



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:	52943
	2482 Technology Drive	LAB TEST NUMBER:	2363-9600
	Hayward, CA 94545	DATE:	August 24, 2011
		PAGE:	1 of 2

Test Material: GST-90A58

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 18--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

Temperature: 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)	7'
Cold, 25°F (-6°C)	8'

Critical Fall Height (CFH):	7'
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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	4	7'	7.05	105	583	
	2	21.3	0	7'	7.05	111	637	
	3	21.3	5	7'	7.05	119	684	
	Average				Drops 2, 3		115	661
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	22.8	6	8'	8.08	128	800	
	2	22.8	2	8'	8.08	137	877	
	3	22.8	9	8'	8.08	151	984	
	Average				Drops 2, 3		144	931
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	7	9'	9.03	144	996	
2	24.2	9	9'	9.10	159	1165		
3	24.1	6	9'	9.03	165	1210		
Average				Drops 2, 3		162	1188	

HOT Sample Condition: Dry Temperature: 120°F (49°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	19.8	8	6'	6.09	111	542	
	2	19.8	6	6'	6.09	120	624	
	3	19.7	3	6'	6.03	108	530	
	Average				Drops 2, 3		114	577
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	21.3	1	7'	7.05	142	780	
	2	21.3	6	7'	7.05	142	795	
	3	21.3	4	7'	7.05	129	714	
	Average				Drops 2, 3		136	755
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	22.8	4	8'	8.08	161	1003	
2	22.8	8	8'	8.08	173	1093		
3	22.8	6	8'	8.08	156	999		
Average				Drops 2, 3		165	1046	

COLD Sample Condition: Dry Temperature: 25°F (-6°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	21.4	7	7'	7.12	119	701	
	2	21.3	4	7'	7.05	124	748	
	3	21.3	3	7'	7.05	121	735	
	Average				Drops 2, 3		123	742
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	22.7	9	8'	8.01	130	861	
	2	22.8	10	8'	8.08	125	804	
	3	22.8	8	8'	8.08	132	842	
	Average				Drops 2, 3		129	823
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	5	9'	9.03	140	1020	
2	24.1	0	9'	9.03	148	1110		
3	24.1	0	9'	9.03	145	1057		
Average				Drops 2, 3		147	1084	

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