TURF AND IVY
SOLUTIONS
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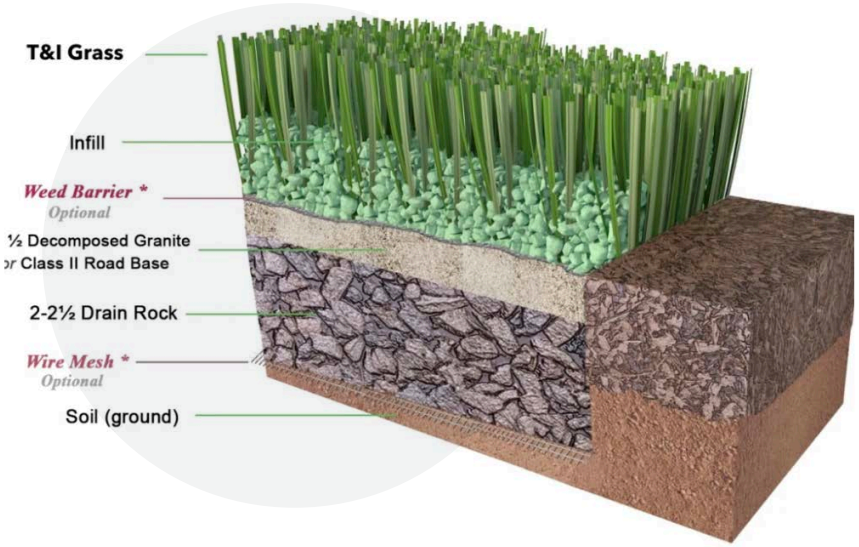
MOTHER OF PEARL

USES

- Playgrounds
- Parks
- Soccer Field
- Football Field
- General Sports Fields
- Commercial or Residential
- Medium-Heavy Traffic

15 Year Manufacturer's Warranty
8 Year Manufacturer's High Traffic Warranty

Flo-Rite Drainage Technology



DIAMOND BLADE | DOUBLE S BLADE
DOUBLE W BLADE

SPECIFICATIONS

Pile Height: **2"**

Turf Gauge: **3/8"**

Face Weight: **80 oz./yd²**

Backing Weight: **31 oz./yd²**

Total Weight: **111 oz./yd²**

Stitch Rate: **12/10cm**

Stitches/M²: **12600**

Material/Dtex: **PE14000 + PP4500**

Color: **Lime Green, Field Green, Light Brown and Emerald Green**

Type Of Fiber: **PE Monofilament and PP Curled As Thatch**

Infill Amount: **1.0 lb./psf.**

Primary Backing: **Premium T&I Backing**

Tuft Bind: **10+ lb/force (ASTM D1335)**

Blade Type: **Diamond Blade, Double S Blade, Double W Blade**

Permeability: **89.1 inches/hr. (ASTM F1551)**

Melting Point: **176 °F (ASTM D2859)**

Grab Tear MD: **>190 lb./force (ASTM D5034)**

Grab Tear CMD: **>170 lb./force (ASTM D5034)**

Roll Width: **15 ft**

Roll Length: **100 ft**

Sq. Ft. Per Roll: **1500**

Total Roll Weight: **1135 lbs**

PFAS Compliant · LEAD FREE · LEED Certified

5 Centerpointe Dr. Ste 400, Lake Oswego, Oregon 9703 USA
Telephone: 1-888-453-5979
www.turfandivy.com | Email: info@turfandivy.com

TESTING SERVICES

TEST REPORT

CLIENT:

Company:	Turf and Ivy Solutions	**Report Number:**	79405
Address:	5 Centerpointe Dr, Ste 400,	**Lab Test Number:**	3169-2439
	Lake Oswego, Oregon 97035	**Test Completion Date:**	1/16/2020
		Report Date:	1/18/2020
Requested by:	Patricia Ochoa	**Page:**	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf							**Date Received:**	1/13/2020
Material Condition:	**EXCELLENT:**	**XXX**	**GOOD:**		**POOR:**		**REJECTED:**		
Turf Identification:	Mother of Pearl								
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**

- 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 centrically 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

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

SYNTHETIC TURF COUNCIL CERTIFIED

NVLAP TESTING

100108-0

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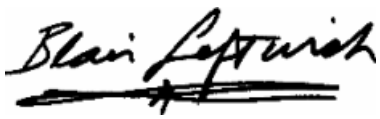
(706) 226-1400
tsioffice@optilink.us

CERTIFICATE OF ANALYSIS

Client: Turf and Ivy Solutions
Product: Turf Series 13 – Mother of Pearl
Xenco Sample #: 627505
Lead Results: Less than one part per million

Synthetic fibers from turf product Turf Series 13 - Mother of Pearl 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 (<1.00 mg/Kg).



Dr. Blair Leftwich, Director

06/18/19

Date

Certificate of Analysis Summary 627505

Turf and Ivy Solutions, Lake Oswego, OR

Project Name: Turf Testing

Project Id: Turf Testing Series 13
Contact: Patricia Ochoa
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:	627505-001					
	Field Id:	Turf Testing Series 13					
	Depth:						
	Matrix:	SOLID					
	Sampled:	Jun-07-19 00:00					
Total Lead	***Extracted:***	Jun-16-19 14:30					
SUB: T104704215-19-29	***Analyzed:***	Jun-17-19 23:09					
	Units/RL:	mg/kg	RL				
Lead		<0.833	0.833				

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

Final 1.000

TESTING SERVICES INC

TEST REPORT

CLIENT:

Company:	Turf and Ivy Solutions	**Report Number:**	74113B
Address:	5 Centerpointe Dr. Ste 400,	**Lab Test Number:**	3019-6606
	Lake Oswego, Oregon 97035	**Test Completion Date:**	6/5/2018
		Report Date:	6/18/2018
		Page:	1 of 1
Requested By:	Patricia Ochoa		

TEST MATERIAL:

Material Type:	Synthetic Turf							**Date Received:**		5/30/2018	
Material Condition:	**EXCELLENT:**		**XXX**	**GOOD:**		**POOR:**		**REJECTED:**			
Turf ID:	Mother of Pearl										
Infill:	None										

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:	**5/30/2018**

- 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 humidly.
- 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, and do not take into account the percolation properties of any infill, 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 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/yd²	Rainfall Capacity (inches/hour)
1	100.3	20.1	61.8
2	60.2	33.5	102.9
3	60.5	33.4	102.5
Average			**89.1 inches/hour**

Uncertainty:
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TSI can only ensure the test results for the specific items tested.
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Test Report Approval:

Erle Miles, III, Lab Director Testing Services Inc.

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

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TURF AND IVY

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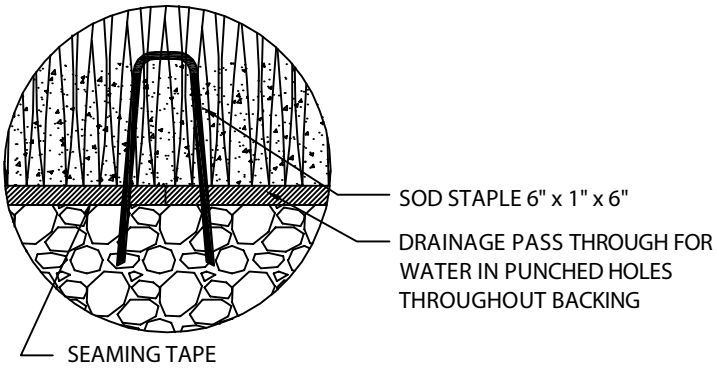
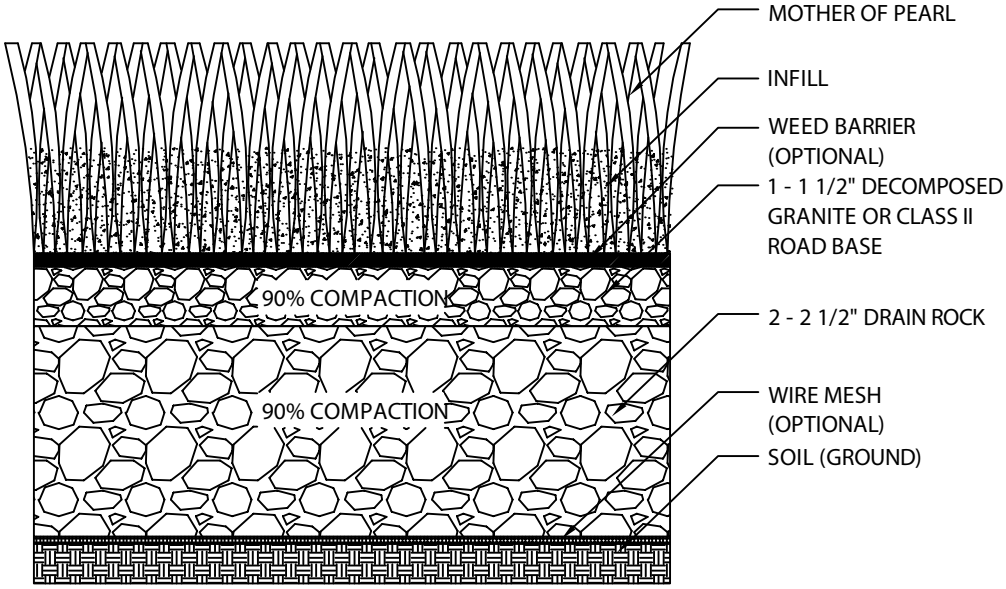


SPECIFICATIONS

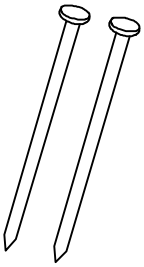
YARN TYPE	POLYETHYLENE BLADE
THATCH YARN TYPE	POLYPROPYLENE CURLED AS THATCH
PILE HEIGHT	2"
TURF GAUGE	3/8"
FACE WEIGHT	80 OZ/YD^2
BACKING WEIGHT	40 OZ/YD^2
TOTAL WEIGHT	120 OZ/YD^2
STITCH RATE	12.5/10 CM
STITCHES/M^2	13125
COLOR	LIME GREEN, FIELD, LIGHT BROWN AND EMERALD GREEN GREEN WITH BROWN AND FIELD 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 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.

PERFORMANCE SERIES

MOTHER OF PEARL

5007-009

5 Centerpointe Drive - Suite 400
Lake Oswego, OR 97035

Office Number:
1.888.453.5979

turfandivy.com

TESTING SERVICES INC

TEST REPORT

CLIENT:

Company:	Turf and Ivy Solutions	**Report Number:**	74113A
Address:	5 Centerpointe Dr, Ste 400,	**Lab Test Number:**	3019-6606
	Lake Oswego, Oregon 97035	**Test Completion Date:**	6/4/2018
		Report Date:	6/18/2018
		Page:	1 of 1
Requested By:	Patricia Ochoa		

TEST MATERIAL:

Material Type:	Synthetic Turf							**Date Received:**		5/30/2018	
Material Condition:	**EXCELLENT:**		**XXX**	**GOOD:**		**POOR:**		**REJECTED:**			
Turf ID:	Mother of Pearl										

TESTING METHODS REQUESTED:

Testing Services Inc. was instructed by the client to test for the following…			
Standard:	ASTM D5848-10E1	**Test Method:**	Standard Test Method for Mass Per Unit Area of Pile Yarn Floorcoverings

SAMPLING PLAN:

Sampling Date:	**5/30/2018**

- 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 humidly.
- 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	Average Total Product Weight	110.12 oz/yd²
ASTM D5848-10e1	Pile Yarn Weight	83.69 oz/yd²

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 Inc.

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

SYNTHETIC TURF COUNCIL CERTIFIED

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PRO-TURF LAB
Division of Professional Testing Laboratory, Inc.

DATE: 04-25-2023	TEST NUMBER: 0405286

CLIENT	Turf and Ivy Solutions

TEST CONDUCTED	ASTM F1951 Test Method for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

PRODUCT NAME	Mother of Pearl
DESCRIPTION OF PRODUCT TESTED	Turf
REFERENCE	Infilled with 1.5 lbs. of sand per square foot

PROCEDURE

This specification establishes minimum characteristics for those factors that determine accessibility. This specification applies to all types of materials that can be used under and around playground equipment. Playground surfaces represented as complying with this specification shall meet all applicable requirements regarding accessibility specified herein. Wheelchair work measurement method - straight propulsion and wheelchair work measurement method - turning shall be performed to conform with the requirements specified. Data was gathered by use of a "Smart Wheel" attached to the Everest and Jennings Traveler wheel chair fitted with pneumatic wheels.

REQUIREMENT CRITERIA

A surface in place shall have average work per foot (work per meter) values for straight propulsion and for turning less than the average work per foot (work per meter) values for straight propulsion and for turning, respectively, on a hard, smooth, surface with a grade of 1:14 (7.1 %).

TEST RESULTS

	Straight Line Propulsion	Turning Propulsion
BASELINE	14.9 lbs. (Average work/ft Force)	11.7 lbs. (Average work/ft Force)
	14.5 lbs. (Average work/ft Force)	11.5 lbs. (Average work/ft Force)

**NOTE: Infilled per manufacturer's instructions.*

This turf system **meets** the criteria as set forth under this test method specification.

APPROVED BY: Gary Cathey

This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to those samples tested and is not necessarily indicative of apparently identical of similar products. This report, or the name of Professional Testing Laboratory Inc. shall not be used under any circumstance in advertising to the general public.

714 Glenwood Place Dalton, GA 30721 Phone: 706-226-3283 Fax: 706-226-6787 email: protest@optilink.us

TEST REPORT

CLIENT:

Company:	Turf and Ivy Solutions	**Report Number:**	79423
Address:	5 Centerpointe Dr, Ste 400,	**Lab Test Number:**	3169-2422
	Lake Oswego, Oregon 97035	**Test Completion Date:**	1/17/2020
		Report Date:	1/18/2020
Requested by:	Patricia Ochoa	**Page:**	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf							**Date Received:**	1/13/2020		
Material Condition:	**EXCELLENT:**		**XXX**	**GOOD:**		**POOR:**		**REJECTED:**			
Product ID:	Mother of Pearl										

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**

- 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 humidly.
- 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	10.3 lbs/force

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

Pull #1	10.27 lbs/force	Pull #2	10.48 lbs/force	Pull #3	12.44 lbs/force	Pull #4	9.938 lbs/force	Pull #5	11.47 lbs/force
Pull #6	10.82 lbs/force	Pull #7	6.161 lbs/force	Pull #8	6.964 lbs/force	Pull #9	11.80 lbs/force	Pull #10	11.80 lbs/force
Pull #11	12.05 lbs/force	Pull #12	14.15 lbs/force	Pull #13	10.48 lbs/force	Pull #14	6.564 lbs/force	Pull #15	9.087 lbs/force

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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TESTING SERVICES

TEST REPORT

CLIENT:

Company:	Turf and Ivy Solutions	**Report Number:**	79697
Address:	5 Centerpointe Dr, Ste 400,	**Lab Test Number:**	3176-2699
	Lake Oswego, Oregon 97035	**Test Completion Date:**	2/18/2020
		Report Date:	2/19/2020
Requested by:	Patricia Ochoa	**Page:**	1 of 1

TEST MATERIAL:

Material Type:	Synthetic Turf							**Date Received:**		2/7/2020	
Material Condition:	**EXCELLENT:**		**XXX**	**GOOD:**		**POOR:**		**REJECTED:**			
Product ID:	Mother of Pearl										

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:	**2/7/2020**

- 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.
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- 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)	193.2 lbs/force
ASTM D5034-09(2017)	Average Grab Tear Strength of Width Direction (CMD)	173.8 lbs/force

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.
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Test Report Approval:

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turf&ivy solutions

Limited Product Warranty

(Effective Date: January 1st, 2022)

Turf and Ivy Solutions, (a.k.a. T&I) warrants our residential landscape artificial turf with a 15-year limited product warranty. T&I also warrants commercial artificial turf applications and putting green surfaces for eight (8) years. All product warranties are from the date of the artificial turf purchase and assuming the turf is maintained as recommended by T&I. T&I shall not in any event be liable for any indirect, incidental, punitive, special, consequential, or other similar damages including, but not limited to loss of profits or revenue, economic loss, or other goodwill, even if T&I has been notified of the possibility of such damages. Slight color changes will occur over the lifetime of artificial turf and are not considered an issue or basis for a claim. **All labor costs involved with the installation, loss of wages, removal of the affected turf and/or reinstallation of any replacement will be the responsibility of the purchaser.**

Subject to the following Limitations:

General provisions of this limited warranty apply to the wear of the turf with regard to ultraviolet degradation, and does not apply to damage incurred during installation, improper underlay, pile crushing, willful or negligent abuses, or damage by machinery or equipment, nor does it apply when the turf is not installed by a licensed certified installer. T&I does not warrant a loss of more than 5% per year of the turf material strength due to ultraviolet degradation. The strain rate and deformation rate increase significantly when the material is subjected to extreme heat and will not be warrantied in such conditions. T&I holds the right to look at temperature history reports to determine if the material has been exposed to consistent extreme heat over period of 96 hours or more. This limited warranty does not apply to the state of Arizona due to the extreme hot weather conditions. T&I only warrants turf products for a period of 3 years for all products sold and installed in the state of Arizona.

Warranty Coverage:

In the event of warranty issues covered by this Limited Warranty, T&I will either (a) replace the affected portion of the artificial turf product with a new artificial turf product of the same quality or (b) T&I may elect to issue a credit instead of replacement. This credit shall only apply to the affected areas of the artificial turf product. Replacement of the affected areas is for the artificial turf products only, excluding any and all costs associated with the installation and infill, including but not limited to installation supplies, inconvenience, labor charges, etc. The Expressed Limited Warranty excludes all implied warranties, and T&I shall in no event be liable for a breach of warranty in any amount exceeding the invoice price of the turf. T&I's residential Limited Landscape Artificial Turf Warranty coverage schedule is as follows: Years 1-8 (100%); Years 9-12 (50%); Years 13-15 (25%). T&I's 8 year commercial and putting green artificial turf warranty coverage schedule is as follows: Years 1-4 (100%); Years 5-6 (50%); Years 7-8 (25%).

5 Centerpointe Drive - Suite 400
Lake Oswego, OR 97035

Office Number:
1.888.453.5979

turfandivy.com

Limited Product Warranty

(Effective Date: January 1st, 2022)

Limitations on Coverage:

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, T&I DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY FOR A PARTICULAR PURPOSE.

Furthermore, this Manufacturer's Limited Warranty does not cover the following:

1. Damage from accidents, vandalism, abuse, neglect and improper installation.
2. Acts of God (including earthquakes, floods, hurricanes, vehicular traffic, damage caused by dogs and other natural disasters).
3. Use of chemicals, fire and improper cleaning methods.
4. Failure to properly maintain, protect and/or repair the turf and cleaning of the turf due to calcium build up/dew.
5. Damage that occurs during the shipping/transportation process. All shipping claims must be filed against the freight company in question.
6. Damage caused by reflection/external heat source (melting) or other flammable materials. Such reflection sources include but are not limited to: windows, vinyl fences, metal blocks, concrete/stucco walls, etc.
7. Turf product is subject to normal wear and tear. Normal wear and tear, including matted down or twisted blades is not a manufacturing defect and therefore is not covered by this warranty.
8. Visual lines caused by variation of the color of yarns and manufactured tufted stitch lines are not considered a defect as there is no deterioration of actual yarn itself and is a common occurrence among all tufted products.
9. When a Claim needs to be submitted the following information is required to be sent to info@turfandivy.com (T&I Sales Order Number, T&I Invoice Number, Pictures, Customer Name, Address and Phone Number)
10. Areas used for high traffic, sport activities, playgrounds and tee lines are not covered in this warranty. Disclaimer: If you are using any Turf and Ivy Solutions products in a high traffic or sport activity application, please refer to the warranty named Turf and Ivy Solutions High Traffic and Sport Activity Turf Warranty.
11. Rolls of artificial turf where the backing of the turf is not covered and exposed to sunlight.

Limitations on Liability:

The purchaser must promptly inspect all products upon delivery. Should any shortages, defects or non-conformities be discovered during the initial inspection upon delivery of the products, T&I shall take on the obligation of making sure the products are free from such shortages, defects or non-conformities if and only if, the purchaser notifies T&I in writing within 30 days after the date of purchase of said products. This warranty is extended to the original purchaser and is not transferrable. In order to qualify for this warranty, the customer must fill out the T&I Warranty Registration, submit a copy of the registration and a copy of their receipt to the address or email below and receive confirmation of registration via email from T&I.

Turf and Ivy Solutions, Inc. 5 Centerpointe Dr, Ste 400, Lake Oswego, OR, U.S.A. Email: info@turfandivy.com

turf&ivy solutions

Limited Product Warranty

(Effective Date: January 1st, 2022)

REGISTRATION

PURCHASER: _____

DATE OF COMPLETION: _____

ADDRESS OF INSTALLATION: _____

PHONE: _____

SIGNATURE: _____

DATE: _____

INSTALLER COMPANY: _____

INSTALLER ADDRESS: _____

INSTALLER PHONE: _____

INSTALLER NAME: _____

INSTALLATION COMPLETION DATE: _____

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High Traffic and Sport Activity Turf Warranty

(Effective Date: January 1st, 2022)

Turf and Ivy Solutions, (a.k.a T&I) warrants the wear and tear of T&I products with regards to ultraviolet degradation, for high traffic and sport activity provided herein or for any other uses for which T&I provides its written authorization, within eight (8) years from the date of completion of installation (as indicated in this warranty). In the event of warranty issues covered by this Limited Warranty, T&I will either (a) replace the affected portion of the artificial turf product with a new artificial turf product of the same quality or (b) T&I may elect to issue a credit instead of replacement. This credit shall only apply to the affected areas of the artificial turf product. Replacement of the affected areas is for the artificial turf products only, excluding any and all costs associated with the installation and infill, including but not limited to installation supplies, inconvenience, labor charges, etc. The Expressed Limited Warranty excludes all implied warranties, and T&I shall in no event be liable for a breach of warranty in any amount exceeding the invoice price of the turf. T&I's 8-year high traffic and sport activity artificial turf warranty coverage schedule is as follows: Years 1-4 (100%); Years 5-6 (50%); Years 7-8 (25%).

T&I warrants all materials installed meets the T&I specifications and warrants the replacement material will be available through the remainder of the warranty period. This warranty shall commence upon the date of installation completion as indicated in this warranty. The accompanying warranty service will not come into effect unless the Certificate of Completion is sent in for validation to the corporate office indicated herein within thirty (30) days of the date of completion or the purchaser's first use, whichever occurs first. In all cases, the warranty shall be deemed to commence upon the date of completion indicated in this warranty. The customer must provide T&I with their maintenance program within thirty (30) days of completion of installation. This warranty is limited to the remedies of replacement under this warranty; all other recourse which might be available are hereby waived by the purchaser.

Limitations on Coverage:

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, T&I DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY FOR A PARTICULAR PURPOSE.

Furthermore, this Manufacturer's Limited Warranty does not cover the following:

1. Damage resulting from an accident, misuse, force majeure, unintentional and intentional abuse, infill displacement, neglect or other than normal play and ordinary use of T&I products. For purposes of this warranty, normal play and ordinary use shall mean usage up to 3,000 hours per year of regular play and utilization for the activities provided herein; normal play and ordinary use also includes a reasonable number of participants or users, but does not include repetitive training, repetitive marching or high-intensity drills on the same part of the turf, especially in the areas of, but not limited to, base areas, base paths, pitcher's mound, home plate, goal areas, soccer penalty mark/spot areas, sideline areas, tee line, and lacrosse crease areas, all areas will need frequent maintenance and possible replacement.

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High Traffic and Sport Activity Turf Warranty

(Effective Date: January 1st, 2022)

2. Damage resulting from maintenance, repair, attempted repair by anyone other than a licensed certified installer or an authorized T&I distributor.

3. Damages caused by, but not limited to, the application of cleaning agents, chemicals, adhesive backing, traffic, dirt, negligence, accidents, vandalism, fire, animals, windstorm, improper care, abuse, neglect and improper installation, and Acts of God (including earthquakes, floods, hurricanes, vehicular traffic, fire, improper cleaning chemicals, damage caused by dogs and other natural disasters).

4. Damage resulting from the use of improper footwear such as regular and repeated use of steel cleats, long-spiked track shoes, and flat-soled shoes. Standard football and soccer cleats are recommended.

5. Failure to properly maintain, protect and/or repair the turf and cleaning of the turf due to calcium build up/dew.

6. Damage that occurs during the shipping/transportation process. All shipping claims must be filed against the freight company in question.

7. Damage caused by reflection/external heat source (melting) or other flammable materials. Such reflection sources include but are not limited to: windows, vinyl fences, metal blocks, concrete/stucco walls, etc.

8. Turf product is subject to normal wear and tear. Normal wear and tear, including matted down or twisted blades is not a manufacturing defect and therefore is not covered by this warranty.

9. Visual lines caused by yarn color variation and manufactured tufted stitch lines are not considered a defect as there is no deterioration of actual yarn itself and is a common occurrence among all tufted products.

10. Rolls of artificial turf where the backing of the turf is not covered and exposed to sunlight.

11. T&I does not warrant a loss of more than 5% per year of the turf material strength due to ultraviolet degradation. The strain rate and deformation rate increase significantly when the material is subjected to extreme heat and will not be warrantied in such conditions. T&I holds the right to look at temperature history reports to determine if the material has been exposed to consistent extreme heat over a period of 96 hours or more. This limited warranty does not apply to the state of Arizona due to the extreme hot weather conditions. T&I only warrants turf products for a period of 3 years for all products sold and installed in the state of Arizona.

High Traffic and Sport Activity Turf Warranty

(Effective Date: January 1st, 2022)

When a Claim needs to be submitted, the following information is required to be sent to info@turfandivy.com (T&I Sales Order Number, T&I Invoice Number, Pictures, Customer Name, Address and Phone Number).

All synthetic turf is subject to normal wear and tear, which is not a manufacturing defect and is not covered in this warranty. In addition to the other factors applicable in this warranty, wear and tear is based on, without limitation, the construction of synthetic turf (stitch rate, fiber face weight, fiber gauge and pile height, infill components and the maintenance of the turf) and the amount of time and intensity of use of the synthetic turf. All T&I products will be stable to fading in the light with the maximum fade of the T&I products through the warranty period not exceeding fifteen percent (15%) of color loss per year based upon an acceptable grey scale. This warranty does not cover the slight gradations and variations of color within the T&I products and/or face distortion.

T&I disclaims all liability for consequential and incidental damages for breach of any implied or express warranty, including any implied warranty of merchantability, with respect to T&I products. In the event that the T&I product is used for purposes other than high traffic and sport activities provided in this warranty or any other uses for which T&I gives it's written authorization, it will be understood that T&I has tested the product for use in connection with these high traffic and sport activities and may not have tested it for other uses. T&I shall not be responsible for any and all damages incurred, therefore the Manufacturer's Limited Warranty, as well as all legal warranties, shall become null and void.

Limitations on Liability:

The purchaser must promptly inspect all products upon delivery. Should any shortages, defects or non-conformities be discovered during the initial inspection upon delivery of the products, T&I shall take on the obligation of making sure the products are free from such shortages, defects or non-conformities if and only if, the purchaser notifies T&I in writing within 30 days after the date of purchase of said products. This warranty is extended to the original purchaser and is not transferrable.

In order to qualify for this warranty, the customer must fill out the T&I Warranty Registration, submit a copy of the registration and a copy of their receipt to the address or email below and receive confirmation via email from T&I.

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High Traffic and Sport Activity Turf Warranty

(Effective Date: January 1st, 2022)

REGISTRATION

PURCHASER: _____

DATE OF COMPLETION: _____

ADDRESS OF INSTALLATION: _____

PHONE: _____

SIGNATURE: _____

DATE: _____

INSTALLER COMPANY: _____

INSTALLER ADDRESS: _____

INSTALLER PHONE: _____

INSTALLER NAME: _____

INSTALLATION COMPLETION DATE: _____

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MANUFACTURING MATERIAL SAFETY DATA SHEET

A. Identity

Chemical name: Polyethylene fibers with polyurethane backing
Manufacturer:

Turf and Ivy Solutions, Inc.
5 Centerpointe Dr Ste 400
Lake Oswego, OR 97035

Emergency telephone number: 1-888-453-5979

B. Hazardous Ingredients
This product is considered to be a non-hazardous chemical under the Federal Occupational Safety and Health Administration Hazard Communication Standard 29CFR1910.1200

C. Physical Data
Boiling Point: n/a
Vapor Pressure: n/a
Vapor Density: n/a
Melting Point: 1760 F/800C (turf fibers)
Specific Gravity: (H20=1) 0.94 turf
Percent volatile by volume: n/a
Evaporation Rate: n/a/
Appearances: Solid
Odor: None

D. Fire Hazard Data
Unusual fire and explosion hazards: None
Flashpoint: 6050F/318oC
Extinguishing Method: Water, Foam, Carbon Dioxide
Fire Fighting Equipment: Wear protective pressure, Self-contained, Breathing Apparatus
This product is resistant to damage and spreading of ignition in typical exposures such as lighted cigarette dropped on the surface.

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MANUFACTURING MATERIAL SAFETY DATA SHEET

E. Reactivity Data
Stability: (Conditions to avoid) Polymer may decompose under fire conditions to give off hazardous products
Dissolution: Softening or discoloration may occur with yarn, phenol, formic acid, other acidic exposures below pH5
Hazardous Decomposition Products: Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Traces of Hydrogen Cyanide
Hazardous Polymerization: Will not occur

F. Health Hazard Information
No health hazards are evident from MSDS documentation of constituents of this product, in the form presented when installed and used for its intended application as a synthetic turf product.

G. Environmental & Disposal Information
This product is in compliance with EPA guidelines (RCRA, CFR261, and TCLP) and is compliant with Executive Order 13101, "Greening the government through waste prevention, recycling, and federal acquisition."
Disposal Procedures: Safe for landfills; Can be processed and used as a combustible fuel where proper recycling facilities are available.

H. Legal Disclaimer
While the information set forth herein is believed to be accurate and complete as of the date hereof, Turf and Ivy Solutions, Inc. makes no warranty with respect thereto and disclaims all liability from release thereon.

I. Date of Issue
September 30, 2010

5 Centerpointe Drive - Suite 400
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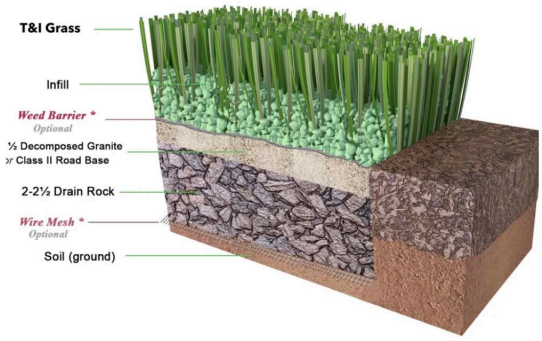
HOW TO INSTALL ARTIFICIAL GRASS

Artificial Lawn - Site Base Preparation

1. Remove 3 - 4 inches of existing grass sod and dirt. Use a sod cutter for large lawns. Cap and remove all sprinklers and sprinkler heads. Be sure to set a rough grade for drainage.
2. Lay 2 - 2 1/2 inches of drain crushed rock, hose down, then using a vibrating plate compactor, compact to 90%.
3. Lay 1 - 1 1/2 inches of either class II road base or decomposed granite.
4. Lay the weed barrier * fabric over road base or decomposed granite. This step is optional. Landscape fabrics have their pros and cons. If the soil beneath your installation is "alive" and weeds are wildly grown before installation, it might be a good idea to protect your lawn from weeds with weed barrier fabric. In many cases, there is no big need for weed protection, and you can install turf right on top of decomposed granite without adding extra layers.
5. Hose down and then use a vibrating plate compactor to compact to 90%.
6. Make sure base surface is as leveled and as smooth as possible.
7. Create a slight grade for optimal drainage.



Synthetic Turf Installation

CAUTION: Turf should be rolled out under the sun with blades facing down at least 1-2 hours before installation. This will allow the turf to acclimate and, as a result, make, it easier to work with.

1.Lay turf onto base and position where needed. Using a carpet knife/razor knife, cut off the excess grass turf on the backside (3 stitches in from sides). Cut fake turf (on the backside) to fit the area.

2. Fasten one end with 40D or 60D Bright Common nails of 5-6 inches in length, spaced 3-4 inches apart along the edges. Stretch turf and fasten with nails as you move across to the opposite end. Place a nail every 12-24 inches throughout the center and every 3-4 inches along the perimeter.

3. Fasten together seams by using 11 gauge 6"x1"x6" staples spaced 4 inches apart along the seam. Do not countersink staples. Note: Be sure the seams are taut and precise, the grain of the turf is facing in the same direction, and the space at the seam is the same as the stitching gauge

4. After turf is installed, power broom before applying infill, apply infill onto turf grass using a drop spreader. Spread infill as evenly as possible with a grading rake or broom until infill settles into the base of the turf. You can use a push broom for quick and easy infilling.

Note: Never use regular sand for infill. For putting green installation, use infill with a smaller grain, for example, silica sand #30, because the smaller grain size will work it into the surface better since the golf greens are dense.

5. Hand or power broom again so that the blades are standing straight up. Use carpet scissors to trim off the excessive turf blades. Clean the surrounding area with a blower or a broom.

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CARE AND MAINTENANCE GUIDE

Our turf is virtually maintenance free. General up keep for synthetic turf includes raking, blowing and occasionally rinsing. You do not have to re-fill the infill. General maintenance will not harm the infill.

From time to time you will want to rake the turf to make sure the needles stand straight up. Heavy furniture or lots of daily use can cause the needles to look less firm over time. You can use a blower to blow off any leaves or dust. A garden hose can also be used to rinse of any stubborn dust.

Cleaning up after your pets is easy with synthetic turf, simply scoop up any large mess and then rise with water. The sun is a natural disinfectant, however if you are looking for something stronger try a bio degradable, smell inhibiting disinfectant. Products like that are readily found at local pet supply stores.

During hot summer months you may want to use a garden hose to cool the turf. Unlike natural grass the synthetic turf does not retain moisture and will feel hot to the touch in extreme degree heat. Most homeowners keep their sprinkler system intact, though they rarely use it. The sprinklers will give the lawn a natural look and provide ease when you need to cool or dust off the lawn.

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