

Australian/New Zealand Standard™

**Electrical installations –
Electric fences**

AS/NZS 3014:2003

This Joint Standard was prepared by the Joint Technical Committee EL/021, Installation of Electric Fences. It was approved on behalf of the Council of Standards Australia on 14 March 2003, and by the Council of Standards New Zealand on 5 March 2003. It was published on 14 March 2003.

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

Australian Chamber of Commerce and Industry
Australian Dairy Farmers' Federation
Consumers' Federation of Australia
Electrical Safety Organisation
Farmsafe Australia
Federated Farmers New Zealand
Ministry of Economic Development, New Zealand
New Zealand Electric Fence Energizers Manufacturers
Standards Working Group
Office of the Chief Electrical Inspector, Victoria
Telecom New Zealand

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Australian/New Zealand Standard™

Electrical installations – Electric fences

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FOREWORD

This Joint Standard was prepared by the Joint Technical Committee EL/021, Installation of Electric Fences, to supersede AS 3014:1991 on publication.

This Standard was revised to update the technical requirements and to publish it as a joint Australia/New Zealand Standard. Two informative Appendices have been added detailing acceptable means of compliance and methods for the prevention of interference with communication lines.

The Standard is intended to complement AS/NZS 3350:1998, Safety of household and similar electrical appliances Part 2.76: Particular requirements – Electric fence energizers

In the preparation of this Standard reference was made to a draft document on the international requirements for the installation and operation of electric fences, obtained from IEC Committee SC 61H-Safety of Electrically Operated Farm Appliances.

In this Standard, the use of the word:

‘May’ indicates the existence of an option;

‘Shall’ indicates that a statement is mandatory;

‘Should’ indicates a recommendation.

This Standard specifies performance-based requirements for the installation and operation of electric fences, however there could be regulatory or local government requirements that may apply. Appendix A provides a means of compliance with specific clauses of the Standard or gives additional information.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Electrical installations – Electric fences**

1 SCOPE

This Standard sets out requirements for the installation and operation of electric fences and the connection to associated equipment both outdoors and indoors.

It covers electric fences powered by energizers supplied from all types of electric power sources such as batteries, solar cells, diesel or petrol generators, and the electricity supply mains.

NOTE – This Standard does apply to equipment not forming part of the electric fences, such as:

- (a) Cattle prods;
- (b) Electric fence energizers;
- (c) Electric fishing machines;
- (d) Animal stunning equipment;
- (e) Meat stimulating equipment.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS 3350:1998, Safety of household and similar electrical appliances Part 2.76: Particular requirements – Electric fence energizers

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

3.1 Building element – Any structural or non-structural component or assembly incorporated into or associated with a building. Included are fixtures, services, drains, permanent mechanical installations for access, glazing, partitions, ceilings and temporary supports.

3.2 Connecting lead – An electric conductor, used to connect the energizer to the electric fence or the earth electrode.

3.3 Earth electrode – Metal structure intended to provide effective electrical contact with earth that is driven into or is in the ground and connected electrically to the output earth terminal of the energizer, and that is independent of other earthing arrangements.

3.4 Electric fence – A barrier used to contain animals within or exclude animals from a particular area that includes one or more electric conductors, insulated from earth, to which regular electric pulses are applied by an energizer.

3.5 Energizer – Appliance that is intended to periodically deliver voltage impulses to a fence connected to it.

3.6 Feeder – Section of the electric fence supplying a number of branches.

3.7 Fence circuit – All conductive parts or components in a fence system, that are connected or



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