



TESTING SERVICES, INC.
 817 SHOWALTER AVE. • P.O. BOX 2041
 DALTON, GEORGIA 30722-2041
 PHONE: (706) 226-1400 • FAX: (706) 226-6118



TEST REPORT

CLIENT:	Global Syn-Turf	REPORT NUMBER:	52898
	2482 Technology Drive	LAB TEST NUMBER:	2363-9599
	Hayward, CA 94545	DATE:	August 24, 2011
		PAGE:	1 of 2

Test Material: GST-80A38 Synthetic Turf

Infill: None

Padding: 2.125" Playground Pad

Sub Base: Concrete

Impact Location: Center of Test Material

Date of Receipt: August 9, 2011

Testing Period: August 17--23, 2011

Authorization: Andrew Gao

Test Procedure: The submitted sample was evaluated for Shock Absorbing Properties in Accordance with the procedures outlined in ASTM F 1292-09; Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

Missile: Hemispherical (Triaxial Accelerometer): Total Drop Assembly Weight (46g) 10 lbs

Test Equipment: Triax 2000 Surface Impactor
 Date of Last Calibration: 3/4/2010 by Alpha Automation

Sample Pre-Condition: 50±10 RH, 70F±5F for a minimum of 24 hrs prior to testing

Sample Conditioning: 8 hrs @ each reference temperatures prior to testing

**Maximum Drop Height That Gives a
 Gmax of 200 or Less and A HIC of 1000 or less**

Ambient, 72°F (23°C)	8'
Hot, 120°F (49°C)	8'
Cold, 25°F (-6°C)	9'

Critical Fall Height (CFH):	8'
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Reference Gmax Curves Included

Prepared and signed by:

Erle Miles, Jr. VP
 Testing Services Inc.



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AMBIENT Sample Condition: Dry Temperature: 70°F (23°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	21.3	2	7'	7.05	102	543
	2	21.3	0	7'	7.05	115	641
	3	21.3	1	7'	7.05	113	627
	Average			Drops 2, 3		114	634
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	2	8'	8.08	130	815
	2	22.8	1	8'	8.08	133	832
	3	22.8	8	8'	8.08	141	875
	Average			Drops 2, 3		137	854
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	24.2	2	9'	9.10	145	976
2	24.2	4	9'	9.10	159	1095	
3	24.2	3	9'	9.10	159	1097	
Average			Drops 2, 3		159	1096	

HOT Sample Condition: Dry Temperature: 120°F (49°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	21.3	8	7'	7.05	136	758
	2	21.3	6	7'	7.05	141	800
	3	21.3	9	7'	7.05	127	711
	Average			Drops 2, 3		134	756
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	8	8'	8.08	157	958
	2	22.8	5	8'	8.08	169	1044
	3	22.8	1	8'	8.08	156	954
	Average			Drops 2, 3		163	999
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	24.2	9	9'	9.10	206	1502
2	24.2	9	9'	9.10	192	1322	
3	24.2	1	9'	9.10	229	1631	
Average			Drops 2, 3		211	1477	

COLD Sample Condition: Dry Temperature: 25°F (-6°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	0	8'	8.08	125	795
	2	22.8	4	8'	8.08	139	945
	3	22.8	1	8'	8.08	122	783
	Average			Drops 2, 3		131	864
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	24.1	3	9'	9.03	141	987
	2	24.1	7	9'	9.03	141	960
	3	24.1	5	9'	9.03	140	969
	Average			Drops 2, 3		141	965
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	25.3	6	10'	9.95	149	1098
2	25.4	7	10'	10.03	158	1174	
3	25.4	5	10'	10.03	157	1161	
Average			Drops 2, 3		158	1168	

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