



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:	Robertson Industries	REPORT NUMBER:	48733A
	4401 E. Baseline Road Suite 105	LAB TEST NUMBER:	2150-2270
	Phoenix, AZ 85042	DATE:	July 13, 2010
		PAGE:	1 of 2

Product Description: TT Synthetic Pro 5.25" (1.75" Pile Ht Synthetic Turf w/Thatch Layer infilled with 2.5 lbs/sq/ft 12-20 Silica Sand over 3.5" Ht Pour-in-Place

Tested Dimension: 18" x 18" X 5.25"

Sub Base: Concrete

Impact Location: Center of Test Material

Date of Receipt: May 10, 2010

Testing Period: July 6--8, 2010

Authorization: Steve Scaturro

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: 3/24/2010 by Alpha Automation

Sample Pre-Condition: 50±10 RH, 7sF±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) 10'

Hot, 120°F (49°C) 9'

Cold, 25°F (-6°C) 9'

Critical Fall Height (CFH):	9'
------------------------------------	-----------

Reference Gmax Curves Included

Prepared and signed by:

 Erle Miles, Jr. VP
 Testing Services Inc.



TEST REPORT

CLIENT:	Robertson Industries	REPORT NUMBER:	48733A
	4401 E. Baseline Road Suite 105	LAB TEST NUMBER:	2150-2270
	Phoenix, AZ 85042	DATE:	July 13, 2010
		PAGE:	Page 2 of 2

AMBIENT Sample Condition: Dry Temperature: 70°F (23°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.2	3	9'	9.10	114	704	
	2	24.2	0	9'	9.10	119	732	
	3	24.2	4	9'	9.10	122	758	
	Average				Drops 2, 3		121	745
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.4	2	10'	10.03	125	817	
	2	25.4	4	10'	10.03	133	890	
	3	25.4	6	10'	10.03	138	945	
	Average				Drops 2, 3		136	918
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	26.6	1	11'	11.00	146	1075	
2	26.7	5	11'	11.08	149	1072		
3	26.7	6	11'	11.08	157	1178		
Average				Drops 2, 3		153	1125	

HOT Sample Condition: Dry Temperature: 120°F (49°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	22.7	1	8'	8.01	118	716	
	2	22.7	1	8'	8.01	121	740	
	3	22.8	2	8'	8.08	122	736	
	Average				Drops 2, 3		122	738
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	1	9'	9.03	133	875	
	2	24.1	4	9'	9.03	138	915	
	3	24.1	4	9'	9.03	140	939	
	Average				Drops 2, 3		139	927
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.4	1	10'	10.03	143	1043	
2	25.4	6	10'	10.03	151	1119		
3	25.4	3	10'	10.03	148	1080		
Average				Drops 2, 3		150	1100	

COLD Sample Condition: Dry Temperature: 25°F (-6°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	22.7	3	8'	8.01	116	681	
	2	22.7	0	8'	8.01	120	708	
	3	22.7	4	8'	8.01	118	697	
	Average				Drops 2, 3		119	703
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	0	9'	9.03	121	768	
	2	24.2	1	9'	9.10	125	797	
	3	24.2	4	9'	9.10	122	771	
	Average				Drops 2, 3		124	784
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.4	5	10'	10.03	144	1012	
2	25.5	1	10'	10.11	150	1063		
3	25.4	7	10'	10.03	147	1032		
Average				Drops 2, 3		149	1048	