



United States Testing Company, Inc.

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REPORT OF TEST

Engineering Services

CLIENT: Allesco, Inc.
770 North Halsted
Suite 107
Chicago, IL 60622

NUMBER: 110825
April 7, 1994

SUBJECT: Shock Absorbing Properties of Playing Surfaces

REFERENCE:

Allesco, Inc., Letter of Authorization dated March 22, 1994.
Samples Received: March 25, 1994

SAMPLE IDENTIFICATION:

One (1) sample of playing surface material was submitted and identified by the Client as follows:

1-1/4" Flip-Flop Puzzle Mats

TEST PERFORMED:

The submitted sample was evaluated for Shock Absorbing Properties in accordance with the procedures outlined in ASTM F-1292-93, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment, except that the test was performed only at room temperature.

Testing Supervised by:

Frank Savino

**Frank Savino, Manager
Materials Engineering Section**

SIGNED FOR THE COMPANY

By *Frank Pepe*

**Frank Pepe
Vice President**

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TEST RESULTS SUMMARY

Sample: 1-1/4" Flip-Flop Puzzle Mats
Sample Dimensions: 11" x 11" (Minimum) x 1-1/4"
Test Procedure: ASTM F-1292-93 and F-355-86, Procedure C
Missile: ANSI C Headform in Crown Position; Total Drop Assembly Weight 5 kg (11 pounds)
Test Date: April 4, 1994

<u>Temperature</u>	<u>Maximum Drop Height That Gives a "G" Max of 200 or Less and an HIC of 1000 or Less</u>
Ambient, 23°C (73°F)	4 Feet
Cold, -1°C (30°F)	N/A
Hot, 49°C (120°F)	N/A

Temperature: 23°C (73°F)

<u>Drop No.</u>	<u>Drop Height, FT</u>	<u>"G" Max.</u>	<u>HIC</u>	<u>Impact Velocity, m/sec</u>
1	3	98	326	4.19
2	3	110	386	4.19
3	3	114	398	4.18
Avg. (2 & 3 Only)		112	392	
1	4	136	565	4.84
2	4	165	709	4.84
3	4	176	761	4.86
Avg. (2 & 3 Only)		170	735	
1	5	170	828	5.43
2	5	233	1208	5.43
3	5	271	1387	5.42
Avg. (2 & 3 Only)		252	1298	