AS/NZS 3003:2003

Australian/New Zealand Standard™

Electrical installations – Patient areas of hospitals, medical and dental practices and dialyzing locations

Superseding AS/NZS 3003:1999

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

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During the development process, Australian/New Zealand Standards are made available in draft form at all sales offices, via both Standards Australia's and Standards New Zealand's websites, and through affiliated overseas bodies in order that all interests concerned with the application of a proposed Standard are given the opportunity to submit views on the requirements to be included.

The following are represented on the committee responsible for this Australian/New Zealand Standard:

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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 Standards may also be withdrawn.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 that 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 New Zealand website at www.standards.co.nz or the Standards Australia website at www.standards.com.au and looking up the relavant Standard in the on-line catalogue. Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards New Zealand and Standards Australia offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvements 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 New Zealand or Standards Australia International at the address shown on the title page.

This Standard was issued in draft form for comment as DR 01957 in Australia and in New Zealand.

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Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020.

ISBN 0 7337 3648 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee HT/21, Wiring of Medical Treatment Areas in Hospitals to supersede AS/NZS 3003:1999. It was approved by the Council of Standards Australia on 30 May 2003 and on behalf of the Council of Standards New Zealand on 15 May 2003. It was published on 30 June 2003.

It specifies special requirements for electrical installations in PATIENT AREAS of hospitals, medical and dental practices and dialyzing locations. These requirements are additional to those specified in AS/NZS 3000 and the New Zealand Electricity Regulations.

Advice on whether particular PATIENT AREAS should be wired as BODY-PROTECTED or CARDIAC-PROTECTED ELECTRICAL AREAS is set out in AS/NZS 2500, *Guide to the safe use of electricity in patient care*. The governing body or proprietor of the health care facility should refer to the safe practice code in AS/NZS 2500 for advice on how these decisions should be based on the type of procedures undertaken in each area and the level of protection afforded in the MEDICAL ELECTRICAL EQUIPMENT available for these procedures.

This Standard is intended to apply only to installations (or alterations or additions thereto) made or carried out after the date on which the Standard is published. However, it is strongly recommended that hospital management carefully evaluates the procedures undertaken within existing installations and take steps to implement the appropriate electrical safety requirements specified herein for areas that are used for CARDIAC-TYPE PROCEDURES or for procedures involving the regular use of MEDICAL ELECTRICAL EQUIPMENT.

While this Standard is intended to apply to new installations or extensions, some guidance is given concerning conversion of older installations.

Major changes in the 2003 edition include the following:

- All PATIENT AREAS are required to be BODY-PROTECTED or CARDIAC-PROTECTED ELECTRICAL AREAS (refer 2.1);
- Colour coding requirements are included for normal 10, 15 and 20 A socket-outlets (refer 2.6.3.2);
- Minimum lettering sizes are specified for some marking requirements (refer 2.10.1);
- This edition emphasizes that decisions about which PATIENT AREAS should be wired as CARDIAC-PROTECTED ELECTRICAL AREAS must be made by the governing body or the proprietor of the institution and based on clinical advice (refer 1.1);
- "0.01 Ω EP earthing systems" as specified in the 1974 and 1985 editions, and as one of the options in the 1999 edition, are no longer specified for new CARDIAC-PROTECTED ELECTRICAL AREAS. However, alterations to existing CARDIAC-PROTECTED ELECTRICAL AREAS with "0.01 Ω EP earthing systems" must be made using the same type of EP earthing system (refer 4.4.2.1 and Appendix I).

The layout of this Standard has been changed from the 1999 edition as follows:

- Requirements that are common to BODY-PROTECTED and CARDIAC-PROTECTED ELECTRICAL AREAS are set out in Section 2 – General requirements for BODY-PROTECTED and CARDIAC-PROTECTED ELECTRICAL AREAS.

- Requirements that only relate to BODY-PROTECTED ELECTRICAL AREAS are set out in Section 3 – Additional requirements for BODY-PROTECTED ELECTRICAL AREAS.

- Requirements that only relate to CARDIAC-PROTECTED ELECTRICAL AREAS are set out in Section 4 – Additional requirements for CARDIAC-PROTECTED ELECTRICAL AREAS.

The terms ‘normative’ and ‘informative’ are used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of the standard whereas an ‘informative’ appendix is only for information and guidance.