

LABORATORY TESTING PERFORMANCE EVALUATION



Project Information

Project Name	1.75" Dual Fiber_TTII Play it Cool/Sand_PP20 Performance Evaluation		
Client Information	Schmitz Foam Products LLC 188 Treat Avenue Coldwater, MI 49036	Target Technologies International, Inc. 8535 Eastlake Drive Burnaby, BC V5A 4T7	Test Date 2/13/2023
Report Date	2/17/2023		Sample Received Date 2/6/2023 – 2/9/2023
Report Status	Final		Job No. 98151/8353
Prepared by	Megan Illsley Laboratory Director		
Checked by	Jeffrey Gentile Director of Operations		

Notes:

1. This report has been prepared by Firefly Sports Testing with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
2. This report is confidential to the Client and Firefly Sports Testing accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."
4. Complete drop data and individual test results are available upon request.

Summary

Firefly Sports Testing was commissioned to perform laboratory testing for the following characteristics listed below.

Test Type	Test Method	Test Description
HIC	ASTM F3146-18	Standard Test Method for Impact Attenuation of Turf Playing Systems Designed for Rugby
AAA	ASTM F3189-20	Standard Test Method for Measuring Force Reduction, Vertical Deformation, and Energy Restitution of Synthetic Turf Systems Using the Advanced Artificial Athlete
g-max	ASTM F355A-16	Standard Test Method for Impact Attenuation of Playing Surface Systems, and Materials Used for Athletics, Recreation and Play

Complete results and background information can be found in the subsequent sections of this report.



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General Information

System Name	1.75" Dual Fiber_ Play it Cool/Sand_PP20		
Carpet	1.75" Dual Fiber	Infill Depth (mm)	27
Performance Infill	3 lb/sf Play it Cool		
Stabilizing Infill	3 lb/sf Sand	Shockpad	PP20
Air Temperature (°F)	70	Sub-Base	Concrete
Surface Temperature (°F)	70	Humidity (%)	45

Results Tables

Set	Drop Height (m)	Drop 1 HIC	Drop 2 HIC	Drop 3 HIC	Max HIC	Critical Fall Height (m)
1	0.990	687	748	726	748	1.16
2	1.158	830	921	922	922	
3	1.351	1178	1256	1330	1330	
4	1.586	1588	1686	1821	1821	

Force Reduction (%)	Vertical Deformation (mm)	Energy Restitution (%)	g-max (g's)
58	7.7	41	119

End of Report

