## Australian/New Zealand Standard™

# **Electrical installations—Marinas and boats**

Part 1: Marinas





#### AS/NZS 3004.1:2014

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-057, Boating and Boating Marinas Installations. It was approved on behalf of the Council of Standards Australia on 7 May 2014 and on behalf of the Council of Standards New Zealand on 6 June 2014.

This Standard was published on 27 June 2014.

The following are represented on Committee EL-057:

Australian Corrosion Association
Australian Industry Group
Boating Industries Alliance of Australia
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Electrical Safety Organisation, New Zealand
Energy Networks Association
Marina Industries Association of Australia
Marine Queensland
New Zealand Marina Operators
New Zealand Motor Caravan Association

### Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 3004.1.

AS/NZS 3004.1:2014

### Australian/New Zealand Standard™

## **Electrical installations—Marinas and boats**

Part 1: Marinas

Originated in Australia as part of AS 3004—1979.
Originated in New Zealand as part of AS/NZS 3004:2002.
Previous edition AS/NZS 3004.1:2008.
Second edition 2014.

### COPYRIGHT

© Standards Australia Limited/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

### **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-057, Boating and Boating Marinas Installations, to supersede AS/NZS 3004.1:2008, *Electrical installations—Marinas and recreational boats*, Part 1: Marinas.

Compliance with this Standard may be required by legislation, from a date to be set by the relevant regulating authority.

This Standard is part of a series, which includes the following:

#### AS/NZS

3004 Electrical installations—Marinas and boats

3004.1 Part 1: Marinas (this Standard)

3004.2 Part 2: Boat installations

The objective of this Standard is to specify safety requirements for electrical installations associated with marinas.

It is not the intention of this Standard to limit the introduction and use of emerging technologies. However, designers are reminded that it is essential that the basic tenets of electrical and marine safety be addressed before any other equipment and installation design elements are considered.

Any requirements that may be applicable in Australia only and New Zealand only are indicated in the text and by a symbol in the right margin as follows:

'In Australia'	A
'In New Zealand'	NZ

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

### CONTENTS

		Page
SECTION	ON 1 SCOPE AND GENERAL	
1.1	SCOPE	4
1.2	APPLICATION	
1.3	REFERENCED DOCUMENTS	
1.4	DEFINITIONS	
1.5	ALTERATIONS, ADDITIONS AND REPAIRS	
1.6	MARINE ENVIRONMENT ELECTRICAL SAFETY CONSIDERATIONS	
1.7	MINIMIZATION OF GALVANIC CORROSION	
1.8	ACCEPTABLE METHODS OF CONNECTION TO BOATS	
1.9	BERTHING INSTRUCTIONS FOR CONNECTION TO THE MARINA	
1.7	LOW-VOLTAGE ELECTRICAL SUPPLY	7
CECTI	ON 2 MARINA ELECTRICAL INSTALLATIONS	
2.1	WIRING DETAILS	0
2.1	MAXIMUM DEMAND OF MAINS AND SUBMAINS	
	ISOLATING TRANSFORMERS	
2.3 2.4	SWITCHBOARDS PROVIDING LOW-VOLTAGE ELECTRICAL SUPPLY	
2.4	TO BOATS	
2.5	OTHER SOCKET-OUTLETS	
2.5	OTHER SOCKET-OUTLETS	12
SECTION	ON 3 CONNECTION OF BOATS TO A MARINA LOW-VOLTAGE ELECTR	ICAI
	LLATION	ICAL
3.1	SUPPLY LEAD	13
3.1	INSTALLATION OF SUPPLY LEAD	
3.2	EARTHING	
3.3	LAKTHING	14
SECTION	ON 4 NEW INSTALLATIONS OR ADDITIONS	
4.1	GENERALGENERAL	15
4.2	PERIODIC VERIFICATION—AUSTRALIA	
4.3	PERIODIC VERIFICATION—AUSTRALIA  PERIODIC VERIFICATION—NEW ZEALAND	
7.5	TERIODIC VERIFICATION—NEW ZEALAND	13
APPEN	IDICES	
A	BERTHING INSTRUCTIONS FOR CONNECTION TO THE MARINA LOW	<b>_</b>
11	VOLTAGE ELECTRICAL SUPPLY THROUGH A SHORE-MOUNTED	
	ISOLATING TRANSFORMER	17
В	BERTHING INSTRUCTIONS FOR CONNECTION TO THE MARINA LOW	
Ъ	VOLTAGE ELECTRICAL SUPPLY THROUGH AN ON-BOARD ISOLATIN	
	TRANSFORMER OR WITHOUT AN ISOLATING TRANSFORMER	
С	MARINA LOW-VOLTAGE ELECTRICAL SUPPLY CONFIGURATIONS	
D	CALCULATION OF MAXIMUM DEMAND	
E	SAMPLE CERTIFICATION OF VERIFICATION—NEW ZEALAND ONLY	
Ľ	SAMELL CENTIFICATION OF VENITICATION—NEW ZEALAND UNLI	43



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--	-------------------------	--------------	--------------------	--------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation