lbs/ft²Silica Sand	# of Specimens (3) 11.5" Diameter	
Tube: 10.75" OD 10.00" ID 8" Length (Beveled)	Tube Index Mark: 6"	Tube Weight: 39 lbs
Flange: 9.375" Diameter	Tube Flow Head: 2 Gallons	Pre-Conditioning: none

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.

TSI can only ensure the test results for the specific items tested.

Unless otherwise noted in the deviations sections of this report, all tests performed are in compliance with stated test method.

Test Report Approval:

Digitally signed by Erle Miles, Jr. VP
DN: cn=Erle Miles, Jr. VP, ou=Testing
Services Inc., c=US
email=tsioffice@optilink.com, o=TSI
Date: 2016.07.21 14:16:11 -0400

Erle Miles, Jr. VP, Testing Services Inc

TSI Accreditation: Our laboratory is accredited by the US Dept of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Our code # is: NVLAP 100108-0. TSI is a certified independent testing laboratory by the Synthetic Turf Council

Form:	Rev:	Revision Date:	Page 1 of 1
Release Date:	Control Type: Electronic – Expires 24 hours after this date: Jul. 21, 16 Printed copies are uncontrolled		

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tsioffice@optilink.us

TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79410
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2444
	San Rafael, CA 94903	Test Completion Date:	1/16/2020
		Report Date:	1/18/2020
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	1/13/2020
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Turf Identification:	Performance Putt		
Infill:	None		

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM D2859	Test Method:	Standard Test Method for Ignition Characteristics of Finished Textile Pile Yarn Floorcoverings

SAMPLING PLAN:

Sampling Date:	1/13/2020
<ul style="list-style-type: none"> Specimen sampling is performed in the sampling department at TSI. The sampling size of specimens is determined by the test method requirements. In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager. All samples are subjected to the outside environmental conditions of temperature and relative humidity. Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested 	

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
Specimens were not exposed to air circulating oven.

TEST SCOPE:

This test method provides a method of determining the flammability characteristics of textile products when exposed to an ignition source in a laboratory environment. Eight specimens were taken from the sample lot, 230mm X 230mm, and preconditioned in an air circulating oven @ 150°C for 2 hours. After removal from the oven, the specimens are placed into a desiccator for 1 hour prior to performing the test. Each specimen was then placed into the test chamber floor with the pile surface up and a steel frame, 230mm X 230mm with 200mm diameter hole, placed on top of the specimen. A methenamine tablet was placed centrally onto the pile surface. The pill was ignited using a lighted match, with the ignition flame and propagated flame allowed to self-extinguish.

CRITERIA:

The specimen passes, if the charred portion of the test specimen, did not extend to within 25mm (1") of the diameter hole of the steel frame. The U.S. Consumer Product Safety Commission requires that at least seven of the eight specimens pass the test for acceptance as meeting the standard.

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT
ASTM D2859-16	Ignition Characteristics of Textile Floor Coverings (Pill Test)	8 out of 8 Pass Passes, U.S. CPSC 16CFR 1630 (FF1-70), Carpets & Rugs

Uncertainty:

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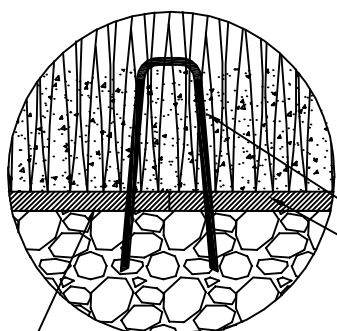
Test Report Approval:

 Erle Miles, III, Lab Director Testing Services (TSI) LLC

TSI Accreditation: Our laboratory is accredited by the US Dept. of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Our code # is: NVLAP 100108-0.
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100108-0



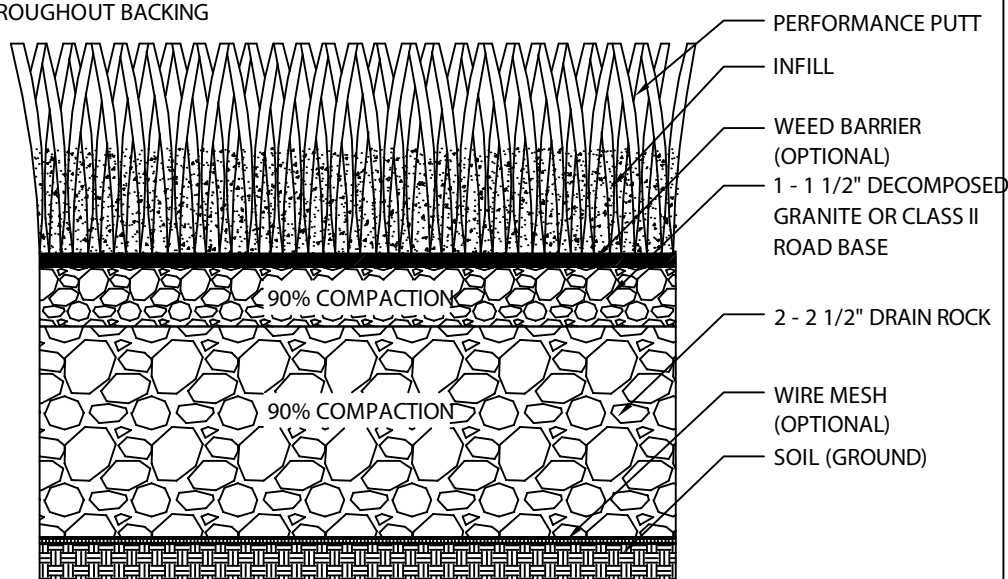
SOD STAPLE 6" x 1" x 6"

DRAINAGE PASS THROUGH FOR
WATER IN PUNCHED HOLES
THROUGHOUT BACKING

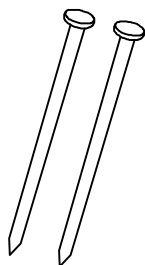
SEAMING TAPE

SPECIFICATIONS

YARN TYPE	POLYPROPYLENE CURLED
PILE HEIGHT	5/8"
TURF GAUGE	3/16"
FACE WEIGHT	60 OZ YD ²
BACKING WEIGHT	20 OZ YD ²
TOTAL WEIGHT	64 OZ YD ²
STITCH RATE	31/10 CM
STITCHES/M ²	65100
COLOR	BICOLOR GREEN
ROLL SIZE (FEET)	15' x 100'
MAXIMUM DRAIN RATE	>30 INCHES PER HOUR



SECTION

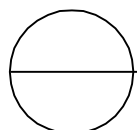


SECURING TURF TO BASE
BRIGHT COMMON 40D/60D
NAILS OR GALVANIZED NAILS
6' APART ALONG PERIMETER.

PUSH BROOM AFTER
INSTALLATION IS COMPLETE.

NOTES:

1. THE GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION. SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH, OR GST RECOMMENDED SEAMING TECHNIQUES.
2. COLOR: BICOLOR GREEN.
3. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. DO NOT SCALE DRAWING.
5. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
6. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
7. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5006-046.



PERFORMANCE PUTT

TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	67993A
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	2836-9370
	San Rafael, CA 94903	Test Completion Date:	7/13/2016
		Report Date:	7/20/2016
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	7/7/2016
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Turf ID:	Performance Putt		

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM D5848	Test Method:	Standard Test Method for Mass Per Unit Area of Pile Yarn Floorcoverings

SAMPLING PLAN:

Sampling Date:	7/7/2016
<ul style="list-style-type: none"> Specimen sampling is performed in the sampling department at TSI. The sampling size of specimens is determined by the test method requirements. In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager. All samples are subjected to the outside environmental conditions of temperature and relative humidity. Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested 	

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT
ASTM D5848-10e1	Total Product Weight	56.60 oz/yd ²
ASTM D5848-10e1	Pile Yarn Weight	43.60 oz/yd ²

Uncertainty:

We undertake all assignments for our clients on a best effort basis. Our findings and judgments are based on the information using the latest test methods available. TSI can only ensure the test results for the specific items tested. Unless otherwise noted in the deviations sections of this report, all tests performed are in compliance with stated test method.

Test Report Approval:

 Digitally signed by Eric Miles, Jr. VP
DN: cn=Eric Miles, Jr. VP, o=Testing
Services Inc. Inc., email=ericmiles@testing
servicesinc.com, c=US
Date: 2016.07.21 14:16:24 -0400

Eric Miles, Jr. VP, Testing Services Inc

TSI Accreditation: Our laboratory is accredited by the US Dept of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Our code # is: NVLAP 100108-0. TSI is a certified independent testing laboratory by the Synthetic Turf Council

Form:	Rev:	Revision Date:	Page 1 of 1
Release Date:	Control Type: Electronic – Expires 24 hours after this date: Jul. 21, 16 Printed copies are uncontrolled		

TEST REPORT

CLIENT:

Company:	Watersavers Turf.	Report Number:	79420-01
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2419
	San Rafael, CA 94903	Test Completion Date:	1/16/2020
		Report Date:	1/18/2020
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	1/13/2020
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Product ID:	Performance Putt		

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM D1335	Test Method:	Standard Test Method for Tuft Bind Strength of Pile Yarn Floorcoverings

SAMPLING PLAN:

Sampling Date:	1/13/2020
<ul style="list-style-type: none"> Specimen sampling is performed in the sampling department at TSI. The sampling size of specimens is determined by the test method requirements. In the event a specific sampling size is not called for, a determination will be made based on previous testing experience, and approved for use by an authorized manager. All samples are subjected to the outside environmental conditions of temperature and relative humidity. Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested 	

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT
ASTM D1335-17e1	Average Tuft Bind Strength	8.2 lbs/force

➤ Each individual pull was made from monofilament fibers

Pull #1	6.685 lbs/force	Pull #2	8.430 lbs/force	Pull #3	9.074 lbs/force	Pull #4	7.758 lbs/force	Pull #5	7.732 lbs/force
Pull #6	7.463 lbs/force	Pull #7	7.973 lbs/force	Pull #8	8.859 lbs/force	Pull #9	6.523 lbs/force	Pull #10	9.557 lbs/force
Pull #11	6.443 lbs/force	Pull #12	6.899 lbs/force	Pull #13	9.611 lbs/force	Pull #14	8.913 lbs/force	Pull #15	10.50 lbs/force

Uncertainty:

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Test Report Approval:

 Digitally signed by Erle Miles
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email=erle@testing-services.com, c=US
Date: 2020.01.21 10:05:44 -0500

Erle Miles, III, Lab Director Testing Services (TSI) LLC

TSI Accreditation:

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TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79706
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2419
	San Rafael, CA 94903	Test Completion Date:	2/18/2020
		Report Date:	2/19/2020
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	2/5/2020
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Product ID:	Performance Putt		

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following...			
Standard:	ASTM D5034	Test Method:	Standard Test Method for Breaking Strength of Textile Fabrics (Grab)

SAMPLING PLAN:

Sampling Date:	2/5/2020
<ul style="list-style-type: none"> Specimen sampling is performed in the sampling department at TSI. The sampling size of specimens is determined by the test method requirements. In the event a specific sampling size is not called for, a determination will be made based on previous testing experience and approved for use by an authorized manager. All samples are subjected to the outside environmental conditions of temperature and relative humidity. Sample requiring pre-determined exposure to specified environmental conditions based on a specific test method, take place in the departments in which they are tested 	

DEVIATION FROM TEST METHOD:

State reason for any Deviation from, Additions to, or Exclusions From Test Method.
None

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT
ASTM D5034-09(2017)	Average Grab Tear Strength of Length Direction (MD)	306.6 lbs/force
ASTM D5034-09(2017)	Average Grab Tear Strength of Width Direction (CMD)	290.2 lbs/force

Uncertainty:

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Test Report Approval:

 Digitally signed by Erle Miles
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Services Inc., ou,
email=erle@testing-services.com, c=US
Date: 2020.02.19 14:56:11 -0500

Erle Miles, III, Lab Director Testing Services (TSI) LLC

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Technical Data Sheet: Performance Putt

Product Properties:	Property	Imperial Unit	Metric Unit	Description
	Fiber Type			Polypropylene Curled as Thatch
	Fiber Mass	Denier 5400	Detex 6000	Polypropylene
	Pile Height	.50 in	12.70 mm	
	Color(s)			Medium Bi-Color Green
	Tufting Gauge	.188 in	4.775 mm	
	Stitch Rate	34.544/4in	34/10cm	
	Stitches	85,393.689/yd ²	71,400/m ²	
	Primary Backing	5.899 oz/yd ²	200.00 g/m ²	Polypropylene and Polyester fiber
	Secondary Backing	7.101 oz/yd ² ±5%	240.789 g/m ² ±5%	Urethane
	Total Backing Weight	13.00 oz/yd ² ±1.5oz	440.789 g/m ² ±50g	
	Micron	120		

Performance Properties:	Property	Imperial Unit	Metric Unit	Test Method
	Face Weight	43.60 oz/yd ²	1,478.339 g/m ²	ASTM D5848-10e1
	Total Weight	56.60 oz/yd ²	1,919.128 g/m ²	ASTM D5848-10e1
	Permeability	71.00 in/ft ² /hr	1,941.227 cm/m ² /hr	ASTM F1551; Suffix-DIN 18-035, Part 6
	Melting Point	250 °F	121 °C	
	Tuft Bind	8.20 lb-f	36.475 N	ASTM-D1335-17e1
	Grab Tear MD	306.60 lb-f	1,363.825 N	ASTM-D5034-05
	Grab Tear CMD	290.20 lb-f	1,290.874 N	ASTM-D5034-05
	Infill Amount (recommended)	¾ of the Pile Height		

Packaging:	Property	Imperial Unit	Metric Unit	Description
	Model Number			Performance Putt
	Roll Width	15 ft	4.57 m	
	Roll Length	100 ft	30.48 m	
	Area per Roll	1,500 ft ²	139.355 m ²	
	Total Roll Weight	735 lbs	333.390 kg	