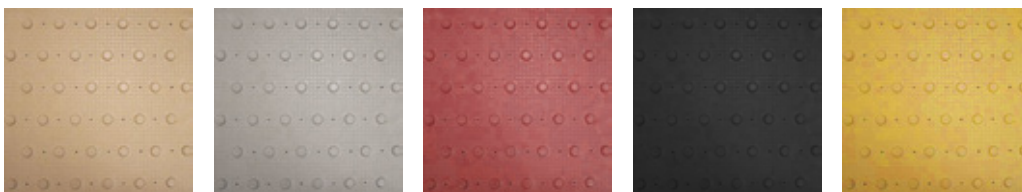




Surface Mounted Tactile Warning Surfaces



About us

Since its formation Visul Systems has established itself as a well-respected manufacturing company, offering a comprehensive range of surface mounted warning surfaces for use in transportation (highways, rail and light rapid transit (LRT)) and the built environment.

As part of the USL Group, Visul Systems supplies surface mounted tactile warning surfaces to numerous high profile projects. We take innovation seriously and believe that it is necessary for a manufacturing company to prosper.

Visul Systems has developed a reputation for manufacturing and supplying high quality resin based warning surfaces and adhesive systems. For further information visit our interactive website www.visulsystems.com.

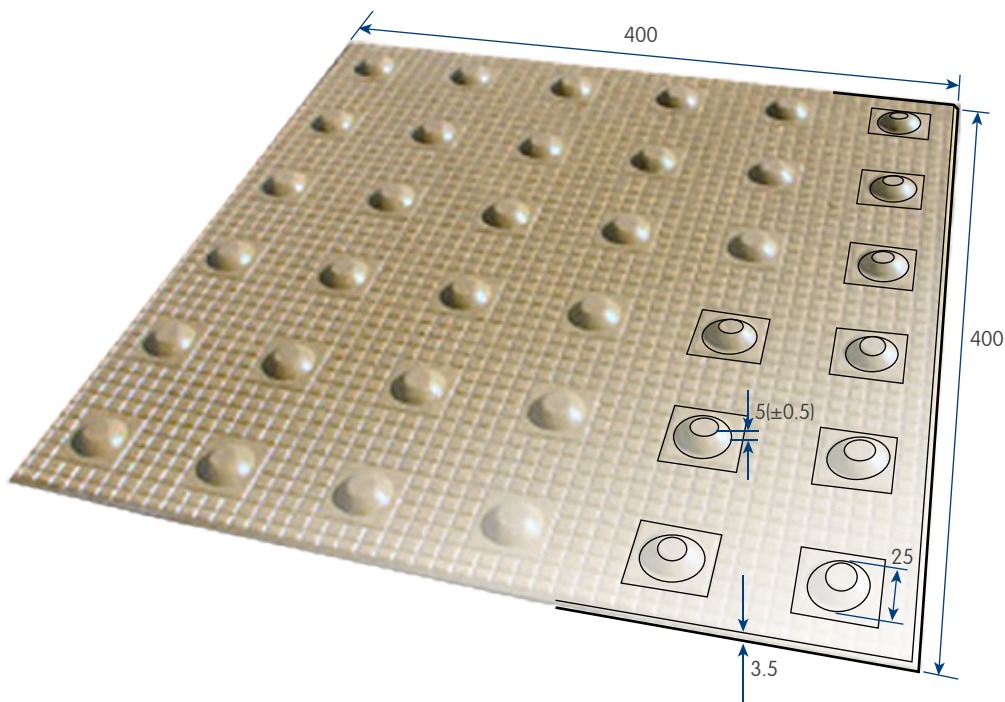
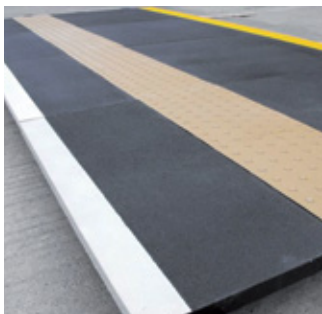
Industry Accreditations and affiliations

Visul Systems recognises the importance of membership of industry-affiliated specialist organisations, allowing us to keep in close contact with the latest industry developments. Visul Systems works in partnership with architects, consultants and contractors to improve product technology, quality and performance, thus benefiting all stakeholders in all aspects of the project.

Materials are manufactured under the ISO 9001 Quality Management Scheme and comply with ISO 14001 Environmental Standards.



About Surface Mounted Warning Surfaces



Tactile Specification (Highways Blister Surface 400mm)

Description

Visual tactile tiles are manufactured on a patented assembly line to ensure near perfect distribution of fillers and resin ensuring excellent wearing qualities and built in flexibility.

System Benefits

- No surface excavation required
- Rapid installation
- Adheres to most construction surfaces
- Hard wearing and durable
- Lightweight and easy to transport
- No 'hot works' adhesive only application

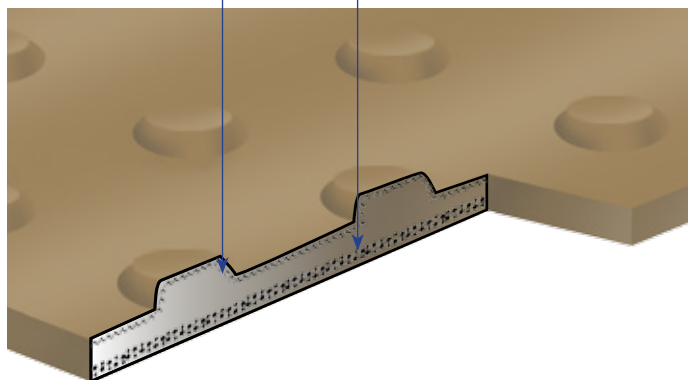
Product performance and Test Data

- The specifically formulated adhesive has been tested for adhesion by Nufins
- Tensile tests were performed and the failure mode for the vast majority of the test samples was within the base substrate
- Skid Resistance Value (SRV). Tested using the pendulum test and values of up to 65 SRV (dry conditions) were achieved
- Wear tested for durability outperforms concrete significantly
- UV stable
- Freeze/Thaw tested
- Manufactured to strict QA Criteria

Patented technique ensures near perfect distribution of resin and special fillers within the tile construction

Heavy weight fillers increases wearing qualities 7 times more resilient than concrete

Lightweight fillers increases flexibility ensuring full contact with substrate





Adhesive

Visul Systems manufacture a range of Polyurethane (PU), Epoxy (EP) and Methyl Methacrylate (MMA) adhesives with excellent bond strength and non-slumping characteristics making them ideally suited for bonding of surface mounted tactiles to construction surfaces/substrates.

Visul Systems tactile adhesive outperforms all other tactile adhesives in terms of strength, durability and cost.

- Non shrink
- No slumping, no primer required
- 100% adhesion to substrate
- Rapid curing
- Moisture tolerant (epoxy adhesive)

System Selector

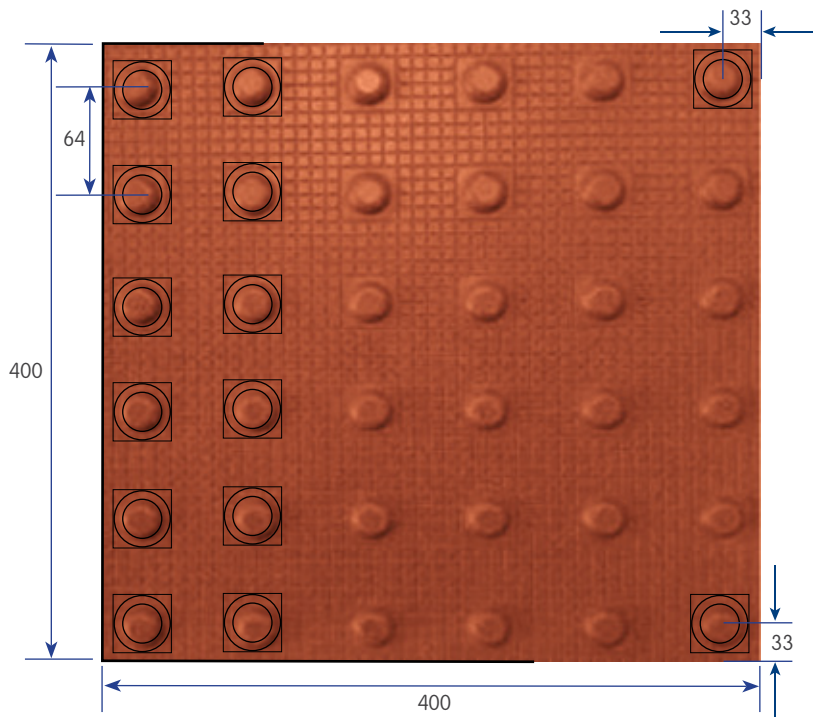
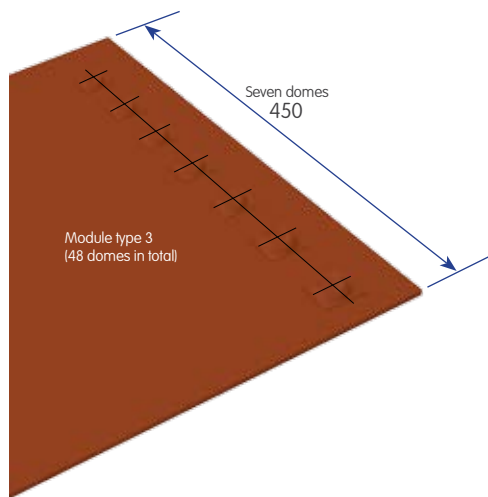
- **Highways**
Blister Surface for Pedestrian Crossing Points
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Platform edge (off-street) warning surface
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Platform edge (on-street) warning surface
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Profile and plan of blister surfaces
The profile of the blister surface comprises of rows of flat-topped 'blisters', 5mm (±0.5mm)



Blister Surface for Pedestrian Crossing Points


The purpose of the blister surface is to provide a warning to visually impaired people who would otherwise, in the absence of a kerb upstand <25mm high, find it difficult to differentiate between where the footway ends and the carriageway begins.

The surface is therefore an essential safety feature for this group of road users at pedestrian crossing points, where the footway is flush with the carriageway to enable wheelchair users to cross unimpeded.

Applications:


The blister surface should be installed in the absence of an upstand at both controlled and uncontrolled crossing points:

Controlled Crossing Points

 RED SHOULD BE USED AT CONTROLLED CROSSINGS ONLY

- Zebras
- Pelicans
- Puffins
- Toucans
- Traffic signals with pedestrian phases

Uncontrolled Crossing Points

 BUFF SHOULD BE USED AT UNCONTROLLED CROSSINGS ONLY

- Side road crossings
- Busy crossovers (vehicle crossings)
- Crossings away from junctions
- Kerb to kerb flat road humps
- Signal controlled junctions without pedestrian phases (traffic lights)

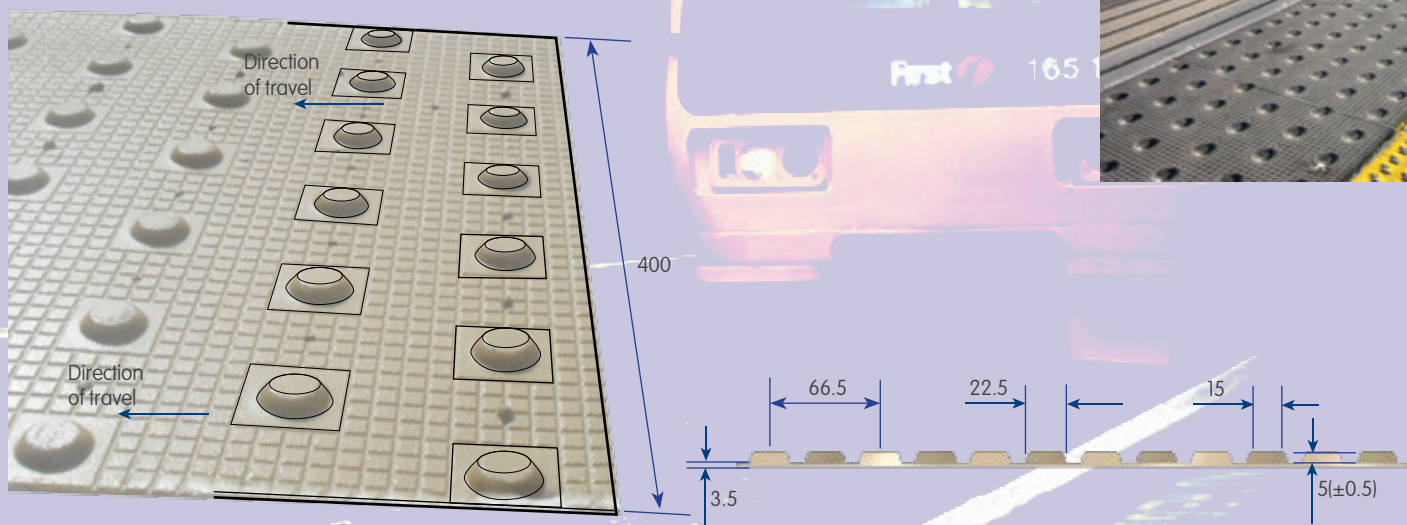
Sizes

- 400mm x 400mm
- 450mm x 450mm





RAIL and LRT



Profile and plan of platform edge (off-street) warning surface
Not to scale, all dimensions in mm

Platforms Edge (off-Street) Warning Surface

The purpose of this surface is to warn visually impaired people of the edge of all off-street railway platforms.

The profile of the platform edge (offstreet) warning surface consists of offset rows of flat-topped domes 5mm (±0.5mm) high, spaced 66.5mm apart from the centre of one dome to the centre of the next.

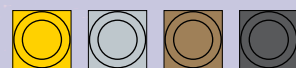
Approved by:



Sizes:

- 400mm x 400mm
- 400mm x 600mm
- 400mm x 930mm
- 400mm x 1208mm
- 400mm x 1220mm

Applications:



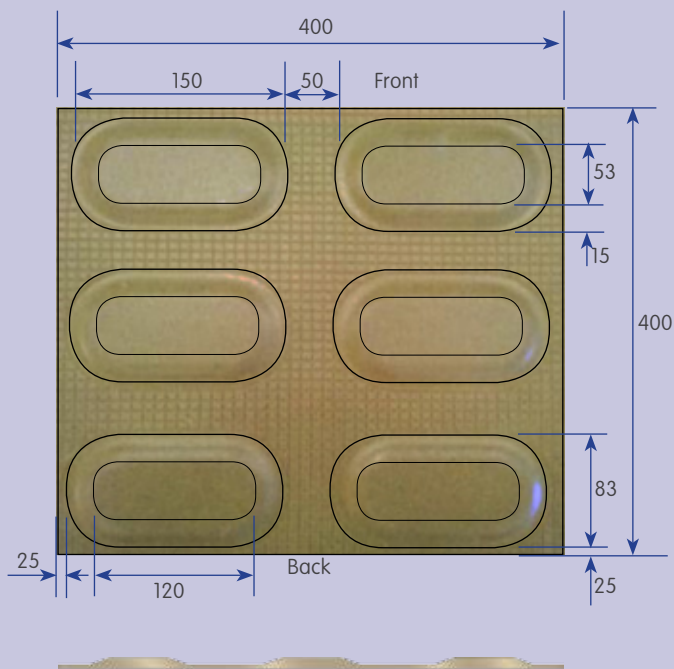
HAZARD YELLOW, GREY, BUFF OR CHARCOAL

- Heavy rail platforms
- Off-street light rapid transit (LRT) platforms
- Underground platforms





BUILT ENVIRONMENT



Profile and plan of platform edge (on-street) warning surface
Not to scale, all dimensions in mm

Platforms Edge (On-street) Warning Surface

The purpose of the platform edge (on-street) warning surface is to warn visually impaired people that they are approaching the edge of an on-street light rapid (LRT) platform.

The profile of the platform edge (on-street) warning surface comprises rows of 'lozenge' shapes. The lozenge shapes are 6mm (± 0.5 mm) high and have rounded edges in order not to be a trip hazard.

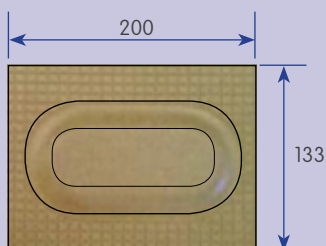
Applications:

- For use at all on-street LRT platform edges

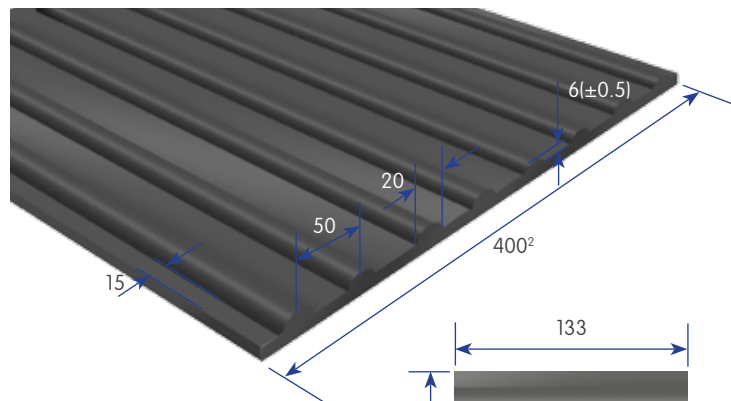
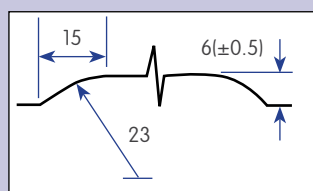


Size

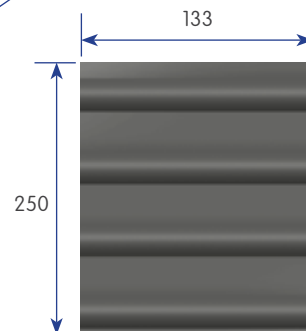
- 400mm x 400mm



Alternative module size



Profile and plan of corduroy hazard warning surface
Not to scale, all dimensions in mm



Alternative module size

Corduroy Hazard Warning Surfaces

The purpose of the corduroy surface is to warn visually impaired people of the presence of specific hazards: steps, level crossings or the approach to on-street rapid transit (LRT) platforms. It is also used where a footway joins a shared route. It conveys the message 'hazard, proceed with caution'.

The profile of the corduroy surface comprises rounded bars running transversely across the direction of pedestrian travel. The bars are 6mm (± 0.5 mm) high, 20mm wide and spaced 50mm from the centre of one bar to the centre of the next.

Applications:

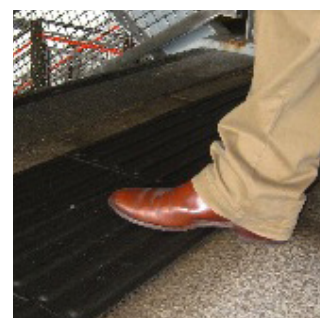


BUFF OR CHARCOAL SHOULD BE USED

- Tops and bottoms of stairs
- Foot of a ramp to an on-street rapid transit (LRT) platform, but not at any other ramps
- Level crossing
- Where people could inadvertently walk directly on to a platform at a railway station
- Where a footway/footpath joins a shared route

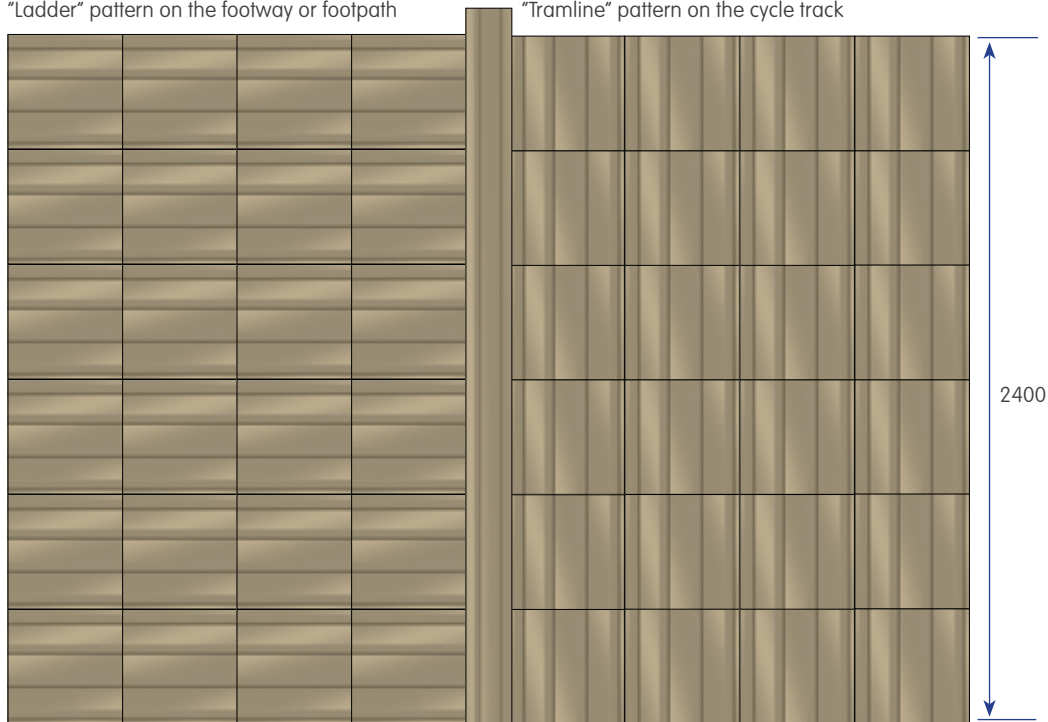
Size

- 400mm x 400mm



"Ladder" pattern on the footway or footpath

"Tramline" pattern on the cycle track



Profile & plan of segregated shared cycle track/footway surface and central delineator strip. Not to scale, all dimensions in mm

Raised line
 20 drainage gap

Segregated Shared Cycle Track/Footway Surfaces and Central Delineator Strip

The purpose of the tactile surface used in conjunction with a segregated shared cycle track/footway is to advise visually impaired people of the correct side to enter.

The purpose of the central delineator is to help visually impaired pedestrians keep to the pedestrian side.

The central delineator is normally installed along the length of the route dividing the pedestrian from the cyclist side.

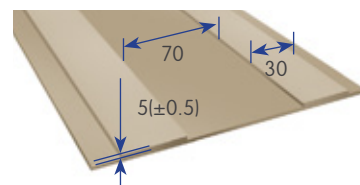
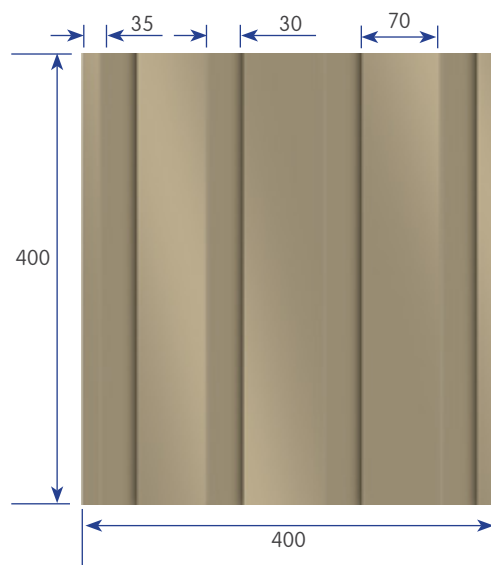
Applications:



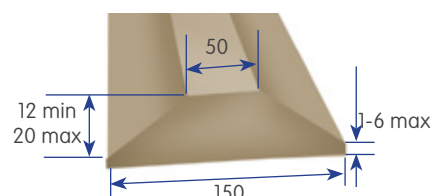
The tactile surface and central delineator strip should be used on any segregated shared route where the designated side is not physically separated from the designated cyclist side, for example by difference in level.

Size

- 400mm x 400mm



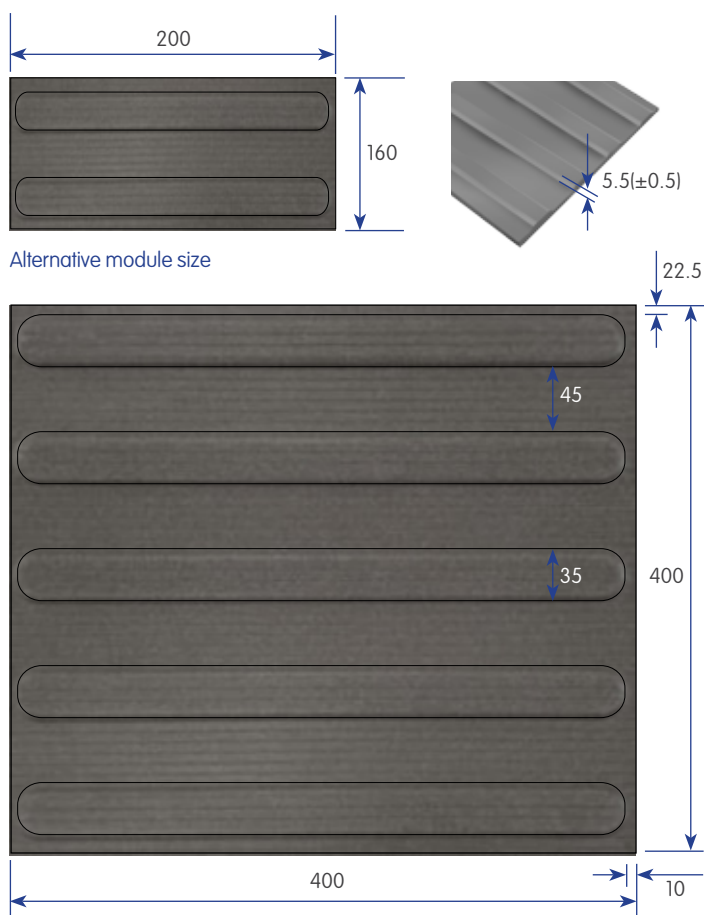
Cross section of tramline



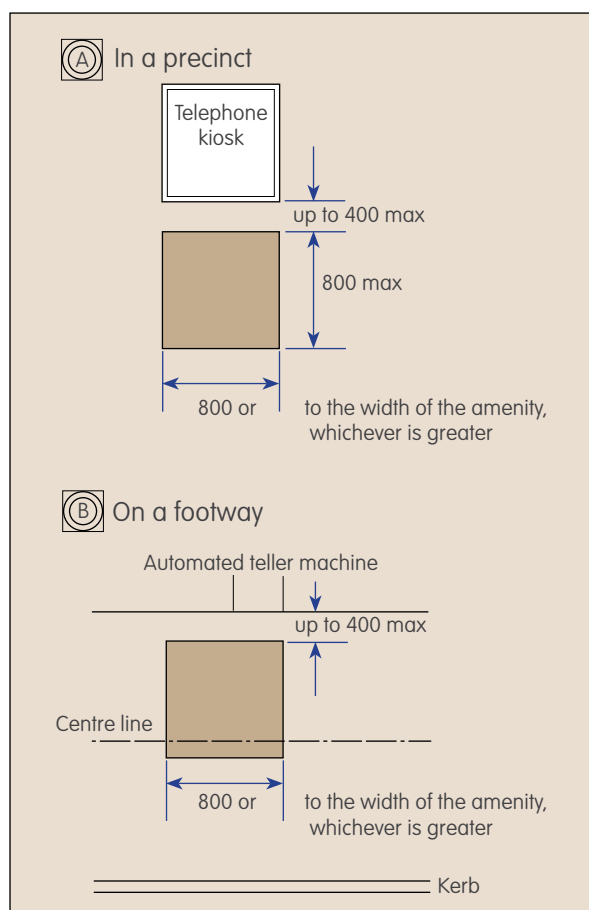
Cross section of raised line



Profile and plan of guidance path surface
Not to scale, all dimensions in mm



Not to scale, all dimensions in mm



Guidance Path Surface

The profile of the guidance path surface comprises a series of raised, flat-topped bars running in the direction of pedestrian travel. The bars are 5.5mm (±0.5mm) high, 35mm wide and are spaced 45mm apart.

Applications:



The guidance path is recommended for the use in the following circumstances:

- Where the traditional guidance given by a standard footway between the property line and carriageway does not exist (for example, in a pedestrian precinct);
- Where pedestrians need to be guided around obstacles (for example, in a pedestrian precinct); although care should be taken in siting street furniture to ensure that such problems are not created;
- Where a number of visually impaired people need to find a specific location; and in transport terminals to guide people between facilities.

Size

- 400mm x 400mm



Information Surface

The information surface does not have a raised profile. The surface should have a matt finish and be slip resistant. It is available in a variety of colours as the use of a contrasting colour tone to the surrounding footway is recommended so as to assist partially sighted people.

Applications:



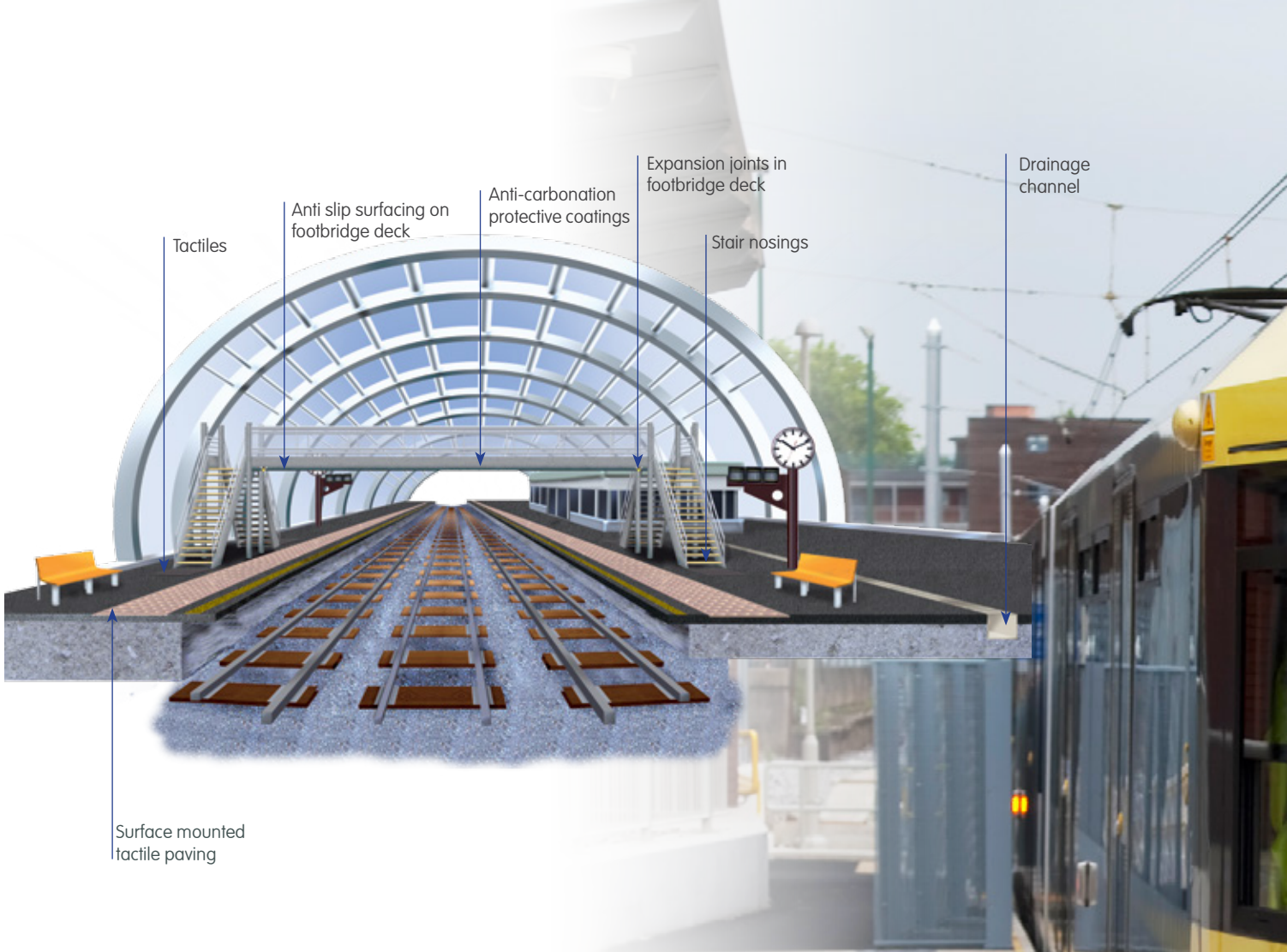
The surface can be used to draw attention to any amenity, such as:

- Telephone kiosk
- Post box
- ATM's
- Toilets
- Waiting Rooms
- Ticket Office

Size

- 400mm x 400mm





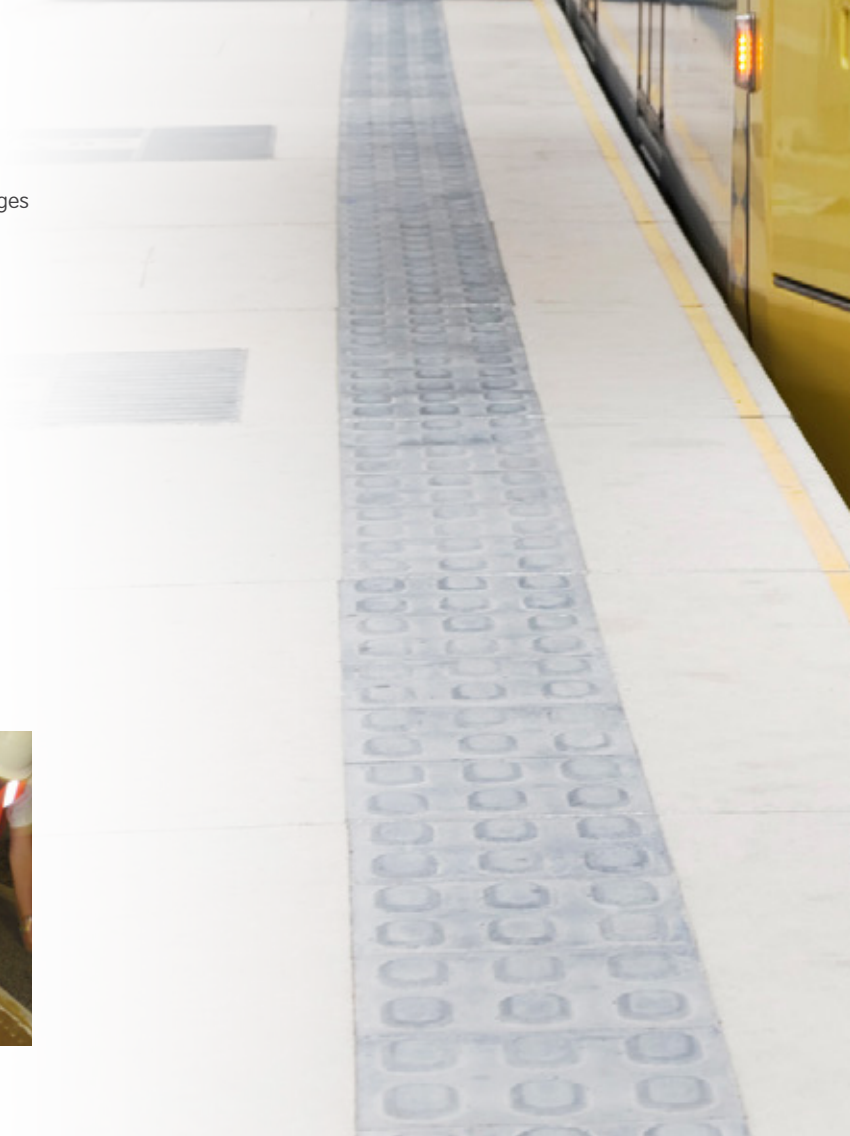
Maintenance Programme

It is important to monitor the condition of the tactile surface and to plan for replacement as part of maintenance programmes. The profile of the tactile surface is crucial to its effectiveness as a warning to visually impaired people.

Visul Systems technical department is able to advise on suitable design and maintenance programs. Further technical information may be obtained on request and consultation is encouraged to ensure choice of materials selected and detailing is optimised to suit in-service performance requirements.

Ancillary Products

- Expansion Joints
- Track bed
- Anti-slip surfacing for footbridges
- Substrate Repairs
- Copers
- Drainage channels





Victoria



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