



Road signs—Specifications



This Australian Standard® was prepared by Committee MS-012, Road Signs and Traffic Signals. It was approved on behalf of the Council of Standards Australia on 18 December 2017.

This Standard was published on 26 March 2018.

The following are represented on Committee MS-012:

- Association of Consultants in Access Australia
 - ARRB Group—Australian Road Research Board
 - Australian Automobile Association
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Motorcycle Council
 - Austroads (Representative from VicRoads)
 - Department of Planning, Transport and Infrastructure, SA
 - Department of Lands, Planning and the Environment, NT
 - Engineers Australia
 - Department of Transport and Main Roads, Qld
 - Institute of Public Works Engineering Australasia
 - Main Roads Western Australia
 - Rail Industry Safety and Standards Board
 - Roadmarking Industry Association of Australia
 - Roads ACT—Transport Canberra and City Services Directorate, ACT Government
 - Roads and Maritime Services, NSW
 - State Roads—Department of State Growth, Tas.
 - VicRoads
-

This Standard was issued in draft form for comment as DR AS 1743:2016.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

Road signs—Specifications

Originated as AS E36—1960.
Previous editions AS 1743—2001 and part of AS 2342—1992.
Revised, amalgamated and designated as AS 1743:2018.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76072 007 0

PREFACE

This Standard was prepared by the Standards Australia Committee MS-012, Road Signs and Traffic Signals, to supersede AS 1743—2001 and to supersede (in part) AS 2342—1992, *Development, testing and implementation of information and safety symbols and symbolic signs*. This Standard is complementary to and should be read in conjunction with the relevant parts of the AS 1742, *Manual of uniform traffic control devices*, series of Standards.

This revision of the Standard incorporates new signs and alterations to or deletion of existing signs resulting from revision or new publication of the following Parts of AS 1742 which have been published since this Standard was last revised:

AS

- 1742.1 Part 1: General introduction and index of signs
- 1742.2 Part 2: Traffic control devices for general use
- 1742.3 Part 3: Traffic control for works on roads
- 1742.4 Part 4: Speed controls
- 1742.5 Part 5: Street name and community facility name signs
- 1742.6 Part 6: Tourist and services signs
- 1742.7 Part 7: Railway crossings
- 1742.9 Part 9: Bicycle facilities
- 1742.10 Part 10: Pedestrian control and protection
- 1742.11 Part 11: Parking controls
- 1742.12 Part 12: Bus, transit, tram and truck lanes
- 1742.13 Part 13: Local area traffic management
- 1742.14 Part 14: Traffic signals
- 1742.15 Part 15: Direction signs, information signs and route numbering

This revision now includes the principles and procedures for determining the need, and the selection, testing and design of graphic symbols and symbolic signs, which was contained within AS 2342—1992. AS 2342 will be withdrawn at the time of the publication of this revision.

This revision also includes the new fonts as detailed in AS 1744:2015, *Standard alphabets for road signs*.

Modern methods of sign production now employ computerized systems which no longer require the extensive tabulation of design information that was provided in the previous edition. The presentation of standard sign drawings has been simplified to better align with these methods.

The technical drawings contained in this Standard are provided in an accompanying product. The drawings files are available in dwg and pdf formats. They may be obtained on purchase of the Standard, in the following manner:

- (1) USB Flash drive containing a Zip file with the drawings files, for hard copy purchasers.
- (2) Zip file with the drawings files, for PDF purchasers downloaded from the SAI Global Infostore.

Delivery methods of the product containing the source drawings files may change over time.

The technical drawings materials in the accompanying product shall only be used, reproduced or modified by an authorised user in a way that meets the requirements of this Standard. They shall not be used for any other purposes.

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

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 OBJECTIVE.....	5
1.3 REFERENCED DOCUMENTS.....	5
1.4 DEFINITIONS.....	6
1.5 NUMBERING SYSTEMS.....	8
SECTION 2 GRAPHIC DESIGN GENERAL REQUIREMENTS	
2.1 GRAPHIC DESIGN	9
2.2 SIGNS WITH PRESET GRAPHICS	9
2.3 'MADE-TO-MEASURE' SIGNS	9
SECTION 3 GRAPHIC DESIGN SYMBOLS AND SYMBOLIC SIGNS	
3.1 INTRODUCTION	11
3.2 DETERMINATION OF NEED	11
3.3 STANDARDIZATION PROCEDURE.....	12
3.4 DESIGN CRITERIA.....	13
3.5 SELECTION AND TESTING	13
3.6 PRINCIPLES FOR THE DESIGN OF GRAPHIC SYMBOLS	16
3.7 PRINCIPLES FOR THE DESIGN OF SIGNS INCORPORATING SYMBOLS.....	19
SECTION 4 MANUFACTURING AND MATERIALS	
4.1 LEGEND	24
4.2 SIGNBOARD SIZE.....	24
4.3 BORDERS, EDGE STRIPS AND CORNERS.....	24
4.4 MANUFACTURING TOLERANCES.....	27
4.5 COLOURS.....	27
4.6 SIGNBOARD CONSTRUCTION	28
4.7 APPLICATION OF SIGN FACES	30
SECTION 5 SIGN DESIGN SPECIFICATIONS.....	31
APPENDICES	
A GUIDANCE ON THE DESIGN AND LAYOUT OF MADE-TO-MEASURE GUIDE SIGNS	32
B DESIGN AND LAYOUT OF SYMBOLIC SERVICE SIGNS.....	35
C ESTABLISHMENT OF NEED FOR A GRAPHIC SYMBOL OR SYMBOLIC SIGN.....	38
D COLLECTION, ASSESSMENT AND TESTING OF SYMBOLIC SIGNS	41
E COMPREHENSION AND RECALL TESTS	45
F SOURCES OF POTENTIAL TEST SYMBOLS	51
G DESIGN AND LAYOUT OF REGULATORY SIGNS (R SERIES).....	52
H WARNING SIGNS (W SERIES).....	150
I GUIDE SIGNS (G SERIES)	259
J GUIDE SIGNS FOR EXPRESSWAY-TYPE ROADS (GE SERIES)	383
K TEMPORARY SIGNS (T SERIES).....	410
L HAZARD MARKERS AND DELINEATORS (D SERIES)	451

STANDARDS AUSTRALIA

Australian Standard Road signs—Specifications

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies graphics, fonts, layout and size requirements together with an abridged materials and manufacturing specification for the manufacture of the standard road signs provided for in the AS 1742 series.

This Standard also specifies principles and procedures for determining the need, and the selection, testing and design of graphic symbols and symbolic signs.

NOTE: Authorities responsible for the provision of signs are not encouraged to develop signs for their own use. However, there will be instances where there is no suitable standard sign. In such cases, the relevant state road authority should be contacted to determine whether such a sign is already in use. If a new sign is to be developed, it should conform to the design requirements specified in this Standard for the particular sign classification. If it is considered that the sign could also be required by other authorities, Standards Australia should be advised so that, during the course of its regular review of road signs, it can take all new developments into account with a view to possible inclusion in the relevant Standards. It is most important that the proliferation of signs with differing designs of legend, symbol or background, essentially for the same purpose, is minimized.

1.2 OBJECTIVE

The objective of this Standard is to provide users and providers of road signs with either standard designs or design rules for the shape and graphic content of signs together with requirements for and guidance on materials and manufacturing quality.

NOTE: Basic elements for the design, shape and colour coding of signs are specified in AS 1742.1.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1397	Continuous hot-dip metallic coated steel sheet and strip—Coatings of zinc and zinc alloyed with aluminium and magnesium
1562	Design and installation of sheet roof and wall cladding
1562.1	Part 1: Metal
1742	Manual of uniform traffic control devices
1742.1	Part 1: General introduction and index of signs
1742.6	Part 6: Tourist and services signs
1742.11	Part 11: Parking controls
1742.15	Part 15: Direction signs, information signs and route numbering
1744	Standard alphabets for road signs
2700	Colour standards for general purposes

AS/NZS

1734 Aluminium and aluminium alloys—Flat sheet, coiled sheet and plate

1906 Retroreflective materials and devices for road traffic control purposes

1906.1 Part 1: Retroreflective materials

ISO

7001 Graphical symbols—Public information symbols

Austroads

Guide to Traffic Management, Part 10: Traffic control and communications devices

1.4 DEFINITIONS

For the purpose of this Standard the following definitions apply:

1.4.1 Colour code

One or more colours used symbolically to represent a particular function.

1.4.2 Composite sign

A sign that carries more than one symbol on a signboard, or a sign which comprises any combination of symbols, words, numerals and arrows on the one signboard.

1.4.3 Conspicuity of a sign

The extent to which a sign is more easily noticed than anything else in the visual field.

1.4.4 Direction sign

A sign that indicates the direction to a particular facility or destination.

1.4.5 Enclosure

A coloured band or outline forming part of the symbolic representation of the sign function.

1.4.6 Field of application

The context in which the use of a particular symbol is appropriate.

1.4.7 Function

The purpose of the symbolic sign, e.g. to regulate, warn or inform.

1.4.8 Ground

That part of a sign immediately behind a symbol or word.

1.4.9 Guide sign

A sign that is erected to inform and advise road users of directions, distances, destinations, routes and location of services for road users, and points of interest.

1.4.10 Image content

The elements of the symbol and their configuration.

1.4.11 Information sign

A sign that supplies information about the availability or location of road user facilities and when and where activities are permitted.

1.4.12 Irradiation

A visual effect occurring in a brightly illuminated sign whereby light appears to spread beyond the edges of the bright elements of the legend.

1.4.13 Legibility

The extent to which the details of a symbol are sufficiently discernible to enable the meaning of the symbol to be determined.

1.4.14 Limitation or restriction sign

A regulatory sign that indicates the degree to which an activity or use of a facility is limited or restricted.

1.4.15 May

Indicates the existence of an option.

1.4.16 Referent

A precise statement of what the symbol signifies.

1.4.17 Regulatory sign

A sign that contains an instruction for which non-compliance constitutes an offence at law.

1.4.18 Safe condition sign

A sign that indicates that it is safe to proceed or that an activity can be undertaken with safety.

1.4.19 Shall

Indicates that a statement is mandatory.

1.4.20 Should

Indicates a recommendation.

1.4.21 Sign

An inscribed board, plaque or other delineated space on which text or symbols or both are used to convey a message.

1.4.22 Significant detail

Detail in the image content that is critical to the comprehension of the symbol.

1.4.23 Standard symbol

A symbol approved by Standards Australia for use on road signs and published in this Standard and in the AS 1742 series.

1.4.24 Structural elements

The individual components that together make up a symbolic sign.

1.4.25 Symbol

A graphic or pictorial device used to represent objects or concepts but, for the purposes of this Standard, excluding letters, numerals and punctuation marks.

NOTE: Directional arrows, although normally classed as symbols, are dealt with in this Standard as though they were a separate sign element.

1.4.26 Symbol set

An integrated range or series of graphic symbols for use in a defined field of application.

1.4.27 Symbolic shape

A shape that is used systematically to indicate a particular class of sign.

1.4.28 Symbolic sign

A sign comprising the combination of a graphic symbol, a symbolic shape and a colour code, which may either stand alone, or may form an element of a composite sign containing text, other symbols, symbolic signs or a combination of these.

1.4.29 Variants

Alternative symbol designs for a given referent.

1.4.30 Warning sign

A sign that warns road users of a particular hazard or of hazardous conditions.

1.5 NUMBERING SYSTEMS

1.5.1 General

Two numbering systems are used in this Standard; one is for identifying individual signs and the other for identifying individual symbols and route marker emblems which are used as components within a sign.

1.5.2 Signs

The numbering system for signs is as follows:

- (a) A letter prefix, as shown below, denoting class of sign:
 - R —regulatory signs
 - W —warning signs
 - G —guide signs
 - GE —guide signs for expressway-type roads
 - T —temporary signs
 - D —hazard makers and delineators.
- (b) A number denoting the series, or group of signs.
- (c) One or two numbers identifying the sign in the series, or group.

NOTE: Two-number designations are used for some collections of closely related signs within a series or group.
- (d) A letter denoting the size of the sign where more than one size is specified, e.g. AA, A, B, C and D, where A or AA is the smallest sign.
- (e) The letters (L) or (R), when the sign has directional significance.

An example would be R2-6A(L) which denotes a regulatory sign in the Direction Series—R2. The sign is the sixth in the series, is the smallest available, and is the left-hand version.

1.5.3 Tourist route marker emblems

The numbering system for tourist route marker emblems or shields used on signs is as follows:

- (a) A letter prefix TRA for tourist drive route marker without numeral or TRB for tourist drive route marker with numeral.
- (b) A number in brackets immediately following the prefix, e.g. (2) or (3), indicating the number of numerals in the route number.
- (c) A number, following a dash, indicating the size of an emblem, e.g. -1 -2 -3, where 1 is the smallest emblem.

NOTE: Free-standing route markers are numbered as guide signs in the G8 series.