



Guide to Standards - Household Electrical Equipment

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and Certification**

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Introduction

This guide provides information on Standards, Certification schemes and other industry specific knowledge that may be of interest to electricians as well as manufacturers, importers, suppliers, installers and purchasers of household and related types of electrical equipment.

You can find Standards relevant to the electronics industry via the SAI Global [Infostore](#) Subject Area [Electrical Engineering](#). Here, the preface, table of contents, foreword and scope of most Australian Standards are available.



Two invaluable resources applying to the household electrical equipment industry are [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#) and [AS/NZS 60335.1:2002, Household and similar electrical appliances - Safety - General requirements \(IEC 60335-1 Ed 4.2, MOD\)](#). These are mentioned constantly throughout this guide.

Disclaimer: The information contained in these pages is provided by way of indicative guidance only and SAI Global Limited does not represent that it is accurate or complete or suitable for any particular specific purposes. The onus remains with users to satisfy themselves of their requirements and needs for their own particular circumstances.

General Information

Regulatory Definitions

A list of regulatory definitions for household and related types of electrical equipment is included in [AS/NZS 4417.2:2012, Regulatory compliance mark for electrical and electronic equipment - Specific requirements for particular regulatory applications](#).

Contact your State or Territory electrical regulators for more detailed information on regulatory definitions for different types of household and related types of electrical equipment.

Electrical equipment not listed in [AS/NZS 4417.2:2012](#) should also be designed to conform to the information that is included in [AS/NZS 3820:2009, Essential safety requirements for electrical equipment](#).

Safety

General information covering safety requirements for electrical equipment is included in [AS/NZS 3820:2009, Essential safety requirements for electrical equipment](#). This Standard is based on information that is included in the [European Union Directive 2006/95/EC](#) (also known as the European Low Voltage Directive). Electrical equipment manufactured overseas may have been approved to this European Low Voltage Directive. The European [CE Conformity Marking](#) scheme is used to arrange approvals to the European Union Low Voltage Directive. A summary of fundamental safety principles for low voltage electrical equipment is also included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#).

Electrical safety Standards for specific types of household and similar types of electrical equipment are primarily covered by the [AS/NZS 60335, Household and similar electrical appliances Series](#). The electrical safety and laboratory tests in these Standards refer to details that are included in [AS/NZS 60335.1:2002, Household and similar electrical appliances - Safety - General requirements \(IEC 60335-1 Ed 4.2, MOD\)](#). This Standard is a modified edition of [IEC 60335-1 Ed 4.2](#) and [EN 60335-1:2003](#).

A WHS Management Plan is useful for Contractors and Sub-Contractors and is a requirement of the Work Health & Safety Regulations 2011 (s309, Part 6.4) for construction projects over \$250,000. The Plan has been developed by Safety Culture Pty Ltd in accordance with the Work Health & Safety Act 2011 and Work Health & Safety Regulations 2011.

To help you maintain compliance and safely manage your construction sites, the Work Health and Safety Management Plan provides the basis for building your own tailored organizational plan. It includes many documents, including:

- WHS Roles and Responsibilities
- SWMS Checklist
- Site Induction Checklist
- Plant Hazard Checklist
- Plant and Equipment Register
- Incident Report Form
- Emergency Plan

Please visit the SAI Global InfoStore for more information about the [Work Health and Safety Managent Plan](#).

Electrical Drawings

Conventions used to design electrical drawings are included in the [AS/NZS 1102, Graphical symbols for electrotechnical documentation Series](#). An index of symbols used with electrical drawings is included in [AS 1102.101-1989, Graphical symbols for electrotechnical documentation - General information and general index](#).

Commonly used drawing symbols for electrical equipment (e.g. plugs, sockets, proximity switches, contact switches, limit switches and fuses) are included in [AS/NZS 1102.107:1997, Graphical symbols for electrotechnical documentation - Switchgear, controlgear and protective devices](#). Location symbols for power supply systems, security systems and electrical services are included in [AS/NZS 1102.111:1997, Graphical symbols for electrotechnical documentation - Architectural and topographical installation plans and diagrams](#).

Manufacturers, importers and suppliers of household electrical equipment may also require information on different types of circuit diagrams. Detailed examples are included in [HB 3:1996, Electrical and electronic drawing practice for students](#).

Insulation Classes

Requirements for different types of insulation classes are defined in [AS/NZS 3000:2007, AS/NZS 60335.1:2011](#) and [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Marking Household Electrical Equipment

Household and related types of electrical equipment shall be marked by following the information provided by the relevant electrical safety regulator, or the appropriate testing and certification body. Please contact SAI Global Product Services for information on their certification and testing schemes.

Electrical equipment being assessed and approved by electrical regulators shall be marked by following the information contained in the [AS/NZS 4417, Regulatory compliance mark for electrical and electronic equipment Series](#).

General information on marking requirements for household and related types of electrical equipment is included in [AS/NZS 60335.1:2011](#) and [AS/NZS 3820:2009](#), Manufacturing standards for different types of electrical equipment also include information on marking and labelling information.

Examples of symbols commonly used to identify electrical equipment are included in the [AS 60417.1-2004, Graphical symbols for use on electrical equipment – Overview and application](#).

Flammability Tests

Ball pressure tests, glow-wire tests and needle flame tests are commonly used to test flammability levels for materials used to manufacture electrical equipment. Electrical equipment supplied in Australia and New Zealand should conform to the flammability tests included in [AS/NZS 60335.1:2011, Household and similar electrical appliances - Safety - General requirements \(IEC 60335-1 Ed 4.2, MOD\)](#). These types of tests are also included in the [AS/NZS 60695, Fire hazard testing - Guidance for assessing the fire hazard of electrotechnical products Series](#).

Wiring Electrical Equipment

Fixed wiring requirements for electrical equipment using single-phase (240 volts) and three-phase (415 volt) circuits are included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#). Household and related types of electrical equipment are used on single-phase circuits and operate at 240 volts.

Voltages

Information on voltages and voltage tolerances for low voltage electrical equipment is included in [AS 60038-2000, Standard voltages](#). This Standard is a modified edition of [IEC 60038 Ed 6.0](#).

Information on the effects electrical current have on the human body and livestock is described in [AS/NZS 60479.1:2010, Effects of current on human beings and livestock - General aspects](#) and [AS/NZS 60479.2:2002, Effects of current on human beings and livestock - Special aspects](#). These Standards are identical to [IEC/TS 60479-1 Ed 4.0](#) and [IEC/TS 60479-2 Ed 2.0](#).

Electromagnetic Compatibility (Radio Interference) Standards

The types of products and equipment described in this guide are categorized under the types of electromagnetic compatibility Standards listed below. Immunity, emission and harmonic requirements for different types of electrical and electronic equipment can be determined by completing the tests that are included in the [AS/NZS 61000, Electromagnetic compatibility \(EMC\) Series](#). These Standards are identical to the [IEC 61000](#) and [EN 61000](#) series. The International Standards referenced below are published with CISPR designations.

Imported electrical equipment sold and distributed in Australia may have been previously been tested to European Standards that are harmonized under the [European Electromagnetic Compatibility Directive](#). If this is the case, the equipment may not need to be re-tested to conform to relevant Australian Standards.

Marking requirements for electrical equipment assessed by electrical regulators to electromagnetic compatibility Standards are included in [AS/NZS 4417.3:2009, Marking of electrical and electronic products to indicate compliance with regulations – Specific requirements for electromagnetic compatibility regulatory applications](#)

Household and Related Types of Electrical Equipment

Information on electromagnetic compatibility for household and related types of electrical and electronic equipment is included in [AS/NZS CISPR 14, Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus Series](#). These Standards are identical to the Standards below:

- [CISPR 14-1 Ed 5.2](#)
- [CISPR 14-2 Ed 1.2](#)
- [EN 55014 Series](#)

Lighting Products and Lighting Equipment

The Australian/New Zealand electromagnetic compatibility Standard for electrical lighting and similar types of products is [AS/NZS CISPR 15:2011, Limits and methods of measurement of radio characteristics of electrical lighting and similar equipment](#). This Standard is a modified edition of the International and European Standards below:

- [CISPR 15 Ed 7.2](#)
- [EN 55015:2006](#)

Sound, Television and Broadcasting Receivers

Information on electromagnetic compatibility and radio interference for sound, television and broadcasting receivers is included in:

- [AS/NZS CISPR 13:2012, Sound and television broadcasting receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement](#)
- [AS/NZS CISPR 20:2009, Sound and television broadcast receivers and associated equipment – Immunity characteristics – Limits and methods of measurement](#)

These Standards are identical to the following International and European Standards:

- [CISPR 13 Ed 5.0](#)
- [EN 55013:2013](#)
- [CISPR 20 Ed 6.0](#)
- [EN 55020:2007](#)

Information Technology Equipment

The electromagnetic compatibility and radio interference Standards for information technology and related types of equipment is [AS/NZS CISPR 22:2009, Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement](#).

The International and European Standards listed below are identical to this Standard:

- [CISPR 22 Ed 6.0](#)
- [EN 55022:2010](#)

Ingress Protected (IP) Rated Enclosures

Ingress Protection (IP) ratings cover environmental tests for electrical enclosures. Test methods covering IP ratings are included in [AS 60529-2004, Degrees of protection provided by electrical enclosures \(IP Code\)](#). This Standard is identical to [IEC 60529 Ed 2.1](#).

Ingress protection ratings are expressed in terms of 3 numbers:

1. The first number is used to specify the levels of protection electrical enclosures have against foreign objects and dust
2. The second specifies protection ratings for enclosures and their levels of protection against moisture
3. The third covers mechanical impact ratings for electrical enclosures

Tables listing IP ratings for electrical enclosures are included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#). This Standard also includes information that covers IP ratings for electrical equipment used in baths, showers and other types of fixed water containers.

IP ratings vary for products which may come in contact with high levels of water or foreign objects, for more information on IP ratings for these products please refer to the sections [Electrical Equipment used in Bathrooms](#), [General Heating Appliances](#) and [Lighting](#) (specifically [Outdoor Lighting Products](#)) included in this guide.

Energy Ratings

Energy efficiency Standards also known as Minimum Energy Performance Standards (MEPS) for electrical equipment are regulated by the [Equipment Energy Efficiency \(E₃\) Committee](#).

For more information on energy efficiency Standards for specific products please refer to the sections listed below:

- [General Household Electrical Appliances](#)
- [White Goods](#)
- [Heating Appliances](#)
- [Transformers \(Power Supplies\)](#)
- [Lighting](#)

Manufacturers of imported electrical equipment may have completed CE Conformity Marking to the [European Union Directive 2005/32/EC](#) (also known as the Energy Using Products (EuP) directive).

Acoustic Tests

Noise levels for household and related types of electrical equipment can be measured by following the tests that are included in the [AS/NZS 60704 Series](#). There are equivalent [International](#) and [European](#) Standards on this topic.

Electrical Accessories

Appliance and Wall Switches

Mechanical switches, electronic step-down converters, electronic switches and semiconductor switching devices built into appliances should be tested to [AS/NZS 61058.1:2008, Switches for](#)

[appliances - General requirements \(IEC 61058-1, Ed. 3.1 \(2000\), MOD\)](#) (which is a modified edition of [IEC 61058-1 Ed 3.1](#) and [EN 61508-1:2002](#)). Marking requirements for different types of switches can also be found in this Standard.

Proximity switches used with electrical appliances should be tested to [AS 60947.5.2-2004, Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Proximity switches](#) (which is identical to [IEC 60947-5-2 Ed. 3.0](#) and [EN 60947-5-2:2008](#)). This Standard also references tests that are included in [AS 60947.1-2004, Low-voltage switchgear and controlgear - General rules](#) (which is identical to [IEC 60947-1 Ed 5.0](#) and [EN 60947-1:2007](#)). Marking requirements for proximity switches is also included in this Standard.

Air-break switches used with appliances should be tested to the requirements described in [AS/NZS 3133](#). Previous editions of the standard may still be enforced by State/Territory electrical safety regulators.

Switches connected to flexible cords used with appliances should be tested and marked according to [AS/NZS 3127:2005, Approval and test specification - Cord-line switches](#). This Standard refers to tests that are included in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Wiring and Installation Standards

Fixed wiring requirements for wall switches are covered by relevant sections of [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#). Switches used with electrical equipment located in damp situations should be installed by following the details outlined in this Standard.

Circuit-breakers

Circuit-breakers (or Miniature Overcurrent Circuit-breakers) are commonly used with household and related types of electrical equipment and can be tested to [AS/NZS 3111:2009, Approval and test specification - Miniature overcurrent circuit-breakers](#) and [AS/NZS 60898.2:2004, Circuit-breakers for overcurrent protection for household and similar installations - Circuit-breakers for a.c. and d.c. operation \(IEC 60898-2 Ed. 1.1 \(2003\) MOD\)](#) (which is a modified edition of [IEC 60898-2 Ed 1.1](#) and [EN 60898-2:2006](#)).

Detailed descriptions for circuit-breakers are included in [AS/NZS 4417.2:2012, Marking of electrical and electronic products to indicate compliance with regulations - Specific requirement for electrical safety regulatory applications](#).

Manufacturing Standards

Electrical safety tests for all types of low voltage circuit-breakers (including integrally fused circuit-breakers and circuit-breakers not providing overcurrent protection) are included in [AS 60947.2-2005, Low-voltage switchgear and controlgear- Circuit-breakers](#). Marking requirements for circuit-breakers are also included in this Standard.

Marking requirements and tests for overcurrent circuit breakers tested to [AS/NZS 3111:2009, Approval and test specification - Miniature overcurrent circuit-breakers](#) are included in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Information on earth-loop impedance and disconnection times for miniature overcurrent circuit-breakers is included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#).

Diagrams for different types of circuit-breakers are included in [BPS 001-2007, Best Practices in Testing & Tagging of Electrical Equipment to AS/NZS 3760](#). This publication also summarises fault-loop impedance procedures that are included in [AS/NZS 3000:2007](#) and [AS/NZS 3017:2007, Electrical installations - Verification guidelines](#).

Safety Switches (Residual Current Devices)

Residual current devices are designed to detect differential currents between active and neutral which are not supplied with electrical equipment. Residual current devices are switches that are supplied with switchboards. The Standards covering this area include:

- [AS/NZS 3190:2009, Approval and test specification - Residual current devices \(current-operated earth-leakage devices\)](#)
- [AS/NZS 61008.1:2004, Residual current operated circuit-breakers without integral protection for household and similar uses \(RCCBs\) - General rules \(IEC 61008-1 Ed. 2.1 \(2002\) MOD\)](#) (which is a modified edition of [IEC 61008-1 Ed 2.1](#) and [I.S. EN 61008-1:2004](#))
- [AS/NZS 61009.1:2004, Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses \(RCBOs\) - General rules \(IEC 61009-1 Ed. 2.1 \(2003\) MOD\)](#) (which is a modified edition of [IEC 61009-1 Ed 2.1](#) and [I.S. EN 61009-1:2004](#))

Residual current devices manufactured in Australia and New Zealand are commonly tested to [AS/NZS 3190:2009](#). Miniature overcurrent circuit-breakers supplied with devices tested to this Standard should meet the requirements in [AS/NZS 3111:2009, Approval and test specification - Miniature overcurrent circuit-breakers](#) which is based on tests covered by [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Imported residual current devices supplied in Australia and New Zealand can be tested to [AS/NZS 61008.1:2004](#) and [AS/NZS 61009.1:2004](#).



A detailed analysis of operational conditions and in-service testing requirements for residual current devices is included in [BPS 0010-2007, Best Practices in Testing & Tagging of Electrical Equipment to AS/NZS 3760](#). Information on leakage current and tripping times for residual current devices is also included in this Manual. It is a recommended publication for manufacturers, importers, suppliers and users of residual current devices.

Wiring and Installation Standards

Fixed wiring arrangements for safety switches (residual current devices) are included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#). General information on electrical wiring requirements for electrical appliances and electrical accessories is also included in this Standard.

Flexible Supply Cords and Cables

PVC Insulated Cords

Information on cords manufactured from PVC insulating materials is included in [AS/NZS 60227.5:2003, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Flexible cables \(cords\)](#). The information contained in this Standard is equivalent to that included in the International Standard [IEC 60227-5](#).

Information on marking requirements for PVC insulated cords is included in [IEC 60227-1 Ed 3.0, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements](#)

Rubber Insulated Cords

Rubber insulated cords supplied and used in Australia should be tested to [AS/NZS 60245.4:2003, Rubber insulated cables – Rated voltages up to and including 450/750 V – Cords and flexible cables](#). This Standard is identical to [IEC 60245-4 Ed 3.0](#). The Australian does not include information on marking requirements for rubber insulated cables. This information is included in [IEC 60245-1 Ed 4.1, Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 1: General requirements](#).

Cords Manufactured from Plastic and Rubber Materials

Cords manufactured from thermoplastic, cross-linked PVC, cross-linked elastomeric, or cross-linked polyolefin insulating materials should be tested to [AS/NZS 3191:2008](#). Electric flexible cords Information contained in this standard are not based on any International or European standards.

Household Plugs and Socket Outlets

Manufacturing Standards

Plugs supplied in Australia and New Zealand should be manufactured from insulated pins. Devices designed to make connections to plugs are classified as socket-outlets. Socket outlets differ from plugs in that they are not manufactured with insulated pins. Put simply, socket-outlets are power points designed to be used with different types of plugs. The term 'General Purpose Outlet' (also known as GPO) can also be used to describe requirements for socket-outlets.

The manufacturing Standard for plugs used with portable appliances is [AS/NZS 3112:2011, Approval and test specification – Plugs and socket-outlets](#). This Standard refers to tests that are included in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Imported plugs may have been tested to [IEC 60884-1 Ed 3.1, Plugs and socket-outlets for household and similar purposes – Part 1: General requirements](#), [IEC 60998-1 Ed 2.0, Connecting devices for low-voltage circuits for household and similar purposes – Part 1: General requirements](#) or [I.S. EN 60998-1:2004, Connecting for Low-voltage Circuits For Household And Similar Purposes - Part 1: General Requirements](#).

Plugs and socket-outlets designed to be used with stationary appliances should be tested and marked according to [AS/NZS 3131:2001, Approval and test specification - Plugs and socket-outlets for stationary appliances](#). This Standard also references tests and marking requirements that are in [AS/NZS 3100:2009](#).

Cord Extension Sockets (Sockets Attached To Cords)

The manufacturing Standard for cord extension sockets is [AS/NZS 3120:1999, Approval and test specification - Cord extension sockets](#). This Standard includes marking details for cord extension sets, a diagram and dimensions for cord extension sockets and refers to tests that are included in [AS/NZS 3100:2009](#). Plugs designed to be inserted into cord extension sockets should be tested to [AS/NZS 3112:2011](#)

Electrical Portable Outlet Devices (Power Boards and Socket-Outlet Adaptors)

Electrical portable outlet devices are connected to the supply by either a power supply cord and a plug, or an appliance inlet. These types of devices are not designed for permanent installation. The manufacturing Standard for electrical portable outlet devices is [AS/NZS 3105:2007, Approval and test specification – Electrical portable outlet devices](#). This Standard also includes marking requirements for these devices and references marking requirements in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Electrical accessories designed to be inserted into socket-outlets (including travel adaptors) should be manufactured to [AS/NZS 3122:2005, Approval and test specification – Socket-outlet adaptors](#).

Information on installation details for electrical portable outlet devices is included in [AS/NZS 3105:2007](#). Installation and connection details for socket-outlet adaptors are included in [AS/NZS 3122:2005](#). Fixed wiring requirements for these types of devices are also included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#).

Appliance Couplers

The term 'appliance coupler' is used to describe connectors and inlets used to connect, or disconnect cords to electrical appliances. Interconnection appliance couplers and sewing machine appliance couplers Standards reference tests that are included in [AS/NZS 60320.1:2004, Appliance couplers for household and similar general purposes – General requirements \(IEC60320-1, Ed. 2.0 \(2001\) MOD\)](#). This Standard includes a diagram which specifies the dimensions for the most commonly used type of coupler (C7). This Standard is also a modified edition of [IEC 60320-1 Ed. 2.1](#) and [I.S. EN 60320-1:2001](#).

Electrical safety and manufacturing requirements for sewing machine appliance couplers are included in [AS/NZS 60320.2.1:2004, Appliance couplers for household and similar general purposes Sewing machine couplers \(IEC 60320-2-1, Ed. 2.0 \(2000\) MOD\)](#). For more information on Standards related to sewing machines, refer to the [Sewing Machines](#) section of this guide.

General information on wiring requirements for electrical appliances and electrical accessories is included in [AS/NZS 3000:2007](#).

Portable Control and Conditioning Devices

There are a number of electrical safety Standards on manufacturing, wiring and electromagnetic compatibility for control and conditioning devices designed to be used with different types of household and related types of electrical equipment.

Some of the common types of portable control devices are:

- Remote control devices
- Timing devices
- Lighting dimmer switches
- Energy regulators

Information on regulatory definitions for different types of control and conditioning devices is included in [AS/NZS 4417.2:2012, Regulatory compliance mark for electrical and electronic equipment - Specific requirements for particular regulatory applications](#)

Manufacturing Standards

Portable control devices used with appliances should be tested to [AS/NZS 3197:2005, Approval and test specification – Portable electrical control or conditioning devices](#). This Standard refers to tests that are included in [AS/NZS 3100:2002, Approval and test specification – General requirements for electrical equipment](#) (which has been superseded by [AS/NZS 3100:2009](#)). Marking details for products tested to [AS/NZS 3197:2005](#) are included in [AS/NZS 3161:2005, Approval and test specification - Thermostats and energy regulators](#) and [AS/NZS 3100:2009](#).

Thermostats supplied with energy regulators should be tested to [AS/NZS 3161:2005, Approval and test specification - Thermostats and energy regulators](#). This Standard also refers to tests that are included in [AS/NZS 3100:2002](#).

Information on methods used to connect portable control and conditioning devices to household electrical equipment and electrical accessories is included in [AS/NZS 3197:2005](#). Fixed wiring details for control devices may be included in [AS/NZS 3000:2007](#).

Transformers (Power Supplies)

This section of the guide provides information on Standards for the types of transformers listed below:

- Energy efficiency tests for magnetic isolating transformers and electronic step-down converters
- Isolating Transformers ([AS/NZS 61558](#) series of standards)
- Transformers used with IT and related types of equipment ([AS/NZS 60950](#))

Energy Efficiency Tests for Magnetic Isolating Transformers and Electronic Step-Down Converters

Energy efficiency tests for magnetic isolating transformers and electronic step-down converters used with extra-low voltage lighting products are included in the [AS/NZS 4879](#) series of Standards. The information contained in these standards is not based on any International or European Standards.

Isolating Transformers

Electrical safety requirements for different types of isolating transformers are included in the [AS/NZS 61558](#) series of standards. The information contained in these codes is identical to International and European Standards.

Transformers Used With Information Technology and Related Types of Equipment

Electrical safety requirements for these types of transformers are included in [AS/NZS 60950.1:2011, Information technology equipment – Safety – General requirements](#). The information contained in this standard is a modified edition of [International](#) and [European](#) standards.

Waste Program for Electrical Equipment

Waste Management Standard for End-Of Life Electrical and Electronic Equipment.

The landfill management Standard [AS/NZS 5377:2013, Collection, storage, transport and end-of-life electrical and electronic equipment](#) sets out the minimum requirements for the safe and environmentally sound handling of e-waste.

Cooling and Heating Equipment

There are a number of Standards providing information on Standards for the types of cooling and heating equipment described below.

Thermostats used with heating appliances (excluding water heaters) should be tested to [AS/NZS 3161:2005, Approval and test specification – Thermostats and energy regulators](#). Thermostats used with water heaters should be tested to [AS 1308-1997, Electric water heaters – Thermostats and thermal cut-offs](#). Australian Standards for thermostats are not based on International or European Standards.

Air Conditioners and Heat Pumps

This section of the guide provides information on energy efficiency and electrical safety standards for reverse cycle air conditioning systems.

Air Conditioners and Heat Pumps (Electrical Safety Standards)

The Australian/New Zealand electrical safety Standard for air conditioners is [AS/NZS 60335.2.40:2006, Household and similar electrical appliances – Safety – Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers](#). The information contained in this Standard is identical to [International](#) and [European](#) Standards.

Compressors used with air conditioners and heat pumps can be tested to [AS/NZS 60335.2.34:2013 \(IEC Text , Household and similar electrical appliances – Safety – Particular requirements for motor-compressors](#). Previous editions of this standard may still be enforced by [electrical safety regulators](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Air Conditioners and Heat Pumps (Energy Efficiency Standards)

Information on energy efficiency standards for different types of air conditioners is included on the Australian Government's [Energy Rating](#) website. The Standards listed on the website can be purchased from SAI Global's [InfoStore](#).

Electric Fans

Electric fans supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.80:2004, Household and similar types of electrical appliances – Safety – Particular requirements for fans](#). The information contained in this standard is a modified edition of more recent editions to [International](#) and [European](#) Standards.

Solar Heaters (Electrically Boosted Heaters)

Solar water heaters sold, supplied and installed in Australia should be tested to [AS/NZS 2712:2007, Solar and heat pump water heaters – Design and construction](#).

Energy efficiency tests for these types of heaters are included in [AS/NZS 4234:2008, Heated water systems – Calculation of energy consumption](#).

Please contact [SAI Global Product Services](#) for information on product certification schemes for these types of heaters.

Heat pumping modules used with solar water heaters should be tested to [AS/NZS 60335.2.40:2006](#).

Electric Room Heaters

Electric room heaters supplied in Australia should be tested to [AS/NZS 60335.2.30:2009, Safety – Particular requirements for room heaters](#). The information contained in this standard is a modified edition of [International](#) and [European](#) Standards.

Water Heaters (Electrical Safety Standards)

The Australian/New Zealand electrical safety Standard for instantaneous electric water heaters is [AS/NZS 60335.2.35:2004, Household and similar electrical appliances – Safety – Particular requirements for instantaneous water heaters](#). The information contained in this Standard is based on information contained in more recent [International](#) and [European](#) Standards.

Water Heaters (Energy Efficiency Standards)

Information on energy efficiency Standards for different types of water heaters is included on the Australian Government's [Energy Rating](#) website. The Standards listed on the website can be purchased from SAI Global's [InfoStore](#).

Water Heaters (Plumbing Requirements)

Water heaters installed in Australia are required to be certified under the [Water Mark](#) scheme. Please contact [SAI Global Product Services](#) for further information on the scheme.

New Heading - Other Types Of Heating Appliances.

Flexible Heating Appliances (Electric Blankets and Heat Pads)

Electric blankets supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.17:2012 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for blankets, pads, clothing and similar flexible heating appliances](#).

Previous editions of this Standard may still be enforced by [electrical regulators](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Household Electrical Appliances

This part of the guide includes information on Standards for:

- Audio, Television and Entertainment Products
- Massage Appliances
- Sewing Machines
- Electric Toys
- Irons

Audio, Television and Entertainment Products

Electrical Safety Standards

The Australian and New Zealand electrical safety Standard for audio, video and similar types of electronic apparatus is [AS/NZS 60065:2012, Audio, video and similar electronic apparatus – Safety requirements](#).

Previous editions of this Standard may still be enforced by [electrical safety regulators](#). The information contained in the Standard is a modified edition of [International](#) and [European](#) standards.

Energy Efficiency Standards

Energy efficiency Standards for receivers and set-top boxes are included in the [AS/NZS 62087 series](#) of Standards. These standards are not based on any International or European Standards.

Receiver Standards

Digital television receivers sold and supplied in Australia should be tested to the Standards below. These standards are not based on information contained in any International or European Standards.

- [AS 4933.1-2010, Digital television – Requirements for receivers – VHF/UHG DVB-T television broadcasts](#)
- [4599.1-2011, Digital television – Terrestrial broadcasting – Characteristics of digital television transmissions](#)

Massage Appliances

The Australian and New Zealand electrical safety standard for massage appliances is [AS/NZS 60335.2.32:2004, Household and similar electrical appliances – Safety – Particular requirements for massage appliances](#). The information contained in this standard is identical to more recent [International](#) and [European](#) Standards.

Electric Toys

The Australian and New Zealand electrical safety for electric toys is [AS/NZS 62115:2011 \(IEC Text\), Electric toys – Safety](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Electric Irons

The electrical safety Standard for irons is [AS/NZS 60335.2.3:2012 \(IEC Text\) Household and similar electrical equipment – Safety – Particular requirements for electric irons](#). Previous editions of this standard may still be enforced by [electrical safety regulators](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Cleaning Appliances

This section of the guide provides information on electrical safety standards for vacuum cleaners and floor polishers.

Floor Polishing Equipment

Electrical safety requirements for floor polishing equipment are included in [AS/NZS 60335.2.10:2006, Household and similar electrical appliances – Safety – Particular requirements for floor treatment and wet scrubbing machines](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Vacuum Cleaners

Electrical safety requirements for vacuum cleaning and water suction appliances are included in [AS/NZS 60335.2.2:2010 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for vacuum cleaners and water-suction cleaning appliances](#). The information included in this standard is a modified version of [International](#) and [European](#) Standards.

Vacuum Cleaners and Water Suction Appliances

Manufacturing Standards

Vacuum cleaners and water suction appliances supplied and used in Australia and New Zealand should be tested to [AS/NZS 60335.2.2:2002](#). This Standard is a modified edition of [IEC 60335-2-2 Ed 5.2](#) and [I.S. EN 60335-2-2:2003](#).

Marking requirements for electric vacuum cleaners and water suction appliances are included in [AS/NZS 60335.2.2:2002](#). This Standard also references marking requirements that are included in [AS/NZS 60335.1:2002](#). Battery operated vacuum cleaners and water suction appliances should be marked by following the details outlined in [AS/NZS 60335.2.2:2002](#).

Electrical accessories (e.g. plugs, socket-outlets and cords) used with cleaning appliances should be connected by following the details outlined in [AS/NZS 60335.1:2002](#). Additional requirements for cords supplied with vacuum cleaners and water-suction appliances are included in [AS/NZS 60335.2.2:2002](#).

Floor Polishers and Scrubbers

Manufacturing Standards

Floor polishers and scrubbing machines supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.10:2006, Household and similar electrical appliances – Safety - Particular requirements for floor treatment machines and wet scrubbing machines \(IEC 60335-2-10 Ed 5,](#)

IDT). This Standard is identical to [IEC 60335-2-10 Ed 5.1](#) and [I.S. EN 60335-2-10:2003](#). Marking requirements for floor polishers and scrubbing machines are also included in [AS/NZS 60335.2.10:2006](#) and [AS/NZS 60335.1:2002](#).

Whitegoods

General Information

White goods supplied in Australia are required to be tested to electrical safety and energy efficiency standards. Washing machines and dishwashers are also required to be tested to water efficiency standards. Water efficiency Standards are included in [AS/NZS 6400:2005, Water efficient products Rating and labelling](#).

Plumbing fittings supplied with different types of white goods should be certified under the [Water Mark](#) scheme. Please contact [SAI Global Product Services](#) to obtain further information on the scheme.

Refrigerating Appliances

SAI Global does not supply any electrical safety Standards for refrigerating appliances. However, energy efficiency tests for these types of appliances are included in the AS/NZS 4474 series of Standards. These Standards are not based on information contained in International or European Standards.

Clothes Dryers

Electrical Safety Standards

The Australian and New Zealand electrical safety Standard for clothes dryers is [AS/NZS 60335.2.11:2009, Household and similar electrical appliances – Safety – Particular requirements for tumble dryers](#). The information contained in this standard is a modified edition of [International](#) and [European](#) Standards.

Energy Efficiency Standards

Energy efficiency tests for clothes dryers are included in the [AS/NZS 2442](#) series of Standards. The information included in these Standards is not based on International or European Standards.

Washing Machines

Electrical Safety Standards

Electrical safety Standards for washing machines can be determined by completing the tests that are included in [AS/NZS 60335.2.7:2012 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for washing machines](#). Previous editions to this standard may be enforced by electrical safety regulators.

Energy Efficiency Standards

Energy efficiency tests for washing machines are included in the [AS/NZS 2040](#) series of Standards.

Refrigerators (Freezers and Wine Chillers)

Refrigerants used with refrigerating appliances should conform to the classification criteria outlined in [AS/NZS 1677.1:1998, Refrigerating systems – Refrigerant classification](#). General information on installation and safety requirements for refrigerating systems, primarily used for commercial and industrial applications is included in [AS/NZS 1677.2:1998, Refrigerating systems – Safety requirements for fixed applications](#).

Manufacturing Standards

Refrigerating appliances using motor compressors that are supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.24-2003, Household and similar electrical appliances - Safety - Particular requirements for motor-compressors](#). This Standard is a modified edition of [IEC 60335-2-24 Ed 6.2](#) and [I.S. EN 60335-2-24:2003](#).

Marking details for refrigerating appliances are included in [AS/NZS 60335.2.24-2003](#) and [AS/NZS 60335.1:2002](#).

Motor compressors incorporated in refrigerating appliances should be tested to [AS/NZS 60335.2.34:2003, Household and similar electrical appliances - Safety - Particular requirements for motor-compressors](#). This Standard is identical to [IEC 60335-2-34 Ed 4.2](#) and [I.S. EN 60335-2-34:2003](#).

Energy Efficiency Standards

Energy efficiency and performance tests for refrigerating appliances are covered by the [AS/NZS 4474, Performance of household electrical appliances - Refrigerating appliances Series](#).

Tumble Dryers (Clothes Dryers)

Manufacturing Standards

Electrical safety and manufacturing requirements for rotary clothes dryers are included in [AS/NZS 60335.2.11:2009, Household and similar electrical appliances – Safety – Particular requirements for tumble dryers \(IEC 60335-2-11 Ed 7, MOD\)](#). This Standard is a modified edition of [IEC 60335-2-11 Ed 7.0](#) and [I.S. EN 60335-2-11:2010](#).

Marking requirements for tumble dryers are included in [AS/NZS 60335.2.11:2009](#) and [AS/NZS 60335.1:2002](#).

Energy Efficiency Standards

Energy efficiency tests and performance requirements for tumble dryers are covered by the [AS/NZS 2442, Performance of household electrical appliances - Rotary clothes dryers Series](#).

Dishwashers

Manufacturing Standards

Dishwashers supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.5:2002, Household and similar electrical appliances – Safety – Particular requirements – Particular requirements for dishwashers](#). This Standard is a modified edition of [IEC 60335-2-5 Ed 5.2](#) and [I.S. EN 60335-2-5:2003](#).

Marking details for dishwashers are included in [AS/NZS 60335.2.5:2002](#) and [AS/NZS 60335.1:2002](#).

Energy Efficiency Standards

Dishwashers supplied in Australia and New Zealand should be tested to the [AS/NZS 2007, Performance of household electrical appliances - Dishwashers Series](#).

Washing Machines

Manufacturing Standards

Washing machines supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.7:2009, Household and similar electrical appliances – Safety – Particular requirements for washing machines](#). This Standard is identical to [IEC 60335-2-7 Ed 7.0](#) and [I.S. EN 60335-2-7:2003](#).

Marking requirements for washing machines are included in [AS/NZS 60335.2.7:2009](#) and [AS/NZS 60335.1:2002](#).

Energy Efficiency Standards

Energy efficiency and performance tests for washing machines are included in the [AS/NZS 2040, Performance of household electrical appliances - Clothes washing Series](#).

Food Preparation appliances

The Australian and New Zealand electrical safety Standard for food preparation appliances is [AS/NZS 60335.2.14:2007, Household and similar electrical appliances – Safety – Particular requirements for kitchen machines](#). The information contained in the Standard is a modified edition of [International](#) and [European](#) Standards.

Liquid Heating Appliances (Coffee Machines, Kettles, Rice Cookers, Urns)

The Australian and New Zealand electrical safety for these types of appliances is [AS/NZS 60335.2.15:2002, Household and similar electrical apparatus – Safety – Particular requirements – Particular requirements for appliances for heating liquids](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Small Refrigerating Appliances

Electrical safety requirements for small refrigerating appliances are included in [AS/NZS 60335.2.24:2010 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Portable Cooking Appliances

Electrical safety requirements for different types of portable cooking appliances are included in [AS/NZS 60335.2.9:2009, Household and similar electrical appliances – Safety – Particular requirements for grills, toasters and similar portable cooking appliances](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Electrical Equipment used in Bathrooms

General Information

Those responsible for installing electrical equipment in bathrooms should follow the 'wet area' information that is included in [AS/NZS 3000:2007](#). This section of the guide provides information on electrical safety Standards for hair care appliances, shavers and towel rails.

Hair Care Appliances

The Australian/New Zealand electrical safety Standard for hair care appliances is [AS/NZS 60335.2.23:2012 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for appliances for skin or hair care](#). Previous editions to this standard may be enforced by electrical safety regulators. The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Shavers

Electric shavers and hair clippers supplied in Australia should be tested to [AS/NZS 60335.2.8:2004, Household and similar electrical appliances – Safety – Particular requirements for shavers, hair clippers and similar appliances](#). The types of information contained in this standard are identical to [International](#) and [European](#) Standards.

Towel Rails

Electrical safety requirements for towel rails are included in [AS/NZS 60334.2.43:2005, Household and similar electrical appliances – Particular requirements for clothes dryers and towel rails](#). The types of information contained in this standard are modified editions of [International](#) and [European](#) Standards.

General Heating Appliances

Manufacturers of imported heating appliances may have completed CE Conformity Marking to the [European Union Directive 2005/32](#) (also known as the Energy Using Products (EuP) directive). Importers of electrical equipment should check to see if their products conform to relevant Australian energy efficiency Standards before they start supplying products in Australia and New Zealand. Information on specific regulations for electrical equipment requiring tests to Standards may be available from the [Equipment Energy Efficiency \(E₃\) Committee](#).

Thermostats, cut-off switches and valves are used to regulate temperatures for heating appliances. Thermostats used with heating appliances should be tested to [AS/NZS 3161:2005, Approval and test specification – Thermostats and energy regulators](#). This Standard references tests that are included in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#). The Electrical safety Standard for thermostats and cut-off switches used with water heaters is [AS 1308-1987, Electric water heaters – Thermostats and thermal cutouts](#).

Different types of household and related types of electrical equipment may require Ingress Protection (IP) ratings. Electrical equipment designed to heat liquids (e.g. water and immersion heaters) may require higher levels of protection. A table listing IP ratings for fixed water containers is included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#). Alternatively, there is also detailed information on ingress protection ratings for electrical enclosures in the [Ingress Protected \(IP\) Rated Enclosures](#) section of this guide.

Flexible supply cords and plugs used with air conditioners, heat pumps and dehumidifiers should be tested to relevant Standards referenced in the [Flexible Supply Cords and Cables](#) and [Household Plugs and Socket Outlets](#) sections of this guide.

Electromagnetic Compatibility Standards

Electrical Equipment used with Heating Appliances supplied and used in Australia and New Zealand should be tested to:

- [AS/NZS CISPR 14.1:2010, Electromagnetic Compatibility - Requirements for household appliances, electrical tools and similar apparatus - Emission](#) (the previous edition [AS/NZS CISPR 14.1:2003](#) may still be regulated by the [ACMA](#)).
- [AS/NZS CISPR 14.2:2003, Electromagnetic compatibility - Requirements for household appliances electric tools and similar apparatus - Immunity - Product family standard](#)
- [AS/NZS 4251, Electromagnetic Compatibility \(EMC\) - Generic emission standard Series](#)
- [AS/NZS 61000, Electromagnetic compatibility \(EMC\) Series](#)

Please consult the [Electromagnetic Compatibility \(Radio Interference\) Standards](#) section of this guide for general information on this topic.

Wiring and Installation Standards

General information on installation requirements for electrical appliances and electrical accessories is included in [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#).

Electrical accessories (e.g. plugs, socket-outlets and cords) used with Heating Appliances should be connected by following the details outlined in [AS/NZS 60335.1:2002, Household and similar electrical appliances - Safety - General requirements \(IEC 60335-1 Ed 4.2, MOD\)](#).

Electric Blankets

Manufacturing Standards

Electric blankets supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.17:2004, Household and similar electrical appliances - Safety - Particular requirements for blankets, pads and similar flexible heating appliances](#). This Standard is a modified edition of [IEC 60335-2-17 Ed 2.2](#) and [EN 60335-2-17:2002](#).

Care labelling requirements for textile materials used to manufacture blankets and covers supplied with electric blankets are included in [AS/NZS 1957:1998, Textiles – Care labelling](#) and [AS/NZS 2621:1998, Textiles – Guide to the selection of correct care labelling instructions from AS/NZS 1957](#).

Heating Pads

Manufacturing Standards

Heating pads supplied and used in Australia and New Zealand may be classified as [Therapeutic Devices](#). For more information on registration schemes, approval systems and regulations for these types of devices, it is advised that you contact the [Therapeutic Goods Administration](#).

Flexible heating pads supplied in Australia and New Zealand should be tested and marked according to [AS/NZS 60335.2.81:2006, Household and similar electrical appliances – Safety – Particular requirements for foot warmers and heating mats](#). This Standard is identical to [IEC 60335-2-81 Ed. 2.1](#) and [EN 60335-2-81:2003](#).

General information on marking requirements for electrical equipment tested to the [AS/NZS 60335, Household and similar electrical appliances - Safety Series](#) is included in [AS/NZS 60335.1:2002](#).

Room Heaters

Manufacturing Standards

Electric room heaters supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.30:2009, Household and similar appliances – Safety – Particular requirements for room heaters \(IEC 60335-2-30 Ed 4.2, MOD\)](#). This Standard is a modified edition of [IEC 60335-2-30 Ed 4.2](#) and [EN 60335-2-30:2003](#).

Marking requirements for room heaters are included in [AS/NZS 60335.2.30:2009](#) and [AS/NZS 60335.1:2002](#).

Room humidifiers supplied in Australia and New Zealand should follow the requirements outlined in [AS/NZS 60335.2.98:2005, Household and similar electrical appliances - Safety - Particular requirements for humidifiers \(IEC 60335-2-98 Ed 2.1, IDT\)](#). The International equivalent to this Standard is [IEC 60335-2-98 Ed 2.1](#).

Duct Heaters

Manufacturing Standards

Electric duct heaters supplied in Australia and New Zealand should be tested to [AS/NZS 3102:2002, Electric duct heaters](#). This Standard references tests that are included in [AS/NZS 3100:2009](#).

Marking requirements for electric duct heaters are also included in [AS/NZS 3102:2002](#) and [AS/NZS 3100:2009](#).

Water Heaters

The [Council of Australian Governments \(COAG\)](#) together with the [Ministerial Council on Energy](#) is implementing a [National Strategy on Energy Efficiency](#). Stage 2 of the strategy involves establishing a set of measures to phase-out conventional electric water heaters. Australian electrical safety Standards for conventional (electric resistance and storage) water heaters are still current.

All plumbed-in products supplied in Australia and New Zealand (e.g. Water Heaters) are required to be certified under the [WaterMark](#) scheme. The [WaterMark](#) certification Standard for water heaters is [AS 3498-2009, Authorization requirements for plumbing products – Water heaters and hot-water storage tanks](#).



For further information on the [WaterMark](#) schemes and receiving testing to [AS 3498-2009](#) from SAI Global, you can refer to the [SAI Global Product Certification Schemes](#) section of this guide or contact the [Product Certification Services](#) Group on:

PHONE: +61 2 8206 6322

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Suitably qualified and competent personnel installing water heaters should also follow the methods prescribed in [AS/NZS 3500.4:2003, Plumbing and drainage – Heated water services](#).

Water heaters supplied in Australia and New Zealand should be supplied with different types of valves. A list of manufacturing Standards for valves used with water heaters is included below:

- [AS 1357.1-2009, Valves primarily for use in heated water systems – Protection valves](#)
- [AS 1357.2-2005, Valves primarily for use in heated water systems – Control valves](#)
- [AS 4032.1-2005, Water supply – Valves for the control of heated water supply temperatures – Thermostatic mixing valves – Materials design and performance requirements](#)
- [AS 4032.2-2005, Water supply – Valves for the control of hot water supply temperatures – Tempering valves and end-of line temperature-actuated devices](#)
- [AS 4032.3-2004, Water supply – Valves for the control of hot water supply temperatures – Requirements for field testing, maintenance or replacement of thermostatic mixing valves and end of line temperature control devices](#)
- [HB 263-2004, Heated water systems](#)

General information on marking requirements for electrical equipment tested to the [AS/NZS 60335, Household and similar electrical appliances - Safety Series](#) is included in [AS/NZS 60335.1:2002](#).

Electromagnetic Compatibility Standards

Electrical Equipment used with Heating Appliances (except for [Therapeutic Lamps](#)) supplied and used in Australia and New Zealand should be tested to:

- [AS/NZS CISPR 14.1:2010, Electromagnetic Compatibility - Requirements for household appliances, electrical tools and similar apparatus - Emission](#) (the previous edition [AS/NZS CISPR 14.1:2003](#) may still be regulated by the [ACMA](#)).
- [AS/NZS CISPR 14.2:2003, Electromagnetic compatibility - Requirements for household appliances electric tools and similar apparatus - Immunity - Product family standard](#)
- [AS/NZS 4251, Electromagnetic Compatibility \(EMC\) - Generic emission standard Series](#)
- [AS/NZS 61000, Electromagnetic compatibility \(EMC\) Series](#)

Please consult the section [Electromagnetic Compatibility \(Radio Interference\) Standards](#) of this guide for general information on this topic.

Wiring and Installation Standards

Electrical wiring details for all types of water heaters are covered by the information that is included in [AS/NZS 3000:2007](#). Internal wiring requirements for heating appliances tested to the [AS/NZS 60335 Series](#) are included in [AS/NZS 60335.1:2002](#). General information on installation requirements for electrical appliances and electrical accessories is included in [AS/NZS 3000:2007](#).

Electrical accessories (e.g. plugs, cords and appliance couplers) supplied with water heaters can be installed by following the details outlined in [AS/NZS 60335.1:2002](#).

Solar Heaters – Electrically Boosted Heaters

Manufacturing Standards

Solar water heaters supplied in Australia and New Zealand should be tested to [AS/NZS 2712:2007, Solar and heat pump water heaters - Design and construction](#). Heat pumping modules used with solar water heaters should be tested to [AS/NZS 60335.2.40:2006, Household and similar electrical appliances - Safety - Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers \(IEC 60335-2-40 Ed 4.2, IDT\)](#). This Standard is identical to [IEC 60335-2-40 Ed. 4.2](#) and [I.S. EN 60335-2-40:2003](#).

Unvented storage water heaters used with solar water heaters should be tested to [AS/NZS 60335.2.21:2002, Household and similar electrical appliances – Safety – Particular requirements – Particular requirements for storage water heaters](#). This Standard is a modified edition of [IEC 60335-2-21 Ed. 5.2](#) and [I.S. EN 60335-2-21:2003](#).

Information on marking requirements for heaters is included in [AS/NZS 60335.2.21:2002](#), [AS/NZS 60335.2.40:2006](#) and [AS/NZS 2712:2007](#).



The [Product Certification Services](#) Group offer a number of Fact Sheets on [Water and Plumbing Products](#). The [Solar Water Heater Fact Sheet](#) supplies detailed information on [AS/NZS 2712:2007](#) in relation to Electrically Boosted Water Heaters and Gas Boosted Water Heaters.

Electrical safety requirements for controllers supplied with solar water heaters can be assessed by following the principles and practices prescribed in [AS/NZS 3820:2009, Essential safety requirements for electrical equipment](#) and [AS/NZS 3000:2007, Electrical installations \(known as the Australian/New Zealand Wiring Rules\)](#).

Energy Efficiency Standards

Manufacturers of solar water heaters using heat pumps applying for renewable energy certificates under the Australian Government's Renewable Energy Certificates scheme should complete the types of thermal performance tests that are included in [AS/NZS 4234:2008, Heated water systems –](#)

Calculation of energy consumption. Computer simulated thermal tests for solar water heaters and heat pumps are included in [AS/NZS 4234:2008, Heated water systems - Calculation of energy consumption.](#)

Energy efficiency tests for collectors supplied with solar water heaters are included in the [AS/NZS 2712:2007, Solar and heat pump water heaters - Design and construction.](#)



Manufacturers should arrange to receive certification via the [StandardsMark](#) scheme to [AS/NZS 2712:2007](#). For further information you can refer to the [SAI Global Product Certification Schemes](#) section of this guide or contact the [Product Certification Services](#) Group on:
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EMAIL: product@saiglobal.com

Outdoor thermal performance tests for solar water heaters are included in [AS 2984-1987, Solar water heaters – Method of test of thermal performance – Outdoor test method](#). The status of this Standard was changed to obsolescent in October 2004 by [Standards Australia's](#) CS/028 committee. The Standard is still referenced in [AS/NZS 2712:2007](#) and forms part of the process of conforming to [AS 2984-1987](#).

Please note: In September 2004 Standards Australia indicated that the status of Standards was to be changed to 'obsolescent' for those Standards which were no longer recommended for new equipment or for best current practise. These Standards have only been retained in order to provide reference for those who are servicing existing requirements.

Instantaneous and Storage Water Heaters

Manufacturing Standards

The electrical safety Standard for instantaneous (storage) water heaters is [AS/NZS 60335.2.35:2004, Household and similar electrical appliances – Safety - - Particular requirements for instantaneous water heaters \(IEC 60335-2-35 Ed 4.1, IDT\)](#). This Standard is identical to [IEC 60335-2-35 Ed 4.1](#) and [I.S. EN 60335-2-35:2006](#).

Marking requirements for instantaneous water heaters are included in [AS/NZS 60335.2.35:2004](#).

Energy Efficiency Standards

Energy efficiency tests for mains pressure and unvented water heaters are included in [AS 1056.1-1991, Storage water heaters – General requirements](#) and [AS/NZS 4692.1:2005, Electric water heaters - Energy consumption, performance and general requirements](#).

Heat Exchange Water Heaters

Manufacturing Standards

Heat exchange water heaters use copper coils that are immersed in thermally insulated containers containing static heated water. The electrical safety Standard for water heaters using heat exchangers which includes marking requirements is [AS 1361-1995, Electric heat-exchange water heaters – For domestic applications](#).

Electrical components used with water heaters should also be marked by following the details outlined in [AS/NZS 3100:2009, Approval and test specification - General requirements for electrical equipment](#).

Energy Efficiency Standards

Energy efficiency tests for water heaters using heat exchangers are included in [AS 1361-1995](#) and [AS/NZS 4692.1:2005, Electric water heaters - Energy consumption, performance and general requirements](#).

Immersion Heaters (Fixed, Aquarium and Portable)

Manufacturing Standards

Fixed immersion heaters supplied in Australia and New Zealand should be tested and marked according to [AS/NZS 60335.2.73:2005, Household and similar electrical appliances – Safety - - Particular requirements for immersion heaters \(IEC 60335-2-73 Ed 2.0, IDT\)](#). This Standard is identical to [IEC 60335-2-73 Ed 2.0](#) and [I.S. EN 60335-2-73:2003](#).

Immersion heaters used with aquariums and garden ponds should be tested and marked according to [AS/NZS 60335.2.55:2004, Household and similar electrical appliances – Safety - - Particular requirements for electrical appliances for use with aquariums and garden ponds](#). This Standard is a modified edition of [IEC 60335-2-55 Ed 3.1](#) and [I.S. EN 60335-2-55:2003](#).

Therapeutic Lamps

Manufacturing Standards

Therapeutic lamps supplied and used in Australia and New Zealand may be classified as [Therapeutic Goods](#). For more information on registration schemes, approval systems and regulations for these types of devices, it is advised that you contact the [Therapeutic Goods Administration](#).

Therapeutic lamps should be tested and marked according to [AS/NZS 60335.2.27:2004, Household and similar electrical appliances – Safety - - Particular requirements for appliances for skin exposure to ultraviolet and infrared radiation](#). This Standard is identical to [IEC 60335-2-27 Ed 4.2](#) and [EN 60335-2-27:2003](#).

Electromagnetic Compatibility Standards

The electromagnetic compatibility Standards for lighting products (including Therapeutic Lamps) is [AS/NZS CISPR 15:2006, Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment](#). The [ACMA](#) fact sheet [EMC compliance for lighting equipment fact sheet](#) may be of use to people interested in electromagnetic compatibility Standards for lighting equipment. These types of products should also be tested to the [AS/NZS 4251 Series](#) and the [AS/NZS 61000 Series](#).

Please consult the section [Electromagnetic Compatibility \(Radio Interference\) Standards](#) of this guide for more general information on this topic.

Information Technology Equipment

Electrical Safety Standards

The Australian/New Zealand electrical safety Standard for different types of information technology equipment is [AS/NZS 60950.1:2011, Information technology equipment – Safety – General requirements](#). The information contained in this standard is a modified edition of [International](#) and [European](#) Standards.

Energy Efficiency Standards

Energy Efficiency levels for information technology equipment can be determined by following the information contained in the Standards listed below. The Standards are not based on information

contained in any International or European Standards.

- [AS/NZS 4665.1:2005, Performance of external power supplies – Test method and energy performance mark](#)
- [AS/NZS 5813 Series](#)
- [AS/NZS 5814.1:2012, Information technology equipment – Energy performance of internal power supplies – Methods of measurement of energy performance](#)

Lighting

This section of the guide provides information on Australian, International, European and US (UL) Standards for different types of indoor and outdoor lights. The Standards primarily provide information on electrical safety and energy efficiency requirements for different types of lights.

Detailed information on fixed electrical wiring requirements for lighting products is included in [AS/NZS 3000:2007](#)

Light Emitting Diodes (LED) Lights

General Information

Regulatory definitions for LED lights that may be supplied and sold in Australia are included in [AS/NZS 4417.2:2012, Light emitting diodes are not required to be tested to any energy efficiency standards](#). Detailed information on technical specifications for different types of LED lights are primarily included in International, European and UL Standards. However, there are some Australian Standards on the topic.

Australian Standards

There is only one specific manufacturing Standard for light-emitting diodes (LED) lights. The information is included in [AS/NZS 1158.6:2010, Lighting for roads and public spaces – Part 6: Luminaires](#). There are no specific Australian Standards providing information on any requirements for indoor lights. However, control gear used with LED modules should be tested to the requirements specified in [AS/NZS 61347.1:2002, Lamp controlgear – General and safety requirements](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards that have been updated.

Manufacturers, importers and suppliers of LED lights should also be familiar with the information that is included in [AS/NZS 60598.1:2003, Luminaires – General requirements and tests](#). The information contained in this standard is a modified edition of [International](#) and [European](#) Standards that have been up-dated. The other parts to the [AS/NZS 60598 series](#) of Standards cross-reference information that is included in [AS/NZS 6059.1:2003](#).

European Standards

There are a number of European Standards for light-emitting diodes (LED) lights. Information on European Standards for LED lights is included below:

Marking/Product Identification Requirements

Marking requirements for LED lights are included in EN 61231:2010, International lamp coding system (ilcos) The Standard is an up-dated edition of the International standard [IEC 61231 Ed 1.1](#)

LED Modules

Performance requirements for LED modules are covered by the European Standards listed below:

- [EN 62031:2008, LED modules for general lighting – Safety specifications](#)

- [EN 62384:2006, DC or ac supplied electronic control gear for LED modules – Performance requirements](#)
- [EN 61347-2-13:2006, Lamp controlgear – Part 2-13: Particular requirements for D.c or A.c. supplied controlgear for LED modules](#)

IEC Standards

UL Standards

The US (UL) standard for light emitting diodes is [UL 8750 Ed 1:2009, Light emitting diode \(LED\) equipment for use in lighting products](#).

General Purpose (Fluorescent, Incandescent, Discharge) Lamps

There are Australian standards providing information on electrical safety and energy efficiency requirements for these types of lamps. This information is included below.

Energy Efficiency Standards (General Information)

There is a number of energy efficiency Standards for the types of lighting products and lighting accessories listed below. The information contained in these Standards is not based on any International or European Standards.

Energy Efficiency Standards (Fluorescent and Discharge Lamps)

Energy efficiency Standards for fluorescent and discharge lamps are included below. This information is included below.

The information contained in these standards is not based on information that is included in any International or European Standards.

- Incandescent Lamps – [AS/NZS 4934](#) series of Standards
- Compact Fluorescent (CFL) Lamps – [AS/NZS 4847](#) series of Standards

Energy Efficiency Standards (Linear Fluorescent Lamps)

Energy efficiency levels for these types of lamps can be determined by completing the tests that are included in the [AS/NZS 4782 series](#) of Standards.

Energy Efficiency Standards (Transformers Used With Halogen Lights)

Energy efficiency levels for transformers used with halogen lights are determined by completing the tests that are included in the [AS/NZS 4879 series](#) of Standards.

Energy Efficiency Standards (Ballasts for Fluorescent Lamps)

Detailed information on energy efficiency Standards for ballasts used with fluorescent lamps is available on the Australian Government's [Energy Rating](#) website. The publications recommended on the website can be purchased by visiting SAI Global's [InfoStore](#).

Electrical Safety Standards

Portable fluorescent, incandescent, incandescent and discharge lamps should be tested [to AS/NZS 60598.2.4:2005, Luminaires Particular requirements – Portable general purpose luminaires](#). This standard is a modified edition of [International](#) and [European](#) Standards.

Performance tests for incandescent lamps are included in the Standards listed below:

- [AS 2325:1993. Tungsten filament lamps for general service – Performance requirements](#)
- [AS/NZS 60432](#) series of standards. These Australian and New Zealand Standards are identical to [International](#) and [European](#) Standards. The International and European Standards have recently been updated.

Decorative Lighting (Christmas Lights)

Electrical safety and manufacturing requirements for decorative lights can be determined by following the information contained in [AS/NZS 60598.2.20:2002, Luminaires – Particular requirements – Lighting chains](#). The Standard is a modified edition of [International](#) and [European](#) Standards that recently been updated.

Recessed Luminaires

Electrical safety and manufacturing requirements for recessed luminaires can be determined by following the information that is included in [AS/NZS 60598.2.2:2001, Luminaires – Particular requirements – Recessed luminaires](#). The Standard is a modified edition of [International](#) and [European](#) Standards that have recently been up-dated.

Detailed information on electrical wiring requirements for recessed luminaires is included in [AS/NZS 3000:2007](#).

Flood Lights

Floodlights supplied in Australia using built-in transformers should be tested to [AS/NZS 60598.2.5:2002, Luminaires – Particular requirements – Floodlights](#). The information contained in the Standard is a modified edition of [International](#) and [European](#) Standards.

Garden Lights

Garden lights sold and supplied in Australia and New Zealand should be tested to [AS/NZS 60598.2.7:2005, Luminaires – Particular requirements – Portable luminaires for garden use](#). The Standard is a modified edition of [International](#) and [European](#) Standards

Torches

Torches sold and supplied in Australia and New Zealand should be tested to [AS/NZS 60598.2.8:2002, Luminaires – Particular requirements – Handlamps](#). Information contained in this Standard is a modified edition of [International](#) and [European](#) Standards that have recently been revised.

Lighting Accessories

The information below provides information on Standards for different types of lighting accessories.

Lighting Control Gear

Electrical safety and manufacturing requirements for different types of control gear are included in the [AS/NZS 61347](#) series of Standards. The information contained in these Standards is a modified edition of [International](#) and [European](#) Standards that have been revised.

Control gear used with LED lights should be tested to [AS/NZS 61347.1:2002, Lamp controlgear – General and safety requirements](#) and [IEC 61347-2-13 Ed 1.0, Lamp controlgear – Part 2-13: Particular requirements for d.c. or a.c. supplied controlgear for LED modules](#). The information contained in this standard is identical to the European Standard ([EN 61347-2-13:2006](#))

Ballasts

Electronic ballasts used with non-tubular fluorescent lamps should be tested to [AS/NZS 60929:2005, A.C. supplied electronic ballasts for tubular fluorescent lamps – Performance requirements](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Ballasts supplied used with tubular fluorescent lamps should be tested to [AS/NZS 60929:2005, A.C. supplied electronic ballasts for tubular fluorescent lamps – Performance requirements](#). The information contained in this standard is identical to [International](#) and [European](#) Standards.

Non-electronic ballasts used with lights should be tested to [AS/NZS 60921:2002, Ballasts for tubular fluorescent lamps – Performance requirements](#). Information contained in this Standard is a modified edition of [International](#) and [European](#) Standards that have been revised.

Lamp Starters

Lamp starters used with fluorescent lights should be used to [AS/NZS 60155:2000, Glow-starters for fluorescent lamps](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Lamp Holders

Bayonet (screw) lamp holders used with lighting products can be tested to either of the Standards listed below:

- [AS/NZS 3117:2007, Approval and test specification – Bayonet lampholders](#)
- OR
- [AS/NZS 61184:2007, Bayonet lampholders](#). The information contained in this standard is a modified edition of [International](#) and [European](#) Standards that recently been revised.

Lamp Covers and Shades

Shades and covers used with light fittings should be tested to glow-wire flammability tests. These types of tests are described in the Standards below:

- [AS/NZS 60598.1:2003, Luminaires – General requirements and tests](#)
- [AS/NZS 60695.2.10:2001](#), Fire hazard testing – Glowing/hot wire based test methods – Glow-wire apparatus and common test procedure. The information contained in this standard in this Standard is equivalent to [International](#) and [European](#) Standards that recently been revised.

Outdoor Electrical Equipment

Outdoor Electrical Equipment

Fence Energizers

Electrical appliances designed to regulate the supply of electricity to fences should be tested to [AS/NZS 60335.2.76:2003, Household and similar electrical appliances – Safety – Particular requirements for electric fence energizers](#). Information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Garage Door Opening Devices

Drives designed to operate garage doors should be tested to [AS/NZS 60335.2.95:2012 \(IEC Text\), Household and similar electrical appliances – Safety – Particular requirements for drives for](#)

[vertically moving garage doors for residential use](#), [Electrical safety regulators](#) may still enforce previous editions of this standard. The information contained in this Standard is identical to [International](#) and [European](#) Standards.

Mechanical and performance tests for garage doors are included in [AS/NZS 4505:2012, Garage doors and other large access doors](#).

Insect Electrocuting Devices

Insect electrocuting devices should be tested to [AS/NZS 60335.2.59:2005, Household and similar electrical appliances – Safety – Particular requirements for insect killers](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Lawn Care Appliances

This part of the guide provides information on standards for electric trimmers, electric shears and electric lawn mowers. Acoustic tests for these types of devices are included in [AS 3534-1988, Acoustics – Methods for measurement of airborne noise emitted by powered lawnmowers, edge and brush cutters and string trimmers](#).

Trimmers

Electric trimmers supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.91:2008, Household and similar electrical appliances – Safety – Particular requirements for walk-behind and hand-held lawn trimmers and lawn edge trimmers](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Shears

Electric shears sold in Australia and New Zealand should be tested to [AS/NZS 60335.2.94:2008, Household and similar electrical appliances – Safety – Particular requirements for scissors type grass shears](#). This information contained in this Standard is a modified edition of an [International](#) Standard.

Lawn Mowers

Electric lawn mowers supplied in Australia and New Zealand should be tested to [AS/NZS 60335.2.77:2002, Household and similar electrical appliances – Safety – Particular requirements – Particular requirements for pedestrian controlled mains-operated lawnmowers](#). The information included in this Standard is a modified edition of [International](#) and [European](#) Standards that have recently been revised.

Mechanical tests and performance requirements for lawn mowers are included in the Australian and International Standards listed below:

- [AS 3792.1-1990, Ride-on lawnmowers – Powered rotary ride-on mowers](#)
- [ISO 5395:1990, Powered lawn-mowers, lawn tractors, lawn and garden tractors, professional mowers, and lawn and garden tractors with mowing attachments – Definitions, safety requirements and test procedures](#)

Power Tools

Hand-held electric power tools supplied in Australia and New Zealand can be tested to either of the standards listed below:

- [AS/NZS 3160:2009, Approval and test specification – Hand-held portable electric tools](#)

- [AS 60745 Series](#). The information contained in these Standards is modified editions of [International](#) and [European](#) Standards.

Welding Equipment

This part of the guide provides information on electrical safety Standards for arc welding equipment. Those using welding equipment in workplaces should also following the types of practices that are described in the [AS 1674](#) series of Standards.

Power sources used with arc welding equipment should be tested to the information that is included in [AS 60974](#) series of Standards. The information included in these Standards is a modified edition of [International](#) and [European](#) Standards.

Swimming Pool and Spa Equipment

There are electrical safety Standards for swimming pool and spa equipment and pool pumps. This information is included below.

Plumbing fittings installed in Australia are required to be certified under the [Water Mark](#) scheme. Please contact [SAI Global Product Services](#) for further information on the scheme. Information on electrical wiring requirements for electrical equipment located in wet areas is also included in [AS/NZS 3000:2007](#).

The Australian and New Zealand electrical safety Standard for swimming pool equipment (including chlorinators and heaters) is [AS/NZS 3160:2001, Approval and test specification – Electrical equipment for spa and swimming pools](#).

Electrical safety requirements for spas are also included in [AS/NZS 60335.2.60:2006, Household and similar electrical appliances – Safety – Particular requirements for whirlpool baths and whirlpool spas](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Pool Pumps

Electrical safety requirements for pool pumps are included [in AS/NZS 60335.2.41:2004, Household and similar electrical appliances – Safety – Particular requirements for pumps](#). The information contained in this Standard is a modified edition of [International](#) and [European](#) Standards.

Demonstrating Compliance to Household Electrical Equipment Standards

Testing and Certification Schemes

There are two options for demonstrating compliance to electrical safety Standards for different types of household and related types of electrical equipment. These options are listed below:

- Type Testing
- Product Certification

Type (Laboratory Testing)

Type testing can be arranged by using a [scheme](#) managed by Australian or New Zealand [electrical regulators](#). Another option would be to arrange tests by contacting an accredited testing facility, or a

suitably accredited certification body. Please contact [SAI Global Product Services](#) to obtain information on our [Type Testing](#) and [CB](#) schemes.

Product Certification

There are number of product certification schemes managed by accredited bodies. Information on AI Global's Standards Mark Product Certification scheme is included below. Contact SAI Global Product Services for further information on the scheme.

[Standards Mark](#) is a System 5 certification scheme which is used to certify manufacturers of electrical equipment to specific product performance standards. The '5-Ticks' Standards Mark certification requirements are:

- Testing of sample products to independent accredited laboratories
- Verification of test reports
- Audit of the manufacturing site for initial and ongoing compliance

SAI Global Product Certification Schemes

SAI Global Limited is the largest provider of third party product certification services in Asia Pacific, and is accredited against a broad range of Australian and International Standards, via its wholly owned subsidiary SAI Global Certification Services Pty Limited.

The [Product Certification Services Group](#) offers a wide range of certification schemes tailored for electrical products.

StandardsMark

StandardsMark™ is a [System 5 certification scheme](#) which is used to certify manufacturers of electrical equipment to specific product performance Standards. The '5 ticks' StandardsMark™ certification requirements are:

- Testing of sample products by independent accredited laboratories
- Verification of test reports
- Audit of the manufacturing site for initial and ongoing compliance

Electrical Type Test

[Electrical Type Test](#) certification is a [System 1 certification scheme](#). This scheme is recognised as an 'External Approval Scheme' by the Minister of Fair Trading NSW. Through this scheme manufacturers can demonstrate product safety compliance as required by the Electrical Product Regulators in Australia and New Zealand, and the minimum requirements are:

- Testing of product samples by independent accredited laboratories
- Assessment of test reports

IECEE CB Scheme

IECEE CB scheme is an International scheme for mutual recognition of product safety certification between participating countries. Developed by the Worldwide System for Conformity Testing and Certification of Electrical Equipment (IECEE), the CB scheme is the first truly international system for acceptance of test reports dealing with the safety of electrical and electronic products. The main objective is to facilitate trade by promoting harmonisation of the national Standards with international Standards and co-operation among product certifiers worldwide.

SAI Global is the accredited National Certification Body (NCB) for Australia and New Zealand. SAI Global also issues internationally recognised CB Certificates that exporters can use to gain local electrical approval in overseas countries.

CE Programs

CE Program for Low Voltage Directive (LVD) 2006/95/EC (ex-73/23/EEC) is offered for those selling their electrical equipment designed for use with a voltage rating of between 50 and 1000V ac and between 75 and 1500 V DC in the European Union. It seeks to ensure that electrical equipment with certain voltage limits provides a high level of protection to the European community.

CE Program for Electromagnetic Compatibility (EMC) Directive 2004/108/EC is offered to those selling their electrical and electronic appliances and equipment in the European Union. It seeks to ensure that electrical and electronic products do not cause excessive electromagnetic interference and are not overly affected by electromagnetic interference themselves. Please visit [CE Program](#) for more information.



Please contact the [Product Certification Services Group](#) if you require any further information on the above schemes.

PHONE: +61 2 8206 6322

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Online Resources

Since January 2013, most Australian jurisdictions have enacted the new harmonised WHS Act. Find out what this means with Sherriff's Work Health & Safety Law Guide.

www.saiglobal.com/WHS

Get anywhere, anytime access to information of which Australian Standards are referenced in which Australian Commonwealth, State and Territory legislation.

www.saiglobal.com/LexConnect

Do you need to be alerted of regulatory updates and how these changes are applicable to your business processes?

www.saiglobal.com/Compliance/products-and-services/regulatory-news/asiapac/safety-health-environment-compliance.htm

Do you need online access to the National Construction Code 2011 and all the Australian Standards® referenced within it?

www.saiglobal.com/NCC

Do you need online access to the Building Code of Australia and all the Australian Standards® referenced within it?

www.saiglobal.com/BCA

Do you need online access to the Plumbing Code of Australia 2011 and all the Australian Standards® referenced within it?

www.saiglobal.com/PCA

Do you need guidance on which Australian Standards® or parts thereof are referred to in legislation?

www.saiglobal.com/Newsletters

Would you like to be notified when Standards relevant to you are updated, amended or newly released?

www.saiglobal.com/SW

Do you need online access to the full text of your own customised selection of Australian Standards® as well as optional access to international Standards?

www.saiglobal.com/Select

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www.saiglobal.com/compliance/regulatory-news/asiapac

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Regulators

Australian Electrical Safety Regulators

NSW Fair Trading

Website: www.fairtrading.nsw.gov.au

Energy Safe Victoria

Website: www.esv.vic.gov.au

Office of the Technical Regulator (South Australia)

Website: www.technicalregulator.sa.gov.au

Department of Commerce (Western Australia) - EnergySafety

Website: www.commerce.wa.gov.au/EnergySafety

Queensland Government - Department of Justice and Attorney-General
Electrical Safety

Website: www.justice.qld.gov.au/fair-and-safe-work/electrical-safety

Tasmania

Workplace Standards Tasmania

Website: <http://www.wst.tas.gov.au>

ACT Government

ACT Planning and Land Authority

Website: www.actpla.act.gov.au/

NT WorkSafe

Electrical Safety

Website: www.worksafe.nt.gov.au/electricalsafety/index.shtml

New Zealand Electrical Safety Regulator

New Zealand Ministry of Economic Development

Energy Safety

Website: www.energysafety.govt.nz

Communications – EMC Australian Regulator

Australian Communications and Media Authority (ACMA)

Website: www.acma.gov.au/WEB/STANDARD/pc=PC_2797

Communications – EMC New Zealand Regulator

New Zealand Ministry of Economic Development

Website: <http://www.med.govt.nz/>

Australian Energy Efficiency Regulators

Australian Government

Department of Climate Change and Energy Efficiency

Website: www.climatechange.gov.au

NSW Government

Industry and Investment

Website: www.industry.nsw.gov.au/energy

Energy Safe Victoria

Website: www.esv.vic.gov.au

Sustainability Victoria

Website: www.sustainability.vic.gov.au/www/html/1517-home-page.asp

Queensland Government - Department of Justice and Attorney-General

Electrical Safety

Website: www.justice.qld.gov.au/fair-and-safe-work/electrical-safety

Queensland Government - Environment and Resource Management

Website: www.derm.qld.gov.au

Queensland Government - Department of Employment, Economic Development and Innovation

Mines and Energy

Website: www.dme.qld.gov.au/Energy/index.cfm

Government of Western Australia

Department of Commerce - EnergySafety

Website: www.commerce.wa.gov.au/EnergySafety

Government of Western Australia

Office of Energy

Website: www.energy.wa.gov.au

Government of South Australia

Department for Transport, Energy and Infrastructure

Website: www.dtei.sa.gov.au/

Government of South Australia
Department for Transport, Energy and Infrastructure
Office of the Technical Regulator
Website: www.technicalregulator.sa.gov.au

Department of Justice (Tasmania)
Workplace Standards Tasmania
Website: www.wst.tas.gov.au/industries/electricity

Department of Infrastructure, Energy and Resources (Tasmania)
Office of Energy Planning and Conservation
Website: www.dier.tas.gov.au/energy/home

ACT Government
ACT Planning and Land Authority
Website: www.actpla.act.gov.au

NT WorkSafe
Electrical Safety
Website: www.worksafe.nt.gov.au/electricalsafety/index.shtml

Northern Territory Government
Department of Resources – Minerals and Energy
Website: www.nt.gov.au/d/Minerals_Energy/index.cfm?header=Energy

New Zealand Energy Efficiency Regulator
Energy Efficiency and Conservation Authority (EECA)
Website: www.eeca.govt.nz

Customer Service Contacts

Information Services Division

Standards & Technical Information Group

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EMAIL: sales@saiglobal.com

Also Visit: [StandardsWatch: be alerted when Standards change](#)

Assurance Services Division

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Also Visit: [Product Certification Key Documents](#)