

TECHNICAL REPORT

Laboratory Tests for Football Synthetic Turf

Report Number: **LSIND-R19003-A2**

Project: **LSIND005 – Maverick Turf**

Date(s): **28/01/2019**

This report contains 5 pages in total.

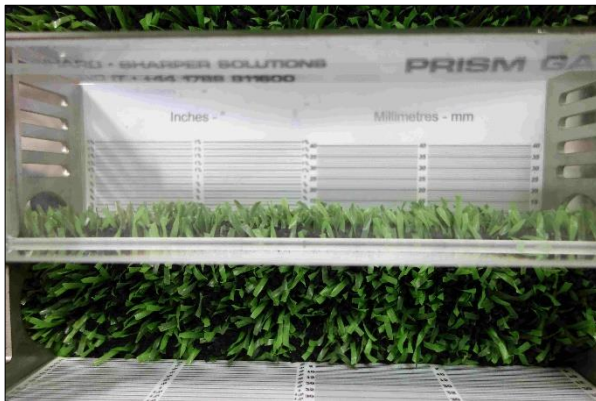
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1. CLIENT DETAILS

Company: Maverick Turf SDN BHD
Address: AL 182A, Kampung Baru Sg Buloh,
 Selangor Darul Ehsan, Malaysia – 47000.

2. PRODUCT INFORMATION



LSIND-S-2019-004

Dimensions: 1 sample of 1.0 m x 1.0 m

Pile Height	50 mm*
Performance Infill – SBR Rubber	0.5 mm to 2 mm
Stabilising Infill – Sand	0.5 mm to 1 mm

*information provided by the client

3. TESTS PROGRAM

Tests methods and technical requirements criteria considered in this report refer to the below standards:

- **Product Identification**
 - **Mass per unit area** ISO 8543
 - **Pile length above backing** ISO 2549
 - **Pile weight** ISO 8543
 - **Tufts per unit area and gauge** ISO 1763
 - **Water permeability** EN 12616:2003
- **Shock Absorption** (FIFA Test Method 04a)
- **Vertical Deformation** (FIFA Test Method 05a)
- **Rotational Resistance** (FIFA Test Method 06)
- **Vertical Ball Rebound** (FIFA Test Method 01)

All the results reported here reflect the performance of the sample(s) received only.

Tests are realized in laboratory where temperature and air humidity are controlled:

- Temperature: 21.4°C
- Air Humidity: 51 %
- Surface: Dry

Samples were tested in accordance with the manufacturer's instructions as reported below:

- Product sample has been laid on concrete.
- Preparation of sample with infill rates as 8 kg/m² of sand & 13 kg/m² of SBR rubber.

4. PERFORMANCE RESULTS

a) Product Identification of the Carpet

i) Mass per unit area

LSIND-S-2019-004	Result
Mass per unit area	2,327 g/m ²

ii) Pile length above backing

LSIND-S-2019-004	Result
Pile length above backing	50.3 mm

iii) Pile weight

LSIND-S-2019-004	Result
Pile weight	628 g/m ²

iv) Tufts per unit area and gauge

LSIND-S-2019-004	Result
Tufts per unit area	9,300 /m ²
Stitch gauge	5/8 inch

v) Water permeability

LSIND-S-2019-004	Result
Water permeability	2,555 mm/h

b) Shock Absorption

<i>Point</i>	1	2	3	<i>Average</i>
LSIND-S-2019-004	58.7 %	58.5 %	58.1 %	58.4 %

*For information, FIFA Quality Requirements: 57 % - 68 %

c) Vertical Deformation

<i>Point</i>	1	2	3	<i>Average</i>
LSIND-S-2019-004	8.8 mm	8.8 mm	8.8 mm	8.8 mm

*For information, FIFA Quality Requirements: 6 mm – 11 mm

d) Rotational Resistance

<i>Point</i>	1	2	3	<i>Average</i>
LSIND-S-2019-004	34 Nm	35 Nm	34 Nm	34 Nm

*For information, FIFA Quality Requirements: 27 Nm – 48 Nm

e) Vertical Ball Rebound

<i>Point</i>	1	2	3	<i>Average</i>
LSIND-S-2019-004	0.90 m	0.91 m	0.90 m	0.90 m

*For information, FIFA Quality Requirements: 0.60 m – 1.0 m

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