



TEST REPORT

CLIENT:	ForeverLawn, Inc	REPORT NUMBER:	602661
	8007 Beeson St	LAB TEST NUMBER:	2596-9052
	Louisville, OH 44641	DATE:	March 21, 2014
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Test Material:

Turf Identification	Infill
K9Grass Sport	0.75 Lbs/ft ² 10/20 Ambient Rubber

INTRODUCTION:

Testing Services Inc was instructed by the client, to perform ADA wheelchair accessibility for the above described material being used under and around playground equipment.

TEST METHOD:

ASTM F1951: Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

REQUIREMENT:

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 %).

PROCEDURE:

Test Surface Preparation: Tests were conducted on 3/18/14 indoors at TSi Laboratories in an environment of 64°F and 42% R.H. The synthetic turf was installed in a wooden box (44"W x 117"L). The system, prior to testing, was slightly compacted using a water-filled lawn roller to simulate foot traffic.

Wheelchair/Operator: The wheelchair used in these tests was manufactured by *Invcare*, Model Action Xtra, serial Number 98J84142. This wheelchair is totally adjustable, a necessity for these tests. The pneumatic tires were inflated to 60 psi on the rear and 32 psi on the front. The weight of the wheelchair was 24.25 pounds and the operator's weight was 165 pounds for a total of 189 pounds. The operator's distribution was adjusted to 60% on the rear wheels and 40 % on the front.

Torque Measuring System: A certified *Dillon Electronic Force Gauge*, Model BFG 500N, S/N 98-2277-07 was used as an interface between a *Dell Laptop* and a certified *Dillon Smart Torque Wrench*, S/N 97-0085-01. Software, also from Dillon, logged the load vs. time and integrated the area under the resulting curves. The adapters and accessories needed to attach the instrumentation were fabricated locally. This total package added 10 pounds to the total weight bringing the total to 199 pounds.

TEST RESULTS:

(Average Work/ft-Force)

Baseline Straight (Average Work/ft-Force)	PlayGround Grass Ultra w/X Static with infill System (Average Work/ft-Force)
13.75 lbs	7.99 lbs
Baseline Turning (Average Work/ft-Force)	PlayGround Grass Ultra w/X Static with infill System (Average Work/ft-Force)
10.21 lbs	6.72 lbs

Conclusion:

The above listed material *meets/exceeds* both the straight line and turning propulsion requirements set forth in this test method and therefore, passes the standard.

Approved By:

Digitally signed by Erle Miles, Jr. VP
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 Services Inc, ou,
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 Date: 2015.03.03 16:51:57 -0400

Erle Miles, Jr V.P., Testing Services Inc

TSi Accreditation:

Our laboratory is accredited with US Dept of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. TSi is a recognized certified laboratory by the Synthetic Turf Council

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.