



CLIENT:

Company:	Irrigation Express
Address:	13650 Vaughn St
	San Fernando, CA 91340

TEST MATERIAL:

Date Material Received:	May 15, 2023
Material Type:	Synthetic Turf
Material Condition:	Excellent, New
Turf Identification:	Autumn Grass 97

TESTING METHODS REQUESTED:

Standard:	ASTM D5848	Test Method:	Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings (Pile Weight)
Standard:	ASTM D5823	Test Method:	Standard Test Method for Tuft Height of Pile Floor Coverings (Tuft Height above Backing)
Standard:	ASTM D5793	Test Method:	Standard Test Method for Binding Sites per Unit Length or Width of Pile Yarn Floorcoverings (Stitch and Gauge)
Standard:	ASTM D1335	Test Method:	Standard Test Method for Tuft Bind Strength of Pile Yarn Floor Coverings (Tuft Lock)
Standard:	ASTM D5034	Test Method:	Standard Test Method for Breaking Strength of Textile Fabrics (Grab Tear Strength)
Standard:	ASTM D7138	Test Method:	Standard Test Method for Determination of Melting Temperatures of Synthetic Fibers (Fiber Identification)

SAMPLING PLAN:

Sampling Date:	5/11/23
<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:

Testing Services, Inc was instructed by the client to perform fiber and construction analysis on submitted 1 roll of finished synthetic turf identified as: Autumn Grass 97 in accordance with ASTM, EN, FIFA, or other or other requested test methods.

TEST DATA:

Fiber Analysis

Test Method	Test Description	Test Result	
ASTM D7138	Melting Point, Fiber Identification	129°C	Polyethylene

Construction Analysis

Test Method	Test Description	Test Result
ASTM D5848	Pile Yarn Weight	75.10 oz/yd ²
ASTM D5823	Average Tuft Height	1.75"
ASTM D5793	Stitch Count	3.6 stitches per 1"
ASTM D5793	Gauge	3/8"
ASTM D1335	Average Tuft Bind	14.0 lbs/force
ASTM D5034	Average Grab Tear Strength: Length Direction	292 lbs/force
ASTM D5034	Average Grab Tear Strength: Width Direction	245 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. 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 (Am)



100108-0



Testing Services (TSI) LLC
 817 Showalter Avenue
 PO Box 1343
 Dalton, GA 30721