


# LABORATORY TESTING IMPACT EVALUATION ASTM F1292



## Project Information

<b>Project Name</b>	Grass Mat Impact Evaluation ASTM F1292 Impact Attenuation of Playground Surfacing Materials	
<b>Client Information</b>	Grassmats LLP Unit 4A & B Holmes Chapel Business Park Manor Lane Holmes Chapel CW4 8AF	
<b>Date</b>	September 15, 2014	
<b>Report Status</b>	Final	
<b>Report No.</b>	USLT-140915	
<b>Prepared &amp; Checked by</b>	Jeffrey Gentile Laboratory Director	

### Notes:

1. This report has been prepared by Sports Labs USA with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
2. This report is confidential to the Client and Sports Labs USA accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."

## Summary

Sports Labs USA was commissioned to perform laboratory testing for the following characteristics listed below.

- ASTM F1292-13: Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment

The results have been summarized in the quick reference table below. Complete results and background information can be found in the subsequent sections of this report.

Temperature	Maximum Drop Height that produces a Gmax of less than 200 and a HIC of less than 1000
Sample conditioned to 26 (°F)	> 10 ft
Sample conditioned to 72 (°F)	> 10 ft
Sample Conditioned to 120 (°F)	> 10 ft
<b>Critical Fall Height</b>	> 10 ft

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September 15, 2014 • Page | 1



# LABORATORY TESTING IMPACT EVALUATION ASTM F1292



## Table Contents

Project Information .....	1
Summary .....	1
Procedure .....	2
General Information .....	2
Results Table.....	3
Results Graphs.....	3
Sample Photos.....	5
End of Report.....	5

## Procedure

This testing followed the ASTM F1292-09: Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment protocol. The samples was conditioned to (3) temperatures for 8hrs at each temperature per F1292 protocol. General information can be found below.

## General Information

<b>Device</b>	Triax 2010 Impact Tester	<b>Test Methods</b>	ASTM F1292-13
<b>Product Name</b>	Rubber Mat 23 mm	<b>Temperatures Tested (°F)</b>	26, 72, 120
<b>Sample Size</b>	20x20 in	<b>Locations per sample</b>	3
<b>Impact Location</b>	Center of Sample	<b>Sub base</b>	Concrete
<b>Product Description</b>	Rubber Mat 23 mm		
<b>System Description</b>	10 mm of natural turf above 100 mm of compacted soil over concrete		

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 September 15, 2014 • Page | 2



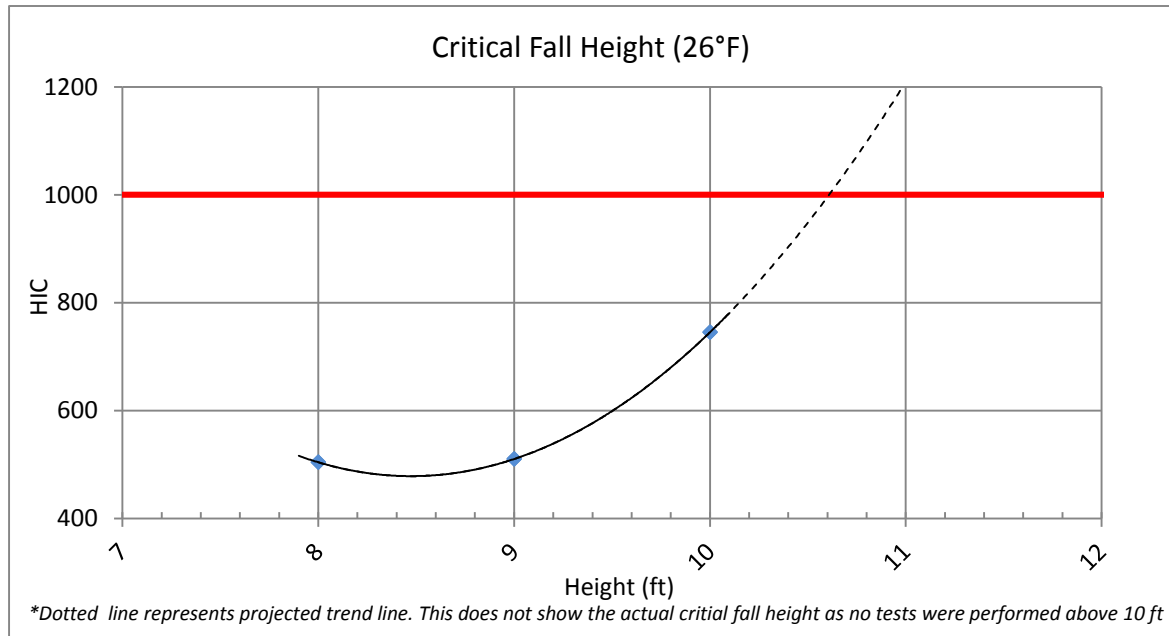
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## Results Table

Temperature (°F)	Height(ft)	Gmax (G's)	HIC	Critical Height (ft)
26	8	103	405	> 10
	9	109	449	
	10	133	474	
72	8	109	548	> 10
	9	116	577	
	10	115	605	
120	8	103	418	>10
	9	113	477	
	10	149	717	

## Results Graphs



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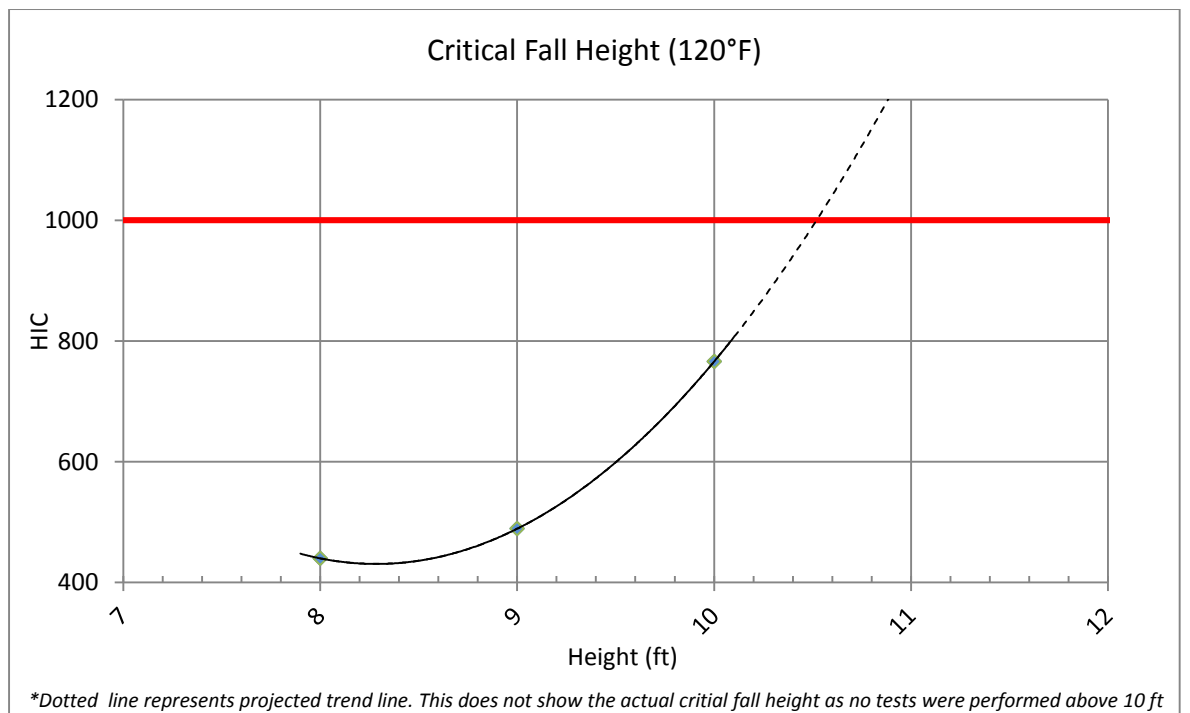
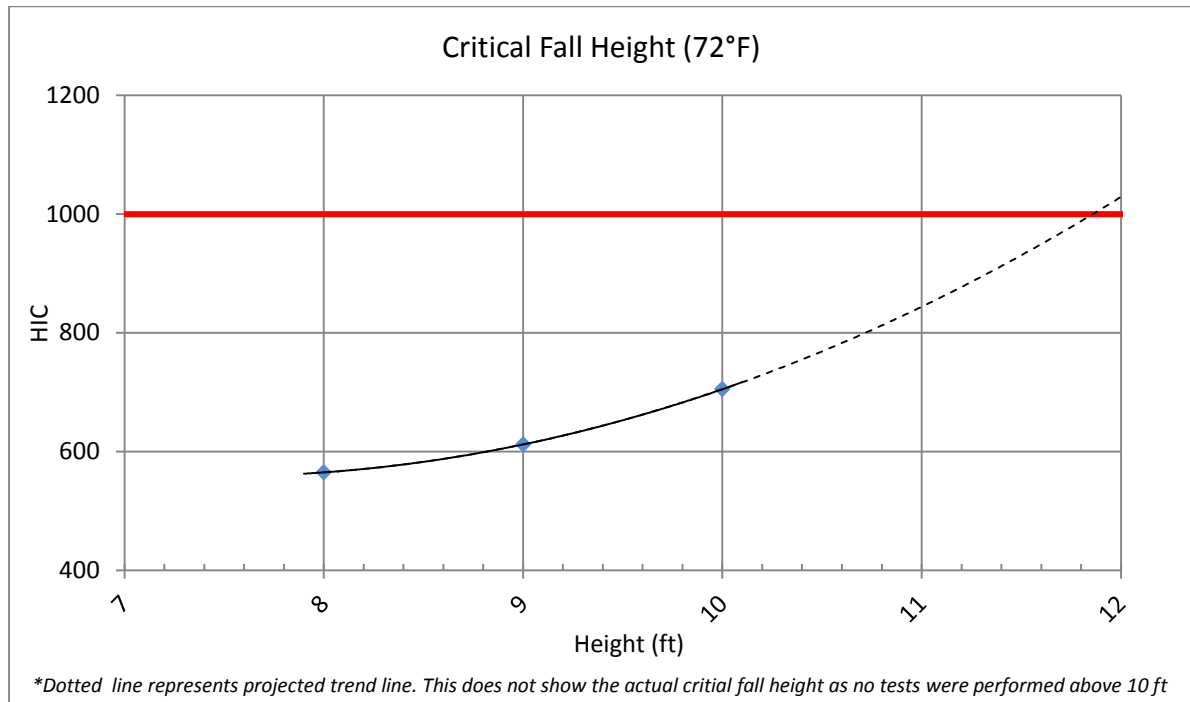


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Critical Fall Height Value > 10 ft

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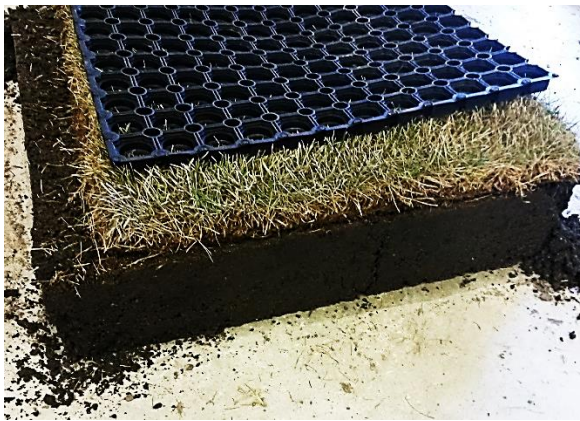
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## Sample Photos



End of Report

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September 15, 2014 • Page | 5

