

METZLER
FOREST PRODUCTS, LLC

26 Timber Lane, Reedsville, PA 17084

Phone: (717)667-2924

Fax: (717)667-9769

www.metzlerforestproducts.com

PLAYGROUND SURFACING
INFORMATION BOOKLET
2023-2024

Corporate Contact Person

Randy Hettinger

Phone: (717)667-2924

randy.hettinger@metzlerfp.com

PROCEDURE TO PROCESS ORDERS

1. CALL RECEIVED INTO THE OFFICE.
2. INQUIRY FOR THE PRICING EMAILED TO THE SALES REPRESENTATIVE.
3. SALES REPRESENTATIVE RESPONDS WITH A QUOTE.
4. ORDER GIVEN TO SALES REPRESENTATIVE.
5. MATERIAL IS SCHEDULED FOR DELIVERY AND SHIPPED.

PROCESS TO MANUFACTURE MATERIAL

1. POLEWOOD IS DEBARKED AND PROCESSED THROUGH A CHIPPER DISC CREATING A CHIP OF THE PROPER SIZE.
2. THE CHIPS ARE THEN PROCESSED THROUGH A HORIZONTAL GRINDER FOR FURTHER MANUFACTURING.
3. MATERIAL IS SEGREGATED ON A FINISHED PILE AWAITING SHIPMENT.

EQUIPMENT TO MANUFACTURE MATERIALS

1. ALL MANUFACTURING EQUIPMENT IS INSPECTED THREE TIMES PER DAY TO ENSURE THAT IT IS OPERATING IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.
2. ALL WEAR PARTS ON BOTH THE DISC CHIPPER AND HORIZONTAL GRINDER ARE INSPECTED EACH TIME.
3. THE CHIPPER KNIVES AND THE GRINDER HAMMERS ARE KEPT IN GOOD OPERATING CONDITION. THE END OF THE DAY MAINTENANCE INCLUDES PROPER LUBE AND SERVICE.
4. ALL MANUFACTURING EQUIPMENT IS CLEANED OF ALL DEBRIS ON A DAILY BASIS.

Metzler Forest Products

Material Handling Procedures:

***Raw Material:**

Logs are delivered and segregated in our yard.

Logs are then chipped and that product is hauled to our onsite storage area.

***Chipped Product:**

The chipped product is then reground into our final product (playground mulch).

***Playground Mulch:**

The finished product is then stored in a separate area until shipping.

***Delivery:**

Playground mulch is then loaded and shipped via truck to customer site.

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PLAYGROUND SURFACING MULCH

Installation Notes:

1. Excavate an area to allow for a depth of 12" compacted of safety surface material. To ensure proper drainage, a minimum grade of 1% - 1 ½ % of drop needs to be established.
2. The above area should then be compacted and proper grade established.
3. Drainage stone approximately two – three inches should be installed along with drainage fabric. (See attached diagram.)
4. If required, any containment systems should now be put into place and secured.
5. Twelve inches of wood fiber may now be brought in and installed.
6. If you have any questions or concerns, call (717)667-2924.

Metzler Forest Products, LLC recommends using the services of a qualified engineer or landscape architect when installing your surfacing material.

A depth of 14"-15" of material will be needed to reach a compacted depth of 12 inches. The 12" depth will need to be monitored regularly to insure the required 12" depth.

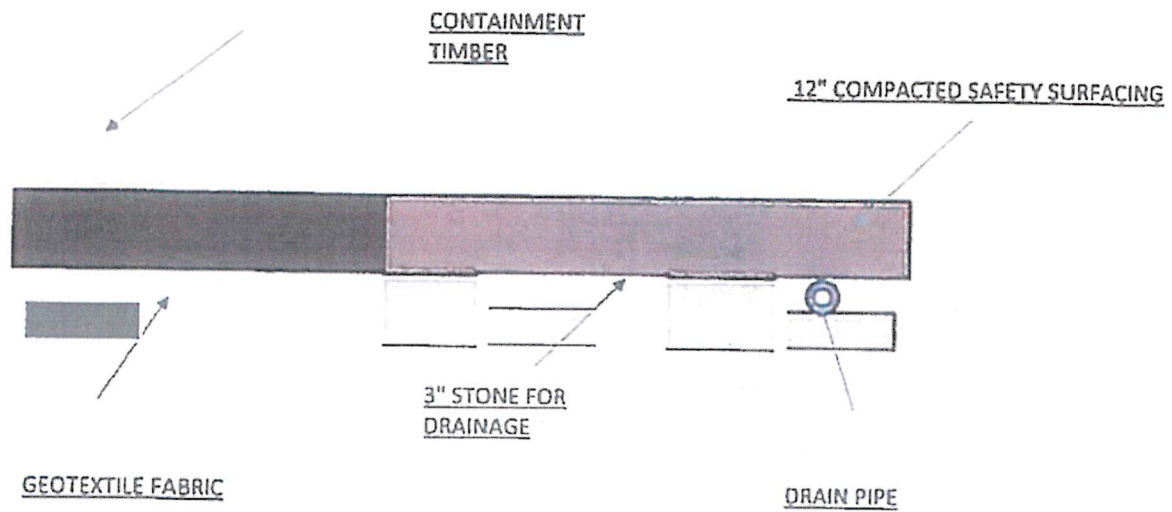
Please refer to ASTM for fall zones, etc. on all equipment.

Maintenance Tips:

1. Inspect and remove any foreign matter that has accumulated on the fiber.
2. Rake level any spots where surfacing has been disturbed.
3. Dig down into the surfacing and measure the depth to insure the necessary material is still maintained.
4. Top dress where needed.

*In the interest of public playground safety, the International Play Equipment Manufacturers Association (IPEMA) provides a Third Part Certification service whereby an independent laboratory, TUVSUD America, validates a manufacturer's certification of conformance to ASTM F1292, "Standard Specification for Impact Attenuation Under and Around Playground Equipment." The use of IPEMA Playground Surfacing Certification Seal signifies that Metzler Forest Products, LLC has received written validation from TUVSUD America that a specified thickness of the product associated with the seal conforms with the requirements of ASTM F1292 at a specified critical height and has certified that the associated products is made with the same materials and in the same manner as the original representative produce sample validated by TUVSUD America. A list of current validated products, their thickness and critical height may be viewed at www.ipma.org.

PLAYGROUND INSTALLATION VIEW



SITE PREPARATION:

1. GRADE SOIL TO A 2% GRADE TOWARDS AN AREA YOU WOULD LIKE THE WATER TO DRAIN.
2. DIG A TRENCH AND PLACE DRAINE PIPE IN.
3. COVER PIPE AND INSTALL A LAYER OF GEO-FABRIC OVER TOPSOIL OVERLAPPING THE SEAMS.
4. COVER THE FABRIC WITH A 3" LAYER OF STONE THAT WILL ALLOW DRAINAGE.
5. ANY TIMBERS OR CONTAINMENT SYSTEMS WOULD HAVE PREVIOUSLY BEEN INSTALLED.
6. PLACE AN ADDITIONAL LAYER OF GEO-FABRIC OVER STONE, AGAIN OVERLAPPING.
7. BRING IN AND SPREAD APPROXIMATELY 6-8" OF PLAYGROUND MATERIAL.
8. WET MATERIAL DOWN ANDMECHANICALLY COMPACT.
9. REPEAT STEP 7 WITH BALANCE OF MATERIAL NEEDED TO COMPACT TO 12".

Procedure for Inspection of Raw Materials:

1. Visual inspection of produced raw product (daily).
2. Visual inspection of finished product (during and after production).

Quality Assurance Program:

Metzler Forest Products, LLC guarantees that clean chips will be used and monitored by the control assurance person on a per load basis.

1. Visual inspection of raw material.
2. Visual inspection of finished product.

Control Assurance Program:

1. Samples will be taken and inspected at our weekly meetings. These meetings will be part of our regularly scheduled production meetings, which includes the control assurance person and all of the production personnel.
2. A team consisting of the control assurance person, mill and material sales person will be put into place to monitor quality and service-related issues.
3. The corporate level manager and quality assurance persons will also meet on a regular basis to discuss any problems or issues that may arise.

Complaint Reviews:

1. All complaints will be documented and reviewed. The control assurance and corporate level persons will address all issues when necessary.
2. All complaints or issues will be handled in a timely fashion until all parties are equally satisfied.
3. All complaints will also be addressed at our production and control assurance meetings.
4. The issues that have been documented and reviewed will be kept on file for future reference.

If you have an questions or concerns, please contact the control assurance person:

Randy Hettinger

Phone: (717)667-2924

Email: randy.hettinger@metzlerfp.com

COMPLAINT FORM

1. Date of complaint: _____

2. Nature of complaint:

3. Date of resolution: _____

4. Resolution of complaint:

Quality Assurance Person Signature (Metzler Forest Products, LLC, rep)

Date

CORRECTIVE ACTIONS DOCUMENTATION

1. ANY QUALITY OR MATERIAL PROBLEMS WILL BE DOCUMENTED ON PAPER AND FILED IN THE IPEMA FOLDER.
2. INTERNAL CORRECTIVE ACTIONS WILL BE NOTED AND FILED INTO THE IPEMA FOLDER AS WELL AS ANY CORRECTIVE ACTIONS REQUIRED BY IPEMA.

PROCEDURE FOR NON-CONFORMING PRODUCT

1. ANY MATERIAL THAT DOES NOT CONFORM TO THE STANDARDS REQUIRED BY METZLER FOREST PRODUCTS AND IPEMA WILL BE SEGREGATED FOR RE-PROCESSING OR STOCKPILED AND USED FOR ALTERNATIVE TYPES OF LANDSCAPE PRODUCTS.

MAINTENANCE RECOMMENDATIONS

DAILY:

1. VISUALLY INSPECT PLAYGROUND AND REMOVE ANY FOREIGN OBJECTS.

WEEKLY:

1. RAKE ANY DISPLACED MATERIAL AROUND SWINGS AND EQUIPMENT TO MAINTAIN THE SUFFICIENT DEPTH OF MATERIAL IN FALL AREAS.
2. KEEP ALL WHEELCHAIR ENTRANCES AND EXITS PACKED AND FREE OF ANY OBSTACLES.

MONTHLY

1. CHECK FOR SUFFICIENT DRAINAGE ON SITE.
2. REPLACE MATERIAL TO ENSURE PROPER DEPTH REQUIREMENTS.

NOTES:

1. THE ABOVE INFORMATION IS BASED ON NORMAL OR AVERAGE PLAYGOUNRDS. IN HIGHER USE SITES THESE STEPS MAY NEED PERFORMED ON A MORE FREQUENT SCHEDULE.
2. IN DRY CLIMATES THE SURFACING MAY NEED TO BE WATERED TO MAINTAIN ITS RESISTANCE TO FIRE AND DUST AND TO KEEP THE MATERIAL PLIABLE.

Training Record

Company: _____ Location: _____

Training Topic: _____

Date: _____ Trainer: _____

Description of Training:

Notes:

Attendance:

SAFETY FIRST



**Sieve Analysis Data Collection Form
ASTM F2075-20 per Section 4.4 and Section 7**

TUV SUD America, Inc
1755 Atlantic Blvd.
Auburn Hills, MI 48326
Ph: (616) 546-4600

Customer/Participant: Metzler Forest Products, LLC

Test Date: 11/04/2022

Main Office Address: 26 Timber Lane

Project No.: 72183324-2

(City, State, Zip): Reedsville, PA 17084

Ambient Air Temp.: 20.3°C

Location ID: Reedsville, PA

Relative Humidity: 42%

Commercial Name of Product: Playground Mulch

Test Equipment Used

<u>TUV Asset No.:</u>	<u>Equipment Type</u>	<u>Manufacturer</u>	<u>Model</u>	
PLYP00100	Environmental Chamber	Russells	RB-8-1-1, (QE496)	
PLYP00163	Data Logger	Omega	OM-CP-RHTEMP101A	
PLYP00216	Hygro-thermometer	Extech Instruments	445703	<input type="checkbox"/>
PLYP00211	Hygro-thermometer	Extech Instruments	445702	<input checked="" type="checkbox"/>
PLYP00055	Test Sieve	W.S. Tyler	No. 16 (1.19 mm)	
PLYP00056	Test Sieve	W.S. Tyler	3/8" (9.53 mm)	
PLYP00057	Test Sieve	W.S. Tyler	3/4" (19.05 mm)	
PLYP00059	Sieve Shaker	W.S. Tyler	RX 812	
PLYP00083	Balance	Denver Instruments	18453642	

Data

Initial Sample and Container Weight	<u>725.7</u>
Tare weight of Container	<u>179.0</u>
Initial Sample Dry Weight (g)	<u>546.7</u>
Sample and Container Weight for 3/4" Sieve	<u>179.9</u>
Tare weight of Container	<u>179.9</u>
Sample Remaining on 3/4" Sieve (g)	<u>0.0</u>
Sample and Container Weight for 3/8" Sieve	<u>203.5</u>
Tare weight of Container	<u>178.5</u>
Sample Remaining on 3/8" Sieve (g)	<u>25.0</u>
Sample and Container Weight for #16 Sieve	<u>676.9</u>
Tare weight of Container	<u>178.0</u>
Material Remaining on # 16 Sieve (g)	<u>498.9</u>

<u>Sieve Size</u>	<u>Min / Max Requirements</u>	<u>% Passing</u>
3/4" (19.05 mm)	99 - 100%	100.0
3/8" (9.53 mm)	78 - 100%	95.4
No. 16 (0.0469 in.)	0 -15%	4.2

Sample in compliance with ASTM F2075-20 for Sieve Analysis Section 4.4 per 7.4

Yes

No

Tare weights of containers verified prior to testing.

Note: Testing performed at TÜV SÜD America in Auburn Hills, MI.

Performed By: Tim Lockstein

Title: Project Engineering Technician

Date: 11/4/2022

Reviewed By: Timothy Foubia

Title: Project Engineering Technician

Date: 12/23/2022

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 SÜD America, Inc., Product Safety Services

1755 Atlantic Blvd., Auburn Hills, MI 48326

Phone: (616) 546-4600

Tramp Metals Test Results

ASTM F2075

Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment, Section 4.6 and Section 9

Customer/Participant: Metzler Forest Products, LLC Report Date: October 17, 2022
 Main Office Address: 26 Timber Lane Reedsville, PA 17084 Test Date: October 17, 2022
 All testing performed at location ID: Reedsville, PA Project No.: 72183324-1
 Commercial Name of Product: Playground Mulch

4.6.1 Per 9.4 Tramp Metals

Level – 0in. – 15in.

<u>Quadrant 1</u>		<u>Quadrant 2</u>		<u>Quadrant 3</u>		<u>Quadrant 4</u>	
<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Level – 15in. – 30in.

<u>Quadrant 1</u>		<u>Quadrant 2</u>		<u>Quadrant 3</u>		<u>Quadrant 4</u>	
<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Level – 30in. – 45in.

<u>Quadrant 1</u>		<u>Quadrant 2</u>		<u>Quadrant 3</u>		<u>Quadrant 4</u>	
<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Level – 45in. – 60in.

<u>Quadrant 1</u>		<u>Quadrant 2</u>		<u>Quadrant 3</u>		<u>Quadrant 4</u>	
<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>	<u>Pass</u>	<u>Fail</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pass Fail

Comments:

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

Performed By: Tim Lockstein

Reviewed By: [Signature]

Title: Product Safety Engineer

Title: Regional Manager

Date: October 17, 2022

Date: 10/18/2022



TUV SUD America Inc.

Product Safety Services

1755 Atlantic Blvd.
Auburn Hills, MI 48326

Phone: (616) 546-4600

IPEMA IMPACT ATTENUATION REPORT - ASTM F3351-19e1

Participant: Metzler Forest Products, LLC
Main Office Address: 26 Timber Ln.
Reedsville, PA 17084
Phone: (717) 667-2924
Manufacturing Location ID: Reedsville, PA
Commercial Name of product: Playground Mulch
Date of Manufacture: Unknown
No. of samples submitted: Approx. 8 Cu. Ft.

TUV Report No.: 72183324-3
Report Date: 11/21/2022
Test Date: 11/17/22 and 11/21/2022
Initial:
Follow up: Ref Job:
Sample Receipt Date: 11/2/2022
Ambient Air Temperature: 23.0 C
Humidity: 25 %

Selection: [checked]

Test Equipment:

Alpha Automation, Triax, TUV System 5: [checked]
Alpha Automation, Triax, TUV System 7: []
Accelerometer ID: PLYP00218
Accelerometer Calibration Date: 4/7/2022

Environmental Chamber ID: AE-029
Calibration Due Date: 8/31/2022
Environmental Chamber ID: PLYP00069
Calibration Due Date: 8/31/2022

Loose Fill Material Sample Description:

Engineered Wood Fiber: [checked] Un-compacted Depth: 14 Inches
Loose Fill Wood: []
Rubber Nuggets: []
Rubber Buffings: []
Sand: [] Compacted Depth: 12 Inches
Gravel: []
Other: []

Unitary Sample Description:

Tiles: [] Total Thickness:
Poured in Place: [] Top Layer:
Other: [] Base Layer:

Turf System Sample Description:

Turf: [] Turf Pile Height: Inches
Pad: [] Pad Thickness: Inches
Aggregate: [] Aggregate: Inches
Infill: [] Infill Amount: Lbs./Sq. Ft.
Infill Type:

Comments:

1.) This test method utilizes the g-max and HIC performance criteria of ASTM F1292, Section 4.2.

The above described sample was tested at : 12 Ft.

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.

Sample in compliance with ASTM F3351-19e1 at the temperature and rating specified? Yes [checked] No []

Signature: Timothy Fouchia Title: Project Engineering Technician Date: 11/21/2022

Reviewed by: [Signature] Title: Regional Manager Date: 12/22/2022



Client: Metzler Forest Products, LLC

TUV Report No.: 72183324-3

Manufacturer: Reedsville, PA

Test Date: 11/17/22 and 11/21/2022

Drop	Specified Impact Height (Ft.)	Reference Temperature -4°C, (25°F)				Reference Temperature 23°C, (72°F)				Reference Temperature 49°C, (120°F)			
		G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)
1	12	61	266	27.8	12.01	61	251	27.8	12.01	67	281	27.9	12.10
2	12	84	435	28.0	12.19	82	391	27.9	12.10	88	453	28.1	12.28
3	12	95	512	28.1	12.28	88	412	27.9	12.10	102	571	28.2	12.36
Average		89.5	473.5			85.0	401.5			95.0	512.0		
Measured Surface Temperature		-3 °C	Max. Change from reference + 5°C, (5°F)			23 °C	Max. Change from reference ± 3°C, (5°F)			49 °C	Max. Change from reference -3°C, (-5°F)		
Sample Condition:		Dry				Dry				Dry			



America

TÜV America Inc.
1755 Atlantic Blvd.
Auburn Hills, MI 48326

Phone: (616) 546-4600
E-mail: info@tuvam.com
www.TUVamerica.com



Hazardous Metals Test ASTM F2075, Section 4.5.2 per 8.0

Manufacturer: Metzler Forest Products, LLC

Main Office Address: 26 Timber Lane, Reedsville, PA 17084

Manufacturing Location ID: Reedsville, PA

Commercial Name of Product: Playground Mulch

PURCHASE ORDER: # 2000051467

PROJECT NO.: 72183324-4

The following ISO 17025-accredited Laboratory performed testing:

St. Louis Testing Laboratories, Incorporated

2810 Clark Avenue

St. Louis, MO 63103

St. Louis Testing Laboratory report attached (1 page).

Test Result: Pass

Fail

Prepared By:

Ray Majszak

12/22/2022

Date

Project Engineering Technician

Title

Reviewed and Approved By:

Timothy Foubia

12/23/2022

Date

Project Engineering Technician

Title

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



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.

TÜV SÜD AMERICA, INC
 1755 Atlantic Blvd.
 Auburn Hills, MI 48326

November 21, 2022
 WO# C-0197656
 Invoice No. INSTL26215
 P.O. No. 2000051467
 Page 1 of 1

Attention: Kaitlyn Macinnes

REPORT OF ANALYSIS


MATERIAL: 72183324-4
SUBJECT: Soluble Heavy Metals Analysis
STANDARD: ASTM F2075-20, Section 4.5, per 8.0 Hazardous Metal Test Method
TEST METHOD: ASTM F2075-20
UNITS: Soluble Heavy Metals - Parts per Million (ppm)
RESULTS:

Substance	72183324-4	Maximum Allowable Limit	Method Detection Limit
Soluble Antimony	<5	60	5
Soluble Arsenic	<5	25	5
Soluble Barium	18	1000	5
Soluble Cadmium	<5	75	5
Soluble Chromium	<5	60	5
Soluble Lead	<5	90	5
Soluble Mercury	<5	60	5
Soluble Selenium	<5	500	5

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

Identification of tested specimen(s) provided by the client

JWL/gs


 Jacob W. Long
 Director, Chemical and
 Environmental Testing

St. Louis Testing Laboratories decision rule is "Simple Acceptance"