

Manual of uniform traffic control devices

Part 1: General introduction and index of signs



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- Roadmarking Industry Association of Australia
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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.

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Australian Standard®

# Manual of uniform traffic control devices

# Part 1: General introduction and index of signs

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#### PREFACE

This Standard was prepared by the Standards Australia Committee MS-012, Road Signs and Traffic Signals, to supersede AS 1742.1—2003.

The *Manual of uniform traffic control devices* was originally prepared by the Australian Committee on Road Devices (ACORD) under the direction of the then Australian Transport Advisory Council. It was subsequently approved by the Standards Australia Council for publication as an Australian Standard in two Parts, AS 1742.1—1975 and AS 1742.2—1978. These Standards superseded the *Australian Standard Road Signs Code* which was first published in 1935 with revisions in 1946 and 1960.

The decision to revise and publish AS 1742 as a series of self-contained parts each dealing with a specific situation, was taken in 1983 in consultation with the National Association of Australian State Road Authorities (now Austroads). The decision was supported by an Australia-wide survey of Local Government Authorities also undertaken in 1983.

The AS 1742 series now comprises the following Standards:

AS

1742	Manual o	of uniform	traffic	control devices
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- 1742.1 Part 1 General introduction and index of signs (this Standard)
- 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 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 edition now includes all new signs and other changes resulting from the revision of this and other Standards in the AS 1742 series.

AS 1742.8, Part 8: *Freeways* has been withdrawn. Its content have been incorporated into other relevant Parts of the series.

The relationship between Australian Standards and publications produced by Austroads should be noted. The former provides specifications and procedures that ensure that products and services are safe and reliable, and consistently perform the way they are intended. The latter provides guidance documents that deal with the design, construction maintenance and operation of the road network. Austroads documents are also used by road authorities in New Zealand.

In cases of similar subject matter, this is dealt with across both sets of documents (e.g. Austroads, *Guide to Road Safety*, Part 3: *Speed Limits and Speed Management*, and Australian Standard AS 1742.4, *Manual of uniform traffic control devices*, Part 4: *Speed controls*). Where this occurs, each document aims to provide information that is consistent, complimentary and supportive of the other.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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#### STANDARDS AUSTRALIA

## Australian Standard Manual of uniform traffic control devices

#### Part 1: General introduction and index of signs

#### SECTION 1 SCOPE AND GENERAL

#### 1.1 SCOPE

This Standard covers the signs used for regulating, warning and guiding road users. It specifies the sign classifications and the numbering system used and sets out the basic design of signs in terms of colour and shape coding. It provides an illustrated index of all signs and sign types which have a standard sign number, and includes sign sizes and reference to other Standards in this series, which cover usage of each sign.

NOTES:

- 1 Pavement markings for general purposes are specified in AS 1742.2. Where special pavement markings are specified, e.g. for bus lanes, these are given in the Standard which relates to that particular traffic situation.
- 2 Requirements for traffic signals are specified in AS 1742.14.
- 3 Detailed specifications for the design and manufacture of signs are given in AS 1743.
- 4 Detailed specification for the letters and numerals used for the design and manufacture of signs is given in AS 1744.
- 5 This index does not cover electronic versions of signs.

#### **1.2 REFERENCED DOCUMENTS**

and symbolic signs

The following documents are referred to in this Standard:

AS			
1742	Manual of uniform traffic control devices		
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	
1743	Road sign	ns—Specifications	
1744	Forms of	Forms of letters and numerals for road signs	
2342	Development, testing and implementation of information and safety		

symbols

AS	
2890	Parking facilities
2890.1	Part 1: Off-street car parking
AS/NZS	
1906	Retroreflective materials and devices for road traffic control purpose

1906.1 Part 1: Retroreflective sheeting

#### **1.3 DEFINITIONS**

For the purpose of this Standard the following definitions apply:

#### 1.3.1 May

Indicates the existence of an option.

#### 1.3.2 Shall

Indicates that a statement is mandatory.

#### 1.3.3 Should

Indicates a recommendation.

#### **1.3.4 Traffic control device**

Any sign, signal, pavement marking or other installation placed or erected by a public authority or official body, having the necessary jurisdiction, for the purpose of regulating, warning or guiding road users.

#### 1.4 CLASSIFICATION OF SIGNS

Signs are classified by function as shown in Table 1.1.

#### TABLE 1.1

Class	Function
Regulatory signs (Type R)	To regulate the movement of traffic by indicating when or where a legal requirement applies, failure to comply with which constitutes an offence.
Warning signs (Type W)	To warn road users of unexpected or hazardous conditions on or adjacent to the road.
Direction signs (Type G)	To inform and advise road users of directions, destinations, route names and distances, non-regulatory traffic instructions, the location of tourist and service facilities for road users, and points of interest.
Expressway direction signs (Type GE)	To inform and advise road users on expressway type roads of directions, destinations, route distances, non-regulatory traffic instructions, the location of services for travellers and other points of interest.
Temporary signs (Type T)	To control, warn and guide road users safely through, around or past work sites on roads and footpaths and to warn and advise of other temporary hazardous conditions that could endanger road users.
Hazard markers (Type D)	To delineate a marked change in the direction of travel or to emphasize the presence of an obstruction.

#### **1.5 NUMBER OF SIGNS AND SIGN COMPONENTS**

#### 1.5.1 Signs

The alphanumeric coding system for signs is as follows:

(a) A letter prefix, as shown below, to denote class of sign:

R—Regulatory signs

W—Warning signs

G and GE—Direction signs and free-standing route markers

T—Temporary signs

D—Hazard markers

- (b) A number denoting the series, or group of signs.
- (c) A second and sometimes a third number identifying the sign in the series, or group. NOTE: Where there are variants of a particular sign, they are identified by the third number.
- (d) For signs with more than one standard size, a letter denoting the size of the sign, e.g. A, AA, B, C, D, where A or AA is the smallest sign.
- (e) The letters (L) or (R), when the sign has directional significance.

*Example*: R2-6A (L) or (R) denotes a regulatory sign in the Direction series—R2. The sign is the sixth in the series, is the smallest available, and has directional significance.

#### 1.5.2 Symbols for tourist service signs

Symbols for services signs are identified by the letter prefix S and tourist sign symbols by TS. They are followed by a number indicating the particular symbol.

#### **1.6 BASIC ELEMENTS OF SIGNS**

#### 1.6.1 General

Traffic signs may contain instructions which the road user is required to obey. They may contain warning of hazards which may not be self-evident, or information about routes, directions, destinations and points of interest. The means employed to convey information consists of a combination of a message and a distinctive sign, shape and colour. The message may be either a legend or a symbol, or both.

As signs are an essential part of the road traffic system, their message should be consistent, and their design and placement coordinated with the road geometric design.

Uniformity in the design of signs facilitates identification by the road user. Standardization of shape, colour and message is used to enable the various classes of sign to be promptly recognized.

#### 1.6.2 Shape

Sign shapes and their application are as follows:



*The equilateral triangle with one point downward* is reserved exclusively for the GIVE WAY and Roundabout signs.

The rectangle with long axis vertical is used generally for regulatory signs other than those for which a specific alternative shape is prescribed, and for non-regulatory traffic instruction signs. It is sometimes used for direction signs where the location and sign layout require a 'portrait' format.

*The circle* is used for regulatory signs associated with pedestrian safety, hand banners, and the Railway Crossing Gate Position sign.

The diamond is used for warning signs.





The diagonal cross is reserved exclusively to indicate the position of a railway or tramway level crossing.

The rectangle with long axis horizontal is used for direction and information signs, signs for works on roads and footpaths and other temporary hazards, free-standing alphanumeric route numbering, MABC Type route markers and supplementary plates used with warning and regulatory signs.

The shield is only used for tourist route markers.

#### 1.6.3 Colour

The standard colours for signs shall comply with those specified in AS 1743. The application of colours is as follows:

- Red-shall be used-(a)
  - as a background colour for STOP signs, signs relating to wrong way movement (i) and reducing speed, hand STOP banners and flags, special hazard signs, and railway crossing position signs and gate signs;
  - (ii) as a legend colour on prohibitive parking signs and STOP HERE ON RED SIGNAL (ARROW) signs;
  - (iii) as a border colour on GIVE WAY signs; and
  - (iv) as a colour associated with symbols on certain regulatory signs.
- (b) Black—shall be used—
  - (i) as a legend colour for signs having a white, vellow, fluorescent vellow, fluorescent yellow-green or fluorescent orange background; and
  - as a background colour for hazard markers, width markers and T-junction sight (ii) boards.
- (c) White—shall be used
  - as a background colour for most regulatory signs, most information signs, (i) Street and Road Name signs, bicycle route direction signs and the diagonal cross for position signs at railway or tramway crossings; and
  - (ii) as a legend colour on signs having a green, blue, black, red or brown background.
- Yellow-shall be used-(d)
  - as a background colour for most warning signs, Advisory Speed signs, and for (i) most roadworks and other temporary hazard signs; and
  - as a legend colour for route numbers on direction signs and free-standing (ii) alphanumeric route numbering (MABC type route markers).

NOTE: For alphanumeric route numbering, see AS 1742.15.

- (e) Fluorescent orange—shall be used as a background colour for roadworks signs that relate to people working on the road, for CHILDREN CROSSING flags and the hand STOP banner for use at a children's crossing.
- Fluorescent yellow—may be used as a background colour in lieu of yellow for (f) roadwork signs, route numbers on direction signs and other specified hazard signs.
- Fluorescent yellow-green—shall be used in lieu of yellow as a background colour for (g) regulatory and warning signs for the protection of pedestrians.

- (h) *Green*—shall be used as a legend colour on permissive parking signs.
- (i) *Standard green*—shall be used as a background colour for direction signs (including expressway direction signs), the Kilometre plate (G10-3), free-standing MABC type route markers, finger boards with reflectorized legends and signs designating the start and end of an expressway type road.
- (j) *Blue*—shall be used as a background colour for Overdimensional (OD) Route signs, State and Bicycle Route markers, services signs and for the legend and border on bicycle route direction signs.
- (k) *Brown*—shall be used as a background colour for Tourist Route markers and tourist information signs.

#### 1.6.4 Lettering

Letters and numerals used for word messages on signs described in this Standard shall conform to those specified in AS 1744.

A description and use of letters and numerals specified in AS 1744—1975, which was current at the time of publication of this Standard, is given at Appendix A. A revision of AS 1744 is expected during the life of this edition of this Standard and when available, will specify the changed description and use that will apply.

#### 1.6.5 Symbols

Symbols shown on signs shall be limited to and shall conform to those shown in this Standard, the artwork for which is given in AS 1743. The only permitted exceptions to this requirement are in respect of the development of new symbols in accordance with AS 2342. AS 2342 is expected to be withdrawn during the life of this edition of this Standard. Requirements regarding the development of new symbols are then expected to be incorporated into a revision of AS 1743. The development of new symbols shall be subject to all of the requirements of that Standard including determination of need, graphic design and comprehension testing.

The advantage of symbols is that, provided they meet the criteria specified above, for a given signboard size, they can usually be seen, read and interpreted at a greater distance ahead of the decision making point than legend signs.

NOTE: The selection and testing of new symbols in accordance with AS 2342 will be beyond the capabilities of most users and will normally require the assistance of a research establishment having the necessary facilities and expertise.

#### 1.6.6 Reflectorization and illumination

#### **1.6.6.1** General

Signs that are intended to convey their messages during the hours of darkness (except parking signs) shall be either illuminated or reflectorized so that their colours and shape are as recognizable by night as by day. Illumination may be required where reflectorization is judged to be ineffective, for example, on overhead signs. Reflectorization may also be ineffective in some areas with high intensity street lighting.

#### **1.6.6.2** Means of illumination

Examples of means of illumination of signs are as follows:

- (a) A light within or behind the sign face, illuminating the main message or symbol, or the sign background or both, through a translucent material.
- (b) An attached or independently mounted light source in front of the sign, designed to direct adequate illumination over its entire face.

NOTE: Stray light from such a source should not be allowed to become a glare source for traffic approaching from the opposite direction.