

Australian/New Zealand Standard™

Design for access and mobility

Part 4: Tactile indicators

AS/NZS 1428.4:2002

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-064, Access for People with Disabilities. It was approved on behalf of the Council of Standards Australia on 28 August 2002 and on behalf of the Council of Standards New Zealand on 21 March 2002. It was published on 28 November 2002.

The following are represented on Committee ME-064:

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Australian Association of Occupational Therapists
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PREFACE

This Standard was prepared by Standards Australia Committee ME-064, Access for People with Disabilities, to supersede AS 1428.4—1992, *Tactile ground surface indicators for the orientation of people with vision impairment*.

The objective of this Standard is to assist in providing a safer built environment for persons who are blind or vision impaired, with particular reference to tactile indicators.

This revision addresses the needs of people with physical mobility impairment and those of people who are blind or vision impaired. It includes the following changes to the previous edition:

- (a) The additional use of discrete TGSIs.
- (b) Dimensioning of applications of TGSIs has been increased from 300 ±10 mm to 300 mm to 400 mm and 600 ±10 mm to 600 mm to 800 mm.
- (c) Applications of TGSIs to kerb ramps and crossings.
- (d) Applications of TGSIs to bus, tram and light rail stops.
- (e) Removal of the spike from raised pavement markers.
- (f) The addition of new appendices and diagrams on the design, installation, and luminance contrast criteria for TGSIs.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a standard, whereas an 'informative' appendix is only for information and guidance.

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FOREWORD

People with disabilities have the right to dignified, safe and independent access to the built environment.

Approximately 330 000 Australians are blind or vision-impaired and many more have some reduction in the effectiveness of their sight, the majority of whom are over the age of 65 years. The ageing of Australia's population is expected to see the number of people with vision impairment double in 25 years.

This Standard deals with the application of tactile ground surface indicators in the built environment.

Application of this Standard will enhance the safety, dignity and independence with which people who are blind or vision impaired have access to the built environment.

Tactile ground surface indicators (TGSIs)

TGSIs provide cues, which, when combined with other environmental information, assist people who are blind or vision impaired with their orientation. Orientation is a person's awareness of where they are, where they are going, and where they have been.

A person's orientation, through processing all available environmental cues, will make the information provided by the TGSIs meaningful. Warning TGSIs indicate an approaching hazard but not what the nature of the hazard will be.

The application of TGSIs will not correct bad design or make an unsafe environment safe. It is essential that planners regard the application of TGSIs as integral to good design and that the information they provide is consistent.

TGSIs should be installed to provide guidance and/or warning of an obstruction or hazard in any location where insufficient alternative or 'natural' tactile cues exist.

TGSIs should not be proliferated unnecessarily, nor used to compensate for bad design. They should be used where the obstruction, hazard or change of direction of travel is less likely to be expected or anticipated and could be encountered, perhaps injuriously, in the absence of a suitably placed TGS1.

Luminance-contrast

The majority of people who are blind or vision impaired have some vision. The provision of sufficient luminance-contrast in the design of signage and the choice of TGSIs will enhance access to information for people with vision impairment and for all pedestrians.

The use of luminance-contrasting strips on the nosing of stairs has been proven to improve safety for people who are vision impaired, as well as for all pedestrians.

Similarly, luminance-contrast principles applied to signage will be of benefit to all users. See Clause 1.5 for a definition of luminance-contrast.

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SECTION 1 SCOPE AND APPLICATION

1.1 SCOPE

This Standard sets out requirements for new building work, for the design and application of tactile indicators, to ensure safe and dignified mobility of people who are blind or vision impaired.

NOTES:

- 1 Information on the design and installation of tactile indicators is given in Appendix B.
- 2 Guidance on typical TGSIs applications for kerb ramps, medians and multiple entry points is given in Appendix C.
- 3 Information on raised pavement markers is given in Appendix D.
- 4 Typical examples of TGSIs for bus stops and trams/light rail platforms are given in Appendix E.
- 5 A list of the documents that were referred to in the preparation of this Standard is given in Appendix G.

1.2 APPLICATION

1.2.1 General

This Standard is applicable to the internal and external built environment, throughout Australia and New Zealand, in potentially hazardous situations as outlined in Clause 2.2.3.1.

1.2.2 New Zealand only

NZS 4121 is cited, in subsection 3 of Section 47A of the Building Act 1991, as a means of compliance with the building code. For those wishing to go beyond these minimum requirements, this Standard provides additional criteria.

The Local Government Act 1974, Section 331(2) states 'in forming or reforming any road or part thereof (not being a road in a rural area), the council shall ensure that reasonable and adequate provision is made for kerb and channel of any footpath or part thereof to be formed or reformed so as to permit safe and easy passage from kerb to kerb of any mechanical conveyance normally and lawfully used by a disabled person'.

NZS 4121 identifies a means of providing reasonable and adequate provision, while this Standard provides additional requirements.

1.3 SYSTEMS AND MATERIALS

This Standard does not preclude the use of any materials or systems not covered herein; however, any such materials or systems may require regulatory approval as an alternative solution.