



TÜV SÜD America Inc.

Product Safety Services

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### IPEMA Surfacing Material Report – ASTM F1292-09

Client: Robertson Industries  
Manufacturer: Robertson Industries  
Manufacturing Location: Phoenix, AZ

TUV Report No.: QI1201149  
Report Date: 2/27/2012  
Test Date: 2/24/12 and 2/27/12  
Initial Test   
Follow up Test  Ref Job:  
Sample Receipt Date: 2/22/2012  
Ambient Air Temperature: 21.7°C  
Humidity: 23.0%

Phone: (800) 858-0519  
Commercial Name of product: TotTurf Synthetic Turf (SP-12)  
Date of Manufacture: Unknown  
No. of samples submitted: 3 - 18in. X 18in. Systems

#### Test Equipment:

Triax System 1:  Environmental Chamber No.: PLYP00101  
Triax System 2:  Calibration Due Date: 8/1/12  
Accelerometer ID: PLYP00089 Environmental Chamber No.: PLYP00069  
Accelerometer Calibration Due Date: 6/1/2012 Calibration Due Date: 8/1/12

#### Loose fill Material Sample Description:

Engineered Wood Fiber:  Un-compacted Depth: \_\_\_\_\_ Inches  
Loose Fill Wood   
Rubber:   
Sand:  Compacted Depth: \_\_\_\_\_ Inches  
Gravel:   
Other:

#### Unitary Sample Description:

Tiles  Total Thickness: 7.0in.  
SBR  Top Layer: 1.5in.  
Turf  Base Layer: 5.5in.

#### Comments:

System: 1.5in. turf overlaying 5.5in. SBR base. Turf infilled with approximately 6lbs. of sand.

**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 F1292-09 at the temperature and rating specified? Yes  No

Signature: Timothy Ferrelin

Date: 2/27/12

Reviewed by: [Signature]

Date: 2/27/2012

Client: Robertson Industries

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Manufacturer: Robertson Industries

Test Date: 2/24/12 and 2/27/12

Drop	Specified Impact Height (Ft.)	Reference Temperature -6°C, (21.2°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1	12	71	479	27.7	69	459	27.7	74	478	27.7
2	12	77	513	27.7	73	476	27.8	82	528	27.8
3	12	79	524	27.7	77	501	27.8	86	542	27.8
Average		78	518.5		75	488.5		84	535	
Measured Surface Temperature		(-6°C)	Max. Change from reference + 5°C ,(9°F)		24°C	Max. Change from reference 3°C ,(5.4°F) ±		49°C	Max. Change from reference -3°C ,(-5.4°F)	
Sample Condition:		DRY			DRY			DRY		

Drop	One foot over (Ft.)	Reference Temperature -6°C, (21.2°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1										
2										
3										
Average		0	0		0	0		0	0	
Measured Surface Temperature		°C	Max. Change from reference + 5°C ,(9°F)		°C	Max. Change from reference 3°C ,(5.4°F) ±		°C	Max. Change from reference -3°C ,(-5.4°F)	
Sample Condition:										

Drop	One foot under (Ft.)	Reference Temperature -6°C, (21.2°F)			Reference Temperature 23°C,(73.4°F)			Reference Temperature 49°C,(120.2°F)		
		G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)	G-Max	HIC	Velocity (ft/s)
1										
2										
3										
Average		0	0		0	0		0	0	
Measured Surface Temperature		°C	Max. Change from reference + 5°C ,(9°F)		°C	Max. Change from reference 3°C ,(5.4°F) ±		°C	Max. Change from reference 3°C ,(-5.4°F)	
Sample Condition:										



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