



**TÜV SÜD America Inc.**

**Product Safety Services**

47523 Clipper Drive  
Plymouth, MI 48170

Phone: 734.455.4841

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

Participant: Hanover Specialties  
Main Office Address: 35 Feldman St.  
Bohemia, NY 11716  
Phone: (631) 231-1300  
Manufacturing Location ID: Bohemia, NY  
Commercial Name of product: Vitriturf V-10  
Date of Manufacture: Unknown  
No. of samples submitted: 3 - 18in. X 18in. PIP Tiles

TUV Report No.: QI1304328-2  
Report Date: 4/25/2013  
Test Date: 4/23/13 and 4/25/13  
Selection:  Initial:   
Follow up  Ref Job:  
Sample Receipt Date: 4/22/2013  
Ambient Air Temperature: 23.3°C  
Humidity: 25.0%

**Test Equipment:**

Triax System 1:  Environmental Chamber No.: PLYP00101  
Triax System 2:  Calibration Due Date: 7/31/13  
Accelerometer ID: PLYP00089 Environmental Chamber No.: PLYP00069  
Accelerometer Calibration Due Date: 6/29/2013 Calibration Due Date: 7/31/13

**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: 3.5in.  
Poured in Place  Top Layer: 0.5in.  
Other  Base Layer: 3.0in.

**Comments:**

**The maximum critical fall height of the above described 7 Ft.  
sample was determined to be:**

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 Fournier

Date: 4/25/13

Reviewed by: Keith G. Smith

Date: 4/25/13

Client: Hanover Specialties

TUV Report No.

QI1304328-2

Manufacturer: Hanover Specialties

Test Date:

4/23/13 and 4/25/13

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)	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	7	131	809	21.3	7.053	126	815	21.3	7.053	119	733	21.3	7.053
2	7	135	855	21.5	7.186	131	859	21.4	7.119	121	737	21.5	7.186
3	7	138	864	21.5	7.186	134	890	21.4	7.119	124	756	21.5	7.186
Average		136.5	859.5			132.5	874.5			122.5	746.5		
Measured Surface Temperature		(-6°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			

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)	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	8	145	1015	22.7	8.011	142	1044	22.7	8.011	137	929	22.7	8.011
2	8	147	1039	22.8	8.081	143	1027	22.7	8.011	137	925	22.8	8.081
3	8	150	1063	22.8	8.081	146	1066	22.8	8.081	138	927	22.9	8.152
Average		148.5	1051			144.5	1046.5			137.5	926		
Measured Surface Temperature		(-6°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			

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)	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	6	118	659	19.8	6.095	116	665	19.7	6.033	107	587	19.8	6.095
2	6	121	691	20.0	6.218	115	676	19.8	6.095	109	591	19.9	6.156
3	6	122	683	19.9	6.156	115	653	19.8	6.095	110	596	19.9	6.156
Average		121.5	687			115	664.5			109.5	593.5		
Measured Surface Temperature		(-6°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			



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