



TEST REPORT

CLIENT:

Company:	Airfield Systems	Report Number:	91668
Address:	8028 N May Ave Suite 201	Lab Test Number:	3382-4571
	Oklahoma City, OK 73120	Test Dates:	6/21/2023-6/24/2023
		Report Date:	6/30/2023
		Page:	2 of 2

TEST MATERIAL:

Identification	SYNLawn Augustine X47	Date Received:	6/14/2023
Infill:	2.5. lbs/ft ² EnviroFill	Subbase:	Aggregate
Pad:	Air Drain		

TESTING METHODS REQUESTED:

<i>Testing Services Inc. was instructed by the client to test for the following...</i>	
Standard:	ASTM F1292
Test Method:	Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground E

SAMPLING PLAN:

Sampling Date:	6/14/2023
<ul style="list-style-type: none"> Turf and padding delivered to Testing Services directly The delivered specimens were acclimated to the appropriate temperatures per the test method prior to testing. 	

TEST APPARATUS:

<ul style="list-style-type: none"> Triax 2015 E Missile System, manufactured by Alpha Automation, Inc. Accelerometer #1488 manufactured by Dytran, Calibration Date 7/26/22 Recalibration Due Date 7/26/24
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DEVIATION FROM TEST METHOD:

<i>State Reason for any Devation, Additions to, or Exclusions from Test Method</i>
None

TEST SUMMARY:

Test Method	Condition		Gmax	HIC	Fall Height
ASTM F1292-18e1	Ambient, Dry	72°F	155	751	5'
	Hot, Dry	120°F	165	790	5'
	Frozen	25°F	165	908	6'

Full test data reported on page 2 of this report

Critical Fall Height < 200 Gmax < 1000 HIC, All Temperature Ranges	5'
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Per the test method, the laboratory test used to determine critical fall height of materials specified for use in a playground shall have been conducted no more than five years prior to the date of installation of the playground surface.

Specificity: The results reported herein reflect the performance of the described samples at the time of testing and at the temperatures reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently.

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. Unless otherwise noted in the deviations sections of this report, all tests performed are in compliance with stated test method.

The results reported herein reflect the performance of the described samples at the time of testing and at the temperature(s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently.

Test Report Approved by: _____
Erle Miles, III, Lab Director, Testing Services (TSI) LLC

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



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Pad:	Air Drain		

TEST DATA: (Average is drop 2 & 3, Drop 1 is for conditioning only)

CONDITIONS	Drop	Velocity (ft/sec)	Angle	Drop Height	Gmax	HIC
Ambient Air Temperature: 68°F	1	16.2	3°	4'	129	473
	2	16.2	6°	4'	143	584
	3	16.2	5°	4'	142	580
	Surface Temperature			72°F	AVERAGE Gmax/HIC	143
Reference Surface Temperature: 72°F ±5°F	1	18.1	3°	5'	138	624
	2	18.1	6°	5'	150	717
	3	18.1	2°	5'	160	784
	Surface Temperature			72°F	AVERAGE Gmax/HIC	155
Test Date: 6/21/2023	1	19.7	2°	6'	184	1077
	2	19.7	1°	6'	209	1308
	3	19.7	4°	6'	196	1163
	Surface Temperature			72°F	AVERAGE Gmax/HIC	203

CONDITIONS	Drop	Velocity (ft/sec)	Angle	Drop Height	Gmax	HIC
Ambient Air Temperature: 67°F	1	16.2	5°	4'	125	448
	2	16.2	10°	4'	137	522
	3	16.2	6°	4'	139	536
	Surface Temperature			25°F	AVERAGE Gmax/HIC	138
Reference Surface Temperature: 120°F ± °F	1	18.1	6°	5'	148	644
	2	18.1	5°	5'	162	769
	3	18.1	2°	5'	167	811
	Surface Temperature			24°F	AVERAGE Gmax/HIC	165
Test Date: 6/21/2023	1	19.8	4°	6'	172	917
	2	19.8	5°	6'	184	1023
	3	19.8	5°	6'	193	1152
	Surface Temperature			25°F	AVERAGE Gmax/HIC	189

CONDITIONS	Drop	Velocity (ft/sec)	Angle	Drop Height	Gmax	HIC
Ambient Air Temperature: 66°F	1	18.0	2°	5'	122	574
	2	18.0	5°	5'	147	700
	3	18.0	2°	5'	164	805
	Surface Temperature			120°F	AVERAGE Gmax/HIC	156
Reference Surface Temperature: 25°F ± °F	1	19.7	4°	6'	138	703
	2	19.7	9°	6'	171	963
	3	19.7	8°	6'	159	853
	Surface Temperature			120°F	AVERAGE Gmax/HIC	165
Test Date: 6/21/2023	1	21.3	2°	7'	185	1201
	2	21.3	2°	7'	173	1074
	3	21.3	6°	7'	191	1277
	Surface Temperature			119°F	AVERAGE Gmax/HIC	182

Testing Services (706) LLC

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