

Product Specification Sheet

Monte Verde Lite

USES:

Landscape
Lawns
Playgrounds
Traffic Medians
Pet Areas
Commercial or Residential
Light-Heavy Traffic

SPECIFICATIONS:

Pile Height: 1.58"
Turf Gauge: 5/8"
Face Weight: 50 oz./yd²
Backing Weight: 28 oz./yd²
Total Weight: 78 oz./yd²
Stitch Rate: 18.5/10 cm
Stitches/m²: 11655
Material/Dtex: PE&PP 16400
Color: Lime Green and Emerald Green
with Brown and Green Thatching
Type Of Fiber: PE Monofilament and PP
Curled As Thatch

Summary Report

Watersavers Turf
4316 Redwood Hwy, Ste
1002 San Rafael, CA 94903

Report Date: December 2, 2016

Work Order: 16112802



Project Location: U.S.A.
Project Name: Turf Test

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
432649	Monte Verde Lite	Turf	2016-11-23	00:00	2016-11-28

Sample: 432649 - Monte Verde Lite

Param	Flag	Result	Units	RL
Total Lead		<100	mg/Kg	1



Certificate of Analysis Summary 627487

Watersavers Turf, San Rafael, CA

Project Name: Turf Testing



Project Id: Turf Testing 3

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:	627487-001					
	Field Id:	Turf Series 3					
	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 22:18					
	Units/RL:	mg/kg RL					
Lead		<0.943 0.943					

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: Monte Verde Lite
Xenco Sample #: 627486
Lead Results: Less than one part per million

Synthetic fibers from turf product Turf Series 1 – Watersavers Turf, 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 less than one milligram lead per kilogram synthetic fiber (<1mg/KG).



Dr. Blair Leftwich, Director

06/18/19

Date

TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79409
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2443
	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:	Monte Verde Lite		
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:

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 are performed in compliance with stated test method.

Test Report Approval:

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

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. TSI is a certified independent testing laboratory by the Synthetic Turf Council



100108-0

TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79331
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3166-2332
	San Rafael, CA 94903	Test Completion Date:	1/9/2020
		Report Date:	1/10/2020
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	1/6/2020
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Product ID:	Monte Verde Lite		
Infill System:	1.0 lbs/ft ² 20/40 Silica Sand		

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:	1/6/2020
<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 	

PROCEDURE:

This test method determines the rainfall drainage capacity (permeability) of the playing surface. Test data values represent drainage rates vertically thru the turf with above listed infill, and do not take into account the percolation properties of a pad and/or an underlying sub base. Three specimens, 11.5" diameter, were cut from the 15' turf roll, side-center-side manner. Each turf specimen was securely fastened to the permeability tube using mechanical flanges, ensuring vertical water flow thru the product. The infill system was then installed. Water was pumped into the tube faster than could exit, until the water level reached 6". The water source was shut off, allowing the accumulated 6" water level to recede. The recede was timed via stopwatch until the water level exited the turf. The flow time was recorded in seconds. This procedure was repeated a total of 4 times where, the first pass was for conditioning, with passes 2,3,4 used for averaging. This process was repeated on the remaining specimens.

DEVIATION FROM TEST METHOD:

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

TEST SUMMARY:

Specimen #	Drainage (Seconds)	gal/min/yd ²	Rainfall Capacity (inches/hour)
1	38.4	52.6	161.3
2	81.9	24.7	75.6
3	57.2	35.3	35.3
Average	59.2	37.5	115.1

Uncertainty:

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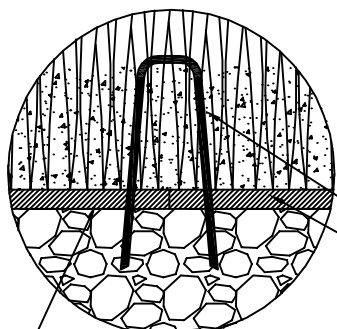
Test Report Approval:

 Digitally signed by Erle Miles, III
DN: cn=Erle Miles, o=Testing Services, ou=TSI, email=erle@testing-services.com, c=US
Date: 2020.01.10 13:25:54 -0500

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

TSI Accreditation: TSI is a certified independent testing laboratory by the Synthetic Turf Council





SOD STAPLE 6" x 1" x 6"

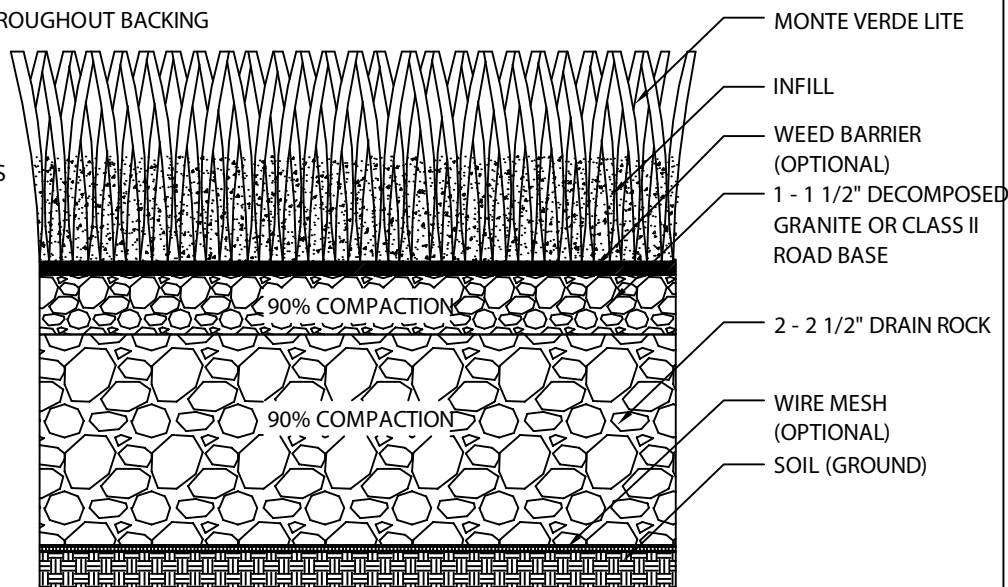
DRAINAGE PASS THROUGH FOR
WATER IN PUNCHED HOLES
THROUGHOUT BACKING

SEAMING TAPE
SPECIFICATIONS

YARN TYPE POLYETHYLENE M BLADE
THATCH YARN TYPE POLYPROPYLENE CURLED AS
THATCH
PILE HEIGHT 1.58"
TURF GAUGE 0.58"
FACE WEIGHT 50 OZ/YD²
BACKING WEIGHT 26 OZ/YD²
TOTAL WEIGHT 76 OZ/YD²
STITCH RATE 20/10 CM
STITCHES/M² 12600
COLOR LIME GREEN AND EMERALD
GREEN WITH BROWN AND
FIELD GREEN THATCHING

ROLL SIZE (FEET) 15' x 100'

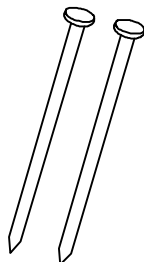
MAXIMUM DRAIN RATE >30 INCHES PER HOUR



SECTION



SEAMING
SOD STAPLES ARE
RECOMMENDED TO SEAM
THE SEAMS



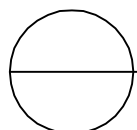
SECURING TURF TO BASE
BRIGHT COMMON 40D/60D
NAILS OR GALVANIZED NAILS
6' APART ALONG PERIMETER
SEAMS.



POWER 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: FIELD GREEN AND OLIVE GREEN WITH BROWN AND FIELD GREEN THATCHING.
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.



MONTE VERDE LITE

TEST REPORT

CLIENT:

Company:	Watersavers Turf.	Report Number:	79322
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3167-2340
	San Rafael, CA 94903	Test Completion Date:	1/9/2020
		Report Date:	1/10/2020
		Page:	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	1/6/2020
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Product ID:	Monte Verde Lite		

TESTING METHODS REQUESTED:

<i>Testing Services Inc. was instructed by the client to test for the following...</i>			
Standard:	ASTM D5848	Test Method:	Standard Test Method for Mass Per Unit Area of Pile Yarn Floorcoverings
Standard:	ASTM D5823	Test Method:	Standard Test Method for Tuft Height of Pile Yarn Floorcoverings

SAMPLING PLAN:

Sampling Date:	1/6/2020
<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 D5848-10e1	Total Product Weight	77.82 oz/yd ²
ASTM D5848-10e1	Pile Yarn Weight	50.07 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 to us using the latest test methods available.

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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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TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79415
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2414
	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:	Monte Verde Lite		

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	12.6 lbs/force

➤ Each individual pull was made from a combination of monofilament and textured fibers, same needle site

Pull #1	11.46 lbs/force	Pull #2	9.353 lbs/force	Pull #3	10.34 lbs/force	Pull #4	9.911 lbs/force	Pull #5	12.49 lbs/force
Pull #6	12.86 lbs/force	Pull #7	15.96 lbs/force	Pull #8	15.26 lbs/force	Pull #9	16.91 lbs/force	Pull #10	15.04 lbs/force
Pull #11	13.31 lbs/force	Pull #12	10.04 lbs/force	Pull #13	9.901 lbs/force	Pull #14	11.19 lbs/force	Pull #15	14.74 lbs/force

Uncertainty:

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Test Report Approval:



Digitally signed by Erle Miles, III
DN: cn=Erle Miles, ou=Testing
Services Inc., email=erle.miles@tsi.com, c=US
Date: 2020.01.18 10:00:00 -0500

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

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TEST REPORT

CLIENT:

Company:	Watersavers Turf	Report Number:	79701
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2414
	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:	Monte Verde Lite		

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)	245.1 lbs/force
ASTM D5034-09(2017)	Average Grab Tear Strength of Width Direction (CMD)	212.3 lbs/force

Uncertainty:

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