

Rotational Penetrometer Surface Testing Report

RESNA Surface – Section 1: Test Method for Firmness and Stability
(Working Draft 2000-11-20)

Test Institution		Rotational Penetrometer	
Name	<u>Beneficial Designs, Inc.</u>	Manufacturer	<u>Beneficial Designs, Inc.</u>
Address	<u>2240 Meridian Blvd., Suite C</u> <u>Minden, NV 89423</u>	Serial number: BDRP–	<u>100</u>
Phone / Fax	<u>ph 775.783.8822/fax 775.783.8823</u>	Date of last calibration	<u>2014-07-14</u>
Operator	<u>S. Schnorbus</u>	Tire pressure set at 36 psi. on	<u>2015-06-30</u>
Data recorder	<u>B. Blythe</u>	by <u>B. Blythe</u>	Temp. °F <u>88</u>

Date & Time of Test		Testing Conditions	
Date	<u>2015-06-30</u>	Temperature °F	<u>88</u>
Time	<u>1300</u>	Relative Humidity %	<u>24</u>
If the temperature is more than 10 °F different than the temperature at the tire pressure check, re-inflate tire before starting to test.			

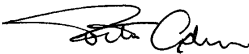
Test Surface		Test Results			
Manufacturer	<u>Brock International LLC</u>	Trial	Slope (%)	Firmness (in)	Stability (in)
Name	<u>PowerBase</u>	1	<u>0.1000</u>	<u>0.2885</u>	<u>0.3450</u>
Type	<u>Artificial Turf</u>	2	<u>0.2000</u>	<u>0.2915</u>	<u>0.3345</u>
Source	<u>Butler, PA</u>	3	<u>0.1000</u>	<u>0.2865</u>	<u>0.3305</u>
Date of mfr	<u>2015</u>	4	<u>0.1000</u>	<u>0.2785</u>	<u>0.3140</u>
Depth	<u>1 inch</u>	5	<u>0.2000</u>	<u>0.2650</u>	<u>0.3175</u>
Slope	<u>0.14%</u>	Avg.	0.1400	0.2820	0.3283
Location	<u>Beneficial Designs, Inc. Minden, NV.</u>	SD	<u>0.0548</u>	<u>0.0107</u>	<u>0.0127</u>

Procedures used to install, compact and/or level prior to testing: The Brock PowerBase panel system was fitted over the laboratory test floor. A 1 inch synthetic turf with polyethylene and nylon fibers was installed over the PowerBase system. The turf was then filed and conditioned with 3 pounds of 12/20 mesh Envirofill™ acrylic coated sand to produce a compacted “infill” depth of 12 mm.

Method of stabilizing the surface reference plates: The test operator stood on the surface reference plates.

Summary of Results

Beneficial Designs, Inc. received a surfacing sample from **Brock International LLC** with the brand name **PowerBase**. This sample of **PowerBase** had a **firmness** of **0.2820 in.** and **stability** of **0.3283 in.**

Report prepared by: 
Peter Axelson, Testing Supervisor

23 July 2015
Date