AS 3000 Supplement 1—1991

Electrical installations—Buildings, structures and premises—Cable and conductor tables (Imperial units)

(Supplement to AS 3000—1991)

STANDARDS AUSTRALIA

This Supplement was prepared by Committee EL/1, Wiring Rules. It was approved on behalf of the Council of Standards Australia on 16 September 1991 and published on 9 December 1991.

The following interests are represented on Committee EL/1:

Association of Consulting Engineers, Australia
Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Department of Administrative Services
Electrical contractors associations of Australia
Electrical regulatory authorities
Electrical Trades Union of Australia
Electricity Supply Association of Australia
Institute of Electrical Inspectors
Institute of Engineers, Australia
Insurance Council of Australia
Telecom Australia

Additional interests participating in preparation of Standard:

Major users
State Government departments and instrumentalities
State professional associations
State trade associations

For history before 1976 see Preface.
AS 3000.1 Supplement 1 first published 1976.
Revised and redesignated AS 3000
Supplement 1—1981.
Second edition 1986.
Third edition 1991.

PREFACE

This Supplement was prepared by the Standards Australia Committee on Wiring Rules to supersede Supplement 1 (1986) to AS 3000—1986.

However, the information contained herein is the same as in Supplement 1 to AS 3000—1986.

Previous editions of AS 3000 in 1976 and 1981 have had this supplement bound together in one volume. In this edition it has been published as a separate booklet as it is now over 15 years since metric cables came into common use and therefore the need for data on imperial cables is reduced.

Before 1976 the tables were published as an appendix to the Wiring Rules and date back to AS CC1 of 1931.

LIST OF TABLES

STANDARDS AUSTRALIA

Australian Standard

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1 SCOPE. This Supplement to AS 3000 contains cable and conductor tables in imperial units intended for use during the period when both imperial and metric cables are available. The ratings are also intended for use when alterations and additions are made to existing installations having imperial cables.

NOTES:

1 The information contained in the tables is essentially the same as in Appendix B of the 1969 edition of AS 3000 (AS CC1, Part 1—1969), Supplement 1 of the 1976 edition, Supplement 1 of the 1981 edition and Supplement 1 to the 1986 edition.

2 For cables and methods of installation not included in the tables, reference should be made to Report HT 183, issued by ERA Technology Limited, United Kingdom.

2 TYPES OF CONDUCTOR. The following tables, unless stated otherwise, refer to conductors of high-conductivity copper.

3 CURRENT RATINGS FOR ALUMINIUM CONDUCTORS. The current carrying capacity of aluminium conductors shall be taken as 80 percent of that given in the following tables for copper conductors of equivalent cross-sectional area except where specific values are included for aluminium conductors.

4 METRIC CONVERSION FACTORS. The dimensions given in the following tables are in imperial units. The following conversion factors may assist where measurements have been made in metric units:

Mass	1.0 lb	= 0.454 kg
Length	1.0 in	= 25.4 mm
	1.0 ft	= 0.305 m
	1.0 yd	= 0.914 m
Area	1.0 sq in	= 645 mm^2
Voltage drop	1.0 volt per ampere per 100 ft route length	= 32.8 mV/A.m

5 EFFECT OF BULK THERMAL INSULATION. The requirements concerning the effect of thermal insulation contained in Clause 2.2.2.2 shall be applied to imperial cables having a size of 7/.036 or larger.