Compliant Products Register for Tactile Ground Surface Indicators (TGSI)
Assessed as compliant to AS/NZS 1428.4.1:2009 and other criteria as determined by Transport and Main Roads.

TGSI are truncated cones and or bars installed on the ground or floor surface designed to provide pedestrians who are blind or vision impaired with warning or directional orientation information.

October 2018
Document control sheet

Contact for enquiries and proposed changes

To be included in the “Compliant Products Register”, TGSI suppliers should contact the author to obtain a copy of the Transport and Main Roads’ criteria form – upon satisfying the criteria, the supplier will be included on this ‘Register’. If you have any other questions regarding this document or if you have feedback on the performance of certain products please contact:

Contact Officer  Jonathan Giles
Title  Senior Technical Officer (Pedestrian & Cycling Facilities)
Phone  (07) 3066 2071
Email  jonathan.p.giles@tmr.qld.gov.au

Version history

<table>
<thead>
<tr>
<th>Version no.</th>
<th>Date</th>
<th>Changed by</th>
<th>Nature of amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>01/04/2010</td>
<td>Peter Cleary</td>
<td>Initial draft.</td>
</tr>
<tr>
<td>2.0</td>
<td>06/09/2011</td>
<td>Jonathan Giles</td>
<td>Updates</td>
</tr>
<tr>
<td>3.0</td>
<td>17/10/2013</td>
<td>Jonathan Giles</td>
<td>Contact details</td>
</tr>
<tr>
<td>4.0</td>
<td>29/04/2014</td>
<td>Jonathan Giles</td>
<td>Additional entries added</td>
</tr>
<tr>
<td>5.0</td>
<td>05/07/2016</td>
<td>Jonathan Giles</td>
<td>Contact details updated</td>
</tr>
<tr>
<td>6.0</td>
<td>14/05/2018</td>
<td>Jonathan Giles</td>
<td>Updates</td>
</tr>
<tr>
<td>7.0</td>
<td>08/10/2018</td>
<td>Jonathan Giles</td>
<td>Criteria 1 &amp; 3 updated</td>
</tr>
</tbody>
</table>

Document sign off

The following officer has endorsed this document

Name  Jon Douglas
Position  Director (Traffic Engineering and Data)
Signature  Original signed
Date
**Contents**

1. **Introduction** ....................................................................................................................................1
   1.1 Relevant information for installation ......................................................................................... 1
   1.2 Audience of the document ............................................................................................................. 1
2. **Definitions** .....................................................................................................................................1
3. **Disclaimer** .......................................................................................................................................1
4. **Standards** .......................................................................................................................................2
   4.1 Governing manuals, specifications or guidelines ......................................................................... 2
5. **Table of ‘Compliant’ Tactile Ground Surface Indicators** .............................................................2

Appendix A - Compliant products criteria checklist..............................................................................8
1 Introduction

This is a controlled document that presents a listing of Tactile Ground Surface Indicator (TGSI) products, which Transport and Main Roads considers to be compliant with:

a) Australian Standard for Design for access and mobility AS/NZS 1428.4.1 2009 – Tactile indicators,

b) Australian Standard for Slip resistance classification of new pedestrian surface materials AS 4586 2013, and

c) Other criteria as specified by the department.

Transport and Main Roads does not recommend any specific TGSI for particular applications, practitioners will need to assess which style is most suitable for the particular application taking into account substrate, aesthetics, availability, consistency in areas and cost.

Companies that supply TGSI may distribute/supply/install a range of products, compliant TGSI listed in the table below are the products that have satisfied the criteria specified by the department.

This document is subject to periodic review and will be updated electronically. If printed, practitioners are requested to access the Transport and Main Roads website (www.tmr.qld.gov.au) for confirmation of the latest products register.

1.1 Relevant information for installation

Where TGSI are installed on a ramp steeper than 1 in 14 (such as the face of a kerb ramp that has a slope of 1 in 8), a wet pendulum test result of P5 is required for the product. Please refer to Standards Australia Handbook 198: 2014, table 3B: Wet pendulum test or oil-wet inclining platform classifications for applications where the NCC does not require slip resistance.

1.2 Audience of the document

- Public document.

2 Definitions

- Refer AS/NZS 1428.4.1:2009 Design for access and mobility – Tactile indicators.

3 Disclaimer

The materials presented in this publication are distributed by the Department of Transport and Main Roads for and on behalf of the State of Queensland as an information source only. Transport and Main Roads makes no statements, representations or warranties about the accuracy or completeness of, or application of, and you should not rely on, any information contained in this publication.

Transport and Main Roads disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs which you might incur as a result of the information contained in this publication being inaccurate or incomplete in any way, or for any other reason whatsoever.

In no event will the State of Queensland be liable for any damages including loss of profits, lost savings, liability in negligence or other indirect, incidental, special or consequential damages arising out of the use or publication of any information contained in this publication.
4 Standards

4.1 Governing manuals, specifications or guidelines

- AS/NZS 1428.4.1 2009
- AS 4586 2013
- Manual of Uniform Traffic Control Devices
- Road Planning & Design Manual 2nd Edition
- Transport and Main Roads Standard Drawings 1446 & 1447
- Transport and Main Roads Guideline Drawings KRG1 & KRG2

5 Table of ‘Compliant’ Tactile Ground Surface Indicators

<table>
<thead>
<tr>
<th>Tactile Ground Surface Indicators (TGSI) Supplier / Product</th>
<th>Product/picture</th>
<th>Product Description</th>
<th>Web site/contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Civil Construction (UCC) Approved Products: Flexi Pave</td>
<td><img src="image" alt="Flexi Pave" /></td>
<td>Flexi Pave Fibre reinforced polymer concrete TGSI Suited to new or retro-fit installations</td>
<td><a href="http://www.ucctactile.com.au">www.ucctactile.com.au</a></td>
</tr>
<tr>
<td>TGS Supplier / Product</td>
<td>Product/picture</td>
<td>Product Description</td>
<td>Web site/contact</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| Pathfinder Approved Products: Discrete tactile strips Discrete tactile single star shafts | ![Image](image1.png) ![Image](image2.png) | **Discrete tactile strips**  
Individually inserted plastic indicators on a bladed shaft (‘discrete’ tactiles).  
Suited to new or retro-fit installations.  
**Discrete tactile single star shafts**  
Individually inserted plastic indicators with single shaft (‘discrete’ tactiles).  
Queensland Agent  
Tactile Systems Australia Pty Ltd  
P (07)5580 6993  
| Austact Approved Products: Polyurethane tactiles | ![Image](image3.png) ![Image](image4.png) | **Polyurethane tactiles**  
Individually inserted polyurethane indicators; (‘discrete’ tactiles).  
Suited to new or retro-fit installations.  
May be affected by high UV exposure. | [www.austact.com.au](http://www.austact.com.au) |
<table>
<thead>
<tr>
<th>Supplier / Product</th>
<th>Product/picture</th>
<th>Product Description</th>
<th>Web site/contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactile Indicators Approved Products: Stikcrete tile</td>
<td><img src="image1" alt="Stikcrete tile" /></td>
<td>Stikcrete tile Special concrete compound. Suited to new or retro-fit installations.</td>
<td><a href="http://www.tactileindicators.com.au">www.tactileindicators.com.au</a></td>
</tr>
<tr>
<td>Comcork Approved Products: Tactile Ground Surface Indicator</td>
<td><img src="image2" alt="Tactile Ground Surface Indicator" /></td>
<td>Tactile Ground Surface Indicator Blend of cork and rubber tile. Suited to retro-fitting installations.</td>
<td><a href="http://www.safetyfloor.com.au">www.safetyfloor.com.au</a></td>
</tr>
<tr>
<td>TGSI Supplier / Product</td>
<td>Product/picture</td>
<td>Product Description</td>
<td>Web site/contact</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>--------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **CTA Approved Products:** CobbleTac PolyPad PolyStud | ![CobbleTac](image1.jpg) | CobbleTac porcelain tactile tiles suited to new installations  
PolyPad rubber tactile pad suited to new or retro-fit installations  
PolyStud discrete plastic tactile suited to new or retrofit installations | [www.cobbletac.com](http://www.cobbletac.com) |
| **Italpro Approved Products:** Ceramic tile | ![Ceramic tile](image2.jpg)  
![Ceramic tile](image3.jpg) | Ceramic tile Suited to new installations. | Terry Richards (03) 9551 0799  
Email: [teryr@italpro.com.au](mailto:teryr@italpro.com.au) |
<table>
<thead>
<tr>
<th>TGSI Supplier / Product</th>
<th>Product/picture</th>
<th>Product Description</th>
<th>Web site/contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Everything</td>
<td><img src="image1.png" alt="Access Tiles" /></td>
<td>Access Tiles 'Cast in place' for new installation or 'surface applied' for retrofit installation.</td>
<td>Ann Shotter (07) 3167 6767 &lt;br&gt;www.accesstile.com.au</td>
</tr>
<tr>
<td>Approved Product:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access Tiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardian Tactile Systems</td>
<td><img src="image2.png" alt="Guardian P.U. Tactile Ground Surface Indicator" /></td>
<td>Guardian P.U. Tactile Ground Surface Indicator Suited to new or retrofit installations.</td>
<td>Adam Ferre (08) 9240 1888 &lt;br&gt;www.guardiantactile.com</td>
</tr>
<tr>
<td>Approved Products:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardian P.U. Tactile Ground Surface Indicator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigen Tactile Approved Products: Fibretac TGI</td>
<td><img src="image3.png" alt="Fibretac TGI" /></td>
<td>New or retrofit installation. UV stabilised resin reinforced with embedded fibreglass.</td>
<td>Michael Lim 0412 544 795 &lt;br&gt;www.eigenstones.com/</td>
</tr>
<tr>
<td>Approved Products:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fibretac TGI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TGS Supplier / Product</td>
<td>Product/picture</td>
<td>Product Description</td>
<td>Web site/contact</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>ESP Australia Brandbumps Approved Products:</td>
<td><img src="image" alt="Product Image" /></td>
<td>New or retrofit installation. Cast in place or surface mounted.</td>
<td>Sean Cain 0432 534 310 <a href="http://www.brandbumps.com">www.brandbumps.com</a></td>
</tr>
</tbody>
</table>
Appendix A - Compliant products criteria checklist

Compliant products meet the following criteria to be included on the ‘compliant products register’ of tactile ground surface indicators (TGSI).

M – Mandatory Requirements (if applicable); D – Desired Requirements; I – Information only

If you do not think a specific criterion is applicable to your product, please supply reasons.

1. **M** Slip resistance, tested in accordance with AS 4586. Tests results confirming the product is in accordance with both slip resistance tests is required. If the manufacturing process has changed new tests are required.
   “Wet Pendulum Test” assessment group = P4 or P5 (W or V if tested before 2013);
   “Oil Wet Inclining Platform Test” assessment group = R11 or better

2. **M** TGSI design (size and spacing) compliant with AS 1428.4.1-2009

3. **M** Minimum guarantee of product including UV resistance and installation (if applicable) of 5 years

4. **M** For ceramic TGSI tile products, minimum breaking strength = 1100N tested in accordance with AS 4459.4

5. **M** For ceramic TGSI tile products, water absorption (E) <=3%, tested in accordance with ISO 10545-3 Ceramic tiles – Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density.

6. **D** Installation and production specification.

7. **D** Variability in products to provide luminance contrast specified in AS 1428.4.1-2009 to be achieved in typical footways and kerb ramps (concrete, asphalt, pavers).