



# G-MAX TEST REPORT

## CLIENTS:

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## REPORT NUMBER

2019

Date 06-18-2019

## DESCRIPTION

An independent analysis of synthetic turf relative to G-max was requested by the client. The Test was performed by a Licensed Professional Engineer at the below referenced location with ASTM certified and calibrated equipment via Triax "A" Missile SN30-9887 1683. The Test Methods are as follows;

*Method A - ASTM F 355, Test Method for Shock-Absorbing Properties of Playing Surface Systems and Materials.  
ASTM F 1936-10, Standard Specification for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured on the Field, (G-max)*

The particulars of this on-site analysis are described below.

## TEST INFORMATION

Project Name – Horace Mann Elementary School  
Site address - 4430 Newark Street NW, Washington, DC  
Test Type - Onsite G-max Test - 10 Locations  
Field Type - Soccer (Sand/Rubber)

Test Date - 06-18-2019  
Time of Test - 8:00am  
Weather - Cloudy 75°F  
Installation Date - N/A  
Field Temp - 81°F Average

## TEST RESULTS

The following test results indicate G-max values for ten individual locations with three separate tests performed at each location. A table has been provided indicating the values associated with each test and a location map showing the ten individual tests at designated and described locations. ***The test results reported herein reflects the conditions of the tested field at the time and temperatures noted.***

## TEST CONCLUSION

The Synthetic Turf Athletic Field at Horace Mann Elementary School as characterized above and in the following report has been verified to be **out of compliance** for shock attenuation and **does not meet the requirements** for play based on the specifications as referenced in ASTM F1936-10 with locations above the maximum allowable limit of 200.

**Horace Mann ES - Synthetic Turf Field  
Overall G-max = 203**

APPROVED BY - RYAN TEETER, P.E. - LDD Sports

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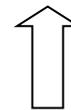
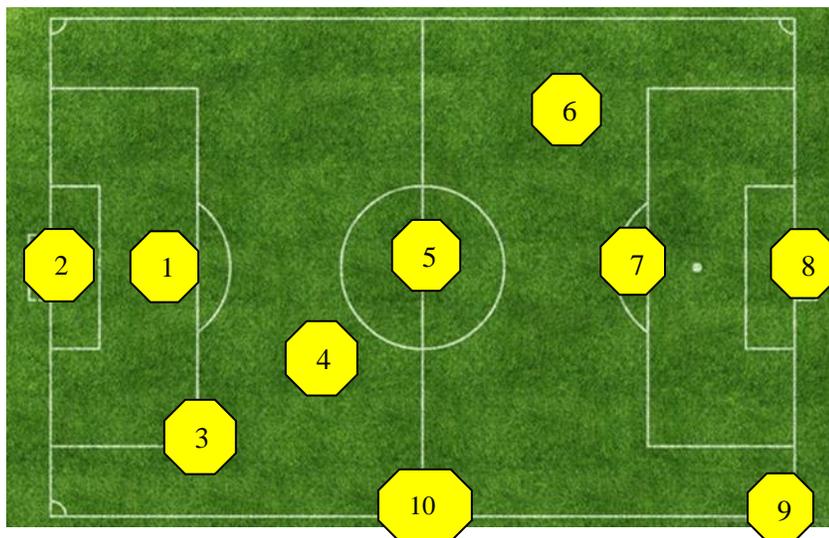
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Horace Mann ES - Synthetic Turf Field									
G-max Values - 06.18.2019									
Test Location	Drop 1		Drop 2		Drop 3		Gmax Average	Infill Depth (mm)	Field Temp (°F)
	Gmax	HIC	Gmax	HIC	Gmax	HIC			
1	212	510	212	481	205	447	208.50	22	81
2	258	739	267	724	258	668	262.50	24	81
3	185	547	181	519	174	479	177.50	26	81
4	186	522	183	505	174	460	178.50	28	81
5	207	642	192	557	182	513	187.00	26	81
6	185	619	195	671	205	605	200.00	26	81
7	182	440	196	425	206	610	201.00	5	81
8	221	774	232	830	222	772	227.00	25	81
9	172	563	179	602	179	601	179.00	33	81
10	211	689	216	713	211	667	213.50	32	81
							<b>203</b>	<b>Overall Average G-max</b>	

Location	Specific Location Description
1	W Penalty Kick at Center of the Field
2	W Goal area at center of field
3	SW Corner of White Lines
4	SW Approx 25 yd line 30 ft from midfield
5	Center of field
6	NE Approx 25 yd line at the numbers
7	E Center of field at White Arc
8	E Soccer Goal Area at center of field
9	SE Corner kick white line
10	South sideline at center field





# G-MAX TEST REPORT



Location #1



Location #2



Location #3



Location #4



Location #5



Location #6



Location #7



Location #8



Location #9



Location #10