Australian Standard®

Manual of uniform traffic control devices

Part 2: Traffic control devices for general use

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 5 February 2009. This Standard was published on 16 March 2009.

The following are represented on Committee MS-012:

- ACT Department of Territory and Municipal Services
- ARRB Transport Research
- AUSTROADS (representative from Department of Transport, Energy and Infrastructure, SA)
- Association of Consultants in Access Australia
- Australian Automobile Association
- Australian Chamber of Commerce and Industry
- Australian Historic Motoring Federation
- Australian Industry Group
- Australian Motorcycle Council
- Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government
- Department of Infrastructure, Planning and Environment, NT
- Institute of Public Works Engineering Australia
- Main Roads Department, Qld
- Main Roads Western Australia
- 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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AS 1742.2—2009
(Incorporating Amendment Nos 1 and 2)

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PREFACE

This Standard was prepared by the Standards Australia Committee MS-012, Road Signs and Traffic Signals to supersede, in part, AS 1742.2—1994, *Manual of uniform traffic control devices*, Part 2: *Traffic control devices for general use*, and part of AS 1742.8—1990, *Manual of uniform traffic control devices*, Part 8, *Freeways*, which has been withdrawn.

This Standard incorporates Amendment No. 1 (October 2009) and Amendment No. 2 (October 2011). The changes required by the Amendment 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 one of a series of fourteen Standards as follows:

AS		
1742	Manual of uniform traffic control devices	
1742.1	Part 1:	General introduction and index of signs
1742.2	Part 2:	Traffic control devices for general use (this Standard)
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:	Service and tourist signs for motorists
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 Standard deals with regulatory and warning signs, markings and devices for general use and is applicable to all roads other than freeways. It has been divided into two main sections, one dealing with controls at intersections and the other with controls between intersections. The latter section has been further divided by relating the devices to specific traffic situations and problem areas between intersections.

This edition of this Standard contains a number of revisions that reflect changes in practice and traffic control device usages that have evolved since the earlier edition of the Standard was published. The more significant changes are as follows:

(a) AS 1742.8 (Freeway controls) has been withdrawn. Its subject matter has now been incorporated into various other relevant standards including this Standard.

(b) Requirements and recommendations relating to direction signs, route numbering and information signs have been removed from this edition and published separately as the new AS 1742.15.

(c) A number of new signs required under the Australian Road Rules that were published in the now expired AS 1742.1 Supp.1(Int)—2000 have been transferred to this Standard. They include signs related to the control of trucks and buses on steep grades, and load limits on bridges.

(d) The Standard includes signs for the warning of substandard curves, which now have added symbolic elements to be used where needed to warn of intersections on the curve.

(e) Yellow raised pavement markers are now specified in lieu of white for use on all dividing lines, right hand edge lines, median and median island outlines. Note that the colour of painted markings has not been changed.

(f) Treatments at lane reductions (merges) have been substantially revised.

(g) A number of new symbolic signs to warn of the presence on the road of animals in the wild have been introduced.

(h) The method of assessing the advisory speed on substandard horizontal curves has been updated.

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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Part 2: Traffic control devices for general use

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for regulatory and warning signs, pavement markings and other devices for general use on roads including expressway type roads, and sets out the way they are applied at intersections and interchanges, between intersections, and at a number of specific situations including substandard horizontal and vertical curves, approaches to structures and obstructions, changes in pavement width, climbing and overtaking lanes, steep grades and water crossings.

1.2 APPLICATION

Apart from specific exceptions in the text this Standard applies to all roads other than unsealed roads in remote areas (see Clause 1.4.4). Provisions of this Standard should be applied in the latter case wherever relevant.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1163	Structural steel hollow sections
1348	Road and traffic engineering—Glossary of terms
1742	Manual of uniform traffic control devices
1742.3	Part 3: Traffic control devices for works on roads
1742.4	Part 4: Speed controls
1742.5	Part 5: Street name and community facility name 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
1742.13	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 signs—Specifications
1744	Forms of letters and numerals for road signs
1906	Retroreflective materials and devices for road traffic control purposes
1906.3	Part 3: Raised pavement markers (retroreflective and non-retroreflective)
2144	Traffic signal lanterns
2700	Colour standards for general purposes
4049	Paints and related materials—Pavement marking materials (series)

AS
4001 Motor vehicles—Rear marker plates
4001.1 Part 1: Manufacturing and classification requirements for Class 1A and Class 1 reflective plates

AS/NZS
1158 Lighting for roads and public spaces
1158.1.1 Part 1.1: Vehicular traffic (Category V) lighting—Performance and design requirements

1906 Retroreflective materials and devices for road traffic control purposes
1906.1 Part 1: Retroreflective sheeting
1906.2 Part 2: Retroreflective devices (non-pavement application)

2009 Glass beads for pavement-marking materials

3845 Road safety barrier systems

AUSTROADS
Rural Road Design, 2003

Guide to Traffic Management—Part 3: Traffic Studies and Analysis, 2008.

1.4 DEFINITIONS

For the purpose of this Standard the definitions in AS 1348 and those below apply.

1.4.1 Annual average daily traffic (AADT)

The total yearly traffic volume in both directions at a road location, divided by the number of days in the year.

NOTE: This term also applies to estimates of AADT based on short-term traffic volume counts.

1.4.2 Expressway type road (expressway)

A divided highway for through traffic with full or partial control of access and generally with grade separation at intersections. The term includes expressways, freeways, tollways and motorways (as defined in AS 1348).

1.4.3 May

Indicates the existence of an option.

1.4.4 Merge

The point, the area or the manoeuvre where a line of traffic is required to join with another line when a lane is discontinued, by either a zip-merge or a lane change.

1.4.5 Road in a remote area

Unless otherwise determined by the road authority, a road in a sparsely populated area with a traffic volume less than 50 vpd.

1.4.6 Shall

Indicates that a statement is mandatory.

1.4.7 Should

Indicates a recommendation.

1.4.8 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.

1.4.9 Zip-merge

The merging of lines of traffic that does not require any line of traffic to change lanes (i.e. by crossing any lane or continuity line) to complete the merge.

1.4.10 85^{th} percentile speed (V_{85})

The speed at or below which 85% of vehicles are observed to travel under free-flowing conditions past a nominated point.

NOTE: A guide to the determination of 85^{th} percentile speed is given in Appendix A.

1.5 SPECIFICATION OF SIGNS, MARKINGS AND DELINEATORS

For detailed specifications for the materials and manufacture of the signs and devices, and for pavement marking materials specified in this Standard reference shall be made to the following Standards:

AS 1743, AS 1744, AS/NZS 1906.1, AS/NZS 1906.2, AS 1906.3, AS/NZS 2009, AS 4049 Series.

1.6 RESPONSIBILITY AND AUTHORITY FOR INSTALLATION

Responsibility for installing traffic control devices is vested in various state and local government authorities. The installation of new devices or interference with existing ones without authority is an offence. Attention is drawn to the fact that it is necessary to obtain approval of the appropriate authority before installing any traffic control device.

Display of unofficial and non-essential devices by private or commercial organizations shall not be permitted.

1.7 GENERAL PRINCIPLES

1.7.1 Basic principles for all traffic control devices

To achieve the purpose for which they are installed, traffic control devices should be used only after engineering studies have indicated the need for them. A device should conform to the following basic principles:

(a) It should be capable of fulfilling an important need.

(b) It should command attention.

(c) It should convey a clear, simple meaning with the minimum number of messages required to obtain the desired response from the driver.

(d) It should command respect.

(e) It should be located to give adequate time for response.

(f) It should not obscure any other traffic control devices.

The failure of a device to fulfil its function may result from—

(i) inadequate traffic engineering studies;

(ii) the device conveying the wrong message, or more messages than the driver can assimilate in the reading time available;

(iii) disregard of weather and physical conditions (such as grades and sight distance), driver psychology, and vehicle limitations;

(iv) lack of maintenance;

(v) disrespect caused by excessive use of the device;