

GBS – Cobbletac TGSI Pavers

CobbleTac

Tactile Ground Surface Indicators (TGSI's)
designed to meet the Australian / New Zealand
Building Codes & Standards

Installation Instructions
For
Porcelain Tactiles

GBS – Cobbletac TGSI Pavers

Date: 03 February 2006

Contents

1.	Important Information	2
2.	Experienced Contractors & Relevant Standards	2
3.	Subfloors	
	3.1 Concrete & Bitumen subfloors	4
	3.2 Timber, hard board and other sub-floor surfaces	4
4.	Installation	
	4.1 Spacing	5
	4.2 Recessed Installations	5
	4.3 Adhesives	5
	4.4 Ensuring a good bond	6
	4.5 Removing Excessive Adhesive	6
5.	Appendix	
	5.1 Approved Adhesive List	7
6.	Contact Details	7

GBS – Cobbletac TGSI Pavers

1.0 Introduction

CobbleTac Porcelain Tactiles are special tiles designed to provide the vision impaired with a warning of impending hazards or give directional guidance. Whilst 10% of all vision impaired people are completely blind, almost 90% are still able to distinguish luminance contrasts that are at least 30%. Tactile Ground Surface Indicators warn the vision impaired by providing both “tactile” and “visual” cues.

Cobbled Porcelain Tactile are available in two types of raised conical profiles: either studded, in the case of hazard warning tiles or ribbed in the case of directional guidance tiles.

The provision of Tactiles is now a compulsory requirement of the Australian and New Zealand Building Codes and forms part of the Disability Discrimination Act (DDA) and public access policy.

CobbleTac Porcelain Tactiles are available in four colours to meet the Building Code and Australian/New Zealand Standards - AS/NZ1428.4 for both tactile warning and luminance contrast requirements.

- **Warning of Hazard indicators** **(Large conical stud profile)**
- **Direction of travel indicators** **(Large conical rib profile)**

This document sets out the method of installing Tactile indicators. For layout requirements refer to AS/NZ 1428.4 or the CobbleTac – User’s Guide.

IMPORTANT NOTE

Due to natural materials used in the manufacture of CobbleTac Porcelain Tactiles, some slight variation in shade and texture between tiles may occur. The manufacturer recommends that possible shade variation and texture match is checked before bonding more than one tile in an adjacent area.

2. **Experienced Contractors & Relevant Standards**

Installation should be carried out by a fully experienced contractor. The installer should be familiar with: the preparation and treatment of all sub-floors, underlayments both trowelled and rigid; and the application and storage of adhesives. A working knowledge of the adhesive manufacturer’s application instructions and the Australian/New Zealand Standard AS/NZS 1428.4:2002 – Design for access and mobility Part 4: Tactile Indicators, is also desirable.

CobbleTac Porcelain Tactiles must be set out for different installation circumstances in the manner prescribed in AS/NZS 1428.4:2002

3. **Subfloors**

CobbleTac Porcelain Tactiles are suitable for installing on level, clean and dry sub-floors, including:

- concrete, bitumen,
- trowelable underlay,

GBS – Cobbletac TGSI Pavers

- hardboard underlay, marine plywood,
- aluminum and steel.

Sub-floors must be dry, level, rigid, clean, free of dust/wax/oil/paint/alkali, and free of hydrostatic water pressure before the laying process commences. Uneven sub-floors may need preparation to meet the required standard.

The nominated contractor is responsible for the inspection, moisture testing and the required preparation of the sub-floor prior to the installation of Tactiles.

3.1 Concrete & Bitumen

Concrete must be thoroughly cured, dry, and free of grease, oil and other contaminants.

In most installations, Tactiles are required to be laid flush (recessed) into the concrete substrate using an appropriate adhesive. Refer section 4.1 Spacing, 4.2 Recessed Installations and 4.3 Adhesives.

Where Tactiles are laid onto concrete which are in contact with fill, hardcore or ground surface, the substrate may need to have a suitable impermeable membrane underneath to prevent ingress of moisture.

3.2 Timber, hard board and other sub-floor surfaces

CobbleTac Porcelain Tactile may be laid over most substrates in the same way as any other porcelain tile.

Hardboard substrates must be clean, dry, free of grease, oil and other contaminants.

For timber surfaces a polypropylene plastic layer, expanded mesh and cementitious base is sufficient to provide a suitable substrate.

4. Installation

4.1 Spacing

CobbleTac Porcelain Tactiles must be laid with a 3 to 5mm spacer between each tile. They must not be butt joined as normal substrate movement will most likely lead to failure.

CobbleTac Porcelain Tactiles must NOT be laid into wet concrete as this does not allow a space between the tiles and surrounding surfaces. This type of installation will ultimately result in failure of the product due to expansion and contraction of the substrate.

It is recommended that all joints be sealed using a compressible sealant or suitable grouting material.

4.2 Recessed Installations

In most circumstances, such as when installing Tactiles into concrete or bitumen, a 12mm recess must be provided to ensure the tiles are laid flush with the surrounding

GBS – Cobbletac TGSI Pavers

surface. This is normally achieved by using a suitable template at the concrete/bitumen pouring stage.

Refer to your **CobbleTac** distributor if you require standard recess templates.

Alternatively, an existing concrete/bitumen substrate can be saw cut to provide a suitable recess. This is achieved by

- saw cutting the substrate, making sure to allow for a suitable spacing both between each tile and around the outside of each external tile.
- removing the substrate to a depth of approximately 50mm and
- refilling with concrete or suitable screeding compound, refer section 5.1 Approved Adhesives, to provide a suitable slab base.

Tactiles are then laid into this recess using a suitable adhesive, refer section 4.3 Adhesives.

4.3 Adhesives

CobbleTac Porcelain Tactiles must be installed with an approved adhesive suitable for the sub-floor. The adhesive must be mixed and applied in strict accordance with the manufacturer's recommended instructions.

Refer to the Appendix for a list of approved adhesives. The adhesives must be spread with a 10mm square notched trowel and the tiles laid into the wet film of adhesive.

4.4 Ensuring a good bond

In order to ensure a successful installation, it is very important to:

- a) use the correct adhesive coverage
- b) ensuring that good transference has occurred between the tile and substrate

When installing **CobbleTac Porcelain Tactiles** it is critical that the adhesive is spread so that there is 100% transfer to the back of the tile. The tiles should then be lightly pressed into the substrate to assist with adhesive transfer. Grid sticking or adhering of the corners only must be avoided as this type of installation will reduce the overall strength of the installation and lead to product damage.

A careful application of force after laying will ensure the exclusion of air and proper transfer of the adhesive on to the back of the tile. This will provide maximum bond to the sub-floor.

ALWAYS ENSURE THE ADHESIVE IS TAKEN RIGHT TO THE EDGE OF THE TILE.

Cure time - Floor traffic should be avoided ideally for 48 hours or at least **for 24 hours** after installation.

Cementitious adhesive layers must be mixed in the correct proportions of sand, lime, cement and water to ensure proper adhesion. Refer to the cement manufacturer's recommendations.

GBS – Cobbletac TGSI Pavers

4.5 Removing Excessive Adhesive

Excess adhesive must be removed immediately from the surface before curing, using a clean damp cloth (water only). Trying to remove adhesive, once cured, is likely to cause damage to the surface of the Tactile.

If adhesive has been left to cure on the surface, aggressive rubbing must be avoided. Use a damp cloth and try to peel the adhesive away from the surface.

5. **Appendix**

5.1 Approved Adhesives

Screeding compound - Use Mapei Mapecem

Adhesives - For internal or external Bitumen, concrete or other cementitious substrates use either Mapei Kerafloor with isolastic or Mapei Grani/Rapid for a 1 hour cure time.

Product Data sheets and Material Safety Data Sheets are available upon request.

6. **Contact Details**

For further information contact GBS:

Reg Hellesoe
Group Building Solutions Ltd. - 021 454 462
PO Box 233
Albany 1311
Northj Harbour
Auckland

Fax 0064 9 414 6524
A/H 0064 9 414 6514