



TESTING SERVICES

LABORATORY TEST SUMMARY

Report # 91363E
Lab Test Number: 3380-4463
Report Date: July 21, 2023

ASTM F1551, DIN 18-035 Part 6; Water Permeability

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CLIENT:

Company:	Global Syn-Turf
Address:	5960 Inglewood Dr Suite 150
	Pleasanton, CA 94588

TEST MATERIAL:

Date Material Received:	June 5, 2023
Material Type:	Synthetic Turf
Material Condition:	Excellent, New
Turf Identification:	Celebration
Infill 1:	1.5 lbs/ft ² Silica Sand
Pad System:	

TESTING METHODS REQUESTED:

<i>Testing Services Inc. was instructed by the client to test for the following...</i>			
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:	6/5/2023
<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	

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 infill listed above, 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. 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.

TEST SUMMARY

Specimen #	Drainage Pass #2 (Seconds)	Drainage Pass #3 (Seconds)	Drainage Pass #4 (Seconds) 3rd Attempt	Total Average Drainage (Seconds)	Average gal/min/yd ²	¹ Rainfall Capacity Inches/hour
Left	46.10	46.60	47.70	46.8	43.2	132.4
Center	48.20	49.40	50.30	49.3	41.0	125.7
Right	98.50	99.10	101.20	99.6	20.3	62.2
Final Averages				65.2	34.8	95.0

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 (American Society for Testing and Materials). TSi is a certified independent testing laboratory by the STC (Synthetic Turf Council).



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