



**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:	47839A
	4401 E. Baseline Road Suite 105	LAB TEST NUMBER:	2150-2265
	Phoenix, AZ 85042	DATE:	April 23, 2010
		PAGE:	1 of 2

**Product Description:** 3.0" Supreme

**Tested Dimension:** 18" x 18" X 3"

**Sub Base:** Concrete

**Impact Location:** Center of Test Material

**Date of Receipt:** March 15, 2010

**Testing Period:** 4/6/2010-4/14/2010

**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) 7'

Hot, 120°F (49°C) 7'

Cold, 25°F (-6°C) 7'

<b>Critical Fall Height (CFH):</b>	7'
------------------------------------	----

Reference Gmax Curves Included

Prepared and signed by:

\_\_\_\_\_  
 Erle Miles, Jr. VP  
 Testing Services Inc.



## TEST REPORT

CLIENT:	Robertson Industries	REPORT NUMBER:	47839A
	4401 E. Baseline Road Suite 105	LAB TEST NUMBER:	2150-2265
	Phoenix, AZ 85042	DATE:	April 23, 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	19.8	1	6'	6.09	116	605
	2	19.8	2	6'	6.09	126	696
	3	19.8	0	6'	6.09	121	660
	Average			Drops 2, 3		124	678
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	21.3	1	7'	7.05	140	866
	2	21.3	0	7'	7.05	148	931
	3	21.3	1	7'	7.05	146	898
	Average			Drops 2, 3		147	915
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	0	8'	8.08	154	1063
2	22.8	1	8'	8.08	160	1118	
3	22.8	1	8'	8.08	160	1111	
Average			Drops 2, 3		160	1115	

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	1	6'	6.09	119	659
	2	19.8	1	6'	6.09	124	694
	3	19.8	5	6'	6.09	124	684
	Average			Drops 2, 3		124	689
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	21.3	3	7'	7.05	146	922
	2	21.4	5	7'	7.12	151	955
	3	21.3	1	7'	7.05	154	993
	Average			Drops 2, 3		153	974
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	0	8'	8.08	161	1150
2	22.8	1	8'	8.08	168	1224	
3	22.8	0	8'	8.08	166	1188	
Average			Drops 2, 3		167	1206	

COLD Sample Condition: Dry Temperature: 25°F (-6°C)	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	19.7	2	6'	6.03	128	719
	2	19.8	7	6'	6.09	133	753
	3	19.8	5	6'	6.09	133	749
	Average			Drops 2, 3		133	751
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	21.3	1	7'	7.05	138	827
	2	21.4	3	7'	7.12	146	898
	3	21.4	1	7'	7.12	145	893
	Average			Drops 2, 3		146	896
	Drop #	Velocity ft/sec	Angle	Drop Ht/Actual	Drop Ht/Theoretical	Gmax	HIC
	1	22.8	4	8'	8.08	160	1138
2	22.8	2	8'	8.08	163	1164	
3	22.8	3	8'	8.08	165	1171	
Average			Drops 2, 3		164	1168	