MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

COVERSHEET

Minister	Hon Dr Megan Woods	**Portfolio**	Minister of Energy and Resources
Title of Cabinet paper	Approval to release discussion paper: "Updating references to standards in the electricity and gas safety regulations"	**Date to be published**	5 May 2021

List of documents that have been proactively released		
Date	**Title**	**Author**
17 March 2021	Approval to release discussion paper: "Updating references to standards in the electricity and gas safety regulations"	Office of the Hon Dr Megan Woods
17 March 2021	Discussion Document - Updating the references to standards in the electricity and gas safety regulations	MBIE
17 March 2021	Table A: New ESR Standards	MBIE
17 March 2021	Table B: ESR Standards Update	MBIE
17 March 2021	Table C: GSMR Updates	MBIE
17 March 2021	DEV-21-MIN-0039	Cabinet Office

Information redacted **YES**

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld as it is confidential advice to Government (pg 7 of the Cabinet paper).

In Confidence

Office of the Minister of Energy and Resources

Chair, Cabinet Environment, Energy and Climate Committee

Approval to release discussion paper: "Updating references to standards in the electricity and gas safety regulations"

Proposal

1. This paper seeks approval for the release of the discussion paper, "Updating references to standards in the electricity and gas safety regulations", for public consultation.

Relation to Government Priorities

2. This is an operational change relating to the Government's comprehensive national health and safety strategy, the Health and Safety at Work Strategy 2018 – 2028, which sets out the Government's vision and plan for improving health and safety at work.

Executive Summary

3. The Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 reference standards and international certification regimes that set benchmarks for safe electricity and gas networks, installations, appliances and associated fittings (collectively referred to as 'products' in this paper) in New Zealand.

4. Of the 630 standards referenced in the current electricity and gas regulations, a WorkSafe review in February 2020 identified 382 which have been amended, revoked or replaced since the regulations were last amended in 2013/14. In addition, referenced international certification regimes and conformance bodies have changed and new international standards have been created in that time.

5. The referenced standards in the regulations must be updated to ensure businesses comply with the latest health and safety requirements when selling or trading electrical and gas products in New Zealand.

6. Updating the references to product safety measures and international certification and conformance regimes in the regulations will benefit businesses and consumers by enabling access to safe, certified products in the international market. The update will streamline regulatory requirements for importers and exporters, minimise compliance costs, and enable freer and fairer trade and access to safe products.

7. Officials have engaged with relevant government agencies and external stakeholders, including the Plumbers, Gasfitters, and Drainlayers Board, and the Electrical Engineers Association to understand the issues with standards referenced in the regulations. Stakeholders have shown broad support for the proposed updates.

8. I seek your agreement to release the attached discussion paper to update references to standards in the electricity and gas regulations, for public consultation commencing as soon as is practicable following Cabinet approval

9. I intend to seek Cabinet agreement to the final amendments to the electricity and gas safety regulations in mid-2021.

Background

Importance of electricity and gas to the New Zealand economy

10. Electricity and gas[1] are important forms of energy used by New Zealanders on a daily basis. Our reliance on electricity and gas for energy both domestically and commercially has been rising over the past two decades, and will continue to evolve as consumer focus begins to shift towards new technologies, such as electric vehicles and hydrogen as a fuel source.

11. The electricity sector is constantly changing, and New Zealanders have embraced evolving technologies, including electric vehicles, small-scale solar generation and residential-scale batteries. Technology is also changing the way electricity providers can engage with businesses and households.

Safety standards

12. Electricity and gas are a necessary part of life, but they are also inherently dangerous and pose a significant health and safety risk to people and property if not appropriately controlled.

13. Notifiable accidents involving gas or electricity are those which cause serious injury or death to people and/or significant damage to property[2]. During 2018, 12 notifiable and 19 non-notifiable accidents in New Zealand were reported resulting from electrical or gas incidents, with one fatality. Accidents also have the potential to result in substantial property damage, and negatively impact commercial productivity.

14. For these reasons, it is illegal to sell gas and electrical products that do not meet an array of safety standards. Anyone who is supplying or manufacturing products must meet all relevant safety standards as referenced in the Electricity (Safety) Regulations 2010 and Gas (Safety and Measurement) Regulations 2010.

How the regulations and standards work

15. The Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 set comprehensive safety requirements for products.

16. The regulations establish benchmarks for what is considered a safe product, or an unsafe product, by referencing 630 international standards and certification or conformance regimes. This establishes compliance requirements for safe electricity and gas products. Most of these standards are based on international standards in accordance with New Zealand's commitments to World Trade Organisation (WTO) principles, helping to ensure both safety, and consistency with our trade partners.

17. Under the Legislation Act 2012, in order to reference a new version of a standard in regulations, Government must explicitly decide to adopt a new version of a referenced standard, and undertake public consultation before amending the regulations.

The international context for New Zealand's energy safety standards

18. Electricity and gas standards are generally developed collaboratively and recognised by multiple countries. I expect positive trade impacts from aligning the New Zealand product safety regime for gas and electrical products with health and safety product requirements of

[1] Gas means any fuel that is supplied through pipes or in containers and is a gas at a temperature of 15°C and an absolute pressure of 101.325 kilopascals; and includes biogas, coal gas, liquefied petroleum gas, natural gas, oil gas, producer gas, refinery gas, reformed natural gas, and tempered liquefied petroleum gas.

[2] As defined in section 16 of the Electricity Act 1992 and section 17 of the Gas Act 1992.

its trading partners. Mutual recognition of standards, where practicable, supports free trade between economies.

19. New Zealand participates in setting international standards, and is a member of the International Electrotechnical Commission (IEC), which publishes consensus-based international electrical Standards and manages conformity assessment systems for electric products, services and systems. New Zealand also has Mutual Recognition Agreements (MRA) for trading certified electrical and electronic equipment with trading partners. Our primary MRA trading partners include Australia, the European Union, Singapore, Taiwan, China and other countries in the Asia-Pacific region.

20. Once a standard has been agreed and published, WTO member countries, including New Zealand, are expected to accept the standard, aligning health and safety product requirements to support free safe trade, with the ability to apply or not apply it if the standard does not meet regulatory requirements.

New Zealand participates in setting Australia / New Zealand standards for electrical and gas products

21. New Zealand is also a member of Australia/New Zealand Standards, participating in the development of electrical and gas product standards through this standard-setting body. The standards-setting committees have representation from our government and industry.

22. This joint approach to standards recognises the similarities of the Australian and New Zealand electrical and gas infrastructures and the benefits of sharing costs and wisdom across similar regimes. In addition, most joint AS/NZS standards draw on international expertise by replicating IEC standards, sometimes with modifications to suit the Australian and New Zealand electrical and gas environments.

Why regulations and referenced standards need to be amended

23. Since the last amendment of our regulations in 2013/14, over half of the 630 electricity and gas safety standards referenced are now out of date, and new standards addressing emerging technologies have not been formally adopted. This means the New Zealand regulatory regime is out of step with our international trade partners, creating complexity and driving up compliance costs for anybody trading in, or utilising, gas and electrical technology. It also means that our current regulatory regime is not fully aligned with international best-practice in energy health and safety.

24. Updating our regulations will improve safety, reduce compliance costs for businesses, simplify the import and export of electrical and gas equipment, and simplify the uptake of new technologies.

International standards have changed

25. As noted above, there have been significant changes to standards and certification regimes cited in the electricity and gas safety regulations. This creates a discrepancy between the standards cited in the regulations and those recommended by national and international standards bodies.

26. The electricity and gas safety regulations were last amended, for the purpose of updating references to standards, in 2013/14. Since then:

- 382 standards in the electricity and gas regulations have been amended, revoked or replaced. Many of the changes maintain the relevance of the standards, especially where technological advances are concerned.

- Some standards have been withdrawn. For some of these standards, no replacement standard exists; for others, the withdrawn standard has been incorporated into, or replaced by, another standard.
- New standards have been developed for more recent technologies, such as electric vehicle charging infrastructure and solar panel inverters.

27. A list of all changes, and detail on those likely to be most impactful, is included in an annex to the attached draft discussion document.

References to certification regimes in the Gas Regulations need to be updated

28. New Zealand has no gas appliance certification system of its own, reflecting the relatively small size of the New Zealand market. Instead, we recognise gas appliance certification from three principal regimes that supply our market – Australia, Europe and North America.

29. Gas appliance importers face uncertainty at present because our regulations do not formally recognise current certification and conformance regimes used in Australia and Europe; two out of three principal regimes used in New Zealand for the import, export, trade and sale of products.

30. In 2018, The European Directive system, (referenced in the Gas Safety and Measurement Regulations 2010), was replaced by the European Gas Appliances Regulations. There is therefore a need to recognise this change of regime in the Regulations, as the standards referenced under the old European system are out of date. This will clarify compliance requirements for New Zealand importers and suppliers.

31. There are also positive trade implications from updating the references to the European gas certification regime more generally, enabling New Zealand to fulfil its obligations as a member of the World Trade Organisation to promote fair and equal trade and access to new or developing products in international markets.

32. Similarly, in 2018 the conformance body BSI Group (Australia and New Zealand) Pty Limited added certification of gas appliances to Australian and Australian/New Zealand standards for gas appliance safety to its portfolio. Conformity assessment bodies such as BSI Group undertake product testing and assessment against standards cited in the regulations and issues and certification for the products.

33. This is a major addition to the Australasian gas appliance market, and needs to be captured in New Zealand regulation, as do many existing references to Australian standards which are now out of date.

34. I am not proposing to make any changes for gas products certified in Britain due to the current agreement between New Zealand and the UK that Brexit will not affect the existing ability for gas products to enter the market.

35. New Zealand intends to build on its relationship with the UK (and its relationship with the EU) after the UK leaves the EU. In addition, we expect Britain to use the existing European Gas Appliances Regulation to certify gas appliances and fittings, at least in the short term.

Benefits of Updating Cited Standards

Referencing the latest standards is expected to reduce business compliance costs

36. Most electricity and gas products sold in New Zealand are manufactured overseas to the latest international standards. However, importers and suppliers need to verify that the products they are buying meet New Zealand requirements to be sold here.

37. Some importers and suppliers are uncertain about whether their imported products comply with the outdated standards referenced in New Zealand regulations. This is because manufacturers typically supply information about compliance to the latest international standards, rather than to those referenced in our regulations.

38. Manufacturers may currently face additional costs to verify that the imported product meets standards referenced in New Zealand regulations; a cost that is passed on to the New Zealand market.

39. By updating our regulations to include current international standards, we can provide greater consistency and certainty for businesses, lowering their compliance costs and better enabling the uptake of new technologies.

Updating the standards will reduce barriers to trade

40. Updating the standards to capture the emergence of new gas and electricity products will improve public health and safety, while facilitating trade between international markets. If we do not update the standards, manufacturers may withdraw from supplying the New Zealand market because of the cost of running dual verification systems, thereby limiting choice for importers of electricity and gas products.

41. Updating standards referenced in legislation is an important part of maintaining the legislation's alignment with international developments, so that New Zealanders can benefit from advances in safety knowledge and trade within the international market.

Updating standards will minimise potential risks to public health and safety

42. The regulations refer to an earlier version of standards that have subsequently been replaced by standards that recognise technological improvements, which could be beneficial for health and safety. For example, in the Electricity (Safety) Regulations, a new standard developed by the International Organisation for Standardisation will replace the previous cited Standard for critical care ventilators to improve particular requirements for basic safety and essential performance.[3] Another example is the outdated reference in the Gas Safety and Measurement Regulations 2010 to the 2008 Standard for gas cooking appliances, which has been superseded by a new AS/NZS standard offering significant safety improvements.[4]

43. With consumer preferences shifting towards cleaner energy sources, we anticipate an increasing demand for electricity and gas as fuel sources. While these fuel sources are considered comparatively safe from an environmental perspective, they have the potential to cause significant harm to people and damage to property. However, New Zealand suppliers operating within the current regulatory framework are not meeting what is now considered international best practice in gas and electricity health and safety.

44. By referencing the latest versions of standards, we can ensure the infrastructure is as robust as it can be to safely support the increasing use of electricity and gas and uptake of associated products, both existing and yet to be developed.

Approach to updating cited standards

The discussion paper seeks feedback on proposals to address out-of-date references to standards

45. I am proposing to amend the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 by:

[3] Standard G in conjunction with IEC 60601-2-12 Ed 1.0 (2001) superseded by ISO 80601-2-12 Ed 1.0 (2011)

[4] AS/NZS 5263.1.1 which has replaced AS 4551

- updating references to official standards so the latest version of the standard is referenced
- wherever possible, only referencing applicable international standards
- removing references to standards that have been withdrawn and, where applicable, adding replacement standards
- adding new standards not previously referenced in the regulations
- recognising changes in the European and Australian gas certification regimes, and
- adopting a more uniform method for citation of standards in the electricity safety regulations to improve the clarity of the regulations for users.

Consultation on the proposed regulatory amendments will inform final proposals

46. The proposed changes to New Zealand's gas and electricity standards are important to ensure we have an up to date regulatory regime that is consistent with that of our international trade partners and easy to use for local suppliers and uses of electricity and gas products.

47. Stakeholder engagement on these issues suggests an appetite for updating this regulatory framework. However, wider consultation is required to familiarise stakeholders with the full scope of change, and ensure a full understanding of the impacts of change.

48. The majority of proposed amendments to the electricity and gas regulations are likely to be minor and technical, or have minimal impact. Proposed changes to standards already referenced are about providing certainty by referencing the latest published version of those standards.

49. The discussion paper identifies a few standards with changes that could have a larger impact. These include the new electric vehicle charging infrastructure standards, changes to the New Zealand Wiring Rules (AS/NZS 3000), and the new standards for refrigeration systems that replaced AS/NZS 1677.2. The updating of references to (AS/NZS 3000), in particular has been of considerable interest to key stakeholders in the electrical sector who have raised concerns about the delay in citing the latest iteration of the standard.

50. The discussion paper also identifies new standards for inclusion in regulations, including 20 new standards that relate to the safety of electric vehicle charging infrastructure. These standards have been developed as new technology has become sufficiently established to warrant normalising in international standards.

51. The discussion paper asks submitters to confirm that most changes will have minimal impacts, identify how the proposals might impact on their business, and set out the impact of such changes. Submitters are also asked to identify any additional standards, or standards with later versions, to include that are not listed in the discussion paper.

52. As I am proposing to update so many of the referenced standards, the discussion paper is set out exactly as the standards are referenced in the regulations, using two schedules and a separate table listing the new standards I am proposing to include. This makes the discussion paper lengthy but navigable for stakeholders accustomed to referring to the regulations to identify with which standards they must comply.

How referenced standards will be kept up to date

53. The rate of change in electrical and gas technologies is increasing, especially for technologies looking to solve the challenges posed by climate change. I have requested that officials develop a longer-term solution to updating references to standards in the regulations in a more timely and responsive way.

54. As a first step in this process, I have proposed a minor and technical amendment to the Electricity and Gas Acts through the Regulatory Systems Amendment Bill (Number 4). The

amendment will clarify a regulatory mechanism where the WorkSafe may update referenced standards in the electricity and gas regulations without the need for a full Cabinet process. This will help to streamline the process of maintaining up-to-date references to standards in the regulations.

Risks or areas of concern

55. I do not see any substantive areas of risk in the proposed updates to New Zealand's electricity and gas standards. As already noted, the changes will give formal standing to already established international standards, the agreements to which New Zealand is a party. The greatest apparent risks would be in not making what are in many cases long overdue updates to our electricity and gas regulations. However, this discussion document will provide an opportunity to explore the proposed changes with stakeholders and develop a better understanding of any risks or issues.

Current knowledge about stakeholder views

56. While stakeholders are likely to welcome a proposal to update references to standards in the electricity and gas safety regulations, many stakeholders are likely to expect the change to happen rapidly. We propose a six-week consultation period given the increasing public need to recognise what is considered a "safe" product.

57. Some industry representatives and publishers (including Electrolink) have expressed concern with how many out-of-date references to standards there are in the electricity and gas safety regulations. The misalignment between the standards in the electricity and gas regulations and international standards makes it difficult for industry to comply. It also presents safety risks to consumers using uncertified products.

58. Some stakeholders are concerned about ensuring the safety of newer technology, for which the regulations do not reference any standards. There are safety gains from the additional standards being proposed but there are also likely to be impacts on industry. I propose asking stakeholders to provide information about the impact of adopting these standards.

59. As noted, key stakeholders in the electrical sector have expressed frustration that the 2018 iteration AS/NZS 3000 has not been cited in regulation. In particular, Master Electricians has been vocal, both with its members and in contacting Ministers and officials, regarding frustrations in the delay in citing the latest version of the standard, and the implications it has in terms of increased complexity and potential safety issues.

Consultation approach and timeframes

60. Subject to Cabinet approval, MBIE will publish the attached discussion paper and associated consultation material in April 2021. I propose a consultation of six weeks to give submitters time to consider the implications of the proposals.

61. MBIE will publish the consultation on their website, notify key stakeholders about the consultation and notify the public of their intention to incorporate standards by reference in the Electricity (Safety) Regulations and the Gas (Safety and Measurement) Regulations in the New Zealand Gazette (as required by the Legislation Act 2012). A summary of submissions will be published on the MBIE website after the consultation has ended.

62. I aim to report to Cabinet in mid-2021 to seek approval on final amendments to the Electricity (Safety) Regulations and the Gas (Safety and Measurement) Regulations.

Financial Implications

63. The release of the discussion paper has no financial implications.

Legislative Implications

64. Changes to the Electricity (Safety) Regulation 2010 and the Gas (Safety and Measurement) Regulations 2010 will be required to implement the proposals in this discussion paper. Public consultation on the discussion paper will assist the Government to decide what to include in the new regulations and inform the regulatory impact assessment process.

Impact Analysis

Regulatory Impact Statement

65. The discussion paper substitutes for a Regulatory Impact Assessment. MBIE's Regulatory Impact Analysis Review Panel has reviewed the discussion paper and confirms that it is likely to lead to effective consultation and support the delivery of Regulatory Impact Analysis to support subsequent decisions.

Population Implications

66. There are unlikely to be any significant impacts on individual population groups resulting from the release of this discussion paper.

67. There may be positive impacts for disabled people from improving access to internationally certified, safe medical equipment in the home. Prices for private medical equipment may drop if businesses are no longer paying high costs to ensure product compliance.

Human Rights

68. Nothing contained in the discussion paper is inconsistent with the rights and freedoms contained in the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

69. The following agencies have been consulted on this paper: WorkSafe New Zealand, the Commerce Commission, The Treasury, Ministry of Transport, New Zealand Transport Authority, Electricity Authority, Accident Compensation Corporation, Environmental Protection Authority, New Zealand Trade and Enterprise, Standards New Zealand. The Department of the Prime Minister and Cabinet were informed of the contents of this paper.

70. Officials have engaged with a range of stakeholders to understand the issues with standards referenced in the regulations, including the Electrical Engineers Association and the Plumbers, Gasfitters and Drainlayers Board.

71. Stakeholders have supported the approach proposed in early engagement to update references to standards in the electricity and gas safety regulations and the references to the European standards regime and the Australian conformance body.

Communications

72. MBIE will publicly release the discussion document and associated consultation material online in April 2021.

73. The document is likely to be of interest mainly to electricity and gas industry stakeholders. I do not anticipate much media interest.

Proactive Release

74. I will release this paper proactively on MBIE's website within 30 days of Cabinet approval of the release of the discussion paper.

Recommendations

The Minister of Energy and Resources recommends that the Committee:

1. Note that the standards referenced in the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 are an important part of delivering electricity and gas safety within an international safety market.
2. Note that a significant number of the standards referenced in the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 are out of date or no longer exist and changes have been made to the gas certification and conformance regimes in Europe and Australia.
3. Note that under the Legislation Act 2012, the government must amend the regulations to adopt the new version of referenced standards, and public consultation is required as part of this process.
4. Agree to the release of the discussion paper entitled Updating references to standards in the electricity and gas safety regulations (attached at Appendix 1), subject to any minor or technical editorial changes that may be required.
5. Authorise the Minister for Energy and Resources to make minor changes to the attached discussion paper before it is released for consultation.
6. Note that officials are considering mechanisms for future updating of references to standards in the Electricity (Safety) Regulations and Gas (Safety and Measurement) Regulations.
7. Note that the discussion paper and this Cabinet paper will be published on the Ministry of Business, Innovation and Employment's website.

Authorised for lodgement

Hon Dr Megan Woods

Minister of Energy and Resources

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

LABOUR, SCIENCE AND ENTERPRISE

LAST UPDATED:
10 MARCH 2021

DISCUSSION DOCUMENT

Updating the references to standards in the electricity and gas safety regulations

tbc – tbc 2021

New Zealand Government

Important notice

The opinions contained in this document are those of the Ministry of Business, Innovation and Employment and do not reflect official Government policy. Readers are advised to seek specific legal advice from a qualified professional person before undertaking any action in reliance on the contents of this publication. The contents of this discussion paper must not be construed as legal advice. The Ministry does not accept any responsibility or liability whatsoever whether in contract, tort, equity or otherwise for any action taken as a result of reading, or reliance placed on the Ministry because of having read, any part, or all, of the information in this discussion paper or for any error, inadequacy, deficiency, flaw in or omission from the discussion paper.

ISBN **XXX-X-XX-XXXXXX-X** (online)

How to have your say

We are interested in your feedback on proposed amendments to the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010.

Who do we want to hear from?

We want to hear from any person or organisation that is interested in or affected by the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010. This includes but is not limited to, regulatory bodies, importers, exporters, manufacturers, suppliers, technicians and training organisations.

We want to hear from you if any of the proposals might impact on your business. Any facts and figures you can give us would be particularly helpful.

Please only provide information on standards that apply specifically to your business or industry.

Submissions process

The Ministry of Business, Innovation and Employment (MBIE) invites you to submit your thoughts in writing on the proposals outlined in this document. Questions are posed throughout the discussion document to guide submissions. We will also provide a separate template sheet with the questions.

The closing date for submissions is **5.00pm, tbc 2021.**

You can make your submission:

- By completing the survey at this link: Link
- By using the online form and submitting it as a Microsoft Word document to ***HSWregs@mbie.govt.nz.***
- By mailing your submission to:

  Health and Safety Policy
  Labour and Immigration Policy
  Ministry of Business, Innovation & Employment
  PO Box 1473
  Wellington 6140.

When mailing your submission, please include your name, the name of your organisation, and your contact details.

Please direct any questions that you have in relation to the submissions process to ***HSWregs@mbie.govt.nz***.

Use of and release of information

The information provided in submissions will be used to inform MBIE's policy development process, and will inform advice to Ministers about health and safety at work regulatory reform. We may contact submitters directly if we require clarification of any matters in submissions.

MBIE intends to upload PDF copies of submissions received to MBIE's website at www.mbie.govt.nz. When you make a submission, MBIE will consider you to have consented to it being uploaded to the website unless you clearly specify otherwise. If your submission contains any information that is confidential or you otherwise wish us not to publish, you can clearly mark this within the text and provide a separate version excluding the relevant information for publication on our website.

Submissions remain subject to request under the Official Information Act 1982. Please clearly indicate in the cover letter or e-mail accompanying your submission if you have any objection to the release of any information in the submission, and which parts you consider should be withheld, together with the reasons for withholding the information. MBIE will take such objections into account and will consult with submitters when responding to requests under the Official Information Act 1982.

Private Information

The Privacy Act 1993 applies to submissions. Any personal information you supply to MBIE in the course of making a submission will only be used for the purpose of assisting in the development of policy advice in relation to this review. Please clearly indicate in the cover letter or e-mail accompanying your submission if you do not wish your name, or any other personal information, to be included in any summary of submissions that MBIE may publish.

Contents

Why we are consulting

The Ministry of Business, Innovation and Employment (MBIE) wants to hear from you about proposed amendments to the Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 (the "electricity and gas safety regulations").

The electricity and gas safety regulations prescribe standards for what is considered safe in the supply and use of electricity and gas products.[1] Regulations are the mechanism to ensure that risks to people and property are managed from the supply and use of electricity and gas. This is achieved by referencing national and international standards.

Currently, over half of the electricity and gas standards are out of date, and our regulations do not include any new standards delivered over the last seven years. This has a range of implications for safety, the compliance costs borne by business, and the ease with which electricity and gas products can be imported and exported.

We want to hear from you about the impact of changes in standards arising from safety developments in products, or from new standards that are developed from new technologies. We want to hear whether our assessment of the impacts in this discussion document is correct, or whether there are impacts that we have not fully considered.

We want your feedback on the options for, and impacts on affected parties from:

- adopting the latest versions of some standards referenced in the electricity and gas regulations
- referencing some new standards in the electricity regulations
- updating the references to the European international certification regime and inserting a reference to the BSI Group (Australia and New Zealand) Pty Ltd conformance assessment body in the gas regulations
- making some minor changes to streamline the structure of Schedule 4 of the electricity safety regulations
- a proposed new approach to update the references to standards in the electricity and gas safety regulations in the future, as developments to the standards emerges.

What are the issues?

We rely on electricity and gas on a daily basis for domestic and commercial use. Our reliance on electricity and gas for energy has been rising over the past two decades, and will continue to evolve as consumer focus begins to shift towards new technologies, such as electric vehicles and the use of hydrogen as a fuel source.

Unsafe electrical and gas systems and products are a significant risk to public health and safety, and can damage property when problems occur. We need to make sure that our electricity and gas networks, installations, appliances and associated fittings are safe.

The standards referenced in the energy and gas safety regulations were last updated in 2013/14. Since then, most of the 630 standards referenced in the current regulations have been amended, revoked or replaced.

New electrical standards have also been developed for new technologies, such as electric vehicles, which are not referenced in the electricity regulations.

[1] Includes electricity and gas installations, appliances and associated fittings used by end-consumers.

Outdated references to standards in the electricity and gas safety regulations have a detrimental impact on the effectiveness, integrity and safety of the energy safety regulatory system by:

- Referring to earlier versions of standards that have subsequently been replaced by standards that incorporate technological and health and safety improvements to new or existing gas and electricity products. Public health and safety, and security of supply will benefit from improved access to safety-tested products coming into the domestic market, and to/from international markets where appropriate. The update will enable ready and cost-effective access to products that are certified to relevant and up to date standards suitable for use in New Zealand. Increased access to safe and reliable products will also minimise the risk of New Zealand receiving products that meet lower standards of safety or compliance, or are simply outdated.

- Creating uncertainty among importers, manufacturers, and suppliers about which standards should be used by the industry to comply with the electricity and gas regulations. The present lack of certainty is leading to increased compliance costs, impacting the efficiency of trade, and potentially resulting in higher costs being passed on to the New Zealand market.

- Imposing barriers to the uptake of emerging technologies and practices. Alternatively, manufacturers may withdraw from supplying the New Zealand market because of the cost of running dual verification systems, potentially limiting choice for domestic importers and exporters of electrical and gas products.

- Overseas exporters potentially avoiding the New Zealand market due to our outdated compliance measures and associated costs, for example, the cost of producing and exporting luminaire lights. Consumer choice is thereby limited when new products are developed, manufactured and released overseas without meeting the standard set by the New Zealand regulations.

- Creating confusion by including standards in regulation that are not aligned with the European Gas Appliance Regulation certification regime introduced in 2018. This creates uncertainty for gas appliance importers because our gas safety regulations do not formally recognise the current standards in use in Europe.

- Creating confusion by not recognising the new Australia/New Zealand conformance system for gas products, known as the BSI Group Pty Ltd, which was established in 2018. Again, this creates uncertainty, with the expectations of the key Australasian conformance body not captured by our regulatory regime.

- Referenced standards becoming out of date as new versions of standards are made, because there is no simple mechanism for maintaining up-to-date references to standards for gas and electricity products, without amending the electricity and gas safety regulations. We are presently working on a longer-term solution to streamline the regulatory mechanism to update references to standards in a more timely and responsive way. This would be beneficial and improve competition within the domestic market, and in trading with other countries.

Question

1) Are there other issues that we should be considering that may have an impact on the effectiveness and integrity of the electricity and gas regulatory system?

What is our approach to amending the electricity and gas safety regulations?

Scope

The scope of this discussion document is limited to:

- updating the references to standards in the Electricity (Safety) Regulations 2010 and Gas (Safety and Measurement) Regulations 2010
- updating the gas certification regimes and conformance bodies referenced in the Gas (Safety and Measurement) Regulations 2010
- streamlining the structure of Schedule 4 in the Electricity (Safety) Regulations 2010.

The updating of new and revised standards is current as of November 2020.

Principles for amending regulations

Wherever possible, only the most recent version of the relevant international and AS/NZ standard will be referenced to enable industries, workers and consumers to benefit from increased trade access between New Zealand and Australia as our closest primary product exporter/importer. We also want to reference the most recent international standard where appropriate and safe, to support our businesses that trade between international markets.

We propose to withdraw some standards, because:

- the standard has been incorporated into another standard
- the standard has been withdrawn, and no replacement exists, or
- an administrative reason where an electricity safety standard has been referred to in Schedule 2 but nowhere else in the regulations, making it an unnecessary reference.

We propose that some new standards will be added to take account of new technologies, such as electric vehicle charging infrastructure and solar panel inverters.

When considering which references to standards to amend, we have taken into consideration the role of the relevant standard in:

- fulfilling NZ's WTO obligations as an international trade partner by using and aligning with changes to international standards
- benefiting from international developments in ensuring the safety of new and existing products
- enabling increased access to international markets by New Zealand importers, by recognising the current standards to which safe products are manufactured and certified
- facilitating lower compliance costs for importers, manufacturers, technicians and training organisations.

We are seeking your input to help us understand these impacts and whether there are other impacts we should also be considering.

Questions

2) Do you agree or disagree with the principles that are being applied for determining which referenced standards should be amended, withdrawn or added?
3) Have we taken into account all relevant considerations in determining which references to standards should be amended or added, and not taken account of irrelevant considerations?

How to find the standards of interest to you

- Please refer to Table A for the list of proposed new standards to add to the Electricity (Safety) Regulations 2010.
- Please refer to Table B for the list of proposed changes to references to standards in the Electricity (Safety) Regulations 2010.
- Please refer to Table C for the list of proposed changes to the Gas (Safety and Measurement) Regulations 2010.

What are the proposed changes to standards?

As mentioned on above, we have used tables to show the proposed changes to the existing standards referenced in the regulations. We propose amending the electricity and gas safety regulations with reference to the latest versions of standards listed in:

- Schedules 2 and 4 of the Electricity (Safety) Regulations 2010
- Schedules 1 and 2A of the Gas (Safety and Measurement) Regulations 2010

We have identified which standards have been amended, revoked or replaced since the Schedules were last updated in 2013/14. No change is proposed if the version of a cited standard remains current (that is, it has not been updated with a new version and it has not been withdrawn).

Tables B and C have been colour-coded to show the level of impact anticipated by the proposed change.

Impacts

In general, adopting the latest version of a referenced standard in the list of proposed amendments will only have minor impacts, but some proposed updates may have a considerable impact. We have, therefore graded the proposed list of amendments into three colours, according to our understanding of the potential impact:

- Green = no impact because there is no change to the standard.
- Blue = minimal impact as we are updating the standard to the latest version.
- Yellow = potential impact from new or different requirements.
- No colour = any proposed new standard.

We propose adopting the relevant international standard where available and appropriate to meet specific safety requirements in New Zealand. We anticipate this will make it easier for importers and suppliers to comply with the regulations, while ensuring product safety.

Question

4) What difference will updating the standard(s) in the regulation make to you? Please provide as much information as you can about the impacts to your business or industry, positive and negative, and how the change will cause such impacts.

- Will the changes make it easier/harder to know when you are compliant?
- Will the changes make it easier/harder to source safe, compliant products?
- Will the changes increase/decrease costs? How much do you think it will change costs?
- Are the benefits greater than the costs? Please tell us why you think so.

What will implementation look like?

We are proposing changes to 382 of the 630 standards referenced in the gas and electricity regulations. The majority of changes to standards will be minor, and will not result in a significant change.

Transitional options

Against each proposed new version of a standard or new standard, there is a proposed 'transition' period. This refers to when the new version of a standard, or the new standard, would come to be recognised after the regulations have been amended.

The transition options for updated standards are either:

1. **Immediate adoption** of a new version of a referenced standard, or the withdrawal and replacement of an outdated standard. We propose that these standards do have an immediate transition because the impact of the change is expected to be minimal on the industry. The mechanism for immediate adoption is separate from the mechanism to retire old products to make sure that any continued sale of these products is regulated until phased out.
2. **Phased transition** of an amended standard or new standard to provide opportunities to fully prepare those in the sector to meet the requirements of the relevant standard. We propose that some new standards are adopted over time as the market transitions to new technologies.

Multiple versions of standards in the Electricity (Safety) Regulations 2010

For some standards in the electricity regulations, we propose to reference multiple versions. This is to:

- provide for a transition period as recommended by Standards NZ, the International Electrotechnical Commission (IEC), or industry
- provide a transition period where the update would affect declared medium to high risk articles already in production, or
- adopt an international standard while enabling New Zealand-specific variations when safety requirements will differ from international specifications.

Impacts of transitioning to the most recent standards

In order to reduce the impact of the changeover to the most recent versions of standards, it is proposed that the transitional provisions in the electricity regulations will recognise that products already in the market, or under order to enter the market, will continue to be deemed safe (refer to regulation 118B of the Electricity (Safety) Regulations for an example of how this worked for the 2013 amendment).

Where standards listed in Schedule 4 of the electricity regulations are made mandatory by other regulatory provisions, including declared high risk articles for electricity and gas products, the international market is expected to drive the transition. For example, as products are manufactured to the latest standards and saturate the domestic market, products made to earlier versions of standards are likely to become less available as demand for newer technologies rises. The costs to consumers should not increase as a result of technological advances if the costs of compliance are low. There may also be a positive impact from increased production overseas due to increased consumer demand, leading to economies of scale.

Questions

5) Do you agree or disagree with the proposed approach for the transition to the new and amended standards in the electricity and gas safety regulations? Please explain why.
6) Do you agree or disagree with the proposal to reference multiple versions of some standards where applicable in the Electricity (Safety) Regulations 2010?

Some of the proposed changes are not straightforward

Some of our proposed updates are not as straightforward to explain. We have provided some extra information about these standards and our proposals. As mentioned on page eight, you can find the standards of interest to you, in the order they are listed in regulation, in Tables A – C. We are particularly interested in your views on the changes to the standards below, and the implications for your business (if any).

We are proposing to adopt both the old and the new versions of AS/NZS 3000 Electrical Installations (known as the Australian/New Zealand Wiring Rules).

1. AS/NZS 3000 Electrical installations

AS/NZS 3000:2007 has been superseded by AS/NZS3000:2018. While 3000:2018 includes important and beneficial updates, we have some concerns with 3000:2018:

- We believe the cost to comply with certain updates is not justified by any safety gain.
- A number of safety improvements were not included in the revised version which means New Zealand cannot benefit from these safety improvements if we adopt 3000:2018. These relate to conditions for electric vehicle charging and the introduction of a TT earthing system for electricity supply.
- There are a number of minor errors in the standard.

We think it unreasonable to propose adopting, in its entirety, a standard that is not entirely adequate and will be altered in the near future.

We therefore propose citing both AS/NZS 3000:2007 with modifications, and AS/NZS 3000:2018:

- AS/NZS 3000:2018 is to be cited in full. Despite its drawbacks, the risks associated with AS/NZS 3000:2018 are essentially on a par with those in AS/NZS 3000:2007. AS/NZS 3000:2018 is useful for showing the path along which transition to a new standard will run, and industry have already taken steps to implement it (such as additional training). It is therefore useful as a guide to how the revised standard will look.
- AS/NZS 3000:2007 is to be cited as it currently is, with modifications in relation to downlights. Refer to Table B for details.

We believe this will ensure any issues with adopting the latest version of the standard can be avoided, and compliance costs minimised, while benefitting from the positive aspects of the standard.

Question

7) Do you agree or disagree with the proposal to reference both AS/NZS 3000:2007, with modifications, and AS/NZS 3000:2018? Please explain why. Any information you can provide on impacts, costs and benefits of adoption would be helpful.

2. AS/NZS 1677.2 Refrigerating Systems - Part 2: Safety requirements for fixed applications, including Amendments 1 and 2

This standard has been superseded by parts 1-4 of AS/NZS 5149:2016. We propose citing parts 2 and 3 in Schedule 2 as they most closely relate to the currently cited standard.

- AS/NZS 5149.2:2016 Refrigerating systems and heat pumps – Safety and environmental requirements – Part 2: Design, construction, testing, marking and documents
- AS/NZS 5149.3:2016 Refrigerating systems and heat pumps – Safety and environmental requirements – Part 3: Installation site.

It is not necessary to directly cite AS/NZS 5149.1:2016 in Schedule 2 as all subsequent parts refer to this for their terms and definitions.

AS/NZS 1677.2 is also referenced in Regulation 60(2)(a). This reference would similarly be updated by replacing the reference to AS/NZS 1677.2 with AS/NZS 5149.2 and AS/NZS 5149.3.

3. AS/NZS 1677.4 Refrigerating Systems – Part 4: Operational, maintenance, repair and recovery

We propose to include a new requirement in the regulations. Unlike AS/NZS 1677, AS/NZS 5149 has a Part 4 for maintenance and repair. We want to include Part 4 as a requirement under the regulations where applicable. For example, by amending regulation 59(3) with content to the effect that a low-voltage or extra-low voltage installation or part installation may be maintained or replaced by complying with AS/NZS 5149.4:2016 where that installation or part installation is a refrigeration system.

Until 2016, there was no standard for maintenance and repair of refrigeration systems and heat pumps. We believe this is needed to enable checks for all the latest safety requirements for refrigeration systems, including for maintenance and repair.

Question

8) Do you agree or disagree with the proposals regarding refrigerants? Specifically do you agree or disagree with the proposals to add an additional requirement under Regulation 59(3)? If so, why? Any information on impacts, costs and benefits of adoption to your business/industry would be helpful.

4. AS/NZS 3003 Electrical installations – patient areas

We propose amending the reference to AS/NZS 3003 to refer to the latest version of the standard: AS/NZS 3003:2018.

Please be aware that this latest version provides more flexibility for supply of electricity to patient treatment equipment when that equipment is being used in residential locations, including private homes and retirement homes or aged care facilities.

We propose an immediate transition because we think this standard improves the provision of quality healthcare in private homes. We want those affected by the inclusion of the standard to benefit from improved healthcare services and outcomes. Regarding any installations that are currently being installed, or in transit to New Zealand or are the subject of an irrevocable purchasing order by a person in New Zealand, these can continue operating safely under the 2011 version of the standard.

The electricity regulations also specify safety requirements for the installation and regular inspection of private electrical medical equipment, to ensure the equipment is electrically safe.

Questions

9) Do you agree or disagree with the proposed change to this standard, and the proposed immediate transition?

5. IEC 62841 series – hand-held motor-operated electric tools

The IEC has introduced a new series for hand-held motor-operated electric tools (IEC 62841 SER). This series is intended to replace much of the IEC 60745 series. The IEC recommends allowing a 36 month transition period from the publication of each standard in the series before it is adopted. Where a part of the 60745 series and part of the 62841 series both apply

to an equipment type, they have both been cited with a 36 month transition period to ensure the equipment is safe to operate.

In some cases, there is no applicable standard in the 60745 series to reference, and the corresponding 62841 standard will not be published for 36 months. In these instances, we propose referencing the relevant part of the 62841 series to ensure there is a minimum standard for health and safety, and regulatory compliance.

Questions

10) Do you agree or disagree with any of these proposed updates to standards or any of the proposed transition times to recognise the relevant updated standard? Please identify which of these standards is of interest and tell us why you disagree. Please also indicate any suggestions or changes that should be made.
11) Have we missed, or incorrectly identified, the latest version of any standards? Which ones did we miss, and why should they be included?
12) If you disagree with our assessment of whether a standard will have a minimal impact to adopt, please advise which standard and why its adoption is not straightforward.
13) What are the costs and benefits to your business/sector from adopting the latest versions of standards referenced in the electricity and gas safety regulations?

What new standards in the electricity safety regulations are proposed?

In table A, we have identified additional product standards for inclusion in Schedule 4 of the Electricity (Safety) Regulations 2010. These standards have been developed since the last update of the regulations in 2013/14 and address new areas of electrical safety.

New standards for electric vehicle charging infrastructure

To support the anticipated uptake in use of electric vehicles as part of New Zealand's response to climate change, we need to be sure their charging systems and the required electrical infrastructure is safe. Having applicable standards cited in the regulations will support businesses and consumers to adapt to regulatory guidance on how to safely charge electric vehicles.

WorkSafe currently issues safety guidelines for safety of electric vehicle charging, intended to ensure electric vehicle supply equipment suitable for New Zealand is supplied, installed and used in line with electrical and workplace health and safety regulatory requirements. However, there are no current standards cited in the regulations related to electric vehicle charging infrastructure, as the technologies have been developing at a rapid pace.

We have included 20 standards to introduce to the regulations to provide certainty and strengthen the safety aspects of electric vehicle charging infrastructure. These standards relate

to 14 different aspects of electric vehicle safety. We consider these standards provide a comprehensive basis to regulate the safety of charging electric vehicles. We are proposing to only reference electric vehicle charging standards from the International Electrotechnical Commission (IEC) and North America, because we think they are the most relevant and most advanced in an area where technology has been progressing quickly.

Aspects of electric vehicle safety covered by the proposed standards include:

- Plugs, sockets, etc.
- Conductive charging systems
- Electrical connections
- A.C. and D.C. charging equipment (including stations)
- Power supply
- Wireless power transfer

We believe these standards should be recognised immediately for transition, to enable the supply and installation of infrastructure for rapidly developing technologies.

We propose adding a new product category clause into Schedule 4 for these standards.

Other new electrical standards

In addition to electric vehicle charging infrastructure, we propose including an additional 23 standards. The majority of these standards did not exist when the regulations were amended in 2013/14, or did not get included in that update.

Table A shows the full list of proposed new standards with an explanation of why we are proposing to include them.

We propose to include:

- a new standard for battery systems that are commonly used in association with photo-voltaic systems
- a new standard about grid connection of energy
- six new standards in the household appliances section, including a standard about refrigerating appliances using flammable refrigerants. These standards recognise the increased likelihood of safety risks from the uptake of refrigeration appliances with flammable refrigerants, as New Zealand moves away from refrigerants using hydrofluorocarbons[2]
- four new standards in the section for switches for circuits, installation protective devices and connection devices
- eight new standards in the section for hand-held motor-operated electric tools which recognise new types of equipment
- a new standard for audio and video products
- a new standard for electrocardiographs
- a new standard for cosmetic and beauty care appliances incorporating lasers.

Impact

We have identified these standards as potentially having less risk of harm at work, as the workers using the technology will need to be registered and trained as appropriate. There could be a potential cost for workers whose businesses do not offer to fund the cost of re-

[2] See the Montreal Protocol commitment to reduce use of hydrofluorocarbons.

training to install or use the new equipment, despite health and safety training being a requisite to conduct the work, as prescribed in the electricity regulations. Similarly, contractors or self-owned businesses could suffer increased costs of compliance if use of the new technology became an industry standard. We are seeking your feedback on the nature of any costs.

There are safety gains from introducing new technologies for workers, businesses, and consumers, but there should at minimum be references to appropriate standards in the regulations, before these technologies penetrate New Zealand markets. We are seeking information on the impact of adopting these new standards to inform our risk impact analysis.

Questions

14) Do you agree or disagree with including any of the proposed new standards in Schedule 4 of the Electricity (Safety) Regulations 2010? Please identify which standard(s) and explain why you agree or disagree and what alternative standard(s) you would propose (if any).
15) What is the impact (for example, additional costs, risks and benefits) of adopting these new standards? Any information you can provide on costs and benefits of adoption to your business/industry would be helpful.

What changes to references to certification regimes and conformance assessment bodies in the gas regulations are proposed?

For gas appliances and fittings to be sold in New Zealand, they must be certified to the standards listed in Schedule 2A in the Gas (Safety and Measurement) Regulations 2010. This certification must be carried out by a certification body listed in the regulations.

New Zealand has no gas certification system of its own, reflecting the size of our domestic market. We recognise gas product certification from three principal regimes that supply our market – Australia, North America and Europe. There have been changes to the European certification regime and the Australia/New Zealand conformance system for gas products since the regulations were last updated in 2013/14.

There is a need to provide certainty through the regulations to gas appliance importers on current certification and conformance regimes followed in New Zealand.

Recognising Europe's new certification regime for gas products

The European Directive system was completely repealed and replaced by the European Gas Appliances Regulations (GAR) on 21 April 2018. We propose amending the gas safety regulations to recognise the European GAR Regulation EU 2016/426.

The gas safety regulations recognise certification bodies that are working within the European Directive EU 2009/142/EC or the EU Directive 90/396/ECC. These are referred to as the Gas Appliance Directives.

The Gas Appliance Directives were replaced by the Gas Appliances Regulation (GAR) in April 2018. The European GAR has revoked the status of certification of appliances under the Gas Appliance Directive. Appliances certified within the new GAR are not recognised formally in New Zealand law. We understand this is creating uncertainty for New Zealand importers and suppliers about what is needed for compliance.

Approach

We understand that any alternative option, without recognising the new GAR certification system in the gas regulations, would pose a level of detriment to the safety, trade and supply functions of businesses, importers/exporters, manufacturers, retail suppliers, and consumers using European-made gas products. We propose an immediate transition.

Impact

We think that the impacts from updating the outdated references to the European certification regime in the gas regulations would be largely minimal on New Zealand businesses and consumers, but positive for importers/exporters of gas products. In 2018, the GAR incorporated new legislative frameworks setting out the requirements for gas products and revoked the status of certified products recognised in the previous legislation.

For importers, there may be reduced total costs, as the New Zealand regulatory system would no longer require a different set of standards to be met for products to be deemed compliant and therefore saleable.

We would like to hear from you on whether the transition to recognise this regime should be immediate, or phased to inform our risk impact analysis.

Questions

16) Do you agree or disagree with amending the gas safety regulations to recognise the Gas Appliance Regulations? If not, why not?
17) What impact would this amendment have for you on importing and supplying gas appliances from the European Union, and why?
18) What, if any, transitional provisions are necessary?

Recognising the new body certifying gas products in Australia

BSI Group (Australia and New Zealand) Pty Limited, gained recognition to certify gas appliances to 'Australian' standards in late 2018.

We propose amending the gas safety regulations to add the BSI Group (Australia and New Zealand) Pty Limited to the list of certification bodies in Schedule 2A.

Approach

We understand that any alternative option, without recognising the new conformance body in the gas regulations would be detrimental to the safety, trade and supply functions of businesses, importers/exporters, manufacturers, retail suppliers, and consumers using Australian-made or New Zealand-made gas products. We propose an immediate transition.

Impact

Australia is the closest primary importer/exporter of gas products from New Zealand. We strongly recommend updating the regulations to reflect the recent accreditation of BSI Group (Australia and New Zealand) Pty Limited to certify gas appliances to 'Australian' standards. We

think that recognising this body will allow New Zealand importers and consumers to engage in safer, freer, and fairer trade of gas products. New Zealand importers may face a decrease in total costs as the BSI group provides a means of certification, recognised in the gas regulations, that is coherent with both the Australian and New Zealand safety regulations. Access to safe and complaint gas appliances is likely to improve as New Zealand formally recognises the conformance body in the regulations, providing assurance to retailers and consumers that the products they buy are safe and compliant.

There are also positive trade implications from updating the references to the conformance group more generally, enabling New Zealand to fulfil its obligations as a member of the World Trade Organisation to promote fair and equal trade and access to new or developing products in international markets.

We would expect the number of affected businesses to be small as New Zealand lacks its own gas certification regime, and the market will already be relying on existing conformance arrangements to some extent as Australia is one of New Zealand's primary (and closest) trading partners of gas products. Industry is likely to be aware of the conformance body, and the associated costs of meeting the new compliance standards. For importers/exporters, there may be reduced costs, as the New Zealand regulatory system would no longer require a different set of standards to be met for products to be deemed compliant and therefore saleable.

Questions

19) Do you agree or disagree with recognising BSI Group (AS/NZ) as a conformance body for gas appliances and specified fittings certified under the Australian regime?
20) Please identify whether you think phased or immediate transition would be more effective to reduce total costs to your industry and/or sector, and why.
21) How would this change affect your ability to import gas appliances and fittings from Australia?
22) Would this change be likely to result in any additional costs or savings in your industry?

We are not proposing to make any changes for gas products certified in Britain

There is a current agreement between the New Zealand and the United Kingdom Governments which means that Brexit will not affect existing abilities for gas products to enter the market.

New Zealand intends to build on its relationship with the UK, and its relationship with the EU, as the UK leaves the EU. In addition, we expect Britain to use the existing European Gas Appliances Regulation (GAR) to certify gas appliances and fittings in the short to medium term.

We propose making some minor changes to the structure of Schedule 4 of the electricity safety regulations

We propose making some minor changes to the structure of Schedule 4 of the Electricity (Safety) Regulations 2010.

Beauty therapy products

We propose moving beauty therapy products into their own category in Schedule 4 (clause 16) of the Electricity (Safety) Regulations. While some items could be included in the *Household appliances and similar electrical appliances* category, the standards for sunbeds and appliances with lasers and intense light sources do not easily fit into that category.

Electrical medical devices

We propose moving the general medical equipment standards to their own section at the start of the clause for electrical medical devices. These standards run in parallel with the other standards in the section and are not specific to any particular piece of equipment. As their application is more general, we think it more appropriate to list them at the start of the section.

Changing how standards are cited

We also propose adopting a more uniform method for the citation of standards in Schedule 4. Currently, IEC Standards are cited using various formats. This can be confusing when reading the regulations.

Wherever possible, in Schedule 4, we propose to only cite applicable international standards. This has been done to provide uniformity with an international market, and clarity across these regulations. Where necessary, the applicable IEC Standard will be modified by the AS/NZS version of that standard, or the AS/NZS version will be cited. Where citation occurs in this way, it is to ensure the electricity or gas product meets New Zealand specific safety requirements, including voltage, frequency and pin configuration.

Questions

23) Do you agree or disagree with moving the beauty therapy appliances into a separate category in Schedule 4?
24) Do you agree or disagree with moving the general medical equipment standards to their own section at the start of the clause for electrical medical devices?
25) Will the proposed changes to referenced IEC Standards in Schedule 4 make it easier to understand the regulations? Or not? Please explain why.

Next steps

After consultation has closed on tbc 2021, we will review your feedback on these proposals. Informed by your feedback, we will then advise the Government about adopting the new versions of the standards cited in the Electricity (Safety) Regulations 2010 and Gas (Safety and Measurement) Regulations 2010, and the other proposals in this consultation document in tbc 2021. We propose to finalise amendments to legislation for commencement on tbc 2021.

We are also considering approaches for streamlining the update of standards in the regulations in the future.

NEW ESR Standards

Schedule 4

Clause 1

Household Appliances and similar

Type	Applicable standard	Latest Edition	Proposed change and rationale
Commercial microwave appliances with insertion or contacting applicators	New standard	IEC 60335-2-110 Ed 1.0 (2013) *Household and similar electrical appliances - Safety - Part 2-110: Particular requirements for commercial microwave appliances with insertion or contacting applicators*	**Immediate adoption of new standard – this standard only came into existence in 2013 & is included to broaden the scope of this schedule in line with new technological developments.**
Electric ondal mattress with a non-flexible heated part	New standard	IEC 60335-2-111 Ed 1.0 (2015) *Household and similar electrical appliances - Safety - Part 2-111: Particular requirements for electric ondol mattress with a non-flexible heated part*	**Immediate adoption of new standard – standard only came into existence in 2015**
Electrical heat pumps, air conditioners, and dehumidifiers using flammable refrigerants	New standard	IEC 60335-2-40 Ed 6.0 (2018) *Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers*	**Immediate adoption of new standard – latest edition only with immediate effect to address issues of flammable refrigerants**
Refrigerating appliances, ice-cream appliances, and ice-makers using flammable	New standard	IEC 60335-2-24 Ed 7.2 (2017) Household and similar electrical appliances -	**Immediate adoption of new standard as modified by Annex ZZ of As/NZS**

refrigerants		Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers	**60335.2.24:2010 including Amendments 1 and 2 – latest edition only to address issues of flammable refrigerants**
Robotic battery powered electrical lawnmowers	New standard	IEC 60335-2-107 Ed 2.0 (2017) *Household and similar electrical appliances - Safety - Part 2-107: Particular requirements for robotic battery powered electrical lawnmowers*	**Immediate adoption of new standard – standard only came into existence in 2012 and broadens the scope of this schedule in line with technological developments**
Self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes	New standard	IEC 60335-2-114 Ed 1.0 (2018) *Household and similar electrical appliances - Safety - Part 2-114: Particular requirements for self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes*	**Immediate adoption of new standard – this standard only came into existence in 2018 and broadens the scope of this schedule in line with technological developments**

Clause 5

Switches for circuits, installation protective devices, and connection devices

Type	Applicable standard	Latest Edition	Proposed change and rationale
Arc fault detection devices	New standard	IEC 62606 Ed 1.1 (2017) *General requirements for arc fault detection devices*	**Immediate adoption of new standard – only came into existence in 2013**
DC isolators	New Standard	IEC 60947-3 Ed 3.2 (2015) *Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*	**New standard – this is included as its own standard due to technical developments concerning DC isolators**
Low-voltage switchgear and controlgear assemblies - General rules	New Standard	IEC 61439-1 Ed 2.0 (2011) *Low-voltage switchgear and control gear assemblies - Part 1: General rules*	**Immediate adoption of new standard – provides greater breadth and ensures subsequent parts compliance with this part 1.** **Standard is already 8 years old, no transition needed.**
Low-voltage switchgear and controlgear assemblies - Power switchgear and controlgear assemblies	New standard	IEC 61439-2 Ed. 2.0 (2011) *Low-voltage switchgear and control gear assemblies - Power switchgear and*	**Immediate adoption of new standard - provides greater breadth ensures subsequent parts compliance with this part**

Type	Applicable standard	Latest Edition	Proposed change and rationale
		controlgear assemblies	**2.** **Standard is already 8 years old, no transition needed.**

Clause 6

Hand-held Motor-operated Electric tools

Type	Applicable standard	Latest Edition	Proposed change and rationale
Die grinders and small rotary tools	New standard	IEC 60745-2-23 Ed 1.0 (2012) Hand-held motor-operated electric tools - Safety - Part 2-23: Particular requirements for die grinders and small rotary tools	**Immediate adoption of new standard – standard only came into existence in 2012 & broadens scope of this schedule in line with technological developments**
Mixers	New Standard	IEC 62841-2-10 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.10: Particular requirements for hand-held mixers*	Immediate adoption of new standard
Transportable bench grinders	New standard	IEC 62841-3-4 Ed 1.0 (2016) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.4: Particular requirements for transportable bench grinders*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**

Transportable diamond drills with liquid system	New standard	IEC 62841-3-6 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.6: Particular requirements for transportable diamond drills with liquid system*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable drills	New standard	IEC 62841-3-13 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.13: Particular requirements for transportable drills*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.** **Though IEC recommends adopting from 2020, there is no prior applicable standard.**
Transportable mitre saws	New standard	IEC 62841-3-9 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.9: Particular requirements for transportable mitre saws*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable table saws	New standard	IEC 62841-3-1 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.1: Particular requirements for*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable threading machines	New standard	IEC 62841-3-12 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.12: Particular requirements for transportable threading machines*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.** **Though IEC recommends adopting from 2020, there is no prior applicable standard.**

Clause 8

Audio and video products

Audio & video products	Applicable standard	Latest edition	Suggested change and rationale

Safety aspects for DC power transfer through communication cables and ports	**NEW STANDARD**	IEC 62368-3 Ed1.0 (2017) *Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports*	**Immediate adoption of new standard – standard only came into existence in 2017 and broadens the scope of this schedule in line with technological developments**

Clause 10

Electrical medical devices

Type	Applicable standard	Latest edition	Suggested change and rationale
Critical care ventilators	Standard G in conjunction with IEC 60601-2-12 Ed 1.0	Cited standard has been withdrawn and replaced by: ISO 80601-2-12 Ed 1.0 (2011) *Medical electrical equipment – Part 2.12: Particular requirements for basic safety and essential performance of critical care ventilators*	Immediate transition to most recent ISO standard.
Electrocardiographs	NEW STANDARD	Cited standard is current IEC 60601-2-25 Ed 2.0 (2011) *Medical electrical equipment - Part 2-25: Particular requirements for the basic safety and essential performance of electrocardiographs*	**This standard was in the previous regulations, but was included in the row below (Electrocardiographic monitoring equipment).** This standard has been introduced on its own as a clarification of the standard below. The purpose is to separate the standards for Electrocardiographs and the equipment that

			monitors electrocardiographs.
Multifunction patient monitoring equipment	Standard G in conjunction with IEC 60601-2-49 Ed 2.0	Cited Standard has been withdrawn and replaced. See standard below. IEC 80601-2-49 Ed 1.0 (2018) *Medical electrical equipment - Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitors*	Immediate transition to latest relevant IEC standard

Clause 16

Beauty Therapy appliances

Type	Applicable standard	Latest Edition	Suggested change and rationale
Cosmetic and beauty care appliances incorporating lasers and intense light sources	New standard	IEC 60335-2-113 Ed 1.0 2016 *Household and similar electrical appliances - Safety - Part 2-113: Particular requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources*	**Immediate adoption of new standard – standard only came into existence in 2016 and addresses rising prominence of such equipment.**

Clause 17

Electric Vehicles

Type	Applicable standard	Latest Edition	Suggested change and rationale
Charging System Equipment	UL 2202 Ed 2 (2009)	1.1 These requirements cover conductive	Please see attached summary document

	Standard for Electric Vehicle (EV) Charging System Equipment UL2202 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. *UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	charging system equipment intended to be supplied by a branch circuit of 600 volts or less for recharging the storage batteries in over-the-road electric vehicles (EV). The equipment includes off board and on board chargers. Off-board equipment may be considered for indoor use only or indoor/outdoor use. On board equipment is always considered outdoor use. Off board equipment is intended to be installed in accordance with the National Electrical Code, NFPA 70. 1.1 revised October 5, 2012 1.2 For the purposes of this standard, the term “electric vehicle”, designated throughout by the initials “EV”, is considered to cover electric vehicles, hybrid electric vehicles, and plug-in versions of these vehicles. 1.3 Electric vehicle charging system equipment that is not a complete assembly and depends upon installation in an end product for compliance with the requirements in this standard is investigated under the requirements of this standard and the standard for the end product. On board chargers that rely upon specific installation requirements within an EV for compliance with the requirements in this standard, are to be evaluated based on those installation requirements and equipment. 1.3 revised October 5, 2012 1.4 These requirements do not cover battery chargers covered by the Standard for Battery Chargers for Charging Engine-Starter Batteries, UL 1236, or the Standard for Industrial Battery Chargers, UL 1564. 1.5 The requirements for devices or systems intended to reduce the risk of electric shock to the user in grounded or isolated circuits	

		for charging electric vehicles are covered in the Standard for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits; Part 1: General Requirements, UL 2231-1, and the Standard for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits; Part 2: Particular Requirements for Protective Devices for Use in Charging Systems, UL 2231-2. 1.6 The requirements in clauses 2 – 84 apply directly to off board charging equipment. Supplement SA applies directly to on board charging equipment. 1.6 added April 22, 2011	
Conductive charging system -	IEC 61851-1 Ed 3.0 (2017) *Electric vehicle conductive charging system - Part 1: General requirements*	Applies to EV supply equipment for charging electric road vehicles, with a rated supply voltage up to 1 000 V AC or up to 1 500 V DC and a rated output voltage up to 1 000 V AC or up to 1 500 V DC. Electric road vehicles (EV) cover all road vehicles, including plug-in hybrid road vehicles (PHEV), that derive all or part of their energy from on-board rechargeable energy storage systems (RESS). The aspects covered in this standard include: - the characteristics and operating conditions of the EV supply equipment; - the specification of the connection between the EV supply equipment and the EV; - the requirements for electrical safety for the EV supply equipment. This third edition cancels and replaces the second edition published in 2010. It constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) The contents of IEC 61851-1:2010 have	

		been re-ordered. Numbering of clauses has changed as new clauses were introduced and some contents moved for easy reading. The following lines give an insight to the new ordering in addition to the main technical changes. b) All requirements from IEC 61851-22 have been moved to this standard, as work on IEC 61851-22 has ceased. c) Any requirements that concern EMC have been removed from the text and are expected to be part of the future version of 61851-21-2. d) Clause 4 contains the original text from IEC 61851-1:2010 and all general requirements from Clause 6 of IEC 61851-1:2010. e) Clause 5 has been introduced to provide classifications for EV supply equipment. f) Previous general requirements of Clause 6 have been integrated into Clause 4. Clause 6 contains all Mode descriptions and control requirements. Specific requirements for the combined use of AC and DC on the same contacts are included. g) Clause 9 is derived from previous Clause 8. Adaptation of the description of DC accessories to allow for the DC charging modes that have only recently been proposed by industry and based on the standards IEC 61851-23, IEC 61851-24 as well as IEC 62196-1, IEC 62196-2 and IEC 62196-3. Information and tables contained in the IEC 62196 series standards have been removed from this standard. h) Clause 10 specifically concerns the requirements for adaptors, initially in Clause 6. i) Clause 11 includes new requirements for the protection of the cable. j) Specific requirements for equipment that	

		is not covered in the IEC 62752 remain in the present document. k) Previous Clause 11 is now treated in Clauses 12 to 13. The requirements in 61851-1 cover the EV supply equipment of both mode 2 and mode 3 types, with the exception in-cable control and protection devices for mode 2 charging of electric road vehicles (IC-CPD) which are covered by IEC 62752. l) Clause 14 gives requirements on automatic reclosing of protection equipment. m) Clause 16 gives requirements for the marking of equipment and the contents of the installation and user manual. This makes specific mention of the need to maintain coherence with the standards for the fixed installation. It also contains an important text on the markings for temperature ratings. n) Annex A has been reviewed to introduce complete sequences and tests and to make the exact cycles explicit. Annex A in this edition supersedes IEC TS 62763 (Edition 1). o) Annex B is normative and has requirements for proximity circuits with and without current coding. p) Previous Annex C has been removed and informative descriptions of pilot function and proximity function implementations initially in Annex B are moved to Annex C. q) New informative Annex D describing an alternative pilot function system has been introduced. r) Dimensional requirements for free space to be left around socket-outlets used for EV energy supply are given in the informative Annex E. s) The inclusion of protection devices within the EV supply equipment could, in some	

		cases, contribute to the protection against electric shock as required by the installation. This is covered by the information required for the installation of EV supply equipment in Clause 16 (Marking).	
Connection to an external electric power supply – Safety requirements	ISO 17409:2015 *Electrically propelled road vehicles – connection to an external electric power supply – Safety requirements*	Specifies electric safety requirements for conductive connections of electrically propelled road vehicles to an external electric power supply using a plug or vehicle inlet. It applies to electrically propelled road vehicles with voltage class B electric circuits. In general, it may apply to motorcycles and mopeds if no dedicated standards for these vehicles exist. It applies only to vehicle power supply circuits. It applies also to dedicated power supply control functions used for the connection of the vehicle to an external electric power supply. It does not provide requirements regarding the connection to a non-isolated d.c. charging station. It does not provide comprehensive safety information for manufacturing, maintenance, and repair personnel. The requirements when the vehicle is not connected to the external electric power supply are specified in ISO 6469‑3. NOTE 1 This International Standard does not contain requirements for vehicle power supply circuits using protection by class II or double/reinforced insulation but it is not the intention to exclude such vehicle	

		applications. NOTE 2 Requirements for EV supply equipment are specified in IEC 61851. A revised edition is currently being voted on.	
DC electric vehicle charging station	IEC 61851-23 Ed 1.0 (2014) *Electric vehicle conductive charging system - Part 23: DC electric vehicle charging station*	Gives the requirements for d.c. electric vehicle (EV) charging stations, herein also referred to as "DC charger", for conductive connection to the vehicle, with an a.c. or d.c. input voltage up to 1 000 V a.c. and up to 1 500 V d.c. according to IEC 60038. It provides the general requirements for the control communication between a d.c. EV charging station and an EV. The requirements for digital communication between d.c. EV charging station and electric vehicle for control of d.c. charging are defined in IEC 61851-24. Due to further technical developments in the field of electric vehicles charging, the requirements in IEC 61851-23:2014 to fulfil the safety objective "protection against electric shock" under single fault condition by limiting the capacitance energy, may not cover all possible combinations of charging stations and vehicles. Since the charging process links the charging infrastructure with the electric vehicle, the requirements laid down in **ISO 17409:2015** are also relevant for the electrical safety of the charging process. The approach of limiting the capacitance energy will not be sufficient for the safety objective "protection against electric shock" under single fault condition in all relevant cases. Therefore, this warning is issued for both standards. It is as always strongly recommended that users of standards additionally perform a risk assessment. Specifically in this case, standards users shall	

		select proper means to fulfil safety requirements in the system of charging station and electric vehicle. This publication is to be read in conjunction with IEC 61851-1:2010. The contents of the corrigendum of May 2016 have been included in this copy.	
Electric vehicle wireless power transfer (WPT) systems - Part 1: General requirements	IEC 61980-1 Ed 1.0 (2015) *Electric vehicle wireless power transfer (WPT) systems - Part 1: General requirements*	Applies to the equipment for the wireless transfer of electric power from the supply network to electric road vehicles for purposes of supplying electric energy to the RESS (Rechargeable energy storage system) and/or other on-board electrical systems in an operational state when connected to the supply network, at standard supply voltages ratings per IEC 60038 up to 1 000 V a.c. and up to 1 500 V d.c. This standard also applies to Wireless Power Transfer (WPT) equipment supplied from on-site storage systems (e.g. buffer batteries, etc.). This publication is to be read in conjunction with the IEC 61980 series. The contents of the corrigendum of January 2017 have been included in this copy.	
In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)	IEC 62752 Ed 1.1 (2018) In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)	Applies to in-cable control and protection devices (IC-CPDs) for mode 2 charging of electric road vehicles, hereafter referred to as IC-CPD including control and safety functions. This standard applies to portable devices performing simultaneously the functions of detection of the residual current, of comparison of the value of this current with the residual operating value and of opening of the protected circuit when the residual current exceeds this value. This consolidated version consists of the first edition (2016) and its amendment 1 (2018). Therefore, no need to order amendment in addition to this publication.	
Plugs, Receptacles, and Couplers for Electric	UL 2251 ED 4 (2017)	1.1 These requirements cover EV plugs, EV	

Vehicles	*Standard for Plugs, Receptacles, and Couplers for Electric Vehicles*	receptacles, vehicle inlets, vehicle connectors, and EV breakaway couplings, rated up to 800 amperes and up to 600 volts ac or dc. These devices are intended for use with conductive electric vehicle supply equipment (EVSE), and are intended to facilitate the conductive connection from the EVSE to the vehicle. These devices are for use in either indoor or outdoor non-hazardous locations in accordance with Annex A, Ref. No. 1. 1.2 This Standard does not directly apply to any device that is not intended for use as described in 1.1. 1.3 In the text of this Standard, the term "device" refers to any product covered by this Standard. The letters "EV" refer to an electric vehicle, including plug-in hybrid vehicles, hybrid vehicles, electric vehicles, battery electric vehicles, and similar vehicles.	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	IEC 62196-1 Ed 3.0 (2014) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements*	Applicable to plugs, socket-outlets, vehicle connectors, vehicle inlets and cable assemblies for electric vehicles, herein referred to as "accessories", intended for use in conductive charging systems which incorporate control means, with a rated operating voltage not exceeding: - 690 V a.c. 50 Hz to 60 Hz, at a rated current not exceeding 250 A; - 1 500 V d.c. at a rated current not exceeding 400 A. This third edition cancels and replaces the second edition published in 2011 and constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) addition of a preferred operating voltage of 1 000 V d.c.; b) addition of a preferred rated current of 80 A d.c.;	This standard was previously in the low-voltage equipment section.

		c) addition of a provision for a combined interface a.c./d.c.; d) description of d.c. configurations (previously under consideration); e) addition of requirements pertaining to the locking mechanism, the interlock and the latching device; f) addition of a test for accessories not suitable for making and breaking an electrical circuit under load; g) Addition of requirements and tests for insulated end caps. Note: ed2.0 is already cited in schedule 4	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories	IEC 62196-2 Ed 2.0 (2016) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories*	Applies to plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories. They have a nominal rated operating voltage not exceeding 480 V a.c., 50 Hz to 60 Hz, and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles. This second edition cancels and replaces the first edition published in 2011 and constitutes a technical revision. This second edition includes the following significant technical changes with respect to the previous edition. a) Standard sheets for configurations type 2 and type 3 have been updated. b) Configuration type 2 is now available with optional shutter. This publication is to be read in conjunction with IEC 62196-1:2014.	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 3: Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers	IEC 62196-3 Ed 1.0 (2014) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 3: Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers*	Applicable to vehicle couplers with pins and contact-tubes of standardized configuration, herein also referred to as "accessories", intended for use in electric vehicle conductive charging systems which incorporate control means, with rated operating voltage up to 1 500 V d.c. and	

		rated current up to 250 A, and 1 000 V a.c. and rated current up to 250 A. This part of IEC 62196 applies to high power d.c. interfaces and combined a.c./d.c. interfaces of vehicle couplers specified in IEC 62196-1:2014, and intended for use in conductive charging systems for circuits specified in IEC 61851-1:2010, and IEC 61851-23:2014. This publication is to be read in conjunction with IEC 62196-1:2014.	
Residual Direct current detecting devices	*IEC 62955 Ed 1.0 (2018)* Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electrical vehicles	Applies to residual direct current detecting devices (RDC-DD) for permanently connected AC electric vehicle charging stations (mode 3 charging of electric vehicles, according to IEC 61851-1 and IEC 60364-7-722), hereafter referred to as RDC-MD (residual direct current monitoring device) or RDC-PD (residual direct current protective device), for rated voltages not exceeding 440 V AC with rated frequencies of 50 Hz, 60 Hz or 50/60 Hz and rated currents not exceeding 125 A.	
Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements	*UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements* UL2594 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. UL 2594 ED 2 (2016) *Standard for Electric Vehicle Supply Equipment* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection*	1.1 These requirements cover devices and systems intended for use in accordance with Annex a, Ref. No. 1, to reduce the risk of electric shock to the user from accessible parts, in grounded or isolated circuits for charging electric vehicles. These circuits are external to or on board the vehicle. 1.2 The devices and systems covered by these requirements are compatible with the designs of charging systems and vehicles where use is intended and are rated accordingly. To assure compatibility, the charging system, the vehicle, or both, are in accordance with the features contained in 1.3 – 1.5. 1.3 The type of vehicle covered by these requirements, including all accessible conductive parts on the vehicle, has one or	

	Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems	more of the following: a) Provision for the connection of an equipment grounding conductor during battery charging, unless the vehicle has a system of reinforced or double insulation or all of the circuitry on the vehicle is electrically isolated from the supply circuit, b) Provision for the connection of ground-monitoring conductors, where required, c) Reinforced insulation, or is double-insulated from the supply circuit, or d) No direct connection between current-carrying conductors and the vehicle chassis. 1.4 These requirements cover devices and systems where the grounding path impedance of the charging system to the vehicle is less than or equal to the impedance of the ungrounded conductor or conductors. 1.5 These requirements cover devices and systems where a continuous current less than 70 mA RMS is available from any accessible part of the charging system. 1.6 Devices covered by these requirements are intended to interrupt the electric circuit to the load when: a) A fault current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit, b) The grounding path becomes open-circuited or becomes an excessively high impedance, or c) A path to ground is detected on an isolated (ungrounded) system. 1.7 These devices and systems are intended to be applied on electrical systems or include derived systems that are: a) Either end-grounded or centrally grounded when the operating voltage is 150	

		Vrms or less, b) Centrally grounded when the operating voltage is greater than 150 Vrms, or c) Isolated (ungrounded). 1.8 Charging circuit-interrupting devices covered by these requirements are investigated for their ability to provide protection based on: a) The type of current (60 Hz AC, DC, a combination of AC and DC, or AC at frequencies greater than 60 Hz) present in the circuit to be protected, and b) Voltage. 1.9 In Mexico and the US, these requirements do not cover ground-fault circuit-interrupters (GFCIs) intended for use as personnel protection in accordance with the national electrical codes on grounded 120 Vrms or 127 Vrms to ground, 60 Hz circuits. Such devices are covered under Annex a, Ref. No. 2. In Canada, these requirements do not cover ground-fault circuit-interrupters (GFCIs) in accordance with the national electrical code on grounded 120 Vrms or 127 Vrms to ground, 60 Hz circuits. Such devices are covered under Annex a, Ref. No. 2. 1.10 This Standard includes the Scope, Definitions, and Description of Requirements, including the required features of protection systems. The standards in Annex a, Ref. No. 3 contain the Performance and Construction requirements for protective devices that would become a part of a charging system.	
Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems	*UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging*	This Standard is intended to be used in conjunction with the general requirements of Annex a, Ref. No. 1. The requirements of Annex a, Ref. No. 1 apply unless modified by this Standard.	

	Systems		
Supply Equipment	UL 2594 ED 2 (2016) *Standard for Electric Vehicle Supply Equipment* UL2594 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. *UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	1.1 This Standard covers conductive electric vehicle (EV) supply equipment with a primary source voltage of 600 V ac or less, with a frequency of 50 or 60 Hz, and intended to provide ac power to an electric vehicle with an on-board charging unit. This Standard covers electric vehicle supply equipment intended for use where ventilation is not required. 1.2 With reference to 1.1, the following list of examples of electric vehicle supply equipment are included in this Standard: a) EV Cord Sets – Rated 125 Vac maximum, 16 A maximum, intended for indoor and outdoor use; b) Fastened in place EV Charging Stations – Rated 250 Vac maximum, 40 A maximum, intended for indoor or outdoor use; c) Fixed in place EV Charging Stations – Rated 600 Vac maximum, intended for indoor or indoor/outdoor use; and d) Fixed in place EV Power Outlet – Rated 600 Vac maximum, intended for indoor or indoor/outdoor use. For Mexico, use 127 Vac where 120 or 125 Vac is referenced in this Standard. In Canada and the United States, this does not apply. 1.3 The products covered by this Standard are intended for use in accordance with the Installation Codes in Annex A, Ref. No.1. 1.4 This Standard does not cover cord sets or power supply cords for applications other than EV charging cord sets. For cord sets and power supply cords not covered by this Standard, refer to Annex A, Ref. No. 2 and No. 3. 1.5 With reference to 1.2, this Standard does not cover electric vehicle charging equipment. For EV charging equipment not	

		covered by this Standard, refer to Annex A, Ref. No. 4. 1.6 This Standard does not cover electric vehicle connectors. For electric vehicle connectors not covered by this Standard, refer to Annex A, Ref. No. 5 1.7 This Standard does not cover regular-use power outlets. For regular-use power outlets not covered by this Standard, refer to Annex A, Ref. No. 6. 1.8 This Standard does not cover equipment intended for wireless power transfer, which may also be designated as wireless charging, inductive charging, magnetic resonance charging, or any other similar designation indicating the transfer of power from the EVSE to the vehicle through other than a conductive connection.	

ESR Standards update

These tables below detail the proposed updates to the Electricity (Safety) Regulations (2010). **Please see the attached summary document for full explanation of the complex issues.**

Contents

Schedule 2

Electrical codes of practice referred to in regulations

Abbreviations used in regulations	Full title	Latest edition	Suggested change and rationale
ECP 34	New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) approved on 21 December 2001	No changes to any of these codes	
ECP 35	New Zealand Electrical Code of Practice for Power Systems Earthing (NZECP 35:1993) approved on 18 March 1993		
ECP 36	New Zealand Electrical Code of Practice for Harmonic Levels (NZECP 36:1993) approved on 18 March 1993		
ECP 46	New Zealand Electrical Code of Practice for High Voltage Live Line Work (NZECP 46.2003) approved on 19 March 2003		
ECP 50	New Zealand Electrical Code of Practice for Repair and Maintenance of Domestic Electrical Appliances by the Owner of the Appliance (NZECP 50:2004) approved on 27 July 2004		
ECP 51	New Zealand Electrical Code of Practice for Homeowner/Occupier's Electrical Wiring Work in Domestic Installations (NZECP 51:2004) approved on 27 July 2004		
ECP 60	New Zealand Electrical Code of Practice for Inspection, Testing and Certification of Low Voltage A.C. Railway Signalling Control Circuits (NZECP 60:1997) approved on 11 March 1998		

Official Standards referred to in regulations

All applicable amendments in this section are to be referenced in full to ensure clarity.

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
AS 2290.1	AS 2290.1:1990: Electrical equipment for coal mines—Maintenance of electrical equipment for hazardous areas	Cited edition of standard has been superseded. AS/NZS 2290.1:2014 *Electrical equipment for coal mines - Introduction, inspection and maintenance - Part 1: For hazardous areas*	Immediate transition to most recent standard. Maintenance standard, no transition issue.
AS 2290.3	AS 2290.3:1990: Electrical equipment for coal mines—Maintenance and overhaul—Maintenance of gas detecting and monitoring equipment	Cited edition of standard has been superseded. AS/NZS 2290.3:2018 *Electrical equipment for coal mines - Introduction, inspection and maintenance - Part 3: Gas detecting and monitoring equipment*	Immediate transition to most recent standard. Amendment published 31/10/2019.
AS 4777.1	AS 4777.1:2005: Grid connection of energy systems via inverters—Part 1: Installation requirements	Cited edition of standard has been superseded. AS/NZS 4777.1:2016 *Grid connection of energy systems via inverters - Part 1: Installation requirements*	Immediate transition to most recent standard.
AS/NZS 1299	AS/NZS 1299:2009: Electrical equipment for mines and quarries—Explosion-protected three-phase restrained plugs and receptacles for working voltages up to and including 3.3 kV	One amendment to cited edition of standard since citation AS/NZS 1299:2009: *Electrical equipment for mines and quarries—Explosion-protected three-phase restrained plugs and receptacles for working voltages up to and including 3.3 kV* AS/NZS 1299:2009 A1 Published 30/03/2012	Immediate transition to most recent standard including Amendment 1.

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
AS/NZS 1677.2	AS/NZS 1677.2:1998: Refrigerating systems—Part 2: Safety requirements for fixed applications: including Amendments 1 and 2	Cited edition of standards has been superseded. Revised standards are: AS/NZS 5149.1:2016 A1 *Refrigerating systems and heat pumps - Safety and environmental requirements - Part 1: Definitions, classification and selection criteria: Amendment 1:2018* *Published 23/03/2018* AS/NZS 5149.1:2016 A2 *Refrigerating systems and heat pumps - Safety and environmental requirements Part 1: Definitions, classification and selection criteria: Amendment 2:2018* *Published 19/07/2018*	Immediate transition to: AS/NZS 5149.1:2016 A1 *Refrigerating systems and heat pumps - Safety and environmental requirements - Part 1: Definitions, classification and selection criteria: Amendment 1:2018* AS/NZS 5149.1:2016 A2 *Refrigerating systems and heat pumps - Safety and environmental requirements Part 1: Definitions, classification and selection criteria: Amendment 2:2018*
AS/NZS 1747	AS/NZS 1747:2003: Reeling, trailing and feeder cables used for mining—Repair, testing and fitting of accessories	One amendment to cited standard since citation: AS/NZS 1747:2003 A1 *Reeling, trailing and feeder cables used for mining - Repair, testing and fitting of accessories: Amendment 1* Published 18/08/2005	Immediate transition to most recent standard including Amendment 1
AS/NZS 1802	AS/NZS 1802:2003: Electric cables—Reeling and trailing—For underground coal mining purposes	Cited standard has been superseded. AS/NZS 1802:2018 *Electric cables - Reeling and trailing - For underground coal mining*	Immediate transition to most recent standard
AS/NZS 1826	AS/NZS 1826:2008: Electrical equipment for explosive gas atmospheres—Special protection—	Cited standard is current AS/NZS 1826:2008	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
	Type of protection 's'	*Electrical equipment for explosive gas atmospheres - Special protection - Type of protection 's'*	
AS/NZS 1972	AS/NZS 1972:2006: Electric cables—Underground coal mining purposes—Other than reeling and trailing	Cited standard is current AS/NZS 1972:2006: *Electric cables—Underground coal mining purposes—Other than reeling and trailing*	No change
AS/NZS 2500	AS/NZS 2500:2004 Guide to the safe use of electricity in patient care	Cited standard is current AS/NZS 2500:2004 *Guide to the safe use of electricity in patient care*	No change
AS/NZS 3000:2007	AS/NZS 3000:2007: Electrical installations (known as the Australian/New Zealand Wiring Rules): including Amendments 1 and 2, subject to the following modifications: 1. In 4.5.2.3.2, change "warning sign shall be installed" to "warning sign shall be installed or fitted in domestic installations but may be omitted from all other installations". 2. In 4.18.1(b) and (c), change "all live (active and neutral) conductors" to "all active conductors". 3. Add a new paragraph to 4.18.2: "In New Zealand, only electrical equipment that is directly associated with the gas supply may be	Cited edition of standards has been superseded. AS/NZS 3000:2018 *Electrical installations - Known as the Australian/New Zealand Wiring Rules* Amendment 1 published 31/01/2020	**Please see summary document**

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
	installed in the hazardous areas of a domestic installation, shown in figure 4.10." 4. Replace 4.18.3 with "In New Zealand, only electrical equipment (including metering equipment) that is directly associated with the gas supply may be installed in the exclusion zones of a domestic installation in figure 4.11."		
AS/NZS 3001	AS/NZS 3001:2008: Electrical installations—Transportable structures and vehicles including their site supplies: including Amendment 1	Cited standard is current Amendment A was superseded by amendment 1 on25/06/2012 AS/NZS 3001:2008 A1 *Electrical Installations - Transportable structures and vehicles including their site supplies: Amendment 1:2012*	No change
AS/NZS 3002	AS/NZS 3002:2008: Electrical installations—Shows and carnivals, subject to the variation that references to AS/NZS 3439.4 must be read as references to AS/NZS 3439.4:2009	Cited standard is current AS/NZS 3002:2008: Electrical installations—Shows and carnivals	No change
AS/NZS 3003	AS/NZS 3003:2011: Electrical installations—Patient areas	Cited edition of standards has been superseded. AS/NZS 3003:2018 *Electrical installations - Patient areas* Amendment 1 published 29/07/2019	**Transition: with immediate effect – significant change to provision of healthcare in homes. We do not want to create confusion by continuing the old rules when the new rules are more practical and facilitative than the old standard.** **Regulations 113, 118A and 118B will come into force, to allow for current**

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
			installations, those currently being installed, those in transit to NZ and those that are the subject of an irrevocable purchasing order by a person in NZ to continue as normal. **All of the above clauses should be amended to include the correct dates.**
AS/NZS 3004.1	AS/NZS 3004.1:2008: Electrical installations—Marinas and recreational boats—Part 1: Marinas	Cited edition of standards has been superseded. AS/NZS 3004.1:2014 *Electrical installations - Marinas and boats - Part 1: Marinas*	Immediate transition to most recent standard
AS/NZS 3004.2	AS/NZS 3004.2:2008: Electrical installations—Marinas and recreational boats—Part 2: Recreational boats installations	Cited edition of standards has been superseded. AS/NZS 3004.2:2014 *Electrical installations - Marinas and boats - Part 2: Boat installations* *Amendment 1 published 17/07/2015*	Immediate transition to most recent standard
AS/NZS 3007	AS/NZS 3007:2013: Electrical equipment in mines and quarries—Surface installations and associated processing plant	Cited standard is current AS/NZS 3007:2013: Electrical equipment in mines and quarries—Surface installations and associated processing plant	No change
AS/NZS 3009	AS/NZS 3009:1998: Electric installations—Emergency power supplies in hospitals	Cited standard is current AS/NZS 3009:1998: Electric installations—Emergency power supplies in hospitals	No change
AS/NZS 3010	AS/NZS 3010:2005: Electrical installations—Generating sets	Cited edition of standards has been superseded. AS/NZS 3010:2017 *Electrical installations—Generating*	Immediate transition to most recent standard

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		sets	
AS/NZS 3012	AS/NZS 3012:2010: Electrical installations—Construction and demolition sites	One amendment to cited edition of standard since citation: AS/NZS 3012:2019 A1 *Electrical installations - Construction and demolition sites: Amendment 1* published 20/10/2015	Immediate transition to most recent standard including Amendment 1
AS/NZS 3014	AS/NZS 3014:2003: Electrical installations—Electric fences: including Amendment 1	Cited standard is current AS/NZS 3014:2003: *Electrical installations—Electric fences: including Amendment 1*	No change
AS/NZS 3016	AS/NZS 3016:2002: Electrical installations—Electric security fences: including Amendment 1	Cited standard is current AS/NZS 3016:2002: *Electrical installations—Electric security fences: including Amendment 1*	No change
AS/NZS 3019	AS/NZS 3019:2007: Electrical installations—Periodic verification	Cited standard is current AS/NZS 3019:2007: Electrical installations—Periodic verification	No change
AS/NZS 3112	AS/NZS 3112:2011: Approval and test specification—Plugs and socket-outlets: including Amendment 1	Cited edition of standard has been superseded. AS/NZS 3112:2017 *Approval and test specification - Plugs and socket-outlets*	Immediate transition to most recent standard
AS/NZS 3190	AS/NZS 3190:2011: Approval and test specification—Residual current devices (current-operated earth-leakage devices)	Cited edition of standard has been superseded. AS/NZS 3190:2016 *Approval and test specification—Residual current devices (current-operated earth-leakage devices)* Amendment 1 published 10/07/2020	Immediate transition to most recent standard

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
AS/NZS 3439	AS/NZS 3439.4.2009: Low-voltage switchgear and controlgear assemblies—Part 4: Particular requirements for assemblies for construction sites (ACS)	Cited standard is current. AS/NZS 3439.4.2009: *Low-voltage switchgear and controlgear assemblies—Part 4: Particular requirements for assemblies for construction sites (ACS)* Standard will be superseded on 24/05/2021 by AS/NZS 61439.4:2016 *Low-voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)*	Immediate transition to: AS/NZS 61439.4:2016 *Low-voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)* Or AS/NZS 3439.4.2009: *Low-voltage switchgear and controlgear assemblies—Part 4: Particular requirements for assemblies for construction sites (ACS)* until 24/05/2021 This is an update to the most recent standard, with a transition period allowed to conform with Standards NZ recommendation.
AS/NZS 3551	AS/NZS 3551:2012: Management programs for medical devices	Two Amendments to standard since citation AS/NZS 3551:2012 A1 *Management programs for medical equipment: Amendment 1* Published 29/10/2013 AS/NZS 3551:2012 A2 *Management programs for medical equipment: Amendment 2* Published 08/09/2016 Both Amendments incorporated	Immediate transition to most recent standard including Amendments 1 and 2.
AS/NZS 3760	AS/NZS 3760:2010: In-service safety inspection and testing of electrical equipment: including Amendments 1 and 2	Cited standard is current AS/NZS 3760:2010: In-service safety inspection and testing	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		of electrical equipment: including Amendments 1 and 2	
AS/NZS 3800	AS/NZS 3800:2005: Electrical equipment for explosive atmospheres—Repair and overhaul	Cited edition of standard has been superseded. AS/NZS 3800:2020 *Electrical equipment for explosive atmospheres—Repair and overhaul*	Immediate transition to most recent standard
AS/NZS 3820	AS/NZS 3820:2009: Essential safety requirements for electrical equipment: including Amendment 1	Cited standard is current AS/NZS 3820:2009: Essential safety requirements for electrical equipment: including Amendment 1	No change
AS/NZS 3832	AS/NZS 3832:1998: Electrical installations—Cold-cathode illumination systems	Cited standard is current AS/NZS 3832:1998: *Electrical installations—Cold-cathode illumination systems*	**This standard is to be withdrawn** as it is not referenced anywhere else throughout the regulations.
AS/NZS 4249	AS/NZS 4249:1994: Electrical safety practices—Film, video and television sites	Cited standard is current AS/NZS 4249:1994: *Electrical safety practices—Film, video and television sites*	No change
AS/NZS 4509.1	AS/NZS 4509.1:2009: Stand-alone power systems—Part 1: Safety and installation	Cited standard is current AS/NZS 4509.1:2009: *Stand-alone power systems—Part 1: Safety and installation* Standard was reconfirmed in 2016	No change
AS/NZS 4701	AS/NZS 4701:2000: Requirements for domestic electrical appliances and equipment for reconditioning or parts recycling	Cited standard is current AS/NZS 4701:2000: *Requirements for domestic electrical appliances and equipment for reconditioning or parts recycling*	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		Standard was reconfirmed in 2016	
AS/NZS 4761.1	AS/NZS 4761.1:2008: Competencies for working with electrical equipment for hazardous areas (EEHA)—Competency Standards	Cited edition of standard has been superseded. AS/NZS 4761.1:2018 *Competencies for working with electrical equipment for hazardous areas (EEHA) - Part 1: Competency Standards*	Immediate transition to most recent standard
AS/NZS 4836	AS/NZS 4836:2011: Safe working on or near low-voltage electrical installations and equipment	Cited standard is current AS/NZS 4836:2011: *Safe working on or near low-voltage electrical installations and equipment*	No Change
AS/NZS 5033	AS/NZS 5033:2012: Installation and safety requirements for photovoltaic (PV) arrays: including Amendments 1 and 2, subject to the following modification: In clause 4.4.1.5(c), after "metallic", insert "high density PVC".	Cited 2012 edition of standard has been superseded. Revised standard is: AS/NZS 5033:2014 *Installation and safety requirements for photovoltaic (PV) arrays* With addition of amendments: AS/NZS 5033:2014 A1 *Installation and safety requirements for photovoltaic (PV) arrays: Amendment 1:2018* Published 29/06/2018 Incorporated AS/NZS 5033:2014 A2 *Installation and safety requirements for photovoltaic (PV) arrays: Amendment 2:2018* Published 29/06/2018 Appended	Immediate transition to most recent standard including Amendments 1 and 2

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
AS/NZS 5761	AS/NZS 5761:2011: In-service safety inspection and testing—Second-hand electrical equipment prior to sale	Cited standard is current AS/NZS 5761:2011: *In-service safety inspection and testing—Second-hand electrical equipment prior to sale*	No change
AS/NZS 5762	AS/NZS 5762:2011: In-service safety inspection and testing—Repaired electrical equipment	Cited standard is current AS/NZS 5762:2011: In-service safety inspection and testing—Repaired electrical equipment	No change
AS/NZS 7000	AS/NZS 7000:2010: Overhead line design—Detailed procedures	Cited edition of standard has been superseded. AS/NZS 7000:2016 *Overhead line design*	Immediate transition to most recent standard This standard is cited for a narrow purpose, and if a project has been started under the old rules, it can continue as such. Any new design should be subject to the latest standard.
AS/NZS 60079.0	AS/NZS 60079.0:2012: Explosive atmospheres—Part 0: Equipment—General requirements	Cited edition of standard has been superseded. AS/NZS 60079.0:2019 *Explosive atmospheres - Part 0: Equipment - General requirements*	Immediate transition to most recent standard
AS/NZS 60079.11	AS/NZS 60079.11:2011: Explosive atmospheres—Part 11: Equipment protection by intrinsic safety 'i'	One amendment to cited edition of standard since citation: AS/NZS 60079.11:2011A1 *Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i': Amendment 1:2013* Incorporated 24/04/2013	**This standard is to be withdrawn** as it is not referenced anywhere else throughout the regulations.
AS/NZS 60079.14	AS/NZS 60079.14:2009: Explosive	Cited edition of standard has been	Immediate transition to most recent

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
	atmospheres—Part 14: Electrical installations design, selection and erection: including Amendment 1	superseded. AS/NZS 60079.14:2017 *Explosive atmospheres - Part 14: Design selection, erection and initial inspection*	standard
AS/NZS 60079.17	AS/NZS 60079.17:2009: Explosive atmospheres—Part 17: Electrical installations inspection and maintenance: including Amendment 1	Cited edition of standard has been superseded. AS/NZS 60079.17:2017 *Explosive atmospheres - Part 17: Electrical installations inspection and maintenance*	Immediate transition to most recent standard
AS/NZS 60079.18	AS/NZS 60079.18:2011: Explosive atmospheres—Part 18: Equipment protection by encapsulation 'm'	Cited edition of standard has been superseded. AS/NZS 60079.18:2016 *Explosive atmospheres—Part 18: Equipment protection by encapsulation 'm'* Amendment 1 published 24/04/2020	**This standard is to be withdrawn** as it is not referenced anywhere else throughout the regulations.
AS/NZS 60079.29.2	AS/NZS 60079.29.2:2008: Explosive atmospheres—Gas detectors—Selection, installation, use, and maintenance of detectors for flammable gases and oxygen	Cited edition of standard has been superseded. AS/NZS 60079.29.2:2016 *Explosive atmospheres - Part 29.2: Gas detectors - Selection, installation, use and maintenance of detectors for flammable gases and oxygen*	Immediate transition to most recent standard
AS/NZS 60079.35.1	AS/NZS 60079.35.1:2011: Explosive atmospheres—Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion	Cited standard is current AS/NZS 60079.35.1:2011: Explosive atmospheres—Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of	**This standard is to be withdrawn.** The certification scheme for caplights is laid out in Schedule 8 clause 37

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		explosion	
AS/NZS 60950.1	AS/NZS 60950.1:2011: Information technology equipment—Safety—General requirements: including Amendment 1	Cited edition of standard has been superseded. AS/NZS 60950.1:2015 *Information technology equipment - Safety - Part 1: General requirements* Please note, this will in turn be superseded on 15/02/2022 by AS/NZS 62368.1:2018 *Audio/video, information and communication technology equipment - Part 1: Safety requirements*	Immediate transition to latest standard: AS/NZS 60950.1:2015 *Information technology equipment - Safety - Part 1: General requirements*
AS/NZS 61000.3.2	AS/NZS 61000.3.2:2007: Electromagnetic compatibility (EMC)—Limits—Limits for harmonic current emissions (equipment input current less than or equal to 16 A per phase): including Amendments 1 and 2	Cited edition of standard has been superseded. AS/NZS 61000.3.2:2013 *Electromagnetic compatibility (EMC) - Part 3.2: Limits - Limits for harmonic current emissions (equipment input current less than or equal to 16 A per phase)*	Immediate transition to latest standard
AS/NZS 62013.1	AS/NZS 62013.1:2001: Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion	Cited standard is current AS/NZS 62013.1:2001: Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion	**This standard is to be withdrawn.** The certification scheme for caplights is laid out in Schedule 8 clause 37
BS EN 50119	BS EN 50119:2009: Railway applications—Fixed installations—Electric traction overhead contact lines	One amendment to cited standard since citation. BS EN 50119:2009+A1:2013 *Railway applications—Fixed installations—Electric traction overhead contact lines including*	Immediate transition to latest standard including Amendment 1

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		Amendment 1 Published 31/05/2013	
BS EN 50122-1	BS EN 50122-1:2011: Railway applications—Fixed installations—Electrical safety, earthing and the return circuit. Part 1: Protective provisions against electric shock: including Amendment 1	Three further amendments to standard since citation: BS EN 50122-1:2011+A4:2017 *Railway applications—Fixed installations—Electrical safety, earthing and the return circuit. Part 1: Protective provisions against electric shock: including Amendment 1* Most recent amendment published 02/17 and replaces previous amendments	Immediate transition to latest standard including Amendment 4
BS 6164	BS 6164:2011: Code of practice for health and safety in tunnelling in the construction industry	Cited standard is current BS 6164:2011: *Code of practice for health and safety in tunnelling in the construction industry*	No change
IEC 60050	IEC 60050-826 Ed 2: International electrotechnical vocabulary—Part 826: Electrical installations	Cited standard is current IEC 60050-826 Ed 2.0 (2004) *International electrotechnical vocabulary—Part 826: Electrical installations*	No change
IEC 60079-0	IEC 60079-0 Ed 6.0 Explosive atmospheres—Equipment—General requirements	Cited edition of standard has been superseded. IEC 60079-0 Ed 7.0 (2017) *Explosive atmospheres - Part 0: Equipment - General requirements*	Immediate transition to latest standard
IEC 60079-33	IEC 60079-33 Ed 1.0 Explosive atmospheres—Equipment protection by special protection‘s’	Cited standard is current IEC 60079-33 Ed 1.0 (2012) *Explosive atmospheres—Equipment protection by special protection ‘s’*	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
IEC 60079-35-1	IEC 60079-35-1 Ed 1.0 Explosive atmospheres—Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion	Cited standard is current IEC 60079-35-1 Ed 1.0 (2011) *Explosive atmospheres—Caplights for use in mines susceptible to firedamp—General requirements—Construction and testing in relation to the risk of explosion*	**This standard is to be withdrawn.** The certification scheme for caplights is laid out in Schedule 8 clause 37
IEC 60913	IEC 60913 Ed 2.0 Railway applications—Fixed installations—Electric traction overhead contact lines	Cited standard is current IEC 60913 Ed 2.0 (2013) *Railway applications—Fixed installations—Electric traction overhead contact lines*	No change
IEC 61000-3-2	IEC 61000-3-2 Ed 3.2 b:2009: Electromagnetic compatibility (EMC)—Part 3-2: Limits—Limits for harmonic current emissions (equipment input current &1e; A per phase): as amended by the deviation in AS/NZS 61000.3.2:2007: including Amendments 1 and 2	Cited edition of standard has been superseded. IEC 61000-3-2:2018 *Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)*	Immediate transition to latest standard
IEC 61000-3-3	IEC 61000-3-3 Ed 2.0:2008: Electromagnetic compatibility (EMC)—Part 3-3: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection	Cited edition of standard has been superseded. IEC 61000-3-3 Ed 3.1 (2017) *Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection* **Likely a revision is being worked on**	Immediate transition to latest standard
IEC 61000-3-4	IEC 61000-3-4 Ed 1.0:1998: Electromagnetic compatibility (EMC)—Part 3-4: Limits—Limitation of	Cited standard is current IEC/TS 61000-3-4 Ed 1.0 (1998)	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
	emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A	*Electromagnetic compatibility (EMC) - Part 3-4: Limits - Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A*	
IEC 61000-3-11	IEC 61000-3-11 Ed 1.0:2000: Electromagnetic compatibility (EMC)—Part 3-11: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems—Equipment with rated current ≤75 A and subject to conditional connection	Cited edition of standard has been superseded. IEC 61000-3-11:2017 *Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems - Equipment with rated current ≤ 75 A and subject to conditional connection*	Immediate transition to latest standard
IEC 61000-3-12	IEC 61000-3-12 Ed 2.0:2011: Electromagnetic compatibility (EMC)—Part 3-12: Limits—Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤75 A per phase	Cited standard is current. IEC 61000-3-12 Ed 2.0 (2011) *Electromagnetic compatibility (EMC)—Part 3-12: Limits—Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤75 A per phase* Work in progress on IEC 61000-3-12/AMD1 – Forecast publication date of 30/06/2021	No change
IEC 62128-1	IEC 62128-1 Ed 2.0 Railway applications – Fixed installations – Electrical safety, earthing and the return circuit – Part 1: Protective provisions against electrical shock	Cited standard is current IEC 62128-1 Ed 2.0 (2013) *Railway applications – Fixed installations – Electrical safety, earthing and the return circuit – Part 1: Protective provisions against electrical shock*	No change
IEC/TS 61000-3-5	IEC/TS 61000-3-5 Ed 2.0:2009: Electromagnetic compatibility (EMC)—	Cited standard is current	No change

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
	Part 3-5: Limits—Limitation of voltage fluctuations and flicker in low-voltage power supply systems for equipment with rated current greater than 75 A	IEC/TS 61000-3-5 Ed 2.0 (2009) *Electromagnetic compatibility (EMC)—Part 3-5: Limits—Limitation of voltage fluctuations and flicker in low-voltage power supply systems for equipment with rated current greater than 75 A*	
IEC/TS 60479-1	IEC/TS 60479-1 Ed 4.0:2005: Effects of current on human beings and livestock—Part 1: General aspects	Cited edition of standard has been superseded. IEC 60479-1 Ed 1.0 (2018) *Effects of current on human beings and livestock - Part 1: General aspects*	Immediate transition to latest standard
IEEE 1222	IEEE 1222-2011: IEEE standard for testing and performance for all-dielectric self-supporting (ADSS) fiber optic cable for use on electric utility power lines	Cited standard is current IEEE 1222-2011 IEEE standard for testing and performance for all-dielectric self-supporting (ADSS) fiber optic cable for use on electric utility power lines	No change
ISO/IEC 17050-1	ISO/IEC 17050-1 Ed 1.0:2004: Conformity assessment—Supplier's declaration of conformity—Part 1: General requirements	Cited standard is current ISO/IEC 17050-1 Ed 1.0 (2004) Conformity assessment—Supplier's declaration of conformity—Part 1: General requirements	No change
NZS 6115	NZS 6115:2006: Electrical installations—Mobile medical facilities: including Amendments 1 and 2	Cited standard is current NZS 6115:2006: *Electrical installations—Mobile medical facilities: including Amendments 1 and 2*	No change
NZS 6116	NZS 6116:2006: Safe application of electricity in the meat processing industry	Cited standard is current NZS 6116:2006: *Safe application of electricity in the meat processing industry*	No change
NZS 7901	NZS 7901:2008: Electricity and gas industries—Safety management systems for public safety	Cited edition of standard has been superseded.	Immediate transition to: NZS 7901:2014

Abbreviation used in regulations	Full title	Latest edition	Suggested change and rationale
		NZS 7901:2014 *Electricity and gas industries – Safety management systems for public safety* See also AS/NZS/ISO 45001:2018 *Occupational health and safety management systems – Requirements with guidance for use*	*Electricity and gas industries – Safety management systems for public safety* Or AS/NZS/ISO 45001:2018 *Occupational health and safety management systems – Requirements with guidance for use* The latter standard has been included following industry requests.

Schedule 4

Wherever possible throughout schedule 4 an attempt has been made to cite only applicable international standards. This has been done to provide uniformity with an international market, and clarity across these regulations. Where necessary the applicable IEC standard is to be modified by the AS/NZS version of that standard, or the AS/NZS version is to be cited. Where citation occurs in this way, it is for safety critical reasons.

Clause 1

Household Appliances and similar

standard A means IEC 60335-1 Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.1:2002, including Amendments 1 to 4

standard B means IEC 60335-1 Ed 5.0 as modified by AS/NZS 60335.1:2011

standard C means AS/NZS 60335.1:2002, including Amendments 1 to 4

standard D means AS/NZS 3350.1:2002, including Amendments 1 to 4.

Standards A, B, C and D will no longer be referenced.

All standards included in this section must, unless another edition is stated, comply with:

IEC 60335-1 Ed 5.2 (2016) *Household and similar electrical appliances - Safety - Part 1: General requirements* as modified by Annex ZZ of AS/NZS 60335.1:2011

Or

IEC 60335-1 Ed 5.1 (2013) *Household and similar electrical appliances - Safety - Part 1: General requirements* as modified by Annex ZZ of AS/NZS 60335.1:2011

This is determined by the date of the applicable standard cited below. They must also comply with the part 2 of the cited standard.

Wherever an elder version of 60335-1 is referenced, this is to be modified by Annex ZZ of AS/NZS 60335.1 that was applicable at the time.

AS/NZS 60335.1:2011 Amendment 5 will be published 28/06/2019. The text in this amendment other than that for 22.201 and Annex ANZ takes effect from 28 June 2019. The text in this amendment for 22.201 and Annex ANZ takes effect on 28 June 2021.

Type	Applicable standard	Latest edition	Suggested change and rationale
Air-cleaning appliances	Standard A, or standard B, in conjunction with IEC 60335-2-65 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-65 Ed 2.2 (2015) *Household and similar electrical appliances - Safety - Part 2-65:Particular requirements for air-cleaning appliances*	Immediate transition to latest edition
Amusement machines and personal service machines	Standard A, or standard B, in conjunction with IEC 60335-2-82 Ed 2.1 as modified by Annex ZZ of AS/NZS 60335.2.82:2006, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-82 Ed 3.0 (2017) *Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines*	Immediate transition to : latest edition Or IEC 60335-2-82 Ed 2.2 (2015) until 1 Jan 2022
Appliances for heating liquids	Standard A, or standard B, in conjunction with IEC 60335-2-15 Ed 5.2 as modified by	Cited edition of standard has been superseded.	Immediate transition to:

Type	Applicable standard	Latest edition	Suggested change and rationale
	Annex ZZ of AS/NZS 60335.2.15:2002, including Amendments 1 to 4	IEC 60335-2-15 Ed 6.2 (2018) *Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids*	latest edition as modified by Annex ZZ of AS/NZS 60335.2.15:2013 including Amendments 1, 2 and 3 Or IEC 60335-2-15 Ed 6.0 (2016) as modified by Annex ZZ of AS/NZS 60335.2.15:2013 including Amendments 1, 2 and 3 until 1 Jan 2023 *Modification includes pressure cooker requirements, all-in-one kitchen appliance interlock requirements and glass bodied kettle mechanical requirements.* **AS/NZS 60335.2.15:2013 Amendment 4 will be published 28/06/2021. It will take effect on 28/06/2021.** **Amendment 5 is proposed for publication 30/11/2021.**
Appliances for skin exposure to ultraviolet and infrared radiation	Standard A, or standard B, in conjunction with IEC 60335-2-27 Ed 5.0 as modified by AS/NZS 60335.2.27:2010	Cited edition of standard has been superseded. IEC 60335-2-27 Ed 5.2 (2015) *Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation*	Immediate transition to latest edition. **Transfer this standard from household appliances to new clause 4.16 'Beauty Therapy appliances'** Please see table 4.16
Appliances for skin or hair care	Standard A, or standard B, in conjunction with IEC 60335-2-23 Ed 5.2 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-23 Ed 5.1 as modified by Annex ZZ of AS/NZS 60335.2.23:2004, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-23 Ed 6.1 (2019) *Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care*	Immediate transition to: latest edition Or IEC 60335-2-23 Ed 6.0 (2016) until 1 Jan 2024

Type	Applicable standard	Latest edition	Suggested change and rationale
			Transfer this standard from household appliances to new clause 4.16 'Beauty Therapy appliances' Please see table 4.16
Appliances to recover and/or recycle refrigerant form air conditioning and refrigerant equipment	Standard A, or standard B, in conjunction with IEC 60335-2-104 ED 1.0	Cited standard is current IEC 60335-1 Ed 4.0 (2002), in conjunction with IEC 60335-2-104 Ed 1.0 (2003) *Household and similar electrical appliances - Safety - Part 2-104: Particular requirements for appliances to recover and/or recycle refrigerant from air conditioning and refrigeration equipment*	Immediate change to latest wording.
Automatic machines for floor treatment for commercial use	Standard B, in conjunction with IEC 60335-2-72 Ed 3.0 or Until 31/05/2016, standard A, or standard B, in conjunction with IEC 60335-2-72 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-72 Ed 4.0 (2016) *Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for floor treatment machines with or without traction drive, for commercial use*	Immediate transition to latest edition
Battery chargers	Standard A, or standard B, in conjunction with IEC 60335-2-29 Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.29:2004, including Amendments 1 and 2	Cited edition of standard has been superseded. IEC 60335-2-29 Ed 5.0 (2016) *Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.29:2017 Or IEC 60335-2-29 Ed 5.0 (2016) as modified by Annex ZZ of 60335.2.29:2017 until 1 Jan 2024 *Modification requires markings to specify that only the correct battery types should be used, and to be visible when charging*
Blankets, pads, clothing, and similar flexible heating appliances	Standard B, in conjunction with IEC 60335-2-17 Ed 3.0 as modified by AS/NZS 60335.2.17:2012 or	Cited edition of standard has been superseded. IEC 60335-2-17 Ed 3.2 (2019)	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.17:2012 including

Type	Applicable standard	Latest edition	Suggested change and rationale
	Until 26/10/2015, standard A, or standard B, in conjunction with IEC 60335-2-17 Ed 2.2 as modified by Annex ZZ of AS/NZS 60335.2.17:2004, including Amendments 1 and 2	*Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances*	Amendment 1 Or IEC 60335-2-17 Ed 3.1 (2015) as modified by Annex ZZ of AS/NZS 60335.2.17:2012 including Amendment 1 until 1 Jan 2024 *Modification includes marking symbols.*
Clocks	Standard A, or standard B, in conjunction with IEC 60335-2-26 Ed 4.1	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-43 Ed 3.2 (2008) *Household and similar electrical appliances - Safety - Part 2-26: Particular requirements for clocks*	Immediate change to latest wording
Clothes dryers and towel rails	Standard A, or standard B, in conjunction with IEC 60335-2-43 Ed 3.2	Cited edition of standard has been superseded. IEC 60335-2-43 Ed 4.0 (2017) Household and similar electrical appliances - Safety - Part 2-43: Particular clothes dryers and towel rails	Immediate transition to: latest edition Or IEC 60335-1 Ed 4.0 (2007) in conjunction with IEC 60335-2-43 Ed 3.2 (2008) until 1 Jan 2022
Commercial dispensing appliances and vending machines	Standard A, or standard B, in conjunction with IEC 60335-2-75 Ed 2.2 as modified by Annex ZZ of AS/NZS 60335.2.75:2005, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-75 Ed 3.2 (2018) *Household and similar electrical appliances - Safety - Part 2-75: Particular requirements for commercial dispensing appliances and vending machines*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.75:2013 including Amendments 1, 2 and 3 Or IEC 60335-2-75 3.1 (2015) as modified by Annex ZZ of AS/NZS 60335.2.75:2013 including Amendments 1 and 2 until 1 Jan 2023 *Modification voids numerous clauses in the IEC*

Type	Applicable standard	Latest edition	Suggested change and rationale
			AS/NZS 60335.2.75:2013 Amendment 3 published 28/06/2019. The IEC text in the Amendment will take effect on 28/06/2021.
Commercial electric appliances for keeping food and crockery warm	Standard A, or standard B, in conjunction with IEC 60335-2-49 Ed 4.1	Cited edition of standard has been superseded. IEC 60335-2-49 Ed 4.2 (2017) *Household and similar electrical appliances - Safety - Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery war*	Immediate transition to latest edition
Commercial electric bains-marie	Standard A, or standard B, in conjunction with IEC 60335-2-50 Ed 4.1	Cited edition of standard has been superseded. IEC 60335-2-50 Ed 4.2 (2017) *Household and similar electrical appliances - Safety - Part 2-50: Particular requirements for commercial electric bains-marie*	Immediate transition to latest edition
Commercial electric boiling pans	Standard A, or standard B, in conjunction with IEC 60335-2-47 Ed 4.1	Cited edition of standard has been superseded. IEC 60335-2-47 Ed 4.2 (2017) *Household and similar electrical appliances - Safety - Part 2-47: Particular requirements for commercial electric boiling pans*	Immediate transition to latest edition
Commercial electric cooking ranges, ovens, hobs, and hob elements	Standard A, or standard B, in conjunction with IEC 60335-2-36 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-36 Ed 6.0 (2017) *Household and similar electrical appliances - Safety - Part 2-36: Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements*	Immediate transition to latest edition
Commercial electric deep fat fryers	Standard A, or standard B, in conjunction with IEC 60335-2-37 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-37 Ed 6.0 (2017) *Household and similar electrical appliances -*	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
		Safety - Part 2-37: Particular requirements for commercial electric doughnut fryers and deep fat fryers	
Commercial electric dishwashing machines	Standard A, or standard B, in conjunction with IEC 60335-2-58 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-58 Ed 4.0 (2017) *Household and similar electrical appliances - Safety - Part 2-58: Particular requirements for commercial electric dishwashing machines*	Immediate transition to latest edition
Commercial electric forced convection ovens, steam cookers, and steam convection ovens	Standard A, or standard B, in conjunction with IEC 60335-2-42 Ed 5.1	Cited edition of standard has been superseded. IEC 60335-2-42 Ed 5.2 (2017) *Household and similar electrical appliances - Safety - Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens*	Immediate transition to latest edition
Commercial electric griddles and griddle grills	Standard A, or standard B, in conjunction with IEC 60335-2-38 Ed 5.1	Cited edition of standard has been superseded. IEC 60335-2-38 Ed 5.2 (2017) *Household and similar electrical appliances - Safety - Part 2-38: Particular requirements for commercial electric griddles and griddle grills*	Immediate transition to latest edition
Commercial electric grillers and toasters	Standard A, or standard B, in conjunction with IEC 60335-2-48 Ed 4.1	Cited edition of standard has been superseded. IEC 60335-2-48 Ed 4.2 (2017) *Household and similar electrical appliances - Safety - Part 2-48: Particular requirements for commercial electric grillers and toasters*	Immediate transition to latest edition
Commercial electric hoods	Standard A, or standard B, in conjunction with IEC 60335-2-99 Ed 1.0	Cited edition of standard has been superseded. IEC 60335-2-99 Ed 1.1 (2017)	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
		Household and similar electrical appliances - Safety - Part 2-99: Particular requirements for commercial electric hoods	
Commercial electric kitchen machines	Standard A, or standard B, in conjunction with IEC 60335-2-64 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-64 Ed 3.2 (2017) *Household and similar electrical appliances - Safety - Part 2-64: Particular requirements for commercial electric kitchen machines*	Immediate transition to latest edition
Commercial electric multi-purpose cooking pans	Standard A, or standard B, in conjunction with IEC 60335-2-39 Ed 6.0 or Standard A, or standard B, in conjunction with IEC 60335-2-39 Ed.5.2	Cited edition of standard has been superseded. IEC 60335-2-39 Ed 6.1 (2017) *Household and similar electrical appliances - Safety - Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans*	Immediate transition to latest edition
Commercial electric rinsing sinks	Standard A, or standard B, in conjunction with IEC 60335-2-62 Ed 3.1	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-62 Ed 3.1 (2008) *Household and similar electrical appliances - Safety - Part 2-62: Particular requirements for commercial electric rinsing sinks*	Immediate change to latest wording
Commercial microwave appliances with insertion or contacting applicators	New standard	IEC 60335-2-110 Ed 1.0 (2013) *Household and similar electrical appliances - Safety - Part 2-110: Particular requirements for commercial microwave appliances with insertion or contacting applicators*	**Immediate adoption of new standard – this standard only came into existence in 2013 & is included to broaden the scope of this schedule in line with new technological developments.**
Commercial microwave ovens	Standard A, or standard B, in conjunction with IEC 60335-2-90 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-90 Ed 4.0 (2015) *Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave ovens*	Immediate transition to latest edition
Commercial refrigerating appliances with an incorporated or remote refrigerant	Standard B in conjunction with IEC 60335-2-89 Ed 2.1	IEC 60335-2-89 Ed 2.2 (2015) *Household and similar electrical appliances -*	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
condensing unit or compressor	or Until 31/05/2015, standard A, or standard B, in conjunction with IEC 60335-2-89 Ed 2.0 as modified by AS/NZS 60335.2.89:2010, including Amendment 1	*Safety - Part 2-89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor*	
Deep fat fryers, frying pans, and similar appliances	Standard B, in conjunction with IEC 60335-2-13 Ed 6.0	Cited edition of standard has been superseded. IEC 60335-2-13 Ed 6.1 (2016) *Household and similar electrical appliances - Safety - Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances*	Immediate transition to latest edition
Dishwashers	Standard A, or standard B, in conjunction with IEC 60335-2-5 Ed 5.2 as modified by Annex ZZ of AS/NZS 60335.2.5:2002, including Amendments 1 to 3	Cited edition of standard has been superseded. IEC 60335-2-5 Ed 6.1 (2018) *Household and similar electrical appliances - Safety - Part 2-5: Particular requirements for dishwashers*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.5:2014 including Amendments 1 and 2 Or IEC 60335-1 Ed 5.0 (2011) as modified by Annex ZZ of AS/NZS 60335.2.5:2014 including Amendments 1 and 2 in conjunction with IEC 60335-2-5 Ed 6.0 (2012) to run until 1 Jan 2023 *Modification calls for warnings regarding the poisoning risk of associated alkaline detergents and includes a spillage test variation*
Drives for gates, doors, and windows	Standard A, or standard B, in conjunction with IEC 60335-2-103 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-103 Ed 3.1 (2017) *Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows*	Immediate transition to latest edition
Drives for rolling shutters, awnings, blinds,	Standard A, or standard B, in conjunction	Cited edition of standard has been	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
and similar equipment	with IEC 60335-2-97 Ed 2.2	superseded. IEC 60335-2-97 Ed 3.0 (2016) *Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment*	
Drives for vertically moving garage doors for residential use	Standard B, in conjunction with IEC 60335-2-95 Ed 3.0	IEC 60335-2-95 Ed 3.2 (2017) *Household and similar electrical appliances - Safety - Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use*	Immediate transition to latest edition
Electric fence energisers	Standard A, or standard B, in conjunction with IEC 60335-2-76 Ed 2.2 as modified by Annex ZZ of AS/NZS 60335.2.76:2003, including Amendments 1 to 3 or Until 31/05/2015, standard A, or standard B, in conjunction with IEC 60335-2-76 Ed 2.1 as modified by Annex ZZ of AS/NZS 60335.2.76:2003, including Amendments 1 to 3	Cited edition of standard has been superseded. IEC 60335-2-76 Ed 3.0 (2018) *Household and similar electrical appliances - Safety - Part 2-76: Particular requirements for electric fence energizers*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.76:2019 including Amendments 1 to 4 Or IEC 60335-2-76 Ed 2.2 (2013) as modified by Annex ZZ of AS/NZS 60335.2.76:2003 including Amendments 1 to 4 to run until 1 Jan 2023 *Modification allows for a variation in output limits.*
Electric fishing machines	Standard A, or standard B, in conjunction with IEC 60335-2-86 Ed 2.2 or Until 31/05/2015, standard A, or standard B, in conjunction with IEC 60335-2-86 Ed 2.1 as modified by Annex ZZ of AS/NZS 60335.2.86:2002, including Amendments 1 to 4	Cited edition of standard has been superseded. IEC 60335-2-86 Ed 3.0 (2018) *Household and similar electrical appliances - Safety - Part 2-86: Particular requirements for electric fishing machines*	Immediate transition to: latest edition Or IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-86 Ed 2.2 (2012) to run until 1 Jan 2023

Type	Applicable standard	Latest edition	Suggested change and rationale
			AS/NZS 60335.2.76:2019 published by 28/06/2019. It is identical to IEC 60335-2-86 Ed 3.0 (2018)
Electric irons	Standard B, in conjunction with IEC 60335-2-3 Ed 6.0 or Until 26/10/2015, standard A, or standard B, in conjunction with IEC 60335-2-3 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-3 Ed 6.1 (2015) *Household and similar electrical appliances - Safety - Part 2-3:Particular requirements for electric irons*	Immediate transition to latest edition
Electric ondal mattress with a non-flexible heated part	New standard	IEC 60335-2-111 Ed 1.0 (2015) *Household and similar electrical appliances - Safety - Part 2-111: Particular requirements for electric ondol mattress with a non-flexible heated part*	**Immediate adoption of new standard – standard only came into existence in 2015**
Electrical animal-stunning equipment	Standard A, or standard B, in conjunction with IEC 60335-2-87 Ed 2.2 or Until 31/05/2015, standard A, or standard B, in conjunction with IEC 60335-2-87 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-87 Ed 3.1 (2018) *Household and similar electrical appliances - Safety - Part 2-87: Particular requirements for electrical animal stunning equipment*	Immediate transition to: latest edition Or IEC 60335-2-87 Ed 3.0 (2016) to run until 1 Jan 2023 **AS/NZS 60335.2.87:2019 published by 28/06/2019. It is identical to IEC 60335-2-87 Ed 3.1 (2018)**
Electrical appliances for use with aquariums and garden ponds	Standard A, or Standard B in conjunction with ICE 60335-2-55 Ed 3.1 as modified by Annex ZZ of AS/NZS 60335.2.55.2011	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-55 Ed 3.1 (2008) *Household and similar electrical appliances - Safety - Part 2-55: Particular requirements for electrical appliances for use with aquariums and garden ponds*	Change of wording: IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-55 Ed 3.1 (2008) as modified by Annex ZZ of 60335.2.55:2011 *Modifications address the composition of supply cords.*
Electrical equipment for spa and swimming pools	AS/NZS 3136:2001, including Amendments 1 and 2	Cited edition of standard has been superseded IEC 60335-2-60 4.0 (2017)	Immediate transition to latest IEC standard only. **This standard has been removed from low-**

Type	Applicable standard	Latest edition	Suggested change and rationale
		Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas	**voltage equipment and placed into Household appliances.** This is in keeping with the rest of the IEC 60335 series.
Electrical heat pumps, air conditioners, and dehumidifiers	Standard A, or standard B, in conjunction with IEC 60335-2-40 Ed 4.2	Cited edition of standard has been superseded. IEC 60335-2-40 Ed 6.0 (2018) *Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers*	Immediate transition to: latest edition Or IEC 60335-2-40 Ed 5.1 (2016) to run until 1 Jan 2023 **AS/NZS 60335.2.40:2019 published by 28/06/2019. It is identical to IEC-2-40 Ed 6.0 (2018)**
Electrical heat pumps, air conditioners, and dehumidifiers using flammable refrigerants		IEC 60335-2-40 Ed 6.0 (2018) *Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers*	**Immediate adoption of new standard – latest edition only with immediate effect to address issues of flammable refrigerants**
Electrolysers	Standard A, or Standard B, in conjunction with IEC 60335-2-108 Ed 1.0 as modified by Annex ZZ of AS/NZS 60335.2.108:2008	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-108 Ed 1.0 (2008) *Household and similar electrical appliances - Safety - Part 2-108: Particular requirements for electrolysers*	No change. IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-108 Ed 1.0 (2008) as modified by Annex ZZ of AS/NZS 60335.2.108:2008 *Modification addresses issue with class 0 products*
Fabric steamers	Standard A, or standard B, in conjunction with IEC 60335-2-85 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-85 Ed 2.2 (2017) *Household and similar electrical appliances - Safety - Part 2-85: Particular requirements for fabric steamers*	Immediate transition to latest edition
Fans	Standard A, or standard B, in conjunction with IEC 60335-2-80 Ed 2.2 as modified by Annex ZZ of AS/NZS 60335.2.80:2004,	Cited edition of standard has been superseded.	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.80:2016

Type	Applicable standard	Latest edition	Suggested change and rationale
	including Amendment 1	IEC 60335-2-80 Ed 3.0 (2015) *Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans*	*Modification determines minimum height requirement for fans mounted at a high level.*
Fixed immersion heaters	Standard A, or standard B, in conjunction with IEC 60335-2-73 Ed 2.2	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-73 Ed 2.2 (2009) *Household and similar electrical appliances - Safety - Part 2-73: Particular requirements for fixed immersion heaters*	Immediate transition to latest wording
Flexible sheet heating elements for room heating	Standard A, or standard B, in conjunction with IEC 60335-2-96 Ed 1.2	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-96 Ed 1.2 (2009) *Household and similar electrical appliances - Safety - Part 2-96: Particular requirements for flexible sheet heating elements for room heating*	Immediate transition to latest wording
Floor treatment and floor cleaning machines, for commercial use	Standard B in conjunction with IEC 60335-2-67 Ed 4.0 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-67 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-67 Ed 4.1 (2016) *Household and similar electrical appliances - Safety - Part 2-67: Particular requirements for floor treatment machines, for commercial use*	Immediate transition to latest edition
Floor treatment machines and wet scrubbing machines	Standard A, or standard B, in conjunction with IEC 60335-2-10 Ed 5.2 or Until 31/05/2014, standard A, or standard B, in conjunction with IEC 60335-2-16 Ed 5.1	Cited standard edition incorrect IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-10 Ed 5.1 (2008) *Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines*	Immediate transition to latest edition
Food waste disposers	Standard A, or standard B, in conjunction with IEC 60335-2-16 Ed 5.1	Cited edition of standard has been superseded.	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
		IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-16 Ed 5.2 (2012) *Household and similar electrical appliances - Safety - Part 2-16: Particular requirements for food waste disposers*	
Foot warmers and heating mats	Standard B in conjunction with IEC 60335-2-81 Ed 2.2 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-81 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-81 Ed 3.1 (2017) *Household and similar electrical appliances - Safety - Part 2-81: Particular requirements for foot warmers and heating mats*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.81:2015 including Amendments 1 and 2 Or IEC 60335-2-81 Ed 3.0 (2015) as modified by Annex ZZ of AS/NZS 60335.2.81:2015 including Amendments 1 and 2 to run until 1 Jan 2022 *Modification includes requirements for electric hot water bottles*
Gas, oil, and solid-fuel burning appliances with electrical connections	Standard B, in conjunction with IEC 60335-2-102 Ed 1.1 as modified by Annex ZZ of AS/NZS 60335.2.102.2004, including Amendments 1 and 2	Cited edition of standard has been superseded. IEC 60335-2-102 Ed 2.0 (2017) *Household and similar electrical appliances - Safety - Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.102:2018 Or IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-102 Ed 1.2 (2012) as modified by Annex ZZ of AS/NZS 60335.2.102:2013 to run until 1 Jan 2022 *Modification concerns software for automatic gas burner control systems and solid fuel burning appliances including a fan.*
Grills, toasters, and similar portable cooking appliances	Standard A, or standard B, in conjunction with IEC 60335-2-9 Ed 6.0 as modified by Annex ZZ of AS/NZS 60335.2.9:2009, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-9 Ed 6.2 (2016)	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.9:2014 including

Type	Applicable standard	Latest edition	Suggested change and rationale
		Household and similar electrical appliances - Safety - Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances	Amendments 1, 2 and 3 Or IEC 60335-2-9 Ed 6.1 (2013) as modified by Annex ZZ of AS/NZS 60335.2.9:2014 including Amendments 1, 2 and 3 until 1 Jan 2021 *Modification includes requirement for toasters to switch off automatically even if he toast carriage is jammed, hob testing variations and additional warnings.*
Hand-held mains-operated garden blowers, vacuums, and blower vacuums	Standard A, or standard B, in conjunction with IEC 60335-2-100 Ed 1.0 as modified by Annex ZZ of AS/NZS 60335.2.100:2003	Cited standard is current IEC 60335-1 Ed 4.0 (2002) in conjunction with IEC 60335-2-100 Ed 1.0 (2002) *Household and similar electrical appliances - Safety - Part 2-100: Particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums*	Immediate transition to latest wording
Heated carpets and underfloor heating appliances	Standard A, or standard B, in conjunction with IEC 60335-2-106 Ed 1.0	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-106 Ed 1.0 (2007) *Household and similar electrical appliances - Safety - Part 2-106: Particular requirements for heated carpets and for heating units for room heating installed under removable floor coverings*	Immediate transition to latest wording
Heated gullies for roof drainage	Standard A, or standard B, in conjunction with IEC 60335-2-83 Ed 1.0 (2007)	Cited edition of standard has been superseded. IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-83 Ed 1.1 (2008) *Household and similar electrical appliances - Safety - Part 2-83: Particular requirements for heated gullies for roof drainage*	Immediate transition to latest edition
Heating appliances for breeding and rearing	Standard A, or standard B, in conjunction	Cited edition of standard has been	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
animals	with IEC 60335-2-71 Ed 2.2 Or Until 31/05/2015, standard A, or standard B, in conjunction with IEC 60335-2-71 Ed 2.1	superseded. IEC 60335-2-71 Ed 3.0 (2018) *Household and similar electrical appliances - Safety - Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals*	
High pressure cleaners and steam cleaners	Standard B, in conjunction with IEC 60335-2-79 Ed 3.0 Or Until 26/10/2015, standard A, or standard B, in conjunction with IEC 60335-2-79 Ed 2.2	Cited edition of standard has been superseded. IEC 60335-2-79 Ed 4.0 (2016) *Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners*	Immediate transition to latest edition
Humidifiers	Standard A, or standard B, in conjunction with IEC 60335-2-98 Ed 2.2	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-98 Ed 2.2 (2008) *Household and similar electrical appliances - Safety - Part 2-98: Particular requirements for humidifiers*	Immediate transition to latest wording
Humidifiers intended for use with heating, ventilation, or air-conditioning systems	Standard A, or standard B, in conjunction with IEC 60335-2-88 Ed 2.0	Cited standard is current IEC 60335-1 Ed 4.0 (2002) in conjunction with IEC 60335-2-88 Ed 2.0 (2002) *Household and similar electrical appliances - Safety - Part 2-88: Particular requirements for humidifiers intended for use with heating, ventilation, or air-conditioning systems*	Immediate transition to latest wording
Insect killers	Standard A, or standard B, in conjunction with IEC 60335-2-59 Ed 3.2 as modified by Annex ZZ of AS/NZS 60335.2.59:2005, including Amendments 1 to 3	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-59 Ed 3.2 (2009) *Household and similar electrical appliances - Safety - Part 2-59: Particular requirements for insect killers*	Immediate change to the following wording: IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-59 Ed 3.2 (2009) as modified by Annex ZZ of AS/NZS 60335.2.59:2005 including Amendments 1 to 3 *Modification affects construction, specifically voltage measurements after disconnection.*

Type	Applicable standard	Latest edition	Suggested change and rationale
Instantaneous water heaters	Standard A, or standard B, in conjunction with IEC 60335-2-35 Ed 4.2	Cited edition of standard has been superseded. IEC 60335-2-35 Ed 5.1 (2016) *Household and similar electrical appliances - Safety - Part 2-35:Particular requirements for instantaneous water heaters*	Immediate transition to latest edition
Ironers	Standard B, in conjunction with IEC 60335-2-44 Ed 3.2 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-44 Ed 3.1	Cited standard is current IEC 60335-2-44 Ed 3.2 (2012) *Household and similar electrical appliances - Safety - Part 2-44: Particular requirements for ironers* No change	No change – references to standards A and B to be removed
Kitchen machines	Standard B, in conjunction with IEC 60335-2-14 Ed 5.1 as modified by Annex ZZ of AS/NZS 60335.2.14:2007, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-14 Ed 6.1 (2019) *Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines*	Immediate transition to: latest IEC edition as modified by Annex ZZ of AS/NZS 60335.2.14:2017 Or IEC 60335-2-14 Ed 6.0 (2016) as modified by Annex ZZ of AS/NZS 60335.2.14:2017 to run until 1 Jan 2024 *Modification bans class 0 products*
Massage appliances	Standard A, or standard B, in conjunction with IEC 60335-2-32 Ed 4.1	Cited edition of standard has been superseded. IEC 60335-2-32 Ed 4.2 (2013) *Household and similar electrical appliances - Safety - Part 2-32:Particular requirements for massage appliances*	Immediate transition to latest edition
Microwave ovens, including combination microwave ovens	Standard A, or standard B, in conjunction with IEC 60335-2-25 Ed 6.0 or Until 29/04/2014, standard C in conjunction with IEC 60335-2-25 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-25 Ed 6.2 (2015) *Household and similar electrical appliances -*	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
		Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens	
Milking machines	Standard A or standard B, in conjunction with IEC 60335-2-70 Ed 2.2 or Until 06/03/2015, standard A, or standard B, in conjunction with IEC 60335-2-70 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-70 Ed 2.2 (2013) Household and similar electrical appliances - Safety - Part 2-70:Particular requirements for milking machines	Immediate transition to latest edition
Motor-compressors	Standard B, in conjunction with IEC 60335-2-34 Ed 5.0 or Until 31/05/2016, standard A, or standard B, in conjunction with IEC 60335-2-34 Ed 4.2	Cited edition of standard has been superseded. IEC 60335-2-34 Ed 5.2 (2016) *Household and similar electrical appliances - Safety - Part 2-34:Particular requirements for motor-compressors*	Immediate transition to latest edition
Multifunctional shower cabinets	Standard A, or standard B, in conjunction with IEC 60335-2-105 Ed 1.1	Cited edition of standard has been superseded. IEC 60335-2-105 Ed 2.0 (2016) *Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for multifunctional shower cabinets*	Immediate transition to latest edition
Oral hygiene appliances	Standard A, or standard B, in conjunction with IEC 60335-2-52 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-52 Ed 3.2 (2017) *Household and similar electrical appliances - Safety - Part 2-52: Particular requirements for oral hygiene appliances*	Immediate transition to latest edition
Outdoor barbecues	Standard A, or standard B, in conjunction with IEC 60335-2-78 Ed 2.1 as modified by Annex ZZ of AS/NZS 60335.2.78:2005, including Amendments 1 and 2	Cited edition of standard has been superseded. IEC 60335-2-78 Ed 2.2 (2019) *Household and similar electrical appliances - Safety - Part 2-78: Particular requirements for outdoor barbecues*	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.78:2005 including Amendments 1 and 2 *Modification affects appliances intended for permanent connection to fixed wiring.*

Type	Applicable standard	Latest edition	Suggested change and rationale
			Proposed revision of AS/NZS 60335.2.78:2005 on 30/11/2019. This was circulated to combined procedure as AS/NZS 60335.2.78:2005 Amendment 3.
Pedestrian-controlled mains-operated lawn scarifiers and aerators	Standard A, or standard B, in conjunction with IEC 60335-2-92 Ed 2.0	Cited standard is current IEC 60335-1 Ed 4.0 (2002) in conjunction with IEC 60335-2-92 Ed 2.0 (2002) *Household and similar electrical appliances - Safety - Part 2-92: Particular requirements for pedestrian-controlled mains-operated lawn scarifiers and aerators*	Immediate transition to latest wording
Pedestrian-controlled mains-operated lawnmowers	Standard A, or standard B, in conjunction with IEC 60335-2-77 Ed 2.0	Cited standard is current IEC 60335-1 Ed 4.0(2002) in conjunction with IEC 60335-2-77 Ed 2.0 (2002) *Household and similar electrical appliances - Safety - Part 2-77: Particular requirements for pedestrian controlled mains-operated lawnmowers*	Immediate transition to latest wording
Portable heating tools and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-45 Ed 3.1 Or Until 26/11/2014, standard A, or standard B, in conjunction with IEC 60335-2-45 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-45 Ed 3.2 (2012) *Household and similar electrical appliances - Safety - Part 2-45: Particular requirements for portable heating tools and similar appliances*	Immediate transition to latest edition
Portable immersion heaters	Standard A, or standard B, in conjunction with IEC 60335-2-74 Ed 2.2	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-74 Ed 2.2 (2009) *Household and similar electrical appliances - Safety - Part 2-74: Particular requirements for portable immersion heaters*	Immediate transition to latest wording
Projectors and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-56 Ed 3.1	Cited edition of standard has been superseded.	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
		IEC 60335-2-56 Ed 3.2 (2014) *Household and similar electrical appliances - Safety - Part 2-56:Particular requirements for projectors and similar appliances*	
Pumps	Standard A, or standard B, in conjunction with IEC 60335-2-41 Ed 3.2 as modified by Annex ZZ of AS/NZS 60335.2.41:2004, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-41 Ed 4.0 (2012) *Household and similar electrical appliances - Safety - Part 2-41: Particular requirements for pumps*	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.41 *Modification requires the legibility of markings on pumps intended for outdoor use to be unaffected by UV light.*
Range hoods and other cooking fume extractors	Standard A, or standard B, in conjunction with IEC 60335-2-31 Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.31:2004, including Amendments 1 to 4	Cited edition of standard has been superseded. IEC 60335-2-31 Ed 5.2 (2018) *Household and similar electrical appliances - Safety - Part 2-31: Particular requirements for range hoods and other cooking fume extractors*	Immediate transition to: latest edition as modified by Annex ZZ of 60335.2.31:2013 including Amendments 1 and 2 Or IEC 60335-2-31 Ed 5.1 (2016) by Annex ZZ of 60335.2.31:2013 including Amendments 1 and 2 until 1 Jan 2023 *Modification addresses requirements concerning combustible materials & allows for Australian approved range hoods.* **AS/NZS 60335.2.31:2013 Amendment 3 published 28/06/2019. The IEC text and National Variations will take effect on 28/06/2021**
Refrigerating appliances, ice-cream appliances, and ice-makers	Standard A, or standard B, in conjunction with IEC 60335-2-24 Ed 7.1 as modified by Annex ZZ of AS/NZS 60335.2.24:2010 including Amendment 1 Or Until 30/05/2015, Standard A, or standard B,	Cited edition of standard has been superseded. IEC 60335-2-24 Ed 7.2 (2017) *Household and similar electrical appliances - Safety - Part 2-24: Particular requirements*	Immediate transition to: latest edition as modified by Annex ZZ of 60335.2.24:2010 including Amendments 1 and 2

Type	Applicable standard	Latest edition	Suggested change and rationale
	in conjunction with IEC 60335-2-24 Ed 7.0 as modified by Annex ZZ of AS/NZS 60335.2.24:2010	*for refrigerating appliances, ice-cream appliances and ice makers*	Or IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-24 Ed 7.0 (2012)as modified by Annex ZZ of 60335.2.24:2010 including Amendments 1 and 2 to run until 1 Jan 2022 *Modification includes tropical climate classification requirement and that thermal insulation be encased in metallic material.*
Refrigerating appliances, ice-cream appliances, and ice-makers using flammable refrigerants	New standard	IEC 60335-2-24 Ed 7.2 (2017) Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers	**Immediate adoption of new standard as modified by Annex ZZ of As/NZS 60335.2.24:2010 including Amendments 1 and 2 – latest edition only to address issues of flammable refrigerants**
Robotic battery powered electrical lawnmowers	New standard	IEC 60335-2-107 Ed 2.0 (2017) *Household and similar electrical appliances - Safety - Part 2-107: Particular requirements for robotic battery powered electrical lawnmowers*	**Immediate adoption of new standard – standard only came into existence in 2012 and broadens the scope of this schedule in line with technological developments**
Room heaters	Standard A, or standard B, in conjunction with IEC 60335-2-30 Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.30:2009, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-30 Ed 5.1 (2016) Household and similar electrical appliances - Safety -Part 2-30:Particular requirements for room heaters	Immediate transition to latest edition as modified by Annex ZZ of 60335.2.30:2015 including Amendments 1 and 2 *Modification includes requirements for small plastic bodied heaters*
Sauna heating appliances and infrared cabins	Standard B, in conjunction with IEC 60335-2-53 Ed 4.0 Or Until 28/10/2014, standard C, in conjunction with IEC 60335-2-53 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-53 Ed 4.1 (2017) *Household and similar electrical appliances - Safety - Part 2-53: Particular requirements for sauna heating appliances and infrared cabins*	Immediate transition to: latest edition Or IEC 60335-2-53 Ed 4.0 (2011) to run until 1 Jan 2022
Scissors type grass shears	Standard A, or standard B, in conjunction with IEC 60335-2-94 Ed 3.0	Cited edition of standard is current IEC 60335-1 Ed 4.0 (2007) in conjunction with	Immediate transition to latest wording

Type	Applicable standard	Latest edition	Suggested change and rationale
		IEC 60335-2-94 Ed 3.0 (2008) *Household and similar electrical appliances - Safety - Part 2-94: Particular requirements for scissors type grass shears*	
Self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes		IEC 60335-2-114 Ed 1.0 (2018) *Household and similar electrical appliances - Safety - Part 2-114: Particular requirements for self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes*	**Immediate adoption of new standard – this standard only came into existence in 2018 and broadens the scope of this schedule in line with technological developments**
Sewing machines	Standard A, or standard B, in conjunction with IEC 60335-2-28 Ed 4.1	Cited edition of standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-28 Ed 4.1 (2008) *Household and similar electrical appliances - Safety - Part 2-28: Particular requirements for sewing machines*	Immediate transition to latest wording
Shavers, hair clippers, and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-8 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-8 Ed 6.2 (2018) *Household and similar electrical appliances - Safety - Part 2-8: Particular requirements for shavers, hair clippers and similar appliances*	Immediate transition to: latest edition Or IEC 60335-2-8 Ed 6.1 (2015)to run until 1 Jan 2023 **This standards is to be moved to the Beauty Therapy Section** – please see new clause 4.16 **AS/NZS 60335.2.8:2013 Amendment 2 is proposed for publication 30/11/2019.**
Spin extractors	Standard A, or standard B, in conjunction with IEC 60335-2-4 Ed 6.0	Cited edition of standard has been superseded. IEC 60335-2-4 Ed 6.2 (2017) *Household and similar electrical appliances - Safety - Part 2-4: Particular requirements for spin extractors*	Immediate transition to latest edition

Type	Applicable standard	Latest edition	Suggested change and rationale
Spray extraction appliances, for commercial use	Standard B, in conjunction with IEC 60335-2-68 Ed 4.0 Or Until 31/05/2016, standard A, or standard B, in conjunction with IEC 60335-2-68 Ed 3.2	Cited edition of standard has been superseded. IEC 60335-2-68 Ed 4.1 (2016) *Household and similar electrical appliances - Safety - Part 2-68:Particular requirements for spray extraction machines, for commercial use*	Immediate transition to latest edition
Stationary circulation pumps for heating and service water installations	Standard B, in conjunction with IEC 60335-2-51 Ed 3.2 Or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-51 Ed 3.1	Cited edition of standard has been superseded. IEC 60335-2-51 Ed 4.0 (2019) *Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations*	Immediate transition to: latest edition Or IEC 60335-1 Ed 5.0 (2011) in conjunction with IEC 60335-2-51 Ed 3.2 (2012) until 1 Jan 2024
Stationary cooking ranges, hobs, ovens, and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-6 Ed 5.2 as modified by Annex ZZ of AS/NZS 60335.2.6:2008, including Amendments 1 and 4	Cited edition of standard has been superseded. IEC 60335-2-6 Ed 6.1 (2018) *Household and similar electrical appliances - Safety - Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances*	Immediate transition to: latest edition as modified by Annex ZZ of AS/NZS 60335.2.6:2014 including Amendment 1 Or IEC 60335-2-6 Ed 6.0 (2014) until 1 Jan 2023 as modified by Annex ZZ of AS/NZS 60335.2.6:2014 Including Amendment 1 *Modification includes a Hob temperature warning and special plug requirements.* **AS/NZS 60335.2.6:2014 Amendment 2 published 28/06/2019. The IEC text in this amendment takes effect on 28 June 2021.**
Storage water heaters	Standard A, or standard B, in conjunction with IEC 60335-2-21 Ed 5.2 as modified by Annex ZZ of AS/NZS 60335.2.21:2002, including Amendments 1 to 3	Cited edition of standard has been superseded. IEC 60335-2-21 Ed 6.1 (2018)	Immediate transition to : latest IEC edition as modified by Annex ZZ of AS/NZS 60335.2.21:2013 including

Type	Applicable standard	Latest edition	Suggested change and rationale
		Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters	Amendment 1 Or IEC 60335-2-21 Ed 6.0 (2013) as modified by Annex ZZ of AS/NZS 60335.2.21:2013 including Amendment 1 until 1 Jan 2023 *Modification includes variations to instructions and testing.* **AS/NZS 60335.2.21:2013 Amendment 2 will be published 28/06/2019. The IEC text in the Amendment will take effect on 28/06/2021.**
Surface-cleaning appliances for household use employing liquids or steam	Standard A, or standard B, in conjunction with IEC 60335-2-54 Ed 4.0	Cited edition of standard has been superseded. IEC 60335-2-54 Ed 4.2 (2019) *Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam*	Immediate transition to : latest edition Or IEC 60335-2-54 Ed 4.1 (2015) until 1 Jan 2024
Thermal storage room heaters	Standard A, or standard B, in conjunction with IEC 60335-2-61 Ed 2.2	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with IEC 60335-2-61 Ed 2.2 (2009) *Household and similar electrical appliances - Safety - Part 2-61: Particular requirements for thermal storage room heaters*	Immediate transition to latest wording
Toilets	Standard A, or standard B, in conjunction with IEC 60335-2-84 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-84 Ed 2.2 (2013) *Household and similar electrical appliances - Safety - Part 2-84:Particular requirements for toilet appliances*	Immediate transition to latest edition
Tumble dryers	Standard A, or standard B, in conjunction with IEC 60335-2-11 Ed 7.0 as modified by	Cited edition of standard has been superseded.	Immediate transition to :

Type	Applicable standard	Latest edition	Suggested change and rationale
	Annex ZZ of AS/NZS 60335.2.11:2009, including Amendment 1	IEC 60335-2-11 Ed 8.0 (2019) *Household and similar electrical appliances - Safety - Part 2-11: Particular requirements for tumble dryers*	latest edition as modified by Annex ZZ of AS/NZS 60335.2.11:2017 Or IEC 60335-2-11 Ed 7.0 (2015) as modified by Annex ZZ of AS/NZS 60335.2.11:2017 until 1 Jan 2024 *Modification requires lint filter to be upright regardless of dryer mounting position, oily clothes warning, risk of fire/flammable materials labelling symbol.*
UV radiation water treatment appliances	Standard B, in conjunction with IEC 60335-2-109 Ed 1.0	Cited edition of standard has been superseded. IEC 60335-2-109 Ed 1.2 (2016) *Household and similar electrical appliances - Safety - Part 2-109: Particular requirements for UV radiation water treatment appliances*	Immediate transition to latest edition
Vacuum cleaners and water-suction cleaning devices	Standard A, or standard B, in conjunction with IEC 60335-2-2 Ed 6.0 as modified by AS/NZS 60335.2.2:2010, including Amendment 1	Cited edition of standard has been superseded. IEC 60335-2-2 Ed 6.2 (2016) *Household and similar electrical appliances - Safety - Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances*	Immediate transition to latest IEC edition as modified by annex ZZ of AS/NZS 60335.2.2:2018 *Modification bans class 0 items and addresses Low Voltage connect issues for motorised powerheads*
Vaporisers	Standard A, or standard B, in conjunction with IEC 60335-2-101 Ed 1.1	Cited edition of standard has been superseded. IEC 60335-2-101 Ed 1.2 (2014) *Household and similar electrical appliances - Safety - Part 2-101:Particular requirements for vaporizers*	Immediate transition to latest edition
Walk-behind and hand-held lawn trimmers and lawn edge trimmers	Standard A, or standard B, in conjunction with IEC 60335-2-91 Ed 3.0 as modified by AS/NZS 60335.2.91:2008, including	Cited standard is current IEC 60335-1 Ed 4.2 (2006) in conjunction with	Immediate transition to latest wording

Type	Applicable standard	Latest edition	Suggested change and rationale
	Amendment 1	IEC 60335-2-91 Ed 3.0 (2008) *Household and similar electrical appliances - Safety - Part 2-91: Particular requirements for walk-behind and hand-held lawn trimmers and lawn edge trimmers*	
Warming plates and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-12 Ed 5.1	Cited edition of standard has been superseded. IEC 60335-2-12 Ed 5.2 (2017) *Household and similar electrical appliances - Safety - Part 2-12: Particular requirements for warming plates and similar appliances*	Immediate transition to latest edition
Washing machines	Standard B, in conjunction with IEC 60335-2-7 Ed 7.1 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-7 Ed 7.0	Cited edition of standard has been superseded. IEC 60335-2-7 Ed 7.2 (2016) *Household and similar electrical appliances - Safety - Part 2-7:Particular requirements for washing machines*	Immediate transition to latest IEC edition as modified by Annex ZZ of AS/NZS 60335.2.7:2012 including Amendments 1 and 2 *Modification relates to a spillage test variation.*
Water-bed heaters	Standard B, in conjunction with IEC 60335-2-66 Ed 2.1	Cited edition of standard has been superseded. IEC 60335-2-66 Ed 2.2 (2012) *Household and similar electrical appliances - Safety - Part 2-66: Particular requirements for water-bed heaters*	Immediate transition to latest edition
Wet and dry vacuum cleaners, including power brush, for commercial use	Standard B, in conjunction with IEC 60335-2-69 Ed 4.0 as modified by Annex ZZ of AS/NZS 60335.2.69:2012 or Until 26/10/2015, standard A, or standard B, in conjunction with IEC 60335-2-69 Ed 3.2 as modified by Annex ZZ of AS/NZS 60335.2.69:2003, including Amendments 1 to 3	Cited edition of standard has been superseded. IEC 60335-2-69 Ed 5.0 (2016) *Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use*	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.69:2017 *Modifications requires appliance outlets for accessories to be loaded with a resistive load according to their marking*
Whirlpool baths and whirlpool spas	Standard A, or standard B, in conjunction with IEC 60335-2-60 Ed 3.2 as modified by Annex ZZ of AS/NZS 60335.2.60:2006,	Cited edition of standard has been superseded.	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.60:2018

Type	Applicable standard	Latest edition	Suggested change and rationale
	including Amendment 1	IEC 60335-2-60 Ed 4.0 (2017) *Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas*	*Modifications includes multiple variations, affecting size, temperature, thermal sensing elements and testing*

Clause 2

Other electrical appliances

Type	Applicable standard	Latest edition	Suggested change and rationale
Electric duct heaters	AS/NZS 3102:2002, including Amendments 1 to 3	One revision of cited edition since citation AS/NZS 3102:2002 *Approval and test specification - Electric duct heaters, including Amendments 1 to 4*	Immediate transition to latest standard
Electric toys	IEC 62115 Ed 1.2	Cited standard has been superseded IEC 62115 Ed 2.0 (2017) *Electric toys – Safety*	Immediate transition to latest standard
Portable inverters	AS/NZS 4763:2011	Cited standard is current AS/NZS 4763:2011 *Safety of portable inverters*	No change
Smoke detectors	AS/NZS 3100:2009, including Amendments 1 and 2	Cited standard has been superseded AS/NZS 3100:2017 *Approval and test specification - General requirements for electrical equipment including Amendment 3*	Immediate transition to latest standard **AS/NZS 3100:2017 Amendment 2 published 28/06/2019. Amendment 3 published 29/11/2019.** **Amendment 2 applies to Contents, Preface, Section 1, Section 2, Section 3, Section 8, Annex A and Annex B.** **Amendment 2 takes effect on 28 June 2021**

Clause 3

Low voltage electrical apparatus

Low voltage equipment other than those listed below must comply with the AS/NZS 3100 series.

Low voltage electrical apparatus	Applicable standard	Latest Edition	Suggested change and rationale
Air-break switches	AS/NZS 3133:2008, including Amendments 1 and 2	Cited edition of standard has been superseded AS/NZS 60669.1:2020 *Switches for household and similar fixed electrical installations - Part 1: General requirements* *See also:* IEC 60669-1 Ed 4.0 (2017) *Switches for household and similar fixed-electrical installations - Part 1: General requirements*	Immediate transition to: Latest AS/NZS standard published on 24/09/2020 Or Latest IEC standard
Appliance couplers for household and similar general purposes	AS/NZS 60320.1:2012 or IEC 60320-1 Ed 2.1	Cited standard is current AS/NZS 60320.1:2012 *Appliance couplers for household and similar general purposes – Part 1: General requirements* Cited standard has been superseded IEC 60320-1 Ed 3.1 (2018) *Appliance couplers for household and similar general purposes - Part 1: General requirements*	Immediate transition to: AS/NZS 60320.1:2012 Or IEC 60320-1 Ed 3.1 (2018)
Bayonet lampholder adaptors	AS 3119:1994	Cited edition of standard has been superseded AS/NZS 3119:2015 *Approval and test specification - Lampholder adaptors*	Immediate transition to latest standard
Bayonet lampholders	AS/NZS 61184:2007	Cited edition of standard has been	Immediate transition to latest IEC standard

Low voltage electrical apparatus	Applicable standard	Latest Edition	Suggested change and rationale
	or IEC 61184 Ed 3.1, including Amendment 2, as modified by AS/NZS 61184:2007 or Until 30/12/2016, AS/NZS 3117:2007	superseded IEC 61184 Ed 4.0 (2017) *Bayonet lampholders*	only
Ceiling roses	AS/NZS 3113:2005	Cited standard is current AS/NZS 3113:2005 *Approval and test specification - Ceiling roses*	No change
Cord extension sets	AS/NZS 3199:2007	Cited standard is current AS/NZS 3199:2007 *Approval and test specification - Cord extension sets*	No change
Cord extension sockets	AS/NZS 3120:2011	Cited standard is current AS/NZS 3120:2011 *Approval and test specification - Cord extension sockets*	No change
Cord-line switches	AS/NZS 3127:2005 or IEC 61058-2-1 Ed 2.0	Cited edition of standard has been superseded IEC 61058-2-1 Ed 3.0 (2018) *Switches for appliances - Part 2-1: Particular requirements for cord switches*	Immediate transition to latest IEC standard only
Edison screw lampholders	AS/NZS 60238:2007 or IEC 60238 Ed 8.2 as modified by AS/NZS 60238:2007 or Until 30/12/2016, AS/NZS 3140:2007	Cited edition of standard has been superseded IEC 60238 Ed. 9.1 (2017) *Edison screw lampholders*	Immediate transition to latest IEC standard only
Electric shaver supply units	AS/NZS 3194:1993, including Amendment 1	Cited edition of standard has been superseded AS/NZS 3194:2015 *Approval and test specification - Electric shaver supply units*	Immediate transition to latest standard
Electrical equipment of machines	IEC 60204-1 Ed 5.1	Cited edition of standard has been superseded	Immediate transition to latest IEC standard

Low voltage electrical apparatus	Applicable standard	Latest Edition	Suggested change and rationale
		IEC 60204-1 Ed 6.0 (2016) *Safety of machinery - Electrical equipment of machines – Part 1: General requirements*	
Electrical portable outlet devices & portable electrical control or conditioning devices	AS/NZS 3105:2012	Cited edition of standard has been superseded AS/NZS 3105:2014 *Approval and test specification - Electrical portable outlet devices*	Immediate transition to latest standard **The title of this standard has also been modified to include portable electrical control or conditioning devices, previously a separate standard. This is because both issues are now covered by AS/NZS 3105:2014.** **Amendment 1 published on 1/09/2020.**
Interconnection couplers for household and similar equipment	AS/NZS 60320.2.2:2004 or IEC 60320-2-2 Ed 2.0	Cited standard is current AS/NZS 60320.2.2:2004 *Appliance couplers for household and similar general purposes - Interconnection couplers for household and similar equipment*	Immediate transition to AS/NZS standard only IEC standard withdrawn 2016
Plugs and socket-outlets	AS/NZS 3112:2011, including Amendment 1	Cited edition of standard has been superseded AS/NZS 3112:2017 *Approval and test specification – Plugs and socket-outlets*	Immediate transition to latest standard
Plugs and socket-outlets for stationary appliances	AS/NZS 3131:2001	Cited edition of standard has been superseded AS/NZS 3131:2015 *Approval and test specification - Plugs and socket-outlets for stationary appliances*	Immediate transition to latest standard
Plugs, socket-outlets, and couplers for general industrial application	AS/NZS 3123:2005	Cited standard is current AS/NZS 3123:2005 *Approval and test specification - Plugs, socket-outlets and couplers for general industrial application*	No change
Plugs, socket-outlets, and couplers for	IEC 60309-2 Ed 4.2	Cited standard is current	No change

Low voltage electrical apparatus	Applicable standard	Latest Edition	Suggested change and rationale
industrial purposes—dimensional interchangeability requirements for pin and contact-tube accessories		IEC 60309-2 Ed 4.2 (2012) *Plugs, socket-outlets, and couplers for industrial purposes – Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories*	
Plugs, socket-outlets, and couplers for industrial purposes—general requirements	IEC 60309-1 Ed 4.2	Cited standard is current IEC 60309-1 Ed 4.2 (2012) *Plugs, socket-outlets, and couplers for industrial purposes – Part 1: General requirements*	No change
Plugs, socket-outlets, and couplers for industrial purposes—switched socket-outlets and connectors with or without interlock	IEC 60309-4 Ed 1.1	Cited standard is current IEC 60309-4 Ed 1.1 (2012) *Plugs, socket-outlets, and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock*	No change
Plugs, socket-outlets, vehicle couplers, and vehicle inlets—conductive charging of electric vehicles	IEC 62196-1 Ed 2.0	Cited edition of standard has been superseded IEC 62196-1 Ed. 3.0 (2014) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements*	**Withdraw standard from this section** – to be included in clause 17 – Electric vehicles
Portable electrical control or conditioning devices	AS/NZS 3197:2005, including Amendments 1 and 2	AS/NZS 3105:2014 Approval and test specification – Electrical portable outlet devices	**Withdraw this standard** – see Electrical portable outlet devices & Portable electrical control or conditioning devices above.
Sewing machine couplers	AS/NZS 60320.2.1:2004 or IEC 60320-2-1 Ed 2.0	Cited edition of standard has been superseded IEC 60320-2-1 Ed3.0 (2018) *Appliance couplers for household and similar general purposes - Part 2-1: Sewing machine couplers*	Transition to: latest IEC standard Or IEC 60320-2-1 Ed 2.0 until 01/01/2021 (as AS/NZS 60320.2.1:2004 was reconfirmed in 2016)

Low voltage electrical apparatus	Applicable standard	Latest Edition	Suggested change and rationale
Socket-outlet adaptors	AS/NZS 3122:2005	Cited edition of standard has been superseded AS/NZS 3122:2015 *Approval and test specification - Socket-outlet adaptors*	Immediate transition to latest standard
Temperature sensing controls	IEC 60730-2-9 Ed 3.1	Cited edition of standard has been superseded IEC 60730-2-9 Ed. 4.0 (2018) *Automatic electrical controls - Part 2-9: Particular requirements for temperature sensing control*	Immediate transition to latest standard

Clause 4

Electric wires and cables

Type	Applicable standard	Latest edition	Suggested change and rationale
Cables for high voltage luminous discharge tube installations	AS/NZS 3166:1993	Cited standard is current Reconfirmed 2016 AS/NZS 3166:1993 *Approval and test specification - Cables for high voltage luminous discharge tube installations*	No change
Electric cables—polymeric insulated—for distribution and service applications	AS/NZS 4961:2003	Cited standard is current Reconfirmed 2016 AS/NZS 4961:2003 *Electric cables - Polymeric insulated - For distribution and service applications* This standard complements standard: AS/NZS 4026:2008 *(Reconfirmed 2018)*	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
		Electric cables - For underground residential distribution systems	
Electric cables—polymeric insulated—for working voltages up to and including 0.6/1 (1.2) kV	AS/NZS 5000.1:2005, including Amendment 1	Cited standard is current Reconfirmed 2016 AS/NZS 5000.1:2005 *Electric cables - Polymeric insulated - For working voltages up to and including 0.6/1 (1.2) kV including Amendment 1*	No change
Electric cables—polymeric insulated—for working voltages up to and including 450/750 V	AS/NZS 5000.2:2006	Cited standard is current Reconfirmed 2016 AS/NZS 5000.2:2006 *Electric cables - Polymeric insulated - For working voltages up to and including 450/750 V*	No Change
Electric cables—polymeric insulated—multicore control cables	AS/NZS 5000.3:2003	Cited standard is current Reconfirmed 2016 AS/NZS 5000.3:2003 *Electric cables - Polymeric insulated - Multicore control cables*	No change
Electric flexible cords	AS/NZS 3191:2008 or IEC 60227 and IEC 60245 series	Cited standard is current AS/NZS 3191:2008 *Electric flexible cords* IEC 60227 SER *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V* IEC 60245 SER *Rubber insulated cables - Rated voltages up to and including 450/750 V*	Transition to AS/NZS standard only with immediate effect This is to provide simplicity and clarity. Too many IEC's would need to be referenced to achieve same effect.
Heating cables with a rated voltage of 300/500 V for comfort heating and prevention of ice formation	IEC 60800 Ed 3.0	Cited standard is current IEC 60800 Ed 3.0 (2009)	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
		Heating cables with a rated voltage of 300/500V for comfort heating and prevention of ice formation	
Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V—flexible cables (cords)	AS/NZS 60227.5:2003, including Amendment 1 or IEC 60227-5 Ed 3.0	Cited IEC standard is current IEC 60227-5: Ed 3.0 (2011) *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V - Part 5: Flexible cables (cords)*	Immediate transition to IEC standard only
Rubber insulated cables—rated voltages up to and including 450/750 V—cords and flexible cables	AS/NZS 60245.4:2003, including Amendment 1 or IEC 60245-4 Ed 3.0	Cited IEC standard is current IEC 60245-4 Ed 3.0 (2011) *Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 4: Cords and flexible cables*	Immediate transition to IEC standard only
Rubber insulated cables—rated voltages up to and including 450/750 V—cords for applications requiring high flexibility	IEC 60245-8 Ed 1.2	Cited standard is current IEC 60245-8 Ed1.2 (2012) *Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 8: Cords for applications requiring high flexibility*	No change
Rubber insulated cables—rated voltages up to and including 450/750 V—heat-resistant silicone insulated cables	IEC 60245-3 Ed 2.0, including Amendments 1 and 2	Cited standard is current IEC 60245-3 Ed 2.0 (1994) Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 3: Heat resistant silicone insulated cables Incorporated A1 10/06/1997 Incorporated A1 23/09/2011	No Change

Clause 5

Switches for circuits, installation protective devices, and connection devices

In this section, where the latest edition of the IEC standard referred to is part 2 or above, the standard in question must be read in conjunction with its corresponding part 1 (i.e. the part 1 that was applicable when said standard was published).

Type	Applicable standard	Latest Edition	Proposed change and rationale
Arc fault detection devices	New standard	IEC 62606 Ed 1.1 (2017) *General requirements for arc fault detection devices*	**Immediate adoption of new standard – only came into existence in 2013**
Assemblies for power distribution in public networks	AS/NZS 3439.5:2001 or IEC 61439-5 Ed 1.0	Cited edition of standard has been superseded IEC 61439-5 Ed 2.0 (2014) *Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks*	Immediate transition to most recent IEC standard only.
Circuit-breakers for overcurrent protection for household and similar installations—circuit-breakers for AC operation	AS/NZS 60898.1:2004 or IEC 60898-1 Ed 1.2 as modified by AS/NZS 60898.1:2004 or AS/NZS 3111:2009, including Amendment 1	Cited edition of standard has been superseded IEC 60898-1 Ed. 2.0 (2015) *Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation*	Immediate transition to most recent IEC standard only.
Circuit-breakers for overcurrent protection for household and similar installations—circuit-breakers for AC and DC operation	AS/NZS 60898.2:2004 or IEC 60898-2 Ed 1.1 as modified by AS/NZS 60898.2:2004	Cited edition of standard has been superseded IEC 60898-2 Ed. 2.0 (2016) *Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 2: Circuit-breakers for AC and DC operation*	Immediate transition to most recent IEC standard only.
Contactors and motor-starters—AC semiconductor controllers and contactors for non-motor loads	AS/NZS 3947.4.3:2000 or IEC 60947-4-3 Ed 1.2	Cited edition of standard has been superseded IEC 60947-4-3 Ed 2.0 (2014)	Immediate transition to most recent IEC standard only.

Type	Applicable standard	Latest Edition	Proposed change and rationale
		Low-voltage switchgear and controlgear - Part 4-3: Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads	
Control circuit devices and switching elements—DC interface for proximity sensors and switching amplifiers (NAMUR)	AS/NZS 3947.5.6:2000 or IEC 60947-5-6 Ed 1.0	Cited IEC standard is current IEC 60947-5-6 Ed 1.0 (1999) *Low-voltage switchgear and controlgear - Part 5-6: Control circuit devices and switching elements - DC interface for proximity sensors and switching amplifiers (NAMUR)*	Immediate transition to current IEC standard only
Control circuit devices and switching elements—electrical emergency stop device with mechanical latching function	AS/NZS 3947.5.5:2000 or IEC 60947-5-5 Ed 1.1	Cited edition of standard has been superseded IEC 60947-5-5 Ed 1.2 (2016) *Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function*	Immediate transition to most recent IEC standard only.
Control circuit devices and switching elements—proximity devices with defined behaviour under fault conditions	AS/NZS 3947.5.3:2000 or IEC 60947-5-3 Ed 1.1	Cited edition of standard has been superseded IEC 60947-5-3 Ed 2.0 (2013) *Low-voltage switchgear and controlgear - Part 5-3: Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDDB)*	Immediate transition to most recent IEC standard only.
DC isolators	New Standard	IEC 60947-3 Ed 3.2 (2015) *Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*	**New standard – this is included as its own standard due to technical developments concerning DC isolators**
Electromagnetic remote-control switches (RCS)	IEC 60669-1 Ed 3.2 as modified by AS/NZS 60669.1:2013 in conjunction with IEC 60669-2-2 Ed 3.0	Cited standard is current IEC 60669-2-2 Ed 3.0 (2006) *Switches for household and similar fixed electrical installations - Part 2-2: Particular requirements - Electromagnetic remote-control switches (RCS)*	Immediate transition to most recent IEC standard only.

Type	Applicable standard	Latest Edition	Proposed change and rationale
Electronic switches	IEC 60669-1 Ed 3.2 as modified by AS/NZS 60669.1:2013 in conjunction with IEC 60669-2-1 Ed 4.1 as modified by AS/NZS 60669.2.1:2013	Cited edition of standard has been superseded IEC 60669-2-1 Ed 4.2 (2015) *Switches for household and similar fixed electrical installations -Part 2-1: Particular requirements - Electronic switches*	Immediate transition to most recent IEC standard only.
Installation couplers intended for permanent connection in fixed installations	IEC 61535 Ed 1.1	Cited IEC standard is current IEC 61535 Ed 1.1 (2012) *Installation couplers intended for permanent connection in fixed installations*	No Change
Isolating switches	IEC 60669-1 Ed 3.2 as modified by AS/NZS 60669.1:2013 in conjunction with IEC 60669-2-4, Ed 1.0	Cited edition of standard is current IEC 60669-2-4 Ed 1.0 (2004) *Switches for household and similar fixed electrical installations - Part 2-4: Particular requirements - Isolating switches*	No change
Low-voltage assemblies intended to be installed in places where unskilled persons have access for their use	AS/NZS 3439.3:2002 or IEC 60439-3 Ed 1.2 as modified by AS/NZS 3439.3:2002	IEC 61439-3 Ed 1.0 (2012) *Low-voltage switch gear and control gear assemblies - Part 3: distribution boards intended to be operated by ordinary persons*	Immediate transition to most recent IEC standard only.
Low-voltage switchgear and controlgear assemblies - General rules	New Standard	IEC 61439-1 Ed 2.0 (2011) *Low-voltage switchgear and control gear assemblies - Part 1: General rules*	**Immediate adoption of new standard – provides greater breadth and ensures subsequent parts compliance with this part 1.** **Standard is already 8 years old, no transition needed.**
Low-voltage switchgear and controlgear assemblies - Power switchgear and controlgear assemblies	New standard	IEC 61439-2 Ed. 2.0 (2011) *Low-voltage switchgear and control gear assemblies - Power switchgear and controlgear assemblies*	**Immediate adoption of new standard - provides greater breadth ensures subsequent parts compliance with this part 2.** **Standard is already 8 years old, no transition needed.**
Low-voltage fuses for use by authorised persons	IEC 60269-1 Ed 4.1 in conjunction with IEC 60269-2 Ed 4.0	Cited edition of standard has been superseded IEC 60269-2 Ed 5.1 (2016)	Immediate transition to most recent standard only.

Type	Applicable standard	Latest Edition	Proposed change and rationale
		Low-voltage fuses - Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to K	
Low-voltage fuses for use by unskilled persons	IEC 60269-1 Ed 4.1 in conjunction with IEC 60269-3 Ed 4.0	Cited edition of standard has been superseded IEC 60269-3 Ed 4.1 (2013) *Low-voltage fuses - Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar applications) - Examples of standardized systems of fuses A to F*	Immediate transition to most recent standard only.
Low-voltage switchgear and controlgears assemblies for construction sites (ACS)	AS/NZS 3439.4:2009 or IEC 60439-4 Ed 2.0	IEC 61439-4 Ed 1.0 (2012) *Low-voltage switchgear and controlgear assemblies – Part 4: Particular requirements for assemblies for construction sites (ACS*)	Immediate transition to most recent IEC standard only.
Multiple-function equipment—automatic transfer switching equipment	AS/NZS 3947.6.1:2001 or IEC 60947-6-1 Ed 2.0	Cited edition of standard has been superseded IEC 60947-6-1 Ed 2.1 (2013) *Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment*	Immediate transition to most recent IEC standard only.
Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)	AS/NZS 61009.1:2011 or IEC 61009-1 Ed 3.0 as modified by AS/NZS 61009.1:2011 or AS/NZS 3190:2011	Cited edition of standard has been superseded AS/NZS 61009.1:2015 *Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) - Part 1: General rules* Or IEC 61009-1 Ed 3.2 (2013) *Residual current operated circuit-breakers with integral overcurrent protection for*	Immediate transition to latest editions as stated.

Type	Applicable standard	Latest Edition	Proposed change and rationale
		household and similar uses (RCBOs) - Part 1: General rules as modified by AS/NZS 61009.1:2015	
Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)	AS/NZS 61008.1:2011 or IEC 61008-1 Ed 3.0 as modified by AS/NZS 61008.1:2011 or AS/NZS 3190:2011	Cited edition of standard has been superseded AS/NZS 61008.1:2015 *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules* Or IEC 61008-1 Ed 3.2 (2013) *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part1: General rules* as modified by AS/NZS 61008.1:2015	Immediate transition to latest editions as stated.
Switches, disconnectors, switch-disconnectors, and fuse-combination units	AS/NZS 3947.3:2001 or IEC 60947-3 Ed 3.1	Cited edition of standard has been superseded IEC 60947-3 Ed 3.2 (2015) *Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*	Immediate transition to most recent IEC standard only.
Time-delay switches (TDS)	IEC 60669-1 Ed 3.2 as modified by AS/NZS 60669.1:2013 in conjunction with IEC 60669-2-3 Ed 3.0	Cited edition of standard is current IEC 60669-2-3 Ed 3.0 (2006) *Switches for household and similar fixed electrical installations - Part 2-3: Particular requirements - Time-delay switches (TDS)*	Immediate transition to most recent IEC standard only
Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses	IEC 62423 Ed 2.0	Cited IEC standard is current IEC 62423 Ed 2.0 (2009) *Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses*	No change

Type	Applicable standard	Latest Edition	Proposed change and rationale
Type-tested and partially type-tested assemblies	AS/NZS 3439.1:2002 or IEC 61439-1 Ed 2.0	IEC 61439-1 Ed 2.0 (2011) *Low-voltage switchgear and controlgear assemblies - Part 1: General rules*	Immediate transition to most recent IEC standard only

Clause 6

Hand-held Motor-operated Electric tools

Standard E means IEC 60745-1 Ed 4.0 (2006) as modified by AS/NZS 60745.1:2009

Standard F means AS/NZS 60745.1:2003, including Amendments 1 to 3.

Standard F was superseded by AS/NZS 60745.1:2009 on 18/07/2014.

References to standard E and F are to be removed.

Unless otherwise stated, all standards must comply with **either** IEC 60745-1 Ed 4.0 (2006) as modified by AS/NZS 60745.1:2009 **or** IEC 62841-1 Ed 1.0 (2014) as modified by AS/NZS 62841.1:2015, as determined by the standard cited, in conjunction with part 2 of the cited standard.

Hand-held Motor-operated electric tools	Applicable standard	Latest Edition	Suggested change and Rationale
Band saws	Standard E in conjunction with IEC 60745-2-20 Ed 1.1	Cited standard is current IEC 60745-2-20 Ed 1.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-20: Particular requirements for band saws*	No change
Chain saws	Standard E in conjunction with IEC 60745-2-13 Ed 2.1	Cited standard is current IEC 60745-2-13 Ed 2.1 (2011) *Hand-held motor-operated electric tools - Safety - Part 2-13: Particular requirements for chain saws* See also	Immediate transition to: IEC 60745-2-13 Ed 2.1 (2011) *Hand-held motor-operated electric tools - Safety - Part 2-13: Particular requirements for chain saws* Until 10/11/2020 as per IEC recommendation

		IEC 62841-4-1 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4.1: Particular requirements for chain saws*	Or IEC 62841-4-1 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4.1: Particular requirements for chain saws*
Circular saws	Standard E in conjunction with IEC 60745-2-5 Ed 5.0 Or Until 29/04/2014, Standard E in conjunction with IEC 60745-2-5 Ed 4.0	Cited standard is current IEC 62841-2-5 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.5: Particular requirements for hand-held circular saws*	Immediate transition to latest standard
Concrete vibrators	Standard E in conjunction with IEC 60745-2-12 Ed 1.0 as modified by Annex ZZ of AS/NZS 60745.2.12:2009	Cited edition of standard has been superseded IEC 60745-2-12 Ed 2.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-12: Particular requirements for concrete vibrators*	Immediate transition to latest standard
Cut-off machines	Standard E in conjunction with IEC 60745-2-22 Ed 1.1 as modified by Annex ZZ of AS/NZS 60745.2.22:2011	Cited standard has been superseded IEC 62841-3-10 Ed 1.0 (2015) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.10: Particular requirements for transportable cut-off machines*	Immediate transition to latest standard
Die grinders and small rotary tools	New standard	IEC 60745-2-23 Ed 1.0 (2012) Hand-held motor-operated electric tools - Safety - Part 2-23: Particular requirements for die grinders and small rotary tools	**Immediate adoption of new standard – standard only came into existence in 2012 & broadens scope of this schedule in line with technological developments**
Drain cleaners	Standard E in conjunction with IEC 60745-2-21 Ed 1.1	Cited standard is current IEC 60745-2-21 Ed 1.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-21: Particular requirements*	Immediate transition to: IEC 60745-2-21 Ed 1.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-21: Particular requirements*

		for drain cleaners See also IEC 62841-2-21 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.21: Particular requirements for hand-held drain cleaners*	*for drain cleaners* Until 23/05/2020 as per IEC recommendation Or IEC 62841-2-21 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.21: Particular requirements for hand-held drain cleaners*
Drills and impact drills	Standard E in conjunction with IEC 60745-2-1 Ed 2.1	Cited standard has been superseded IEC 62841-2-1 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.1: Particular requirements for hand-held drills and impact drills*	Immediate transition to: IEC 60745-2-1 Ed 2.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-1: Particular requirements for drills and impact drills* Until 22/06/2020, as per IEC recommendation Or IEC 62841-2-1 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.1: Particular requirements for hand-held drills and impact drills*
Grinders, polishers, and disk-type sanders	Standard E in conjunction with IEC 60745-2-3 Ed 2.2 as modified by Annex ZZ of AS/NZS 60745.2.3:2013 Or Until 31/05/2015 standard E in conjunction with IEC 60745-2-3 Ed 2.1 as modified by Annex ZZ of AS/NZS 60745:2011	Cited standard is current IEC 60745-2-3 Ed 2.2 (2012) *Hand-held motor-operated electric tools - Safety - Part 2-3: Particular requirements for grinders, polishers and disk-type sanders*	Remove reference to outdated standard IEC 60745-2-3 Ed 2.1 No other change
Hammers	Standard E in conjunction with IEC 60745-2-6 Ed 2.2 as modified by Annex ZZ of AS/NZS 60745.2.6:2009	Cited standard is current IEC 60745-2-6 Ed 2.2 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-6: Particular requirements for*	No change

		hammers	
Hedge trimmers	Standard E in conjunction with IEC 60745-2-15 Ed 2.1	Cited standard is current IEC 60745-2-15 Ed 2.1 (2009) *Hand-held motor-operated electric tools - Safety - Part 2-15: Particular requirements for hedge trimmers* See also IEC 62841-4-2 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4.2: Particular requirements for hedge trimmers*	Immediate transition to: IEC 60745-2-15 Ed 2.1 (2009) *Hand-held motor-operated electric tools - Safety - Part 2-15: Particular requirements for hedge trimmers* Until 14/12/2020 as per IEC recommendation Or IEC 62841-4-2 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4.2: Particular requirements for hedge trimmers*
Jointers	Standard E in conjunction with IEC 60745-2-19 Ed 1.1	Cited standard is current IEC 60745-2-19 Ed 1.1 (2010) *Hand-held motor-operated electric tools - Safety - Part 2-19: Particular requirements for jointers*	No change
Mixers	New Standard	IEC 62841-2-10 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.10: Particular requirements for hand-held mixers*	Immediate adoption of new standard
Other hand-held motor-operated electric tools	AS/NZS 3160:2009 including Amendments 1 and 2	Cited standard is current AS/NZS 3160:2009 *Approval and test specification – Hand-held portable electric tools including amendment 1* This is not subject to IEC 60745-1 Ed 4.0 (2006)	No change to main standard Previous amendments 1 and 2 have been incorporated in this revised version of standard. New Amendments have been added. Therefore wording to be: AS/NZS 3160:2009 *Approval and test specification – Hand-held*

			portable electric tools including amendment 1
Planers	Standard E in conjunction with IEC 60745-2-14 Ed 2.2	Cited standard has been superseded IEC 62841-2-14 Ed 1.0 (2015) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.14: Particular requirements for hand-held planers*	Immediate transition to latest standard
Reciprocating saws (jig and sabre saws)	Standard E in conjunction with IEC 60745-2-11 Ed 2.1	Cited standard is current IEC 60745-2-11 Ed 2.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-11: Particular requirements for reciprocating saws (jig and sabre saws)* See also IEC 62841-2-11 Ed 1.1 (2018) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.11: Particular requirements for hand-held reciprocating saws*	Immediate transition to: IEC 60745-2-11 Ed 2.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-11: Particular requirements for reciprocating saws (jig and sabre saws)* Until 19/01/2021 as per IEC recommendation Or IEC 62841-2-11 Ed 1.1 (2018) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.11: Particular requirements for hand-held reciprocating saws*
Routers and trimmers	Standard E in conjunction with IEC 60745-2-17 Ed 3.0 Or Until 29/04/2014, Standard F in conjunction with AS/NZS 60745.2.17:2003	Cited standard is current IEC 60745-2-17 Ed 3.0 (2010) *Hand-held motor-operated electric tools - Safety - Part 2-17: Particular requirements for routers and trimmers* *See also* IEC 62841-2-17 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.17: Particular requirements for*	Immediate transition to : IEC 60745-2-17 Ed 3.0 (2010) *Hand-held motor-operated electric tools - Safety - Part 2-17: Particular requirements for routers and trimmers* Until 23/08/2020 Or IEC 62841-2-17 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.17: Particular*

		hand-held routers	*requirements for hand-held routers*
Sanders and polishers other than disc type	Standard E in conjunction with IEC 60745-2-4 Ed 2.1	Cited standard has been superseded IEC 62841-2-4 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.4: Particular requirements for hand-held sanders and polishers other than disc type*	Immediate transition to latest standard
Screwdrivers and impact wrenches	Standard E in conjunction with IEC 60745-2-2 Ed 2.1 as modified by Annex ZZ of AS/NZS 60745.2.2:2009	Cited standard has been superseded IEC 62841-2-2 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.2: Particular requirements for hand-held screwdrivers and impact wrenches*	Immediate transition to latest standard
Shears and nibblers	Standard E in conjunction with IEC 60745-2-8 Ed 2.1 as modified by Annex ZZ of AS/NZS 60745.2.8:2009	Cited standard has been superseded IEC 62841-2-8 Ed 1.0 (2016) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2.8: Particular requirements for hand-held shears and nibblers*	Immediate transition to latest standard
Spray guns for non-flammable liquids	AS/NZS 3160:2009 including Amendments 1 and 2	Cited standard is current AS/NZS 3160:2009 *Approval and test specification – Hand-held portable electric tools including Amendment 1* This standard is not subject to IEC 60745-1 Ed 4.0 (2006)	No change to main standard. Previous amendments 1 and 2 have been incorporated in this revised version of standard. New Amendments have been added. Therefore wording to read: AS/NZS 3160:2009 *Approval and test specification – Hand-held portable electric tools including Amendment 1*

			This standard is not subject to IEC 60745-1 Ed 4.0 (2006)
Strapping tools	Standard E in conjunction with IEC 60745-2-18 Ed 1.1	Cited standard is current IEC 60745-2-18 Ed 1.1 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-18: Particular requirements for strapping tools*	No change
Tackers	Standard E in conjunction with IEC 60745-2-16 Ed 2.0	Cited standard is current IEC 60745-2-16 Ed 2.0 (2008) *Hand-held motor-operated electric tools - Safety - Part 2-16: Particular requirements for tackers*	No change
Tappers	Standard E in conjunction with IEC 60745-2-9 Ed 2.1	Cited standard is current IEC 60745-2-9 Ed 2.1 *Hand-held motor-operated electric tools - Safety - Part 2-9: Particular requirements for tappers*	No change
Transportable bench grinders	New standard	IEC 62841-3-4 Ed 1.0 (2016) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.4: Particular requirements for transportable bench grinders*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable diamond drills with liquid system	New standard	IEC 62841-3-6 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.6: Particular requirements for transportable diamond drills with liquid system*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable drills	New standard	IEC 62841-3-13 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.13: Particular requirements for transportable drills*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.** **Though IEC recommends adopting from 2020, there is no prior applicable standard.**

Transportable mitre saws	New standard	IEC 62841-3-9 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.9: Particular requirements for transportable mitre saws*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable table saws	New standard	IEC 62841-3-1 Ed 1.0 (2014) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.1: Particular requirements for*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.**
Transportable threading machines	New standard	IEC 62841-3-12 Ed 1.0 (2017) *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.12: Particular requirements for transportable threading machines*	**Immediate adoption of new standard – broadens the scope of this clause for new equipment.** **Though IEC recommends adopting from 2020, there is no prior applicable standard.**

Clause 7

Electric Welding Machines

Electric Welding Machines	Applicable standard	Latest Edition	Suggested change and Rationale
Limited-duty portable AC arc welding machines	IEC 60974-6 Ed 2.0 Or IEC 60974 Ed 1.0 as modified by AS 60974.6:2006	Cited edition of standard has been superseded IEC 60974-6 Ed 3.0 (2015) *Arc welding equipment – Part 6: Limited duty equipment*	Immediate transition to most recent IEC standard

Clause 8

Audio and video products

Audio & video products	Applicable standard	Latest edition	Suggested change and rationale
Audio, video, and similar electronic apparatus	AS/NZS 60065:2012 Or IEC 60065 Ed 7.2 as modified by Annex ZZ of AS/NZS 60065:2012	Cited edition of standard has been superseded IEC 60065 Ed 8.0 (2014) *Audio, video and similar electronic apparatus - Safety requirements* IEC 62368-1 Ed 3.0 2(018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*	Immediate transition to: IEC 60065 Ed 8.0 (2014) *Audio, video and similar electronic apparatus - Safety requirements* until 01/01/2023 to allow 5 years transition OR IEC 62368-1 Ed 3.0 (2018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*
Safety aspects for DC power transfer through communication cables and ports	**NEW STANDARD**	IEC 62368-3 Ed1.0 (2017) *Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports*	**Immediate adoption of new standard – standard only came into existence in 2017 and broadens the scope of this schedule in line with technological developments**
Power supplies for IT equipment	AS/NZS 60065:2012 or IEC 60065 Ed 7.2 as modified by Annex ZZ of AS/NZS 60065:2012	Cited edition of standard has been superseded IEC 60065 Ed 8.0 (2014) *Audio, video and similar electronic apparatus - Safety requirements* IEC 62368-1 Ed 3.0 2(018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*	Immediate transition to: IEC 60065 Ed 8.0 (2014) *Audio, video and similar electronic apparatus - Safety requirements* until 01/01/2023 to allow 5 years transition OR IEC 62368-1 Ed 3.0 2(018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*

Clause 9

Information Technology Equipment

Information technology equipment	Applicable standard	Latest Edition	Suggested change and rationale
Information technology equipment	AS/NZS 60950.1:2011 or IEC 60950-1 Ed 2.1, as modified by Annex ZZ of AS/NZS 60950.1:2011	Cited edition of standard has been superseded AS/NZS 60950.1:2015 *Information technology equipment - Safety - Part 1: General requirements* AS/NZS 62368.1:2018 *Audio/video, information and communication technology equipment - Part 1: Safety requirements* Will supersede above standard on 15/02/2022 IEC 60950 Ed 2.2 (2013) *Audio, video and similar electronic apparatus - Safety requirements*	Immediate transition to the latest IEC standards: IEC 60950-1 Ed 2.2 (2013) *Audio, video and similar electronic apparatus - Safety requirements* Until 01/01/2023 to allow 5 year transition OR IEC 62368-1 Ed 3.0 (2018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*
Power supplies for IT equipment	AS/NZS 60950.1:2011 or IEC 60950-1 Ed 2.1, as modified by Annex ZZ of AS/NZS 60950.1:2011	Cited edition of standard has been superseded AS/NZS 60950.1:2015 *Information technology equipment - Safety - Part 1: General requirements* AS/NZS 62368.1:2018 *Audio/video, information and communication technology equipment - Part 1: Safety requirements* Will supersede above standard on 15/02/2022 IEC 60950 Ed 2.2 (2013) *Audio, video and similar electronic apparatus - Safety requirements*	Immediate transition to the latest IEC standards: IEC 60950-1 Ed 2.2 (2013) *Audio, video and similar electronic apparatus - Safety requirements* Until 01/01/2023 to allow 5 year transition OR IEC 62368-1 Ed 3.0 (2018) *Audio/video, information and communication technology equipment - Part 1: Safety requirements*

Clause 10

Electrical medical devices

standard G means IEC 60601-1 Ed 3.0, including Amendment 1

standard H means IEC 60601-1 Ed 2.0, including Amendments 1 and 2.

These standards have been superseded by IEC 60601-1 Ed 3.1 (2012) *Medical electrical equipment - Part 1: General requirements for basic safety and essential performance*

References to standards G and H will be removed.

All standards included in this section must comply with IEC 60601-1 Ed 3.1 (2012) in conjunction with the part 2 of the cited standard. Only additional changes are noted below. As these standards are not requirements, all changes are to take place immediately.

The Collateral standards have been moved to the start of this table. These standards run in parallel with other standards and are an overall standard, rather than being specific to any piece of equipment. The collateral standards are therefore not subject to part 2 of their specified standard.

Type	Applicable standard	Latest edition	Suggested change and rationale
Collateral standard - Alarm systems in medical electrical equipment and medical electrical systems	Standard G in conjunction with IEC 60601-1-8 Ed 2.1	Cited standard is current IEC 60601-1-8 Ed 2.1 (2012) *Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems*	No change
Collateral standard—Medical electrical equipment and medical electrical systems used in the home healthcare environment	Standard G in conjunction with IEC 60601-1-11 Ed 1.0	Cited edition of standard has been superseded IEC 60601-1-11 Ed 2.0 2015 *Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral Standard:*	Immediate transition to most recent IEC standard

Type	Applicable standard	Latest edition	Suggested change and rationale
		Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment	
Collateral standard—Medical electrical systems	Standard H in conjunction with IEC 60601-1-1 Ed 2.0	Cited standard has been withdrawn. See below standard. IEC 60601-1-12 Ed 1.0 (2014) *Medical electrical equipment - Part 1-12: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems intended for use in the emergency medical services environment*	Immediate transition to most recent, relevant IEC standard
Collateral standard—Physiologic closed-loop controllers	Standard G in conjunction with IEC 60601-1-10 Ed 1.0	Cited edition of standard has been superseded IEC 60601-1-10 Ed 1.1 (2013) *Medical electrical equipment - Part 1-10: General requirements forbasic safety and essential performance - Collateral Standard: Requirements for the development of physiologic closed-loopcontrollers*	Immediate transition to most recent IEC standard
Collateral standard—Programmable electrical medical systems	Standard H in conjunction with IEC 60601-1-4 Ed 1.1	Cited standard has been withdrawn.	**Withdraw standard**
Collateral standard—Radiation protection in diagnostic X-ray equipment	Standard G in conjunction with IEC 60601-1-3 Ed 2.1	Cited standard is current IEC 60601-1-3 Ed 2.1 (2013) *Medical electrical equipment - Part 1.3: General requirements for basic safety and essential performance - Collateral Standard: Radiation protection in diagnostic X-ray equipment*	No change
Collateral standard—usability	Standard G in conjunction with IEC 60601-1-6 Ed 3.0	Cited edition of standard has been superseded IEC 60601-1-6 Ed. 3.1 (2013)	Immediate transition to most recent IEC standard

Type	Applicable standard	Latest edition	Suggested change and rationale
		Medical electrical equipment - Part 1-6: General requirements forbasic safety and essential performance - Collateral standard: Usability	

Type	Applicable standard	Latest Edition	Suggested change and rationale
Ambulatory electrocardiographic systems	Standard G in conjunction with IEC 60601-2-47 Ed 2.0	Cited standard is current IEC 60601-2-47 Ed 2.0 (2012) *Medical electrical equipment – Part 2.47: Particular requirements for the basic safety and essential performance of ambulatory electrocardiographic systems*	No change
Anaesthetic systems	Standard G in conjunction with IEC 80601-2-13 Ed 1.0	Cited edition of standard has been superseded ISO 80601-2-13 Ed 1.0 (2011) *Medical electrical equipment – Part 2.13: Particular requirements for basic safety and essential performance of an anaesthetic workstation*	Immediate transition to most recent ISO standard This is a name change only. IEC website also notes this standard as ISO/IEC 80601-2-13
Automatic cycling non-invasive blood pressure monitoring equipment	Standard G in conjunction with IEC 80601-2-30 Ed 1.0	Cited edition of standard has been superseded IEC 80601-2-30 Ed 2.0 (2018) *Medical electrical equipment - Part 2-30: Particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers*	Immediate transition to most recent IEC standard.
Blankets, pads, and mattresses intended for heating in medical use	Standard G in conjunction with IEC 80601-2-35 Ed 2.0	Cited edition of standard has been superseded IEC 80601-2-35 Ed 2.1 (2016) *Medical electrical equipment – Part 2.35: Particular requirements for the basic safety*	Immediate transition to most recent IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		and essential performance of heating devices using blankets, pads or mattresses and intended for heating in medical use	
Cardiac defibrillators	Standard G in conjunction with IEC 60601-2-4 Ed 3.0	Cited edition of standard has been superseded IEC 60601-2-4 Ed 3.1 (2018) *Medical electrical equipment – Part 2.30: Particular requirements for the basic safety and essential performance of cardiac defibrillators*	Immediate transition to most recent IEC standard
Clinical thermometers for body temperature measurement	Standard G in conjunction with IEC 80601-2-56 Ed 1.0	Cited edition of standard has been superseded ISO 80601-2-56 Ed 2.0 (2017) *Medical electrical equipment - Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement*	Immediate transition to most recent ISO standard. Correct naming of this standard is ISO as confirmed by IEC website
Critical care ventilators	Standard G in conjunction with IEC 60601-2-12 Ed 1.0	Cited standard has been withdrawn and replaced by: ISO 80601-2-12 Ed 1.0 (2011) *Medical electrical equipment – Part 2.12: Particular requirements for basic safety and essential performance of critical care ventilators*	Immediate transition to most recent ISO standard.
Dental extra-oral X-ray equipment	Standard G in conjunction with IEC 60601-2-63 Ed 1.0	Cited edition of standard has been superseded IEC 60601-2-63 Ed 1.1 (2017) *Medical electrical equipment – Part 2.63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment*	Immediate transition to most recent IEC standard
Dental intra-oral X-ray equipment	Standard G in conjunction with IEC 60601-2-65 Ed 1.0	Cited edition of standard has been superseded	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		IEC 60601-2-65 Ed 1.1 b(2017) *Medical electrical equipment – Part 2.65: Particular requirements for the basic safety and essential performance of dental intra-oral X-ray equipment*	
Diagnostic and therapeutic laser equipment	Standard G in conjunction with IEC 60601-2-22 Ed 3.1	Cited edition of standard has been superseded IEC 60601-2-22 Ed 3.1 b(2012) *Medical electrical equipment – Part 2.22: Particular requirements for the basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment*	Immediate transition to latest IEC standard
Direct blood-pressure monitoring equipment	Standard G in conjunction with IEC 60601-2-34 Ed 3.0	Cited standard is current IEC 60601-2-34 Ed 3.0 b(2011) *Medical electrical equipment – Part 2.34: Particular requirements for the basic safety and essential performance of invasive blood pressure monitoring equipment*	No change
Electrocardiographs	NEW STANDARD	Cited standard is current IEC 60601-2-25 Ed 2.0 (2011) *Medical electrical equipment - Part 2-25: Particular requirements for the basic safety and essential performance of electrocardiographs*	**This standard was in the previous regulations, but was included in the row below (Electrocardiographic monitoring equipment).** This standard has been introduced on its own as a clarification of the standard below. The purpose is to separate the standards for Electrocardiographs and the equipment that monitors electrocardiographs.
Electrocardiographic monitoring equipment	IEC 60601-2-25 Ed 2.0, including Amendment 1 and IEC 60601-2-27 Ed 3.0	Cited standard is current IEC 60601-2-27 Ed 3.0 (2011) *Medical electrical equipment - Part 2-27: Particular requirements for the basic safety and essential performance of electrocardiographic monitoring equipment*	Immediate transition to relevant IEC standard only. See above.
Electroencephalographs	Standard G in conjunction with IEC 60601-2-	Cited edition of standard has been	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
	26 Ed 2.0	superseded IEC 60601-2-26 Ed 3.0 (2012) *Medical electrical equipment – Part 2.26: Particular requirements for the basic safety and essential performance of electroencephalographs*	
Electromyographs and evoked response equipment	Standard G in conjunction with IEC 60601-2-40 Ed 1.0	Cited edition of standard has been superseded IEC 60601-2-4 Ed 2.0 (2016) *Medical electrical equipment – Part 2.40: Particular requirements for the basic safety and essential performance of electromyographs and evoked response equipment*	Immediate transition to latest IEC standard
Electron accelerators in the range of 1 MeV to 50 MeV	Standard G in conjunction with IEC 60601-2-1 Ed 3.0	Cited edition of standard has been superseded IEC 60601-2-1 Ed 3.1 (2014) *Medical electrical equipment - Part 2-1: Particular requirements forthe basic safety and essential performance of electron accelerators in the range 1 MeV to 50 MeV*	Immediate transition to latest IEC standard
Endoscopic equipment	Standard G in conjunction with IEC 60601-2-18 Ed 3.0	Cited standard is current IEC 60601-2-18 Ed 3.0 (2009) *Medical electrical equipment - Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment*	No change
External cardiac pacemakers with internal power source	Standard G in conjunction with IEC 60601-2-31 Ed 2.1	Cited standard is current IEC 60601-2-31 Ed 2.1 (2011) *Medical electrical equipment - Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power*	No change

Type	Applicable standard	Latest Edition	Suggested change and rationale
		source	
Extracorporeally induced lithotripsy	Standard G in conjunction with IEC 60601-2-36 Ed 1.0	Cited edition of standard has been superseded IEC 60601-2-36 Ed 2.0 (2014) *Medical electrical equipment - Part 2-36: Particular requirements for the basic safety and essential performance of equipment for extracorporeally induced lithotripsy*	Immediate transition to latest IEC standard
Gamma beam therapy equipment	Standard G in conjunction with IEC 60601-2-11 Ed 3.0	Cited standard is current IEC 60601-2-11 Ed. 3.0 (2013) *Medical electrical equipment - Part 2.11: Particular requirements for the basic safety and essential performance of gamma beam therapy equipment*	No change
Haemodialysis, haemodiafiltration, and haemofiltration equipment	Standard G in conjunction with IEC 60601-2-16 Ed 4.0	Cited edition of standard has been superseded IEC 60601-2-16 Ed 5.0 (2018) *Medical electrical equipment - Part 2-16: Particular requirements for basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment*	Immediate transition to latest IEC standard
High-frequency surgical equipment	Standard G in conjunction with IEC 60601-2-2 Ed 5.0	Cited edition of standard has been superseded IEC 60601-2-2 Ed 6.0 (2017) *Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories*	Immediate transition to latest IEC standard
Infant incubators	Standard G in conjunction with IEC 60601-2-19 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-19 Ed 2.1 (2016)	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		Medical electrical equipment - Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators	
Infant phototherapy equipment	Standard G in conjunction with IEC 60601-2-50 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-50 Ed 2.1 (2016) *Medical electrical equipment - Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment*	Immediate transition to latest IEC standard
Infant radiant warmers	Standard G in conjunction with IEC 60601-2-21 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-21 Ed 2.1 (2016) *Medical electrical equipment - Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers*	Immediate transition to latest IEC standard
Infant transport incubators	Standard G in conjunction with IEC 60601-2-20 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-20 Ed 2.1 (2016) *Medical electrical equipment - Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators*	Immediate transition to latest IEC standard
Infusion pumps and controllers	Standard G in conjunction with IEC 60601-2-24 Ed 2.0	Cited standard is current. IEC 60601-2-24 Ed 2.0 (2012) *Medical electrical equipment - Part 2-24: Particular requirements for the basic safety and essential performance of infusion pumps and controllers*	No change
Lens removal devices and vitrectomy devices for ophthalmic surgery	Standard G in conjunction with IEC 80601-2-58 Ed 1.0	Cited edition of standard has been superseded IEC 80601-2-58 Ed 2.1 (2016)	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		Medical electrical equipment - Part 2-58: Particular requirementsfor the basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery	
Magnetic resonance equipment for medical diagnosis	Standard G in conjunction with IEC 80601-2-33 Ed 3.1	Cited edition of standard has been superseded IEC 60601-2-33 Ed 3.2 (2015) *Medical electrical equipment - Part 2-33: Particular requirements for the basic safety and essential performance of magnetic resonance equipment for medical diagnosis*	Immediate transition to latest IEC standard
Mammographic X-ray equipment and mammographic stereotactic devices	Standard G in conjunction with IEC 60601-2-45 Ed 3.0	Cited edition of standard has been superseded IEC 60601-2-45 Ed 3.1 (2015) *Medical electrical equipment - Part 2-45: Particular requirements for basic safety and essential performance of mammographic X-ray equipment and mammomagraphic stereotactic devices*	Immediate transition to latest IEC standard
Medical beds	Standard G in conjunction with IEC 60601-2-52 Ed 1.0	Cited edition of standard has been superseded IEC 60601-2-52 Ed 1.1 (2015) *Medical electrical equipment - Part 2-52: Particular requirements for the basic safety and essential performance of medical beds*	Immediate transition to latest IEC standard
Microwave therapy equipment	Standard G in conjunction with IEC 60601-2-6 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-6 Ed 2.1 (2016) *Medical electrical equipment - Part 2-6: Particular requirements forthe basic safety and essential performance of microwave therapy equipment*	Immediate transition to latest IEC standard
Multifunction patient monitoring equipment	Standard G in conjunction with IEC 60601-2-49 Ed 2.0	Cited Standard has been withdrawn and replaced. See standard below.	Immediate transition to latest relevant IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		IEC 80601-2-49 Ed 1.0 (2018) *Medical electrical equipment - Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitors*	
Nerve and muscle stimulators	Standard G in conjunction with IEC 60601-2-10 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-10 Ed 2.1 (2016) *Medical electrical equipment - Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators*	Immediate transition to latest IEC standard
Non-laser light source equipment intended for therapeutic, diagnostic, monitoring and cosmetic/aesthetic use	Standard G in conjunction with IEC 60601-2-57 Ed 1.0	Cited standard is current IEC 60601-2-57 Ed 1.0 (2011) *Medical electrical equipment - Part 2-57: Particular requirements for the basic safety and essential performance of non-laser light source equipment intended for therapeutic, diagnostic, monitoring and cosmetic/aesthetic use*	No change
Operating tables	Standard G in conjunction with IEC 60601-2-46 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-46 Ed 3.0 (2016) *Medical electrical equipment - Part 2-46: Particular requirements for the basic safety and essential performance of operating tables*	Immediate transition to latest IEC standard
Oxygen concentrators for individual patient use	Standard H in conjunction with ISO 8359-1996 including Amendment 1	Cited edition of standard has been superseded ISO 80601-2-69 ed 1.0 2014 *Medical electrical equipment - Part 2-69: Particular requirements for the basic safety and essential performance of oxygen concentrator equipment*	Immediate transition to latest ISO standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
Peritoneal dialysis equipment	Standard G in conjunction with IEC 60601-2-39 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-39 Ed 3.0 (2018) *Medical electrical equipment - Part 2-39: Particular requirements for basic safety and essential performance of peritoneal dialysis equipment*	Immediate transition to latest IEC standard
Pulse oximeter equipment	Standard G in conjunction with IEC 80601-2-61 Ed 1.0	Cited edition of standard has been superseded ISO 80601-2-61 ed 2.1 (2017) *Medical electrical equipment - Part 2-61: Particular requirements for the basic safety and essential performance of pulse oximeter equipment*	Immediate transition to latest ISO standard
Radiotherapy simulators	Standard G in conjunction with IEC 60601-2-29 Ed 3.0	Cited standard is current. IEC 60601-2-29 Ed 3.0 (2008) *Medical electrical equipment - Part 2-29: Particular requirements for the basic safety and essential performance of radiotherapy simulators*	No change
Remote-controlled automatically driven gamma-ray afterloading equipment	Standard H in conjunction with IEC 60601-2-17 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-17 Ed 3.0 (2017) *Medical electrical equipment - Part 2-17: Particular requirements for the basic safety and essential performance of automatically-controlled brachytherapy afterloading equipment*	Immediate transition to latest IEC standard
Requirements and test for electromagnetic compatibility	Standard G in conjunction with IEC 60601-1-2 Ed 3.0	Cited edition of standard has been superseded IEC 60601-1-2 Ed 4.0 (2014) *Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard:*	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		Electromagnetic disturbances - Requirements and tests	
Respiratory gas monitors	Standard G in conjunction with IEC 80601-2-55 Ed 1.0	Cited edition of standard has been superseded ISO 80601-2-55 Ed 2.0 (2018) *Medical electrical equipment - Part 2-55: Particular requirements for the basic safety and essential performance of respiratory gas monitors*	Immediate transition to latest ISO standard.
Screening thermographs for human febrile temperature screening	Standard G in conjunction with IEC 80601-2-59 Ed 1.0	Cited edition of standard has been superseded ISO 80601-2-59 Ed 2.0 (2017) *Medical electrical equipment - Part 2-59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening*	Immediate transition to latest ISO standard.
Short-wave therapy equipment	Standard G in conjunction with IEC 60601-2-3 Ed 3.0	Cited edition of standard has been superseded IEC 60601-2-3 Ed 3.1 (2016) *Medical electrical equipment - Part 2-3: Particular requirements for the basic safety and essential performance of short-wave therapy equipment*	Immediate transition to latest IEC standard
Sleep apnoea breathing therapy equipment	Standard H in conjunction with ISO 17510-1:2007	Cited edition of standard has been superseded ISO 80601-2-70 Ed 1.0 (2015) *Medical electrical equipment - Part 2.70: Particular requirements for basic safety and essential performance of sleep apnoea breathing therapy equipment*	Immediate transition to latest ISO standard.
Surgical luminaires and luminaires for diagnosis	Standard G in conjunction with IEC 60601-2-41 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-41 Ed 2.1 (2013)	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		Medical electrical equipment - Part 2-41: Particular requirements for the basic safety and essential performance of surgical luminaires and luminaires for diagnosis	
Therapeutic X-ray generators	Standard G in conjunction with IEC 60601-2-8 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-8 Ed 2.1 (2015) *Medical electrical equipment - Part 2-8: Particular requirements forthe basic safety and essential performance of therapeutic X-ray equipment operating in the range 10 kV to 1 MV*	Immediate transition to latest IEC standard
Transcutaneous partial pressure monitoring equipment	Standard G in conjunction with IEC 60601-2-23 Ed 3.0	Cited standard is current IEC 60601-2-23 Ed 3.0 (2011) *Medical electrical equipment - Part 2-23: Particular requirements for the basic safety and essential performance of transcutaneous partial pressure monitoring equipment*	No change
Ultrasonic medical diagnostic and monitoring equipment	Standard G in conjunction with IEC 60601-2-37 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-37 Ed 2.1 (2015) *Medical electrical equipment - Part 2-37: Particular requirements for the basic safety and essential performance of ultrasonic medical diagnostic and monitoring equipment*	Immediate transition to latest IEC standard
Ultrasonic physiotherapy equipment	Standard G in conjunction with IEC 60601-2-5 Ed 3.0	Cited standard is current IEC 60601-2-5 Ed 3.0 (2009) *Medical electrical equipment - Part 2-5: Particular requirements for the basic safety and essential performance of ultrasonic physiotherapy equipment*	No change
X-ray equipment for interventional procedures	Standard G in conjunction with IEC 60601-2-43 Ed 2.0	Cited edition of standard has been superseded	Immediate transition to latest IEC standard

Type	Applicable standard	Latest Edition	Suggested change and rationale
		IEC 60601-2-43 Ed 2.1 (2017) *Medical electrical equipment - Part 2-43: Particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures*	
X-ray equipment for radiography and radioscopy	Standard G in conjunction with IEC 60601-2-54 Ed 1.0	Cited edition of standard has been superseded IEC 60601-2-54 Ed 1.2 (2018) *Medical electrical equipment - Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy*	Immediate transition to latest IEC standard
X-ray source assemblies and X-ray tube assemblies for medical diagnosis generators	Standard G in conjunction with IEC 60601-2-28 Ed 2.0	Cited edition of standard has been superseded IEC 60601-2-28 Ed 3.0 (2017) *Medical electrical equipment - Part 2-28: Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis*	Immediate transition to latest IEC standard

Clause 11

Lighting Fittings

Standard J means IEC 60598-1 Ed 7.0 as modified by Annex ZZ of AS/NZS 60598.1:2003

Most recent edition of above standard is IEC 60598-1 Ed 8.1 (2017) *Luminaires - Part 1: General requirements and tests*

Standard K means AS/NZS 60598.1:2003.

Standards J and K will no longer be referenced.

All of the standards in this section must comply with IEC 60598-1 Ed 8.1 (2017), in conjunction with part 2 of the cited standard. Only changes that do not relate to IEC 60598-1 Ed 8.1 (2017) are included.

Lighting fittings	Applicable standard	Latest Edition	Suggested change and rationale
Air handling luminaires	Standard J in conjunction with IEC 60598-2-19 Ed 1.0, including Amendments 1 and 2 Or Standard K in conjunction with AS/NZS 60598.2.19:2001	Cited IEC standard is current IEC 60598-2-19 Ed. 1.0 (1981) *Luminaires. Part 2: Particular requirements. Second Nineteen: Air-handling luminaires (safety requirements)* *Including Amendments 1 and 2.*	No change
Aquarium luminaires	Standard J in conjunction with IEC 60598-2-11 Ed. 1.0	Cited standard has been superseded IEC 60598-2-11 Ed. 2.0 (2013) *Luminaires. Part 2.11: Particular requirements- Aquarium luminaires*	Immediate change to most recent IEC standard
Extra low voltage lighting systems for filament lamps	Standard J in conjunction with IEC 60598-2-23 Ed. 1.1 Or Standard K in conjunction with AS/NZS 60598.2.23:2002	Cited IEC standard is current IEC 60598-2-23 Ed. 1.1 (2001) *Luminaires. Part 2.23: Particular requirements - Extra low voltage lighting systems for filament lamps*	No change
Fixed general-purpose luminaires	Standard J in conjunction with IEC 60598-2-1 Ed 1.0, including Amendment 1 (Annex ZZ of AS/NZS 60598.1:2003 is not applicable) or Standard K in conjunction with AS/NZS 60598.2.1:1998	Cited IEC standard is current IEC 60598-2-1 Ed 1.0 (1979) *Luminaires. Part 2: Particular requirements. Section One: Fixed general purpose luminaires* *Including Amendment 1*	No change
Floodlights	Standard J in conjunction with IEC 60598-2-5 Ed 2.0 as modified by AS/NZS 60598.2.5:2002 or Standard K in conjunction with AS/NZS 60598.2.5:2002	Cited standard has been superseded IEC 60598-2-5 Ed 3.0 (2015) *Luminaires - Part 2-5: Particular requirements – Floodlights*	Immediate transition to latest IEC standard only
Ground-recessed luminaires	Standard J in conjunction with IEC 60598-2-13 Ed. 1.0	Cited standard has been superseded IEC 60598-2-13 Ed. 1.2 (2016) *Luminaires – Part 2.13: Particular requirements – Ground recessed luminaires*	Immediate transition to latest IEC standard

Lighting fittings	Applicable standard	Latest Edition	Suggested change and rationale
Handlamps	Standard J in conjunction with IEC 60598-2-8 Ed 3.0 or Standard K in conjunction with AS/NZS 60598.2.8:2002	Cited IEC standard is current IEC 60598-2-8 Ed 3.0 (2013) *Luminaires - Part 2-8: Particular requirements - Handlamps*	No change
Lighting chains	Standard J in conjunction with IEC 60598-2-20 Ed 3.0 as modified by AS/NZS 60598.2.20:2002 or Standard K in conjunction with AS/NZS 60598.2.20:2002	Cited standard has been superseded IEC 60598-2-20 Ed 4.0 (2014) *Luminaires - Part 2-20: Particular requirements - Lighting chains*	Immediate transition to latest IEC standard only
Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment	Standard J in conjunction with IEC 60598-2-14 Ed 1.0	Cited IEC standard is current IEC 60598-2-14 Ed. 1.0 (2009) *Luminaires – Part 2.14: Particular requirements – Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment*	No change
Luminaires for emergency lighting	Standard J in conjunction with IEC 60598-2-22 Ed 3.2 as modified by Compliance Document for New Zealand Building Code Clause F6 or Standard K in conjunction with AS/NZS 60598.2.22:2005 as modified by Compliance Document for New Zealand Building Code Clause F6	Cited standard has been superseded IEC 60598-2-22 Ed 4.1 (2017) *Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting*	Immediate transition to latest IEC standard in conjunction with the Compliance Document for New Zealand Building Code Clause F6.
Luminaires for road and street lighting	Standard J in conjunction with IEC 60598-2-3 Ed 3.0	Cited standard has been superseded IEC 60598-2-3 Ed 3.1 (2011) *Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting*	Immediate transition to latest IEC standard
Luminaires for stage lighting, television, film, and photographic studios (outdoor and indoor)	Standard J in conjunction with IEC 60598-2-17 Ed 1.2 Or Standard K in conjunction with IEC 60598-2-17:2006	Cited standard has been superseded IEC 60598-2-17 Ed 2.0 (2017) *Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and*	Immediate transition to latest IEC standard

Lighting fittings	Applicable standard	Latest Edition	Suggested change and rationale
		indoor)	
Luminaires for swimming pools and similar applications	Standard J in conjunction with IEC 60598-2-18 Ed 2.0 as modified by Annex ZZ of AS/NZS 60598.2.18:1998 Or Standard K in conjunction with AS/NZS 60598.2.18:1998	Cited IEC standard is current IEC 60598-2-18 Ed 2.0 (1993) *Luminaires - Part 2: Particular requirements - Section 18: Luminaires for swimming pools and similar applications*	Remove references to any AS/NZS standards. No change to IEC standard.
Luminaires for use in clinical areas of hospitals and health care buildings	Standard J in conjunction with IEC 60598-2-25 Ed 1.0 including Amendment 1 Or Standard K in conjunction with AS/NZS 60598.2.25:2001	Cited IEC standard is current IEC 60598-2-25 Ed 1.0 (1994) *Luminaires - Part 2: Particular requirements - Section 25: Luminaires for use in clinical areas of hospitals and health care buildings*	Remove references to any AS/NZS standards. No change to IEC standard.
Luminaires with built-in transformers or convertors for filament lamps	Standard J in conjunction with IEC 60598-2-6 Ed 2.0 including Amendment 1 Or Standard K in conjunction with AS/NZS 60598.2.6:1998	Relevant IEC standard has been withdrawn (2015). IEC 60598-2-6 Ed 2.0 (1994) *Luminaires - Part 2: Particular requirements - Section 6: Luminaires with built-in transformers for filament lamps*	**Withdraw this standard** – no replacement IEC standard exists.
Luminaires with limited surface temperatures	Standard J in conjunction with IEC 60598-2-24 Ed 1.0	Cited standard has been superseded IEC 60598.2.24 Ed 2.0 (2013) *Luminaires – Part 2.4: Particular requirements - Luminaires with limited surface temperatures*	Immediate transition to latest IEC standard
Mains socket-outlet mounted nightlights	Standard J in conjunction with IEC 60598-2-12 Ed 2.0 in conjunction with Annex J of AS/NZS 3112:2011	Cited IEC standard is current IEC 60598-2-12 Ed 2.0 (2013) *Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights* AS/NZS 3112:2017 Approval and test specification - Plugs and socket-outlets	Immediate transition to currently cited IEC standard in conjunction with Annex J of AS/NZS 3112:2017 Annex J needed as this refers specifically to NZ plug sockets.
Photo and film luminaires (non-professional)	Standard J in conjunction with IEC 60598-2-9 Ed 2.0 including Amendment 1 Or	Cited standard is current AS/NZS 60598.2.9:2006	Immediate transition to AS/NZS standard only

Lighting fittings	Applicable standard	Latest Edition	Suggested change and rationale
	Standard K in conjunction with AS/NZS 60598.2.9:2006	Luminaires - Particular requirements - Photo and film luminaires (non-professional)	IEC standard withdrawn 2016
Portable general-purpose luminaires	Standard J in conjunction with IEC 60598-2-4 Ed 2.0 as modified by AS/NZS 60598.2.4:2005, including Amendment 1 Or Standard K in conjunction with AS/NZS 60598.2.4:2005, including Amendment 1	Cited standard has been superseded IEC 60598-2-4 Ed 3.0 (2017) *Luminaires – Part 2-4: Particular requirements -Portable general-purpose luminaires*	Immediate transition to latest IEC standard
Portable luminaires for children	Standard J in conjunction with IEC 60598-2-10 Ed 2.0 as modified by Annex ZZ of AS/NZS 60598.2.10:1998	Cited IEC standard is current IEC 60598-2-10 Ed 2.0 (2003) *Luminaires - Part 2-10: Particular requirements - Portable luminaires for children* AS/NZS 60598.2.10:2015 *Luminaires - Part 2.10: Particular requirements - Portable luminaires for children*	Immediate transition to currently cited IEC standard as modified by Annex ZZ of AS/NZS 60598.2.10:2015 Annex ZZ needed as this refers specifically to NZ plug sockets.
Portable luminaires for garden use	Standard J in conjunction with IEC 60598-2-2 Ed 2.1 as modified by Annex ZZ of AS/NZS 60598.2.10:1998	Cited standard has been withdrawn. This standard is now incorporated into: IEC 60598-2-4 Ed 3.0 (2017) *Luminaires – Part 2-4: Particular requirements -Portable general-purpose luminaires*	**Withdraw this standard** - it is already included in the standard for Portable general-purpose luminaires
Recessed luminaires	Standard J in conjunction with IEC 60598-2-2 Ed 2.1 as modified by AS/NZS 60598.2.2:2001, including Amendment A	Cited standard has been superseded IEC 60598-2-2 Ed 3.0 (2011) *Luminaires - Part 2-2: Particular requirements - Recessed luminaires*	Immediate transition to latest IEC standard

Clause 12

Lamp control gear

Standard L means AS/NZS 61347.1:2002

Standard M means IEC 61347-1 Ed 2.1 as modified by AS/NZS 61347.1:2002.

The latest IEC standard is IEC 61347-1 Ed 3.1 (2017) *Lamp controlgear - Part 1: General and safety requirements.*

All references to standards L and M are to be removed.

All standards included in this table must comply with IEC 61347-1 Ed 3.1 (2017) in conjunction with part 2 of the cited standard. Only changes not relating to IEC 61347-1 Ed 3.1 (2017) will be noted below.

Type	Applicable standard	Latest edition	Suggested change and rationale
AC supplied electronic ballasts for fluorescent lamps	Standard L in conjunction with AS/NZS 61347.2.3:2004 or Standard M in conjunction with IEC 61347-2-3 Ed 1.1, including Amendment 2 or IEC 61347-2-3 Ed 2.0	Cited edition of standard has been superseded. IEC 61347-2-3 Ed 2.1 (2016) *Lamp control gear - Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps*	Immediate transition to latest IEC standard only Name change to: ***'AC or DC supplied electronic ballasts for fluorescent lamps'*** This is due to the withdrawal of several standards below, and clarifies that this standard refers to DC also.
Ballasts for discharge lamps (excluding fluorescent lamps)	Standard L in conjunction with AS/NZS 61347.2.9:2004 or Standard M in conjunction with IEC 61347-2-9 Ed 1.2	Cited edition of standard has been superseded. IEC 61347-2-9 Ed 2.1 (2012) *Lamp controlgear - Part 2-9: Particular requirements for electromagnetic controlgear for discharge lamps (excluding fluorescent lamps)*	Immediate transition to latest IEC standard only
Ballasts for fluorescent lamps	Standard L in conjunction with AS/NZS 61347.2.8:2003 or Standard M in conjunction with IEC 61347-2-	Cited IEC standard is current IEC 61347-2-8 Ed 1.1 (2006) *Lamp controlgear - Part 2-8: Particular*	Remove any reference to any AS/NZS standard. No change to cited IEC standard.

	8 Ed 1.1	*requirements for ballasts for fluorescent lamps*	
DC or AC supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)	Standard M in conjunction with IEC 61347-2-12 Ed 1.1	Cited IEC standard is current IEC 61347-2-12 Ed 1.1 (2010) *Lamp controlgear - Part 2-12: Particular requirements for d.c. or a.c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)*	No change
DC or AC supplied electronic controlgear for LED modules	Standard L in conjunction with IEC 61347-2-13 Ed 1.0	Cited edition of standard has been superseded. IEC 61347-2-13 Ed 2.1 (2016) *Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules*	Immediate transition to latest IEC standard
DC or AC supplied electronic step-down convertors for filament lamps	Standard L in conjunction with AS/NZS 61347.2.2:2007	Cited edition of standard has been superseded. IEC 61347-2-2 Ed 2.0 (2011) *Lamp controlgear - Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps*	Immediate transition to latest IEC standard
DC supplied electronic ballasts for aircraft lighting	Standard L in conjunction with AS/NZS 61347.2.6:2002 or Standard M in conjunction with IEC 61347-2-6 Ed 1.0 or IEC 61347-2-3 Ed 2.0	Cited standard has been withdrawn IEC 61347-2-6 Ed 1.0 (2000) *Lamp controlgear - Part 2-6: Particular requirements for d.c. supplied electronic ballasts for aircraft lighting* Has been withdrawn	**Withdraw this standard** Issues previously covered by this standard have been incorporated into IEC 61347-2-3 Ed 2.1 (2016)
DC supplied electronic ballasts for emergency lighting	Standard M in conjunction with IEC 61347-2-7 Ed 2.0	Cited edition of standard has been superseded. IEC 61347-2-7 Ed 3.1 (2017) *Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)*	Immediate transition to latest IEC standard

DC supplied electronic ballasts for general lighting	Standard L in conjunction with AS/NZS 61347.2.4:2002 or Standard M in conjunction with IEC 61347-2-4 Ed 1.0 or IEC 61347-2-3 Ed 2.0	Cited standard has been withdrawn IEC 61347-2-4 Ed 1.0 (2000) *Lamp controlgear - Part 2-4: Particular requirements for d.c. supplied electronic ballasts for general lighting* Has been withdrawn	**Withdraw this standard** Issues previously covered by this standard have been incorporated into IEC 61347-2-3 Ed 2.1 (2016)
DC supplied electronic ballasts for public transport	Standard L in conjunction with AS/NZS 61347.2.5:2002 or Standard M in conjunction with IEC 61347-2-5 Ed 1.0 or IEC 61347-2-3 Ed 2.0	Cited standard has been withdrawn IEC 61347-2-5 Ed 1.0 (2000) *Lamp controlgear - Part 2-5: Particular requirements for d.c. supplied electronic ballasts for public transport lighting*	**Withdraw this standard** Issues previously covered by this standard have been incorporated into IEC 61347-2-3 Ed 2.1 (2016)
Electronic inverters and converters for high-frequency operation of cold start tubular discharge lamps (neon tubes)	Standard L in conjunction with AS/NZS 61347.2.10:2004 or Standard M in conjunction with IEC 61347-2-10 Ed 1.1	Cited IEC standard is current IEC 61347-2-10 Ed 1.1 (2009) *Lamp controlgear - Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)*	Remove any reference to any AS/NZS standard. No change to cited IEC standard.
Glow-starters for fluorescent lamps	AS/NZS 60155:2000, including Amendments 1 and 2 or IEC 60155 Ed 4.0, including Amendments 1 and 2, as modified buy AS/NZS 60155:2000, including Amendments 1 and 2	Cited IEC standard is current IEC 60155 Ed 4.0 (1993) *Glow-starters for fluorescent lamps* Amendments incorporated	Remove any reference to any AS/NZS standard. No change to cited IEC standard.
Miscellaneous electronic circuits used with luminaires	Standard L in conjunction with AS/NZS 61347.2.11:2003 or Standard M in conjunction with IEC 61347-2-11 Ed 1.0	Cited edition of standard has been superseded. IEC 61347-2-11 Ed 1.1 (2017) *Lamp controlgear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires*	Immediate transition to most recent IEC standard only.
Starting devices (other than flow starters)	Standard L in conjunction with AS/NZS 61347.2.1:2002 or Standard M in conjunction with IEC 61347-2-	Cited edition of standard has been superseded. IEC 61347-2-1 Ed 1.2 (2013)	Immediate transition to most recent IEC standard only.

	1 Ed 1.1	*Lamp controlgear - Part 2-1: Particular requirements for startingdevices (other than glow starters)*	

Clause 13

Lamps

Type	Applicable standard	Latest edition	Suggested change and rationale
Tungsten filament lamps for domestic and similar general lighting purposes	AS/NZS 60432.1:2007 Or IEC 60432-1 Ed 2.2	Cited IEC standard is current IEC 60432-1 Ed 2.2 (2012) *Incandescent lamps - Safety specifications - Part 1: Tungsten filament lamps for domestic and similar general lighting purposes*	Remove reference to AS/NZS standard No change to IEC standard
Tungsten-halogen lamps for domestic and similar general lighting purposes	AS/NZS 60432.2:2007 Or IEC 60432-2 Ed 2.2	Cited IEC standard is current IEC 60432-2 Ed 2.2 (2012) *Incandescent lamps - Safety specifications - Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes*	Remove reference to AS/NZS standard No change to IEC standard
Tungsten-halogen lamps (non-vehicle)	AS/NZS 60432.3:2007 Or IEC 60432-3 Ed 2.0	Cited IEC standard is current IEC 60432-3 Ed 2.0 (2012) *Incandescent lamps - Safety specifications - Part 3: Tungsten halogen lamps (non-vehicle)*	Remove reference to AS/NZS standard No change to IEC standard
Self-ballasted lamps for general lighting services	AS/NZS 60968:2001 Or IEC 60968 Ed 2.0	Cited edition of standard has been superseded IEC 60968 Ed 3.0 (2015) *Self-ballasted fluorescent lamps for general lighting services - Safety requirements*	Remove reference to AS/NZS standard Immediate transition to latest IEC standard

Clause 14

Power Transformers, power supplies, reactors and similar products

Standard N means IEC 61558-1 Ed 2.1 as modified by Annex ZZ of AS/NZS 61558.1:2008, including Amendment 1

Standard O means AS/NZS 62558.1:2000, including Amendments 1 to 7

Standard P means IEC 61558-1 Ed 1.1 as modified by Annex ZZ of AS/NZS 61558.1:2000, including Amendments 1 to 7

The latest version of the above IEC standards is:

IEC 61558-1 Ed 3.0 (2017) *Safety of transformers, reactors, power supply units and combinations thereof - Part 1: General requirements and tests*

All references to standards N, O and P are to be removed. All standards below must comply with IEC 61558-1 Ed 3.0 (2017) in conjunction with part 2 of the cited standard. Only changes not relating to IEC 61558-1 Ed 3.0 (2017) are included in this table.

Type	Applicable standard	Latest edition	Suggested change and rationale
Auto transformers and power supply units incorporating auto transformers	Standard N in conjunction with IEC 61558-2-13 Ed 2.0	Cited standard is current IEC 61558-2-13 Ed 2.0 (2009) *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V - Part 2-13: Particular requirements and tests for auto transformers and power supply units incorporating auto transformers*	No change
Bell and chime transformers and power supply units	Standard N in conjunction with IEC 61558-2-8 Ed 2.0 Or Until 29/04/2014, standard O in conjunction with AS/NZS 61558.2.5:2001	Cited IEC standard is current IEC 61558-2-8 Ed 2.0 (2010) *Safety of transformers, reactors, power supply units and combinations thereof - Part 2-8: Particular requirements and tests for transformers and power supply units for bells and chimes* Reference to AS/NZS 61558.2.5:2001 has	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
		already expired	
Constant voltage transformers and power supply units	Standard P in conjunction with IEC 61558-2-12 Ed 2.0	Cited standard is current IEC 61558-2-12 Ed 2.0 (2011) *Safety of transformers, reactors, power supply units and combination thereof - Part 2-12: Particular requirements and tests for constant voltage transformers and power supply units for constant voltage*	No change
Control transformers and power supplies incorporating control transformers	Standard N in conjunction with IEC 61558-2-2 Ed 2.0	Cited standard is current IEC 61558-2-2 Ed 2.0 (2007) *Safety of power transformers, power supplies, reactors and similar products - Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers*	No change
Ignition transformers for gas and oil burners	Standard N in conjunction with IEC 61558-2-3 Ed 2.0 Or Until 29/05/2014, standard O in conjunction with AS/NZS 61558.2.3:2001	Cited IEC standard is current IEC 61558-2-3 Ed 2.0 (2010) *Safety of transformers, reactors, power supply units and combinations thereof - Part 2-3: Particular requirements and tests for ignition transformers for gas and oil burners* Reference to AS/NZS 61558.2.3:2001 has already expired	No change
Isolating transformers and power supply units for isolating transformers for general use	Standard N in conjunction with IEC 61558-2-4 Ed 2.0	Cited standard is current IEC 61558-2-4 Ed 2.0 (2009) *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V - Part 2-4: Particular requirements and tests for isolating transformers and power supply units incorporating isolating transformers*	No change
Isolating transformers for the supply of medical locations	Standard N in conjunction with IEC 61558-2-15 Ed 2.0 as modified by AS/NZS 61558.2.15:2012	Cited IEC standard is current IEC 61558-2-15 Ed 2.0 (2011)	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
	Or Until 26/10/2015, standard O in conjunction with AS/NZS 61558.2.15:2001	*Safety of transformers, reactors, power supply units and combinations thereof - Part 2-15: Particular requirements and tests for isolating transformers for the supply of medical locations* Reference to AS/NZS 61558.2.15:2001 has already expired	
Safety isolating transformers and power supply units for isolating transformers for general use	Standard N in conjunction with IEC 61558-2-6 Ed 2.0 as modified by AS/NZS 61558.2.6:2009	Cited IEC standard is current IEC 61558-2-6 Ed 2.0 (2009) *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V - Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers*	Remove reference to AS/NZS 61558.2.6:2009 No change to cited IEC standard
Separating transformers and powers supplies incorporating separating transformers for general application	Standard N in conjunction with IEC 61558-2-1 Ed 2.0	Cited standard is current IEC 61558-2-1 Ed 2.0 (2007) *Safety of power transformers, power supplies, reactors and similar products - Part 2-1: Particular requirements and tests for separating transformers and power supplies incorporating separating transformers for general applications*	No change
Small reactors	Standard N in conjunction with IEC 61558-2-20 Ed 2.0 Or Until 29/04/2014, standard P in conjunction with IEC 61558-2-20 Ed 1.0	Cited IEC standard is current IEC 61558-2-20 Ed 2.0 (2010) *Safety of transformers, reactors, power supply units and combinations thereof - Part 2-20: Particular requirements and tests for small reactors* Reference to IEC 61558-2-20 Ed 1.0 has already expired	No change
Switch mode power supply units and transformers for switch mode power supply units	Standard N in conjunction with IEC 61558-2-16 Ed 1.0	IEC 61558-2-16 Ed 1.1 (2013) *Safety of transformers, reactors, power supply units and similar products for supply*	Immediate transition to most recent standard

Type	Applicable standard	Latest edition	Suggested change and rationale
		voltages up to 1 100 V - Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units	
Transformers and power supplies for toys	Standard N in conjunction with IEC 61558-2-7 Ed 2.0	Cited standard is current IEC 61558-2-7 Ed 2.0 (2007) *Safety of power transformers, power supplies, reactors and similar products - Part 2-7: Particular requirements and tests for transformers and power supplies for toys*	No change
Transformers and power supply units for construction sites	Standard N in conjunction with IEC 61558-2-23 Ed 2.0 Or Until 29/04/2014, standard O in conjunction with AS/NZS 61558.2.23:2001	Cited IEC standard is current IEC 61558-2-23 Ed 2.0 (2010) *Safety of transformers, reactors, power supply units and combinations thereof - Part 2-23: Particular requirements and tests for transformers and power supply units for construction sites* Reference to AS/NZS 61558.2.23:2001 has already expired	No change
Transformers for class III handlamps for tungsten filament lamps	Standard N in conjunction with IEC 61558-2-9 Ed 2.0 Or Until 29/04/2014, standard O in conjunction with AS/NZS 61558.2.9:2003	Cited standard is current IEC 61558-2-9 Ed 2.0 (2010) *Safety of transformers, reactors, power supply units and combinations thereof - Part 2-9: Particular requirements and tests for transformers and power supply units for class III handlamps for tungsten filament lamps* Reference to AS/NZS 61558.2.9:2003 has already expired	No change
Transformers for shaver, power supply units for shavers, and shaver supply units	Standard N in conjunction with IEC 61558-2-5 Ed 2.0 as modified by AS/NZS 61558.2.5:2011, including Amendment 1 Or Until 28/10/2014, standard O in conjunction with AS/NZS 61558.2.5:2003	Cited standard is current AS/NZS 61558.2.5:2011 *Safety of transformers, reactors, power supply units and combinations thereof – Part 2.5: Particular requirements and test for*	Immediate transition to AS/NZS standard only No IEC as this is a socket outlet specific for NZ plugs

Type	Applicable standard	Latest edition	Suggested change and rationale
		transformers for shavers, power supply units for shavers and shaver supply units Including Amendment 1	

Clause 15

Mining Electrical Equipment

Standard Q means AS/NZS 4871.1:2012

All references to standard Q are to be removed.

All equipment below is subject to AS/NZS 4871.1:2012 - *Electrical equipment for mines and quarries - Part 1: General requirements*, the standard cited below and part 2 thereof.

Note: 4871 series is currently being reviewed.

Type	Applicable standard	Latest edition	Suggested change and rationale
Distribution, control and auxiliary equipment	Standard Q in conjunction with AS/NZS 4871.2:2010	Cited standard is current AS/NZS 4871.2:2010 *Electrical equipment for mines and quarries – Distribution, control and auxiliary equipment*	No change
Substations	Standard Q in conjunction with AS/NZS 4871.3:2010	One amendment to cited standard since sitation AS/NZS 4871.3:2010 *Electrical equipment for mines and quarries – Substations Including amendment 1*	Immediate transition to include amendment one
Mains powered electrical mobile machines	Standard Q in conjunction with AS/NZS 4871.4:2010	Cited standard is current AS/NZS 4871.4:2010 *Electrical equipment for mines and quarries - Mains powered electrical mobile machines*	No change
Battery powered electrical mobile machines	Standard Q in conjunction with AS/NZS	AS/NZS 4871.5:2010	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
	4871.5:2010	*Electrical equipment for mines and quarries - Battery powered electrical mobile machines*	
Diesel powered machinery and ancillary equipment	Standard Q in conjunction with AS/NZS 4871.6:2013	Cited standard is current AS/NZS 4871.6:2013 *Electrical equipment for mines and quarries – Part 6: Diesel powered machinery and ancillary equipment*	**Withdraw this standard** – it is now duplicated below
Electrical wiring systems at extra-low voltage of earth-moving machinery and ancillary equipment for use in mines	AS 4242-1994	Cited edition of standard has been superseded AS/NZS 4871.6:2013 *Electrical equipment for mines and quarries – Part 6: Diesel powered machinery and ancillary equipment*	Immediate transition to latest standard
Conveyors	AS 1755:2000	Cited edition of standard has been superseded AS/NZS 4024.3610:2015 *Safety of machinery – Part 3610: Conveyors - General requirements*	Immediate transition to latest standard
Reeling and trailing cables (other than underground coal mining)	AS/NZS 2802:2000, including Amendment 1	Cited standard is current AS/NZS 2802:2000 *Electric cables - Reeling and trailing for mining and general use (other than underground coal mining)* Amendment 1 has been incorporated	No change
Electrical protection devices for mines and quarries	AS/NZS 2081:2011	Cited standard is current AS/NZS 2081:2011 *Electrical protection devices for mines and quarries*	No change
Remote controls for mining equipment	AS/NZS 4240.1:2009 Remote control systems for mining equipment – Design, construction, testing, installation and commissioning AS/NZS 4240.2:2009 Remote control systems	Cited standards are current AS/NZS 4240.1:2009 *Remote control systems for mining*	No change

Type	Applicable standard	Latest edition	Suggested change and rationale
	for mining equipment – Operation and maintenance for underground metalliferous mining AS/NZS 4240.3:2013 Remote control systems for mining equipment – Operation and maintenance for underground coal mining	*equipment – Design, construction, testing, installation and commissioning* AS/NZS 4240.2:2009 *Remote control systems for mining equipment - Operation and maintenance for underground metalliferous mining* AS/NZS 4240.3:2013 *Remote control systems for mining equipment - Part 3: Operation and maintenance for underground coal mining*	
Materials for insulating power conducting components	AS1147.1-1989	Cited standard is current AS1147.1-1989 *Electrical equipment for coal mines - Insulating materials - Materials for insulating power conducting components*	**Withdraw this standard** This "equipment type" is a sub component that will be cited in the principal standards

Clause 16

Beauty Therapy appliances

Type	Applicable standard	Latest Edition	Suggested change and rationale
Appliances for skin exposure to ultraviolet and infrared radiation	Standard A, or standard B, in conjunction with IEC 60335-2-27 Ed 5.0 as modified by AS/NZS 60335.2.27:2010	Cited standard has been withdrawn and replaced by: IEC 60335-2-27:2019 *Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation*	Immediate transition to latest edition as modified by Annex ZZ of AS/NZS 60335.2.27:2016 including Amendment 1 *Modification includes NZ limit for radiation and bans UV types 1, 4 and 5.* *Liaise with MOH re: sunbed ban.* **This standard has been transferred from Household and similar appliances section.**
Appliances for skin or hair care	Standard A, or standard B, in conjunction with IEC 60335-2-23 Ed 5.2 or	Cited edition of standard has been superseded.	Immediate transition to: latest IEC edition

	Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-23 Ed 5.1 as modified by Annex ZZ of AS/NZS 60335.2.23:2004, including Amendment 1	IEC 60335-2-23 Ed 6.1 (2019) *Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care*	Or IEC 60335-2-23 Ed 6.0 (2016) until 1 Jan 2024 **This standard has been transferred from Household and similar appliances section.**
Cosmetic and beauty care appliances incorporating lasers and intense light sources	New standard	IEC 60335-2-113 Ed 1.0 2016 *Household and similar electrical appliances - Safety - Part 2-113: Particular requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources*	**Immediate adoption of new standard – standard only came into existence in 2016 and addresses rising prominence of such equipment.**
Shavers, hair clippers, and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-8 Ed 5.2	Cited edition of standard has been superseded. IEC 60335-2-8 Ed 6.2 (2018) *Household and similar electrical appliances - Safety - Part 2-8: Particular requirements for shavers, hair clippers and similar appliances*	Immediate transition to: latest edition Or IEC 60335-2-8 Ed 6.1 (2015)to run until 1 Jan 2023 AS/NZS 60335.2.8:2013 Amendment 2 is proposed for publication 30/11/2019. **This standard has been transferred from Household and similar appliances section**

Clause 17

Electric Vehicles

Unless otherwise stated all standards in this section are new additions. This reflects the growing importance of and recent development in technology pertaining to electric vehicles. The combination of these standards provides a comprehensive basis to regulate the safety of Electric Vehicles and as such all are to be adopted with immediate effect.

Type	Applicable standard	Technical information	Suggested change and Rationale
Charging System Equipment	UL 2202 Ed 2 (2009) *Standard for Electric Vehicle (EV) Charging System Equipment* UL2202 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. *UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	1.1 These requirements cover conductive charging system equipment intended to be supplied by a branch circuit of 600 volts or less for recharging the storage batteries in over-the-road electric vehicles (EV). The equipment includes off board and on board chargers. Off-board equipment may be considered for indoor use only or indoor/outdoor use. On board equipment is always considered outdoor use. Off board equipment is intended to be installed in accordance with the National Electrical Code, NFPA 70. 1.1 revised October 5, 2012 1.2 For the purposes of this standard, the term “electric vehicle”, designated throughout by the initials “EV”, is considered to cover electric vehicles, hybrid electric vehicles, and plug-in versions of these vehicles. 1.3 Electric vehicle charging system equipment that is not a complete assembly and depends upon installation in an end product for compliance with the requirements in this standard is investigated under the requirements of this standard and the standard for the end product. On board chargers that rely upon specific installation	Please see attached summary document

		requirements within an EV for compliance with the requirements in this standard, are to be evaluated based on those installation requirements and equipment. 1.3 revised October 5, 2012 1.4 These requirements do not cover battery chargers covered by the Standard for Battery Chargers for Charging Engine-Starter Batteries, UL 1236, or the Standard for Industrial Battery Chargers, UL 1564. 1.5 The requirements for devices or systems intended to reduce the risk of electric shock to the user in grounded or isolated circuits for charging electric vehicles are covered in the Standard for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits; Part 1: General Requirements, UL 2231-1, and the Standard for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits; Part 2: Particular Requirements for Protective Devices for Use in Charging Systems, UL 2231-2. 1.6 The requirements in clauses 2 – 84 apply directly to off board charging equipment. Supplement SA applies directly to on board charging equipment. 1.6 added April 22, 2011	
Conductive charging system -	IEC 61851-1 Ed 3.0 (2017) *Electric vehicle conductive charging system - Part 1: General requirements*	Applies to EV supply equipment for charging electric road vehicles, with a rated supply voltage up to 1 000 V AC or up to 1 500 V DC and a rated output voltage up to 1 000 V AC or up to 1 500 V DC. Electric road vehicles (EV) cover all road vehicles, including plug-in hybrid road vehicles (PHEV), that derive all or part of their energy from on-board rechargeable energy storage systems (RESS). The aspects covered in this standard include: - the characteristics and operating conditions of the EV supply equipment; - the specification of the connection	

		between the EV supply equipment and the EV; - the requirements for electrical safety for the EV supply equipment. This third edition cancels and replaces the second edition published in 2010. It constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) The contents of IEC 61851-1:2010 have been re-ordered. Numbering of clauses has changed as new clauses were introduced and some contents moved for easy reading. The following lines give an insight to the new ordering in addition to the main technical changes. b) All requirements from IEC 61851-22 have been moved to this standard, as work on IEC 61851-22 has ceased. c) Any requirements that concern EMC have been removed from the text and are expected to be part of the future version of 61851-21-2. d) Clause 4 contains the original text from IEC 61851-1:2010 and all general requirements from Clause 6 of IEC 61851-1:2010. e) Clause 5 has been introduced to provide classifications for EV supply equipment. f) Previous general requirements of Clause 6 have been integrated into Clause 4. Clause 6 contains all Mode descriptions and control requirements. Specific requirements for the combined use of AC and DC on the same contacts are included. g) Clause 9 is derived from previous Clause 8. Adaptation of the description of DC accessories to allow for the DC charging	

		modes that have only recently been proposed by industry and based on the standards IEC 61851-23, IEC 61851-24 as well as IEC 62196-1, IEC 62196-2 and IEC 62196-3. Information and tables contained in the IEC 62196 series standards have been removed from this standard. h) Clause 10 specifically concerns the requirements for adaptors, initially in Clause 6. i) Clause 11 includes new requirements for the protection of the cable. j) Specific requirements for equipment that is not covered in the IEC 62752 remain in the present document. k) Previous Clause 11 is now treated in Clauses 12 to 13. The requirements in 61851-1 cover the EV supply equipment of both mode 2 and mode 3 types, with the exception in-cable control and protection devices for mode 2 charging of electric road vehicles (IC-CPD) which are covered by IEC 62752. l) Clause 14 gives requirements on automatic reclosing of protection equipment. m) Clause 16 gives requirements for the marking of equipment and the contents of the installation and user manual. This makes specific mention of the need to maintain coherence with the standards for the fixed installation. It also contains an important text on the markings for temperature ratings. n) Annex A has been reviewed to introduce complete sequences and tests and to make the exact cycles explicit. Annex A in this edition supersedes IEC TS 62763 (Edition 1). o) Annex B is normative and has requirements for proximity circuits with and without current coding.	

		p) Previous Annex C has been removed and informative descriptions of pilot function and proximity function implementations initially in Annex B are moved to Annex C. q) New informative Annex D describing an alternative pilot function system has been introduced. r) Dimensional requirements for free space to be left around socket-outlets used for EV energy supply are given in the informative Annex E. s) The inclusion of protection devices within the EV supply equipment could, in some cases, contribute to the protection against electric shock as required by the installation. This is covered by the information required for the installation of EV supply equipment in Clause 16 (Marking).	
Connection to an external electric power supply – Safety requirements	ISO 17409:2015 *Electrically propelled road vehicles – connection to an external electric power supply – Safety requirements*	Specifies electric safety requirements for conductive connections of electrically propelled road vehicles to an external electric power supply using a plug or vehicle inlet. It applies to electrically propelled road vehicles with voltage class B electric circuits. In general, it may apply to motorcycles and mopeds if no dedicated standards for these vehicles exist. It applies only to vehicle power supply circuits. It applies also to dedicated power supply control functions used for the connection of the vehicle to an external electric power supply. It does not provide requirements regarding the connection to a non-isolated d.c. charging station.	

		It does not provide comprehensive safety information for manufacturing, maintenance, and repair personnel. The requirements when the vehicle is not connected to the external electric power supply are specified in ISO 6469‑3. NOTE 1 This International Standard does not contain requirements for vehicle power supply circuits using protection by class II or double/reinforced insulation but it is not the intention to exclude such vehicle applications. NOTE 2 Requirements for EV supply equipment are specified in IEC 61851. A revised edition is currently being voted on.	
DC electric vehicle charging station	IEC 61851-23 Ed 1.0 (2014) *Electric vehicle conductive charging system - Part 23: DC electric vehicle charging station*	Gives the requirements for d.c. electric vehicle (EV) charging stations, herein also referred to as "DC charger", for conductive connection to the vehicle, with an a.c. or d.c. input voltage up to 1 000 V a.c. and up to 1 500 V d.c. according to IEC 60038. It provides the general requirements for the control communication between a d.c. EV charging station and an EV. The requirements for digital communication between d.c. EV charging station and electric vehicle for control of d.c. charging are defined in IEC 61851-24. Due to further technical developments in the field of electric vehicles charging, the requirements in IEC 61851-23:2014 to fulfil the safety objective "protection against electric shock" under single fault condition by limiting the capacitance energy, may not cover all possible combinations of charging stations and vehicles. Since the charging	

		process links the charging infrastructure with the electric vehicle, the requirements laid down in **ISO 17409:2015** are also relevant for the electrical safety of the charging process. The approach of limiting the capacitance energy will not be sufficient for the safety objective "protection against electric shock" under single fault condition in all relevant cases. Therefore, this warning is issued for both standards. It is as always strongly recommended that users of standards additionally perform a risk assessment. Specifically in this case, standards users shall select proper means to fulfil safety requirements in the system of charging station and electric vehicle. This publication is to be read in conjunction with IEC 61851-1:2010. The contents of the corrigendum of May 2016 have been included in this copy.	
Electric vehicle wireless power transfer (WPT) systems - Part 1: General requirements	IEC 61980-1 Ed 1.0 (2015) *Electric vehicle wireless power transfer (WPT) systems - Part 1: General requirements*	Applies to the equipment for the wireless transfer of electric power from the supply network to electric road vehicles for purposes of supplying electric energy to the RESS (Rechargeable energy storage system) and/or other on-board electrical systems in an operational state when connected to the supply network, at standard supply voltages ratings per IEC 60038 up to 1 000 V a.c. and up to 1 500 V d.c. This standard also applies to Wireless Power Transfer (WPT) equipment supplied from on-site storage systems (e.g. buffer batteries, etc.). This publication is to be read in conjunction with the IEC 61980 series. The contents of the corrigendum of January 2017 have been included in this copy.	
In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)	IEC 62752 Ed 1.1 (2018) In-cable control and protection device for mode 2 charging of electric road vehicles (IC-	Applies to in-cable control and protection devices (IC-CPDs) for mode 2 charging of electric road vehicles, hereafter referred to	

	CPD)	as IC-CPD including control and safety functions. This standard applies to portable devices performing simultaneously the functions of detection of the residual current, of comparison of the value of this current with the residual operating value and of opening of the protected circuit when the residual current exceeds this value. This consolidated version consists of the first edition (2016) and its amendment 1 (2018). Therefore, no need to order amendment in addition to this publication.	
Plugs, Receptacles, and Couplers for Electric Vehicles	UL 2251 ED 4 (2017) *Standard for Plugs, Receptacles, and Couplers for Electric Vehicles*	1.1 These requirements cover EV plugs, EV receptacles, vehicle inlets, vehicle connectors, and EV breakaway couplings, rated up to 800 amperes and up to 600 volts ac or dc. These devices are intended for use with conductive electric vehicle supply equipment (EVSE), and are intended to facilitate the conductive connection from the EVSE to the vehicle. These devices are for use in either indoor or outdoor non-hazardous locations in accordance with Annex A, Ref. No. 1. 1.2 This Standard does not directly apply to any device that is not intended for use as described in 1.1. 1.3 In the text of this Standard, the term "device" refers to any product covered by this Standard. The letters "EV" refer to an electric vehicle, including plug-in hybrid vehicles, hybrid vehicles, electric vehicles, battery electric vehicles, and similar vehicles.	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	IEC 62196-1 Ed 3.0 (2014) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements*	Applicable to plugs, socket-outlets, vehicle connectors, vehicle inlets and cable assemblies for electric vehicles, herein referred to as "accessories", intended for use in conductive charging systems which incorporate control means, with a rated operating voltage not exceeding:	This standard was previously in the low-voltage equipment section.

		- 690 V a.c. 50 Hz to 60 Hz, at a rated current not exceeding 250 A; - 1 500 V d.c. at a rated current not exceeding 400 A. This third edition cancels and replaces the second edition published in 2011 and constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) addition of a preferred operating voltage of 1 000 V d.c.; b) addition of a preferred rated current of 80 A d.c.; c) addition of a provision for a combined interface a.c./d.c.; d) description of d.c. configurations (previously under consideration); e) addition of requirements pertaining to the locking mechanism, the interlock and the latching device; f) addition of a test for accessories not suitable for making and breaking an electrical circuit under load; g) Addition of requirements and tests for insulated end caps. Note: ed2.0 is already cited in schedule 4	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories	IEC 62196-2 Ed 2.0 (2016) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories*	Applies to plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories. They have a nominal rated operating voltage not exceeding 480 V a.c., 50 Hz to 60 Hz, and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles. This second edition cancels and replaces the first edition published in 2011 and constitutes a technical revision. This second edition includes the following significant technical changes with respect to the previous edition.	

		a) Standard sheets for configurations type 2 and type 3 have been updated. b) Configuration type 2 is now available with optional shutter. This publication is to be read in conjunction with IEC 62196-1:2014.	
Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 3: Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers	IEC 62196-3 Ed 1.0 (2014) *Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 3: Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers*	Applicable to vehicle couplers with pins and contact-tubes of standardized configuration, herein also referred to as "accessories", intended for use in electric vehicle conductive charging systems which incorporate control means, with rated operating voltage up to 1 500 V d.c. and rated current up to 250 A, and 1 000 V a.c. and rated current up to 250 A. This part of IEC 62196 applies to high power d.c. interfaces and combined a.c./d.c. interfaces of vehicle couplers specified in IEC 62196-1:2014, and intended for use in conductive charging systems for circuits specified in IEC 61851-1:2010, and IEC 61851-23:2014. This publication is to be read in conjunction with IEC 62196-1:2014.	
Residual Direct current detecting devices	*IEC 62955 Ed 1.0 (2018)* Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electrical vehicles	Applies to residual direct current detecting devices (RDC-DD) for permanently connected AC electric vehicle charging stations (mode 3 charging of electric vehicles, according to IEC 61851-1 and IEC 60364-7-722), hereafter referred to as RDC-MD (residual direct current monitoring device) or RDC-PD (residual direct current protective device), for rated voltages not exceeding 440 V AC with rated frequencies of 50 Hz, 60 Hz or 50/60 Hz and rated currents not exceeding 125 A.	
Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements	*UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements*	1.1 These requirements cover devices and systems intended for use in accordance with Annex a, Ref. No. 1, to reduce the risk of electric shock to the user from accessible parts, in grounded or isolated circuits for	

	UL2594 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. UL 2594 ED 2 (2016) *Standard for Electric Vehicle Supply Equipment* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	charging electric vehicles. These circuits are external to or on board the vehicle. 1.2 The devices and systems covered by these requirements are compatible with the designs of charging systems and vehicles where use is intended and are rated accordingly. To assure compatibility, the charging system, the vehicle, or both, are in accordance with the features contained in 1.3 – 1.5. 1.3 The type of vehicle covered by these requirements, including all accessible conductive parts on the vehicle, has one or more of the following: a) Provision for the connection of an equipment grounding conductor during battery charging, unless the vehicle has a system of reinforced or double insulation or all of the circuitry on the vehicle is electrically isolated from the supply circuit, b) Provision for the connection of ground-monitoring conductors, where required, c) Reinforced insulation, or is double-insulated from the supply circuit, or d) No direct connection between current-carrying conductors and the vehicle chassis. 1.4 These requirements cover devices and systems where the grounding path impedance of the charging system to the vehicle is less than or equal to the impedance of the ungrounded conductor or conductors. 1.5 These requirements cover devices and systems where a continuous current less than 70 mA RMS is available from any accessible part of the charging system. 1.6 Devices covered by these requirements are intended to interrupt the electric circuit to the load when: a) A fault current to ground exceeds some	

		predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit, b) The grounding path becomes open-circuited or becomes an excessively high impedance, or c) A path to ground is detected on an isolated (ungrounded) system. 1.7 These devices and systems are intended to be applied on electrical systems or include derived systems that are: a) Either end-grounded or centrally grounded when the operating voltage is 150 Vrms or less, b) Centrally grounded when the operating voltage is greater than 150 Vrms, or c) Isolated (ungrounded). 1.8 Charging circuit-interrupting devices covered by these requirements are investigated for their ability to provide protection based on: a) The type of current (60 Hz AC, DC, a combination of AC and DC, or AC at frequencies greater than 60 Hz) present in the circuit to be protected, and b) Voltage. 1.9 In Mexico and the US, these requirements do not cover ground-fault circuit-interrupters (GFCIs) intended for use as personnel protection in accordance with the national electrical codes on grounded 120 Vrms or 127 Vrms to ground, 60 Hz circuits. Such devices are covered under Annex a, Ref. No. 2. In Canada, these requirements do not cover ground-fault circuit-interrupters (GFCIs) in accordance with the national electrical code on grounded 120 Vrms or 127 Vrms to ground, 60 Hz circuits. Such devices are covered under Annex a, Ref. No. 2.	

		1.10 This Standard includes the Scope, Definitions, and Description of Requirements, including the required features of protection systems. The standards in Annex a, Ref. No. 3 contain the Performance and Construction requirements for protective devices that would become a part of a charging system.	
Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems	*UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	This Standard is intended to be used in conjunction with the general requirements of Annex a, Ref. No. 1. The requirements of Annex a, Ref. No. 1 apply unless modified by this Standard.	
Supply Equipment	UL 2594 ED 2 (2016) *Standard for Electric Vehicle Supply Equipment* UL2594 In conjunction with UL 2231-1 and UL 2231-2 with the alterations that the device is certified to 230 V to earth, at 50 Hz on an MEN system of supply. *UL 2231-1 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements* *UL 2231-2 Ed 2 (2012)* *Standard for Safety for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems*	1.1 This Standard covers conductive electric vehicle (EV) supply equipment with a primary source voltage of 600 V ac or less, with a frequency of 50 or 60 Hz, and intended to provide ac power to an electric vehicle with an on-board charging unit. This Standard covers electric vehicle supply equipment intended for use where ventilation is not required. 1.2 With reference to 1.1, the following list of examples of electric vehicle supply equipment are included in this Standard: a) EV Cord Sets – Rated 125 Vac maximum, 16 A maximum, intended for indoor and outdoor use; b) Fastened in place EV Charging Stations – Rated 250 Vac maximum, 40 A maximum, intended for indoor or outdoor use; c) Fixed in place EV Charging Stations – Rated 600 Vac maximum, intended for indoor or indoor/outdoor use; and d) Fixed in place EV Power Outlet – Rated 600 Vac maximum, intended for indoor or indoor/outdoor use. For Mexico, use 127 Vac where 120 or 125 Vac is referenced in this Standard. In Canada	

		and the United States, this does not apply. 1.3 The products covered by this Standard are intended for use in accordance with the Installation Codes in Annex A, Ref. No.1. 1.4 This Standard does not cover cord sets or power supply cords for applications other than EV charging cord sets. For cord sets and power supply cords not covered by this Standard, refer to Annex A, Ref. No. 2 and No. 3. 1.5 With reference to 1.2, this Standard does not cover electric vehicle charging equipment. For EV charging equipment not covered by this Standard, refer to Annex A, Ref. No. 4. 1.6 This Standard does not cover electric vehicle connectors. For electric vehicle connectors not covered by this Standard, refer to Annex A, Ref. No. 5 1.7 This Standard does not cover regular-use power outlets. For regular-use power outlets not covered by this Standard, refer to Annex A, Ref. No. 6. 1.8 This Standard does not cover equipment intended for wireless power transfer, which may also be designated as wireless charging, inductive charging, magnetic resonance charging, or any other similar designation indicating the transfer of power from the EVSE to the vehicle through other than a conductive connection.	

GSMR Updates

Contents

1 February 2019

Gas (Safety and Measurement) Regulations – Schedule 1

1. This document identifies the current status of gas codes of practice and official standards specified in Schedule 1 of the Gas (Safety and Measurement) Regulations 2010 — as discussed with MBIE on 5 March 2019.

2. GSMR Schedule 1 specifies the codes and standards referred to in the body of these regulations.

3. Schedule 1 was last updated on 31 July 2014, by regulation 27 of the Gas (Safety and Measurement) Amendment Regulations 2014 (LI 2014/205).

4. This document does not identify whether any of these standards or codes are at present under review, or scheduled for review.

5. The only significant issue with citation that may need to be checked is with NZS 5258. This standard is past the date by which it should be reviewed. Its successor standard is AS/NZS 4645 (in three parts) and consideration should be given to removal of citation. NZS 5258 is cited in GSMR 25, 26, 27 & 33 but the only unique citation is in GSMR 33(f) where it is used to specify KPIs for safety management systems. The latest edition of AS/NZS 4645.1 contains a set of recommended KPIs. The question is whether AS/NZS 4645.1 Appendix K *Annualised gas industry key performance measures – Networks* can replace NZS 5258 Appendix F *Examples of performance* indicators.

6. One other point of interest is that ISO/IEC Guide 67 has been replaced by a standard ISO/IEC 17067. This standard sets the fundamentals of product certification and certification bodies work to it and are assessed against it so it makes sense to recognise the current standard.

Gas codes of practice

GSMR Updates

Abbreviations used in regulations	Full title	Latest edition	Version to be cited in 20 Suggested transiti
GCP 2	New Zealand Gas Code of Practice for Maintenance and Safety of CNG Refuelling Stations (NZ GCP 2:1993) issued by the Secretary on 2 February 1993, and approved by the Minister of Energy on 18 March 1993	Current code is cited	GCP 2 New Zealand Gas Code of Prac Maintenance and Safety of CN Stations (NZ GCP 2:1993) issue Secretary on 2 February 1993, by the Minister of Energy on 1 No change

Official standards

Abbreviations used in regulations	Full title	Latest edition	Version to be cited in 20 Suggested transiti
AS/NZS 4645	New Zealand Standard known as AS/NZS 4645:2008 (Gas distribution networks Parts 1, 2, and 3) including Amendments 1, 2, and A	Cited 2008 edition of standard is superseded Revised standards are: AS/NZS 4645.1:2018 *Gas distribution networks - Network management* AS/NZS 4645.2:2018 *Gas distribution networks - Steel pipe systems* AS/NZS 4645.3:2018 *Gas distribution networks - Plastics pipe systems*	AS/NZS 4645:2018 Gas distribution networks Part Immediate transition to latest
AS/NZS 5601.1–2013	New Zealand Standard known as AS/NZS 5601.1:2013 (Gas installations—Part 1: General installations)	Two amendments to cited edition of standard since citation AS/NZS 5601.1:2013/Amendment 3:2020 Gas installations – General installations AS/NZS 5601.1:2013/Amendment 4:2020 Gas installations – General installations	AS/NZS 5601.1:2013/Amendm installations – General installat AS/NZS 5601.1:2013/Amendm installations – General installat Immediate transition to latest
AS/NZS 5601.2–2013	New Zealand Standard known as AS/NZS5601.2:2013 (Gas installations—Part 2: LP Gas installations in caravans and boats for non-propulsive purposes)	Cited 2013 edition of standard is superseded Revised standard is: AS/NZS 5601.2:2020	AS/NZS 5601.2:2020 *Gas installations – LP Gas insta caravans and boats for non-pr purposes*

GSMR Updates

		Gas installations – LP Gas installations in caravans and boats for non-propulsive purposes	Immediate transition to latest s
AS/NZS 60079.10.1:2009	New Zealand Standard known as AS/NZS 60079.10.1:2009 (Explosive atmospheres—Classification of areas—Explosive gas atmospheres) including amendment 1	Cited standard is current AS/NZS 60079.10.1:2009 *Explosive atmospheres - Classification of areas - Explosive gas atmospheres*	AS/NZS 60079.10.1:2009 New Zealand Standard known 60079.10.1:2009 (Explosive atr Classification of areas—Explosi atmospheres) including Amend No change
AS/NZS 60079.10.2:2011	New Zealand Standard known as AS/NZS 60079.10.2:2011 (Explosive atmospheres—Classification of areas—Combustible dust atmospheres)	Cited 2011 edition of standard is superseded Revised standard is: AS/NZS 60079.10.2:2016 *Explosive atmospheres* - Part 10.2: *Classification of areas - Explosive dust atmospheres*	AS/NZS 60079.10.2:2016 Explosive atmospheres - Part 1 Classification of areas -Combus atmospheres Immediate transition to latest s
ISO/IEC Guide 67:2004	International Organization for Standardization Standard known as ISO/IEC Guide 67:2004 (Conformity assessment—Fundamentals of product certification)	Cited 2004 edition of guide is superseded by ISO/IEC 17067:2013 New Zealand adoption: AS/NZS ISO/IEC 17067:2015 *Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes* Identical to and reproduced from ISO/IEC 17067:2013.	AS/NZS ISO/IEC 17067:2015 Conformity assessment - Funda product certification and guide certification schemes Immediate transition to latest s
AS/NZS ISO/IEC 17020	International Organization for Standardization Standard known as ISO/IEC 17020:2013 (Conformity assessment—Requirements for the operation of various types of bodies performing inspection)	Cited standard is current – ISO website notes 'This standard was last reviewed and confirmed in 2017. Therefore this version remains current.' ISO/IEC 17020:2012 *Conformity assessment -- Requirements for the operation of various types of bodies performing inspection* AS/NZS ISO/IEC 17020:2013 *Conformity assessment - Requirements for the operation of various types of bodies performing inspection* is identical to and reproduced from ISO/IEC 17020:2012.	AS/NZS ISO/IEC 17020:2013 Conformity assessment - Requi operation of various types of b No change
AS/NZS ISO/IEC 17025	International Organization for Standardization Standard known as ISO/IEC 17025:2005 (General requirements for the competence of testing and calibration laboratories)	Cited 2005 edition of standard ISO/IEC 17025:2005 has been revised by: ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories* Current NZ adoption is: NZS ISO/IEC 17025:2018 *General requirements for the competence of*	NZS ISO/IEC 17025:2018 General requirements for the c testing and calibration laborato Immediate transition to latest s

GSMR Updates

		testing and calibration laboratories NZS ISO/IEC 17025:2018 is identical to and reproduced from ISO/IEC 17025:2017.	
NZS 5255	New Zealand Standard known as NZS 5255:2014 (Safety verification of existing gas installations)	Cited standard is current NZS 5255:2014 *Safety verification of existing gas installations*	NZS 5255:2014 Safety verification of existing g No change
NZS 5256	New Zealand Standard known as NZS 5256:2014 (Verification of safety of gas appliances)	Cited standard is current 5256:2014 *Verification of safety of gas appliances*	NZS 5256:2014 Verification of safety of gas ap No change
NZS 5258	New Zealand Standard known as NZS 5258:2003 (Gas distribution networks) subject to the variation that references in this standard to AS/NZS 1596:2002 (Storage and handling of LP gas) must be read as references to AS/NZS 1596:2008 (Storage and handling of LP gas)	Cited standard is current but its content is out of date compared with the latest edition of AS/NZS 4645. NZS 5258:2003 *Gas distribution networks*	Propose to remove from regs [(33)] and schedule 1 for purpos establishing KPIs Ask industry if still need the sta KPIS for a safety management
NZS 5259	New Zealand Standard known as NZS 5259:2004 (Gas measurement)	Cited 2004 edition of standard is superseded Current standard: NZS 5259:2015 *Gas measurement*	NZS 5259:2015 Gas measurement Immediate transition to latest
NZS 5263	New Zealand Standard known as NZS 5263:2003 (Gas detection and odorisation)	Cited standard is current NZS 5263:2003 *Gas detection and odorisation*	NZS 5263:2003 Gas detection and odorisation No change
NZS 5266	New Zealand Standard known as NZS 5266 (Int):2012 (Safety of gas appliances)	Cited 2012 interim standard is superseded Current standard is: NZS 5266:2014 *Safety of gas appliances*	NZS 5266:2014 Safety of gas appliances Immediate transition to latest
NZS 5425.1	New Zealand Standard known as NZS 5425.1:1994 (Code of practice for CNG compressor and refuelling stations—on site storage and location of equipment)	Cited standard is current NZS 5425.1:1994 *Code of practice for CNG compressor and refuelling stations - On site storage and location of equipment*	NZS 5425.1:1994 Code of practice for CNG comp refuelling stations - On site sto location of equipment No change

GSMR Updates

NZS 5425.2	New Zealand Standard known as NZS 5425.2:1996 (Code of practice for CNG compressor and refuelling stations—compressor equipment)	Cited standard is current NZS 5425.2:1996 *Code of practice for CNG compressor and refuelling stations - Compressor equipment*	NZS 5425.2:1996 Code of practice for CNG comp refuelling stations - Compresso No change
NZS 5425.3	New Zealand Standard known as NZS 5425.3 (Code of practice for CNG compressor and refuelling stations—metering devices)	Cited standard is current – in three sub-parts NZS 5425.3.1P:1985 *Code of practice for CNG compressor and refuelling stations - Metering devices - Division 3.1P Metering method using tables and calculator programme* NZS 5425.3.2:1984 *Code of practice for CNG compressor and refuelling stations - Metering devices - Division 3.2 Installation and operation of on-line metering devices* Note: Includes NZS 5425.3.2:1984 A1, published 30/07/1996 NZS 5425.3.3:1984 *Code of practice for CNG compressor and refuelling stations - Metering devices - Division 3.3 Requirements for type approval of on-line metering devices* Note: Includes NZS 5425.3.3:1984 A1, published 30/03/1993	NZS 5425.3.1P:1985 Code of practice for CNG comp refuelling stations - Metering d 3.1P Metering method using ta calculator programme NZS 5425.3.2:1984 Code of practice for CNG comp refuelling stations - Metering d 3.2 Installation and operation o metering devices including Am NZS 5425.3.3:1984 Code of pra compressor and refuelling stati devices - Division 3.3 Requirem approval of on-line metering d Amendment 1 No change
NZS 5425.4	New Zealand Standard known as NZS 5425.4:1994 (Code of practice for CNG compressor and refuelling stations—CNG trickle-fill stations on commercial and industrial premises)	Cited standard is current NZS 5425.4:1994 *Code of practice for CNG compressor and refuelling stations - CNG trickle fill stations on commercial and industrial premises* Includes NZS 5425.4:1994 A1, published 29/04/1995	NZS 5425.4:1994 Code of practice for CNG comp refuelling stations - CNG trickle commercial and industrial prer Amendment 1 No change
NZS 5435	New Zealand Standard known as NZS 5435:1996 (Specification for liquefied petroleum gas (LPG))	Cited standard is current NZS 5435:1996 *Specification for liquefied petroleum gas (LPG)* Incorporates amendment NZS 5435:1996 A1, Published 30/10/2008	NZS 5435:1996 Specification for liquefied petro including Amendment 1 No change
NZS 5442	New Zealand Standard known as NZS 5442:2008 (Specification for reticulated natural gas)	Cited standard is current NZS 5442:2008	NZS 5442:2008 Specification for reticulated na

GSMR Updates

		Specification for reticulated natural gas	No change
NZS 7901	New Zealand Standard known as NZS 7901:2008 (Electricity and gas industries—safety management systems for public safety)	Superseded Current standard - NZS 7901:2014 *Electricity and gas industries – Safety management systems for public safety*	NZS 7901:2014 Electricity and gas industries – management systems for publi Immediate transition to latest
NZS/AS 3645	New Zealand Standard known as NZS/AS 3645:2012 (Essential requirements for gas equipment Part 1 and Part 2)	Cited standard is current in two parts: NZS/AS 3645.1:2012 *Essential requirements for gas equipment - Part 1: Essential safety* NZS/AS 3645.2:2012 *Essential requirements for gas equipment - Part 2: Certification*	NZS/AS 3645:2012 Essential requirements for gas 1 and Part 2 No change
CSA 22.2.46:2013	Canadian Standards Association standard known as CSA 22.2.46:2013 (Electric air heaters)	Cited standard is current Current, reconfirmed 2018 (This is the 9th edition). CSA website catalogue identifies it as CSA C22.2 No. 46-13 (R2018) *Electric Air-Heaters*	CSA C22.2 No. 46-13 (R2018) Electric Air-Heaters Immediate transition to latest
UL 499 Ed.13 (2005)	UL Standard known as UL 499 Ed.13(2005)—Safety Electric Heating Appliances	Cited edition 13 (2005) of standard is superseded Latest edition is UL 499 *Standard for Electric Heating Appliances* Edition 14, date 2014-11-07	UL 499 Ed.14 (2014) Standard for Electric Heating A Immediate transition to latest
UL 130 Ed.13 (2011)	UL Standard known as UL 130 Ed.13 (2011)—Standard for Electric Heating Pads	Cited standard is current UL 130 *Standard for Electric Heating Pads* Edition 13, date 2011-07-15	UL 130 Ed.13 (2011) Standard for Electric Heating P No change

GSMR Updates

Gas (Safety and Measurement) Regulations S2A 2 – European regime

General

1. This document identifies the current status of standards specified in Schedule 2A Clause 2 of the Gas (Safety and Measurement) Regulations 2010 — as at 12 February 2019. Appendix 1 contains the text of this Clause.

2. GSMR Schedule 2A sets out the requirements for gas appliances certification in accordance with GSMR 55. Schedule 2A Clause 1 specifies the bodies recognised for the purpose of certification. Schedule 2A Clauses 2, 3 & 4 identify specific standards and conditions that are applicable to certification by particular bodies – working under European, North American and Australian bodies identified in Clause 1, respectively.

3. Schedule 2A Clause 2 sets out the standards and conditions applying to certification by bodies working within EU Directive 2009/142/EC or EU Directive 90/396/ECC.

4. The whole of GSMR Schedule 2A was last updated on 31 July 2014, by regulation 28 of the Gas (Safety and Measurement) Amendment Regulations 2014 (LI 2014/205).

5. This document does not comprehensively identify whether any of these standards are at present under review, or scheduled for review.

European gas appliance regime

6. An overhaul of the European gas appliance regime resulted in the Gas Appliances Regulation (Regulation (EU) 2016/426[1]) replacing EU Directive 2009/142/EC. The earlier (EU Directive 90/396/ECC had previously been superseded by Directive 2009/142/EC). The new European regime applies a more rigorous level of scrutiny to the conformity of product.

7. When the Gas Appliances Regulation (GAR) took full effect on 20 April 2018 it ceased the certification of appliances under Directive 2009/142/EC. The effect of this is product entering the New Zealand marked that is certified to either the Directive or the GAR is not formally recognised for the purposes of GSMR 55.

8. We therefore recommend that both Clause 2A 1 and Clause 2A 2(1) be updated to recognise the current European GAR.

[1] See https://ec.europa.eu/growth/sectors/pressure-gas/gas-appliances/regulation_en.

GSMR Updates

Recognised European standards

9. Schedule 2A Clause 2(6) and 2(7) cite recognised European Standards for the purposes of GSMR 55. Under the European standards system the European standards body CEN develops standards which are then adopted (implemented) by each member body. For example the water heater standard EN 26:2015 is published for the UK as BS EN 26:2015 and for Germany as DIN EN 26: 2015. In general the national implementations vary little from the EN, this system enables national standards to address any local matters (for example variations in gas type).

10. We do not propose to amend the conditions set in S2A Clause 2(2) which specify elements that are critical to ensure suitability for New Zealand conditions.

11. We do not propose to modify the mechanism set out in S2A Clause 2(3) to 2(5) to recognise national standards that implement European standards.

12. Many of the standards identified in S2A Clauses 2(6) and 2(7) have been revised, withdrawn and replaced with a later edition.
13. and Table 2 below identify the status of cited standards and the current edition of each standard. These tables are in numerical order to enable to better group standards together.

Table 1 - General requirements standards - Schedule 2A Clause 2(6)

Reference n GSMR S 2A (2)(6)	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2 Suggested transi
Domestic cooking appliances burning gas – Safety – General **Standard A**	EN 30-1-1:2008+A1:2010 Domestic cooking appliances burning gas - Part 1-1: Safety – General Current standard	EN 30-1-1:2008+A1:2010 Domestic cooking appliances burning gas - Part 1-1: Safety – General BS EN 30-1-1:2008+A3:2013 Domestic cooking appliances burning gas. Safety. General	EN 30-1-1:2008+A1:2010 Domestic cooking appliances b 1-1: Safety – General BS EN 30-1-1:2008+A3:2013 Domestic cooking appliances b Safety. General No change
Gas heated catering equipment – General safety rules **Standard B**	EN 203-1:2005+A1:2008 Gas heated catering equipment - Part 1: General safety rules Superseded standard	EN 203-1:2014/AC:2016 BS EN 203-1:2014 Gas heated catering equipment. General safety rules	EN 203-1:2014/AC:2016 BS EN 203-1:2014 Gas heated equipment. General safety rul Immediate transition to latest

GSMR Updates

Analysis of standards cited in Schedule 2A Clause 2(7)

For the purposes of analysis this table is sorted in order of EN standard reference

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
Gas-fired instantaneous water heaters	EN 26:1997 Gas-fired instantaneous water heaters for sanitary uses production, fitted with atmospheric burners (Including Corrigendum 1998) Superseded standard	EN 26:2015 Gas-fired instantaneous water heaters for the production of domestic hot water BS EN 26:2015. Gas-fired instantaneous water heaters for the production of domestic hot water.	EN 26:2015 Gas-fired instantaneous water heate for the production of domestic hot water BS EN 26:2015. Gas-fired instantaneous water heaters for the production of domestic hot wate Immediate transition to latest standard
General domestic cooking appliances	EN 30-1-1:2008 + A3:2013 Domestic cooking appliances burning gas—Part 1-1: Safety—General Current standard	EN 30-1-1:2008+A3:2013 Domestic cooking appliances burning gas - Part 1-1: Safety - General BS EN 30-1-1:2008+A3:2013 Domestic cooking appliances burning gas. Safety. General	EN 30-1-1:2008+A3:2013 Domestic cooking appliances burning gas - Part 1-1: Safety - Gener BS EN 30-1-1:2008+A3:2013 Domestic cooking appliances burning gas. Safety General No change
Appliances having forced-convection ovens and/or grills	EN 30-1-2:2012 Domestic cooking appliances burning gas. Safety. Appliances having forced-convection ovens and/or grills In conjunction with Standard A Current standard	EN 30-1-2:2012 Domestic cooking appliances burning gas - Safety - Part 1-2: Appliances having forced-convection ovens and/or grills BS EN 30-1-2:2012 Domestic cooking appliances burning gas. Safety. Appliances having forced-convection ovens and/or grills	EN 30-1-2:2012 Domestic cooking appliances burning gas - Safet Part 1-2: Appliances having forced-convection ovens and/or grills BS EN 30-1-2:2012 Domestic cooking appliances burning gas. Safety Appliances having forced-convection ovens and/ grills No change
Appliances having a glass ceramic hotplate In conjunction with Standard A	EN 30-1-3:2003 + A1:2006 Domestic cooking appliances burning gas. Safety. Appliances having a glass ceramic hotplate Current standard	EN 30-1-3:2003+A1:2006 Domestic cooking appliances burning gas - Part 1-3: Safety - Appliances having a glass ceramic hotplate BS EN 30-1-3:2003 Domestic cooking appliances burning gas. Safety. Appliances having a glass ceramic hotplate (includes amendments)	EN 30-1-3:2003+A1:2006 Domestic cooking appliances burning gas - Part 1 3: Safety - Appliances having a glass ceramic hotplate BS EN 30-1-3:2003 Domestic cooking appliances burning gas. Safety Appliances having a glass ceramic hotplate

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
			(includes amendments) No change
Appliances having 1 or more burners with an automatic burner control system	EN 30-1-4:2012 Domestic *cooking* appliances burning gas. Safety. Appliances having one or more burners with an automatic burner control system In conjunction with Standard A Current standard	EN 30-1-4:2012 Domestic cooking appliances burning gas - Safety - Part 1-4: Appliances having one or more burners with an automatic burner control system BS EN 30-1-4:2012 Domestic cooking appliances burning gas. Safety. Appliances having one or more burners with an automatic burner control system	EN 30-1-4:2012 Domestic cooking appliances burning gas - Safet Part 1-4: Appliances having one or more burners with an automatic burner control system BS EN 30-1-4:2012 Domestic cooking appliances burning gas. Safety Appliances having one or more burners with an automatic burner control system No change
Gas-fired storage water heaters	EN 89:1999 Gas-fired storage water heaters for the production of domestic hot water Superseded standard	EN 89:2015 Gas-fired storage water heaters for the production of domestic hot water BS EN 89:2015 Gas-fired storage water heaters for the production of domestic hot water	EN 89:2015 Gas-fired storage water heaters for the producti of domestic hot water BS EN 89:2015 Gas-fired storage water heaters for the producti of domestic hot water Immediate transition to latest standard
General gas heated catering equipment	EN 203-1:2005 + A1:2008 Gas heated catering equipment—Part 1: General safety rules Superseded standard	EN 203-1:2014 Gas heated catering equipment - Part 1: General safety rules EN 203-1:2014/AC:2016 BS EN 203-1:2014 Gas heated catering equipment. General safety rules	EN 203-1:2014 Gas heated catering equipment - Part 1: General safety rules EN 203-1:2014/AC:2016 BS EN 203-1:2014 Gas heated catering equipmer General safety rules Immediate transition to latest standard
Open burners and wok burners	EN 203-2-1:2005 Gas heated catering equipment. Specific requirements. Open burners and wok burners In conjunction with Standard B	EN 203-2-1:2014 Gas heated catering equipment - Part 2-1: Specific requirements - Open burners and wok burners BS EN 203-2-1:2014 Gas heated catering equipment. Specific requirements. Open burners and wok burners	EN 203-2-1:2014 Gas heated catering equipmen Part 2-1: Specific requirements - Open burners a wok burners BS EN 203-2-1:2014 Gas heated catering equipment. Specific

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
			requirements. Open burners and wok burners Immediate transition to latest standard
Ovens	EN 203-2-2:2006 Gas heated catering equipment. Specific requirements. Ovens In conjunction with Standard B Current standard	EN 203-2-2:2006 Gas heated catering equipment - Part 2-2: Specific requirements – Ovens BS EN 203-2-2:2006 Gas heated catering equipment. Specific requirements. Ovens	EN 203-2-2:2006 Gas heated catering equipmen Part 2-2: Specific requirements – Ovens BS EN 203-2-2:2006 Gas heated catering equipment. Specific requirements. Ovens No change
Boiling pans	EN 203-2-3:2005 Gas heated catering equipment Part 2.3. Specific requirements–Boiling pans In conjunction with Standard B Superseded standard	EN 203-2-3:2014 Gas heated catering equipment - Part 2-3: Specific requirements - Boiling pans BS EN 203-2-3:2014 Gas heated catering equipment. Specific requirements. Boiling pans	EN 203-2-3:2014 Gas heated catering equipmen Part 2-3: Specific requirements - Boiling pans BS EN 203-2-3:2014 Gas heated catering equipment. Specific requirements. Boiling pans Immediate transition to latest standard
Fryers	EN 203-2-4:2005 Gas heated catering equipment. Specific requirements. Fryers In conjunction with Standard B Current standard	EN 203-2-4:2005 Gas heated catering equipment - Part 2-4: Specific requirements – Fryers BS EN 203-2-4:2005 Gas heated catering equipment. Specific requirements. Fryers	EN 203-2-4:2005 Gas heated catering equipmen Part 2-4: Specific requirements – Fryers BS EN 203-2-4:2005 Gas heated catering equipment. Specific requirements. Fryers No change
Hot water heaters for beverage	EN 203-2-6:2005 Gas heated catering equipment. Specific requirements Current standard	EN 203-2-6:2005 Gas heated catering equipment - Part 2-6: Specific requirements - Hot water heaters for beverage BS EN 203-2-6:2005 Gas heated catering equipment. Specific requirements. Hot water heaters for beverage	EN 203-2-6:2005 Gas heated catering equipmen Part 2-6: Specific requirements - Hot water heat for beverage BS EN 203-2-6:2005 Gas heated catering equipment. Specific requirements. Hot water heaters for beverage No change
Salamanders and rotisseries	EN 203-2-7:2007 Gas heated catering equipment. Specific requirements. Salamanders and rotisseries In conjunction with Standard B Superseded standard	EN 203-2-7:2014 Gas heated catering equipment - Part 2-7: Specific requirements - Salamanders and rotisseries BS EN 203-2-7:2014 Gas heated catering equipment. Specific requirements. Salamanders and rotisseries	EN 203-2-7:2014 Gas heated catering equipmen Part 2-7: Specific requirements - Salamanders ar rotisseries BS EN 203-2-7:2014 Gas heated catering equipment. Specific requirements. Salamanders

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
			and rotisseries Immediate transition to latest standard
Brat pans and paella cookers	EN 203-2-8:2005 Gas heated catering equipment Part 2.8. Specific requirements–Brat pans and paella cookers In conjunction with Standard B Superseded standard	EN 203-2-8:2016 Gas heated catering equipment - Part 2-8: Specific requirements - Brat pans and paella cookers BS EN 203-2-8:2005 Gas heated catering equipment. Specific requirements. Brat pans and paella cookers	EN 203-2-8:2016 Gas heated catering equipmen Part 2-8: Specific requirements - Brat pans and paella cookers BS EN 203-2-8:2005 Gas heated catering equipment. Specific requirements. Brat pans and paella cookers Immediate transition to latest standard
Solid tops, warming plates, and griddles	EN 203-2-9:2005 Gas heated catering equipment. Specific requirements. Solid tops, warming plates and griddles In conjunction with Standard B Current standard	EN 203-2-9:2005 Gas heated catering equipment - Part 2-9: Specific requirements - Solid tops, warming plates and griddles BS EN 203-2-9:2005 Gas heated catering equipment. Specific requirements. Solid tops, warming plates and griddles	EN 203-2-9:2005 Gas heated catering equipmen Part 2-9: Specific requirements - Solid tops, warming plates and griddles BS EN 203-2-9:2005 Gas heated catering equipment. Specific requirements. Solid tops, warming plates and griddles No change
Chargrills	EN 203-2-10:2007 Gas heated catering equipment Part 2.10. Specific requirements–Chargrills In conjunction with Standard B Current standard	EN 203-2-10:2007 Gas heated catering equipment - Part 2-10: Specific requirements – Chargrills BS EN 203-2-10:2007 Gas heated catering equipment. Specific requirements. Chargrills	EN 203-2-10:2007 Gas heated catering equipme - Part 2-10: Specific requirements – Chargrills BS EN 203-2-10:2007 Gas heated catering equipment. Specific requirements. Chargrills No change
Pasta cookers	EN 203-2-11:2006 Gas heated catering equipment. Specific requirements. Pasta cookers In conjunction with Standard B Current standard	EN 203-2-11:2006 Gas heated catering equipment - Part 2-11: Specific requirements - Pasta cookers BS EN 203-2-11:2006 Gas heated catering equipment. Specific requirements. Pasta cookers	EN 203-2-11:2006 Gas heated catering equipme - Part 2-11: Specific requirements - Pasta cooker BS EN 203-2-11:2006 Gas heated catering equipment. Specific requirements. Pasta cooker No change
Single burner gas-fired overhead radiant tube heaters	EN 416-1:2009 Single burner gas-fired overhead radiant tube heaters for non-domestic use. Safety Current standard	EN 416-1:2009 Single burner gas-fired overhead radiant tube heaters for non-domestic use - Part 1: Safety BS EN 416-1:2009 Single burner gas-fired overhead radiant tube	EN 416-1:2009 Single burner gas-fired overhead radiant tube heaters for non-domestic use - Part Safety

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
		heaters for non-domestic use. Safety	BS EN 416-1:2009 Single burner gas-fired overhe radiant tube heaters for non-domestic use. Safe No change
Gas-fired overhead luminous radiant heaters	EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters. Safety Current standard	EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters - Part 1: Safety BS EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters. Safety	EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters - Part 1: Safety BS EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters. Safety No change
Domestic flueless space heaters, including cabinet heaters	EN 449:2002 + A1:2007 Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters) Current standard	EN 449:2002+A1:2007 Specification for dedicated liquefied petroleum gas appliances - Domestic flueless space heaters (including diffusive catalytic combustion heaters) BS EN 449:2002+A1:2007 Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters).	EN 449:2002+A1:2007 Specification for dedicate liquefied petroleum gas appliances - Domestic flueless space heaters (including diffusive catalyt combustion heaters) BS EN 449:2002+A1:2007 Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters). No change
Gas-fired central heating boilers of nominal heat input not exceeding 70 kW	EN 483:1999 + A4:2007 Gas-fired central heating boilers. Type C boilers of nominal heat input not exceeding 70 kW Superseded standard	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests BS EN 15502-2-1:2012+A1:2016 Gas-fired central heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW NB The EN 15502 series is intended to replace EN 297, EN 483, EN 677, EN 656, EN 13836, EN 15420.	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests BS EN 15502-2-1:2012+A1:2016 Gas-fired centra heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of nominal heat input not exceeding 1 000 kW Immediate transition to latest standard
Independent hotplates, including those incorporating a grill for outdoor use	EN 484:1997 Specification for dedicated liquefied petroleum gas appliances. Independent hotplates, including those incorporating a grill for outdoor use Current standard	EN 484:1997 Specification for dedicated liquefied petroleum gas appliances - Independent hotplates, including those incorporating a grill for outdoor use BS EN 484:1998 Specification for dedicated liquefied petroleum gas appliances. Independent hotplates, including those incorporating a grill for outdoor use	EN 484:1997 Specification for dedicated liquefie petroleum gas appliances - Independent hotplat including those incorporating a grill for outdoor use BS EN 484:1998 Specification for dedicated liquefied petroleum gas appliances. Independen

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
			hotplates, including those incorporating a grill fo outdoor use No change
Dedicated liquefied petroleum gas appliances	EN 497:1997 Specification for dedicated liquefied petroleum gas appliances. Multi-purpose boiling burners for outdoor use Current standard	EN 497:1997 Specification for dedicated liquefied petroleum gas appliances – Multi-purpose boiling burners for outdoor use BS EN 497:1998 Specification for dedicated liquefied petroleum gas appliances. Multi-purpose boiling burners for outdoor use	EN 497:1997 Specification for dedicated liquefie petroleum gas appliances – Multi-purpose boilin burners for outdoor use BS EN 497:1998 Specification for dedicated liquefied petroleum gas appliances. Multi-purpo boiling burners for outdoor use No change
Dedicated liquefied petroleum gas appliances	EN 498:2012 Specification for dedicated liquefied petroleum gas appliances Current standard	EN 498:2012 Specification for dedicated liquefied petroleum gas appliances - Barbecues for outdoor use contact grills included BS EN 498:2012 Specification for dedicated liquefied petroleum gas appliances. Barbecues for outdoor use contact grills included	EN 498:2012 Specification for dedicated liquefie petroleum gas appliances - Barbecues for outdo use contact grills included BS EN 498:2012 Specification for dedicated liquefied petroleum gas appliances. Barbecues fo outdoor use contact grills included No change
Decorative fuel-effect gas appliances	EN 509:1999 Decorative fuel-effect gas appliances Current standard	EN 509:1999 Decorative fuel-effect gas appliances Includes EN 509:1999/A1:2003 & EN 509:1999/A2:2004 BS EN 509:2000 Decorative fuel-effect gas appliances	EN 509:1999 Decorative fuel-effect gas applianc Includes EN 509:1999/A1:2003 & EN 509:1999/A2:2004 BS EN 509:2000 Decorative fuel-effect gas appliances No change
Portable vapour pressure liquefied petroleum gas appliances	EN 521:2006 Specifications for dedicated liquefied petroleum gas appliances. Portable vapour pressure liquefied petroleum gas appliances See EU Warning below[2]	EN 521:2006 Specifications for dedicated liquefied petroleum gas appliances - Portable vapour pressure liquefied petroleum gas appliances BS EN 521:2006 Specifications for dedicated liquefied petroleum	EN 521:2006 Specifications for dedicated liquefie petroleum gas appliances - Portable vapour pressure liquefied petroleum gas appliances BS EN 521:2006 Specifications for dedicated

[2] EN 521:2006
Warning (1): This publication does not cover portable flat gas stoves (2).

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
	Current standard	gas appliances. Portable vapour pressure liquefied petroleum gas appliances	liquefied petroleum gas appliances. Portable vapour pressure liquefied petroleum gas appliances No change
Non-domestic direct gas-fired forced convection air heaters for space heating	EN 525:2009 Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW Current standard	EN 525:2009 Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW BS EN 525:2009 Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW	EN 525:2009 Non-domestic direct gas-fired force convection air heaters for space heating not exceeding a net heat input of 300 kW BS EN 525:2009 Non-domestic direct gas-fired forced convection air heaters for space heating n exceeding a net heat input of 300 kW No change
Independent gas-fired convection heaters	EN 613:2000 Independent gas-fired convection heaters Current standard	EN 613:2000 Independent gas-fired convection heaters Includes EN 613:2000/A1:2003 BS EN 613:2001 Independent gas-fired convection heaters	EN 613:2000 Independent gas-fired convection heaters Includes EN 613:2000/A1:2003 BS EN 613:2001 Independent gas-fired convectio heaters No change
Room sealed LPG space heating equipment for installation in vehicles and boats	EN 624:2011 Specification for dedicated LPG appliances—Room sealed LPG space heating equipment for installation in vehicles and boats Current standard	EN 624:2011 Specification for dedicated LPG appliances - Room sealed LPG space heating equipment for installation in vehicles and boats BS EN 624:2011 Specification for dedicated LPG appliances. Room sealed LPG space heating equipment for installation in vehicles and boats	EN 624:2011 Specification for dedicated LPG appliances - Room sealed LPG space heating equipment for installation in vehicles and boats BS EN 624:2011 Specification for dedicated LPG appliances. Room sealed LPG space heating equipment for installation in vehicles and boats No change
Domestic combination hot water and central	EN 625:1995 Gas-fired central heating boilers. Specific requirements for the domestic hot water operation of	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests

(1) In accordance with Commission Implementing Decision (EU) 2015/2414 of 17 December 2015 on the publication with a restriction in the Official Journal of the European Union of the reference of harmonised standard EN 521:2006 "Specifications for dedicated liquefied petroleum gas appliances – Portable vapour pressure liquefied petroleum gas appliances" in accordance with Directive 2009/142/EC of the European Parliament and of the Council (OJ L 333, 19.12.2015, p. 120).
(2) Flat gas stoves consist of a burner assembly fitted on a horizontal body containing an integrated compartment for a gas cartridge beside the burner.

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
heating boilers	combination boilers of nominal heat input not exceeding 70 kW Superseded, Withdrawn Standard	BS EN 15502-2-1:2012+A1:2016 Gas-fired central heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW BS EN 15502-2-2:2014 Gas-fired central heating boilers. Specific standard for type B1 appliances	BS EN 15502-2-1:2012+A1:2016 Gas-fired centra heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of nominal heat input not exceeding 1 000 kW BS EN 15502-2-2:2014 Gas-fired central heating boilers. Specific standard for type B1 appliances
Gas-fired central heating boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW	EN 656:1999 A1:2006 Gas-fired central heating boilers. Type B boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW Current standard	EN 656:1999/A1:2006 Gas-fired central heating boilers - Type B boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW BS EN 656:2000 Gas-fired central heating boilers. Type B boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW	EN 656:1999/A1:2006 Gas-fired central heating boilers - Type B boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW BS EN 656:2000 Gas-fired central heating boilers Type B boilers of nominal heat input exceeding 7 kW, but not exceeding 300 kW No change
Gas-fired central heating boilers with a nominal heat input not exceeding 70 kW	EN 677:1998 Gas-fired central heating boilers. Specific requirements for condensing boilers with a nominal heat input not exceeding 70 kW Superseded, Withdrawn Standard	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests BS EN 15502-2-1:2012+A1:2016 Gas-fired central heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW BS EN 15502-2-2:2014 Gas-fired central heating boilers. Specific standard for type B1 appliances	BS EN 15502-1:2012+A1:2015 Gas-fired heating boilers. General requirements and tests BS EN 15502-2-1:2012+A1:2016 Gas-fired centra heating boilers. Specific standard for type C appliances and type B2, B3 and B5 appliances of nominal heat input not exceeding 1 000 kW BS EN 15502-2-2:2014 Gas-fired central heating boilers. Specific standard for type B1 appliances Immediate transition to latest standard
Absorption refrigerators	EN 732:1998 Specifications for dedicated liquefied petroleum gas appliances—Absorption refrigerators Current standard	EN 732:1998 Specifications for dedicated liquefied petroleum gas appliances - Absorption refrigerators BS EN 732:1999 Specifications for dedicated liquefied petroleum gas appliances. Absorption refrigerators	EN 732:1998 Specifications for dedicated liquefi petroleum gas appliances - Absorption refrigerators BS EN 732:1999 Specifications for dedicated liquefied petroleum gas appliances. Absorption refrigerators No change

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
Independent gas-fired convection heaters	EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases Current standard	EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases Includes EN 1266:2002/A1:2005 BS EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases	EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportati of combustion air and/or flue gases Includes EN 1266:2002/A1:2005 BS EN 1266:2002 Independent gas-fired convect heaters incorporating a fan to assist transportati of combustion air and/or flue gases No change
Mobile and portable non-domestic forced convection direct fired air heaters	EN 1596:1998 Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters Current standard	EN 1596:1998 Specification for dedicated liquefied petroleum gas appliances - Mobile and portable non-domestic forced convection direct fired air heaters Includes EN 1596:1998/A1:2004 BS EN 1596:1998 Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters	EN 1596:1998 Specification for dedicated liquefi petroleum gas appliances - Mobile and portable non-domestic forced convection direct fired air heaters Includes EN 1596:1998/A1:2004 BS EN 1596:1998 Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters No change
Gas-fired absorption and adsorption air-conditioning and/or heat pump appliances	EN 12309-1:1999 Gas-fired absorption and adsorption air-conditioning and/or heat pump appliances with a net heat input not exceeding 70 kW. Safety Superseded standard	EN 12309-1:2014 Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW. Terms and definitions and EN 12309-2:2015 Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW - Part 2: Safety BS EN 12309-1:2014 Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW. Terms and definitions and BS EN 12309-2:2015 Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW.	EN 12309-1:2014 Gas-fired sorption appliances f heating and/or cooling with a net heat input not exceeding 70 kW. Terms and definitions and EN 12309-2:2015 Gas-fired sorption appliances f heating and/or cooling with a net heat input not exceeding 70 kW - Part 2: Safety BS EN 12309-1:2014 Gas-fired sorption appliance for heating and/or cooling with a net heat input not exceeding 70 kW. Terms and definitions and BS EN 12309-2:2015 Gas-fired sorption appliance for heating and/or cooling with a net heat input

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
		Safety	not exceeding 70 kW. Safety Immediate transition to latest standard
Gas-fired type B tumble dryers	EN 12752-1:1999 Gas-fired type B tumble dryers of nominal heat input not exceeding 20 kW. Safety Both EN 12752-1:1999 and BS EN 12752-1:1999 Withdrawn standards	Unable to identify successor standard as at 2019-02-27. Replacements for these withdrawn standards are not specified in BSI catalogue. The BSI catalogue does identify another standard for gas fired tumble dryers but it doesn't clarify whether or how the BS EN 12752-1 and BS EN 1458 are related. EN 1458-1:2011 BS EN 1458-1:2011 Domestic direct gas-fired tumble dryers of types B22D and B23D, of nominal heat input not exceeding 6 kW. Safety	EN 12752-1:1999 Gas-fired type B tumble dryers nominal heat input not exceeding 20 kW. Safety This standard is to be retained after consultation with BSI. Although this standard has been withdrawn without replacement, certification bodies still us it to certify products within its scope. There is nothing to suggest any deficiencies in the standard, and the GSMR currently recognises its adequacy.
Parasol patio heaters *(Flueless radiant heaters for outdoor or amply ventilated area use)*	EN 14543:2005 + A1:2007 Specification for dedicated liquefied petroleum gas appliances. Parasol patio heaters. Flueless radiant heaters for outdoor or amply ventilated area use Superseded standard	EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances - Parasol patio heaters - Flueless radiant heaters for outdoor or amply ventilated area use BS EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances. Parasol patio heaters. Flueless radiant heaters for outdoor or amply ventilated area use	EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances - Parasol pati heaters - Flueless radiant heaters for outdoor or amply ventilated area use BS EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances. Parasol patio heaters. Flueless radiant heaters for outdoor or amply ventilated area use Immediate transition to latest standard
Independent gas-fired flueless space heaters	EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW Current standard	EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW BS EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW	EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW BS EN 14829:2007 Independent gas-fired flueles space heaters for nominal heat input not exceeding 6 kW No change
Room sealed storage water heaters for the production of sanitary	EN 15033:2006 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats	EN 15033:2006 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats	EN 15033:2006 Room sealed storage water heat for the production of sanitary hot water using LP for vehicles and boats

GSMR Updates

Appliance type	Cited European Standard	Current edition of cited standard and corresponding British Standard	Version to be cited in 2019 update Suggested transitions
hot water using LPG for vehicles and boats	Current standard	Includes EN 15033:2006/AC:2008 BS EN 15033:2006 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats	Includes EN 15033:2006/AC:2008 BS EN 15033:2006 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats No change
Fuel cell gas heating appliances	EN 50465:2008 Gas appliances. Fuel cell gas heating appliance. Fuel cell gas heating appliance of nominal heat input inferior or equal to 70 kW Superseded standard	EN 50465:2015 Gas appliances - Combined heat and power appliance of nominal heat input inferior or equal to 70 kW BS EN 50465:2015 European product standard for combined heating power systems using gas fuel	EN 50465:2015 Gas appliances - Combined heat and power appliance of nominal heat input inferior or equa to 70 kW BS EN 50465:2015 European product standard for combined heatin power systems using gas fuel Immediate transition to latest standard

Table 2 - Specific requirements standards - Schedule 2A Clause 2(7)

References:

Information on European standards is obtained from the 'Summary list of titles and references harmonised standards under Directive 2009/142/EC for Appliances burning gaseous fuels (ex-90/396/EEC)'

See: https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/appliances-burning-gaseous-fuels

European (CEN) standards:
https://standards.cen.eu/dyn/www/f?p=204:105:0:::::

British (BS) Standards:
https://shop.bsigroup.com/ProductDetail?pid=000000000030249912

Appendix 1 Current text of Schedule 2A Clause 2:

(1) This clause applies to a gas appliance or specified fittings certified by a body that is working within the certification regime of—

(a) EU Directive 2009/142/EC; or
(b) EU Directive 90/396/ECC, in the case of appliances not covered by EU Directive 2009/142/EC.

(2) The appliance or fittings must be certified to the standard specified in subclause (7), subject to the following conditions:

(a) an appliance incorporating electrical equipment with a low voltage external supply must be tested for gas safety compliance using a supply of 230 volts, 50 Hz (nominal):
(b) an LPG appliance, other than an appliance for use with non-refillable cartridges, must be certified to Category I3B/P 30 or I3B/P 28-30:
(c) a natural gas appliance must be certified to Category I2H:
(d) a cabinet heater must be fitted with a label and notice that complies with Appendices 1 and 2 of NZS/AS 3645.

(3) An appliance is deemed to have been certified to an EN standard specified in subclause (7) if the appliance has been certified to a published national standard.

(4) In subclause (3), published national standard means a standard published by a national standardisation body that is a member of the Committee of European Standards (CEN) as being the national implementation of the relevant EN standard.

(5) An appliance that is deemed to be certified to an EN standard specified in subclause (7) is subject to—

(a) the conditions set out in subclause (2); and
(b) the condition that the appliance include instructions in English for its installation and use.

(6) In subclause (7),—

standard A means EN 30-1-1:2008 + A3:2013 Domestic cooking appliances burning gas. Safety. General

standard B means EN 203-1:2005 + A1:2008 Gas heated catering equipment. General safety rules

(7) The applicable standards are as follows:

Appliance and/or fittings type	Applicable standard
Absorption refrigerators	EN 732:1998 Specifications for dedicated liquefied petroleum gas appliances—Absorption refrigerators
Appliances having a glass ceramic hotplate	Standard A in conjunction with EN 30-1-3:2003 Domestic cooking appliances burning gas. Safety. Appliances having a glass ceramic hotplate EN 30-1-3:2003 + A1:2006 Domestic cooking appliances burning gas—Part 1-3: Safety—Appliances having a glass ceramic hotplate
Appliances having forced-convection ovens and/or grills	Standard A in conjunction with EN 30-1-2:2012 Domestic cooking appliances burning gas. Safety. Appliances having forced-convection ovens and/or grills
Appliances having 1 or more burners with an automatic burner control system	Standard A in conjunction with EN 30-1-4:2012 Domestic cooking appliances burning gas. Safety. Appliances having one or more burners with an automatic burner control system
Gas-fired instantaneous water heaters	EN 26:1997 Gas-fired instantaneous water heaters for the production of domestic hot water, fitted with atmospheric burners
Gas-fired storage water heaters	EN 89:1999 Gas-fired storage water heaters for the production of domestic hot water
Boiling pans	Standard B in conjunction with EN 203-2-3:2005 Gas heated catering equipment Part 2.3. Specific requirements–Boiling pans
Brat pans and paella cookers	Standard B in conjunction with EN 203-2-8:2005 Gas heated catering equipment Part 2.8. Specific requirements–Brat pans and paella cookers
Chargrills	Standard B in conjunction with EN 203-2-10:2007 Gas heated catering equipment Part 2.10. Specific requirements–Chargrills
Decorative fuel-effect gas appliances	EN 509:1999 Decorative fuel-effect gas appliances
Dedicated liquefied petroleum gas appliances	EN 497:1997 Specification for dedicated liquefied petroleum gas appliances. Multi-purpose boiling burners for outdoor use
Domestic combination hot water and central heating boilers	EN 625:1995 Gas-fired central heating boilers. Specific requirements for the domestic hot water operation of combination boilers of nominal heat input not exceeding 70 kW
Dedicated liquefied petroleum gas appliances	EN 498:2012 or, until 30 June 2016, the 1997 standard. Specification for dedicated liquefied petroleum gas appliances
Domestic flueless space heaters, including cabinet heaters	EN 449:2002 + A1:2007 Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters)
Fryers	Standard B in conjunction with EN 203-2-4:2005 Gas heated catering equipment. Specific requirements. Fryers

GSMR Updates

Appliance and/or fittings type	Applicable standard
Fuel cell gas heating appliances	EN 50465:2008 Gas appliances. Fuel cell gas heating appliance. Fuel cell gas heating appliance of nominal heat input inferior or equal to 70 kW
Gas-fired absorption and adsorption air-conditioning and/or heat pump appliances	EN 12309-1:1999 Gas-fired absorption and adsorption air-conditioning and/or heat pump appliances with a net heat input not exceeding 70 kW. Safety
Gas-fired central heating boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW	EN 656:1999 A1:2006 Gas-fired central heating boilers. Type B boilers of nominal heat input exceeding 70 kW, but not exceeding 300 kW EN 15502-2-1:2012
Gas-fired central heating boilers of nominal heat input not exceeding 70 kW	EN 483:1999 + A4:2007 Gas-fired central heating boilers. Type C boilers of nominal heat input not exceeding 70 kW
Gas-fired central heating boilers with a nominal heat input not exceeding 70 kW	EN 677:1998 Gas-fired central heating boilers. Specific requirements for condensing boilers with a nominal heat input not exceeding 70 kW
Gas-fired overhead luminous radiant heaters	EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters. Safety
Gas-fired type B tumble dryers	EN 12752-1:1999 Gas-fired type B tumble dryers of nominal heat input not exceeding 20 kW. Safety
General domestic cooking appliances	EN 30-1-1:2008 + A3:2013 Domestic cooking appliances burning gas—Part 1-1: Safety—General
General gas heated catering equipment	EN 203-1:2005 + A1:2008 Gas heated catering equipment—Part 1: General safety rules
Hot water heaters for beverage	Standard B in conjunction with EN 203-2-6:2005 Gas heated catering equipment. Specific requirements
Independent gas-fired convection heaters	EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases
Independent gas-fired flueless space heaters	EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW
Independent gas-fired convection heaters	EN 613:2000 Independent gas-fired convection heaters
Independent hotplates, including those incorporating a grill for outdoor use	EN 484:1997 Specification for dedicated liquefied petroleum gas appliances. Independent hotplates, including those incorporating a grill for outdoor use
Mobile and portable non-domestic forced convection direct fired air heaters	EN 1596:1998 Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters
Non-domestic direct gas-fired forced convection air heaters	EN 525:2009 Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW
Non-domestic direct gas-fired forced convection air heaters for space heating	
Open burners and wok burners	Standard B in conjunction with EN 203-2-1:2005 Gas heated catering equipment. Specific requirements. Open burners and wok burners
Ovens	Standard B in conjunction with EN 203-2-2:2006 Gas heated catering equipment. Specific requirements. Ovens
Parasol patio heaters.	Flueless radiant heaters for outdoor or amply ventilated area use EN 14543:2005 + A1:2007 Specification for dedicated liquefied petroleum gas appliances. Parasol patio heaters. Flueless radiant heaters for outdoor or amply ventilated area use
Pasta cookers	Standard B in conjunction with EN 203-2-11:2006 Gas heated catering equipment. Specific requirements. Pasta cookers
Portable vapour pressure liquefied petroleum gas appliances	EN 521:2006 Specifications for dedicated liquefied petroleum gas appliances. Portable vapour pressure liquefied petroleum gas appliances
Room sealed LPG space heating equipment for installation in vehicles and boats	EN 624:2011 Specification for dedicated LPG appliances—Room sealed LPG space heating equipment for installation in vehicles and boats
Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats	EN 15033:2006 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats
Salamanders and rotisseries	Standard B in conjunction with EN 203-2-7:2007 Gas heated catering equipment. Specific requirements. Salamanders and rotisseries
Single burner gas-fired overhead radiant tube heaters	EN 416-1:2009 Single burner gas-fired overhead radiant tube heaters for non-domestic use. Safety
Solid tops, warming plates, and griddles	Standard B in conjunction with EN 203-2-9:2005 Gas heated catering equipment. Specific requirements. Solid tops, warming plates and griddles

GSMR Updates

Gas (Safety and Measurement) Regulations – S2A 3 – North American regime

1. This document identifies the current status of standards specified in Schedule 2A Clause 3 of the Gas (Safety and Measurement) Regulations 2010 — as at 12 February 2019. Appendix 1 contains the text of this Clause.
2. GSMR Schedule 2A sets out the requirements for gas appliances certification in accordance with GSMR 55. Schedule 2A Clause 1 specifies the bodies recognised for the purpose of certification. Schedule 2A Clauses 2, 3 & 4 identify specific standards and conditions that are applicable to certification by particular bodies – working under European, North American and Australian bodies identified in Clause 1, respectively.
3. Schedule 2A Clause 3 sets out the standards and conditions applying to certification by the two North American CABs that are recognised to use ANSI or CSA standards.
4. The whole of GSMR Schedule 2A was last updated on 31 July 2014, by regulation 28 of the Gas (Safety and Measurement) Amendment Regulations 2014 (LI 2014/205).
5. We are not aware of any interest to amend (add to) the certification bodies identified in S2A Clause 3(1). We do not propose inviting stakeholder to nominate additional certification bodies at this time because that has the potential to delay the project.
6. We do not propose to amend the conditions set in S2A Clause 3(2).
7. Most of standards identified in S2A Clause 3(3) have been revised, withdrawn and replaced with a later edition. Table 3 below identifies the status of cited standards and the current edition of each standard.
8. We propose updating each citation to the current edition.
9. This document does not identify whether any of these standards are at present under review, or scheduled for review.
10. We are not aware of any industry interest in adding to the list of cited standards. Therefore we do not propose to add to the standards identified in S2A Clause 3(3), other than to recognise current editions of standards already cited.

Table 3 - Status of standards cited in S2A 3

Appliance and/or fittings type	Cited applicable standard & Status	Current edition of cited standard	Version to be cited in 2019 update Suggested transitions	Actions
Gas clothes dryers	ANSI Z21.5.1-2006/CSA 7.1-2006 American National Standard/CSA Standard For Gas Clothes Dryers, Volume I Type 1 Clothes Dryers, including ANSI Z21.5.1a-2007/CSA 7.1a-2007 Withdrawn ANSI Z21.5.1-2015/CSA 7.1-2015 - Gas clothes dryers, volume I, type I clothes dryers (Withdrawn) ANSI Z21.5.1-2016 CSA 7.1-2016 (withdrawn)	ANSI Z21.5.1-2017 • CSA 7.1-2017 *Gas clothes dryers, volume I, type 1 clothes dryers* Seventh edition	ANSI Z21.5.1-2017 • CSA 7.1-2017 *Gas clothes dryers, volume I, type 1 clothes dryers* Seventh edition Immediate transition to latest standard	
Gas-fired low-intensity infrared heaters	ANSI Z83.20-2008/CSA 2.34-2008 American National Standard/CSA Standard For Gas-Fired Low-Intensity Infrared Heaters, including ANSI Z83.20a-2010/CSA 2.34a-2010 and ANSI Z83.20b-2011/CSA 2.34b-2011 Gas-fired low intensity infrared heaters Withdrawn	ANSI Z83.20-2016/CSA 2.34-2016 *Gas-fired tubular and low-intensity infrared heaters* Third edition ANSI Z83.20-2016/CSA 2.34-2016 *Gas-fired tubular and low-intensity infrared heaters* Third edition	ANSI Z83.20-2016/CSA 2.34-2016 *Gas-fired tubular and low-intensity infrared heaters* Third edition ANSI Z83.20-2016/CSA 2.34-2016 *Gas-fired tubular and low-intensity infrared heaters* Third edition Immediate transition to latest standard	
Gas-fired low pressure steam and hot water boilers	ANSI Z21.13-2010/CSA 4.9-2010 American National Standard/CSA Standard For Gas-Fired Low Pressure Steam And Hot Water Boilers, including ANSI Z21.13a-2010/CSA 4.9a-2010, and ANSI Z83.20b-2011/CSA 2.34b-2011 Withdrawn ANSI Z21.13-2010 • CSA 4.9-2010, ANSI Z21.13a-2010 • CSA 4.9a-2010, and ANSI Z21.13b-2012 • CSA	ANSI Z21.13-2017 • CSA 4.9-2017 *Gas-fired low pressure steam and hot water boilers* Sixth edition	ANSI Z21.13-2017 • CSA 4.9-2017 *Gas-fired low pressure steam and hot water boilers* Sixth edition Immediate transition to latest standard	

GSMR Updates

Appliance and/or fittings type	Cited applicable standard & Status	Current edition of cited standard	Version to be cited in 2019 update Suggested transitions	Actions
	4.9b-2012 ANSI Z21.13-2013 • CSA 4.9-2013 Withdrawn			
Gas-fired outdoor infrared patio heaters	ANSI Z83.26-2007/CSA 2.37-2007 American National Standard/CSA Standard For Gas-Fired Outdoor Infrared Patio Heaters, including ANSI Z83.26a-2008/CSA 2.37a-2008 Withdrawn	ANSI Z83.26-2014 • CSA 2.37-2014 *Gas-fired outdoor infrared patio heaters* Second edition	ANSI Z83.26-2014 • CSA 2.37-2014 *Gas-fired outdoor infrared patio heaters* Second edition Immediate transition to latest standard	
Gas storage water heaters with input ratings above 75,000 BTU per hour	ANSI Z21.10.3-2013/ CSA 4.3-2013 Gas Water Heaters—Volume III, Storage Water Heaters With Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous ANSI Z21.10.3-2015/CSA 4.3-2015 Withdrawn	ANSI Z21.10.3-2017/CSA 4.3-2017 *Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 Btu per hour, circulating and instantaneous* Eighth edition	ANSI Z21.10.3-2017/CSA 4.3-2017 *Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 Btu per hour, circulating and instantaneous* Eighth edition Immediate transition to latest standard	
Gas storage water heaters with input ratings of 75,000 BTU per hour or less	ANSI Z21.10.1-2013/CSA 4.1-2013 American National Standard/CSA Standard for Gas Water Heaters With Input Ratings of 75,000 BTU Per Hour or Less Withdrawn ANSI Z21.10.1-2014/CSA 4.1-2014 Withdrawn	ANSI Z21.10.1-2017/CSA 4.1-2017 *Gas water heaters, volume I, storage water heaters with input ratings of 75,000 Btu per hour or less* Seventh edition[3]	ANSI Z21.10.1-2017/CSA 4.1-2017 *Gas water heaters, volume I, storage water heaters with input ratings of 75,000 Btu per hour or less* Seventh edition[4] Immediate transition to latest standard	
Gas-fired unvented room heaters	ANSI Z21.11.2-2011 American National Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters Withdrawn ANSI Z21.11.2-2013 Withdrawn	ANSI Z21.11.2-2016 *Gas-fired room heaters, volume II, unvented room heaters* Twenty-eighth edition	ANSI Z21.11.2-2016 *Gas-fired room heaters, volume II, unvented room heaters* Twenty-eighth edition Immediate transition to latest standard	
Gas-fired waterless toilets	CGA 5.2-1971 Gas-fired waterless toilets Reconfirmed 2013	CGA 5.2-1971 (R2013) *Gas-Fired Waterless Toilets*	CGA 5.2-1971 (R2013) *Gas-Fired Waterless Toilets* No change	
Gas food service equipment	ANSI Z83.11-2006/CSA 1.8-2006 American National Standard/CSA Standard For Gas Food Service Equipment, including ANSI Z83.11a-2007/CSA 1.8a-2007 and ANSI Z83.11b-2009/CSA 1.8b-2009 Withdrawn	ANSI Z83.11-2016/CSA 1.8-2016 *Gas food service equipment* fourth edition	ANSI Z83.11-2016/CSA 1.8-2016 *Gas food service equipment* fourth edition Immediate transition to latest standard	
Household cooking gas appliances	ANSI Z21.1-2010 American National Standard For Household Cooking Gas Appliances, including ANSI Z21.1a-2011, and ANSI Z21.1b-2012 Household cooking gas appliances Withdrawn	CSA/ANSI Z21.1-2018/CSA 1.1-2018 *Household cooking gas appliances* Second edition (as a CSA); previous edition was 2016	CSA/ANSI Z21.1-2018/CSA 1.1-2018 *Household cooking gas appliances* Second edition (as a CSA); previous edition was 2016 Immediate transition to latest standard	
Outdoor cooking gas appliances	ANSI Z21.58-2007/CSA 1.6-2007 American National Standard/CSA Standard For Outdoor Cooking Gas Appliances, including ANSI Z21.58a-2008/CSA 1.6a-2008, and ANSI Z21.58b-2012/CSA 1.6b-2012 Outdoor cooking gas appliances	ANSI Z21.58-2015 • CSA 1.6-2015 *Outdoor cooking gas appliances*	ANSI Z21.58-2015 • CSA 1.6-2015 *Outdoor cooking gas appliances* Immediate transition to latest standard	

[3] See IAPMO note on 14th Edition.

[4] See IAPMO note on 14th Edition.

GSMR Updates

Appliance and/or fittings type	Cited applicable standard & Status	Current edition of cited standard	Version to be cited in 2019 update Suggested transitions	Actions
	Withdrawn			
Outdoor cooking specialty gas appliances	ANSI Z21.89-2007/CSA 1.18-2007 American National Standard/CSA Standard For Outdoor Cooking Specialty Gas Appliances, including ANSI Z21.89a-2008/CSA 1.18a-2008, and ANSI Z21.89b-2012/CSA 1.18b-2012 Outdoor cooking specialty gas appliances CSA 1.18-2007 (R2012) Withdrawn ANSI Z21.89-2013/CSA 1.18-2013 Withdrawn	ANSI Z21.89-2017 • CSA 1.18-2017 *Outdoor cooking specialty gas appliances*	ANSI Z21.89-2017 • CSA 1.18-2017 *Outdoor cooking specialty gas appliances* Immediate transition to latest standard	
Outdoor decorative gas appliances	ANSI Z21.97-2010 Outdoor Decorative Gas Appliances Withdrawn Previous editions in 2012 & 2014	ANSI Z21.97-2017/CSA 2.41-2017 *Outdoor decorative gas appliances* Third edition	ANSI Z21.97-2017/CSA 2.41-2017 *Outdoor decorative gas appliances* Third edition Immediate transition to latest standard	
Portable type gas camp stoves	ANSI Z21.72-2011/CSA 11.2-2011 American National Standard/CSA Standard For Portable Type Gas Camp Stoves Withdrawn	ANSI Z21.72-2016 • CSA 11.2-2016 *Portable type gas camp stoves*	ANSI Z21.72-2016 • CSA 11.2-2016 *Portable type gas camp stoves* Immediate transition to latest standard	
Portable type gas camp heaters	ANSI Z21.63/CSA 11.3 2011 Portable Type Gas Camp Heaters Withdrawn	ANSI Z21.63-2014/CSA 11.3-2014 *Portable type gas camp heaters*	ANSI Z21.63-2014/CSA 11.3-2014 *Portable type gas camp heaters* Immediate transition to latest standard	
Portable type gas camp lights	ANSI Z21.73-2011/CSA 11.1-2011 American National Standard/CSA Standard For Portable Type Gas Camp Lights ANSI Z21.73-2000/CSA 11.1-2000 Withdrawn	ANSI Z21.73-2017 • CSA 11.1-2017 *Portable type gas camp lights* Third edition	ANSI Z21.73-2017 • CSA 11.1-2017 *Portable type gas camp lights* Third edition Immediate transition to latest standard	
Vented gas fireplace heaters	ANSI Z21.88-2009/CSA 2.33-2009 Vented gas fireplace heaters Withdrawn ANSI Z21.88-2014/CSA 2.33-2014 Withdrawn ANSI Z21.88-2016/CSA 2.33-2016 Withdrawn	ANSI Z21.88-2017/CSA 2.33-2017 *Vented gas fireplace heaters* Eighth edition	ANSI Z21.88-2017/CSA 2.33-2017 *Vented gas fireplace heaters* Eighth edition Immediate transition to latest standard	
Vented gas fireplaces	ANSI Z21.50-2012/CSA 2.22-2012 American National Standard/CSA Standard For Vented Gas Fireplaces Withdrawn ANSI Z21.50-2014/CSA 2.22-2014 Withdrawn	ANSI Z21.50-2016/CSA 2.22-2016 *Vented decorative gas appliances* Eighth edition	ANSI Z21.50-2016/CSA 2.22-2016 *Vented decorative gas appliances* Eighth edition Immediate transition to latest standard	
Vented gas-fired space heating appliances	ANSI Z21.86-2008/CSA 2.32-2008 American National Standard/CSA Standard For Vented Gas-Fired Space Heating Appliances Withdrawn	ANSI Z21.86-2016/CSA 2.32-2016 *Vented gas-fired space heating appliances* Sixth edition	ANSI Z21.86-2016/CSA 2.32-2016 *Vented gas-fired space heating appliances* Sixth edition Immediate transition to latest standard	

Appendix 1 Current text of Schedule 2A Clause 3: Standards and conditions applying to certification by Canadian Standards Association or Underwriters Laboratories

Schedule 2A Clause 3

(1) This clause applies to a gas appliance or specified fittings certified by—

(a) Canadian Standards Association; or

(b) Underwriters Laboratories.

(2) The appliance or fittings must be certified to the standard specified in subclause (3), subject to the following conditions:

(a) a gas appliance incorporating electrical equipment with a low voltage external supply must be tested for gas safety compliance using a supply of 230 volts, 50 Hz (nominal):

(b) an LPG appliance, other than an appliance for use with non-refillable cartridges, must be tested as follows:

(i) either—

A the tests specified in the compliance standard must be conducted with Test Gas D (butane); and

B combustion tests, and tests of burner operating characteristics, pilot operating characteristics, and ignition, must also be conducted with Test Gas E (propane) with no change whatever in burner equipment; or

(ii) in the case of an outdoor cooking gas appliance or an outdoor cooking speciality gas appliance, tests for temperature hazards, heat resistance, flame abnormalities, including sooting, and tests in which CO ratios or concentrations are measured must be conducted with Test Gas D (butane) with no change whatever in burner equipment.

(3) The applicable standards are as follows:

Appliance and/or fittings type	Applicable standard
Gas clothes dryers	ANSI Z21.5.1-2006/CSA 7.1-2006 American National Standard/CSA Standard For Gas Clothes Dryers, Volume I Type 1 Clothes Dryers, including ANSI Z21.5.1a-2007/CSA 7.1a-2007
Gas-fired low-intensity infrared heaters	ANSI Z83.20-2008/CSA 2.34-2008 American National Standard/CSA Standard For Gas-Fired Low-Intensity Infrared Heaters, including ANSI Z83.20a-2010/CSA 2.34a-2010 and ANSI Z83.20b-2011/CSA 2.34b-2011 Gas-fired low intensity infrared heaters
Gas-fired low pressure steam and hot water boilers	ANSI Z21.13-2010/CSA 4.9-2010 American National Standard/CSA Standard For Gas-Fired Low Pressure Steam And Hot Water Boilers, including ANSI Z21.13a-2010/CSA 4.9a-2010, and ANSI Z83.20b-2011/CSA 2.34b-2011
Gas-fired outdoor infrared patio heaters	ANSI Z83.26-2007/CSA 2.37-2007 American National Standard/CSA Standard F or Gas-Fired Outdoor Infrared Patio Heaters, including ANSI Z83.26a-2008/CSA 2.37a-2008
Gas storage water heaters with input ratings above 75,000 BTU per hour	ANSI Z21.10.3-2013/ CSA 4.3-2013 Gas Water Heaters—Volume III, Storage Water Heaters With Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous
Gas storage water heaters with input ratings of 75,000 BTU per hour or less	ANSI Z21.10.1-2013/CSA 4.1-2013 American National Standard/CSA Standard for Gas Water Heaters With Input Ratings of 75,000 BTU Per Hour or Less Or, until 30 June 2016: ANSI Z21.10.1-2009/CSA 4.1-2009 American National Standard/CSA Standard for Gas Water Heaters, Volume I, Storage Water Heaters With Input Ratings Of 75,000 BTU Per Hour Or Less, including ANSI Z21.10.1a-2009/CSA 4.1a-2009
Gas-fired unvented room heaters	ANSI Z21.11.2-2011 American National Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters Or, until 30 June 2016: ANSI Z21.11.2-2007 American National Standard for Gas-fired Room Heaters, Volume II, Unvented Room Heaters, including ANSI Z21.11.2a-2008 and ANSI Z21.11.2b-2010
Gas-fired waterless toilets	CGA 5.2-1971 Gas-fired waterless toilets
Gas food service equipment	ANSI Z83.11-2006/CSA 1.8-2006 American National Standard/CSA Standard For Gas Food Service Equipment, including ANSI Z83.11a-2007/CSA 1.8a-2007 and ANSI Z83.11b-2009/CSA 1.8b-2009
Household cooking gas appliances	ANSI Z21.1-2010 American National Standard For Household Cooking Gas Appliances, including ANSI Z21.1a-2011, and

GSMR Updates

	ANSI Z21.1b-2012 Household cooking gas appliances
Outdoor cooking gas appliances	ANSI Z21.58-2007/CSA 1.6-2007 American National Standard/CSA Standard For Outdoor Cooking Gas Appliances, including ANSI Z21.58a-2008/CSA 1.6a-2008, and ANSI Z21.58b-2012/CSA 1.6b-2012 Outdoor cooking gas appliances
Outdoor cooking specialty gas appliances	ANSI Z21.89-2007/CSA 1.18-2007 American National Standard/CSA Standard For Outdoor Cooking Specialty Gas Appliances, including ANSI Z21.89a-2008/CSA 1.18a-2008, and ANSI Z21.89b-2012/CSA 1.18b-2012 Outdoor cooking specialty gas appliances
Outdoor decorative gas appliances	ANSI Z21.97-2010 Outdoor Decorative Gas Appliances
Portable type gas camp stoves	ANSI Z21.72-2011/CSA 11.2-2011 American National Standard/CSA Standard For Portable Type Gas Camp Stoves
Portable type gas camp heaters	ANSI Z21.63/CSA 11.3 2011 Portable Type Gas Camp Heaters
Portable type gas camp lights	ANSI Z21.73-2011/CSA 11.1-2011 American National Standard/CSA Standard For Portable Type Gas Camp Lights ANSI Z21.73-2000/CSA 11.1-2000 Or, until 30 June 2016: American National Standard/CSA Standard For Portable Type Gas Camp Lights, including ANSI Z21.73a-2001/CSA 11.1a-2001 and ANSI Z21.73b-2002/CSA 11.1b-2002
Vented gas fireplace heaters	ANSI Z21.88-2009/CSA 2.33-2009 Vented gas fireplace heaters
Vented gas fireplaces	ANSI Z21.50-2012/CSA 2.22-2012 American National Standard/CSA Standard For Vented Gas Fireplaces Or, until 30 June 2016: American National Standard/CSA Standard For Vented Gas Fireplaces, including ANSI Z21.50a-2008/CSA 2.22a-2008 and ANSI Z21.50b-2009/CSA 2.22b-2009 ANSI Z21.50-2007/CSA 2.22-2007
Vented gas-fired space heating appliances	ANSI Z21.86-2008/CSA 2.32-2008 American National Standard/CSA Standard For Vented Gas-Fired Space Heating Appliances

GSMR Updates

Gas (Safety and Measurement) Regulations Schedule 2A 4 – Australian regime

1. This document identifies the current status of standards specified in Schedule 2A Clause 4 of the Gas (Safety and Measurement) Regulations 2010 — as at 12 February 2019. Appendix 1 contains the text of this Clause.

2. GSMR Schedule 2A sets out the requirements for gas appliances certification in accordance with GSMR 55. Schedule 2A Clause 1 specifies the bodies recognised for the purpose of certification. Schedule 2A Clauses 2, 3 & 4 identify specific standards and conditions that are applicable to certification by particular bodies – working under European, North American and Australian bodies identified in Clause 1, respectively.

3. Schedule 2A Clause 4 sets out the standards and conditions applying to specific certification by bodies working to specific Australian *gas appliance* standards.

4. The whole of GSMR Schedule 2A was last updated on 31 July 2014, by regulation 28 of the Gas (Safety and Measurement) Amendment Regulations 2014 (LI 2014/205).

5. This document does not identify whether any of these standards are at present under review, or scheduled for review.

Australian Certification bodies

6. The Certification bodies identified in S2A Clause 4(1) are Australian and are recognised by Australian gas appliance regulators for the certification of appliances to the Australian and joint Australian-New Zealand gas appliance standards.

7. This list of certification bodies is out of date. Specifically a new entrant – BSI Group (Australia and New Zealand) Pty Ltd has recently obtained recognition as a CAB for the purposes of certification of 'Australian' standards [NB the company name needs to be verified].

8. Once due diligence is completed we intend to propose the recognition of BSI Global Australia by amending both Clause 2A 1 and Clause 2A 4(1), and any other updates, see Table 4.

Table 4 - 'Australian' CABs for gas appliance certification – S2A 4(1)

CAB	Status & Proposed update
SAI Global Certification Services Pty Ltd (trading as SAI Global)	Retain recognition; company legal name to be reverified
IAPMO R & T Oceana Pty Ltd	Retain recognition; company legal name to be reverified
Australian Gas Association	Retain recognition; company legal name to be reverified
Global-Mark Pty Ltd	Retain recognition; company legal name to be reverified
BSI Group (Australia and New Zealand) Pty Ltd	Add recognition; company legal name to be verified

New Australian Certification scheme

9. We note the committee of New Zealand Australian state gas safety regulators (Gas Technical Regulators Committee –GTRC) has implemented its gas appliance scheme and JAS-ANZ is implementing the recognition of CABs to certify to that scheme.

10. This scheme has only recently been set up and is in transition. New Zealand is not involved in the scheme. More work is required to confirm its suitability for recognition as opposed to the status quo where the regulations recognise individual CABs. Therefore we do not propose to recommend blanket recognition of CABs under the GTRC scheme.

Australian gas appliance standards

11. Standards Australia is in the process of revising its gas appliance standards which are cited in GSMR Schedule 2A 4(3). Most of these standards are now in a format where general requirements are in a base standard and type-specific requirements are in a type-specific part of that standard. The revised standards apply consistent requirements and test methods across the range of appliances. They also include a small number of New Zealand specific variations.

12. For example AS/NZS 5263.0 *Gas appliances – General requirements* contains the generally applicable requirements and test methods, and AS/NZS 5263.1.1 *Gas appliances – Domestic gas cooking appliances* applies those requirements to domestic gas cooking appliances, with any necessary type-specific requirements.

13. Some cited standards have not yet been brought into this structure. Therefore we do not propose modifying the New Zealand specific conditions in S2A Clause 4(2). The only current applicable conditions are:

> *The appliance or fittings must be certified to the standard specified in subclause (3), subject to the condition that an LPG appliance, other than an appliance for use with a non-refillable cartridge, must be certified as a universal LPG appliance or a New Zealand LPG appliance.*

14. Most of the standards cited in S2A Clause 4(3) have been revised and issued as part of the AS/NZS 5263 series, see Table 5. For ease of analysis this table consolidates the specific appliance types falling within each standard, eg gas cooking appliances.

15. Several projects to amend these standards are under way, in addition to those identified in Table 5. We recommend that a decision as to which standards to include in updating S2A Clause 4(3) is made as late as possible.

Table 5 - 'Australian' gas appliance standards - S2A 4(3)

Appliance and/or fittings Class (group types)	Current applicable standards	Status	Version to be cited in 2019 update Suggested transitions	Actions
Portable and mobile appliances LPG — including: • Camping lanterns • Cookers and barbecues • Equipment for use with refillable cylinders • Space heaters	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3	Current, under review However there are relevant GTRC Technical Bulletins that address technical issues not covered by the current standard.	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3 No change	
Industrial and commercial gas-fired appliances	AS 3814-2009 Industrial and commercial gas-fired appliances Includes Amendment 1-2010 (not cited)	Superseded by: AS 3814:2015 *Industrial and commercial gas-fired appliances* and the latest version: AS 3814:2018 *Industrial and commercial gas-fired appliances*	AS 3814:2018 *Industrial and commercial gas-fired appliances* Immediate transition to latest standard	
Domestic or similar gas cooking appliances – including: • Built-in cookers and ovens • Caravan and marine cookers • Counter top cookers • Elevated cookers • Freestanding cookers • Hotplates • Wall ovens	AS 4551-2008 Domestic gas cooking appliances, including AS 4551-2008/Amdt 1-2009 and AS 4551-2008/Amdt 2-2012	Superseded by: AS/NZS 5263.1.1:2020 *Gas appliances – Domestic gas cooking appliances*	AS/NZS 5263.1.1:2020 *Gas appliances – Domestic gas cooking appliances* Immediate transition to latest standard	
Domestic or similar water heating appliances – including: • Boilers (central heating and/or water heating) • Gas boosted solar water heaters • Instantaneous water heaters • Storage water heaters	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating	Superseded by: AS/NZS 5263.1.2:2020 *Gas appliances – Gas fired water heaters for hot water supply and/or central heating*	AS/NZS 5263.1.2:2020 *Gas appliances – Gas fired water heaters for hot water supply and/or central heating* Immediate transition to latest standard	
Domestic or similar space heating appliances – including: • Balanced flue convection heaters • Flueless convection heaters • Flued radiant/convection heaters • Flueless radiant/convection heaters • Miscellaneous heaters • Wall furnaces	AS 4553-2008 Gas space heating appliances, including AS 4553-2008/Amdt 1-2011 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety	Superseded by: AS/NZS 5263.1.3:2016 *Gas appliances - Gas space heating appliances*	AS/NZS 5263.1.3:2016 *Gas appliances - Gas space heating appliances* Immediate transition to latest standard	
Gas laundry dryers	AS 4554-2005 Gas laundry dryers	Current, Reconfirmed 2016: AS 4554-2005 (R2016) Gas laundry dryers Note: A draft successor standard AS/NZS 5263.1.9 *Gas laundry dryers* is in preparation	AS 4554-2005 (R2016) Gas laundry dryers No change	

GSMR Updates

Domestic gas refrigerators	AS 4555-2002 (AG-105-2002) Domestic gas refrigerators, including AS 4555-2002 (AG 105-2002)/Amdt 1-2011	Current Reconfirmed 2016 as: AS 4555-2002 (AG 105-2002) (R2013) *Domestic gas refrigerators;* AS 4555-2002 (AG 105-2002) (R2013)/Amdt 1-2011 *Domestic gas refrigerators*	AS 4555-2002 (AG 105-2002) (R2013) *Domestic gas refrigerators;* AS 4555-2002 (AG 105-2002) (R2013)/Amdt 1-2011 *Domestic gas refrigerators* No change	
Ducted heaters & Duct and unit heaters	AS 4556-2011 Indirect gas-fired ducted air-heaters	Superseded by: AS/NZS 5263.1.6:2020 *Gas appliances – Indirect gas-fired ducted air heaters*	AS/NZS 5263.1.6:2020 *Gas appliances – Indirect gas-fired ducted air heaters* Immediate transition to latest standard	
Domestic outdoor gas barbecues	AS 4557-2004 Domestic outdoor gas barbecues, including AS 4557-2004/Amdt 1-2009 and AS 4557-2004/Amdt 2-2012 Or NZS/AS 4557(Int): 2013 Domestic outdoor gas barbecues	Superseded by: AS/NZS 5263.1.7:2020 *Gas appliances – Domestic outdoor gas appliances*	AS/NZS 5263.1.7:2020 *Gas appliances – Domestic outdoor gas appliances* Immediate transition to latest standard	
Decorative gas log and other fuel effect fires – including: • Exterior gas lights • Gas log fires • Indoor gas lights	AS 4558-2011 Decorative gas log and other fuel effect fires Or NZS/AS 4558(Int):2013 Decorative gas log and other fuel effect fires	Superseded by: AS/NZS 5263.1.8:2016 *Gas appliances - Decorative effect gas appliances*	AS/NZS 5263.1.8:2016 *Gas appliances - Decorative effect gas appliances* Immediate transition to latest standard	
Gas pool heaters	AS 4560-2004 Gas pool heaters, including AS 4560-2004/Amdt 1-2009 Gas pool heaters	Current Reconfirmed 2016 as: AS 4560-2004 (R2016) Gas pool heaters; AS 4560-2004 (R2016)/Amdt 1-2009 *Gas pool heaters* Note: A draft successor standard AS/NZS 5263.1.12 *Gas pool heaters* is in preparation	AS 4560-2004 (R2016) Gas pool heaters; AS 4560-2004 (R2016)/Amdt 1-2009 *Gas pool heaters* No change	
Commercial catering gas equipment – including: • Atmospheric steamers • Barbecues, charbroilers and rotisseries • Boiling tables (open and closed top) • Boiling water units • Chinese cooking tables • Food warmers including bains marie • Fryers • Ovens • Pasta cookers and rethermalisers • Ranges • Salamanders, grillers and griddles • Stockpots and brat pans	AS 4563-2004 Commercial catering gas equipment	Current Reconfirmed 2016 as: AS 4563-2004 (R2016) *Commercial catering gas equipment* A full revision of this standard is under way	AS 4563-2004 (R2016) *Commercial catering gas equipment* Immediate transition to latest standard	
Radiant gas heaters for outdoor and non-residential indoor use	AS 4565-2004 Radiant gas heaters for outdoor and non-residential indoor use, including AS 4565-2004/Amdt 1-2011 Radiant gas heaters for outdoor and non-residential indoor use	Available, Superseded It was reconfirmed in 2017 as: AS 4565-2004 (R2017) *Radiant gas heaters for outdoor and non-residential indoor use;* AS 4565-2004 (R2017)/Amdt 1-2011 *Radiant gas heaters for outdoor and non-residential indoor use* Then superseded by:	AS/NZS 5263.1.4:2017 *Gas appliances - Radiant gas heaters* Immediate transition to latest standard	

GSMR Updates

		AS/NZS 5263.1.4:2017 *Gas appliances - Radiant gas heaters*		
Overhead radiant tube gas heaters	AS 4643-2007 Overhead radiant tube gas heaters	Superseded by: AS/NZS 5263.1.4:2017 *Gas appliances - Radiant gas heaters*	AS/NZS 5263.1.4:2017 *Gas appliances - Radiant gas heaters* Immediate transition to latest standard	
LPG mobile industrial direct-fired air heaters	AS 5262-2011 LP Gas mobile industrial direct-fired air heaters	Current Note: A draft successor standard AS/NZS 5263.1.10 *Gas direct fired air heaters* is in preparation	AS 5262-2011 LP Gas mobile industrial direct-fired air heaters No change	

Appendix 1 Schedule 2A Clause 4 Standards and conditions applying to certification by SAI Global, IAPMO R & T Oceana, or Australian Gas Association, or Global-Mark Pty Ltd

(1) This clause applies to a gas appliance or specified fittings certified by any one of the following bodies:

(a) SAI Global Certification Services Pty Ltd (trading as SAI Global):
(b) IAPMO R & T Oceana Pty Ltd:
(c) Australian Gas Association:
(d) Global-Mark Pty Ltd.

(2) The appliance or fittings must be certified to the standard specified in subclause (3), subject to the condition that an LPG appliance, other than an appliance for use with a non-refillable cartridge, must be certified as a universal LPG appliance or a New Zealand LPG appliance.

(3) The applicable standards are as follows:

Appliance and/or fittings type	**Applicable standard**
Atmospheric steamers	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Balanced flue convection heaters	AS 4553-2008 Gas space heating appliances, including AS 4553-2008/Amdt 1-2011 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Barbecues, charbroilers and rotisseries	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Boilers (central heating and/or water heating)	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating Or, until 30 June 2016: AS 4552-2000 Gas-fired water heaters for hot water supply and/or central heating
Boiling tables (open and closed top)	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Boiling water units	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Built-in cookers and ovens	AS 4551-2008 Domestic gas cooking appliances, including AS 4551-2008/Amdt 1-2009 and AS 4551-2008/Amdt 2-2012

GSMR Updates

Appliance and/or fittings type	Applicable standard
	Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Camping lanterns	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3 Or, until 30 June 2016: AS 2658-2003 LP Gas—portable and mobile appliances
Caravan and marine cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Chinese cooking tables	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Cookers and barbecues	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3 Or, until 30 June 2016: AS 2658-2003 LP Gas—portable and mobile appliances
Counter top cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Domestic gas refrigerators	AS 4555-2002 (AG-105-2002) Domestic gas refrigerators, including AS 4555-2002 (AG 105-2002)/Amdt 1-2011
Domestic outdoor gas barbecues	AS 4557-2004 Domestic outdoor gas barbecues, including AS 4557-2004/Amdt 1-2009 and AS 4557-2004/Amdt 2-2012 Or NZS/AS 4557(Int): 2013 Domestic outdoor gas barbecues Or, until 30 June 2016: AS 4557-2001 Domestic outdoor gas barbecues
Ducted heaters	AS 4556-2011 Indirect gas-fired ducted air-heaters Or, until 30 June 2016: AS 4556-2000/AG 106-2000 Indirect gas-fired ducted air-heaters
Duct and unit heaters	AS 4556-2011 Indirect gas-fired ducted air-heaters Or, until 30 June 2016: AS 4556-2000/ AG 106-2000 Indirect gas-fired ducted air-heaters
Elevated cookers	AS 4551-2008 Domestic gas cooking appliances

GSMR Updates

Appliance and/or fittings type	Applicable standard
	Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Equipment for use with refillable cylinders	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3 Or, until 30 June 2016: AS 2658-2003 LP Gas—portable and mobile appliances
Exterior gas lights	AS 4558-2011 Decorative gas log and other fuel effect fires Or NZS/AS 4558(Int):2013 Decorative gas log and other fuel effect fires Or, until 30 June 2016: AS 4558-2000/AG108-2000 Decorative gas log and other fuel effect fires
Flueless convection heaters	AS 4553-2008 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Flued radiant/convection heaters	AS 4553-2008 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Flueless radiant/convection heaters	AS 4553-2008 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Food warmers including bains marie	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Freestanding cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Fryers	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering

GSMR Updates

Appliance and/or fittings type	Applicable standard
	gas equipment
Gas boosted solar water heaters	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating Or, until 30 June 2016: AS 4552-2000 Gas-fired water heaters for hot water supply and/or central heating
Gas laundry dryers	AS 4554-2005 Gas laundry dryers Or, until 30 June 2016: AS 4554-2002 Gas laundry dryers
Gas log fires	AS 4558-2011 Decorative gas log and other fuel effect fires NZS/AS 4558(Int):2013 Decorative gas log and other fuel effect fires Or, until 30 June 2016: AS 4558-2000/AG108-2000 Decorative gas log and other fuel effect fires
Gas pool heaters	AS 4560-2004 Gas pool heaters, including AS 4560-2004/Amdt 1-2009 Gas pool heaters
Hotplates	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances
Indoor gas lights	AS 4558-2011 Decorative gas log and other fuel effect fires Or NZS/AS 4558(Int):2013 Decorative gas log and other fuel effect fires Or, until 30 June 2016: AS 4558-2000/AG108-2000 Decorative gas log and other fuel effect fires
Industrial and commercial gas-fired appliances	AS 3814-2009 Industrial and commercial gas-fired appliances Or, until 30 June 2016: AS 3814-2002/AG 108-2000 Industrial and commercial gas-fired appliances
Instantaneous water heaters	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating Or, until 30 June 2016: AS 4552-2000 Gas-fired water heaters for hot water supply and/or central heating
LPG mobile industrial direct-fired air heaters	AS 5262-2011 LP Gas mobile industrial direct-fired air heaters Or, until 30 June 2016: AG 404-1998 Approval requirements for LPG mobile industrial direct-fired air heaters
Miscellaneous heaters	AS 4553-2008 Gas space heating appliances

GSMR Updates

Appliance and/or fittings type	Applicable standard
	Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Ovens	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Overhead radiant tube gas heaters	AS 4643-2007 Overhead radiant tube gas heaters
Pasta cookers and rethermalisers	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Radiant gas heaters for outdoor and non-residential indoor use	AS 4565-2004 Radiant gas heaters for outdoor and non-residential indoor use, including AS 4565-2004/Amdt 1-2011 Radiant gas heaters for outdoor and non-residential indoor use Or, until 30 June 2016: AS 4565-2001 Outdoor radiant gas heaters
Ranges	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Salamanders, grillers and griddles	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Space heaters	AS 2658-2008 LP Gas—portable and mobile appliances, including AS 2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658-2008/Amdt 3 Or, until 30 June 2016: AS 2658-2003 LP Gas—portable and mobile appliances
Stockpots and brat pans	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment
Storage water heaters	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating Or, until 30 June 2016: AS 4552-2000 Gas-fired water heaters for hot water supply and/or central heating
Wall furnaces	AS 4553-2008 Gas space heating appliances

GSMR Updates

Appliance and/or fittings type	Applicable standard
	Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—Part 1: Essential safety Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances
Wall ovens	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances