

# Product Specification Sheet

## Coastal Plush

**USES:**

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

**SPECIFICATIONS:**

Pile Height: 2"  
Turf Gauge: 3/8"  
Face Weight: 94 oz./yd<sup>2</sup>  
Backing Weight: 38 oz./yd<sup>2</sup>  
Total Weight: 132 oz./yd<sup>2</sup>  
Stitch Rate: 16/10cm  
Stitches/m<sup>2</sup>: 16800  
Material/Dtex: PE 13000 + PP5000  
Color: 2/3 Field Green and Lime Green  
with Brown and Green Thatching  
Type Of Fiber: PE Monofilament and PP  
Curled As Thatch

## Summary Report

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

Report Date: June 6, 2012

Work Order: 12060430



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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
299845	Coastal Plush	turf	2012-05-30	00:00	2012-06-04

**Sample: 299845 - Coastal Plush**

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



# Certificate of Analysis Summary 627493

Watersavers Turf, San Rafael, CA

Project Name: Turf Testing



Project Id: Turf Testing Series 9

Project Location: USA

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

Report Date: 20-JUN-19

Project Manager: John Builes

<b>Analysis Requested</b>	<b>Lab Id:</b>	627493-001					
	<b>Field Id:</b>	Turf Series 9					
	<b>Depth:</b>						
	<b>Matrix:</b>	SOLID					
	<b>Sampled:</b>	Jun-07-19 00:00					
<b>Total Lead SUB: T104704215-19-29</b>	<b>Extracted:</b>	Jun-16-19 14:30					
	<b>Analyzed:</b>	Jun-17-19 22:52					
	<b>Units/RL:</b>	mg/kg RL					
Lead		<0.847 0.847					

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: Coastal Plush  
Xenco Sample #: 627493  
Lead Results: Less than one part per million

Synthetic fibers from turf product Coastal Plush, 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).



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**Dr. Blair Leftwich, Director**

06/18/19

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**Date**

## TEST REPORT

### CLIENT:

Company:	Watersavers Turf.	Report Number:	79329
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3166-2330
	San Rafael, CA 94903	Test Completion Date:	1/10/2020
		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:	Coastal Plush		
Infill System:	1.0 lbs/ft <sup>2</sup> 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"> <li>Specimen sampling is performed in the sampling department at TSI.</li> <li>The sampling size of specimens is determined by the test method requirements.</li> <li>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.</li> <li>All samples are subjected to the outside environmental conditions of temperature and relative humidity.</li> <li>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</li> </ul>	

### 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 <sup>2</sup>	Rainfall Capacity (inches/hour)
1	152.0	13.3	40.8
2	79.6	25.4	77.8
3	124.7	16.2	49.7
Average	118.8	18.3	56.1

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



## TEST REPORT

### CLIENT:

Company:	Watersavers Turf	Report Number:	79408
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2442
	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:	Coastal Plush		
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"> <li>Specimen sampling is performed in the sampling department at TSI.</li> <li>The sampling size of specimens is determined by the test method requirements.</li> <li>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.</li> <li>All samples are subjected to the outside environmental conditions of temperature and relative humidity.</li> <li>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</li> </ul>	

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

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### Test Report Approval:

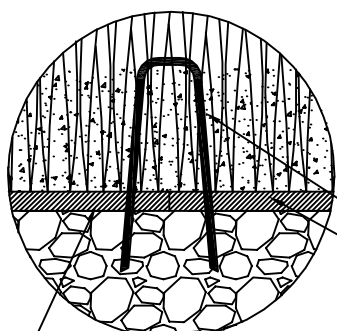
Erle Miles, III, Lab Director Testing Services (TSI) LLC

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



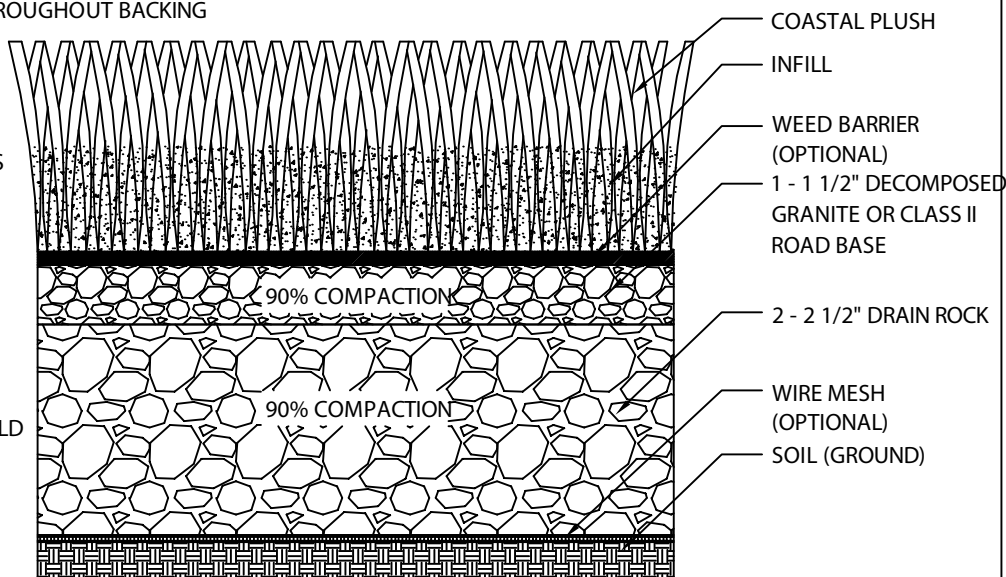
100108-0



SOD STAPLE 6" x 1" x 6"  
DRAINAGE PASS THROUGH FOR  
WATER IN PUNCHED HOLES  
THROUGHOUT BACKING

SEAMING TAPE  
SPECIFICATIONS

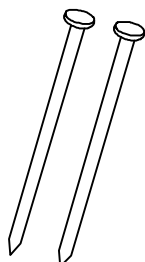
YARN TYPE POLYETHYLENE BLADE  
THATCH YARN TYPE POLYPROPYLENE CURLED AS  
THATCH  
PILE HEIGHT 2"  
TURF GAUGE 3/8"  
FACE WEIGHT 94 OZ YD<sup>2</sup>  
BACKING WEIGHT 20 OZ YD<sup>2</sup>  
TOTAL WEIGHT 114 OZ YD<sup>2</sup>  
STITCH RATE 12/10 CM  
STITCHES/M<sup>2</sup> 12600  
COLOR 1/3 LIME GREEN AND 2/3 FIELD  
GREEN WITH BROWN AND  
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



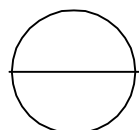
SECURING TURF TO BASE  
BRIGHT COMMON 40D/60D  
NAILS OR GALVANIZED NAILS  
6' APART ALONG PERIMETER  
SEAMS.



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: 1/3 LIME GREEN AND 2/3 FIELD GREEN WITH BROWN AND 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.
7. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [www.CADdetails.com/info](http://www.CADdetails.com/info) AND ENTER REFERENCE NUMBER 5006-040.



COASTAL PLUSH

## TEST REPORT

### CLIENT:

Company:	Watersavers Turf	Report Number:	67971A
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	2839-9489
	San Rafael, CA 94903	Test Completion Date:	7/18/2016
		Report Date:	7/20/2016
		Page:	1 of 1

### TEST MATERIAL:

Material Type:	Synthetic Turf	Date Received:	7/14/2016
Material Condition:	EXCELLENT: XXX GOOD: POOR: REJECTED:		
Style:	Coastal Plush		

### 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:	5/24/2016
<ul style="list-style-type: none"> <li>Specimen sampling is performed in the sampling department at TSI.</li> <li>The sampling size of specimens is determined by the test method requirements.</li> <li>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.</li> <li>All samples are subjected to the outside environmental conditions of temperature and relative humidity.</li> <li>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</li> </ul>	

### 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	131.97 oz/yd <sup>2</sup>
ASTM D5848-10e1	Pile Yarn Weight	94.30 oz/yd <sup>2</sup>

### 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 Erle Miles, Jr.  
Date: 2016.07.21 09:33:58 -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		



## TEST REPORT

### CLIENT:

Company:	Watersavers Turf	Report Number:	79422
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2421
	San Rafael, CA 94903	Test Completion Date:	1/17/2020
		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:	Coastal Plush						

### 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"> <li>Specimen sampling is performed in the sampling department at TSI.</li> <li>The sampling size of specimens is determined by the test method requirements.</li> <li>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.</li> <li>All samples are subjected to the outside environmental conditions of temperature and relative humidity.</li> <li>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</li> </ul>	

### 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	14.6 lbs/force

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

Pull #1	9.632 lbs/force	Pull #2	17.68 lbs/force	Pull #3	16.05 lbs/force	Pull #4	16.30 lbs/force	Pull #5	9.525 lbs/force
Pull #6	18.83 lbs/force	Pull #7	16.75 lbs/force	Pull #8	14.69 lbs/force	Pull #9	12.80 lbs/force	Pull #10	12.92 lbs/force
Pull #11	16.77 lbs/force	Pull #12	18.81 lbs/force	Pull #13	11.84 lbs/force	Pull #14	11.58 lbs/force	Pull #15	14.56 lbs/force

### Uncertainty:

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### Test Report Approval:

 Digitally signed by Erle Miles, III, DN: cn=Erle Miles, o=Testing Services, Inc., ou=Erle Miles, email=erle@testing-services.com, c=US, Date: 2020.01.18 10:04:12 -0500

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

### TSI Accreditation:

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## TEST REPORT

### CLIENT:

Company:	Watersavers Turf	Report Number:	79708
Address:	4316 Redwood Hwy, Ste 100	Lab Test Number:	3169-2421
	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:	Coastal Plush		

### 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"> <li>Specimen sampling is performed in the sampling department at TSI.</li> <li>The sampling size of specimens is determined by the test method requirements.</li> <li>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.</li> <li>All samples are subjected to the outside environmental conditions of temperature and relative humidity.</li> <li>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</li> </ul>	

### 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)	261.3 lbs/force
ASTM D5034-09(2017)	Average Grab Tear Strength of Width Direction (CMD)	208.1 lbs/force

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## Technical Data Sheet: Coastal Plush

Product Properties:	Property	Imperial Unit	Metric Unit	Description
	Fiber Type			Polyethylene Monofilament and Polypropylene Curled as Thatch
	Fiber Mass	Denier 11700/4500 Monofilament	Detex 13000/5000 Monofilament	Polyethylene
	Pile Height	2.00 in	50.80 mm	
	Color(s)			Lime Green and Field Green With Brown and Green Thatching
	Tufting Gauge	.375 in	9.525 mm	
	Stitch Rate	16.256/4in	16/10cm	
	Stitches	20,092.633/yd <sup>2</sup>	16,800/m <sup>2</sup>	
	Primary Backing	5.899 oz/yd <sup>2</sup>	200.00 g/m <sup>2</sup>	Polypropylene and Polyester fiber
	Secondary Backing	31.771 oz/yd <sup>2</sup> ±5%	1,077.271 g/m <sup>2</sup> ±5%	Urethane
	Total Backing Weight	37.67 oz/yd <sup>2</sup> ±1.5oz	1,277.271 g/m <sup>2</sup> ±50g	
	Micron	240		

Performance Properties:	Property	Imperial Unit	Metric Unit	Test Method
	Face Weight	94.30 oz/yd <sup>2</sup>	3,197.417 g/m <sup>2</sup>	ASTM D5848-10e1
	Total Weight	131.97 oz/yd <sup>2</sup>	4,474.688 g/m <sup>2</sup>	ASTM D5848-10e1
	Permeability	56.1 in/ft <sup>2</sup> /hr	1,533.843 cm/m <sup>2</sup> /hr	ASTM F1551; Suffix-DIN 18-035, Part 6
	Melting Point	176 °F for Blades (greens and brown) 250 °F for Thatch (brown and curled)	80 °C for Blades (greens and brown) 121 °C for Thatch (brown and green curled)	
	Tuft Bind	14.6 lb-f	64.944 N	ASTM-D1335-17e1
	Grab Tear MD	261.3 lb-f	1,162.320 N	ASTM-D5034-05
	Grab Tear CMD	208.1 lb-f	925.675 N	ASTM-D5034-05
	Infill Amount (recommended)	¾ of the Pile Height		

Packaging:	Property	Imperial Unit	Metric Unit	Description
	Model Number			Coastal Plush
	Roll Width	15 ft	4.57 m	
	Roll Length	100 ft	30.48 m	
	Area per Roll	1,500 ft <sup>2</sup>	139.355 m <sup>2</sup>	
	Total Roll Weight	1,062 lbs	481.715 kg	