



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: US Playground Surfacing, LLC
Main Office Address: 29 Thompson Hill,
Canton, CT 06019
Phone: (860) 309-9901
Manufacturing Location ID: Canton, CT
Commercial Name of product: Premium Safety Surfacing, Model #2
Date of Manufacture: Unknown
No. of samples submitted: Approx. 10.Cu.Ft.

TUV Report No.: 72165288-3
Report Date: 12/22/2020
Test Date: 12/18/2020 & 12/22/2020
Initial:
Follow up: **Ref Job:** _____
Sample Receipt Date: 11/13/2020
Ambient Air Temperature: 23.2 °C
Humidity: 20 %

Selection:

Test Equipment:

Alpha Automation, Triax, TUV System 5:
Alpha Automation, Triax, TUV System 7:
Accelerometer ID: PLYP00144
Accelerometer Calibration Date: 6/8/2021

Environmental Chamber ID: AE029
Calibration Due Date: 9/8/2021
Environmental Chamber ID: PLYP00096
Calibration Due Date: 9/8/2021

Loose Fill Material Sample Description:

Engineered Wood Fiber: 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 : 20 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 No

Signature: Sabrina Nagai Title: Project Coordinator Date: 12/22/2020

Reviewed by: [Signature] Title: Regional Manager Date: 12/22/2020



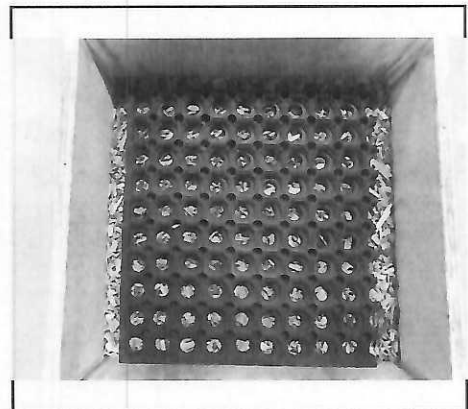
Client: US Playground Surfacing, LLC

TUV Report No.: 72165288-3

Manufacturer: Canton, CT

Test Date: 12/18/2020 & 12/22/2020

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	20	81	650	36.1	20.26	95	669	36.0	20.15	99	682	36.1	20.26
2	20	87	644	36.1	20.26	111	780	36.0	20.15	102	722	36.1	20.26
3	20	101	648	36.2	20.37	123	891	36.1	20.26	114	932	36.2	20.37
Average		94.0	646.0			117.0	835.5			108.0	827.0		
Measured Surface Temperature		-2 °C	Max. Change from reference + 5°C, (5°F)			21 °C	Max. Change from reference + 3°C, (5°F)			46 °C	Max. Change from reference -3°C, (-5°F)		
Sample Condition:		Dry				Dry				Dry			



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