

# **TEST REPORT**

**16-0132IT-P**

Issued on March 01<sup>st</sup> 2016

*CLIENT*

**KATASKEVES DAPEDON LTD - BUILDING SYSTEM**

*PRODUCT NAME*

**POLYFLEX PU SYSTEM**

*TYPE*

**SYNTHETIC FLOOR**

Test according to:

**EN 14904:2006 Surfaces for sports areas – Indoor surfaces for multi-sport use – Specification**

*This report may not be used for commercial purposes unless it is reproduced in its entirety.*

The results are valid only for the submitted samples as described in this report.



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## SCOPE OF THE TEST PROGRAMME

The system (sample submitted) was tested in accordance to EN 14904:2006, using the following test procedures.

## DOCUMENTS OF REFERENCE

### STANDARDS USED

UNI EN 14904:2006 Surfaces for sports areas. Indoor surfaces for multi-sport use. Specification

UNI EN 14808:2006 - Surfaces for sports areas. Determination of shock absorption

UNI EN 14809:2006 - Surfaces for sports areas. Determination of vertical deformation

UNI EN 12235:2013 - Surfaces for sports areas. Determination of vertical ball behaviour

UNI EN 13036-4:2011 Road and airfield surface characteristics. Test methods. Method for measurement of slip/skid resistance of a surface. The pendulum test

UNI EN 1569:2001 Surfaces for sports areas. Determination of the behaviour under a rolling load

UNI EN ISO 5470-1:2001 Rubber or plastic coated fabrics. Determination of abrasion resistance. Taber abrader.

UNI EN ISO 2813:2001 Paints and varnishes. Measurement of specular gloss of non-metallic paint films at 20°, 60° and 85°

UNI EN 1516:2001 Surfaces for sports areas – Determination of resistance to indentation

UNI EN 1517:2001 Surfaces for sports areas – Determination of resistance to impact

## STORAGE TIMES

Storage of documents 4 years and samples 1 month from the issue of the report

## SAMPLING

Sampling is performed by the customer

## ENVIRONMENTAL CONDITIONS IN THE LABORATORY

Air temperature	Relative humidity
23°C ± 2°C	50% ± 5%

## CLIENT

COMPANY  
ADDRESS

**KATASKEVES DAPNDON LTD - BUILDING SYSTEM**  
5 Koromila Str.  
54645 Thessaloniki

COUNTRY

Greece

## DATA ACQUISITION

DATE OF RECEIPT OF ORDER

January 27<sup>th</sup> 2016

DATE OF RECEIPT OF FIRST SAMPLE

February 02<sup>nd</sup> 2016

DATE OF RECEIPT OF LAST SAMPLE

February 02<sup>nd</sup> 2016

STARTING DATE OF THE TESTS

February 12<sup>th</sup> 2016

ENDING DATE OF THE TESTS

## SAMPLE IDENTIFICATION

Product name	POLYFLEX PU SYSTEM
Type	<input type="checkbox"/> Permanent wooden floor <input type="checkbox"/> Mobile wooden floor <input checked="" type="checkbox"/> Synthetic Surface <input type="checkbox"/> Other
Description ( from manufacturer's data sheet)	From bottom layer: Shockpad ISOPOL 8mm, PU pore filler POLYSPORT STUCCO 950/1050 1mm (white), PU self levelling POLYSPORT PU 951/1051 1mm and protection PU protection coat POLYSPORT 952/1052. Total thickness 11mm.
Picture of the upper side	
Picture of the lower side	
Picture of the section	

## TESTS RESULTS

Test	Wooden requirements	Synthetic requirements	Result	Unit	Uncertainty	Pass / Fail
Shock absorption	$\geq 25\% \leq 75\%$		30	%	$\pm 1.5\%$	Pass
Vertical deformation	$\leq 5.0\text{mm}$		0.9	mm	$\pm 0.10\text{mm}$	Pass
Vertical ball behaviour	$\geq 90\%$		94	%	$\pm 2.8\%$	Pass
Friction	80-110		80	-	$\pm 5$	Pass
Resistance to wear	$\leq 0.08\text{g}$	$\leq 1\text{g}$	0.16	g	$\pm 0.002\text{g}$	Pass
Resistance to impact	NA	$\leq 0.5\text{mm}$	In Progress	mm	$\pm 0.01\text{mm}$	
	No perceivable cracking, splitting, delamination or permanent indentation		In Progress	-	-	
Resistance to indentation	$\leq 0.5\text{mm}$ . after 24h		0.23	mm	$\pm 0.01\text{mm}$	Pass
Specular gloss	$\leq 45\%$ lacquered surfaces	$\leq 30\%$ mat surface	40	%	$\pm 2\%$	Pass
Rolling load 1500N	$\leq 0.5\text{mm}$ under a 300mm straight edge		0.21	mm	$\pm 0.02\text{mm}$	Pass
	No perceivable damage		No damage	-	-	Pass

## EQUIPMENT USED

### UNI EN14808:2006 - Surfaces for sports areas. Determination of shock absorption

Device	Model	Serial number	Internal code
Datalogger	117-H1	01333640/702	STR018
Artificial athlete	Artificial athlete	-	STR016
Shock absorption spacer	NA	-	STR124
Vernier caliper	Digimatic	01333640/702	STR014
Air conditioner	BXN0-A022 E	BX-CT0022AA001H	STR127

### UNI EN 14809:2006 - Surfaces for sports areas. Determination of vertical deformation

Device	Model	Serial number	Internal code
Datalogger	117-H1	01333640/702	STR018
Artificial athlete	Artificial athlete	-	STR016
Vertical deformation spacer	NA	-	STR125
Vernier caliper	Digimatic	01333640/702	STR014
Air conditioner	BXN0-A022 E	BX-CT0022AA001H	STR127

### UNI EN 12235:2013 - Surfaces for sports areas. Determination of vertical ball behaviour

Device	Model	Serial number	Internal code
Laser meter	HD50	59294569	STR067
Vertical rebound structure	NA	-	STR115
Foot ball	NA	-	STR140
Air conditioner	BXN0-A022 E	BX-CT0022AA001H	STR127
Datalogger	117-H1	01333640/702	STR018

### UNI EN ISO13036-4:2011 Road and airfield surface characteristics. Test methods. Method for measurement of slip/skid resistance of a surface. The pendulum test

Device	Model	Serial number	Internal code
Datalogger	117-H1	01333640/702	STR018
RRL Pendulum	NA	-	STR006
Air conditioner	BXN0-A022 E	BX-CT0022AA001H	STR127

**UNI EN ISO 5470-1:2001 Rubber or plastics coated fabrics. Determination of abrasion resistance. Taber abrader**

Device	Model	Serial number	Internal code
Taber Test	5135 Abraser	20081249	STR093
Whill reface	250	20081292	STR155
Kern libra	770	17111475	STR005
Air conditioning system	BXN0-A022 E	BX-CT0022AA001H	STR127
Datalogger	117-H1	01333640/702	STR018

**UNI EN ISO 2813:2001 Paints and varnishes. Measurement of specular gloss of non metallic paint films at 20°, 60° and 85°**

Device	Model	Serial number	Internal code
Gloss equipment	Novo-glossq	GFE07101732C	STR094
Air conditioning system	BXN0-A022 E	BX-CT0022AA001H	STR127
Datalogger	117-H1	01333640/702	STR018

**UNI EN 1569:2001 Surfaces for sports areas. Determination of the behaviour under a rolling load**

Device	Model	Serial number	Internal code
Load bearing equipment	NA	-	STR073
Mitutoyo caliber	NA	012243618	STR014
Air conditioning system	BXN0-A022 E	BX-CT0022AA001H	STR127
Datalogger	117-H1	01333640/702	STR018

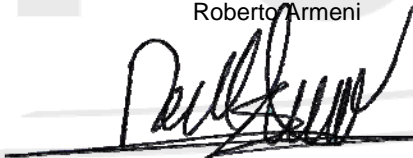
**ADDITIONAL INFORMATION**

This is a temporary report.

**CONCLUSIONS**

None

Laboratory director  
Roberto Armeni




Technician  
Davide Giorgini

