

## LABORATORY PERFORMANCE REPORT

In accordance with

### **BS EN 1177:2018 – Determination of Critical Fall Height**

**Sample Reference** **PAG 95mm EPDM Rubber Pad**

**Report Number** **18983/1151**

**Report Status** **Final**

**Issue Date** **30/08/2018**

**Client** **PAG Flooring Systems Ltd**  
**Bahnhofstrasse 26**  
**D-38176 Wendeburg**  
**Germany**

#### FOREWORD

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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 Critical Fall Height.

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**By** Laboratory Co-ordinator  
  
30/08/2018

  
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**Checked** Sean Ramsay  
**By** Laboratory Director  
  
30/08/2018

  
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TEST DETAILS	
System Name	PAG 95mm EPDM Rubber Pad
Test Condition	Dry
Surface Temperature (°C)	23.8 °C
Air Temperature (°C)	22.4 °C
Relative Humidity (%)	48 %
Fixing Method	Self Weighted
Substrate	Concrete
Shockpad type	EPDM Rubber Pad
Total Depth (mm)	95 mm
Infill Type	n/a
Infill moisture content at test (%)	n/a



## **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: 2008 to the prefabricated tile method.

## **3.0 TESTING**

- 3.1 Determination of Critical Fall Height – BS EN 1177: 2008.

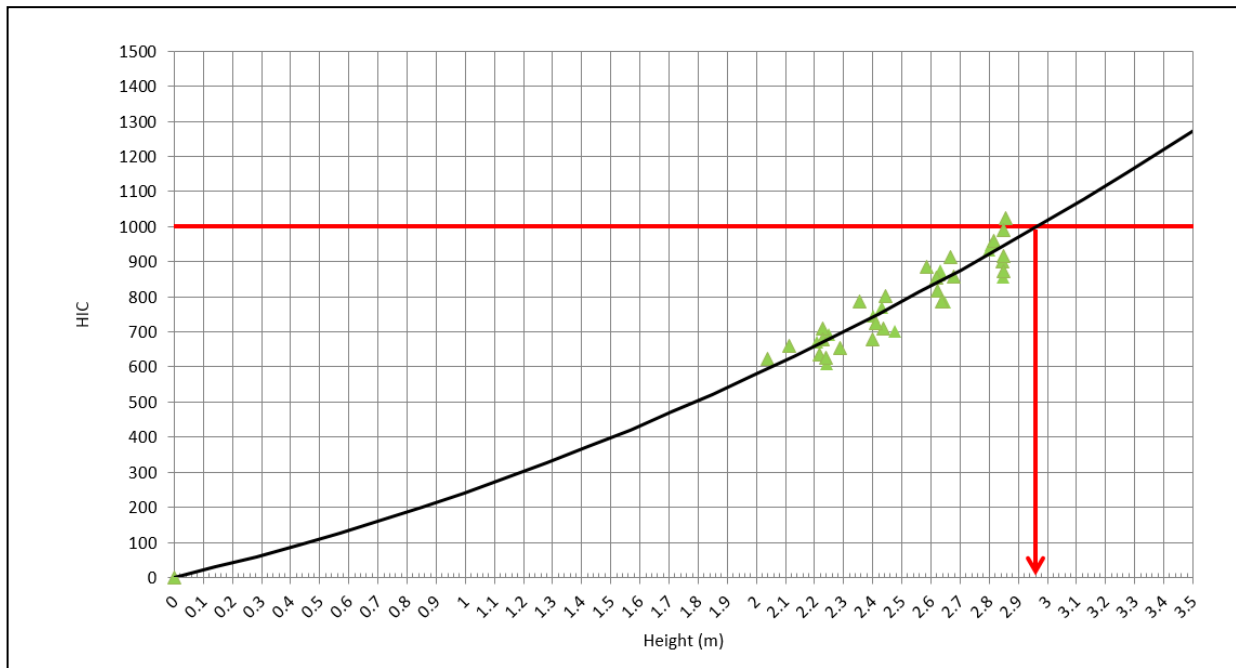
## **4.0 TEST RESULTS**

- 4.1 Detailed test results are given overleaf in tabular format.

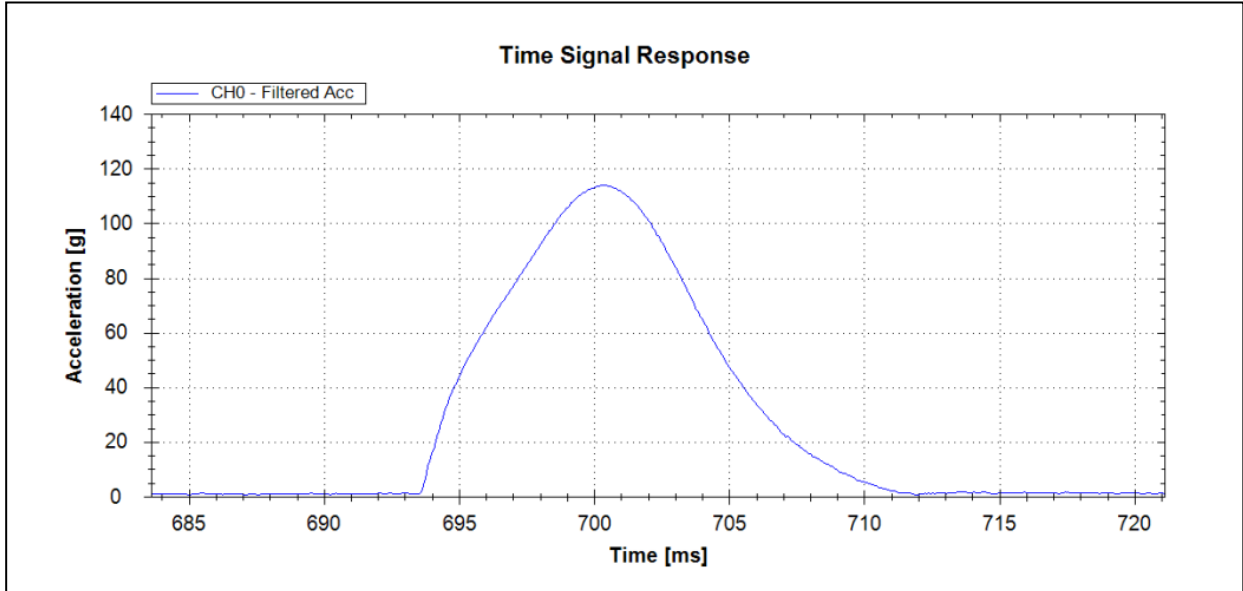


**3.0 HIC (CRITICAL FALL HEIGHT) TEST RESULTS**

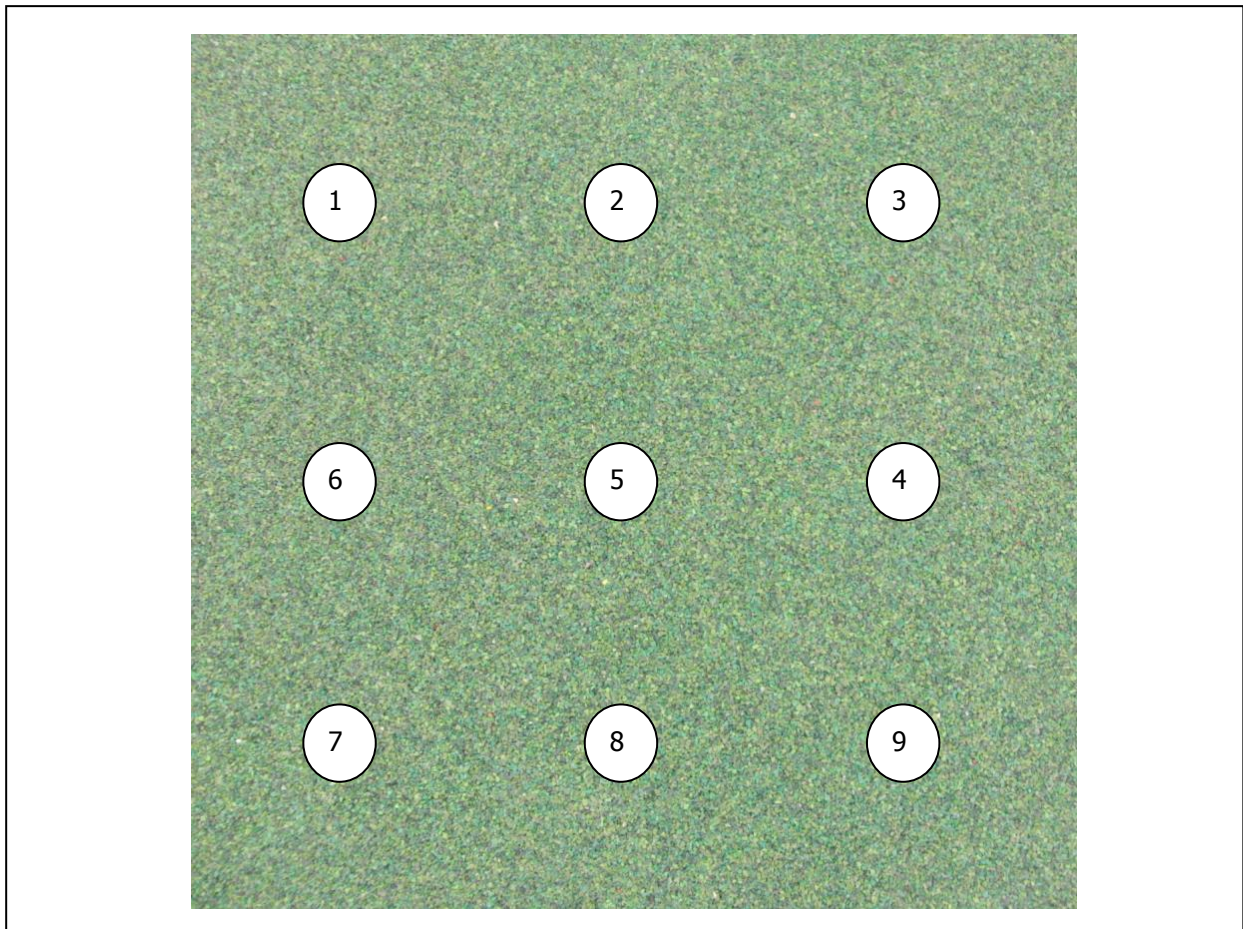
Test Results	Drop Test 1			Drop Test 2			Drop Test 3		
	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC
	2.815	16	959	2.858	16	1023	2.845	17	902
	2.667	17	914	2.584	16	886	2.677	17	858
	2.354	17	787	2.229	17	710	2.438	18	708
	2.113	17	661	2.039	17	623	2.288	18	655
Test Results	Drop Test 4			Drop Test 5			Drop Test 6		
	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC
	2.851	17	915	2.85	17	989	2.849	18	874
	2.621	18	817	2.617	17	856	2.638	18	788
	2.218	18	636	2.445	17	802	2.4	18	678
	2.411	18	724	2.227	18	680	2.241	19	626
Test Results	Drop Test 7			Drop Test 8			Drop Test 9		
	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC	Drop Height (m)	T <sub>2</sub> -T <sub>1</sub>	HIC
	2.798	17	933	2.849	18	857	2.809	16	946
	2.629	17	863	2.647	18	785	2.631	17	876
	2.401	17	746	2.474	19	701	2.431	17	770
	2.209	18	670	2.242	19	609	2.25	17	692



<b>Calculated Critical Fall Height Value</b>	<b>2.9 m</b>
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#### 4.0 SURFACE PHOTOGRAPH/TEST LOC ATIONS



5.0 LAYER PHOTOGRAPH



**End of Report**