

TEST REPORT

14-0500IT-B

Issued on November 09th 2014.

CLIENT

KATASKEVES DAPEDON LTD

PRODUCT NAME

PLAYPREM 80+15mm

TYPE

SHOCK ABSORBING SURFACE

Test according to:

**UNI EN 1177:2008 Impact attenuating playground surfacing.
Determination of critical fall height**

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The results are solely considered valid for the specime subjected to testing*

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SUBJECT

Determination of the HIC value in accordance with the EN 1177:2008

REFERENCE DOCUMENTS

REFERENCE STANDARDS AND REGULATIONS USED

UNI EN 1177:2008 Impact attenuating playground surfacing. Determination of critical fall height

STORAGE TIMES

Storage of documents and untested samples 1 month from the issue of the report

APPLICANT

COMPANY NAME
ADDRESS

KATASKEVES DAPEDON LTD
5 Koromila Str.
54645 Thessaloniki

COUNTRY

Greece

DATA ACQUISITION

DATE ORDER RECEIVED

September 30th 2014

DATE FIRST SAMPLE RECEIVED

September 10th 2014

DATE LAST SAMPLE RECEIVED

September 10th 2014

START DATE OF TESTS

October 20th 2014

END DATE OF TESTS

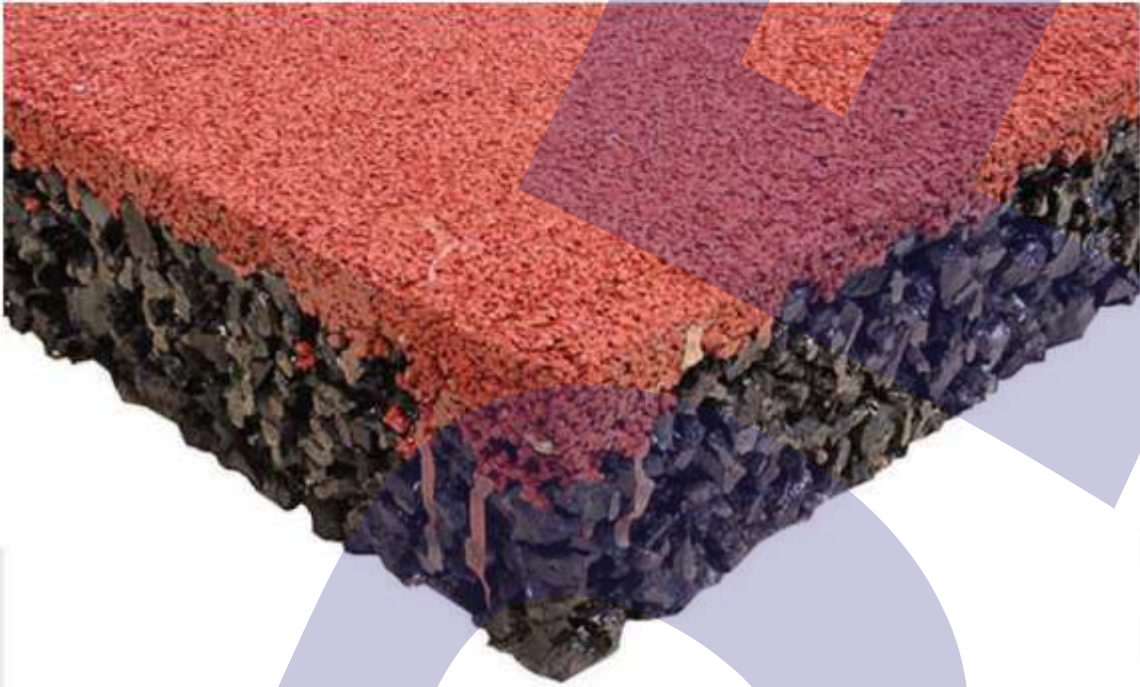
October 28th 2014

TEST PERFORMANCE CONDITION IN LABORATORY

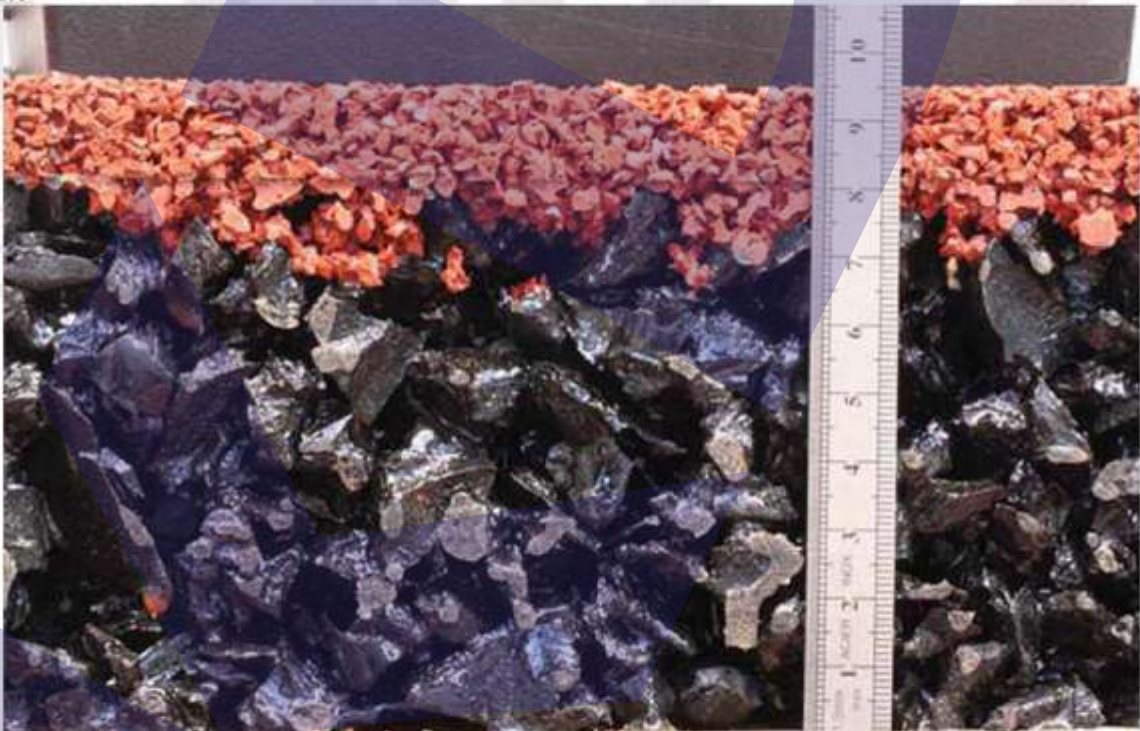
Air temperature	Relative humidity
23°C ± 2°C	50% ± 5%

SAMPLE IDENTIFICATION

General view



Section

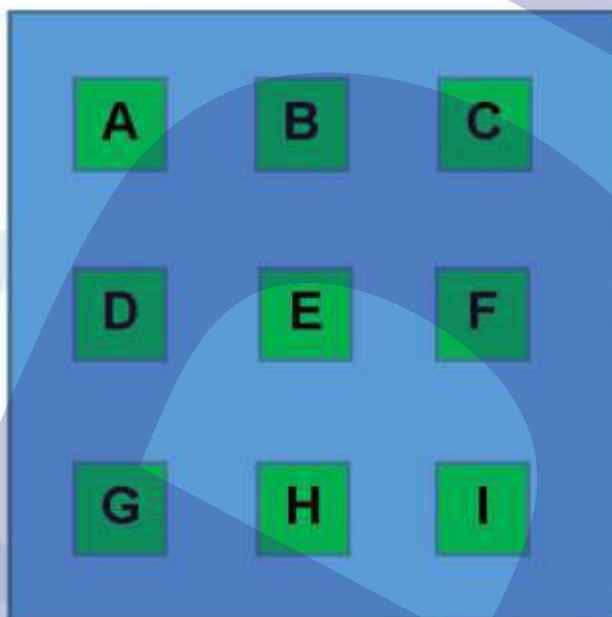


Product description

Trade name	PLAYPREM 80+15mm
Declared thickness	95mm.
Description	Shock absorbing surface with first layer of SBR granules (80mm.) and a top layer of EPDM granules (15mm.) for a total thickness of 95mm.

DATA ACQUISITION

SCHEME OF MEASUREMENTS DONE



DESCRIPTION OF THE TEST

The test consists of dropping out of each of the nine points occurred a hemispherical mass with an accelerometer for four times in each of the nine points to a different height of fall detecting the values of HIC for each of the points.

TEST RESULTS

Verified point	HIC 1000 (cm. value)	Critical fall height (meters value)	Total critical fall height (meters value)
A	1.89	1.8	1.7
B	1.83	1.8	
C	1.80	1.8	
D	1.79	1.7	
E	1.90	1.9	
F	1.90	1.9	
G	1.80	1.8	
H	1.78	1.7	
I	1.80	1.8	

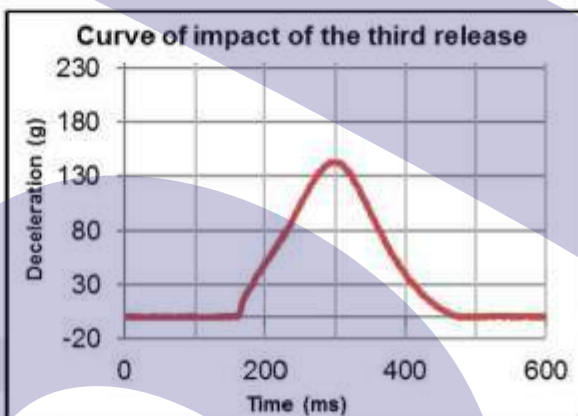
DETAIL OF THE TESTS POINT "A"

HIC CURVE

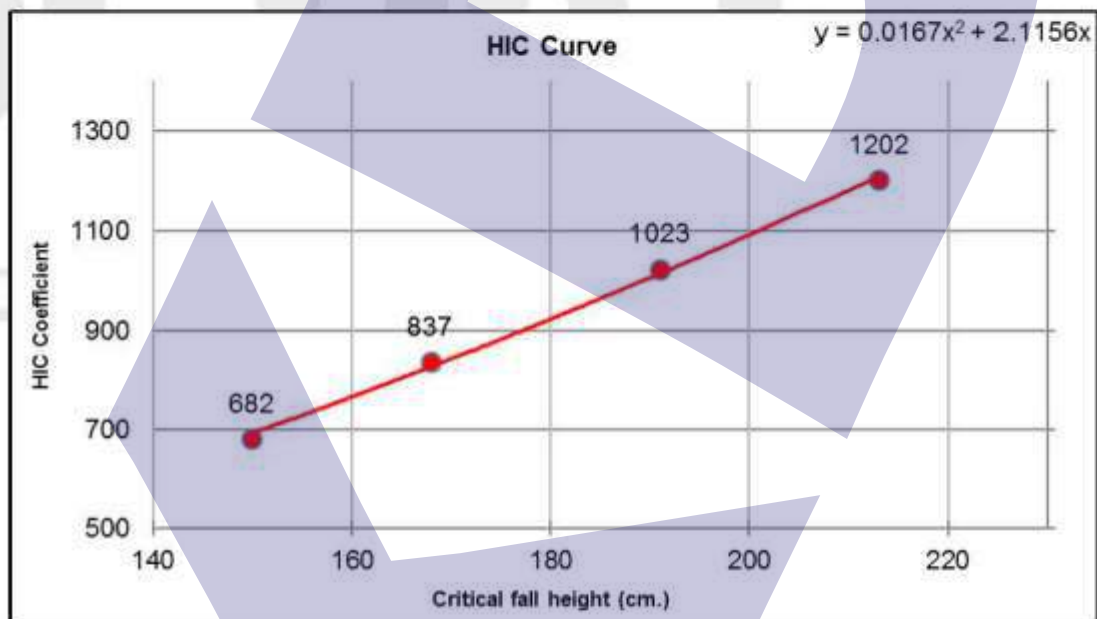
Thickness of the sample at the point "A"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	8.3	117.8	150	682
2	7.9	130.6	168	837
3	7.8	143.4	191	1023
4	7.5	155.2	213	1202



Critical fall height of the point 1	
1.8 m	per HIC=1000
Requirement	
H≥1.3m	



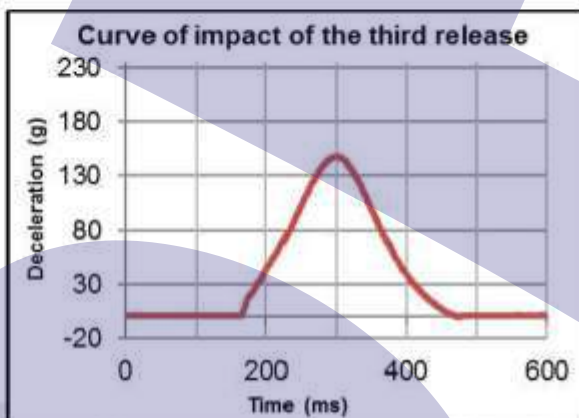
DETAIL OF THE TESTS POINT "B"

HIC CURVE

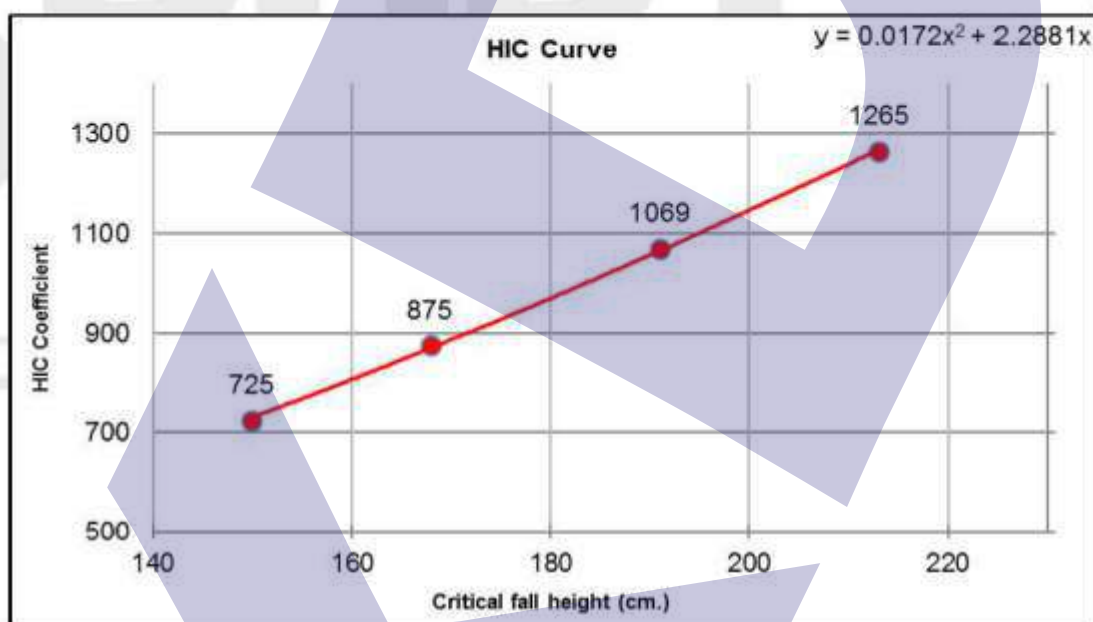
Thickness of the sample at the point "B"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	8	122.2	150	725
2	7.6	134.9	168	875
3	7.5	147.8	191	1069
4	7.2	159.9	213	1265



Critical fall height of the point 1	
1.8 m	per HIC=1000
Requirement	
H≥1.3m	



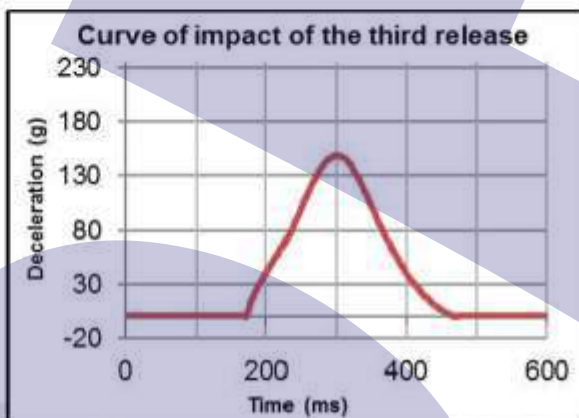
DETAIL OF THE TESTS POINT "C"

HIC CURVE

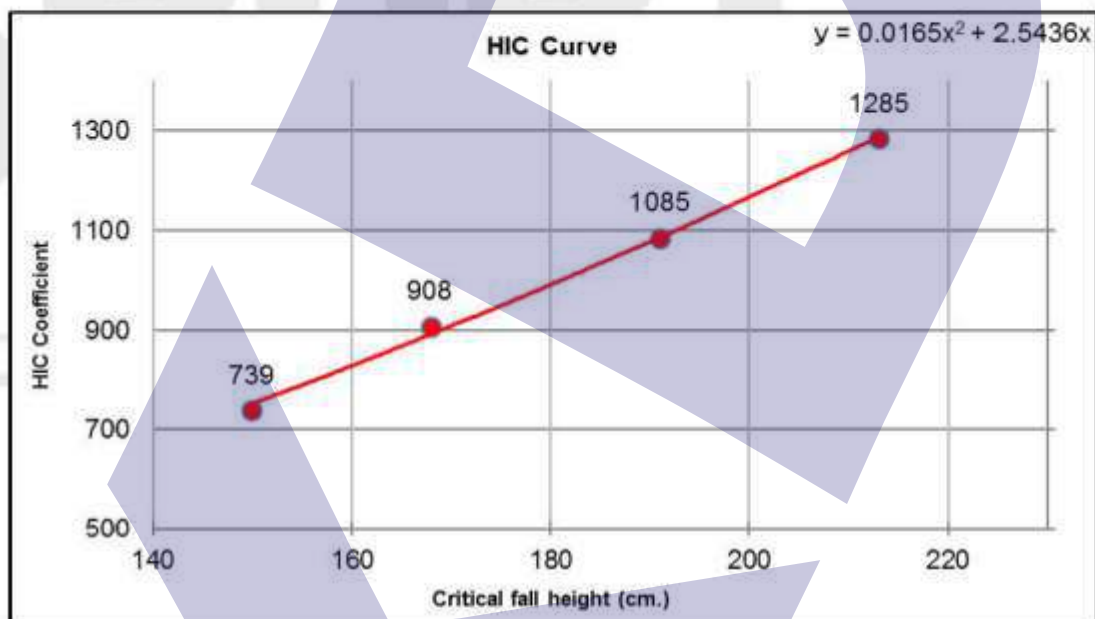
Thickness of the sample at the point "C"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	7.8	124	150	739
2	7.4	137.9	168	908
3	7.3	149.3	191	1085
4	7.2	161.7	213	1285



Critical fall height of the point 1	
1.8	m per HIC=1000
Requirement	
H≥1.3m	



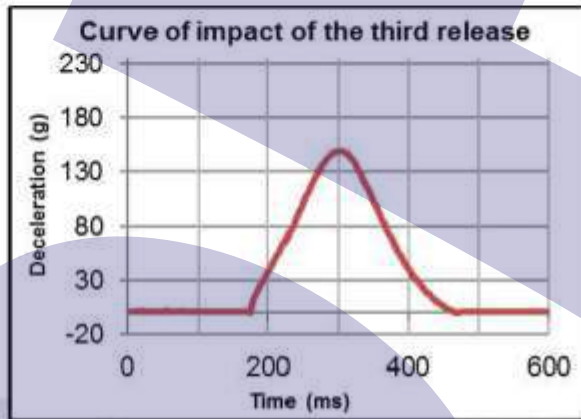
DETAIL OF THE TESTS POINT "D"

HIC CURVE

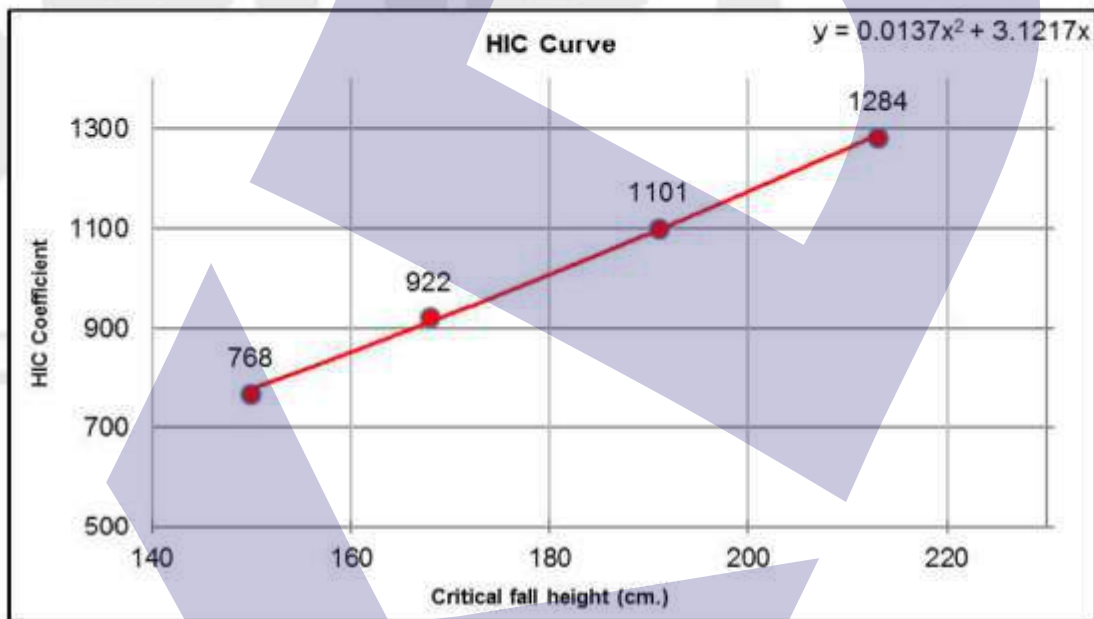
Thickness of the sample at the point "D"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	7.7	125.5	150	768
2	7.4	137.9	168	922
3	7.3	149.2	191	1101
4	7.2	159.8	213	1284



Critical fall height of the point 1	
1.7 m	per HIC=1000
Requirement	
H≥1.3m	



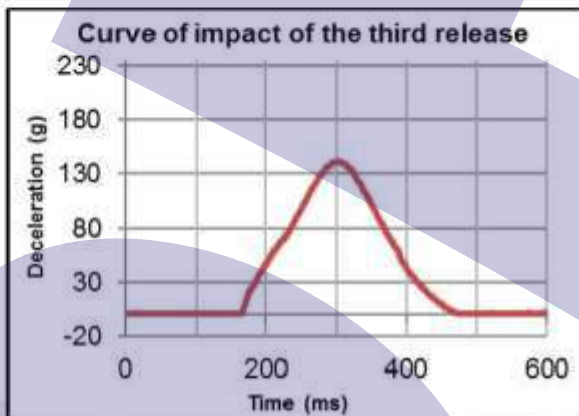
DETAIL OF THE TESTS POINT "E"

HIC CURVE

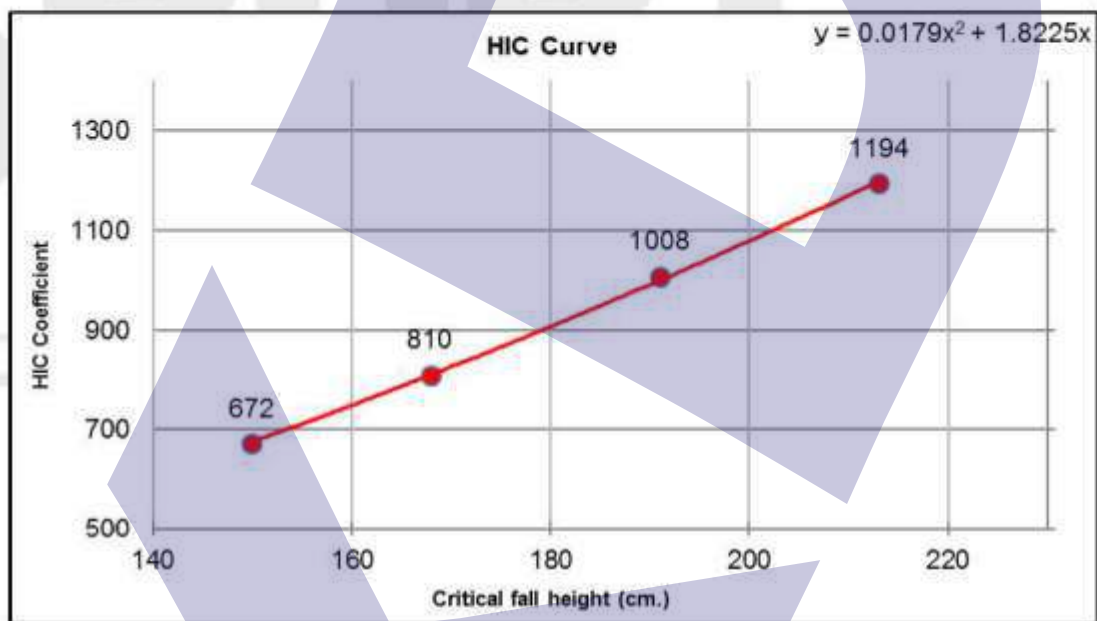
Thickness of the sample at the point "E"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	8.3	117.3	150	672
2	8	128.6	168	810
3	8.1	141.3	191	1008
4	7.6	153.9	213	1194



Critical fall height of the point 1	
1.9 m	per HIC=1000
Requirement	
H≥1.3m	



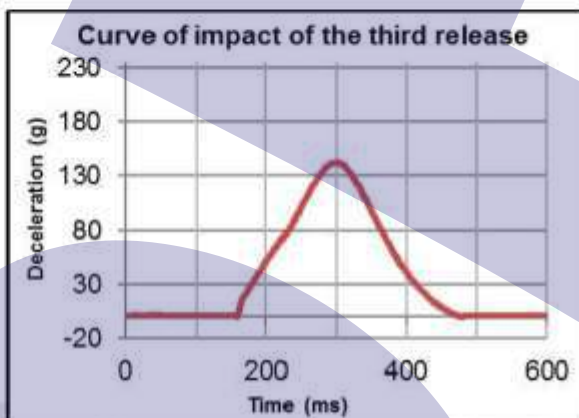
DETAIL OF THE TESTS POINT "F"

HIC CURVE

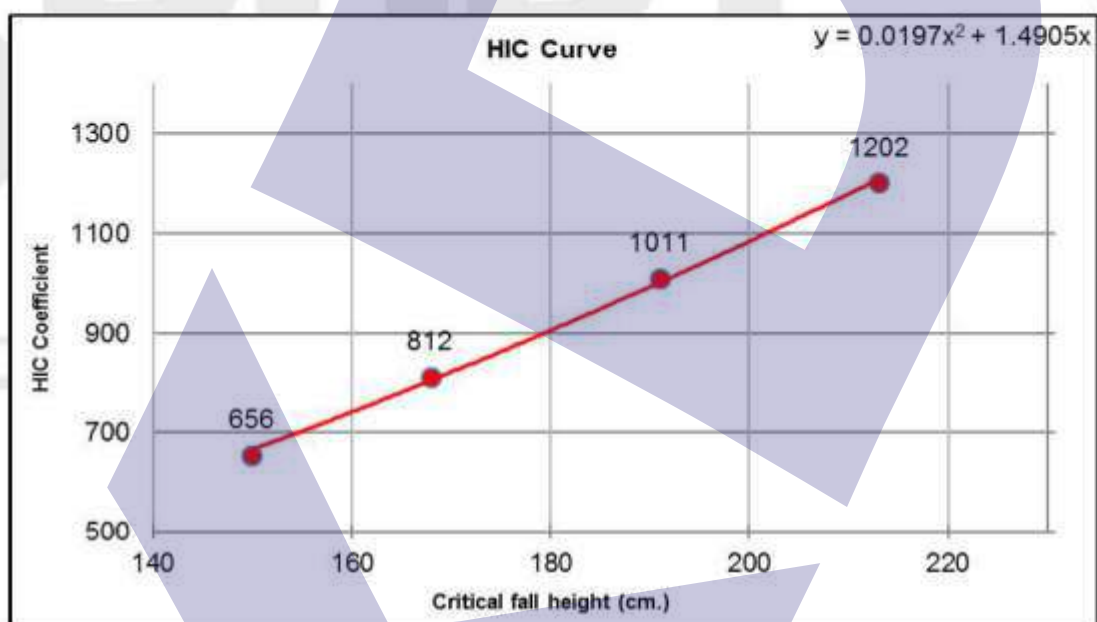
Thickness of the sample at the point "F"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	8.6	114.7	150	656
2	8.2	128.3	168	812
3	8	142.5	191	1011
4	7.6	154.7	213	1202



Critical fall height of the point 1	
1.9	m per HIC=1000
Requirement	
H≥1.3m	



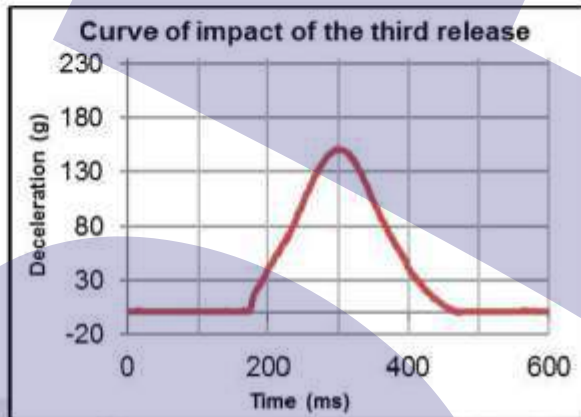
DETAIL OF THE TESTS POINT "G"

HIC CURVE

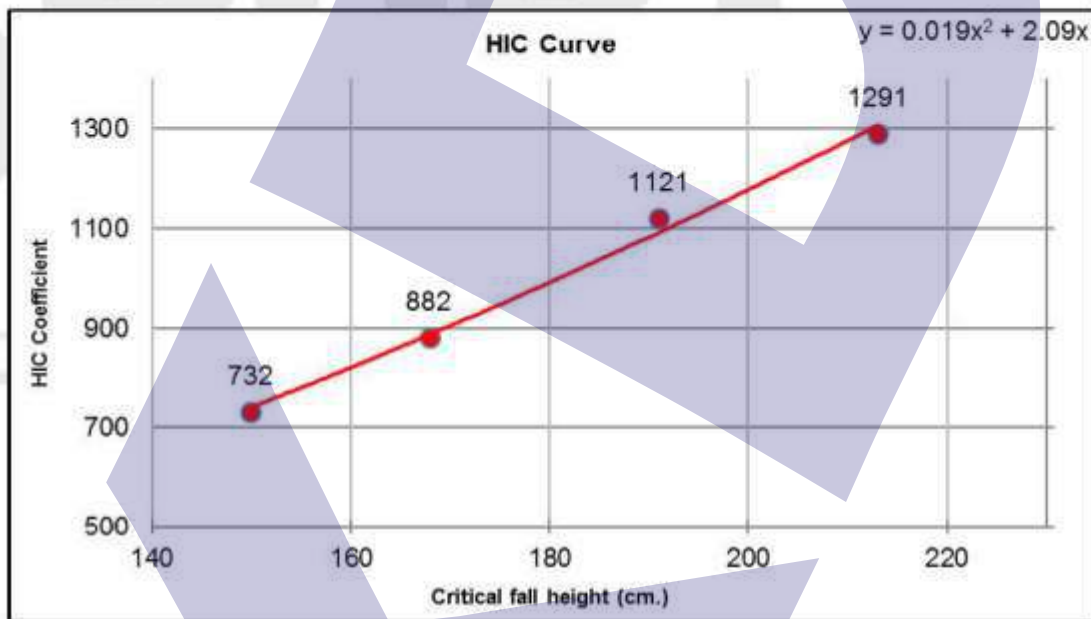
Thickness of the sample at the point "G"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	7.8	122.7	150	732
2	7.6	135.1	168	882
3	7.3	150.8	191	1121
4	7.2	160.4	213	1291



Critical fall height of the point 1	
1.8 m	per HIC=1000
Requirement	
H≥1.3m	



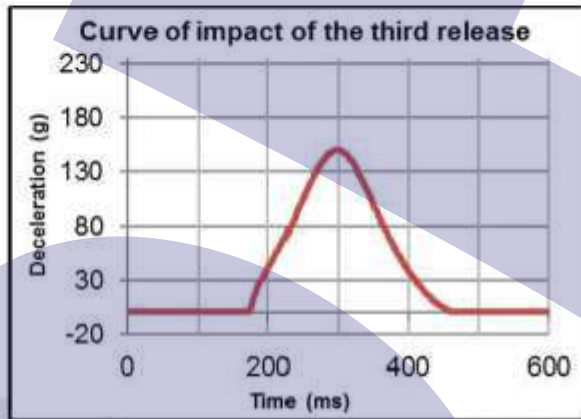
DETAIL OF THE TESTS POINT "H"

HIC CURVE

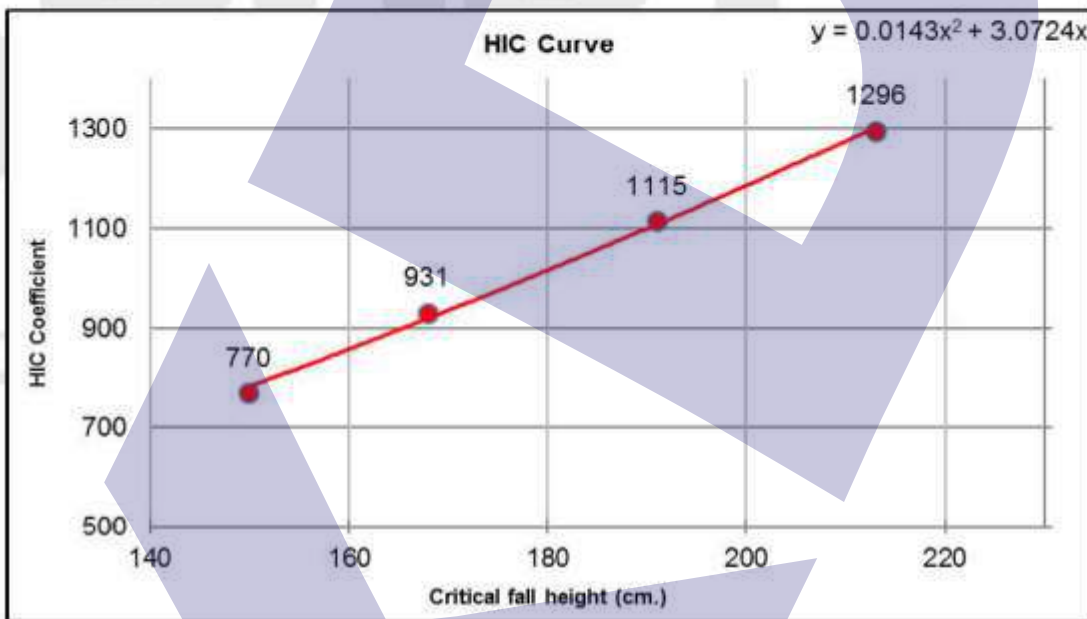
Thickness of the sample at the point "H"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	7.7	125.9	150	770
2	7.5	139	168	931
3	7.3	150.2	191	1115
4	7.2	160.8	213	1296



Critical fall height of the point 1	
1.7	m per HIC=1000
Requirement	
H≥1.3m	



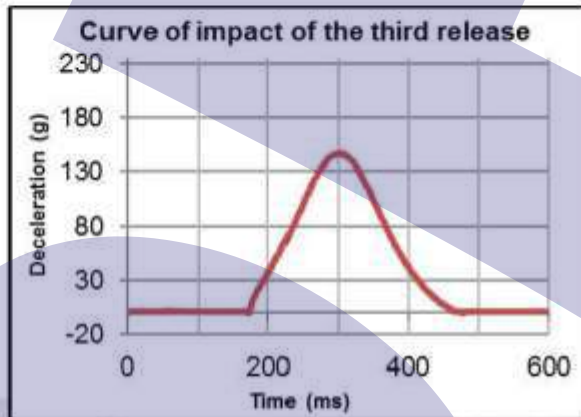
DETAIL OF THE TEST POINT "I"

HIC CURVE

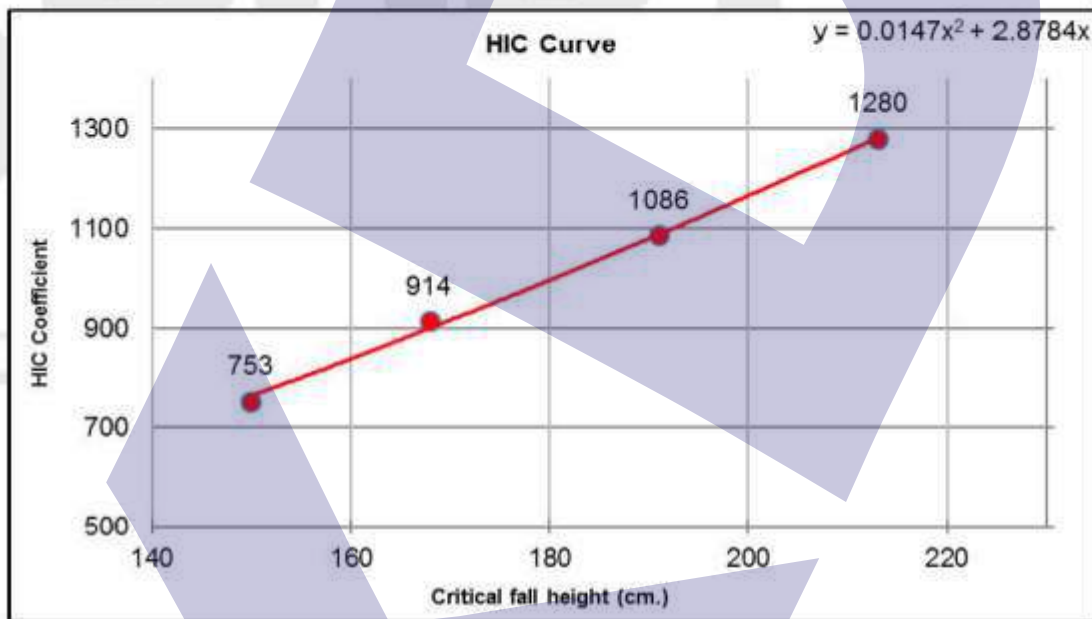
Thickness of the sample at the point "I"

95mm.

Impact No.	Time (ms)	Gmax (g)	Height (cm.)	HIC
1	7.8	124.7	150	753
2	7.4	137.8	168	914
3	7.4	147.7	191	1086
4	7.3	159.5	213	1280



Critical fall height of the point 1	
1.8 m	per HIC=1000
Requirement	
H≥1.3m	



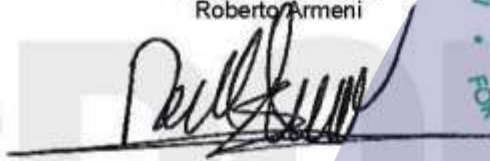
EQUIPMENT USED

UNI EN 1177:2008 Impact attenuating playground surfacing. Determination of critical fall height

Instrument	Model	Serial number	Internal code
Datalogger	117-H1	01333640/702	STR018
Metro laser	HD 150	59294569	STR067
Struttura HIC	N/A	STR172	STR172
Accelerometro triassiale	Entran	STR173	STR173
Climatizzatore	BXN0-A022 E	BX-CT0022AA001H	STR127

END OF THE TEST REPORT

Laboratory Director
Roberto Armeni



Laboratory Manager
Davide Giorgini

