



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:	Rubber Designs, LLC	REPORT NUMBER:	59929
	3125 Skyway Circle	LAB TEST NUMBER:	2589-8540
	Melbourne, FL 32934	DATE:	February 14, 2014
		PAGE:	1 of 2

Test Material: 3.75" Rubber Designs Interlocking Tile

Tested Dimension: 18" x 18" x 3.75"

Sub Base: Concrete

Impact Location: Center of Test Material

Date of Receipt: February 5, 2014

Testing Period: February 5--7, 2014

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: 3/18/2013 by Alpha Automation

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

<u>Temperature:</u>	<u>Maximum Drop Height That Gives a Gmax of 200 or Less and A HIC of 1000 or less</u>
Ambient, 72°F (23°C)	10'
Hot, 120°F (49°C)	10'
Cold, 25°F (-6°C)	10'
Critical Fall Height (CFH):	10'

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	24.1	4	9'	9.03	121	807	
	2	24.0	4	9'	8.95	114	749	
	3	24.1	5	9'	9.03	120	800	
	Average				Drops 2, 3		117	775
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.3	1	10'	9.95	128	940	
	2	25.3	7	10'	9.95	135	1003	
	3	25.3	6	10'	9.95	129	946	
	Average				Drops 2, 3		132	975
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	26.6	3	11'	11.00	149	1212	
2	26.6	2	11'	11.00	135	1070		
3	26.5	8	11'	10.91	139	1107		
Average				Drops 2, 3		137	1089	

HOT Sample Condition: Dry Temperature: 120°F (49°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	4	9'	9.03	120	809	
	2	24.2	6	9'	9.10	116	800	
	3	24.1	5	9'	9.03	119	788	
	Average				Drops 2, 3		118	794
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.3	3	10'	9.95	126	886	
	2	25.3	1	10'	9.95	126	883	
	3	25.3	8	10'	9.95	127	938	
	Average				Drops 2, 3		127	911
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	26.6	7	11'	11.00	138	1043	
2	26.5	0	11'	10.91	128	933		
3	26.5	3	11'	10.91	137	1090		
Average				Drops 2, 3		133	1012	

COLD Sample Condition: Dry Temperature: 25°F (-6°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	24.1	2	9'	9.03	111	804	
	2	24.0	7	9'	8.95	111	812	
	3	24.1	7	9'	9.03	118	856	
	Average				Drops 2, 3		115	834
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	25.3	1	10'	9.95	126	977	
	2	25.3	0	10'	9.95	114	845	
	3	25.3	0	10'	9.95	122	939	
	Average				Drops 2, 3		118	892
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC	
	1	26.6	2	11'	11.00	136	1133	
2	26.5	3	11'	10.91	138	1222		
3	26.6	2	11'	11.00	141	1234		
Average				Drops 2, 3		140	1228	

OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, THESE LETTERS AND REPORTS ARE FOR THE USE ONLY OF THE CLIENT TO WHOM THEY ARE ADDRESSED AND THEIR COMMUNICATION TO ANY OTHERS OR THE USE OF THE NAME TESTING SERVICES, Inc. MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. THE REPORTS AND LETTERS, AND OUR NAME, OUR SEALS, OR OUR INSIGNIA ARE NOT UNDER ANY CIRCUMSTANCES TO BE USED IN ADVERTISING TO THE GENERAL PUBLIC. VISIT OUR WEBSITE AT www.tsiodalton.com