

LABORATORY TESTING PERFORMANCE EVALUATION



Project Information

Project Name	2" Dual Fiber_Play Safe 65 Black EPDM/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	2" Dual Fiber_ Play Safe 65 Black EPDM/Sand _ PP20		
Carpet	2" Dual Fiber	Infill Depth (mm)	38
Performance Infill	2 lb/sf Play Safe 65 Black EPDM		
Stabilizing Infill	4.5 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	0.998	451	532	539	539	1.34
2	1.222	670	765	833	833	
3	1.425	916	1025	1118	1118	
4	1.635	1149	1318	1383	1383	

Force Reduction (%)	Vertical Deformation (mm)	Energy Restitution (%)	g-max (g's)
70	11.6	32	85

End of Report

