

LABORATORY TESTING ASTM F1015 ABRASION



Project Information

Project Name	TTII NATURE'S INFILL 10-20, Pine Chip and Walnut Infill System Comparison ASTM F1015 Relative Abrasiveness Evaluation		
Client Info	Target Technologies International Inc 8535 Eastlake Drive Burnaby BC V5A4T7	Sample Received	7/2023
Report Date	8/4/2023	Test Date	8/3/2023
Report Status	Final	Job No.	98742/8934
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."

Summary

Firefly Sports Testing was commissioned to perform abrasion testing. The purpose of this testing was to provide abrasiveness index for the tested surface(s). The tests performed were per the following standard:

Test Type	Test Method	Test Description
Relative Abrasiveness	ASTM F1015-21	Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces

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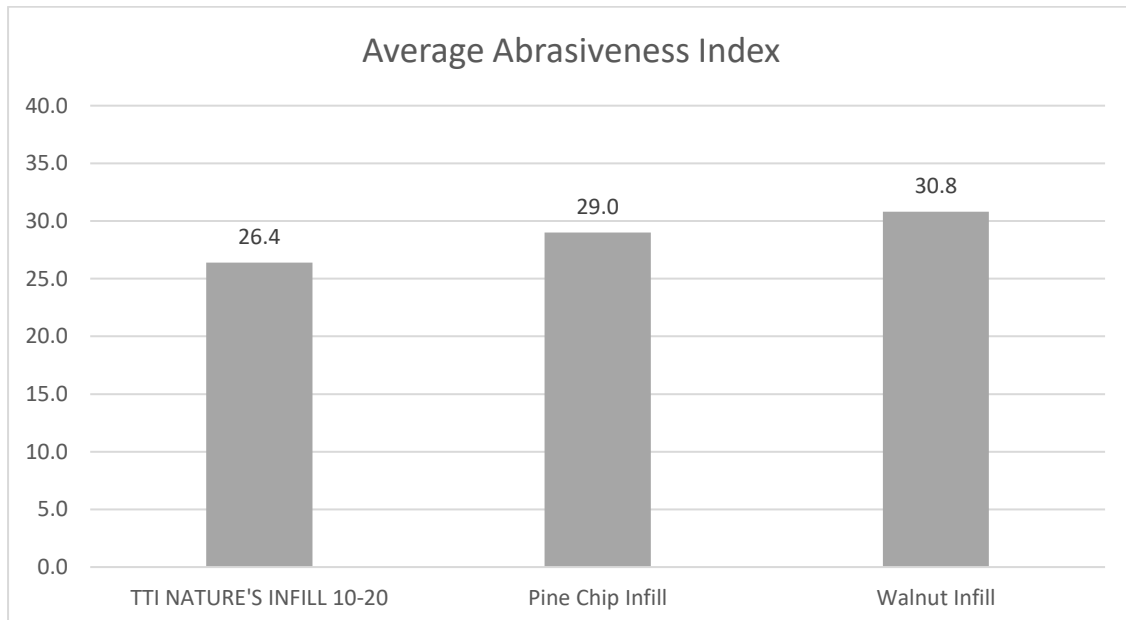
General Information

Air Temperature (°F)	72	Infill Systems	1.5 lb/sf TTII NATURE'S INFILL 10-20_5 lb/sf Sand
Humidity (%)	46		0.75 lb/sf Pine Chip_5 lb/sf Sand 1.5 lb/sf Walnut Infill_5 lb/sf Sand
Product Info	2" 46oz Dual Fiber	Device	ASTM F1015 Abrasion Plate, Trymer 2000 foam
Underlayment	None	Test Date	8/3/2023

Quick Reference Results Summary

	Average	(min)	Range	(max)
TTII NATURE'S INFILL 10-20	26.4	24.6	to	27.8
Pine Chip	29.0	28.4	to	29.3
Walnut Infill	30.8	30.5	to	31.0

Average Abrasiveness Index



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TTI NATURE'S INFILL 10-20 Results

Sample	Pre Weight					Post Weight					Abrasion Index	Average
	Trial 1	Trial 2	Trial 3	Trial 4	Total	Trial 1	Trial 2	Trial 3	Trial 4	Total		
1	2.10	2.10	2.14	2.19	8.53	1.71	1.80	1.71	1.83	7.05	24.6	26.4
2	2.11	2.10	2.07	2.07	8.36	1.78	1.73	1.61	1.62	6.75	26.9	
3	2.11	2.01	2.09	2.00	8.21	1.76	1.50	1.65	1.62	6.55	27.8	

Pine Chip Infill Results

Sample	Pre Weight					Post Weight					Abrasion Index	Average
	Trial 1	Trial 2	Trial 3	Trial 4	Total	Trial 1	Trial 2	Trial 3	Trial 4	Total		
1	2.12	2.12	2.16	2.14	8.55	1.71	1.69	1.70	1.70	6.80	29.1	29.0
2	2.06	2.04	1.99	2.13	8.22	1.57	1.71	1.53	1.70	6.52	28.4	
3	2.00	2.05	2.00	2.08	8.12	1.54	1.60	1.59	1.64	6.36	29.3	

Walnut Infill Results

Sample	Pre Weight					Post Weight					Abrasion Index	Average
	Trial 1	Trial 2	Trial 3	Trial 4	Total	Trial 1	Trial 2	Trial 3	Trial 4	Total		
1	2.16	2.12	2.12	2.20	8.59	1.65	1.65	1.67	1.77	6.74	30.8	30.8
2	2.00	2.03	2.03	2.09	8.15	1.52	1.53	1.60	1.66	6.32	30.5	
3	2.04	2.12	2.05	2.02	8.24	1.58	1.68	1.57	1.55	6.38	31.0	

End of Report



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