

# Australian/New Zealand Standard™

## Design for access and mobility

### Part 4.1: Means to assist the orientation of people with vision impairment— Tactile ground surface indicators



## **AS/NZS 1428.4.1:2009**

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 23 November 2009 and on behalf of the Council of Standards New Zealand on 24 November 2009. This Standard was published on 3 December 2009.

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The following are represented on Committee ME-064:

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Australian Building Codes Board  
Australian Industry Group  
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# Australian/New Zealand Standard™

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### Part 4.1: Means to assist the orientation of people with vision impairment— Tactile ground surface indicators

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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* and AS/NZS 1428.4—2002, *Tactile indicators*.

*This Standard incorporates Amendment No. 1 (November 2010) and Amendment No. 2 (December 2014). The changes required by the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

This Standard is part of a series that is comprised of the following:

### AS

- 1428 Design for access and mobility
- 1428.1 Part 1: General requirements for access—New building work
- 1428.2 Part 2: Enhanced and additional requirements—Buildings and facilities
- 1428.3 Part 3: Requirements for children and adolescents with physical disabilities
- 1428.5 Part 5: Communication for people who are deaf or hearing impaired

### AS/NZS

- 1428 Design for access and mobility
- 1428.4.1 Part 4.1: Means to assist the orientation of people with vision impairment—Tactile ground surface indicators (this Standard)

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.

The Building Code of Australia and *Disability (Access to Premises—Buildings)* (Premises Standard) define where access for people with a disability is required and reference a number of Australian Standards (including this Standard) to provide technical solutions to meet deemed-to-satisfy provisions.

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.

The use of Notes in this Standard are of an advisory nature only to give explanation to guidance to the user on recommended design considerations or technical procedures, or to provide an informative cross-reference to other document or publications. Notes to clauses in this Standard do not form a mandatory part for compliance with this Standard.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

## CONTENTS

	<i>Page</i>
FOREWORD .....	4
 SECTION 1 SCOPE AND APPLICATION	
1.1 SCOPE .....	5
1.2 APPLICATION.....	5
1.3 NORMATIVE REFERENCES .....	6
1.4 DEFINITIONS .....	6
 SECTION 2 CRITERIA AND APPLICATION FOR TACTILE INDICATORS	
2.1 SCOPE OF SECTION .....	9
2.2 GENERAL REQUIREMENTS.....	9
2.3 WARNING TGSIs .....	9
2.4 STAIRWAYS, RAMPS, ESCALATORS AND MOVING WALKS .....	12
2.5 PEDESTRIANS AND VEHICLES AT THE SAME GRADE .....	17
2.6 WARNING OF HAZARDS WITHIN THE CIRCULATION SPACE, OR ADJACENT TO A CONTINUOUS ACCESSIBLE PATH OF TRAVEL.....	21
 SECTION 3 CRITERIA AND APPLICATION OF DIRECTIONAL TACTILE GROUND SURFACE INDICATORS	
3.1 GENERAL .....	25
3.2 DIRECTIONAL TGSIs .....	25
3.3 CHANGE OF DIRECTION.....	28
3.4 RAILWAY PLATFORMS.....	29
3.5 PASSENGER WHARVES .....	30
3.6 BUS STOPS AND TRAM/LIGHT RAIL STOPS .....	30
 APPENDICES	
A INFORMATION ON DESIGN AND INSTALLATION .....	32
B RAISED PAVEMENT MARKERS .....	35
C KERB RAMPS, MEDIANS AND MULTIPLE ENTRY POINTS .....	37
D TYPICAL EXAMPLES OF TACTILE GROUND SURFACE INDICATORS FOR BUS STOPS AND TRAM/LIGHT RAIL STOPS.....	63
E LABORATORY AND ON-SITE MEASUREMENT OF LUMINANCE CONTRAST .....	71
BIBLIOGRAPHY .....	79

## FOREWORD

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

A1 | In 2010 nearly 600 000 Australians are blind or have impaired vision 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.

A1 | The consistent 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. Information on wayfinding is given in Appendix A.

A1 | Warning TGSIs indicate an approaching hazard but not what the nature of the hazard will be. When used in conjunction with directional tactile ground surface indicators, TGSIs provide a 'message' to pause and consider a change in direction.

The application of TGSIs will not correct bad design or make an unsafe environment safe. Good design will minimise the need for the use of TGSIs.

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.

### **Luminance-contrast**

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

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**Design for access and mobility**

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 Tactile ground surface indicators

SECTION 1 SCOPE AND APPLICATION

**1.1 SCOPE**

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

NOTE: Information on design and installation of tactile indicators is given in Appendix A.

**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 such as stairs, ramps, kerb ramps and level transition between pedestrian accessways and vehicle carriageways.

**1.2.2 New Zealand only**

NZS 4121 applies primarily in buildings and related areas and is cited in Section 119 of the *Building Act 2004* as a means of complying with the Building Code. In New Zealand, neither NZS 4121 nor the Building Code require tactile ground surface indicators in buildings. This Standard complements NZS 4121 by describing how tactile ground surface indicators are to be provided in public environments.

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’.

The official New Zealand guide to the design of pedestrian facilities on public roads and paths is the *Pedestrian Planning and Design Guide* (PPDG). The official New Zealand guide to the design and application of ground surface indicators on public roads and paths is RTS 14—*Guidelines for facilities for blind and vision-impaired pedestrians*. Both are published by the New Zealand Transport Agency.

The informative Appendices A to D are not applicable to New Zealand and users in NZ are referred to the PPDG and RTS 14 for guidance on the application of TGSIs for public roads, paths and kerb ramps.

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