



TEST REPORT

Everplay International, Inc.
18 Automotive Rd.
Brampton, Ontario
Canada L6S 5N5

DTL REPORT NO	9018011
REPORT DATE	2/10/2009
RECEIVE DATE	2/3/2009

ATTN: Mr. Rolf Huber

SAMPLE DESCRIPTION

Everplay International, Inc. submitted three, (3), 540mm X 540mm surfacing systems comprised of approximately 30mm poured in place material overlying approximately 140mm loose fill rubber material bonded with polyurethane binder. Samples were prepared and assembled by Everplay International, Inc., in 19mm thick plywood boxes. Testing was performed on 2/10/2009.

WORK REQUESTED/TEST SPECIFICATIONS

To perform impact testing at a fourteen, (14), foot fall height at temperatures, (-6° C, 23° C and 49° C) per ASTM F1292-04.

REFERENCE DOCUMENTS

ASTM F1292-04 – Impact Attenuation of Surface Systems Under and Around Playground Equipment.

CONCLUSION

The above described surfacing system met the requirements of ASTM F1292-04 at fourteen (14) feet.

The material thickness indicated, met HIC (Head Impact Criteria) and G-Max requirements at the fall height indicated per ASTM F1292-04. The results reported herein reflect the performance of this playground surface system at the time of testing and at the temperatures indicated. Performance will vary with temperature, moisture content and other factors.

TEST RESULTS

Sample material, approximately 30mm poured in place material, overlying approximately 140mm loose fill rubber material bonded with a polyurethane binder, was tested at a fourteen (14) foot impact height at temperatures (-6° C, 23° C and 49° C). An impact test consists of three, (3), impacts at the same impact site, at each height. Calculate the average HIC and G-Max values of the second and third impacts.

For head impact data reduction, please refer to Attachment A, (2 pages).

REQUIREMENTS

ASTM F1292-04, using an average of the last two (2) of three (3) impacts. No value shall exceed 200 G-Max or 1000 HIC.

TEST EQUIPMENT

Detroit Testing Laboratory, Inc.'s calibration system meets the requirements of ISO 17025:2005.

- Triax 2000 Surface Impact Tester, Serial No.: 30-7901, Verified prior to use.
- Dytran Tri-axial accelerometer, Model 3014M2, Serial No.: 1361, DTL ID No.:12591, Calibrated to 5/2009.
- Omega Digital Thermometer, Model HH11, ID No. 10633, Calibrated to 2/2009.
- Omega Penetration Probe, Thermocouple Type K, Model No. 88311, ID No. 11820, Calibrated to 2/2009.
- Thermotron Environmental Chamber, ID No. EC106, Calibrated to 1/10.
- Thermotron Environmental Chamber, ID No. EC133, Calibrated to 5/09.

REMARKS

Sample material was prepared & assembled by Everplay International, Inc., in 540mm X 540mm X 19mm thick plywood boxes. Prior to performing impacts, box undersides were removed. Samples were tested over a poured concrete floor.

SAMPLE DISPOSITION

Sample material will be retained by DTL for fifteen (15) days, then, disposed of at the discretion of DTL unless otherwise requested by Everplay International, Inc.

Reported by:

DETROIT TESTING LABORATORY, INC.



Keith Ward
Certification Program Test Technician III



David Splane
Certification Program Coordinator

KW/DS



DETROIT TESTING LABORATORY, INC.

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SURFACING MATERIAL REPORT – ASTM F1292-04

Client: Everplay International, Inc.
 Manufacturer: Everplay International, Inc.
 Manufacturing Location: Brampton, Ontario
 Commercial Name of product: Unknown

Date of Manufacture: Unknown
 No. of samples submitted: 3

DTL Report No.: 9018011
 Report Date: 2/10/2009
 Test Date: 2/10/2009
 Initial Test
 Follow up Test **Ref Job:**
 Sample Selection
 Selection Date:
 Sample Receipt Date: 2/3/2009
 Ambient Air Temperature: 23°C

Test Equipment:

DTL Guided Wire Tower Accelerometer Calibration Due Date: N/A
 Triax 2000 Accelerometer Calibration Due Date: 5/2009
 Temperature Probe Calibration Due: 2/2009

Environmental Chamber No.: 106
 Calibration Due Date: 1/10
 Environmental Chamber No.: 133
 Calibration Due Date: 5/09

Loose fill Material Sample Description:

Loose Fill Wood: <input type="checkbox"/>	Un-compacted Depth:	Inches
Engineered Wood Fiber: <input type="checkbox"/>		
Rubber: <input type="checkbox"/>	Compacted Depth:	Inches
Sand: <input type="checkbox"/>		
Gravel: <input type="checkbox"/>		
Other: <input type="checkbox"/>		

Unitary Sample Description:

Tiles <input type="checkbox"/>	Thickness:
Poured in Place <input checked="" type="checkbox"/>	Thickness: <u>30mm</u>
Other <input checked="" type="checkbox"/>	Thickness: <u>140 mm</u>

Comments:

System consists of 540mm X 540mm X 30mm thick Poured in Place Tile overlying approximately 140mm depth loose fill rubber bonded with polyurethane binder.

The above described sample was tested at : 14 Ft.

The results reported herein reflect the performance of the above described samples at the time of testing and at the temperature(s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently. The following data sheet provides an accurate representation of the test results.

Sample in compliance with ASTM F1292-04 at the temperature and rating specified? Yes No

Signature: _____

Date: _____

Reviewed by: _____

Date: _____

Client: **Everplay International, Inc.**

DTL Report No. **9018011**

Manufacturer: **Everplay International, Inc.**

Test Date: **2/10/2009**

Drop	Specified Drop Height (Ft.)	Reference Temperature -6°C, (21.1°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1	14	84	635	30.3	61	396	30.6	63	429	30.4
2	14	83	602	30.4	69	478	30.5	60	412	30.4
3	14	83	611	30.3	70	499	30.4	59	385	30.5
Average		83	606.5		69.5	488.5		59.5	398.5	
Measured Surface Temperature		-4°C, (24.8°F)	Max. Change from reference + 5°C ,(9°F)		25°C,(77°F)	Max. Change from reference ± 3°C ,(5.4°F)		46°C,(114.8°F)	Max. Change from reference -3°C ,(-5.4°F)	
Sample Condition:		DRY			DRY			DRY		

Drop	One foot over (Ft.)	Reference Temperature -6°C, (21.2°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1										
2										
3										
Average		0	0		0	0		0	0	
Measured Surface Temperature		°C	Max. Change from reference + 5°C ,(9°F)		°C	Max. Change from reference ± 3°C ,(5.4°F)		°C	Max. Change from reference -3°C ,(-5.4°F)	
Sample Condition:										

Drop	One foot under (Ft.)	Reference Temperature -6°C, (21.2°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1										
2										
3										
Average		0	0		0	0		0	0	
Measured Surface Temperature		°C	Max. Change from reference + 5°C ,(9°F)		°C	Max. Change from reference ± 3°C ,(5.4°F)		°C	Max. Change from reference -3°C ,(-5.4°F)	
Sample Condition:										



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