**Emergency escape lighting and exit signs for buildings** 

Part 1: System design, installation and operation





This Australian Standard was prepared by Committee LG-007, Emergency lighting in buildings. It was approved on behalf of the Council of Standards Australia on 16 March 2005.

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Association of Consulting Engineers Australia
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Building Industry Authority NZ
Business New Zealand
Department of Commerce (NSW)
IES: The Lighting Society
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# Australian Standard™

# **Emergency escape lighting and exit signs for buildings**

# Part 1: System design, installation and operation

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### **PREFACE**

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee LG-007, Emergency Lighting in Buildings, to supersede AS/NZS 2293.1:1998 *Emergency lighting for buildings*, Part 1: *System design, installation and operation*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian rather than an Australian/New Zealand Standard.

The AS (/NZS) AS/NZS 2293 series comprises three Parts as follows:

# AS(/NZS)

2293	Emergency escape	lighting and	exit signs for	buildings
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- 2293.1 Part 1: System design, installation and operation (this Standard)
- 2293.2 Part 2 Inspection and maintenance
- 2293.3 Part 3 Emergency escape luminaires and exit signs

The objective of the AS 2293 series of Standards is to provide all those associated with the design, construction, installation, certification and maintenance of all the individual components of an emergency escape lighting and exit signage scheme, and the scheme as a whole, with the requirements and guidelines to provide an installation that will ensure an acceptable level of illumination to the nominated areas for the safe evacuation of occupants from those areas in an emergency situation.

The objective of this Standard is to provide designers, installers and certifiers of emergency escape lighting and exit signage schemes with the relevant requirements and guidance for the provision of emergency escape lighting and exit signs to all designated spaces within a building in order to ensure an acceptable level of illumination for the safe evacuation of occupants from those spaces in an emergency situation.

The principal reason for this edition of the Standard is to specify installation requirements for exit signs employing internationally accepted pictographs instead of the previously used word 'Exit'. Also, the basic terminology used to describe the subject matter of the Standard has been modified to be compatible with that used in IEC 60598-2-22 *Luminaires*, Part 2-22: *Particular requirements—Luminaires for emergency lighting*. The terminology now used, and reflected in the new series title, recognizes the term emergency lighting as including four categories of lighting, each provided with an alternative energy supply, as follows:

- (a) Emergency escape lighting.
- (b) Illuminated emergency exit signs.
- (c) High risk task area lighting.
- (d) Standby lighting.

Of these categories, items (a) and (b) are the newly adopted terms that refer to the two types of emergency lighting that are required by law in Australia and comprise the scope of the AS 2293 series of Standards. Items (c) and (d) are types of lighting that have a limited history in this country and which are not covered by this series of Standards.

This Standard also includes the following significant changes from the previous edition:

- (i) Replacement of word 'exit' with pictograph.
- (ii) Inclusion of detailed restrictions on the use of arrows.
- (iii) Revision of maximum viewing distances for exit signs.
- (iv) As this Standard is not a joint Australian/New Zealand document, there is no content specific to New Zealand only.

# (v) The adoption of terminology from IEC 60598-2-22.

Further to the content of this Standard, the committee will investigate new techniques, new or developing energy sources and illuminants (e.g. photoluminiscent materials), new approaches such as wayfinding systems and also the effects of smoke on emergency lighting, for possible inclusion in future editions of the AS 2293 series.

The committee invites input from interested parties in relation to any of these matters.

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.

This Standard distinguishes between documents cited as normative references and those referenced for information only. Those belonging to the former category are cited in the clause titled 'Normative references' and listed in Appendix A while those of the latter type are listed in the bibliography.

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# STANDARDS AUSTRALIA

# Australian Standard Emergency escape lighting and exit signs for buildings

Part 1: System design, installation and operation

# SECTION 1 SCOPE AND GENERAL

## 1.1 SCOPE

This Standard specifies requirements for the design and installation of emergency escape lighting and illuminated emergency exit signage systems for buildings. Both central battery and single point or self contained systems are included.

The scope of this Standard does not include the following:

- (a) Constructional (including appearance) requirements for emergency escape luminaires and exit signs.
  - NOTE: These requirements can be found in AS 2293.3.
- (b) Requirements for maintaining an emergency escape lighting installation once installed.
  - NOTE: These requirements can be found in AS/NZS 2293.2.
- (c) Specification of the types of buildings or particular spaces that are required to be provided with emergency escape lighting.
  - NOTE: This is typically set out in the Building Code of Australia (BCA).
- (d) Requirements for emergency evacuation lighting of the interior of lift cars.
  - NOTE: These requirements can be found in AS 1735.
- (e) Requirements for high-risk task area lighting.
- (f) Requirements for standby lighting.

NOTE: Due to the known detrimental effect of smoke on the visual conditions provided by emergency lighting, it is recommended that provision be made to keep escape paths as free from smoke as possible by means such as construction techniques and ventilation.

# 1.2 APPLICATION

It is anticipated that this Standard will be referenced in the May 2006 edition of the Building Code of Australia, thereby superseding the previous referenced edition from the AS/NZS 2293 series.

# 1.3 NORMATIVE REFERENCES

The referenced documents detailed in Appendix A are indispensable for the application of this document.

## 1.4 DEFINITIONS

For the purpose of this Standard, the definitions given in the Building Code of Australia, as appropriate, and those below apply.



AS 2293.1-2005 Emergency escape lighting and exit signs for buildings - System design, installation and operation

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