LABORATORY PERFORMANCE REPORT

In accordance with

BS EN 1177:2018 – Method 1* – Determination of Impact Attenuation

Sample Reference **Winner Velour Summer Green + Trocellen 50mm**

Report Number **19578/4083**

Report Status **Final**

Issue Date **12/06/2019**

Client **Playrite**
Wellington Mills
Liversedge
West Yorkshire
WF15 7FH

FOREWORD

1. This report has been prepared by Sports Labs limited 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 Limited 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".
4. *Not all tests carried out are within our scope of ISO 17025 Accreditation. Comments and opinions are outwith the scope of our ISO 17025 accreditation.

HEADQUARTERS
Sports Labs Ltd
1 Adam Square,
Brucefield Industry Park
Livingston EH54 9DE
Scotland, United Kingdom

Tel: +44 (0) 1506 444 755
Email: info@sportslabs.co.uk
Web: www.sportslabs.co.uk

REGIONAL LOCATIONS
- USA
- Morocco
- Turkey
- South Africa
- Netherlands
- Belgium
- Norway
- Israel

1.0 INTRODUCTION

We refer to the sample of playground surfacing delivered to our Laboratory. The client requested testing to be carried out in accordance with the requirements of BS EN 1177:2018* - Determination of Impact Attenuation.

Prepared By Craig Melrose

Laboratory Co-ordinator
12/06/2019

Checked By Sean Ramsay

Laboratory Director
12/06/2019

TEST DETAILS	
System Name	Winner Velour Summer Green + Trocellen 50mm
Test Condition	Dry
Surface Temperature (°C)	23.5 °C
Air Temperature (°C)	22.0 °C
Relative Humidity (%)	42 %
Infill Rates (kg/m²)	12 Kg/m²
Fixing Method	Self Weighted
Test Sample Dimension	1.0m x 1.0m
Substrate	Concrete
Shockpad	Trocellen 3020 XC + Trocellen 3030XC NW

2.0 TEST DETAILS

2.1 The test specimen was prepared in accordance with the manufacturer's instructions.

2.2 The specimens were tested in the conditions and temperatures described in BS EN 1177: 2018* to Method 1 for surfacing intended to be manufactured on site.

The results contained within this report apply to the sample provided and test conditions detailed. Whilst the methods described in BS EN 1177:2018 can be used to assess the impact attenuation performance of surfaces, attention of users is drawn that the behaviour of some materials can be highly variable and dependent on prevailing test conditions and that test results will likely vary over time or with climatic conditions.

3.0 TESTING

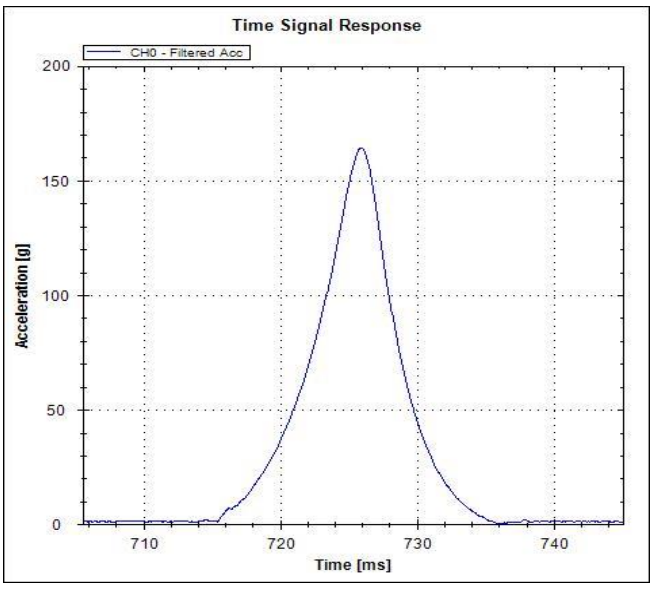
3.1 Determination of Impact Attenuation – BS EN 1177: 2018*.

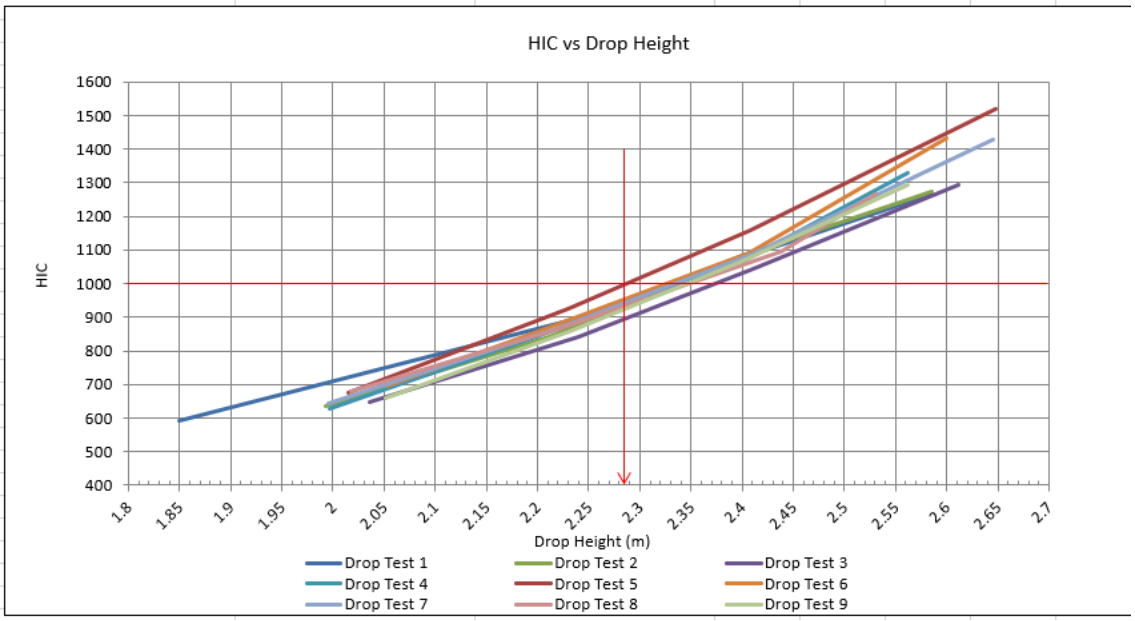
4.0 TEST RESULTS

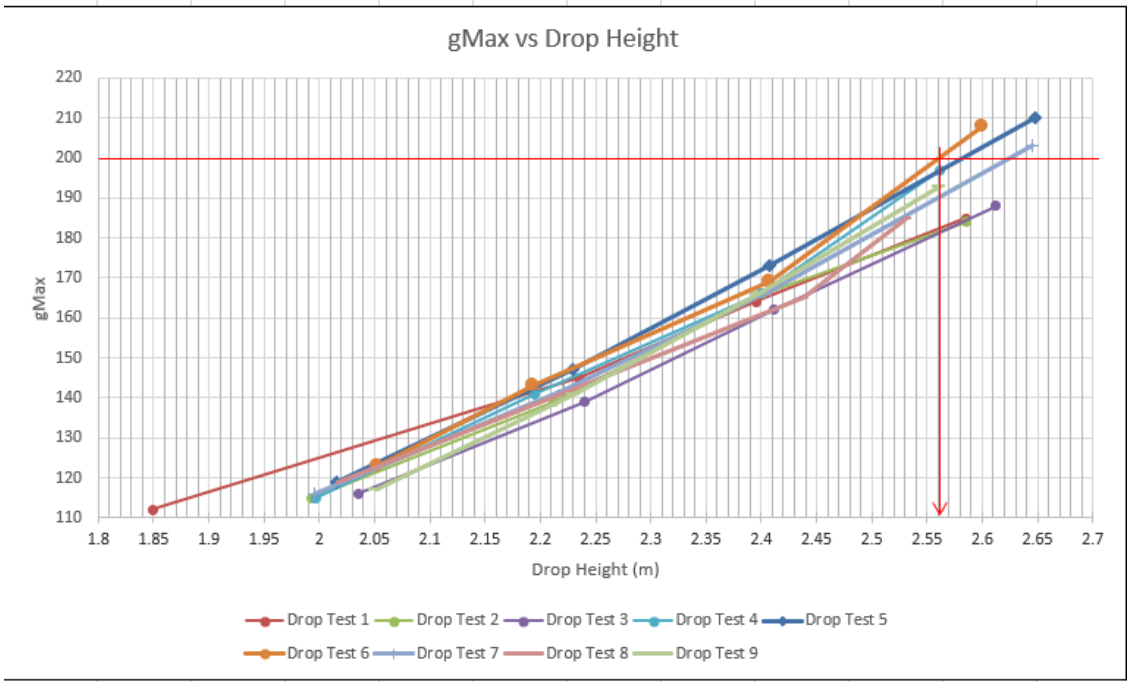
4.1 Detailed test results are given overleaf in tabular format.

5.0 HIC (CRITICAL FALL HEIGHT) TEST RESULTS

Drop Test 1			Drop Test 2			Drop Test 3		
Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX
1.849	591	112	1.993	637	115	2.036	649	116
2.235	895	145	2.212	843	139	2.240	841	139
2.395	1070	164	2.401	1083	166	2.411	1042	162
2.585	1265	185	2.585	1272	184	2.612	1292	188
Drop Test 4			Drop Test 5			Drop Test 6		
Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX
1.997	628	115	2.015	676	119	2.053	696	123
2.195	836	141	2.230	925	147	2.193	848	143
2.399	1063	166	2.408	1160	173	2.407	1092	169
2.562	1328	197	2.648	1521	210	2.600	1433	208
Drop Test 7			Drop Test 8			Drop Test 9		
Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX	Drop Height (m)	HIC	gMAX
1.996	645	116	2.017	678	119	2.051	659	117
2.222	871	142	2.228	873	142	2.231	856	141
2.409	1087	167	2.438	1094	165	2.398	1062	166
2.645	1427	203	2.531	1265	185	2.562	1294	193

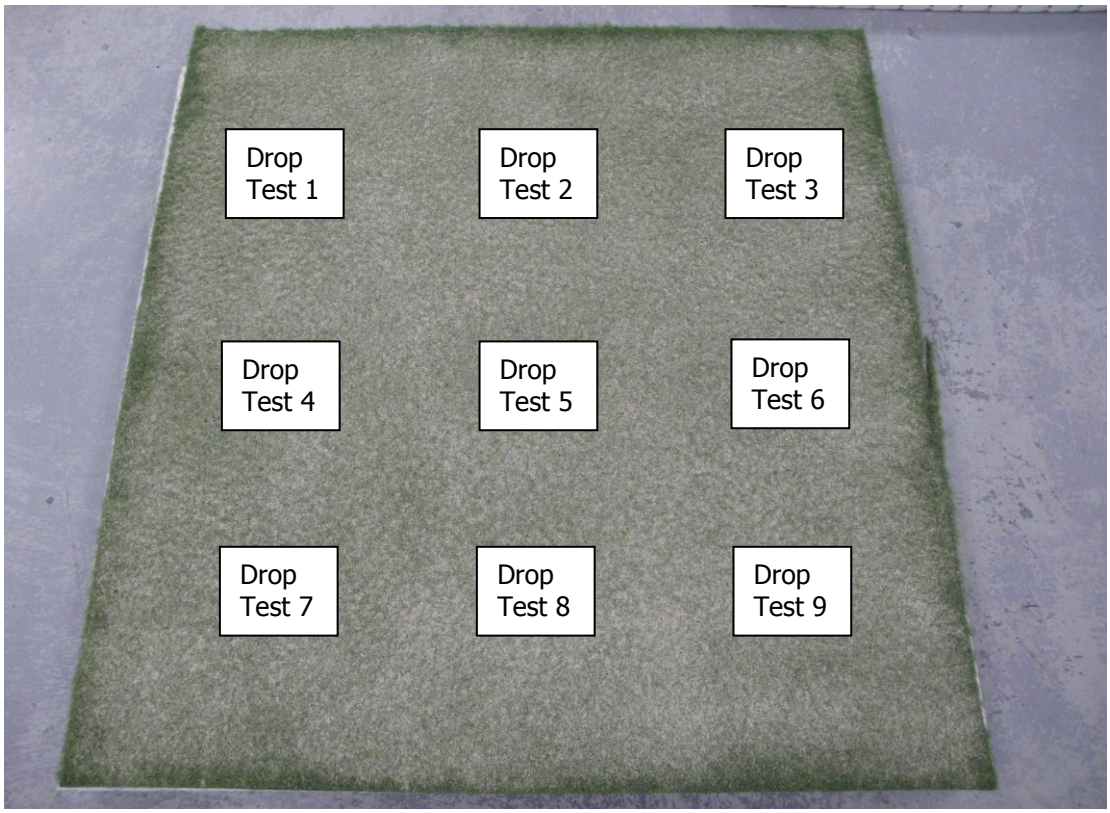


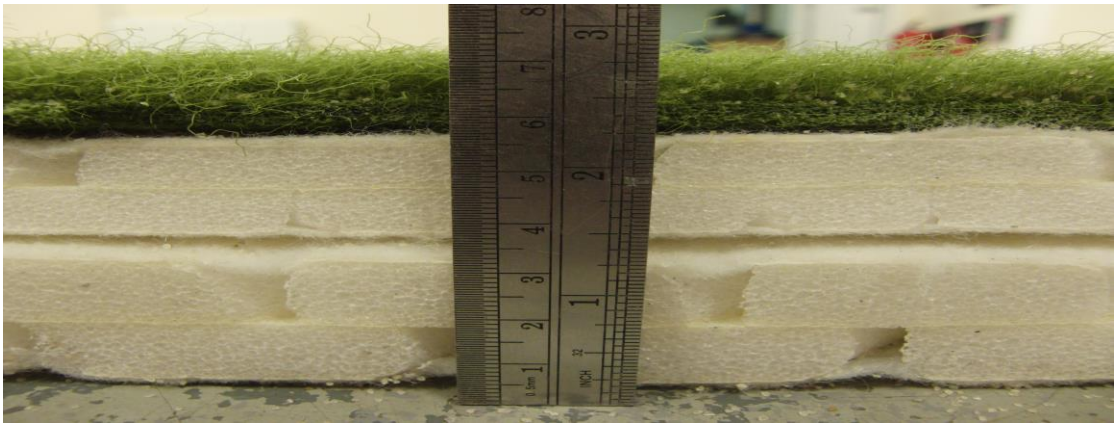




Calculated Critical Fall Height Value uncertainty of ±7 %	**2.28 m**

6.0 SURFACE PHOTOGRAPH/TEST LOCATIONS





End of Report