TEST RESULTS

Playground Surface Test Reports Summary

INDEPENDENT TESTING LABORATORY
TÜV SÜD America Inc., Auburn Hills, MI (IPEMA Validator) Report No. 72124138-1
Client: The Fibar Group, LLC **Commercial Name of Product:** Fibar® Engineered Wood Fiber **Test Equipment:** Alpha Automation, Triax, TUV System 5
Environmental Chamber Nos. PLYP00069, PLYP00101
Accelerometer ID PLYP00121

Sample Description: Engineered Wood Fiber
Compacted Depth: 12 inches
Test Dates: 3/23/17-3/24/17
Ambient Air Temperature: 23.0° C
Humidity: 20%

ASTM F1292-13 *Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment*

Drop	Specified Impact Height (Feet)	Reference Temperature -6° C (21.2°F)				Reference Temperature - Ambient 23° C (73.4°F)				Reference Temperature 49° C (120.2°F)			
		G-Max	HIC	Velocity Feet/second	Theoretical Drop Height (Feet)	G-Max	HIC	Velocity Feet/Second	Theoretical Drop Height (Feet)	G-Max	HIC	Velocity Feet/Second	Theoretical Drop Height (Feet)
1	12	73	338	27.8	12.014	58	250	27.7	11.928	66	292	27.8	12.014
2	12	94	428	28.0	12.188	82	378	27.9	12.101	94	477	28.0	12.188
3	12	98	483	28.1	12.275	92	446	28.0	12.188	107	582	28.0	12.188
Average		96	455.5			87	412			100.5	529.5		

Conclusion: Sample Passed ASTM F1291-13 at the temperature and rating specified.
Report signed by Sabrina Nevqui and Timothy Fouchia, Project Coordinators, TÜV SÜD America Inc.

ASTM F2075-15 *Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment*
Test Date: 4/24/17, Project No. 72127196-2

1. **Sieve Analysis** Section 4.6 and Section 9

Sieve Size	Minimum / Maximum Requirements	Percent Passing
3/4" (19.05 mm)	99-100%	100.0
3/8" (9.53 mm)	75-100%	91.2
No. 16 (0.0469 in.)	0-15%	7.8

Conclusion: Sample passed ASTM F2075-15 for Sieve Analysis Section 4.4 per 7.4.
Test Results signed by Sabrina Nevqui, Project Coordinator, and David Splane, Regional Manager.

2. **Tramp Metals Test** - Section 4.4 and Section 9 Tramp Metals
Test conducted on 4/18/17, Project No. 7215490-2, and required 112 probes (7 probes at 15 different locations around the sample)

3. **Hazardous Metals Test** – Project No. 72125490-4, test Date: 5/8/17 per Section 4.5.2 per 8.0. Fibar® Engineered Wood Fiber product in compliance with the requirements of the Standard specified. Test results signed by Joseph McGan, Project Coordinator, and David Splane, Regional Manager.

Conclusion: Sample passed ASTM F2075-15, Section 4.6 and Section 9 Tramp Metals, and Section 4.5.2 per 8.0 Hazardous Metals. Fibar® Engineered Wood Fiber product in compliance with the requirements of the Standard specified.

INDEPENDENT TESTING LABORATORY
Testing Services, Inc., Dalton, GA (Report No. 69556A, Test Date: 12/22/16)

ASTM F1951 *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*

Test Material
Type: Engineered Wood Fiber
Material Condition: Excellent
Tested Depth and Conditions: 11" compacted, 40% moisture content
Test Equipment: Wheelchair used - *Invcare*, Model Action Xtra, Serial No. 98J84141
Torque Measuring System: Certified *Dillion Smart Torque Wrench*, S/N 97-0085-01

TEST REPORT

CLIENT

Company:	The Fibar Group	Report Number:	69556A
Address:	80 Business Park Drive, Suite 300	Lab Test Number:	2881-1146
	Armonk, New York 10504	Test Completion Date:	12/22/16
		Report Date:	12/28/16
Requested By:	Joy Dunn		

Conclusion: Fibar® Engineered Wood Fiber **meets/exceeds** both the straight line and turning propulsion requirements of the above accessibility standard.
Test Report Approval signed by Erle Miles, Lab Director, Testing Services, Inc.

ADA Compliance
Please visit our website www.Fibar.com to view Fibar Systems' Accessibility Video.
For more about the IPEMA Certification Program and to verify a product's certifications, go to www.ipema.org.

"Critical Height for each surface material is defined as the maximum height from which the headform, upon impact, yielded both a peak deceleration of less than 200 G's and an HIC of less than 1,000. Critical Height, therefore, may be considered as an approximation of the maximum fall height from which life-threatening injury may not be expected to occur."
— U.S. Consumer Product Safety Commission (www.cpsc.gov)

ADA COMPLIANCE

Fibar® Engineered Wood Fiber playground surfacing meets the ASTM F1951 ***Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.*** The Fibar Group, LLC certifies and warrants that its playground surface systems are in compliance with the Federal Access Law in accordance with the Americans with Disabilities Act, provided the surface is installed and maintained according to manufacturer's specifications. (www.access-board.gov)

The law requires correct installation, regular maintenance, and an accessible entryway. FibarMat wear mats should be installed under all swings, tire swings, slide exits, and all excessive wear areas, including sliding poles. Wear Mats help with accessibility and maintenance of your playground.