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ELECTRICAL INSTALLATIONS— MARINAS AND PLEASURE CRAFT AT MAINS VOLTAGE



STANDARDS ASSOCIATION OF AUSTRALIA
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Association of Consulting Engineers, Australia
Australian Electrical Manufacturers Association
Confederation of Australian Industry
Department of Housing and Construction
Electrical Contractors Associations of Australia
Electrical Trades Union of Australia
Electricity regulatory authorities
Electricity Supply Association of Australia
Institute of Electrical Inspectors
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AUSTRALIAN STANDARD

**ELECTRICAL INSTALLATIONS—
MARINAS AND PLEASURE
CRAFT AT MAINS VOLTAGE**

AS 3004—1983

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PREFACE

This edition of this standard was prepared by a special subcommittee of the Association's Committee on Wiring Rules to supersede AS 3004—1979. Its preparation results from experience in the use of the first edition and developments in electrical installation practice.

The first edition of the standard was originally prepared following requests from electrical contractors, consultants, marina operators and inspecting authorities associated with the electrical installations of pleasure craft and floating vessels and of marinas.

Sections 1 and 2 of this standard are intended for application in terms of AS 3000, SAA Wiring Rules, and this edition is intended to become applicable from the date of publication. It is assumed, however, that Statutory and Supply authorities will exercise discretion in any case where immediate application of a particular requirement additional to AS 3000 would cause hardship, and in general a period of not less than 6 months from the date of publication is suggested before a particular requirement is applied on a mandatory basis.

The committee acknowledges that the connection of a shore supply earth conductor to the structure of the boat may introduce or accelerate the galvanic and electrolytic corrosion (electrolysis) of hulls and skin fittings. For this reason, the standard offers alternative methods of supply but does not specify which method shall be used.

While the scope of the standard does not refer to an extra-low voltage system on the boat, reference is made to it in Section 3 to ensure that the safe isolation between the low voltage and extra-low voltage systems is maintained.

In the preparation of this standard, consideration was given to IEC 585-1, Electrical Installation Guide — Caravans, Boats and Yachts.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

**ELECTRICAL INSTALLATIONS—MARINAS AND PLEASURE CRAFT AT
MAINS VOLTAGE**

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard sets out requirements for electrical installations in pleasure craft intended for use with low voltage supply systems (normally exceeding 32 V a.c. but not exceeding 250 V a.c.) and for the electrical installations of marinas providing facilities for such connections.

NOTES:

1. This standard is intended to apply to boats where electricity is used mainly for domestic purposes. However, electrical installations in large boats and in marinas providing facilities for such connection should comply in principle with this standard and with AS 3000. Some special requirements may be necessary because of the nature of the equipment used in these boats and marinas, and such requirements will be the subject of consideration by the organizations and authorities concerned.
2. This standard does not call for specific instruction notices to be provided either on a boat or on the marina. However, it is recommended that the marina operator provide each boat operator intending to connect his boat to the marina supply with a copy of an instruction notice containing at least the information set out in Appendix A or Appendix B, as appropriate.

1.2 APPLICATION. Electrical installations in boats and marinas shall be carried out in accordance with the appropriate requirements of AS 3000, except as varied herein, and with the applicable additional requirements of this standard.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1074	Steel Tubes and Tubulars Threaded or Suitable for Threading with Pipe Threads of Whitworth Form
AS 1799	SAA Small Boats Code
AS 1939	Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment

AS 2053	Non-metallic Conduits and Fittings
AS 3112	Approval and Test Specification for Plugs and Plug Socket
AS 3120	Approval and Test Specification for Cord Extension Sockets
AS 3126	Approval and Test Specification for Extra-low Voltage Transformers
AS 3167	Approval and Test Specification for Protective Isolating Transformers
AS 3190	Approval and Test Specification for Core-operated (Core Balance) Earth Leakage Devices
AS 3191	Approval and Test Specification for Electric Flexible Cords
AS 3199	Approval and Test Specification for Cord Extension Sets
AS 3109	Approval and Test Specification for Appliance Plugs and Appliance Inlet-sockets

1.4 DEFINITIONS. For the purpose of this standard the following definitions apply:

1.4.1 Pleasure craft—any boat, vessel, yacht, motor launch, houseboat or other floating craft used for pleasure purposes.

NOTE: Throughout this standard, the word 'boat' is used to mean 'pleasure craft' as above defined.

1.4.2 Marina—any wharf, jetty, pier or floating pontoon arrangement capable of accommodating more than one pleasure craft.