



CLIENT:

Company:	ForeverLawn Inc
Address:	8007 Beeson Rd
	Louisville, OH 44641

TEST MATERIAL:

Date Material Received:	May 30, 2024
Material Type:	Synthetic Turf
Material Condition:	Excellent, New
Material ID:	K9 Grass Endura

TEST 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 (Weights)
Standard:	ASTM D5823	Test Method:	Standard Test Method for Tuft Height of Pile Yarn Floorcoverings (Fiber Length)
Standard:	ASTM D1335	Test Method:	Standard Test Method for Tuft Bind Strength of Pile Yarn Floorcoverings (Tuft Lock)
Standard:	ASTM D5793	Test Method:	Standard Test Method for Binding Sites per Unit Length of Width of Pile Yarn Floorcoverings (Stitch & Gauge)
Standard:	ASTM D5034	Test Method:	Standard Test Method for Breaking Strength of Textile Fabrics (Grab Tear)

SAMPLING PLAN:

Sampling Date:	5/30/24
<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 SCOPE:

A finished synthetic turf identified above, was analyzed for the following construction properties:

Mass Per Unit Area (Weights): This method determines the mass per unit area of the yarn used to produce the product or pile weight. The total weight includes all components that make up the product. The primary backing weight are the layers that comprise the tufting backing components. The secondary weight is the coating, normally urethane, that provides the backing of the product.

Pile Height: This method determines the length of the individual fiber strands measured from the base of the tuft to the tip of the tuft.

Stitch & Gauge: This method measures the number of binding sites per unit length or width of tufted pile yarn floorcoverings.

Tuft Bind: This method determines the force necessary to pull or break a tuft from its backing.

Grab Tear: This method determines the tear strength of all of the components that make up the product

TEST SUMMARY:

TEST METHOD	TEST DESCRIPTION	TEST RESULT	Date Tested:
ASTM D5848-20	Total Product Weight	84.26 oz/yd ²	6/7/2024
ASTM D5848-20	Pile Weight	60.00 oz/yd ²	6/7/2024
ASTM D5848-20	Primary Backing Weight	19.26 oz/yd ²	6/7/2024
ASTM D5848-20	Secondary Backing Weight	10.00 oz/yd ²	6/7/2024
ASTM D5793	Stitch Count	N/A Knitted Backing	
ASTM D5793	Gauge	N/A Knitted Backing	
ASTM D1335-21	Average Tuft Bind Strength	12.0 lbs/force	6/4/2024
ASTM D5034-21	Average Grab Tear Strength-Length	568 lbs/force	6/7/2024
ASTM D5034-21	Average Grab Tear Strength-Width	790 lbs/force	6/7/2024

Notes:

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 an Organizational Member of ASTM (American Society for Testing and Materials). TSI is a certified independent testing laboratory by the STC (Synthetic Turf Council).

