



**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: Bondflex 5.5in.  
 Date of Manufacture: Unknown  
 No. of samples submitted: 3 - 18in. X 18in. Samples

TUV Report No.: QI1208004  
 Report Date: 7/27/2012  
 Test Date: 7/27/2012  
 Selection:   
 Initial   
 Follow up  **Ref Job:**  
 Sample Receipt Date: 7/24/2012  
 Ambient Air Temperature: 22.4°C  
 Humidity: 38.0%

**Test Equipment:**

Triax System 1: <input checked="" type="checkbox"/>	Environmental Chamber No.: <u>PLYP00101</u>
Triax System 2: <input type="checkbox"/>	Calibration Due Date: <u>8/1/12</u>
Accelerometer ID: <u>PLYP00036</u>	Environmental Chamber No.: <u>PLYP00069</u>
Accelerometer Calibration Due Date: <u>3/7/2013</u>	Calibration Due Date: <u>8/1/12</u>

**Loose fill Material Sample Description:**

Engineered Wood Fiber: <input type="checkbox"/>	Un-compacted Depth: <u>4</u> Inches
Loose Fill Wood: <input type="checkbox"/>	
Rubber: <input checked="" type="checkbox"/>	
Sand: <input type="checkbox"/>	Compacted Depth: <u>4</u> Inches
Gravel: <input type="checkbox"/>	
Other: <input type="checkbox"/>	

**Unitary Sample Description:**

Tiles <input type="checkbox"/>	<b>Total Thickness:</b> <u>1.5in.</u>
Poured in Place <input checked="" type="checkbox"/>	Top Layer: <u>N/A</u>
Other <input type="checkbox"/>	Base Layer: <u>N/A</u>

**Comments:**

Samples arrived in wooden boxes, pre-assembled by Hanover Specialties. Samples are: 1.5in. Poured in place over 4.0in. Loose rubber. Total system thickness of 5.5in.

**The maximum determined critical fall height of the above described sample is: 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 Foubia

Date: 7/27/12

Reviewed by: Luc G. Skutter

Date: 7/30/12

Client: **Hanover Specialties**

TUV Report No. **Q11208004**

Manufacturer: **Hanover Specialties**

Test Date: **7/27/2012**

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	135	1012	27.6	112	719	27.7	90	683	27.7
2	12	131	955	27.6	106	649	27.7	100	681	27.7
3	12	128	892	27.7	115	742	27.7	100	683	27.7
Average		129.5	923.5		110.5	695.5		100	682	
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	13	140	1092	28.7	120	851	28.7	109	806	28.7
2	13	132	964	28.7	115	771	28.7	113	826	28.8
3	13	145	1114	28.7	119	816	28.7	108	785	28.8
Average		138.5	1039		117	793.5		110.5	805.5	
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 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	11	125	966	26.5	99	547	26.4	98	699	26.4
2	11	132	941	26.5	103	600	26.5	92	606	26.4
3	11	124	837	26.6	99	535	26.5	80	486	26.4
Average		128	889		101	567.5		86	546	
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		



**America**