### TECHNICAL SERVICES REPORT

**Subject:** Testing of two samples referenced 'Anti Static Tile' and 'ESD Tile' to BS EN 1081: 1998 Resilient floor coverings - Determination of electrical resistance,

**Your reference:**

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**Conditions of Issue:**

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

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A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

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**Report signed by:** Mandy de Wet  
**Position:** Flooring Technologist  
**Department:** Flooring
TESTING OF TWO SAMPLES REFERENCED 'ANTI STATIC TILE' AND 'ESD TILE' TO BS EN 1081: 1998 RESILIENT FLOOR COVERINGS - DETERMINATION OF ELECTRICAL RESISTANCE, METHOD A.

As requested by Ecotile LLP, we have assessed the floor covering submitted for electrical resistance, as detailed below:

SUMMARY

With regard to the sample referenced ‘Anti Static Tile Smooth Textured Interlock Floor Tile’ submitted for determination of electrical resistance, the sample has achieved an average vertical resistance of $0.15 \times 10^9 \Omega$, therefore satisfying the requirements set out in BS EN 14041: 2004 to be classed as a conductive floor covering – in terms of vertical resistance.

The following symbol (BS EN 1081: 1998) can therefore be applied:

![BS EN 1081:1998 Electrical resistance]

With regard to the sample referenced ‘ESD Tile Smooth Textured Interlock Floor Tile’ submitted for determination of electrical resistance, the sample has achieved an average vertical resistance of $1.8 \times 10^3 \Omega$, therefore satisfying the requirements set out in BS EN 14041: 2004 to be classed as a static dissipative floor covering – in terms of vertical resistance.

The following symbol (BS EN 1081: 1998) can therefore be applied:

![BS EN 1081:1998 Electrical resistance]
SAMPLE SUBMITTED

Sample references: ‘Anti Static Tile Smooth Textured Floor Tile’ and ‘ESD Tile Smooth Textured Floor Tile’

Appearance:

Anti Static Tile Smooth Textured Floor Tile

ESD Tile Smooth Textured Floor Tile

Intended application: Contract / Commercial use
Date received: 9th February 2011
Date conditioned: 14th February 2011
Testing commenced: 4th March 2011
Testing completed: 11th March 2011
Testing conducted by: Mandy De Wet, Phil Weal.

TESTS CARRIED OUT

- BS EN 1081: 1998 Resilient floor coverings – Determination of electrical resistance, Method A (1)

Notes:

(1) The results have been assessed in accordance with BS EN 14041: 2004 Resilient, textile and laminate floor covering – Essential characteristics.
RESULTS

Table 1. (BS EN 1081) Method A: Vertical Resistance Measurements.

<table>
<thead>
<tr>
<th>Sample Reference</th>
<th>Test Method</th>
<th>EN 14041: 2004 Requirements</th>
<th>Average Results (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti Static Tile Smooth Textured Floor Tile</td>
<td>BS EN 1081</td>
<td>Static dissipative floor coverings ≤ 10⁹ Ω</td>
<td>0.15x10⁹</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conductive floor coverings ≤10⁶ Ω</td>
<td></td>
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<td>1.8x10³</td>
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COMMENTS

BS EN 1081: 1998, Resilient and textile floor coverings – Determination of electrical resistance

The test is intended to evaluate the electrical resistance of a floor covering under standard laboratory conditions. Prior to carrying out the testing the underside of the floor covering is coated in a graphite solution and allowed to dry in an oven for a minimum period of 96 hours.

The tests were conducted by placing the floor covering onto a metal plate and placing a tripod electrode with a minimum load exerting a force of 300N on to the surface of the floor covering. The resistance is measured between a surface tripod electrode and an electrode attached to the underside of the floor covering, using a defined voltage and resistance.

After 15 seconds a reading is taken, the tripod is then repositioned for a further measurement. Three test specimens are used during the assessment.
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CANCELLATION AND RETURNS
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