

TEST REPORT

Laboratory tests on ShockWave

Report Number **LSUK.15-0441**

Client
**Notts Sport Ltd
Innovation House,
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Leicestershire,
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Date(s) **01/06/2015**

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SUMMARY

At the request of Notts Sport a series of performance tests have been carried out on a sample of ShockWave.

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1. INTRODUCTION

Samples of Shockwave were supplied for test by Notts Sport Ltd.

2. TEST METHODS

The following testing was undertaken:

- The thickness was determined in accordance with BS EN 1969: Determination of the Thickness of Synthetic Sports Surfaces.
- The tensile strength was determined in accordance with BS EN 12230: Determination of the Tensile Properties of Synthetic Sports Surfaces.
- The AAA shock absorption and vertical deformation was determined in accordance with Method 4a and 5a of the Handbook of Requirements for Football Turf.
- The mass per unit area was determined in accordance with BS EN 430: Resilient floor coverings – Determination of mass per unit area.
- The dimensional stability after hot water and hot air aging was determined in accordance with EN 13746 Surfaces for sports areas — Determination of dimensional changes due to the effect of varied water, frost and heat conditions.
- The permeability was determined in accordance with BS EN 12616: 2013 Surfaces for sports areas - Determination of water infiltration rate.

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3. RESULTS

| Test | Method | Result |
|----------------------------|----------------|-----------------------|
| Thickness | BS EN 1969 | 55 mm |
| Tensile Strength | BS EN 12230 | 0.72 MPa |
| Shock Absorption (AAA) | FIFA Method 4a | 69.8 1% |
| Vertical Deformation (AAA) | FIFA Method 5a | 10.3 mm |
| Mass per unit area | BS EN 430 | 2319 g/m ² |
| Dimensional stability | EN 13746 | 0.12 % |
| Permeability | BS EN 12616 | 3211 mm/h |