



Product Research

Field Testing and Inspections

Phone: 812.528.2743

Fax: 866.331.0045

www.asetservices.com

Suitability Test Report

Issued To: PlastPrime® Rua Bartolomeu Lourenco De Gusmao, 3579 Boqueirao Curitiba PR/CEP 81650-050

Standard:

This report contains the results of sports surface performance characteristics that have been evaluated using ASTM F2772 (2011)

System Name: PlastSport® Indoor

Product Original Test Date	Aug 22, 2014	
Recommended Retest	Aug 22, 2021	
Report Number	F2772.11-021412-01	
Pages	8	

Evaluated Characteristic	Test Results (Avg Values)	Max	Min	Result
Force Reduction	16%	17%	15%	Pass Level 1
Ball Rebound	100%	101%	100%	Pass
Vertical Deformation	1.7 mm	1.8 mm	1.5 mm	Pass

Note: This report contains 8 pages, and may not be used for commercial purposes unless it is reproduced in its entirety.



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ASTM F2772 (2011)

To: PlastPrime® Rua Bartolomeu Lourenco De Gusmao, 3579 Boqueirao Curitiba PR/CEP 81650-050

Subject: Suitability test carried out on a sports surface system according to standards and methods selected by Tarkett Sports

ASET Services, Inc was commissioned by PlastPrime® to conduct suitability testing of the PlastSport® Indoor area elastic sports surface system.

A sample of the sport surface system measuring 1.5 m x 1.5 m (4.9 ft x 4.9 ft) was constructed at ASET Services' test facility.



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1 System Construction Summary The sample was constructed using the following materials and construction methods.

A) Top Layer	Approx 12 mm	Modular plastic tile. Surface area nominally 25 cm x 25 cm (10 in x 10 in). Thickness nominally 12 mm (½ in). Each tile contains 2 sides with 'loops' that extend beyond the surface area of the tiles and beneath neighboring tiles. The remaining 2 sides contain the other portion of the locking system that engages with the loops. Material: Polypropylene copolymer	
B) Elastic layer	Approx 11 mm	A rubber shock absorbing pad, nominal dimensions: 11 mm thick x 6 mm in diameter (7/16 in x ¼ in). Each pad protruded beyond the base of the plastic tile suspending the tiles above the concrete subfloor. Each tile contained a total of 35 pads.	
C) Concrete			
Photo			



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2 Testing Procedures & Requirements Environment

Testing was conducted according to ASTM F2772 (issue 2011). The testing climate was 23 C, 45% relative humidity unless otherwise noted. Point locations are documented in Appendix 2.

Test Methods Used

Force Reduction / Shock Absorption Evaluated using ASTM F2569 Test Method F2772 Requirements Average >= 10% Range: No point more than 5% from the average Classes assigned depending upon result

<u>Vertical Ball Rebound</u> Evaluated using ASTM 2117 Test Method F2772 Requirements Average >= 90% Range: No point more than 3% from the average

Vertical Deflection

Evaluated using ASTM F2157 Test Method F2772 Requirements Average <= 5mm Range: No point more than 0.7 mm from average

Area Elastic classes assigned depending upon result

Note: Methods used in this evaluation are identical to EN 14904 (2006).



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3 Conclusions

The PlastSport® Indoor area elastic sports surface system described in previous sections was found to meet the performance requirements for area elastic sports surfaces as specified in ASTM F2772 (2011).

Testing and report generation was performed by Paul W. Elliott, Ph.D., P.E. of ASET Services, Inc.

I hereby certify that the results presented in this report were obtained on the sample as described, on said date and are believed to be accurate representations of the performance of this sport surface system.

Paul W Ellio 2

_ Date: _ September 17,2014 _





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Appendix A: Performance Data by Point

Concrete Impact Force:	6482 N
Concrete Rebound Height:	1.04 m

Point	Force Reduction (%)	Ball Rebound (%)	Vertical Deformation (mm)
1	16%	100%	1.60
2	17%	101%	1.80
3	15%	100%	1.50
4	17%	100%	1.60
5	16%	101%	1.60
6	17%	100%	1.8
Avg	16%	100%	1.7 mm
Max	17%	101%	1.8 mm
Min	15%	100%	1.5 mm



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Appendix B:

Test Point Description			
Point	Description		
1	Tile 'T' Joint		
2	Tile Edge Joint		
3	Center of Tile		
4	Over Shock Absorbing Pad		
5	Between Shock Absorbing Pad		
6	Between Shock Absorbing Pad		



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Appendix C: Test Point Locations

6	2 3	
5	4	