### **Supreme Forest Products**

D.B.A. New England Playground Surfacing
49 DePaolo Dr. Southington CT, 06489

1 - 800 - 888 - PLAY (7529)

Any IPEMA Certified Playground Safety Surfacing supplied for a public playground should be supplied with Certification Documents from the

<u>Actual Manufacturing Site</u> of the Playground Safety Surfacing;

Minimum Manufacturing Site Playground Safety Surfacing Documentation should include:

1. Impact Attenuation ASTM 1292-09

3. Sieve Analysis ASTM 2075-10a Section 4.4 Per 7.4

4. Hazardous Metal Test ASTM 2075-10a Section 4.5.2 Per 8.0

5. Accessibility Testing ASTM 1951

6. 25 Year Performance Warranty (Warranties should not require additional purchases such as Mats )







### IPEMA Certificate of Compliance



of conformance to the ASTM F1292-13, Standard Specification for Impact Attenuation In the interest of public playground safety, IPEMA provides a third-party certification service whereby TÜV SÜD America validates a manufacturer's certification of Surface Systems Under and Around Playground Equipment Standard.

that the products listed below conform with the requirements of ASTM F1292-13 The manufacturer listed below has received written validation from TÜV SÜD America

# To verify product certification, visit www.ipema.org

MANUFACTURER

Southington, CT 06489 PRODUCT NBR

49 De Paolo Road

Supreme Forest Products, Inc. dba New England Play

PRODUCT LINE

Playground safety fiber 12"/12

DESCRIPTION

Engineered Wood Fiber

You may verify this certificate by visiting IPEMA's website at http://ipema.org



## IPEMA Certificate of Compliance



# ISSUE DATE: 7/28/14 -

service whereby TÜV SÜD America validates a manufacturer's conformance for Use as a Playground Safety Surface Under and Around Playground Equipment to the ASTM F 2075-10a Standard Specification for Engineered Wood Fiber In the interest of public playground safety, IPEMA provides a third-party certification

that the products listed below conform with the requirements of ASTM F 2075-10a The manufacturer listed below has received written validation from TÜV SÜD America

# To verify product certification, visit www.ipema.org

## MANUFACTURER

49 De Paolo Road Supreme Forest Products, Inc. dba New England Play

Southington, CT 06489

PRODUCT NBR

PRODUCT LINE

DESCRIPTION

Playground safety fiber Engineered Wood Fiber

You may verify this certificate by visiting IPEMA's website at http://ipema.org





#### TÜV SÜD America Inc.

Product Safety Services 47523 Clipper Drive Plymouth, MI 48170

Phone: 734.455.4841

#### IPEMA Impact Attenuation Report - ASTM F1292-13

Main Office Address:	Southington, CT 800 888 7529 Southington, CT 06 Playground Safety Unknown	648 <u>9</u>	Selection: ☑ Samp	Initial:	7/11/2014 7/10/2014 & 7/ □ □Ref Job: 7/9/2014 23.3°C	<u>11/2014</u>
		Test Equip	oment:_			
	Triax System 4:	V		al Chamber No.:	PLYP00101	
	Triax System 1:		Calib	ration Due Date:	6/17/15	
	Accelerometer ID:	PLYP00121	Environment	al Chamber No.:	PLYP00069	
Accelerometer Ca	libration Due Date:	1/22/2015	Calib	ration Due Date:	6/17/15	
	Loose f	ill Material Sa	<u>mple Descriptio</u>	n:		
Engineered Wood Fiber:	<b>☑</b>	Un-	compacted Depth:	<u>15</u>	Inches	
Loose Fill Wood						
Rubber:						
Sand:			Compacted Depth:	<u>12</u>	Inches	
Gravel:						
Other:						
	Ur	nitary Sample	Description:			
	Tiles	67-24	-70	otal Thickness:		
	Poured in Place			Top Layer:		
	Other			Base Layer:	-	
O-monto.	16	. []	19	-		
Comments:					174	
The above de	escribed sample	was tested at :	<u>12</u> <u>Ft.</u>			
he results reported herein reflect the esults are specific to the described ifferently. The following data sheet	samples. Samples o	f surfacing materials	that do not closely mate	sting and at the te ch the described s	mperature(s) re amples w <mark>i</mark> ll per	ported. The form
ample in compliance with ASTM F12	292-13 at the temperat	ture and rating specif	led? Yes	V	No	
Signature:	All Soci	Title:	Regional nuns	vator Date:	7/11/201-	<u>1-</u>
Reviewed by:		Title:	Regional piano	Date:	7/10/2019	te

Client: Supreme Forest Products dba New England Playground Surfacing

#### TUV Report No. <u>QI1406435-3</u>

Manufacturer: Supreme Forest Products dba New England Playground Surfacing

Test Date: 7/10/2014 & 7/11/2014

	Specified	Refe	rence Tempe	erature -6°C,	(21.2°F)	Refe	rence Temp	erature 23°C,	(73.4°F)	Refer	ence Tempe	rature 49°C, (	120.2°F)
Drop	Impact Height (Ft.)	G-Max	ШС	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	HIC	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (fl.)
1	12	77	331	27.9	12.101	64	273	28.0	12.188	53	192	27.9	12.101
2	12	101	527	28.1	12.275	79	361	28.2	12.363	64	255	28,2	12.363
3	12	111	618	28.2	12.363	86	391	28.2	12.363	82	358	28.2	12.363
Av	erage	106	572.5		Royal British	82.5	376		le maria	73	306.5		
Aeasured Sur	face Temperature	-6°C	Max. Cha	inge from ref (5°F)	erence + 5°C,	23°C	Max. Ch	ange from ref (5°F)	erence ± 3°C,	°C49°C	Max.	Change from -3°C, (-5°l	
Sample	Condition:		]	DRY				DRY	******************		1	DRY	

		Refe	rence Temp	erature -6°C,	(21.2°F)	Refe	rence Temp	erature 23°C,	(73.4°F)	Refer	ence Tempe	rature 49°C, (	(120.2°F)
Drop	One foot over (Ft.)	G-Max	ніс	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	HIC	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	HIC	Velocity (fl/s)	Theoretical Drop Height (fl.)
1					0.000				0.000				0.000
2					0.000				0.000				0.000
3					0.000				0.000				0.000
Av	erage	0	0		No. of the last	0	0			0	0		
Measured Sur	face Temperature	°C	Max. Ch	ange from ref (5°F)	erence + 5°C,	°C	Max. Ch	ange from ref (5°F)	erence ± 3°C,	°C	Max.	Change from -3°C, (-5°	
Sample	Condition:												

		Refe	rence Temp	erature -6°C,	(21.2°F)	Refe	rence Temp	erature 23°C,	(73.4°F)	Refer	ence Tempe	rature 49°C,	(120.2°F)
Drop	One foot under (Ft.)	G-Max	HIC	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	HIC	Velocity (fl/s)	Theoretical Drop Height (fl.)	G-Max	ніс	Velocity (ft/s)	Theoretical Drop Height (ft.)
1					0.000				0.000				0.000
2					0.000				0.000				0.000
3					0.000				0.000				0.000
Av	erage	0	0			0	0	Exp. on		0	0		SKOWE
Measured Sur	face Temperature	°C	Max. Ch	ange from ref (5°F)	erence + 5°C,	°C	Max. Ch	ange from ref (5°F)	erence ± 3°C,	°C	Max.	Change from -3°C, (-5°	
Sample	Condition:												





#### TÜV SÜD America Inc. Product Safety Services

47523 Clipper Drive, Plymouth, MI 48170

Phone: 734.455.4841 Fax: 734.455.6590

Phone: 734.455.4841 Fax: 734	4,455,0590		
Standard Specification for Engineers	Metals Test Results - ASTM F 2075-10 d Wood Fiber for Us bund Equipment, Sec	)a as a Playground Sa	
	reme Forest Products dba		7/2/2014
	land Playground Surfacing	Test Date:	6/24/2014
	uthington, CT uthington, CT	Job No.:	<u>6/24/2014</u> QI1406435-1
	yground Safety Fiber	300 110	<u>Q(1400435-1</u>
Troddet Brand Walliervulliber.	yground balety r ibei		
4.6.1 Per 9.4.2.3 Tramp Metals			
Level - 0" - 15"			
Quadrant 1 Quadra	nt 2 Quadra	ant 3 Qu	uadrant 4
Pass Fail Pass  ☐ ☐	Fail Pass ⊠	<u>Fail</u> <u>Pass</u>	<u>Fail</u>
			Ш
<u>Level – 15" – 30"</u>			
Quadrant 1 Quadra	The second secon	TOTAL CONTRACTOR OF THE PARTY O	uadrant 4
	<u>Fail</u> <u>Pass</u> ⊠	<u>Fail</u> <u>Pass</u>	<u>Fail</u>
<u>Level – 30" – 45"</u>			
Quadrant 1 Quadra	SEV 1955		adrant 4
$\begin{array}{c cc} \underline{Pass} & \underline{Fail} & \underline{Pass} \\ \hline \boxtimes & \Box & \hline \end{array}$	<u>Fail</u> <u>Pass</u> ⊠	Fail Pass	<u>Fail</u>
			2
<u>Level – 45" – 60"</u>			
Quadrant 1 Quadra	nt 2 Quadra	ant 3 Qu	adrant 4
Pass Fail Pass	Fail Pass	Fail Pass	Fail
			Ц
Pass ⊠ Fail □			The second secon
Comments:			
	7	N U	G 1.
Signature:		ed By: Dimolly	1 Janellen
Title: ( Mayer Cooldwa	tor Title:	Project Cobrid	matair
Date: 7/2/2014	Date: _	7/21/14	
		- 0088 D 00 EW 1	0/04/44

PSSPLAY026 Tramp Metals Test Results - ASTM F 2075 Rev. 02 Effective: 6/24/14



# Sieve Analysis Data Collection Form ASTM F2075-10a per Section 4.4 and Section 7

TUV SUD America, Inc. 47523 Clipper Street Plymouth, MI 48170 Ph: (734) 455-4841

Date: 7/18/2014	Regional managed	Title:	X		Reviewed By:
Date: 7/10/2014	PROJECT (CORDINATION	Title:	Chi		Test Performed By:
No	Yes ×	11.7	0-15%	No.16 (0.0469in.)	No
	1	100.0	99 - 100 %	3/4" (19.05 mm)	3 Ç
Sample in compliance with ASTM F2075-10 for Sieve Analysis Section 4.4 per 7.4	Sample in compliance w Analysis Se	% Loss by Sieve (Percent Passing)	Min / Max Requirements	Size	Siev
11.7 % Passing Sieve	2.5 + % not passing 3/8" Sieve =	+ % not passing ¾" Sieve +	Sieve + 0.0	% not passing #16 Sieve ÷	100% - 85.9
	#16 sieve	× 100 = <u>85.9</u> % <u>not</u> passing #16 sieve	620.0	532.4 g + Initial sample weight (g)=	Material remaining 53:
					#16 Sieve
	97.5 % Passing Sieve	% not passing ¾" Sieve =	Sieve + 0.0	.5 % not passing 3/8" Sieve +	100% - 2.5
	3/8" sieve	x 100 = 2.5 % not passing 3/8" sieve	620.0	3.2 g + Initial sample weight (g)=	Material remaining 15.2
					3/8"Sieve
		% Passing Sieve	= 100.0	.0 % not passing 3/4" Sieve	100% - 0.0
	ng ¾" sieve	x 100 = 0.0 % not passing 3/7 sieve	620.0	.0 g + Initial sample weight (g)=	Material remaining 0.0
					3/4" Sieve
			0	/ Weight (g)= 620.0	Initial Sample Dry Weight (g)=
Job# QI1406435-2		All testing performed at TUV Plymouth, MI	ty Fiber	Southington, CT  Name: Playground Safety Fiber	Product Brand Name:
Test Date: 7/10/14		Supreme Forest Products, Inc. dba New England Playround Surfacing Southington, CT	Products, Inc. dba No		artic Ado

The results reported herein reflect the performance of the above described samples at the time of testing and at the temperature(s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently. The following data sheet provides an accurate representation of the test results.

TÜV America Inc. 47523 Clipper St. Plymouth, MI 48170 Phone: (734) 455-4841 Fax: (734) 455-6590 E-mail: info@tuvam.com www.TUVamerica.com



#### <u>Hazardous Metals Test</u> ASTM F2075-10a, Section 4.5.2 per 8.0

Manufacturer Main Office Address Manufacturing Location ID Product Brand Name	Supreme Forest Products di 49 DePaulo Drive, Southing Southington, CT Playground Safety Fiber		ound Surfacing
PURCHASE ORDER: # 200	00010054		TÜV JOB# QI1406435-4
The following ISO 17025-ac	credited Laboratory perforn	ned testing:	
St. Louis Testing Laboratorie 2810 Clark Avenue St. Louis, MO 63103 St. Louis Testing Laborato		e).	
Test Result: Pass _	Х	Fail	
Prepared By:			
Loe McGuan  Roject Chardinat  Title		7/21/14 Date	
Reviewed and Approved B	y:		
Timothy Fouchia Project Coordina	)a	7/21/14 Date	

Title

2810 Clark Avenue • St. Louis, MO 63103-2574 • (314) 531-8080 • FAX (314) 531-8085 Chemical, Metallurgical, Mechanical, Nondestructive, Environmental Testing, Analyses and Field Service.

TUV SUD AMERICA, INC 47523 Clipper St Plymouth, MI 48170

Attention: Janice Gudenau

July 18, 2014 Lab No. 14C-1429 Invoice No. 185785 P.O. No. 2000010054 Page 2 of 2

#### REPORT OF ANALYSIS

**MATERIAL:** 

QI1406435-4

SUBJECT:

Soluble Heavy Metals Analysis

STANDARD:

ASTM F2075-10a

TEST METHOD:

ASTM F2075-10a

UNITS:

Soluble Heavy Metals - Parts per Million (ppm)

**RESULTS:** 

RESULTS.			
Substance	QI1406435-4	Maximum Allowable Limit	Method Detection Limit
Soluble Antimony	<50	60	50
Soluble Arsenic	<15	25	15
Soluble Barium	<900	1000	900
Soluble Cadmium	<65	75	65
Soluble Chromium	<50	60	50
Soluble Lead	<80	90	80
Soluble Mercury	<50	60	50
Soluble Selenium	<400	500	400

The soluble heavy metal content of the tested product is in compliance with the requirements of the above-indicated standard.

Identification of tested specimens provided by the client.

Robin E. Sinn Laboratory Director

RES/gkg







### REPORT NUMBER QI1407131



### **America**

#### PREPARED FOR

SUPREME FOREST PRODUCTS DBA: NEW ENGLAND PLAYGROUND SURFACING 49 DePAOLO DRIVE SOUTHINGTON, CT 06489

> ATTENTION MR. NICK MCGUFFIE

> > REPORT DATE JULY 17, 2014

#### TÜV SÜD America, Inc.

47523 Clipper Street Plymouth, Michigan 48170 USA Phone: 734.455.4841

Fax: 734.455.6590 www.TUVAmerica.com TÜV SÜD America, Inc. letters, reports and data are for the exclusive use of our customers to whom they are addressed and shall not be reproduced, except in full, without the written approval of the Laboratory. Our letters and reports apply only to those samples tested, and are not necessarily indicative of the qualities of apparent identical or similar products. Samples not destroyed in testing are retained for a maximum of thirty (30) days. The use of the name TÜV SÜD America, Inc. or its Seal or Insignia, are not permitted to be used by the customer on their communications, brochures, advertising, reports or other forms of media, without prior written approval. Reported test parameters are generally specified as set points of testing equipment. All documentation and data utilized in the generation of this report are available upon request.



July 17, 2014

#### REPORTED / APPROVED BY:

TÜV SÜD America, Inc.

Reported by:

Joe McGuan, Project Coordinator

CERTIFICATION TEST PROGRAMS

Approved by:

David Splane, Regional Manager

**CERTIFICATION TEST PROGRAMS** 



July 17, 2014

#### **PURPOSE**

The purpose of this test report is to present the test results obtained during the performance of a test program. This report includes a brief description of the samples presented for test, a list of the documents presented as test instructions, and a summary of the testing performed and the results obtained. Applicable requirements and conclusions are based on the criteria provided by our client, or as specified in the reference document(s).

#### WORK REQUESTED / REFERENCE DOCUMENT(s)

Perform testing in accordance with ASTM F1951-09b, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

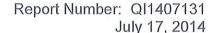
#### **TEST SEQUENCE**

- 1. Wheelchair work measurement method straight propulsion with no material on a flat surface with a grade of 7.1%.
- 2. Wheelchair work measurement method straight propulsion with material and no grade.
- 3. Wheelchair work measurement method turning 90° with no material on a flat surface with a grade of 7.1%.
- 4. Wheelchair work measurement method turning 90° with material and no grade.

Testing was performed July 17, 2014.

#### SAMPLE DESCRIPTION

Supreme Forest Products; Dba: New England Playground Surfacing, Submitted approximately 60 cubic feet of loose fill wood material identified as Playground Safety Fiber.





#### **TESTING PERFORMED**

#### ACCESSIBILITY OF SURFACE SYSTEMS

#### Procedure

Sample material was installed in TÜV SÜD America, Inc.'s test fixture in four inch increments, and tamped using a 10 inch X 10 inch hand tamper, until a depth of 12 inches was achieved. The sample material was tested, propelling the wheelchair with four even propulsion strokes, per trial, across the material 5.56 feet, within eight seconds. This process was repeated five times for each test, (straight and 90° turn propulsions).

Per ASTM F1951-09b, section 5.1, no additional compaction or modification occurred between propulsion trials. Installation instructions were not provided by the manufacturer.

#### Results

The average work force over one foot, in pound force-inch values, for straight propulsion and for turning with material surface in place, shall be less than the average work per foot values for straight propulsion and for turning, respectively, on a hard, smooth, surface with a grade of 7.1% + 2%, (1:14).

Discard the high and low work per foot values and average the remaining three trials to determine the average work per foot required to negotiate the test surface and the hard, smooth surface with a grade of 7.1% + 2% (1:14).

#### Conclusion

The sample material "Playground Safety Fiber" met the requirements of ASTM F1951-09b.

#### Sample Disposition

The sample material will be retained by TÜV SÜD America, Inc., for fifteen (15) days, then disposed of at the discretion of TÜV SÜD America, Inc., unless otherwise requested by Supreme Forest Products; Dba New England Playground Surfacing.



July 17, 2014

#### **TEST EQUIPMENT**

TÜV SÜD America, Inc.'s calibration system meets the requirements of ISO 17025:2005.

TUV ID#	Equipment Type	Manufacturer	Model	Calibration Due:
PLYP00047	Reaction Torque Sensor	Lebow	2110-110-2K	12/26/14
PLYP00043	Signal Conditioner	Daytronics	3370S	12/26/14
PLYP00151	Wheelchair	Quickie	Q2	NCR
PLYP00136	Scale/Balance	Toledo Scale	4181	06/26/15
PLYP00145	Air pressure gauge	Westward	2HKX9	03/21/15
PLYP0068	Digital Thermometer	Omega	HH11	12/26/14
PLYP00084	Thermocouple Probe	Omega	К Туре	12/26/14
PLYP00015	Digital Protractor	Mitutoyo	Pro 360	06/19/15
PLYP00071	Thermohygrometer	Extech Instruments	445702	12/26/14

NCR - No Calibration Required

#### REMARKS, Deviation(s):

- Per ASTM F1951-09b, section 7.1.2 Test Wheelchair Rider; a 165 + 11, -4.4lb test wheelchair rider shall propel the wheelchair during testing. The rider's weight was measured at 174lbs prior to testing.
  - The wheelchair rider weight was 174 pounds, which combined with the wheelchair for a total of 222.7 pounds.
- Per section 7.1.3 Weight of Total System- The total weight of the wheelchair Rider System, including any distance measurement or data acquisition equipment residing on the wheelchair shall be a minimum of 187.2 lb and a maximum of 255 lb.

Page 6: Test Data



July 17, 2014

#### Material Name / Description: Playground Safety Fiber

Surface temperature: 24.7°C
Ambient lab temperature: 22.6°C
Ambient lab humidity: 40% RH

Trial#	No Material (work per foot) (lbf·in)	With Material (work per foot) (lbf·in)
Straight propulsion trial 1	139.65	152.73
Straight propulsion trial 2	141.43	142.82
Straight propulsion trial 3	137.52	131.85
Straight propulsion trial 4	138.77	128.64
Straight propulsion trial 5	137.71	134.03
Straight propulsion average	138.71	136.24

90° Turn propulsion trial 1	185.01	161.01
90º Turn propulsion trial 2	185.23	150.89
90º Turn propulsion trial 3	192.99	156.57
90º Turn propulsion trial 4	191.32	156.50
90° Turn propulsion trial 5	189.11	148.71
Turn propulsion average	188.55	154.65

### **Supreme Forest Products**

**D.B.A. New England Playground Surfacing** 

49 DePaolo Dr Southington CT, 06489

#### 25 YEARS PERFORMANCE LIMITED WARRANTY

This limited warranty applies to the NEW ENGLAND PLAYGROUND SURFACING Material known as PLAYGROUND SAFETY FIBER.

PLAYGROUND SAFETY FIBER is warranted by NEW ENGLAND PLAYGROUND SURFACING to the original purchaser to meet or exceed Playground Surfacing Guidelines of U.S. Consumer Product Safety Commission published in 1997 using ASTM: Standard F1292-09 for a period of twenty (25) years from the certified date of delivery subject to the conditions and exclusions listed below.

#### WARRANTY: MATERIAL REPLACEMENT ONLY

The entire liability of NEW ENGLAND PLAYGROUND SURFACING and the Purchaser's sole remedy in the event the PLAYGROUND SAFETY FIBER does not conform to the Limited Warranty shall be limited to replacement of any defective material and shall not include removal, installation or consequential damages or any refund.

#### ACTS INVALIDATING WARRANTY:

Incorrect installation (including failure to provide adequate drainage), failure to install all material delivered, failure to maintain a minimum depth of 12", use of the Material with other products not provided by NEW ENGLAND PLAYGROUND SURFACING, abnormal use, lack of or improper maintenance, or vandalism shall void this Limited Warranty and NEW ENGLAND PLAYGROUND SURFACING shall have no responsibility with respect to damage or loss resulting there from.

In addition, changed impact attenuation characteristics created by sand or other materials tracked into the System are not covered by this Warranty.

#### DISCLAIMERS:

NEW ENGLAND PLAYGROUND SURFACING disclaims all other Warranties expressed or implied, including but not limited to implied Warranties of fitness or merchantability and fitness for a particular purpose.

In no event shall NEW ENGLAND PLAYGROUND SURFACING or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, claims for personal injury or property damage or other pecuniary loss) arising out of the use or inability to use the Material, even if NEW ENGLAND PLAYGROUND SURFACING has been advised of the possibility of such loss. Because some states do not allow the exclusion of limitations of liability for consequential or incidental damages, the above limitation may not apply to you.

Acceptance of the Material shall constitute acceptance of the terms of this LIMITED *WARRANTY*.

Surfacing Playgrounds since 1986

1 - 800 - 888 - PLAY (7529)