

Australian Standard<sup>®</sup>

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**SAA Wiring Rules**

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# **SAA WIRING RULES**

This Australian Standard was prepared by Committee EL/1, Wiring Rules. It was approved on behalf of the Council of Standards Australia on 29 August 1991 and published on 9 December 1991.

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## Australian Standard<sup>®</sup>

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### **Electrical installations — Buildings, structures and premises**

*known as the*

### **SAA Wiring Rules**

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## PREFACE TO THE TENTH (1991) EDITION

This edition of this Standard was prepared by the Standards Australia Committee on Wiring Rules and supersedes AS 3000—1986.

This edition is based on the following considerations:

- (a) Experience gained in the application of the ninth (1986) edition as expressed to Standards Australia in terms of miscellaneous enquiries and comment on that edition.
- (b) The five amendments and numerous Rulings to the ninth edition.
- (c) New materials and installation techniques developed since the publication of the ninth edition.

In addition, during the preparation of this edition consideration was given to the published sections of IEC 364 containing internationally agreed requirements for the electrical installations of buildings.

Work on the preparation of this edition commenced in June 1989 with a call for comment on the ninth edition by means of appropriate announcements in the technical press. The comment received was considered in detail by a number of State and specialist subcommittees after which preliminary drafts were prepared.

A draft for comment was prepared which was not only circulated to Committee EL/1, its subcommittees and other interests, but was also made available to the general public to encourage comment from individuals who made use of AS 3000. The large number of comments received were then considered by the subcommittees, after which a postal ballot was prepared by and circulated to Committee EL/1 in February 1991 for ratification. At a meeting of Committee EL/1 held in May 1991 the postal ballot draft was formally ratified and all matters arising from the ballot were resolved.

The presentation of this edition has not changed from the ninth edition after Committee EL/1 decided to retain the format which involved an arrangement of text into different typefaces to indicate the nature of different material. This format was adopted in order to render the Standard more readable and understandable. The order of sections, and in most cases clauses, is unchanged. This concept received wide support at the draft for comment stage and thus was adopted for the published Standard. An explanation of this presentation is contained in the Foreword.

Even though AS 3008.1 gives detailed information on cable selection, Appendix B has been retained for conductor sizes and installation methods which would generally be applicable to domestic and small commercial/industrial installations.

An electric shock survival chart has been included, however it must be emphasized that the information is provided only for guidance. It is recommended that persons associated with the installation or repair of electrical installations obtain training in resuscitation methods.

The SAA Wiring Rules are applied throughout Australia by means of State and Territory Acts and Regulations. In general these Acts and Regulations specify compliance with the Rules; however, because of local requirements, some variation to specific clauses may be called for by means of these Acts and Regulations.

As Clause 1.3.1.1 requires all material and equipment used in an installation to comply with Approval and Test Specifications or the safety requirements of other Standards, cross-references to these Standards have generally not been included.

This Standard requires reference to a number of Australian Standards and other publications as listed in Appendix A.

Where ratings for cables with imperial dimensions are required, reference should be made to Supplement No 1 (1991) which is available as a separate booklet.

The attention of users of this volume is drawn to the separate booklet Doc. 3000 N, *Notes on Changes in the SAA Wiring Rules* - Tenth Edition (AS 3000—1991) as compared with the ninth edition (AS 3000—1986) which may be obtained from the various offices of Standards Australia.

Attention is also drawn to the issue of Doc. 3000 R, *Rulings to the SAA Wiring Rules*. Where a Ruling has been issued on a particular clause, a special symbol has been placed in the margin adjacent to the clause. The Rulings are available from Standards Australia through a subscription service or by individual purchase; the subscription service is a single charge for the issue of Rulings for the life of this edition of AS 3000. Enquiries should be directed to Standards Australia.

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# STANDARDS AUSTRALIA

## Australian Standard

### Electrical installations—Buildings, structures and premises

#### FOREWORD

**Application of different typefaces.** There are four different typefaces used in this Standard and each of these has a specific purpose. The typefaces and their application are as follows:

- (a) **Bold print.** These are opening statements defining the fundamental principle and are generally positioned at the beginning of a clause or major part of a section.
- (b) Normal print. These are mandatory requirements which form the substance of a clause in that they indicate certain methods which satisfy the essential requirements.
- (c) *Italic print.* These are exceptions or variations to mandatory requirements. These generally give specific examples where the essential requirements do not apply or where they are varied for certain applications.
- (d) Reduced normal print. These are explanatory notes which may give advice. They are preceded by 'NOTE' in the manner used in previous editions.

It is important not to read any single typeface by itself as the preceding or following paragraphs may contain additional or modifying requirements.

**Cross-references.** Throughout this Standard, where reference to another clause or portion of a clause has been made to avoid repetition, such reference, unless otherwise stated, shall include all appropriate subclauses and paragraphs of the clause or portion thereof referred to.

**Rulings and interpretations.** Rulings and interpretations applicable throughout the Commonwealth will be given by Committee EL/1, Wiring Rules, of Standards Australia. This committee is represented in all States by Wiring Rules subcommittees, each of which is empowered to interpret the Wiring Rules as applying to specific questions arising within the particular State concerned and to recommend to Committee EL/1 the issue of Rulings in the 3000 R series of documents.

**Provision for revision.** This Standard necessarily deals with existing conditions, but it is not intended to discourage invention or to exclude materials, equipment and methods which may be developed in the future. Revisions will be made from time to time in view of such developments and amendments to this edition will be made only where absolutely necessary. It is expected that the next edition will be issued approximately 5 years from the publication date of this edition.