



### COVERSHEET

Minister	Hon Simon Watts	Portfolio	Energy
Title of Cabinet paper	Updating Energy Safety Standards Citations in Regulations	Date to be published	26 March 2025

List of documents that have been proactively released			
Date	Title	Author	
October 2024	Cabinet Policy Paper: Updating Energy Safety Standards Citations in Regulations	Office of Energy Minister	
23 October 2024	ECO-24-MIN-0240 Minute	Cabinet Office	

#### Information redacted

NO

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#### In Confidence

Office of the Minister for Energy

Cabinet Economic Policy Committee

### **Updating Energy Safety Standards Citations in Regulations**

#### Proposal

I am seeking Cabinet agreement to update approximately 440 citations of standards in the Electricity (Safety) Regulations 2010 and Gas (Safety and Measurement) Regulations 2010, along with a range of other technical updates to ensure the currency of these regulations. I am also seeking delegated authority to make any necessary technical changes to the updates proposed in this paper that may be required as a result of the drafting process or further targeted engagement with stakeholders.

#### **Relation to government priorities**

- 2 The proposals in this paper support:
  - better regulation, by ensuring key elements of our energy safety regime reflect current international best practice and effectively cover emerging technologies.
  - doubling renewable energy by 2050, in particular by reducing the costs of safe installation, operation and maintenance of solar and battery technologies and electric vehicle charging infrastructure. Increasing uptake of solar and battery technology will also support New Zealand's security of electricity supply and help to reduce emissions from fossil based electricity generation.
  - our commitment under the *Supercharging EV Infrastructure* work programme to update the AS/NZS 3000 Wiring Rules which set out the requirements for the design, construction, and verification for electrical installations.
  - a productive economy, by minimising the risk of trade barriers and compliance costs eventuating from New Zealand's regulatory recognition of safety standards no longer aligning with the more up to date regimes of some of our key trading partners.
  - the safety of those who work with, or use, electrical and gas products, by ensuring our regulatory framework includes up to date references to the standards expected for the sale, installation, and use of such products.

#### **Executive Summary**

3 The Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 (the regulations) cite or refer to over 600 standards and international certification regimes that set benchmarks for safe electricity and gas networks, installations, appliances, and associated fittings in New Zealand.

- 4 However, these citations have not been updated since 2014, meaning the majority refer to older versions of standards than are currently recognised in many other jurisdictions, and also that there is limited coverage of emerging solar and electric vehicle technologies.
- 5 This creates a number of issues including:
  - Possible future impacts on energy safety.
  - Challenges and additional compliance costs for importers and suppliers operating with trading partners that recognise more recent standards.
  - Challenges and additional compliance costs for installers and practitioners that may be required to work to older versions of standards, rather than current best practice.
  - Impacts on the uptake of new technologies for which there is uncertainty about safe use.
  - Higher costs for consumers looking to install renewable energy technologies such as solar panels or smart electric vehicle chargers, and over time decreasing choice as a result of our outdated standards citations.
- 6 An example of this issue that has been provided to officials by the solar industry is that the 2020 version of AS/NZS 4777.2 standard allows for the use of solar inverters with integral isolator switches but that the versions cited in current regulations require external isolators to be installed, increasing costs to consumers. The updates in this paper will resolve this issue among many others. There have also been concerns about the continued use of the 2007 version AS/NZS 3000 (the standard for wiring installations) rather than the 2018 version, from a range of stakeholders, including Master Electricians. We have committed to update this reference as part of *Supercharging EV Infrastructure*.
- 7 To remove these barriers and reduce costs, I am seeking Cabinet agreement to approximately 440 updates in citations across the regulations ensuring these references use the latest versions of standards. I am also seeking delegated authority to make any necessary technical and timing changes to the updates proposed in this paper that may be required as a result of the drafting process or further targeted engagement with stakeholders.
- 8 I also note that the Regulatory Systems (Immigration and Workforce) Amendment Bill (the Bill), set to be passed in 2025, will amend relevant legislation to enable WorkSafe to update these citations via agreement by the relevant Minister rather than needing to change Regulations, meaning they can be kept up to date more efficiently and easily in future.

#### Background

#### The citation of standards in regulations is out of date

- 9 The Electricity Act 1992 and Gas Act 1992 set the legislative framework and requirements for electricity and gas safety (energy safety) from supply through to end use. Included in the purpose of these Acts is to protect the public and workers, as well as to prevent property damage in connection with the supply and use of electricity and gas. The coverage includes the safety of electrical and gas appliances and fittings at the time of sale or supply.
- 10 The Electricity (Safety) Regulations 2010 and the Gas (Safety and Measurement) Regulations 2010 (the regulations) cite over 600 standards and international certification regimes that set benchmarks for safe electricity and gas networks, installations, appliances, and associated fittings in New Zealand. 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.
- 11 The citations of standards in the two sets of regulations were last updated in 2013/14. Given most standards are updated by standards-setting bodies on a roughly five-year cycle, this means that most of the citations in the regulations refer to versions of the standards in question which are no longer current. Additionally, over the last decade there have been advances in and uptake of new electrical technologies related to solar generation, energy storage, and the use of electric vehicles, which are not well covered by currently cited standards. Finally, there are several references in the Gas (Safety and Measurement) Regulations 2010 to old certification regimes which require updating.

#### Impacts of out of date standards citations

12 Stakeholders who are trading, operating and utilising gas and electrical technology have expressed concern and frustration about how outdated the standards are and about the process for updating them. They face challenges in managing the inflow and outflow of products and delivery of services certified to standards overseas that differ from those cited in New Zealand regulations. Stakeholders need to manage two sets of standards, the modern overseas standards and older New Zealand versions. This time and cost is ultimately passed on to consumers who wish to access these technologies. A range of issues have also been raised regarding the currency and coverage of standards cited relating to emerging solar and electrical vehicle technologies from groups such as the Solar Energy Association of New Zealand, and providers in the sector.

#### Impacts on energy safety

13 There is little substantive evidence to suggest that the current outdated state of the energy safety regulations has negatively impacted on energy safety outcomes. However, over time the added compliance costs and uncertainty associated with working with outdated versions of standards will likely increase risk, as will the fact that emerging technologies and practices are not effectively covered in the current regulations.

#### Challenges for importers and suppliers

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- 14 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 in order to be sold here.
- 15 With New Zealand's regulations increasingly referencing versions of standards no longer utilised by our major trading partners, some importers and suppliers are uncertain about whether their imported products comply with outdated standards cited for New Zealand. This is because manufacturers typically supply information about compliance to the latest international standards rather than to those referenced in regulations.
- 16 Suppliers have expressed frustration with the outdated nature of the standards and the costs of complying with the old standards. Suppliers are having to dedicate time and resource ensuring they comply with both the modern, internationally used standards, and outdated standards which are used only in New Zealand, but must be complied with to sell in the New Zealand market.
- 17 Additionally, 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 regimes used in New Zealand for the import, export, trade, and sale of products.
- 18 The lack of certainty resulting from this 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. This is likely hindering the uptake of consumer owned energy generation that can help to solve New Zealand's security of electricity supply challenges.

#### Challenges for installers and practitioners

19 For installers and users of technology, not being able to utilise the latest standards for installation can inhibit their ability to use the most efficient and effective practices. This results in requests to WorkSafe for exemptions, which is costly and time consuming for both stakeholders and WorkSafe. The solar installation industry is particularly hindered by this issue, as solar technology has progressed in the past few years.

#### Impacts on the uptake of new technologies

20 Outdated standards references also impose barriers to the uptake of new technologies and practices. Additionally, manufacturers may withdraw from supplying the New Zealand market because of the cost of running dual verification systems and uncertainty about whether their products meet New Zealand requirements, potentially limiting choice for domestic importers and exporters of electrical and gas products.

#### Impacts on consumers

21 Overseas importers may also potentially avoid 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.

# The proposals in this paper will reduce these challenges and support the increased uptake of renewable energy technologies

- 22 Pursuing the changes proposed in this paper at pace should help to mitigate these challenges. In particular they will:
  - address stakeholder concerns with standards relating to solar energy usage, which are currently being inefficiently addressed through WorkSafe exemptions.
  - enable more efficient installation of renewable energy technology such as solar panels, batteries and EV chargers and thereby help to reduce the cost of adoption.
  - reduce additional costs for manufactures to verify that the imported product meets standards referenced in New Zealand regulations when the product already meets standards in comparable jurisdictions; a cost that is passed on to the New Zealand market.
  - reduce the risk manufacturers 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 and consumer access to the latest, safest products.
  - minimise potential risks to public health and safety and simplifying compliance and verification for importers, suppliers, and installers.

#### Proposed Updates to the ESR and GSMR

#### **Changes to Standards Citations**

- 23 I am recommending the update and/or introduction approximately 440 citations in regulation. The key changes are:
  - Updates to 50 citations in *Schedule 2* of the *Electricity (Safety) Regulations* 2010, primarily to the latest available version of the same standard, including in relation to solar technologies<sup>1</sup>.
  - Updates to 309 citations in *Schedule 4* of the *Electricity (Safety) Regulations* 2010, primarily to the latest available version of the same standard.
  - Introduction of 53 new citations in *Schedule 4* of the *Electricity (Safety) Regulations 2010*, addressing a range of technologies, including (but not limited to) refrigerating systems, electrical vehicles, and transportable tools.
  - Updates to 22 citations in *Schedule 1* of the *Gas (Safety and Measurement) Regulations 2010*, primarily to the latest available version of the same standard<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Enabled through Section 169 of the Electricity Act 1992.

<sup>&</sup>lt;sup>2</sup> Enabled through Section 54 of the Gas Act 1992.

A full list of proposed changes is attached to this paper as Appendix 1.

#### **Other Changes**

- 25 Additional to the updates of citations, these changes will also:
  - Update references to Gas compliance bodies in the Gas (Safety and Measurement) Regulations 2010 to recognise current European, Australian, and British gas certification bodies.
  - Restructure of parts of Schedule 4 of the Electricity (Safety) Regulations 2010 to better categorise products covered in these regulations.

#### Consultation has supported the proposed approach

- From 2019 to 2020, a major update of the regulations was developed, proposing updates and changes to over 300 citations in the regulations, aimed at updating references, introducing new references, recognising new certification bodies, and restructuring Schedule 4 of the Electricity regulations. Consultation on this proposal in 2021 resulted in 78 submissions were from a range of stakeholders including peak bodies, businesses, and individuals. Stakeholders were largely supportive of the proposed changes set forth in the discussion document and changes suggested were largely minor<sup>3</sup>.
- 27 Further progression was halted by shifting priorities of the previous Government and this work was subsequently deprioritised, with resource being reassigned elsewhere. The associated delays meant that in many instances, changes consulted on no longer reflected the latest versions of specific standards.
- 28 Since our Government has reprioritised this work, MBIE and WorkSafe have worked to confirm a final list of proposed updates with some changes to what was consulted on. Primarily, these relate to instances where a more recent version of a standard has been published since that consultation took place. Where this has occurred, assessment has been undertaken to ensure these newer versions are appropriate for application in New Zealand.
- 29 Additionally, there are a number of other changes that have been proposed to incorporate modifications to the standards to be cited, cite different standards than were initially consulted on, or deliver consequential amendments note previously identified. Upon analysis, I am confident these changes are appropriate. However, WorkSafe and MBIE will continue to engage with stakeholders as appropriate bodies to address any issues that may arise either from stakeholders, or during the drafting process.
- 30 I am seeking Cabinet's delegation to make final decisions on the inclusion of any changes in the revised regulations that may be identified during drafting.

<sup>&</sup>lt;sup>3</sup> There was considerable resistance to an initial proposal to dually cite both the 2007 and 2018 versions of AS/NZS 3000. This resulted in a targeted supplementary consultation with key stakeholders and informed a revised proposal to instead simply update the citation to recognise the 2018 version of the standard. There will however be transition arrangements to manage the change without disrupting supply chain arrangements.

#### Costs of the proposed changes

- 31 Feedback received during initial consultation did not identify any major potential costs associated with the proposed updates. Stakeholders almost uniformly saw the benefits of updated regulations outweighing any costs.
- 32 There will be some short-term costs to importers, suppliers, and installers of electrical and gas products, and by extension to consumers, associated with accessing standards and training staff. However, given most international products are already meeting the updated standards, it is expected that this will be comparatively limited in most cases. Any costs should also be an expected cost of business for implementing new technologies and managing safety.

# The Government is also progressing a more efficient long term solution for managing the citation of safety standards

- 33 The current approach to citing standards in regulation and updating them through a Cabinet process is unduly onerous and risks undermining the regulatory regime. Updates to international standards are regularly published and it is difficult for the existing process to keep up.
- 34 The Regulatory Systems (Immigration and Workforce) Amendment Bill (the Bill) will amend relevant legislation to enable WorkSafe to update referenced standards via agreement from the relevant Minister and without the need for a full Cabinet and regulation making process. This will allow references to standards to be kept up to date regularly as they are published, avoiding the current situation and reducing administrative burden.
- 35 The Bill is currently in Select Committee, and the four submissions received referencing the amendments were all strongly in favour of them.
- 36 Assuming no unexpected delays, Royal assent is anticipated by April 2025.

#### Timing

- 37 These changes are long overdue, and there is substantial anticipation and impatience from stakeholders to see them completed. To this end, I am proposing to prioritise these updates, to be finalised as soon as practicable in 2025.
- 38 PCO has advised that approximately four months will be required for drafting. Factoring in the Christmas break, this would mean drafting could be completed by April 2025 and then Gazetted soon after.
- 39 As well as seeking Cabinet delegation to make final decisions on any changes to the proposed updates that stakeholders or officials may identify as necessary, I am also seeking delegation to make decisions on the timing of the proposed updates, should delays occur and a tranche approach be identified as the best mechanism for ensuring priority updates can be swiftly completed.

#### **Cost-of-living Implications**

40 It is not expected that these changes will have a substantive impact on the cost of living. In the short term some costs may be driven by electricity and gas industry stakeholders adapting to use of new and updated standards, but this will be countered by a reduction in compliance and operational complexity delivered by better aligning our regulatory settings with those of our major trading partners.

#### **Financial Implications**

41 There are no financial implications for the Crown arising from the recommendations in this paper.

#### Legislative Implications

42 These changes to the ESR and GSMR will not require a bill but will require PCO resource to undertake a substantial number of updates to those regulations.

#### **Impact Analysis**

#### **Regulatory Impact Statement**

43 The Ministry for Regulation has determined that this proposal is exempt from the requirement to provide a Regulatory Impact Statement on the grounds that it has no or only minor impacts on businesses, individuals, and not-for-profit entities.

#### **Climate Implications of Policy Assessment**

44 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not apply to this proposal as the threshold for significance is not met.

#### **Population Implications**

45 There are no specific population implications associated with the recommendations in this paper.

#### **Human Rights**

46 The recommendations in this paper do not create any inconsistencies with the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

#### **Use of external Resources**

47 No external resources have been used in the development of the recommendations in this paper.

#### Consultation

48 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,

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Environmental Protection Authority, New Zealand Trade and Enterprise, Standards New Zealand, Ministry of Foreign Affairs and Trade. The Department of the Prime Minister and Cabinet were informed of the contents of this paper.

#### Communications

49 Given industry's interest in these changes and frustration at previous delays, I intend to make a general statement to stakeholders indicating this work is now progressing and providing broad timelines, following Cabinet's decisions. Alongside this I will inform stakeholders of options to alter the upper voltage limit for power supply, aimed at supporting home solar generation.

#### **Proactive Release**

50 I expect to proactively release this Cabinet paper, potentially with redactions should any decisions remain outstanding, within 30 days of Cabinet's decisions.

#### Recommendations

The Minister for Energy recommends that the Committee:

- 1 **Note** there are over 600 citations of energy safety standards in the *Electricity (Safety) Regulations 2010* and the *Gas (Safety and Measurement) Regulations 2010*, which set expectations for the safe installation and usage of electrical and gas products respectively
- 2 **Note** that these citations have not been updated since 2014, and most now refer to outdated versions of the standards in question
- 3 **Note** that some emerging technologies, such as those associated with solar panels electric vehicle charging, are not well covered by the *Electricity (Safety) Regulations* 2010
- 4 Note that I am proposing a substantial update and/or introduction of approximately 440 citations across both the *Electricity (Safety) Regulations 2010* and the *Gas (Safety and Measurement) Regulations 2010*, along with changes to recognise new gas certification bodies in the *Gas (Safety and Measurement) Regulations 2010* and make layout changes to the *Electricity (Safety) Regulations 2010*
- 5 Agree to the proposed changes to the *Electricity (Safety) Regulations 2010* and the *Gas (Safety and Measurement) Regulations 2010*, which are detailed in full in Appendix One of this paper
- 6 Note that given the scale of proposed changes, it may be necessary to work with Parliamentary Counsel Office to undertake the proposed updates in tranches, to ensure the most important changes can be made as swiftly as possible
- 7 **Agree** to delegate to the Minister for Energy the ability to make any final refinements to the changes proposed in this paper without reporting back to this Committee, should these be required following stakeholder or officials feedback

8 **Agree** to delegate to the Minister for Energy the ability to make decisions on whether to progress all changes at once, or in tranches without reporting back to this Committee.

Authorised for lodgement.

Hon Simeon Brown

Minister for Energy

### Appendices

**Appendix One:** Proposed updates to the Electricity (Safety) Regulations 2010 and Gas (Safety and Measurement) Regulations 2010

# Appendix 1: Proposed updates to the Electricity Safety Regulations 2010 and Gas (Safety and Measurement) Regulations 2010

#### Section 1 – Proposed Updates

- Table 1: Standards citations to be updated in Schedule 2 of the ESR
- Table2: Standards citations to be removed from Schedule 2 of the ESR
- Table 3: Standards citations to be updated in Schedule 4 of the ESR
- Table 4: Standards citations to be added to Schedule 4 of the ESR
- Table 5: Standards citations to be updated in Schedule 1 of the GSMR
- Table 6: Standards citations to be removed from Schedule 1 of the GSMR
- Table 7: New and updated Standards Citations and References to gas certification bodies in Schedule 2A of the GSMR
- Table 8: New standards and conditions applying to UK certifying bodies

#### Section 2 - Proposed modifications to new and updated standards

### Section 1 – Proposed Updates

Table 1: Standards citations to be updated in Schedule 2 of the ESR

ESR Schedule 2 Currently cited standard	ESR Schedule 2 Replacement standard	Transition (where relevant)
AS 2290.1:1990: Electrical equipment for coal mines— Maintenance of electrical equipment for hazardous areas	AS 2290.1:2021 Electrical equipment for coal mines - Introduction, inspection and maintenance, Part 1: Hazardous areas	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS 2290.3:1990: Electrical equipment for coal mines— Maintenance and overhaul—Maintenance of gas detecting and monitoring equipment	AS/NZS 2290.3:2018 Electrical equipment for coal mines — Introduction, inspection and maintenance, Part 3: Gas detecting and monitoring equipment, including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS 4777.1:2005: Grid connection of energy systems via inverters—Part 1: Installation requirements	AS/NZS 4777.1:2016 Grid connection of energy systems via inverters - Part 1: Installation requirements	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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 1299:2022 Electrical equipment for mines and quarries - Explosion-protected three-phase restrained and bolted cable coupling devices for working voltages up to and including 11 kV	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 1677.2:1998: Refrigerating systems—Part 2: Safety requirements for fixed applications: including Amendments 1 and 2	AS/NZS 5149.1:2016 Refrigerating systems and heat pumps - Safety and environmental requirements - Part 1: Definitions, classification and selection criteria: (ISO 5149-1:2014, MOD) including amendment 1:2018 and amendment 2: 2018 AS/NZS 5149.2:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Design, construction, testing, marking and documentation (ISO 5149- 2:2014, MOD) AS/NZS 5149.3:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 3: Installation site (ISO 5149-3:2014, MOD) AS/NZS 5149.4:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 3: Installation site (ISO 5149-3:2014, MOD)	Immediate transition to latest standard with the ability for projects already started or quoted under the old standard to continue under that standard.
AS/NZS 1747:2003: Reeling, trailing and feeder cables used for mining—Repair, testing and fitting of accessories	AS/NZS 1747:2022 Reeling, trailing and feeder cables used for mining - Repair, testing and fitting of accessories	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 1802:2003: Electric cables—Reeling and trailing— For underground coal mining purposes	AS/NZS 1802:2018 Electric cables - Reeling and trailing - For underground coal mining	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 1826:2008: Electrical equipment for explosive gas atmospheres—Special protection—Type of protection 's'	AS/NZS 60079.33:2012 Explosive atmospheres - Equipment protection by special protection 's'	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 2500:2004: Guide to the safe use of electricity in patient care	AS/NZS 2500:2020: Safe use of medical electrical equipment in health care	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
<ul> <li>AS/NZS 3000:2007: Electrical installations (known as the Australian/New Zealand Wiring Rules): including Amendments 1 and 2, subject to the following modifications:</li> <li>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".</li> <li>2. In 4.18.1(b) and (c), change "all live (active and neutral) conductors" to "all active conductors".</li> <li>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 installed in the hazardous areas of a domestic installation, shown in figure 4.10."</li> <li>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."</li> </ul>	AS/NZS 3000:2018 Electrical installations (known as the Australian/New Zealand Wiring Rules). Including Amendments 1, 2 and 3.	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3001:2008: Electrical installations—Transportable structures and vehicles including their site supplies: including Amendment 1	AS/NZS 3001.1:2022 Electrical installations — Connectable electrical installations and supply arrangement Part 1: Site supplies for connectable electrical installations	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
	AS/NZS 3001.2:2022 Electrical installations — Connectable electrical installations and supply arrangements, Part 2: Connectable electrical installations	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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	AS/NZS 3002:2021 Electrical installations - Shows and carnival events	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3003:2011: Electrical installations—Patient areas	AS/NZS 3003:2018 Electrical installations - Patient areas including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3004.1:2008: Electrical installations—Marinas and recreational boats—Part 1: Marinas	AS/NZS 3004.1:2014 Electrical installations - Marinas and boats - Part 1: Marinas	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3004.2:2008: Electrical installations—Marinas and recreational boats—Part 2: Recreational boats installations	AS/NZS 3004.2:2014 Electrical installations - Marinas and boats - Part 2: Boat installations	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

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ESR Schedule 2 Currently cited standard	ESR Schedule 2 Replacement standard	Transition (where relevant)
AS/NZS 3010:2005: Electrical installations—Generating sets	AS/NZS 3010:2017 Electrical installations - Generating sets including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3012:2010: Electrical installations—Construction and demolition sites	AS/NZS 3012:2019 Electrical installations - Construction and demolition sites including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3019:2007: Electrical installations—Periodic verification	AS/NZS 3019:2022 Electrical installations - Periodic assessment	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3112:2011: Approval and test specification—Plugs and socket-outlets: including Amendment 1	AS/NZS 3112:2017 Approval and test specification - Plugs and socket-outlets	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3190:2011: Approval and test specification— Residual current devices (current-operated earth-leakage devices)	AS/NZS 3190:2016 Approval and test specification—Residual current devices (current-operated earth-leakage devices) including Amendment 1: 2020	Immediate adoption of replacement standard.
AS/NZS 3551:2012: Management programs for medical devices	AS/NZS 3551:2012 A1 Management programs for medical equipment including Amendment 1 and Amendment 2	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3760:2010: In-service safety inspection and testing of electrical equipment: including Amendments 1 and 2	AS/NZS 3760:2022: In-service safety inspection and testing of electrical equipment	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3800:2005: Electrical equipment for explosive atmospheres—Repair and overhaul	AS/NZS 3800:2020 Electrical equipment for explosive atmospheres—Repair and overhaul including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 3820:2009: Essential safety requirements for electrical equipment: including Amendment 1	AS/NZS 3820:2020 Essential safety requirements for electrical equipment	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 4249:1994: Electrical safety practices—Film, video and television sites	AS/NZS 4249:2022 Electrical installations and safety practices – Film, video and television sites including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 4761.1:2008: Competencies for working with electrical equipment for hazardous areas (EEHA)— Competency Standards	AS/NZS 4761.1:2018 Competencies for working with electrical equipment for hazardous areas (EEHA) - Part 1: Competency Standards	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 4836:2011: Safe working on or near low-voltage electrical installations and equipment	AS/NZS 4836:2023 Safe working on or near low-voltage and extra-low voltage electrical installations and equipment	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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".	AS/NZS 5033:2021 Installation and safety requirements for photovoltaic (PV) arrays	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 7000:2010: Overhead line design—Detailed procedures	AS/NZS 7000:2016 Overhead line design	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 60079.0:2012: Explosive atmospheres—Part 0: Equipment—General requirements	AS/NZS IEC 60079.0: 2019 Explosive atmospheres - Part 0: Equipment - General requirements	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 60079.14:2009: Explosive atmospheres—Part 14: Electrical installations design, selection and erection: including Amendment 1	AS/NZS 60079.14:2022 Explosive atmospheres, Part 14: Design selection, erection and initial inspection	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 60079.17:2009: Explosive atmospheres—Part 17: Electrical installations inspection and maintenance: including Amendment 1	AS/NZS 60079.17:2017 Explosive atmospheres - Part 17: Electrical installations inspection and maintenance	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
AS/NZS 60079.29.2:2008: Explosive atmospheres—Gas detectors—Selection, installation, use, and maintenance of detectors for flammable gases and oxygen	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	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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	AS/NZS IEC 61000.3.2:2023 Electromagnetic compatibility (EMC), Part 3.2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
BS 6164:2011: Code of practice for health and safety in tunnelling in the construction industry	BS 6164:2019 - TC Health and safety in tunnelling in the construction industry. Code of practice	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
IEC 60050-826 Ed 2: International electrotechnical vocabulary—Part 826: Electrical installations	IEC 60050-826 Ed 3.0 2022 International Electrotechnical Vocabulary (IEV) - Part 826: Electrical installations	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
IEC 60079-0 Ed 6.0 Explosive atmospheres—Equipment— General requirements	IEC 60079-0 Ed 7.0 (2017) Explosive atmospheres - Part 0: Equipment - General requirements	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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	IEC 61000-3-2:2018 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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	IEC 61000-3-3 Ed 3.2 (2021) 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	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

ESR Schedule 2 Currently cited standard	ESR Schedule 2 Replacement standard	Transition (where relevant)
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	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	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
EC 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	IEC 61000-3-12:2011 Edition 2.1 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 including Amendment 1	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
IEEE 1222-2011: IEEE standard for testing and performance for all-dielectric self-supporting (ADSS) fibre optic cable for use on electric utility power lines	IEEE 1222-2019 IEEE Standard for Testing and Performance for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable for Use on Electric Utility Power Lines	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
NZS 7901:2008: Electricity and gas industries—Safety management systems for public safety	NZS 7901:2014 Electricity and gas industries – Safety management systems for public safety	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

### Table2: Standards citations to be removed from Schedule 2 of the ESR

ESR Schedule 2 Standard to be removed	Notes
AS/NZS 3439.4.2009: Low-voltage switchgear and control gear assemblies—Part 4: Particular requirements for assemblies for construction sites (ACS)	During consultation it was proposed that this standard be updated to AS/NZS 61439.4:2016. However, this standard was included in the regulations for the purposes of the citation of AS/NZS 3002; now that AS/NZS 3002 has been updated, we no longer need to update to AS/NZS 61439.4:2016 and can remove AS/NZS 3439.4.2009 altogether.

### Table 3: Standards citations to be updated in Schedule 4 of the ESR

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Clause 1: Household and similar electrical appliances			
Subclause (1) Subclause (2)	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.	Standard A means IEC 60335-1 Ed 6.0 (2020) Household and similar electrical appliances - Safety - Part 1: General requirements as modified by AS/NZS 60335.1:2022 including Corrigendum 1 Standard B means IEC 60335-1 Ed 5.2 (2016) Household and similar electrical appliances - Safety - Part 1: General requirements as modified by AS/NZS 60335.1:2020 including Amendment 1 and Corrigendum 1	Immediate adoption of replacement standard.
Air-cleaning appliances	Standard A, or standard B, in conjunction with IEC 60335-2-65 Ed 2.1	Standard A, in conjunction with IEC 60335-2-65 Ed 3.0 (2023) Household and similar electrical appliances - Safety - Part 2-65: Particular requirements for air-cleaning appliances OR Until 04/05/2026, Standard B, in conjunction with IEC 60335-2-65 Ed 2.2 (2015) Household and similar electrical appliances - Safety - Part 2- 65: Particular requirements for air-cleaning appliances	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
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	Standard B, in conjunction with IEC 60335-2-82 Ed 3.1 (2020) Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines	Immediate adoption of replacement standard.
Appliances for heating liquids	Standard A, or standard B, in conjunction with IEC 60335-2-15 Ed 5.2 as modified by Annex ZZ of AS/NZS 60335.2.15:2002, including Amendments 1 to 4	Standard B, in conjunction with IEC 60335-2-15 Ed 6.2 (2018) Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids as modified by AS/NZS 60335.2.15:2019 Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids	Immediate adoption of replacement standard.
Appliances to recover and/or recycle refrigerant from air conditioning and refrigeration equipment	Standard A, or standard B, in conjunction with IEC 60335-2- 104 Ed 1.0	Standard B, in conjunction IEC 60335-2-104 Ed 2.0 (2021) 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 adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-72 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for floor treatment machines with or without traction drive, for commercial use Or Until 04/05/2026, Standard B, in conjunction with 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	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
		without traction drive, for commercial use	

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Battery chargers	Standard A. or standard B. in conjunction with IEC 60335-2-29	Standard B. in conjunction with IEC 60335-2-29 Ed 5.1 (2019)	Immediate adoption of replacement
	Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.29:2004, including Amendments 1 and 2	Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers as modified by AS/NZS 60335.2.29:2017 Household and similar electrical appliances - Safety - Part 2.29: Particular requirements for battery chargers, including Amendment 1.	standard.
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 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	Standard A, in conjunction with IEC 60335-2-17 Ed 4.0 (2022) Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances as modified by AS/NZS 60335.2.17:2023 Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances OR	Immediate adoption of replacement standard, with transition until 01/12/2026 for standard B.
		3.2 (2019) Household and similar electrical appliances - Safety - Part 2- 17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances as modified by AS/NZS 60335.2.17:2012 Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances including Amendment 1 and 2	
Clocks	Standard A, or standard B, in conjunction with IEC 60335-2-26 Ed 4.1	Standard B, in conjunction with IEC 60335-2-26 Ed 4.1 (2008) Household and similar electrical appliances - Safety - Part 2-26: Particular requirements for clocks	Immediate adoption of replacement standard.
Clothes dryers and towel rails	Standard A, or standard B, in conjunction with IEC 60335-2-43 Ed 3.2	Standard B, in conjunction with IEC 60335-2-43 Ed 4.0 (2017) Household and similar electrical appliances - Safety - Part 2-43: Particular clothes dryers and towel rails	Immediate adoption of replacement standard.
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	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.75:2013 including Amendments 1, 2 and 3	Immediate adoption of replacement standard.
Commercial electric appliances for keeping food and crockery warm	Standard A, or standard B, in conjunction with IEC 60335-2-49 Ed 4.1	Standard A, in conjunction with IEC 60335-2-49 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery warm	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
		OR Until 04/05/2026, Standard B, in conjunction with 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 warm	
Commercial electric bains-marie	Standard A, or standard B, in conjunction with IEC 60335-2-50 Ed 4.1	Standard A, in conjunction with IEC 60335-2-50 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2-50: Particular requirements for commercial electric bains-marie OR Until 04/05/2026, Standard B, in conjunction with IEC 60335-2-50 Ed	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
Communicated astroin	Characteristic devel P. in continuation with USC CO225-2-47	4.2 (2017) Household and similar electrical appliances - Safety - Part 2- 50: Particular requirements for commercial electric bains-marie	
boiling pans	Ed 4.1	Household and similar electrical appliances - Safety - Part 2-47: Particular requirements for commercial electric boiling pans	standard, with transition until 04/05/2026 for standard B.
		Until 04/05/2026, Standard B, in conjunction with IEC 60335-2-47 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2- 47: Particular requirements for commercial electric boiling pans	
Commercial electric cooking ranges, ovens, hobs, and hob elements	Standard A, or standard B, in conjunction with IEC 60335-2-36 Ed 5.2	Standard A, in conjunction with IEC 60335-2-36 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2-36: Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements OR	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
		Until 04/05/2027, Standard B, in conjunction with 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	
Commercial electric deep fat fryers	Standard A, or standard B, in conjunction with IEC 60335-2-37 Ed 5.2	Standard A, in conjunction with IEC 60335-2-37 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2-37: Particular requirements for commercial electric doughnut fryers and deep fat fryers OR	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
		Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-37 Ed 6.0 (2017) Household and similar electrical appliances - Safety - Part 2- 37: Particular requirements for commercial electric doughnut fryers and deep fat fryers	

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Commercial electric dishwashing machines	Standard A, or standard B, in conjunction with IEC 60335-2-58 Ed 3.1	Standard B, in conjunction with 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 adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-42 Ed 6.0 (2021) Household and similar electrical appliances - Safety - Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam-convection ovens OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Commercial electric griddles and griddle grills	Standard A, or standard B, in conjunction with IEC 60335-2-38 Ed 5.1	Standard A, in conjunction with IEC 60335-2-38 Ed 6.0 (2021) Household and similar electrical appliances - Safety - Part 2-38: Particular requirements for commercial electric griddles and griddle grills OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Commercial electric grillers and toasters	Standard A, or standard B, in conjunction with IEC 60335-2-48 Ed 4.1	Standard A, in conjunction with IEC 60335-2-48 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2-48: Particular requirements for commercial electric grillers and toasters OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Commercial electric hoods	Standard A, or standard B, in conjunction with IEC 60335-2-99 Ed 1.0	Standard A, in conjunction with IEC 60335-2-99 Ed 2.0 (2021) Household and similar electrical appliances - Safety - Part 2-99: Particular requirements for commercial electric hoods OR Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-99 Ed 1.1 (2017) Household and similar electrical appliances - Safety - Part 2- 99: Particular requirements for commercial electric hoods	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
Commercial electric kitchen machines	Standard A, or standard B, in conjunction with IEC 60335-2-64 Ed 3.1	Standard A, in conjunction with IEC 60335-2-64 Ed 4.0 (2021) Household and similar electrical appliances - Safety - Part 2-64: Particular requirements for commercial electric kitchen machines OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Commercial electric multi-purpose cooking pans	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	Standard A, in conjunction with IEC 60335-2-39 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Commercial electric rinsing sinks	Standard A, or standard B, in conjunction with IEC 60335-2-62 Ed 3.1	Standard B, in conjunction with IEC 60335-2-62 Ed 4.0 (2019) Household and similar electrical appliances - Safety - Part 2-62: Particular requirements for commercial electric rinsing sinks	Immediate adoption of replacement standard.
Commercial microwave ovens	Standard A, or standard B, in conjunction with IEC 60335-2-90 Ed 3.1	Standard B, in conjunction with IEC 60335-2-90 Ed 4.1 (2019) Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave	Immediate adoption of replacement standard.
Commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor	Standard B in conjunction with IEC 60335-2-89 Ed 2.1 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	Standard B, in conjunction with IEC 60335-2-89 Ed 3.0 (2019) Household and similar electrical appliances - Safety - Part 2-89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor	Immediate adoption of replacement standard.
Deep fat fryers, frying pans, and similar appliances	Standard B, in conjunction with IEC 60335-2-13 Ed 6.0	Standard A, in conjunction with IEC 60335-2-13 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances OR Until 25/11/25 Standard B, in conjunction with 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 adoption of replacement standard, with transition until 25/11/2025 for standard B.
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	Standard B, in conjunction with IEC 60335-2-5 Ed 6.1 (2018) Household and similar electrical appliances - Safety - Part 2-5: Particular requirements for dishwashers as modified by AS/NZS 60335.2.5:2014 Household and similar electrical appliances - Safety - Part 2-5: Particular requirements for dishwashers including Amendments 1, 2 and 3.	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Drives for gates, doors, and windows	Standard A, or standard B, in conjunction with IEC 60335-2- 103 Ed 2.1	Standard A, in conjunction with IEC 60335-2-103 Ed 4.0 (2023) Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows OR Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-103 Ed 3.2 (2019) Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
Drives for rolling shutters, awnings, blinds, and similar equipment	Standard A, or standard B, in conjunction with IEC 60335-2-97 Ed 2.2	Standard A, in conjunction with IEC 60335-2-97 Ed 4.0 (2023) Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment OR Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-97 Ed 3.1 (2019) Household and similar electrical appliances - Safety - Part 2- 97: Particular requirements for drives for shutters, awnings, blinds and similar equipment	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
Drives for vertically moving garage doors for residential use	Standard B, in conjunction with IEC 60335-2-95 Ed 3.0	Standard A, in conjunction with IEC 60335-2-95 Ed 5.0 (2023) Household and similar electrical appliances - Safety - Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use OR Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-95 Ed 4.0 (2019) Household and similar electrical appliances - Safety - Part 2- 95: Particular requirements for drives for vertically moving garage doors for residential use	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
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	Standard B, in conjunction with IEC 60335-2-76 Ed 3.0 (2018) Household and similar electrical appliances - Safety - Part 2-76: Particular requirements for electric fence energizers as modified by of AS/NZS 60335.2.76:2019 Household and similar electrical appliances - Safety - Part 2-76: Particular requirements for electric fence energizers	Immediate adoption of replacement standard.
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	Standard B, in conjunction with IEC 60335-2-86 Ed 3.0 (2018) Household and similar electrical appliances - Safety - Part 2-86: Particular requirements for electric fishing machines	Immediate adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-3 Ed 7.0 (2022) Household and similar electrical appliances - Safety - Part 2-3: Particular requirements for electric irons OR Until 04/05/2027, Standard B, in conjunction with IEC 60335-2-3 Ed 6.1 (2015) Household and similar electrical appliances - Safety - Part 2-3: Particular requirements for electric irons	Immediate adoption of replacement standard, with transition until 04/05/2027 for standard B.
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	Standard B, in conjunction with 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 adoption of replacement standard.
Electrical appliances for use with aquariums and garden ponds	Standard A, or standard B, in conjunction with IEC 60335-2-55 Ed 3.1 as modified by Annex ZZ of AS/NZS 60335.2.55:2011	Standard A, in conjunction with IEC 60335-2-55 Ed 4.0 (2021) Household and similar electrical appliances - Safety - Part 2-55: Particular requirements for electrical appliances for use with aquariums and garden ponds OR Until 25/11/2025, Standard B, 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 as modified by AS/NZS 60335.2.55:2011 Household and similar electrical appliances - Safety - Part 2- 55: Particular requirements for electrical appliances for use with aquariums and garden ponds as modified by AS/NZS 60335.2.55:2011 Household and similar electrical appliances for use with aquariums and garden ponds	Immediate adoption of replacement standard, with transition until 25/11/2025 for standard B.
Electrical equipment for spa and swimming pools	AS/NZS 3136:2001, including Amendments 1 and 2	Standard B, in conjunction with IEC 60335-2-60 4.0 (2017) Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas as modified by AS/NZS 60335.2.60:2018 Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas	Immediate adoption of replacement standard.
Electrical heat pumps, air conditioners, and dehumidifiers	Standard A, or standard B, in conjunction with IEC 60335-2-40 Ed 4.2	Standard A, in conjunction with IEC 60335-2-40 Ed 7.0 (2022) Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers as modified by AS/NZS 60335.2.40:2023 Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	Standard B, in conjunction with IEC 60335-2-108 Ed 1.0 (2008) Household and similar electrical appliances - Safety - Part 2-108: Particular requirements for electrolysers as modified by AS/NZS 60335.2.108:2008 Household and similar electrical appliances - Safety - Part 2-108: Particular requirements for electrolysers	Immediate adoption of replacement standard.
Fabric steamers	Standard A, or standard B, in conjunction with IEC 60335-2-85 Ed 2.1	Standard A, in conjunction with IEC 60335-2-85 Ed 3.0 (2022) Household and similar electrical appliances - Safety - Part 2-85: Particular requirements for fabric steamers OR Until 01/12/2026, Standard B, in conjunction with IEC 60335-2-85 Ed 2.2 (2017) Household and similar electrical appliances - Safety - Part 2- 85: Particular requirements for fabric steamers	Immediate adoption of replacement standard, with transition until 01/12/2026 for standard B.
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, including Amendment 1	Standard B, in conjunction with IEC 60335-2-80 Ed 3.0 (2015) Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans as modified by AS/NZS 60335.2.80:2016 including Amendments 1 and 2 Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for	Immediate adoption of replacement standard.
Fixed immersion heaters	Standard A, or standard B, in conjunction with IEC 60335-2-73 Ed 2.2	fans Standard B, 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 adoption of replacement standard.
Flexible sheet heating elements for room heating	Standard A, or standard B, in conjunction with IEC 60335-2-96 Ed 1.2	Standard B, in conjunction with IEC 60335-2-96 Ed 2.0 (2019) Household and similar electrical appliances - Safety - Part 2-96: Particular requirements for flexible sheet heating elements for room heating	Immediate adoption of replacement standard.
Floor treatment and floor cleaning machines, for commercial use	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	Standard A, in conjunction with IEC 60335-2-10 Ed 6.0 (2021) Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines OR Until 25/11/2025, Standard B, 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 adoption of replacement standard, with transition until 25/11/2025 for standard B.
Food waste disposers	Standard A, or standard B, in conjunction with IEC 60335-2-16 Ed 5.1	Standard A, in conjunction with IEC 60335-2-16 Ed 6.0 (2022) Household and similar electrical appliances - Safety - Part 2-16: Particular requirements for food waste disposers OR Until 04/05/2026, Standard B, 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	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
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	Standard B, in conjunction with IEC 60335-2-81 Ed 3.2 (2020) Household and similar electrical appliances - Safety - Part 2-81: Particular requirements for foot warmers and heating mats as modified by AS/NZS 60335.2.81:2015 Household and similar electrical appliances - Safety - Part 2-81: Particular requirements for foot warmers and heating mats including Amendments 1, 2 and 3	Immediate adoption of replacement standard.
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	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.102:2018 Household and similar electrical appliances - Safety - Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections	Immediate adoption of replacement standard.
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	Standard B, in conjunction with IEC 60335-2-9 Ed 7.0 (2019) Household and similar electrical appliances - Safety - Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances as modified by AS/NZS 60335.2.9:2020 Household and similar electrical appliances - Safety - Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances	Immediate adoption of replacement standard.
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	Standard B, 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 adoption of replacement standard.
Heated carpets and underfloor heating appliances	Standard A, or standard B, in conjunction with IEC 60335-2- 106 Ed 1.0	Standard A, in conjunction with IEC 60335-2-106 Ed 2.0 (2021) 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 OR Until 25/11/2025, Standard B, 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 adoption of replacement standard, with transition until 25/11/2025 for standard B.
Heated gullies for roof drainage	Standard A, or standard B, in conjunction with IEC 60335-2-83 Ed 1.1	Standard B, 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 adoption of replacement standard.
Heating appliances for breeding and rearing animals	Standard A, or standard B, in conjunction 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	Standard B, in conjunction with 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	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	Standard A, in conjunction with IEC 60335-2-79 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
Humidifiers	Standard A, or standard B, in conjunction with IEC 60335-2-98 Ed 2.2	Standard A, in conjunction with IEC 60335-2-98 Ed 3.0 (2023) Household and similar electrical appliances - Safety - Part 2-98: Particular requirements for humidifiers OR Until 04/05/2026, Standard B, 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
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	Standard B, 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 adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-59 Ed 4.0 (2021) Household and similar electrical appliances - Safety - Part 2-59: Particular requirements for insect killers OR Until 25/11/2025, Standard B, 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 as modified by Annex ZZ of AS/NZS 60335.2.59:2005 Household and similar electrical appliances - Safety - Part 2-59: Particular requirements for insect killers including Amendments 1 to 3.	Immediate adoption of replacement standard, with transition until 25/11/2025 for standard B.
Instantaneous water heaters	Standard A, or standard B, in conjunction with IEC 60335-2-35 Ed 4.2	Standard B, in conjunction with IEC 60335-2-35 Ed 5.2 (2020) Household and similar electrical appliances - Safety - Part 2- 35:Particular requirements for instantaneous water heaters	Immediate adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-44 Ed 4.0 (2021) Household and similar electrical appliances - Safety - Part 2-44: Particular requirements for ironers OR Until 25/11/2025, Standard B, in conjunction with IEC 60335-2-44 Ed 3.2 (2012) Household and similar electrical appliances - Safety - Part 2- 44: Particular requirements for ironers	Immediate adoption of replacement standard, with transition until 25/11/2025 for standard B.
Kitchen machines	Standard A, or 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	Standard B, in conjunction with IEC 60335-2-14 Ed 6.1 (2019) Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines as modified by AS/NZS 60335.2.14:2017 Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines, including Amendment 1	Immediate adoption of replacement standard.
Massage appliances	Standard A, or standard B, in conjunction with IEC 60335-2-32 Ed 4.1	Standard B, in conjunction with IEC 60335-2-32 Ed 5.0 (2019) Household and similar electrical appliances - Safety - Part 2-32: Particular requirements for massage appliances	Immediate adoption of replacement standard.
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	Standard B, in conjunction with IEC 60335-2-25 Ed 7.0 (2020) Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens	Immediate adoption of replacement standard.
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	Standard B, in conjunction with IEC 60335-2-70 Ed 2.2 (2013) Household and similar electrical appliances - Safety - Part 2- 70:Particular requirements for milking machines	Immediate adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-34 Ed 6.0 (2021) Household and similar electrical appliances - Safety - Part 2-34: Particular requirements for motor-compressors	Immediate adoption of replacement standard.
Multifunctional shower cabinets	Standard A, or standard B, in conjunction with IEC 60335-2- 105 Ed 1.1	Standard B, in conjunction with IEC 60335-2-105 Ed 2.1 (2019) Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for multifunctional shower cabinets	Immediate adoption of replacement standard.
Oral hygiene appliances	Standard A, or standard B, in conjunction with IEC 60335-2-52 Ed 3.1	Standard A, in conjunction with IEC 60335-2-52 Ed 4.0 (2021) Household and similar electrical appliances - Safety - Part 2-52: Particular requirements for oral hygiene appliances OR Until 25/11/2025, Standard B, in conjunction with IEC 60335-2-52 Ed 3.2 (2017) Household and similar electrical appliances - Safety - Part 2- 52: Particular requirements for oral hygiene appliances	Immediate adoption of replacement standard, with transition until 25/11/2025 for standard B.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Outdoor barbecues	Standard A, or standard B, in conjunction with IEC 60335-2-78	Standard A, in conjunction with IEC 60335-2-78 Ed 3.0 (2021)	Immediate adoption of replacement
	Ed 2.1 as modified by Annex ZZ of AS/NZS 60335.2.78:2005,	Household and similar electrical appliances - Safety - Part 2-78:	standard, with transition until
	including Amendments 1 and 2	Particular requirements for outdoor barbecues	25/11/2025 for standard B.
		OR	
		Until 25/11/2025. Standard B. in conjunction with IEC 60335-2-78 Ed	
		2.2 (2019) Household and similar electrical appliances - Safety - Part 2-	
		78: Particular requirements for outdoor barbecues as modified by AS/NZS 60335 2 78:2019 Household and similar electrical appliances -	
		Safety - Part 2-78: Particular requirements for outdoor barbecues	
Pedestrian-controlled	Standard A or standard B in conjunction with IEC 60335-2-02	Standard B. in conjunction with IEC 60335-2-02 Ed 2.0 (2002)	Immediate adoption of replacement
mains-operated lawn	Ed 2.0	Household and similar electrical appliances - Safety - Part 2-92:	standard.
scarifiers and aerators		Particular requirements for pedestrian-controlled mains-operated lawn	
Pedestrian-controlled	Standard A or standard B in conjunction with IEC 60335-2-77	Standard B in conjunction with JEC 60335-2-77 Ed 2.0 (2002)	Immediate adoption of replacement
mains-operated	Ed 2.0	Household and similar electrical appliances - Safety - Part 2-77:	standard.
lawnmowers		Particular requirements for pedestrian controlled mains-operated lawnmowers	
Portable heating tools	Standard A, or standard B, in conjunction with IEC 60335-2-77	Standard B, in conjunction with IEC 60335-2-45 Ed 3.2 (2012)	Immediate adoption of replacement
and similar appliances	Ed 2.0	Household and similar electrical appliances - Safety - Part 2-45: Particular requirements for portable beating tools and similar	standard.
		appliances	
Portable immersion	Standard A, or standard B, in conjunction with IEC 60335-2-74	Standard A, in conjunction with IEC 60335-2-74 Ed 3.0 (2021) Household and similar electrical appliances - Safety - Part 2-74	Immediate adoption of replacement standard with transition until
licaters		Particular requirements for portable immersion heaters	25/11/2025 for standard B.
		OP	
		Until 25/11/2025, Standard B, in conjunction with IEC 60335-2-74 Ed	
		74: Particular requirements for portable immersion heaters as modified	
		by AS/NZS 60335.2.74:2018 Household and similar electrical appliances	
		heaters	
Projectors and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-56 Ed 3.1	Standard B, in conjunction with IEC 60335-2-56 Ed 3.2 (2014) Household and similar electrical appliances - Safety - Part 2-	Immediate adoption of replacement standard.
		56:Particular requirements for projectors and similar appliances	
Pumps	Standard A, or standard B, in conjunction with IEC 60335-2-41	Standard B, in conjunction with IEC 60335-2-41 Ed 4.0 (2012)	Immediate adoption of replacement
	including Amendment 1	Particular requirements for pumps as modified by AS/NZS	stanuaru.
		60335.2.41:2013 Household and similar electrical appliances - Safety -	
Panga boods and other	Standard A or standard P in conjunction with IEC 60225-2-21	Standard B. in conjunction with IEC 60225 2 21 Ed 5 2 (2018)	Immediate adaption of replacement
cooking fume	Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.31:2004,	Household and similar electrical appliances - Safety - Part 2-31:	standard.
extractors	including Amendments 1 to 4	Particular requirements for range hoods and other cooking fume	
		similar electrical appliances - Safety - Part 2.31: Particular requirements	
		for range hoods and other cooking fume extractors	
Refrigerating	Standard B, in conjunction with IEC 60335-2-24 Ed 7.1 as	Standard B, in conjunction with IEC 60335-2-24 Ed 8.0 (2020)	Immediate adoption of replacement
appliances, ice-cream	modified by AS/NZS 60335.2.24:2010 including Amendment 1	COR1:2021 Household and similar electrical appliances - Safety - Part 2-	standard.
makers	Until 31/05/2015, standard A, or standard B, in conjunction	appliances and ice makers as modified by AS/NZS 60335.2.24:2021	
	with IEC 60335-2-24 Ed 7.0 as modified by AS/NZS	Household and similar electrical appliances - Safety - Part 2-24:	
	60335.2.24:2010	appliances and ice makers, including Amendment 1	
Room heaters	Standard A. or standard B. in conjunction with IEC 60335-2-30	Standard B. in conjunction with IEC 60335-2-30 Ed 5 2 (2021)	Immediate adoption of replacement
	Ed 4.2 as modified by Annex ZZ of AS/NZS 60335.2.30:2009,	Household and similar electrical appliances - Safety -Part 2-	standard, with transition until
	including Amendment 1	30:Particular requirements for room heaters as modified by AS/NZS 60335.2.30:2023 Household and similar electrical appliances - Safety -	01/12/2026 for standard B.
		Part 2-30:Particular requirements for room heaters	
		OR	
		Until 01/12/2026, Standard B, in conjunction with IEC 60335-2-30 Ed 5.2 (2021) Household and similar electrical appliances - Safety -Part 2-	
		30:Particular requirements for room heaters as modified by AS/NZS	
		60335.2.30:2015 Household and similar electrical appliances - Safety - Part 2-30:Particular requirements for room beaters, including	
		Amendments 1, 2 and 4	
Course here the r	Ctondard D in environtian with 150 C0005 0 50 51 50		Immediate electric of the state
sauna neating appliances and infrared	standard B, in conjunction with IEC 60335-2-53 Ed 4.0 or	standard B, in conjunction with IEC 60335-2-53 Ed 4.2 (2021) Household and similar electrical appliances - Safety - Part 2-53:	immediate adoption of replacement standard.
cabins	Until 28/10/2014, standard C in conjunction with IEC 60335-2-	Particular requirements for sauna heating appliances and infrared	
Sewing machines	Standard & or standard B in conjunction with IEC 6022E 2.28	Standard A in conjunction with IEC 60225 2 29 Ed 5 0 (2021)	Immediate adoption of ronlocomont
Sewing machines	Ed 4.1	Household and similar electrical appliances - Safety - Part 2-28:	standard, with transition until
		Particular requirements for sewing machines	25/11/2025 for standard B.
		OR	
		Until 25/11/2025. Standard B. 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	

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Spin extractors	Standard A, or standard B, in conjunction with IEC 60335-2-4 Ed 6.0	Standard A, in conjunction with IEC 60335-2-4 Ed 8.0 (2023) Household and similar electrical appliances - Safety - Part 2-4: Particular requirements for spin extractors OR Until 04/05/2026, Standard B, in conjunction with IEC 60335-2-4 Ed 7.0 (2021) Household and similar electrical appliances - Safety - Part 2-4: Particular requirements for spin extractors	Immediate adoption of replacement standard, with transition until 04/05/2026 for standard B.
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	Standard A, in conjunction with IEC 60335-2-68 Ed 5.0 (2021) Household and similar electrical appliances - Safety - Part 2- 68:Particular requirements for spray extraction machines, for commercial use OR Until 04/05/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2026 for standard B.
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	Standard A, in conjunction with IEC 60335-2-51 Ed 5.0 (2023) Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations OR Until 04/05/2027, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2027 for standard B.
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	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.6:2014 including Amendments 1 and 2	Immediate adoption of replacement standard.
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	Standard A, in conjunction with IEC 60335-2-21 Ed 7.0 (2022) Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters as modified by AS/NZS 60335.2.21:2023 Household and similar electrical appliances – Safety – Part 2.21: Particular requirements for storage water heaters OR Until 01/12/2026, Standard B, in conjunction with IEC 60335-2-21 Ed 6.1 (2018) Household and similar electrical appliances - Safety - Part 2- 21: Particular requirements for storage water heaters as modified by AS/NZS 60335.2.21:2013 Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters as modified by AS/NZS 60335.2.21:2013 Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters, including Amendments 1 and 2	Immediate adoption of replacement standard, with transition until 01/12/2026 for standard B.
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	Standard A, in conjunction with IEC 60335-2-54 Ed 5.0 (2022) Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam OR Until 01/12/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 01/12/2026 for standard B.
Thermal storage room heaters	Standard A, or standard B, in conjunction with IEC 60335-2-61 Ed 2.2	Standard B, 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 adoption of replacement standard.
Toilets	Standard A, or standard B, in conjunction with IEC 60335-2-84 Ed 2.1	Standard B, in conjunction with IEC 60335-2-84 Ed 3.0 (2019) Household and similar electrical appliances - Safety - Part 2-84: Particular requirements for toilet appliances	Immediate adoption of replacement standard.
Tumble dryers	Standard A, or standard B, in conjunction with IEC 60335-2-11 Ed 7.0 as modified by 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 as modified by AS/NZS 60335.2.11:2020 Household and similar electrical appliances - Safety - Part 2-11: Particular requirements for tumble dryers	Immediate adoption of replacement standard.
UV radiation water treatment appliances	Standard B, in conjunction with IEC 60335-2-109 Ed 1.0	Standard A, in conjunction with IEC 60335-2-109 Ed 2.0 (2023) Household and similar electrical appliances - Safety - Part 2-109: Particular requirements for UV radiation water treatment appliances OR Until 04/05/2027, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 04/05/2027 for standard B.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	Standard B, in conjunction with IEC 60335-2-2 Ed 7.0 (2019) Household and similar electrical appliances - Safety - Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances as modified by AS/NZS 60335.2.2:2020 Household and similar electrical appliances - Safety - Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances, including Amendment 1	Immediate adoption of replacement standard.
Vaporisers	Standard A, or standard B, in conjunction with IEC 60335-2- 101 Ed 1.1	Standard B, in conjunction with IEC 60335-2-101 Ed 1.2 (2014) Household and similar electrical appliances - Safety - Part 2- 101:Particular requirements for vaporizers	Immediate adoption of replacement standard.
Warming plates and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-12 Ed 5.1	Standard B, in conjunction with 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 adoption of replacement standard.
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	Standard B, in conjunction with IEC 60335-2-7 Ed 8.0 (2019) Household and similar electrical appliances - Safety - Part 2-7:Particular requirements for washing machines	Immediate adoption of replacement standard.
Water-bed heaters	Standard B, in conjunction with IEC 60335-2-66 Ed 2.2 or Until 26/10/2014, standard A, or standard B, in conjunction with IEC 60335-2-66 Ed 2.1	Standard B, in conjunction with IEC 60335-2-66 Ed 2.2 (2011) Household and similar electrical appliances - Safety - Part 2-66: Particular requirements for water-bed heaters	Immediate adoption of replacement standard.
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	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.69:2017 Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use	Immediate adoption of replacement standard.
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, including Amendment 1	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.60:2018 Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas	Immediate adoption of replacement standard.
Clause 2: other electrical appliances			
Electric duct heaters	AS/NZS 3102:2002, including Amendments 1 to 3	AS/NZS 3102:2002 Approval and test specification - Electric duct heaters, including Amendments 1 to 4	Immediate adoption of replacement standard.
Electric toys	IEC 62115 Ed 1.2	IEC 62115 Ed 2.0 (2017) Electric toys – Safety	Immediate adoption of replacement standard.
Portable inverters	AS/NZS 4763:2011	AS/NZS 4763:2011 Safety of portable inverters	Immediate adoption of replacement standard.
Smoke detectors	AS/NZS 3100:2009, including Amendments 1 and 2	AS/NZS 3100:2022 Approval and test specification - General requirements for electrical equipment	Immediate adoption of replacement standard.
Clause 3: Low voltage electrical apparatus			
Air-break switches	AS/NZS 3133:2008, including Amendments 1 and 2	AS 3133:2020 Approval and test specification - Air-break switches OR IEC 60669-1 Ed 4.0 (2017) including COR1:2020 Switches for household	Immediate adoption of replacement standard.
		and similar fixed electrical installations - Part 1: General requirements as modified by AS/NZS 60669.1:2020 including Amendment 1	
Appliance couplers for household and similar general purposes	AS/NZS 60320.1:2012 or IEC 60320-1 Ed 2.1	IEC 60320-1 Ed 3.1 (2018) Appliance couplers for household and similar general purposes - Part 1: General requirements as modified by of AS/NZS 60320.1:2023 Appliance couplers for household and similar general purposes - Part 1: General requirements	Immediate adoption of replacement standard.
Bayonet lampholder adaptors	AS 3119:1994	AS/NZS 3119:2015 Approval and test specification - Lampholder adaptors	Immediate adoption of replacement standard.
Bayonet lampholders	AS/NZS 61184:2007 or IEC 61184 Ed 3.1, including Amendment 2, as modified by AS/NZS 61184:2007 or	IEC 61184 Ed 4.1 (2019) Bayonet lampholders as modified by Appendix ZZ of AS 61184:2022 Bayonet lampholders OR	Immediate adoption of replacement standard, with transition until 13/05/2025 for IEC 61184 Ed 3.1.
	Until 30/12/2016, AS/NZS 3117:2007	Until 13/05/2025, IEC 61184 Ed 3.1 (2011) Bayonet lampholders as modified by Appendix ZZ of AS/NZS 61184:2015 Bayonet lampholders, including Amendment 1 and 2	
Cord extension sets	AS/NZS 3199:2007	AS/NZS 3199:2020 Approval and test specification - Cord extension sets	Immediate adoption of replacement standard.
Cord extension sockets	AS/NZS 3120:2011	AS/NZS 3120:2021 Approval and test specification - Cord extension sockets	Immediate adoption of replacement standard.
Cord-line switches	AS/NZS 3127:2005 or IEC 61058-2-1 Ed 2.0	IEC 61058-2-1 Ed 3.0 (2018) Switches for appliances - Part 2-1: Particular requirements for cord switches OR AS/NZS 3127:2005 Approval and test specification - Cord-line switches	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Edison screw lampholders	AS/NZS 60238:2007 or IEC 60238 Ed 8.2 as modified by AS/NZS 60238:2007	IEC 60238 Ed 9.2 (2020) Edison screw lampholders as modified by AS 60238:2022 Edison screw lampholders	Immediate adoption of replacement standard, with transition until 13/05/2025 for IEC 60238 Ed 8.0.
	or	OR	-,,
	Until 30/12/2016, AS/N2S 3140:2007	Until 13/05/2025, IEC 60238 Ed 8.0 (2004) Edison screw lampholders as modified by AS/NZS 60238:2015 Edison screw lampholders, including Amendment 1	
Electric shaver supply units	AS/NZS 3194:1993, including Amendment 1	AS 3194:2015 Approval and test specification - Electric shaver supply units, including Amendment 1	Immediate adoption of replacement standard, with transition until 04/05/2026 for AS/NZS 3194:2015
		Until 4/5/2026 AS/NZS 3194:2015 Approval and test specification - Electric shaver supply units	
Electrical equipment for spa and swimming pools	AS/NZS 3136:2001, including Amendments 1 and 2	Standard B, in conjunction with IEC 60335-2-60 4.0 (2017) Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas as modified by AS/NZS 60335.2.60:2018 Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas	Immediate adoption of replacement standard.
Electrical equipment of machines	IEC 60204-1 Ed 5.1	IEC 60204-1 Ed 6.1 (2021) Safety of machinery - Electrical equipment of machines – Part 1: General requirements	Immediate adoption of replacement standard.
Electrical portable outlet devices	AS/NZS 3105:2012	AS/NZS 3105:2014 Approval and test specification - Electrical portable outlet devices, including Amendment 1	Immediate adoption of replacement standard.
Interconnection couplers for household and similar equipment	AS/NZS 60320.2.2:2004 or IEC 60320-2-2 Ed 2.0	IEC 60320-2-2 Ed 2.0 (1998) Appliance couplers for household and similar general purposes - Interconnection couplers for household and similar equipment as modified by AS/NZS 60320.2.2:2004 Appliance couplers for household and similar general purposes - Interconnection couplers for household and similar equipment	Immediate adoption of replacement standard.
Plugs and socket-	AS/NZS 3112:2011, including Amendment 1	AS/NZS 3112:2017 Approval and test specification – Plugs and socket-	Immediate adoption of replacement
Outlets	AS/N7S 2121-2001	outlets including Amendment 1	standard.
outlets for stationary appliances	K3/N23 5151.2001	outlets for stationary appliances	standard.
Plugs, socket-outlets, and couplers for industrial purposes— dimensional interchangeability requirements for pin and contact-tube accessories	IEC 60309-2 Ed 4.2	IEC 60309-2 Ed 5.0 (2021) Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 2: Dimensional compatibility requirements for pin and contact-tube accessories	Immediate adoption of replacement standard.
Plugs, socket-outlets, and couplers for industrial purposes— general requirements	IEC 60309-1 Ed 4.2	IEC 60309-1 Ed 5.0 (2021) Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 1: General requirements	Immediate adoption of replacement standard.
Plugs, socket-outlets, and couplers for industrial purposes— switched socket-outlets and connectors with or without interlock	IEC 60309-4 Ed 1.1	IEC 60309-4 Ed 2.0 (2021) Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 4: Switched socket-outlets with or without interlock	Immediate adoption of replacement standard.
Portable electrical control or conditioning devices	AS/NZS 3197:2005, including Amendments 1 and 2	See "Electrical portable outlet devices" above	This item is to be removed from the regulations as it is now combined with AS/NZS 3105:2014 referred to above.
Sewing machine couplers	AS/NZS 60320.2.1:2004 or IEC 60320-2-1 Ed 2.0	IEC 60320-2-1 Ed 2.0 (2018) Appliance couplers for household and similar general purposes - Part 2-1: Sewing machine couplers as modified by AS/NZS 60320.2.1:2004 Appliance couplers for household and similar general purposes - Sewing machine couplers	Immediate adoption of replacement standard.
Socket-outlet adaptors	AS/NZS 3122:2005	AS/NZS 3122:2021 Approval and test specification - Socket-outlet adaptors	Immediate adoption of replacement standard.
Temperature sensing controls	IEC 60730-2-9 Ed 3.1	IEC 60730-2-9 Ed. 4.2 (2020) Automatic electrical controls - Part 2-9: Particular requirements for temperature sensing control	Immediate adoption of replacement standard.
Clause 4: Electric wires and cables			
Electric flexible cords	AS/NZS 3191:2008 or IEC 60227 and IEC 60245 series	AS/NZS 3191:2008 Specifies construction, dimensions and tests for flexible cords insulated with thermoplastic or cross-linked PVC, thermoplastic or cross-linked elastomers or cross-linked polyolefin which, dependent on cord type, are designed for working voltages up to and including 250/250 V, 250/440 V or 0.6/1 kV. OR	Immediate adoption of replacement standard.
		AS/NZS IEC 60227.5:2019 Rubber insulated cables - Rated voltage up to and including 450/750 V - Part 4: Cords and flexible cables OR AS/NZS IEC 60245.4:2020 Rubber insulated cables - Rated voltage up to and including 450/750 V - Part 4: Cords and flexible cables	

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Heating cables with a rated voltage of 300/500 V for comfort heating and prevention of ice formation	IEC 60800 Ed 3.0	IEC 60800 Ed 4.0 (2021) Heating cables with a rated voltage up to and including 300/500 V for comfort heating and prevention of ice formation	Immediate adoption of replacement standard.
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	AS/NZS IEC 60227.5:2019 Rubber insulated cables - Rated voltage up to and including 450/750 V - Part 4: Cords and flexible cables	Immediate adoption of replacement standard.
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	AS/NZS IEC 60245.4:2020 Rubber insulated cables - Rated voltage up to and including 450/750 V - Part 4: Cords and flexible cables	Immediate adoption of replacement standard.
Rubber insulated cables—rated voltages up to and including 450/750 V—cords for applications requiring high flexibility	IEC 60245-8 Ed 1.2	IEC 60245-8 Ed 1.2 (2011) Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 8: Cords for applications requiring high flexibility, including Amendment 1 and 2.	Immediate adoption of replacement standard.
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	IEC 60245-3 Ed 2.0 (2011), Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 3: Heat resistant silicone insulated cables, including Amendments 1 and 2	Immediate adoption of replacement standard.
Clause 5: Switches for circuits, installation protective devices, and connection devices			
Assemblies for power distribution in public networks	AS/NZS 3439.5:2001 or IEC 61439-5 Ed 1.0	IEC 61439-5 Ed 3.0 (2023) Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks OR Until 04/05/2026, IEC 61439-5 Ed 2.0 (2014) Low-voltage switchgear and control gear assemblies - Part 5: Assemblies for power distribution in public networks	Immediate adoption of replacement IEC standards only, with transition until 04/05/2026 for IEC 61439-5 Ed 2.0.
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	AS/NZS 60898.1:2004 Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Circuit- breakers for a.c. operation or IEC 60898-1 Ed 2.1 (2019) Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation or AS/NZS 3111:2009 Approval and test specification - Air-break switches, including Amendment 1 and 2	Immediate adoption of replacement standard.
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	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 adoption of replacement standard.
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	IEC 60947-4-3 Ed 3.0 (2020) Low-voltage switchgear and controlgear - Part 4-3: Contactors and motor-starters - Semiconductor controllers and semiconductor contactors for non-motor loads	Immediate adoption of replacement IEC standard only.
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	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 adoption of 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	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 adoption of 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	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 adoption of IEC standard only.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	IEC 60669-1 Ed 4.0 (2017) including COR1:2020 Switches for household and similar fixed electrical installations as modified by AS/NZS 60669.1:2020 Switches for household and similar fixed electrical installations - Part 1: General requirements in conjunction with 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 adoption of replacement standard.
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	IEC 60669-1 Ed 4.0 (2017) including COR1:2020 Switches for household and similar fixed electrical installations as modified by AS/NZS 60669.1:2020 Switches for household and similar fixed electrical installations - Part 1: General requirements in conjunction with IEC 60669-2-1 Ed 4.1 (2009) Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches as modified by AS/NZS 60669.2.1:2013 witches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches 60669.2.1:2013 witches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches OR IEC 60669-1 Ed 4.0 (2017) including COR1:2020 Switches for household and similar fixed electrical installations as modified by AS/NZS 60669.1:2020 Switches for household and similar fixed electrical installations - Part 1: General requirements in conjunction with IEC 60669-2-1 Ed 4.2 (2015) Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches as modified by AS 60669.2.1:2020 Switches for household and similar fixed electrical installations - Part 1: General requirements in conjunction with IEC 60669-2-1 Ed 4.2 (2015) Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches as modified by AS 60669.2.1:2020 Switches for household and similar fixed electrical installations	Immediate adoption of replacement standards.
Installation couplers intended for permanent connection in fixed installations	IEC 61535 Ed 1.1	IEC 61535 Ed 1.1 (2012) Installation couplers intended for permanent connection in fixed installations as modified by AS/NZS 61535:2011 Installation couplers intended for permanent connection in fixed installations	Immediate adoption of replacement standard.
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	IEC 60669-1 Ed 4.0 (2017) including COR1:2020 Switches for household and similar fixed electrical installations as modified by AS/NZS 60669.1:2020 in conjunction with IEC 60669-2-4 Ed 1.0 (2004) Switches for household and similar fixed electrical installations - Part 2-4: Particular requirements - Isolating switches	Immediate adoption of replacement standard.
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 switchgear and controlgear assemblies - Part 3: Distribution boards intended to be operated by ordinary persons (DBO) as modified by AS/NZS 61439.3:2016 Low- voltage switchgear and controlgear assemblies - Part 3: Distribution boards intended to be operated by ordinary persons (DBO)	Immediate adoption of IEC standard only.
Low-voltage fuses for use by authorised persons	IEC 60269-1 Ed 4.1 in conjunction with IEC 60269-2 Ed 4.0	IEC 60269-1 Ed 4.2 (2014) Low-voltage fuses - Part 1: General requirements in conjunction with IEC 60269-2 Ed 5.1 (2016) 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	Immediate adoption of replacement standard.
Low-voltage fuses for use by unskilled persons	IEC 60269-1 Ed 4.1 in conjunction with IEC 60269-3 Ed 4.0	IEC 60269-1 Ed 4.2 (2014) Low-voltage fuses - Part 1: General requirements in conjunction with IEC 60269-3 Ed 4.2 (2019) 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 adoption of replacement standard.
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) as modified by AS/NZS 61439.4:2016 Low- voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)	Immediate adoption of IEC standard only.
Multiple-function equipment—automatic transfer switching equipment	AS/NZS 3947.6.1:2001 or IEC 60947-6-1 Ed 2.0	IEC 60947-6-1 Ed 3.0 (2021) Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment	Immediate adoption of 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	AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1. And IEC 61009-1 Ed 3.2 (2013) Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) - Part 1: General rules as modified by AS/NZS 61009.1:2015 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) - Part 1: General rules	Immediate adoption of replacement standards.
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	AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1. And 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 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules	Immediate adoption of replacement standards.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Switches	AS/NZS 3947.3·2001	IFC 60947-3 Ed 4 0 (2020)	Immediate adoption of IEC standard
disconnectors, switch-	or	Low-voltage switchgear and controlgear - Part 3: Switches,	only.
disconnectors, and	IEC 60947-3 Ed 3.1	disconnectors, switch-disconnectors and fuse-combination units	
fuse-combination units		IFC COCCO 2 2 Ed 2 0 (2000) Switches for household and similar fixed	
(TDS)	conjunction with IEC 60669-2-3 Ed 3.0	electrical installations - Part 2-3: Particular requirements - Time-delay	standard.
		switches (TDS)	
Type F and type B	IEC 62423 Ed 2.0	AS/NZS 3190:2016 Approval and test specification - Residual current	Immediate adoption of replacement
operated circuit-		Amendment 1.	stanualus.
breakers <b>without</b>			
integral overcurrent		And IEC 62423 Ed 2 0 (2009) including COR1:2011 and COR2:2021 Type E	
household and similar		and type B residual current operated circuit-breakers with and without	
uses		integral overcurrent protection for household and similar uses	
		And	
		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	
		Residual current operated circuit-breakers without integral overcurrent	
		protection for household and similar uses (RCCBs) - Part1: General rules	
Type F and type B	IEC 62423 Ed 2.0	AS/NZS 3190:2016 Approval and test specification - Residual current	Immediate adoption of replacement
residual current		devices (current-operated earth-leakage devices) including	standards.
breakers <b>with</b> integral		Amendment 1	
overcurrent protection		And	
for household and similar uses		IEC 62423 Ed 2.0 (2009) including COR1:2011 and COR2:2021 Type F and type B residual current operated circuit-breakers with and without	
Similar uses		integral overcurrent protection for household and similar uses	
		And	
		IEC 61009-1 Ed 3.2 (2013) Residual current operated circuit-breakers	
		with integral overcurrent protection for household and similar uses	
		(RCBOs) - Part 1: General rules as modified by AS/NZS 61009.1:2015 Residual current operated circuit-breakers with integral overcurrent	
		protection for household and similar uses (RCBOs) - Part 1: General	
		rules	
Type-tested and	AS/NZS 3439.1:2002	IEC 61439-1 Ed 2.0 (2011) Low-voltage switchgear and control gear	Immediate adoption of IEC standard
partially type-tested	or	assemblies - Part 1: General rules as modified by of AS/NZS	only.
assemblies	IEC 61439-1 Ed 2.0	61439.1:2016 Low-voltage switchgear and controlgear assemblies -	
Clause 6: Hand-held			
tools			
Subclause (1)	In subclause (2),—	Standard E means IEC 62841-1 Ed 1.0 (2014) Electric motor-operated	Immediate adoption of replacement
	standard E means IEC 60745-1 Ed 4.0 as modified by AS/NZS	hand-held tools, transportable tools and lawn and garden machinery -	standards.
	60745.1:2009	Safety - Part 1: General requirements as modified by AS/NZS 62841.1:2015 Electric motor-operated hand-held tools, transportable	
		tools and lawn and garden machinery - Safety - Part 1: General	
		requirements including Amendments 1 and 2	
	standard F means AS/NZS 60745.1:2003, including	Standard F means IEC 60745-1 Ed 4.0 (2006) Electric motor-operated	
	Amendments 1 to 3.	Safety - Part 1: General requirements as modified by AS/NZS	
		60745.1:2009 Hand-held motor-operated electrical tools - Safety -	
		General requirements including Amendment 1	
Subclause (2)			
Band saws	Standard E in conjunction with IEC 60745-2-20 Ed 1.1	Standard F, in conjunction with IEC 60745-2-20 Ed 1.1 Hand-held motor-operated electric tools - Safety - Part 2-20: Particular	Immediate adoption of replacement standard.
		requirements for band saws	Stariation.
Chain saws	Standard E in conjunction with IEC 60745-2-13 Ed 2.1	Standard E, in conjunction with IEC 62841-4-1 Ed 1.0 (2017)	Immediate adoption of replacement
		Electric motor-operated hand-held tools, transportable tools and lawn	standard.
		chain saws	
Circular saws	Standard E in conjunction with IEC 60745-2-5 Ed 5.0	Standard E, in conjunction with, IEC 62841-2-5 Ed 1.0 (2014)	Immediate adoption of replacement
		Electric motor-operated hand-held tools, transportable tools and lawn	standard.
	5 Ed 4.0	and garden machinery - Salety - Part 2.5: Particular requirements for hand-held circular saws	
Concrete vibrators	Standard E in conjunction with IEC 60745-2-12 Ed 2.1 as	Standard F, in conjunction with IEC 60745-2-12 Ed 2.1 (2008) Hand-held	Immediate adoption of replacement
	modified by Annex ZZ of AS/NZS 60745.2.12:2009	motor-operated electric tools - Safety - Part 2-12: Particular	standard.
		requirements for concrete vibrators as modified by AS/NZS 60745.2.12:2009 Hand-held motor-operated electrical tools - Safety -	
		Particular requirements for concrete vibrators	
Cut-off machines	Standard E in conjunction with IEC 60745-2-22 Ed 1.0 as modified by AS/NZS 60745 2 22:2011	Standard E, in conjunction with IEC 62841-3-10 Ed 1.1 (2015) Electric motor-operated hand-held tools, transportable tools and lawn	Immediate adoption of replacement standard
		and garden machinery - Safety - Part 3.10: Particular requirements for	standard.
		transportable cut-off machines	
Drain cleaners	Standard E in conjunction with IEC 60745-2-21 Ed 1.1	Standard E, in conjunction with IEC 62841-2-21 Ed 1.0 (2017) Electric motor-operated hand-held tools, transportable tools and lawn	immediate adoption of replacement standard.
		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	Standard E, in conjunction with IEC 62841-2-1 Ed 1.1 (2021)	Immediate adoption of replacement
		and garden machinery - Safety - Part 2.1: Particular requirements for	stalludiu.
		hand-held drills and impact drills	

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Grinders, polishers, and disc-type sanders	Standard E in conjunction with IEC 60745-2-3 Ed 2.2 as modified by 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 AS/NZS 60745:2011	Standard F, in conjunction with 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 as modified by AS/NZS 60745.2.3:2013 Hand-held motor-operated electric tools - Safety - Part 2.3: Particular requirements for grinders, polishers and disk-type sanders, including Amendment 1	Immediate adoption of replacement standard.
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	Standard E, in conjunction with IEC 62841-2-6 Ed 1.0 (2020) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-6: Particular requirements for hand- held hammers	Immediate adoption of replacement standard.
Hedge trimmers	Standard E in conjunction with IEC 60745-2-15 Ed 2.1	Standard E, in conjunction with IEC 62841-4-2 Ed 1.1 (2017) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4.2: Particular requirements for hedge trimmers	Immediate adoption of replacement standard.
Other hand-held motor- operated electric tools	AS/NZS 3160:2009 including Amendments 1 and 2	AS/NZS 3160:2009 Approval and test specification – Hand-held portable electric tools, including Amendment 1 (Reconfirmed 2020)	Immediate adoption of replacement standard.
Planers	Standard E in conjunction with IEC 60745-2-14 Ed 2.2	Standard E, in conjunction with 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 adoption of replacement standard.
Reciprocating saws (jig and sabre saws)	Standard E in conjunction with IEC 60745-2-11 Ed 2.1	Standard E, in conjunction with 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 adoption of replacement standard.
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	Standard E, in conjunction 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 hand-held routers	Immediate adoption of replacement standard.
Sanders and polishers other than disc type	Standard E in conjunction with IEC 60745-2-4 Ed 2.1	Standard E, in conjunction with 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 adoption of replacement 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	Standard E, in conjunction with 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 adoption of replacement standard.
Scissors type grass shears	Standard A, or standard B, in conjunction with IEC 60335-2-94 Ed 3.0	Standard E, in conjunction with IEC 62841-4-5 Ed 1.0 (2021) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-5: Particular requirements for grass shears OR Until 24/06/2025, Standard B, in conjunction with IEC 60335-2-94 Ed 3.0 (2008) Household and similar electrical appliances - Safety - Part 2- 94: Particular requirements for scissors type grass shears	Immediate adoption of replacement standard, with transition until 24/06/2025 for standard B.
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	Standard E, in conjunction with 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 adoption of replacement standard.
Spray guns for non- flammable liquids	AS/NZS 3160:2009 including Amendments 1 and 2	AS/NZS 3160:2009 Approval and test specification – Hand-held portable electric tools, including Amendment 1 (Reconfirmed 2020)	
Strapping tools	Standard E in conjunction with IEC 60745-2-18 Ed 1.1	Standard F, in conjunction with IEC 60745-2-18 Ed 1.1 Hand-held motor-operated electric tools - Safety - Part 2-18: Particular requirements for strapping tools	Immediate adoption of replacement standard.
Tackers	Standard E in conjunction with IEC 60745-2-16 Ed 2.0	Standard F, in conjunction with IEC 60745-2-16 Ed 2.0 Hand-held motor-operated electric tools - Safety - Part 2-16: Particular requirements for tackers	Immediate adoption of replacement standard.
Tappers and threaders	Standard E in conjunction with IEC 60745-2-9 Ed 2.1	Standard E, in conjunction with IEC 62841-2-9 Ed 1.0 (2015) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-9: Particular requirements for hand-held tappers and threaders	Immediate adoption of replacement standard.
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 Annex ZZ of AS/NZS 60335.2.91:2008, including Amendment 1	Standard E, in conjunction with IEC 62841-4-4 Ed 1.0 (2021) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-4: Particular requirements for lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws	Immediate adoption of replacement standard
Clause 7: Electric welding machines			
Limited-duty, portable AC arc welding	IEC 60974-6 Ed 2.0 or	IEC 60974-6 Ed 3.0 (2015) Arc welding equipment – Part 6: Limited duty equipment	Immediate adoption of replacement standard.
Clause 8: Audio and	IEC 60974-6 Ed 1.0 as modified by AS 60974.6:2006		
video products			

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	IEC 62368-1 Ed 3.0 (2018) Audio/video, information and communication technology equipment - Part 1: Safety requirements as modified by Appendix ZZ of AS/NZS 62368.1:2022 Audio/video, information and communication technology equipment – Part 1: Safety requirements OR AS/NZS 60065:2012 Audio, video and similar electronic apparatus - Safety requirements or IEC 60065 Ed 7.2 Audio, Video And Similar Electronic Apparatus - Safety	Immediate adoption of new standard.
		Requirements as modified by Annex ZZ of AS/NZS 60065:2012	
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	IEC 62368-1 Ed 3.0 (2018) Audio/video, information and communication technology equipment - Part 1: Safety requirements as modified by Appendix ZZ of AS/NZS 62368.1:2022 Audio/video, information and communication technology equipment – Part 1: Safety requirements OR AS/NZS 60065:2012 Audio, video and similar electronic apparatus - Safety requirements or IEC 60065 Ed 7.2 Audio, Video And Similar Electronic Apparatus - Safety Requirements as modified by Annex ZZ of AS/NZS 60065:2012	Immediate adoption of new standard.
Clause 9: Information			
technology equipment			
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	IEC 62368-1 Ed 3.0 (2018) Audio/video, information and communication technology equipment - Part 1: Safety requirements as modified by Appendix ZZ of AS/NZS 62368.1:2022 Audio/video, information and communication technology equipment – Part 1: Safety requirements OR AS/NZS 60950: 2011 Information technology equipment - Safety - General requirements OR AS/NZS 62368.1:2018 Audio/video, information and communication technology equipment - Part 1: Safety requirements OR IEC 60950-1 Ed 2.1 Information technology equipment - Safety - Part 1: General requirements as modified by Annex ZZ of AS/NZS 60950: 2011	Immediate adoption of new standard.
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	IEC 62368-1 Ed 3.0 (2018) Audio/video, information and communication technology equipment - Part 1: Safety requirements as modified by Appendix ZZ of AS/NZS 62368.1:2022 Audio/video, information and communication technology equipment – Part 1: Safety requirements OR AS/NZS 60950: 2011 Information technology equipment - Safety - General requirements OR AS/NZS 62368.1:2018 Audio/video, information and communication technology equipment - Part 1: Safety requirements OR IEC 60950-1 Ed 2.1 Information technology equipment - Safety - Part 1: General requirements as modified by Annex ZZ of AS/NZS 60950: 2011	Immediate adoption of new standard.
Clause 10: Electrical			
Subclause (1)	In subclause (2),— standard G means IEC 60601-1 Ed 3.0, including Amendment 1	standard G means IEC 60601-1 Ed 3.2 (2020) Medical electrical equipment - Part 1: General requirements for basic safety and essential performance	
	standard H means IEC 60601-1 Ed 2.0, including Amendments	remove references to standard H.	
Subclause (2)	- 2 UTU 2:		
Collateral standard— Alarm systems in medical electrical equipment and medical electrical systems	Standard G in conjunction with IEC 60601-1-8 Ed 2.1	Standard G, in conjunction with IEC 60601-1-8 Ed 2.2 (2020) 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	Immediate adoption of replacement standard.
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	Standard G, in conjunction with IEC 60601-1-11 Ed 2.1 2020 Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment	Immediate adoption of replacement standard.
Collateral standard— Medical electrical systems	Standard H in conjunction with IEC 60601-1-1 Ed 2.0	Standard G, in conjunction with IEC 60601-1-12 Ed 1.1 (2020) 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 adoption of replacement standard.
Collateral standard— Physiologic closed-loop controllers	Standard G in conjunction with IEC 60601-1-10 Ed 1.0	Standard G, in conjunction with IEC 60601-1-10 Ed 1.2 (2020) Medical electrical equipment - Part 1-10: General requirements for basic safety and essential performance - Collateral Standard: Requirements for the development of physiologic closed-loop controllers	Immediate adoption of replacement standard.
Collateral standard— Programmable electrical medical systems	Standard H in conjunction with IEC 60601-1-4 Ed 1.1	Cited standard has been withdrawn.	Remove from the Regulations.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Collateral standard— Radiation protection in diagnostic X-ray equipment	Standard G in conjunction with IEC 60601-1-3 Ed 2.1	Standard G, in conjunction with IEC 60601-1-3 Ed. 2.2 (2021) Medical electrical equipment - Part 1-3: General requirements for basic safety and essential performance - Collateral Standard: Radiation protection in diagnostic X-ray equipment	Immediate adoption of replacement standard.
Collateral standard — usability	Standard G in conjunction with IEC 60601-1-6 Ed 3.0	Standard G, in conjunction with IEC 60601-1-6 Ed. 3.2 (2020) Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability	Immediate adoption of replacement standard.
Anaesthetic systems	Standard G in conjunction with IEC 80601-2-13 Ed 1.0	Standard G, in conjunction with ISO 80601-2-13 Ed 2.0 (2022) Medical electrical equipment – Part 2.13: Particular requirements for basic safety and essential performance of an anaesthetic workstation	Immediate adoption of replacement standard.
Automatic cycling non- invasive blood pressure monitoring equipment	Standard G in conjunction with IEC 80601-2-30 Ed 1.0	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 adoption of replacement standard.
Blankets, pads, and mattresses intended for heating in medical use	Standard G in conjunction with IEC 80601-2-35 Ed 2.0	Standard G, in conjunction with IEC 60601-2-35 Ed 2.1 (2023) Medical electrical equipment – Part 2.35: Particular requirements for the basic safety and essential performance of heating devices using blankets, pads or mattresses and intended for heating in medical use	Immediate adoption of replacement standard.
Cardiac defibrillators	Standard G in conjunction with IEC 60601-2-4 Ed 3.0	Standard G, in conjunction with 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 adoption of replacement standard.
Clinical thermometers for body temperature measurement	Standard G in conjunction with IEC 80601-2-56 Ed 1.0	Standard G, in conjunction with 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 adoption of replacement standard.
Critical care ventilators	Standard G in conjunction with IEC 80601-2-12 Ed 1.0	Standard G, in conjunction with ISO 80601-2-12 Ed 3.0 (2023) Medical electrical equipment - Part 2-12: Particular requirements for the basic safety and essential performance of critical care ventilators	Immediate adoption of replacement standard.
Dental extra-oral X-ray equipment	Standard G in conjunction with IEC 60601-2-63 Ed 1.0	Standard G, in conjunction with IEC 60601-2-63 Ed 1.2 (2021) Medical electrical equipment – Part 2.63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment	Immediate adoption of replacement standard.
Dental intra-oral X-ray equipment	Standard G in conjunction with IEC 60601-2-65 Ed 1.0	Standard G, in conjunction with IEC 60601-2-22 Ed 1.2 (2021) Medical electrical equipment – Part 2.65: Particular requirements for the basic safety and essential performance of dental intra-oral X-ray equipment	Immediate adoption of replacement standard.
Diagnostic and therapeutic laser equipment	Standard G in conjunction with IEC 60601-2-22 Ed 3.1	Standard G, in conjunction with IEC 60601-2-22 Ed 4.0 (2019) Medical electrical equipment – Part 2.22: Particular requirements for the basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment	Immediate adoption of replacement standard.
Electrocardiographs	Previously included in below item	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	
Electrocardiographic monitoring equipment	IEC 60601-2-25 Ed 2.0, including Amendment 1 and IEC 60601-2-27 Ed 3.0	Standard G, in conjunction with 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 adoption of replacement standard.
Electroencephalographs	Standard G in conjunction with IEC 60601-2-26 Ed 2.0	Standard G, in conjunction with IEC 80601-2-26 Ed 1.0 (2019) Medical electrical equipment - Part 2-26: Particular requirements for the basic safety and essential performance of electroencephalographs	Immediate adoption of replacement standard.
Electromyographs and evoked response equipment	Standard G in conjunction with IEC 60601-2-40 Ed 1.0	Standard G, in conjunction with IEC 60601-2-40 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 adoption of replacement standard.
Electron accelerators in the range of 1 MeV to 50 MeV	Standard G in conjunction with IEC 60601-2-1 Ed 3.0	Standard G, in conjunction with IEC 60601-2-1 Ed 4.0 (2020) Medical electrical equipment - Part 2-1: Particular requirements for the basic safety and essential performance of electron accelerators in the range 1 MeV to 50 MeV	Immediate adoption of replacement standard.
External cardiac pacemakers with internal power source	Standard G in conjunction with IEC 60601-2-31 Ed 2.1	Standard G, in conjunction with IEC 60601-2-31 Ed 3.0 (2020) Medical electrical equipment - Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source	Immediate adoption of replacement standard.
Extracorporeally induced lithotripsy	Standard G in conjunction with IEC 60601-2-36 Ed 1.0	Standard G, in conjunction with 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 adoption of replacement standard.
Haemodialysis, haemodiafiltration, and haemofiltration equipment	Standard G in conjunction with IEC 60601-2-16 Ed 4.0	Standard G, in conjunction with 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 adoption of replacement standard.
High-frequency surgical equipment	Standard G in conjunction with IEC 60601-2-2 Ed 5.0	Standard G, in conjunction with IEC 60601-2-2 Ed 6.1 (2023) 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 adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Infant incubators	Standard G in conjunction with IEC 60601-2-19 Ed 2.0	Standard G, in conjunction with IEC 60601-2-19 E.d 3.1 (2023) Medical electrical equipment - Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators	Immediate adoption of replacement standard.
Infant phototherapy equipment	Standard G in conjunction with IEC 60601-2-21 Ed 2.0	Standard G, in conjunction with IEC 60601-2-50 E.d 3.1 (2023) Medical electrical equipment - Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment	Immediate adoption of replacement standard.
Infant radiant warmers	Standard G in conjunction with IEC 60601-2-21 Ed 2.0	Standard G, in conjunction with IEC 60601-2-21 E.d 3.1 (2023) Medical electrical equipment - Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers	Immediate adoption of replacement standard.
Infant transport incubators	Standard G in conjunction with IEC 60601-2-20 Ed 2.0	Standard G, in conjunction with IEC 60601-2-20 E.d 3.1 (2023) Medical electrical equipment - Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators	Immediate adoption of replacement standard.
Lens removal devices and vitrectomy devices for ophthalmic surgery	Standard G in conjunction with IEC 80601-2-58 Ed 1.0	Standard G, in conjunction with IEC 80601-2-58 Ed 2.1 (2016) Medical electrical equipment - Part 2-58: Particular requirements for the basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery	Immediate adoption of replacement standard.
Magnetic resonance equipment for medical diagnosis	Standard G in conjunction with IEC 60601-2-33 Ed 3.1	Standard G, in conjunction with IEC 60601-2-33 Ed 4.0 (2022) Medical electrical equipment - Part 2-33: Particular requirements for the basic safety and essential performance of magnetic resonance equipment for medical diagnosis	Immediate adoption of replacement standard.
Mammographic X-ray equipment and mammographic stereotactic devices	Standard G in conjunction with IEC 60601-2-45 Ed 3.0	Standard G, in conjunction with IEC 60601-2-45 Ed 3.2 (2022) Medical electrical equipment - Part 2-45: Particular requirements for basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices	Immediate adoption of replacement standard.
Medical beds	Standard G in conjunction with IEC 60601-2-52 Ed 1.0	Standard G, in conjunction with 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 adoption of replacement standard.
Microwave therapy equipment	Standard G in conjunction with IEC 60601-2-6 Ed 2.0	Standard G, in conjunction with IEC 60601-2-6 Ed 2.2 (2022) Medical electrical equipment - Part 2-6: Particular requirements for the basic safety and essential performance of microwave therapy equipment	Immediate adoption of replacement standard.
Multifunction patient monitoring equipment	Standard G in conjunction with IEC 60601-2-49 Ed 2.0	Standard G, in conjunction with 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 adoption of replacement standard.
Nerve and muscle stimulators	Standard G in conjunction with IEC 60601-2-10 Ed 2.0	Standard G, in conjunction with IEC 60601-2-10 E.d 2.2 (2023) Medical electrical equipment - Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators	Immediate adoption of replacement 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	Standard G, in conjunction with IEC 60601-2-57 E.d 2.0 (2023) 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, cosmetic and aesthetic use	Immediate adoption of replacement standard.
Operating tables	Standard G in conjunction with IEC 60601-2-46 Ed 2.0	Standard G, in conjunction with IEC 60601-2-46 E.d 4.0 (2023) Medical electrical equipment - Part 2-46: Particular requirements for the basic safety and essential performance of operating tables	Immediate adoption of replacement standard.
Oxygen concentrators for individual patient use	Standard H in conjunction with ISO 8359:1996 including Amendment 1	Standard G, in conjunction with ISO 80601-2-69 Ed 2.0 2020 Medical electrical equipment - Part 2-69: Particular requirements for the basic safety and essential performance of oxygen concentrator equipment	Immediate adoption of replacement standard.
Peritoneal dialysis equipment	Standard G in conjunction with IEC 60601-2-39 Ed 2.0	Standard G, in conjunction with 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 adoption of replacement standard.
Pulse oximeter equipment	Standard G in conjunction with IEC 80601-2-61 Ed 1.0	Standard G, in conjunction with 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 adoption of replacement standard.
Remote-controlled automatically driven gamma-ray afterloading equipment	Standard H in conjunction with IEC 60601-2-17 Ed 2.0	Standard G, in conjunction with IEC 60601-2-17 Ed 3.0 (2013) Medical electrical equipment - Part 2-17: Particular requirements for the basic safety and essential performance of automatically-controlled brachytherapy afterloading equipment	Immediate adoption of replacement standard.
Requirements and tests for electromagnetic compatibility	Standard G in conjunction with IEC 60601-1-2 Ed 3.0	Standard G, in conjunction with IEC 60601-1-2 Ed 4.1 (2020) Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests	Immediate adoption of replacement standard.
Respiratory gas monitors	Standard G in conjunction with IEC 80601-2-55 Ed 1.0	Standard G, in conjunction with 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 adoption of replacement standard.
Screening thermographs for human febrile temperature screening	Standard G in conjunction with IEC 80601-2-59 Ed 1.0	Standard G, in conjunction with IEC 80601-2-59 E.d 2.1 (2023) Medical electrical equipment - Part 2-59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Short-wave therapy equipment	Standard G in conjunction with IEC 60601-2-3 Ed 3.0	Standard G, in conjunction with IEC 60601-2-3 Ed 3.2 (2022) Medical electrical equipment - Part 2-3: Particular requirements for the basic safety and essential performance of short-wave therapy equipment	Immediate adoption of replacement standard.
Sleep apnoea breathing therapy equipment	Standard H in conjunction with ISO 17510-1:2007	Standard G, in conjunction with ISO 80601-2-70 Ed 2.0 (2020) Medical electrical equipment - Part 2.70: Particular requirements for basic safety and essential performance of sleep apnoea breathing therapy equipment	Immediate adoption of replacement standard.
Surgical luminaires and luminaires for diagnosis	Standard G in conjunction with IEC 60601-2-41 Ed 2.0	Standard G, in conjunction with IEC 60601-2-41 Ed 3.0 (2021) Medical electrical equipment - Part 2-41: Particular requirements for the basic safety and essential performance of surgical luminaires and luminaires for diagnosis	Immediate adoption of replacement standard.
Therapeutic X-ray generators	Standard G in conjunction with IEC 60601-2-8 Ed 2.0	Standard G, in conjunction with IEC 60601-2-8 Ed 2.1 (2015) Medical electrical equipment - Part 2-8: Particular requirements for the basic safety and essential performance of therapeutic X-ray equipment operating in the range 10 kV to 1 MV	Immediate adoption of replacement standard.
Ultrasonic medical diagnostic and monitoring equipment	Standard G in conjunction with IEC 60601-2-37 Ed 2.0	Standard G, in conjunction with 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 adoption of replacement standard.
X-ray equipment for interventional procedures	Standard G in conjunction with IEC 60601-2-43 Ed 2.0	Standard G, in conjunction with IEC 60601-2-43 Ed 3.0 (2022) Medical electrical equipment - Part 2-43: Particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures	Immediate adoption of replacement standard.
X-ray equipment for radiography and radioscopy	Standard G in conjunction with IEC 60601-2-54 Ed 1.0	Standard G, in conjunction with IEC 60601-2-54 Ed 2.0 (2022) Medical electrical equipment - Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy	Immediate adoption of replacement 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	Standard G, in conjunction with 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 adoption of replacement standard.
Clause 11: Lighting			
Subclause (1)	In subclause (2),— standard J means IEC 60598-1 Ed 7.0 as modified by Annex ZZ of AS/NZS 60598.1:2003	<b>Standard J</b> means IEC 60598-1 Ed 8.1 (2017) Luminaires - Part 1: General requirements and tests as modified by Appendix ZZ of AS/NZS 60598.1:2017 including Amendments 1 and 2	Immediate adoption of replacement standard.
	standard K means AS/NZS 60598.1:2003.	Remove references to standard K.	
Subclause (2)			
Air handling luminaires	Amendments 1 and 2 or Standard K in conjunction with AS/NZS 60598.2.19:2001	Standard J, in conjunction with IEC 60598-2-19 E.d 1.0 (1981) Luminaires. Part 2: Particular requirements-Air-handling luminaires (safety requirements) as modified by AS/NZS 60598.2.19:2001 Luminaires - Particular requirements - Air handling luminaries (safety requirements)	Immediate adoption of replacement standard.
Aquarium luminaires	Standard J in conjunction with IEC 60598-2-11 Ed 1.0	Standard J, in conjunction with IEC 60598-2-11 Ed. 2.1 (2022) Luminaires. Part 2.11: Particular requirements- Aquarium luminaires	Immediate adoption of replacement standard.
Extra low voltage lighting systems for filament lamps	Standard J in conjunction with IEC 60598-2-23 Ed 1.1 as modified by AS/NZS 60598.2.23:2002 or Standard K in conjunction with AS/NZS 60598.2.23:2002	Standard J, in conjunction with IEC 60598-2-23 Ed 2.0 (2020) Luminaires - Part 2-23: Particular requirements - Extra-low-voltage lighting systems for ELV light as modified by AS/NZS 60598.2.23:2021 Luminaires, Part 2.3: Particular requirements - Extra-low-voltage lighting systems for ELV light sources	Immediate adoption of replacement standard.
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	Standard J, in conjunction with IEC 60598-2-1 Ed 1.0 (1979) including Amendment 1 Luminaires - Part 2.1: Particular requirements - Fixed general purpose luminaires as modified by AS/NZS 60598.2.1:2014 Luminaires - Part 2.1: Particular requirements - Fixed general purpose luminaires including Amendments 1 and 2	Immediate adoption of replacement standard.
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	Standard J, in conjunction with IEC 60598-2-5 Ed 3.0 (2015) Luminaires - Part 2-5: Particular requirements – Floodlights	Immediate adoption of replacement standard.
Ground-recessed luminaires	Standard J in conjunction with IEC 60598-2-13 Ed 1.0	Standard J, in conjunction with IEC 60598-2-13 Ed. 1.2 (2016) Luminaires – Part 2.13: Particular requirements – Ground recessed luminaires	Immediate adoption of replacement standard.
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	Standard J, in conjunction with IEC 60598-2-8 Ed 3.0 (2013) Luminaires - Part 2-8: Particular requirements - Handlamps as modified by AS/NZS 60598.2.8:2015 Luminaires - Part 2.8: Particular requirements - Handlamps	Immediate adoption of replacement standard.
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	IEC 60598-2-20 Ed 4.0 (2014) Luminaires - Part 2-20: Particular requirements - Lighting chains as modified by Appendix ZZ of AS/NZS 60598.2.20:2018 Or IEC 60598-2-20 Ed 5.0 (2022) Luminaires - Part 2.20: Particular requirements - Lighting chains.	
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	Standard J, in conjunction with IEC 60598-2-22 Ed 4.1 (2017) Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
Luminaires for road and street lighting	Standard J in conjunction with IEC 60598-2-3 Ed 3.0	Standard J, in conjunction with IEC 60598-2-3 Ed 3.1 (2011) Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting as modified by AS/NZS 60598.2.3:2015 Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting	Immediate adoption of replacement 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 AS/NZS 60598.2.17:2006	Standard J, in conjunction with IEC 60598-2-17 Ed 2.0 (2017) Luminaires - Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and indoor)	Immediate adoption of replacement standard.
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	Standard J, in conjunction with IEC 60598-2-18 Ed 3.0 (2022) Luminaires - Part 2: Particular requirements - Part 2-18: Luminaires for swimming pools and similar applications as modified by AS 60598.2.18:2019 Luminaires - Part 2: Particular requirements - Part 2- 18: Luminaires for swimming pools and similar applications	Immediate adoption of replacement 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	Standard J, in conjunction with 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 as modified by AS/NZS 60598.2.25:2001 Luminaires - Part 2: Particular requirements - Section 25: Luminaires for use in clinical areas of hospitals and health care buildings	Immediate adoption of replacement 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	Standard J, in conjunction with IEC 60598-2-6 Ed 2.0 (2001) Luminaires - Particular requirements - Luminaires with built-in transformers for filament lamps as modified by AS/NZS 60598.2.6:1998 Luminaires - Particular requirements - Luminaires with built-in transformers for filament lamps	Immediate adoption of replacement standard.
Luminaires with limited surface temperatures	Standard J in conjunction with IEC 60598-2-24 Ed 1.0	Standard J, in conjunction with IEC 60598.2.24 Ed 2.0 (2013) Luminaires – Part 2.4: Particular requirements - Luminaires with limited surface temperatures	Immediate adoption of replacement 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	Standard J, in conjunction with IEC 60598-2-12 Ed 2.0 (2013) Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights as modified by of AS/NZS 60598.2.12:2015 Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights	Immediate adoption of replacement standard.
Photo and film luminaires (non- professional)	Standard J in conjunction with IEC 60598-2-9 Ed 2.0, including Amendment 1 or Standard K in conjunction with AS/NZS 60598.2.9:2006	Standard J, in conjunction with IEC 60598-2-9 Ed 2.0 (1987) Luminaires - Particular requirements - Photo and film luminaires (non-professional) as modified by AS/NZS 60598.2.9:2006 Luminaires - Particular requirements - Photo and film luminaires (non-professional)	Immediate adoption of replacement standard.
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	Standard J, in conjunction with IEC 60598-2-4 Ed 3.0 (2017) Luminaires – Part 2-4: Particular requirements -Portable general- purpose luminaires as modified by Appendix ZZ of AS 60598.2.4:2019 Luminaires – Part 2-4: Particular requirements -Portable general- purpose luminaires	Immediate adoption of replacement 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	Standard J, in conjunction with IEC 60598-2-10 Ed 2.0 (2003) Luminaires - Part 2-10: Particular requirements - Portable luminaires for children as modified by Appendix ZZ of AS/NZS 60598.2.10:2015 Luminaires - Part 2-10: Particular requirements - Portable luminaires for children	Immediate adoption of replacement standard.
Portable luminaires for garden use	Standard J in conjunction with IEC 60598-2-10 Ed 2.0 as modified by Annex ZZ of AS/NZS 60598.2.10:1998	Standard J, in conjunction with IEC 60598-2-4 Ed 3.0 (2017) Luminaires – Part 2-4: Particular requirements -Portable general- purpose luminaires as modified by Appendix ZZ of AS 60598.2.4:2019 Luminaires - Particular requirements - Portable general purpose luminaires	Immediate adoption of replacement standard.
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	IEC 60598-2-2 Ed 3.0 (2011) Luminaires - Part 2-2: Particular requirements - Recessed luminaires as modified by AS/NZS 60598.2.2:2016 including Amendments 1, 2 and RUL 1:2020	Immediate adoption of replacement standard.
Clause 12: Lamp control gear			
Subclause (1)	In subclause (2),— standard L means AS/NZS 61347.1:2002	standard L means IEC 61347-1 Ed 3.0 (2015) Lamp controlgear - Part 1: General and safety requirements as modified by Appendix ZZ of AS/NZS 61347.1:2016 including Amendment 1	Immediate adoption of replacement standard.
	standard M means IEC 61347-1 Ed 2.1 as modified by AS/NZS 61347.1:2002.	Remove references to standard M.	
Subclause (2)			
AC or DC supplied electronic ballasts for fluorescent lamps	Standard L in conjunction with AS/N2S 61347.2.3:2004 or Standard M in conjunction with IEC 61347-2-3 Ed 1.1, including Amendment 2 or	Standard L, in conjunction with 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 adoption of replacement standard.
Polloete for discharge	IEC 61347-2-3 Ed 2.0	Standard L in conjugation with IEC (1947-2-0 E-1-2-0 (2012)	Immodiate adaption of serils as set
lamps (excluding fluorescent lamps)	or Standard M in conjunction with IEC 61347-2-9 Ed 1.2	Lamp controlgear - Part 2-9: Particular requirements for electromagnetic controlgear for discharge lamps (excluding fluorescent lamps)	standard.
Ballasts for fluorescent lamps	Standard L in conjunction with AS/NZS 61347.2.8:2003 or Standard M in conjunction with IEC 61347-2-8 Ed 1.1	Standard L, in conjunction with IEC 61347-2-8 Ed 1.1 (2006) Lamp controlgear - Part 2-8: Particular requirements for ballasts for fluorescent lamps	Immediate adoption of replacement standard.
DC or AC supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)	Standard M in conjunction with IEC 61347-2-12 Ed 1.1	Standard L, in conjunction with IEC 61347-2-12 E.d 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)	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
DC or AC supplied electronic controlgear for LED modules	Standard L in conjunction with IEC 61347-2-13 Ed 1.0	Standard L, in conjunction with 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 as modified by AS 61347.2.13:2018 Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	Immediate adoption of replacement standard.
DC or AC supplied electronic step-down convertors for filament lamps	Standard L in conjunction with AS/NZS 61347.2.2:2007	Standard L, in conjunction with 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 adoption of replacement 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	Remove this heading and standard from the regulations. Now captured under heading "AC or DC supplied electronic ballasts for fluorescent lamps" above
DC supplied electronic ballasts for emergency lighting	Standard M in conjunction with IEC 61347-2-7 Ed 2.0	Standard L, in conjunction with 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) as modified by Appendix ZZ of AS 61347.2.7:2019 Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)	Immediate adoption of replacement 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	Remove this standard from the regulations. Now captured under heading "AC or DC supplied electronic ballasts for fluorescent lamps" above
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	Remove this standard from the regulations. Now captured under heading "AC or DC supplied electronic ballasts for fluorescent lamps" above
Electronic inverters and convertors 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	Standard L, in conjunction with 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)	Immediate adoption of replacement 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 by AS/NZS 60155:2000, including Amendments 1 and 2	IEC 60155 Ed 4.0 (1993) Glow-starters for fluorescent lamps as modified by AS 60155:2018 Or IEC 60155 Ed 4.0 (1993) Glow-starters for fluorescent lamps as modified by AS/NZS 60155:2000 including Amendments 1 and 2	Immediate adoption of replacement 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	Standard L, in conjunction with IEC 61347-2-11 Ed 1.1 (2017) Lamp controlgear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires	Immediate adoption of replacement standard.
Starting devices (other than glow starters)	Standard L in conjunction with AS/NZS 61347.2.1:2002 or Standard M in conjunction with IEC 61347-2-1 Ed 1.1	Standard L, in conjunction with IEC 61347-2-1 Ed 1.2 (2013) Lamp controlgear - Part 2-1: Particular requirements for starting devices (other than glow starters)	Immediate adoption of replacement standard.
Tungsten filament lamps for domestic and similar general lighting purposes	AS/NZS 60432.1:2007 or IEC 60432-1 Ed 2.2	AS/NZS 60432.1:2007 Incandescent lamps - Safety specifications - Part 1: Tungsten filament lamps for domestic and similar general lighting purposes or IEC 60432-1 Ed 2.2 (2012) Incandescent lamps - Safety specifications - Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	No change.
Tungsten-halogen lamps for domestic and similar general lighting purposes	AS/NZS 60432.2:2007 or IEC 60432-2 Ed 2.2	AS/NZS 60432.2:2007 Incandescent lamps - Safety specifications - Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes or IEC 60432-2 Ed 2.2 (2012) Incandescent lamps - Safety specifications - Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	No change.
Tungsten-halogen lamps (non-vehicle)	AS/NZS 60432.3:2007 or IEC 60432-3 Ed 2.0	IEC 60432-3 Ed 2.0 (2012) Incandescent lamps - Safety specifications - Part 3: Tungsten halogen lamps (non-vehicle)	Immediate adoption of replacement standard.
Self-ballasted lamps for general lighting services	AS/NZS 60968:2001 or IEC 60968 Ed 2.0	AS/NZS 60968:2001 Self-ballasted fluorescent lamps for general lighting services - Safety requirements or IEC 60968 Ed 3.0 (2015) Self-ballasted fluorescent lamps for general lighting services - Safety requirements	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
<b>Clause 14:</b> Power transformers, power supplies, reactors, and similar products			
Subclause (1)	In subclause (2),— standard N means IEC 61558-1 Ed 2.1 as modified by Annex ZZ of AS/NZS 61558.1:2008, including Amendment 1	<b>Standard N</b> means IEC 61558-1 Ed 3.0 (2017) Safety of transformers, reactors, power supply units and combinations thereof - Part 1: General requirements and tests as modified by AS/NZS 61558.1:2018 including Amendment 1 and 2	Immediate adoption of replacement standard.
	standard O means AS/NZS 61558.1:2000, including Amendments 1 to 7	Remove references to standard O.	
	<b>standard P</b> means IEC 61558-1 Ed 1.1 as modified by Annex ZZ of AS/NZS 61558.1:2000, including Amendments 1 to 7.	Remove references to standard P.	
Subclause (2)			
Auto transformers and power supply units incorporating auto transformers	Standard N in conjunction with IEC 61558-2-13 Ed 2.0	Standard N, in conjunction with IEC 61558-2-13:2022 E.d 3.0 (2022) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-13: Particular requirements and tests for auto- transformers and power supply units incorporating auto-transformers for general applications	Immediate adoption of replacement standard.
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 61558.2.8:2001	Standard N, in conjunction with 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 as modified by AS/NZS 61558.2.8:2011 Safety of transformers, reactors, power supply units and combinations thereof - Part 2-8: Particular requirements and tests for transformers and tests for transformers and tests for transformers and tests and combinations thereof - Part 2-8: Particular requirements and tests for transformers and power supply units for bells and chimes	Immediate adoption of replacement standard.
Constant voltage transformers and power supply units	Standard P in conjunction with IEC 61558-2-12 Ed 2.0	Standard N, in conjunction with 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	Immediate adoption of replacement standard.
Control transformers and power supplies incorporating control transformers	Standard N in conjunction with IEC 61558-2-2 Ed 2.0	Standard N, in conjunction with IEC 61558-2-2:2022 E.d 3.0 (2022) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-2: Particular requirements and tests for control transformers and power supply units incorporating control transformers	Immediate adoption of replacement standard.
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	Standard N, in conjunction IEC 61558-2-3 Ed 3.0 (2023) including COR1 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 OR	Immediate adoption of replacement standard, with transition until 04/05/2026 for IEC 61558-2-3 Ed 2.0 (2010).
		Until 04/05/2026, Standard N, in conjunction 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	
Isolating transformers and power supply units for isolating transformers for general use	Standard N in conjunction with IEC 61558-2-4 Ed 2.0	Standard N, in conjunction IEC 61558-2-4 Ed 3.0 (2021) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-4: Particular requirements and tests for isolating transformers and power supply units incorporating isolating transformers for general applications	Immediate adoption of replacement standard.
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 or Until 26/10/2015, standard O in conjunction with AS/NZS 61558.2.15:2001	Standard M, in conjunction IEC 61558-2-15 Ed 3.0 (2022) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-15: Particular requirements and tests for isolating transformers for medical IT systems for the supply of medical locations	Immediate adoption of replacement standard.
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	Standard N, in conjunction IEC 61558-2-6 Ed 3.0 (2021) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers for general applications Or	Immediate adoption of replacement standard, with transition until 24/06/2025 for IEC 61558-2-6 Ed 2.0 (2009).
		Until 24/06/2025, Standard N, in conjunction 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 as modified by AS/NZS 61558.2.6:2009 Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers for general applications including Amendment 1	
Separating transformers and power supplies incorporating separating transformers for general applications	Standard N in conjunction with IEC 61558-2-1 Ed 2.0	Standard N, in conjunction with IEC 61558-2-1 Ed 3.0 (2021) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-1: Particular requirements and tests for separating transformers and power supply units incorporating separating transformers for general applications	Immediate adoption of replacement standard.
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	Standard N, in conjunction IEC 61558-2-20 Ed 3.0 (2022) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-20: Particular requirements and tests for small reactors	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	Standard N, in conjunction IEC 61558-2-16 Ed 2.0 (2021) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units for general applications OR Until 24/06/2025, Standard N, in conjunction IEC 61558-2-16 Ed 1.1 (2013) Safety of transformers, reactors, power supply units and similar products for supply 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	Immediate adoption of replacement standard, with transition until 24/06/2025 for IEC 61558-2-16 Ed 1.1 (2013).
Transformers and power supplies for toys	Standard N in conjunction with IEC 61558-2-7 Ed 2.0	Standard N, in conjunction IEC 61558-2-7 Ed 3.0 (2023) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-7: Particular requirements and tests for transformers and power supply units for toys OR Until 24/06/2025, Standard N, in conjunction 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	Immediate adoption of replacement standard, with transition until 24/06/2025 for IEC 61558-2-7 Ed 2.0 (2007).
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	Standard N in conjunction with 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	Immediate adoption of replacement standard.
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	Standard N in conjunction with 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	Immediate adoption of replacement standard.
Transformers for shavers, 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	Standard N, in conjunction IEC 61558-2-5 Ed 2.0 (2010) Safety of transformers, reactors, power supply units and combinations thereof - Part 2-5: Particular requirements and test for transformer for shavers, power supply units for shavers and shaver supply units as modified by AS/NZS 61558.2.5:2011 Safety of transformers, reactors, power supply units and combinations thereof - Part 2-5: Particular requirements and test for transformer for shavers, power supply units for shavers and shaver supply units, including Amendment 1	Immediate adoption of replacement standard.
Clause 15: Mining			
Subclause (1)	In subclause (2), <b>standard Q</b> means AS/NZS 4871.1:2012	Cited standard is current: AS/NZS 4871.1:2012 - Electrical equipment for mines and quarries - Part 1: General requirements	No change.
Subclause (2) Substations	Standard Q in conjunction with AS/NZS 4871.3:2010	Standard Q in conjunction with AS/NZS 4871.3:2010 Electrical equipment for mines and quarries – Substations Including Amendment 1	Immediate adoption of replacement standard.
Construction and testing of caplights	AS/NZS 62013.1	AS/NZS 60079.35.1 Caplights for use in mines susceptible to firedamp - General requirements - Construction and testing in relation to the risk of explosion	Immediate adoption of replacement standard.
Construction and testing of caplights	IEC 60079-35-1	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	
Electrical wiring systems at extra-low voltage of earth-moving machinery and ancillary equipment for use in mines	AS 4242:1994	AS/NZS 4871.6:2013 Electrical equipment for mines and quarries – Part 6: Diesel powered machinery and ancillary equipment	Immediate adoption of replacement standard.
Equipment protection by intrinsic safety 'I'	AS/NZS 60079.11	AS/NZS 60079.11:2011 Explosive atmospheres—Part 11: Equipment protection by intrinsic safety 'i' including Amendment 1	Immediate adoption of replacement standard.
Equipment protection by encapsulation 'm'	AS/NZS 60079.18:2011: Explosive atmospheres—Part 18: Equipment protection by encapsulation 'm'	AS/NZS 60079.18:2016 Explosive atmospheres—Part 18: Equipment protection by encapsulation 'm'	Immediate adoption of replacement standard.
Conveyors	AS 1755:2000	AS/NZS 4024.3610:2015 Safety of machinery – Part 3610: Conveyors – General requirements	Immediate adoption of replacement
Materials for insulating power conducting components	AS1147.1-1989	AS 1147.1 1989 Electrical equipment for coal mines - Insulating materials - Materials for insulating power conducting components	No change.
NEW Clause 16: Beauty Therapy appliances			
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	Standard B, in conjunction with IEC 60335.2.27 Ed 6.0 (2019) Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation as modified by AS/NZS 60335.2.27:2020 Household and similar electrical appliances - Safety - Part 2.27: Particular requirements for appliances for skin exposure to optical radiation	Immediate adoption of replacement standard.

Clause/Appliance Type	ESR Schedule 4 Currently cited standard	ESR Schedule 4 Replacement standard	Transition (where relevant)
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	Standard B, in conjunction with 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 as modified by AS/NZS 60335.2.23:2017 including Amendment 1 and 2	Immediate adoption of replacement standard.
Shavers, hair clippers, and similar appliances	Standard A, or standard B, in conjunction with IEC 60335-2-8 Ed 5.2	Standard A, in conjunction with IEC 60335-2-8 Ed 7.0 (2022) Household and similar electrical appliances - Safety - Part 2-8: Particular requirements for shavers, hair clippers and similar appliances OR Until 01/12/2026, Standard B, in conjunction with 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 adoption of replacement standard, with transition until 01/12/2026 for standard B.
New clause 17: Electric Vehicles			
Plugs, socket-outlets, vehicle <b>connectors</b> , and vehicle inlets— conductive charging of electric vehicle	IEC 62196-1 Ed 2.0	IEC 62196-1 Ed 4.0 (2022) Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	Immediate adoption of replacement standard.

#### Table 4: Standards citations to be added to Schedule 4 of the ESR

Clause	Type of appliance	ESR Schedule 4 New standard to be inserted	Notes
Clause 1(2)	Commercial microwave appliances with insertion or contacting applicators	Standard B, in conjunction with IEC 60335-2-110 Ed 1.1 (2019) Household and similar electrical appliances - Safety - Part 2-110: Particular requirements for commercial microwave appliances with insertion or contacting applicators	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 1(2)	Electric ondal mattress with a non-flexible heated part	Standard B, in conjunction with 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	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 1(2)	Electrical heat pumps, air conditioners, and dehumidifiers using flammable refrigerants	Standard B, in conjunction with IEC 60335-2-40 Ed 7.0 (2022) Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers as modified by AS/NZS 60335.2.40:2023 Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers	This standard is to be adopted to address issues of flammable refrigerants.
Clause 1(2)	Electrically power assisted cycles	EN 15194:2017+A1:2023 Cycles - Electrically power assisted cycles - EPAC Bicycles	Should be placed under hoverboards in clause 1(2)
Clause 1(2)	Refrigerating appliances, ice-cream appliances, and ice-makers using flammable refrigerants	IEC 60335-2-24 Ed 8.0 (2020) Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers as modified by AS/NZS 60335.2.24:2021 including Amendment 1	Adoption of latest edition is to address issues of flammable refrigerants.
Clause 1(2)	Refrigerating systems and heat pumps	AS/NZS 5149.1:2016 Refrigerating systems and heat pumps - Safety and environmental requirements - Part 1: Definitions, classification and selection criteria: (ISO 5149-1:2014, MOD), including Amendment 1 and Amendment 2 and AS/NZS 5149.2:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Definitions, classification and selection criteria and AS/NZS 5149.3:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 3: Installation site and AS/NZS 5149.4:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 3: Installation site and AS/NZS 5149.4:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 4: Operation, maintenance, repair and recovery	Compliance to Parts 1 to 4 of AS/NZS 5149.1:2016 is required for refrigerating systems and heat pumps. For AS/NZS 5149.2, the modifications to the formulae in Schedule 2 are also required here.
Clause 1(2)	Robotic battery powered electrical lawnmowers	Standard B, in conjunction with IEC 60335-2-107 Ed 2.2 (2021) Household and similar electrical appliances - Safety - Part 2-107: Particular requirements for robotic battery powered electrical lawnmowers OR Until 04/05/2027, Standard B IEC 60335-2-107 Ed 2.1 (2020) Household and similar electrical appliances - Safety - Part 2-107: Particular requirements for robotic battery powered electrical lawnmowers	This standard is included to broaden the scope of this schedule in line with new technological developments.

Clause	Type of appliance	ESR Schedule 4 New standard to be inserted	Notes
Clause 1(2)	Self-balancing personal transport, Personal-e-Transporters devices	Standard A, in conjunction with IEC 60335-2-114 Ed 2.0 (2022) Household and similar electrical appliances - Safety - Part 2-114: Particular requirements for Personal-e-Transporters as modified by AS/NZS 60335.2.114:2023 Household and similar electrical appliances - Safety - Part 2-114: Particular requirements for Personal-e-Transporters OR	This standard is included to broaden the scope of this schedule in line with new technological developments. Note that we propose a different heading from what was consulted on (Self-balancing personal transport
		Until 04/05/2025 Standard B, in conjunction with 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	devices for use with batteries containing alkaline or other non-acid electrolytes)
Clause 4	Insulating covers for electrical purposes	AS 4202:1994 Insulating covers for electrical purposes	This standard is included to broaden the scope of this schedule to provide for equipment regularly used by the industry.
Clause 5	Arc fault detection devices	IEC 62606 Ed 1.1 (2017) General requirements for arc fault detection devices as modified by Appendix ZZ of AS/NZS 62606:2022	This standard is included to broaden the scope of this schedule to provide for equipment regularly used by the industry.
Clause 5	DC isolators	IEC 60947-3 Ed 4.0 (2020) Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse- combination units as modified by AS 60947.3:2023 Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch- disconnectors and fuse-combination OR Until 03/11/2025 IEC 60947-3 Ed 3.2 (2015) Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units as modified by AS 60947.3:2018 Low-	Included as a new heading due to technical developments concerning DC isolators
		voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units OR Until 03/11/2025 IEC 60947-3 Ed 3.1 (2012) including COR1:2013 Low- voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units	
Clause 5	Low-voltage switchgear and controlgear assemblies - General rules	IEC 61439-1 Ed 2.0 (2011) Low-voltage switchgear and control gear assemblies - Part 1: General rules as modified by of AS/NZS 61439.1:2016 Low-voltage switchgear and control gear assemblies - Part 1: General rules	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 5	Low-voltage switchgear and controlgear assemblies - Power switchgear and controlgear assemblies	IEC 61439-2 Ed. 2.0 (2011) Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies as modified by AS/NZS 61439.2:2016 Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 5	Portable residual current device (PRCD) ( <b>new item</b> )	AS/NZS 3190:2016 including Amendment 1 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1.	This standard is included to broaden the scope of this schedule in line with new technological developments. Proposed modifications are provided in Word document.
Clause 5	Portable socket outlet assembly (PSOA) - for construction site use	AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices, including Amendment 1, in conjunction with AS/NZS 3012:2019 Electrical installations - Construction and demolition sites.	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 5	Portable socket outlet assembly (PSOA) - for household and similar general use	AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices, including Amendment 1	As above.
Clause 6 (2)	Die grinders and small rotary tools	Standard F, in conjunction with 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	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 6 (2)	Mixers	Standard E, in conjunction with 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	This standard is included to broaden the scope of this clause for new equipment.
Clause 6 (2)	Transportable bench grinders	Standard E, in conjunction with IEC 62841-3-4 Ed 1.1 (2019) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.4: Particular requirements for transportable bench grinders	This standard is included to broaden the scope of this clause for new equipment.
Clause 6 (2)	Transportable diamond drills with liquid system	Standard E, in conjunction with IEC 62841-3-6 Ed 1.1 (2022)- 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	This standard is included to broaden the scope of this clause for new equipment.
Clause 6 (2)	Transportable drills	Standard E, in conjunction with 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	This standard is included to broaden the scope of this clause for new equipment.
Clause 6 (2)	Transportable mitre saws	Standard E, in conjunction with IEC 62841-3-9 Ed 2.0 (2020) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.9: Particular requirements for transportable mitre saws	This standard is included to broaden the scope of this clause for new equipment.
Clause 6 (2)	Transportable table saws	Standard E, in conjunction with IEC 62841-3-1 Ed 1.1 (2021) Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.1: Particular requirements for transportable table saws	This standard is included to broaden the scope of this clause for new equipment.

Clause	Type of appliance	ESR Schedule 4 New standard to be inserted	Notes
Clause 6 (2)	Transportable threading machines	Standard E, in conjunction with IEC 62841-3-12 Ed 1.1 (2021) - Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3.12: Particular requirements for transportable threading machines	This standard is included to broaden the scope of this clause for new equipment.
Clause 8	Safety aspects for DC power transfer through communication cables and ports	<ul> <li>IEC 62368-3 Ed 1.0 (2017) - Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports as modified by AS 62368.3:2023 Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports</li> <li>Or</li> <li>Until 4/5/2026 IEC 62368-3 Ed 1.0 (2017)- Audio/video, information and communication technology equipment - Part 3: Safety aspects for DC power transfer through communication cables and ports</li> </ul>	This standard is included to broaden the scope of this schedule in line with new technological developments.
Clause 10	Portable medical socket outlet assembly for protection of medical procedures ( <b>new item</b> )	AS/NZS 3190:2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1. And AS/NZS 3012:2019 Electrical installations - Construction and demolition sites	This standard is included to broaden the scope of this schedule in line with new technological developments. Proposed modifications are provided in Word document.
		And AS/NZS 3003:2018 including Amendment 1 Electrical installations - Patient areas	
Clause 10	Portable residual device for protection of medical procedures (new item)	AS/NZS 3190:2016 including Amendment 1 Approval and test specification - Residual current devices (current-operated earth-leakage devices).	This standard is included to broaden the scope of this schedule in line with new technological developments.
		And AS/NZS 3003:2018 including Amendment 1 Electrical installations - Patient areas	Proposed modifications are provided in Word document.
Clause 14	Power transformers, power supplies, reactors, and similar products	AS/NZS 4777.2:2020 Grid connection of energy systems via inverters Part 2: Inverter requirements, including Amendment 1.	This standard was not included in the consultation document, however the Electrical Engineers Association submitted that it should be added to the ESR. WorkSafe agree that it should be included due to importance of inverters being used on grid systems (anti islanding).
Clause 14	Aircraft ground power supplies	ISO 6858:2017 Aircraft — Ground support electrical supplies — General requirements	This standard is included to broaden the scope of this schedule in line with new technological developments.
new clause 16	Cosmetic and beauty care appliances incorporating lasers and intense light sources	Standard B in conjunction with IEC 60335-2-113 Ed 1.1 (2021) Household and similar electrical appliances - Safety - Part 2-113: Particular requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources	This standard is included to address rising prominence of such equipment.
New clause 17(1)	In subclause (2)	Standard R means IEC 61851-1 Ed 3.0 (2017) Electric vehicle conductive charging system - Part 1: General requirements	We suggest that a similar approach be taken for the new Clause 17: Electric Vehicles as for other clauses by including Part 1 standards that should be used in conjunction with the relevant Part 2 standard.
New clause 17(1)		Standard S means IEC 62196-1 Ed 4.0 (2022) Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	As above.
New clause 17 (2)	Electric vehicle conductive charging system	IEC 61851-1 Ed 3.0 (2017) Electric vehicle conductive charging system - Part 1: General requirements	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	DC electric vehicle charging station	vehicle conductive charging system - Part 23: DC electric vehicle supply equipment	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Electrical powered vehicles - not including road vehicles	ISO 17409:2020 Electrically propelled road vehicles — Conductive power transfer — Safety requirements. With the variation that this standard can be used for off road vehicles.	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Electrical powered vehicles - not including road vehicles	EN 50604-1:2016/A1:2021 Secondary lithium batteries for light EV (electric vehicle) applications – Part 1: General safety requirements and test methods. With the variation that this standard can be used for off road vehicles.	This standard is included to broaden the scope of this schedule in line with new technological developments.
			Proposed modifications are provided in Word document.
New clause 17(2)	Electric vehicle conductive charging system	standard R, In conjunction with IEC 61851-25 Ed 1.0 (2020) Electric vehicle conductive charging system - Part 25: DC EV supply equipment where protection relies on electrical separation	I his standard is included to broaden the scope of this schedule in line with new technological developments.

Clause	Type of appliance	ESR Schedule 4 New standard to be inserted	Notes
New clause 17(2)	Electric vehicle wireless power transfer (WPT) systems	IEC 61980-1 Ed 2.0 (2020) Electric vehicle wireless power transfer (WPT) systems - Part 1: General requirements	This standard is included to broaden the scope of this schedule in line with new technological developments.
		And IEC 61980-3 Ed 1.0 (2022) Electric vehicle wireless power transfer (WPT) systems - Part 3: Specific requirements for magnetic field wireless power transfer systems	
		And IEC 61980-2 Ed 1.0 (2023) Electric vehicle wireless power transfer (WPT) systems - Part 2: Specific requirements for MF-WPT system communication and activities	
New clause 17(2)	In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)	Standard R, and IEC 62752 Ed 1.1 (2018) In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Vehicle connector, vehicle inlet and cable assembly for DC charging intended to be used with a thermal management system	Standard S, in conjunction with IEC TS 62196-3-1 Ed 1.0 (2020) Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 3-1: Vehicle connector, vehicle inlet and cable assembly for DC charging intended to be used with a thermal management system	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories	Standard S, in conjunction with IEC 62196-2 Ed 3.0 (2022) 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	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers	Standard S, in conjunction with IEC 62196-3 Ed 2.0 (2022) 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	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Dimensional compatibility and interchangeability requirements for DC pin and contact-tube accessories for Class II or Class III application	Standard S, in conjunction with IEC TS 62196-4 Ed 1.0 (2022) Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 4: Dimensional compatibility and interchangeability requirements for DC pin and contact-tube accessories for Class II or Class III application	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Dimensional compatibility requirements for DC pin and contact-tube vehicle couplers intended to be used for DC EV supply equipment where protection relies on electrical separation	Standard S, in conjunction with IEC 62196-6 Ed 1.0 (2022) Plugs, socket- outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 6: Dimensional compatibility requirements for DC pin and contact-tube vehicle couplers intended to be used for DC EV supply equipment where protection relies on electrical separation	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Residual Direct current detecting devices	Standard R, and IEC 62955 Ed 1.0 (2018) Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electrical vehicles	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	Cables for AC charging according to modes 1, 2 and 3 of IEC 61851-1 of rated voltages up to and including 450/750 V	IEC 62893-3 ED 1.0 (2017) Charging cables for electric vehicles for rated voltages up to and including 0,6/1 kV - Part 3: Cables for AC charging according to modes 1, 2 and 3 of IEC 61851-1 of rated voltages up to and including 450/750 V	This standard is included to broaden the scope of this schedule in line with new technological developments.
		And IEC 62893-1 Ed 1.1 (2020) Charging cables for electric vehicles for rated voltages up to and including 0,6/1 KV – Part 1: General requirements	
		And IEC 62893-2 Ed 1.0 (2017) Charging cables for electric vehicles of rated voltages up to and including 0,6/1 kV – Part 2: Test methods	
New clause 17(2)	Cables for DC charging according to mode 4 of IEC 61851-1 - DC charging without use of a thermal management system	IEC 62893-4-1 Ed 1.0 (2020) Charging cables for electric vehicles of rated voltages up to and including 0,6/1 kV - Part 4-1: Cables for DC charging according to mode 4 of IEC 61851-1 - DC charging without use of a thermal management system	This standard is included to broaden the scope of this schedule in line with new technological developments.
		And IEC 62893-1 Ed 1.1 (2020) Charging cables for electric vehicles for rated voltages up to and including 0,6/1 KV – Part 1: General requirements	
		And IEC 62893-2 Ed 1.0 (2017) Charging cables for electric vehicles of rated voltages up to and including 0,6/1 kV – Part 2: Test methods	
New clause 17(2)	Cables for DC charging according to mode 4 of IEC 61851-1 - Cables intended to be used with a thermal management system	IEC TS 62893-4-2 Ed 1.0 (2021) Charging cables for electric vehicles of rated voltages up to and including 0,6/1 kV - Part 4-2: Cables for DC charging according to mode 4 of IEC 61851-1 - Cables intended to be used with a thermal management system	This standard is included to broaden the scope of this schedule in line with new technological developments.
		And IEC 62893-1 Ed 1.1 (2020) Charging cables for electric vehicles for rated voltages up to and including 0,6/1 KV – Part 1: General requirements	
		And IEC 62893-2 Ed 1.0 (2017) Charging cables for electric vehicles of rated voltages up to and including 0,6/1 kV – Part 2: Test methods	
New clause 17(2)	Electric vehicle conductive charging system using type 4 vehicle coupler	Standard R, in conjunction with IEC PAS 61851-1-1 ED 1.0 (2023) Electric vehicle conductive charging system – Part 1-1: Specific requirements for electric vehicle conductive charging system using type 4 vehicle coupler	This standard is included to broaden the scope of this schedule in line with new technological developments.

Clause	Type of appliance	ESR Schedule 4 New standard to be inserted	Notes
New clause 17(2)	Conductive charging of electric vehicles – DC vehicle coupler configuration GG	Standard R, in conjunction with IEC PAS 63454 Ed 1.0 (2022) Conductive charging of electric vehicles – DC vehicle coupler configuration GG and in conjunction with IEC 61851-23 Ed 2.0 (2023) Electric vehicle conductive charging system - Part 23: DC electric vehicle supply equipment Or Standard R, in conjunction with IEC PAS 63454 Ed 1.0 (2022) Conductive charging of electric vehicles – DC vehicle coupler configuration GG and in conjunction with IEC 61851-25 Ed 1.0 (2020) Electric vehicle conductive charging system - Part 25: DC EV supply equipment where protection relies on electrical separation	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	DC EV supply equipment where protection relies on double or reinforced insulation	Standard R, in conjunction with IEC TS 61851-3-1 ED 1.0 (2023) Electric vehicle conductive charging system – Part 3-1: DC EV supply equipment where protection relies on double or reinforced insulation – General rules and requirements for stationary equipment	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 17(2)	DC EV supply equipment where protection relies on double or reinforced insulation – Particular requirements for portable and mobile equipment	Standard R, in conjunction with IEC TS 61851-3-2 Ed 1.0 (2023) Electric vehicle conductive charging system – Part 3-2: DC EV supply equipment where protection relies on double or reinforced insulation – Particular requirements for portable and mobile equipment, in conjunction with IEC TS 61851-3-1 Ed 1.0 (2023) Electric vehicle conductive charging system – Part 3-1: DC EV supply equipment where protection relies on double or reinforced insulation – General rules and requirements for stationary equipment	This standard is included to broaden the scope of this schedule in line with new technological developments.
New clause 18: Electrical energy sources	Lithium cells in batteries	AS IEC 62619:2023 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications OR IEC 62133-2 Ed 1.1 (2017) Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems	This standard is included to broaden the scope of this schedule in line with new technological developments. Proposed modifications are provided in Word document.

### Table 5: Standards citations to be updated in Schedule 1 of the GSMR

GSMR Schedule 1 Current cited standard	GSMR Schedule 1 Updated standard	Transition
New Zealand Standard known as AS/NZS 4645:2008 (Gas distribution networks Parts 1, 2, and 3) including Amendments 1, 2, and A	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	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as AS/NZS 5601.1:2013 (Gas installations—Part 1: General installations)	AS/NZS 5601.1:2013 Gas installations – General installations incorporating amendments 1, 2, 3 and 4.	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
	Dual citation with the above: AS/NZS 5601.1:2022 Gas installations – Part 1: General installations	Dual citation as above
New Zealand Standard known as AS/NZS5601.2:2013 (Gas installations—Part 2: LP Gas installations in caravans and boats for non- propulsive purposes)	AS/NZS 5601.2:2020 Gas installations – LP Gas installations in caravans and boats for non-propulsive purposes	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as AS/NZS 60079.10.1:2009 (Explosive atmospheres—Classification of areas—Explosive gas atmospheres) including amendment 1	AS/NZS 60079.10.1:2009 or AS/NZS IEC 60079.10.1:2022 Explosive atmospheres, Part 10.1: Classification of areas - Explosive gas atmospheres or AS/NZS IEC 60079.10.1:2022 Supplement 1 Explosive atmospheres, Part 10.1: Classification of areas - Explosive gas atmospheres – Commentary (Supplement 1 to AS/NZS IEC 60079.10.1:2022)	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as AS/NZS 60079.10.2:2011 (Explosive atmospheres—Classification of areas—Combustible dust atmospheres)	AS/NZS 60079.10.2:2016 Explosive atmospheres - Part 10.2: Classification of areas - Explosive dust atmospheres	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
International Organization for Standardization Standard known as ISO/IEC Guide 67:2004 (Conformity assessment—Fundamentals of product certification)	AS/NZS ISO/IEC 17067:2015 Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
International Organization for Standardization Standard known as ISO/IEC 17020:2013 (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	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
International Organization for Standardization Standard known as ISO/IEC 17025:2005 (General requirements for the competence of testing and calibration laboratories)	NZS ISO/IEC 17025:2018 General requirements for the competence of testing and calibration laboratories	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as NZS 5259:2004 (Gas measurement)	NZS 5259:2015 Gas measurement	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as NZS 5263:2003 (Gas detection and odorisation)	NZS 5263:2003 Gas detection and odorization incorporating amendment 1.	
New Zealand Standard known as NZS 5266 (Int):2012 (Safety of gas appliances)	NZS 5266:2014 Safety of gas appliances	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

GSMR Schedule 1 Current cited standard	GSMR Schedule 1 Updated standard	Transition
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)	NZS 5425.1:1994 Code of practice for CNG compressor and refuelling stations - On site storage and location of equipment including amendment 1	
New Zealand Standard known as NZS 5425.3 (Code of practice for CNG compressor and refuelling stations—metering devices)	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 including Amendment 1	
	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 including Amendment 1	
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)	NZS 5425.4:1994 Code of practice for CNG compressor and refuelling stations - CNG trickle fill stations on commercial and industrial premises, including Amendment 1	
New Zealand Standard known as NZS 7901:2008 (Electricity and gas industries—safety management systems for public safety)	NZS 7901:2014 Electricity and gas industries – Safety management systems for public safety	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
New Zealand Standard known as NZS/AS 3645:2012 (Essential requirements for gas equipment Part 1 and Part 2)	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	
Canadian Standards Association standard known as CSA 22.2.46:2013 (Electric air heaters)	CSA C22.2 No. 46-13 (R2018) Electric Air-Heaters	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
UL Standard known as UL 499 Ed.13(2005)—Safety Electric Heating Appliances	UL 499 Ed.14 (2023) Electric Heating Appliances	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
UL Standard known as UL 130 Ed.13 (2011)—Standard for Electric Heating Pads	UL 130 Ed.13 (2015) Standard for Electric Heating Pads	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

### Table 6: Standards citations to be removed from Schedule 1 of the GSMR

GSMR Schedule 1 Standard to be removed	Notes
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)	Need to remove references to NZS 5258 from the relevant regulations.

Table 7: New and updated Standards Citations and References to gas certification bodies in Schedule 2A of the GSMR

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
Clause 1 Bodies that may certify gas appliances and specified fittings	<ul> <li>(1) The following bodies may certify gas appliances and specified fittings for the purposes of regulation 54(3):</li> <li>(a) a body that is working within either of the following certification regimes:</li> <li>(i) EU Directive 2009/142/EC:</li> <li>(ii) for appliances that are not overed by EU Directive 2009/142/EC, EU Directive 90/396/ECC</li> </ul>	(a) a body that is working within the European Gas Appliances Regulation (EU GAR) – Regulation (EU) 2016/426	Immediate citation referring to new regime with no transition needed provided there is a generic transition similar to regulation 93.
		Insert 'A conformity assessment body appointed by a UK Competent Authority to undertake conformity assessment activities for the purposes of the Gas Appliances (Enforcement) and Miscellaneous Amendments Regulations 2018 (referred to as a UK approved body)'	As above
	(b) Canadian Standards Association:		No change
	(c) Underwriters Laboratories:		No change
	(d) SAI Global Certification Services Pty Ltd (trading as SAI Global):		No change
	(e) IAPMO R & T Oceana Pty Ltd:		No change
	(f) Australian Gas Association:		No change
	(g) Global-Mark Pty Ltd:		No change
		Insert 'BSI Group (Australia and New Zealand) Pty Ltd'	immediate transition as above

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
	(h) a body accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) and with a scope that includes NZS/AS 3645:2010 Part 2.	(h) a body accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) and with a scope that includes NZS/AS 3645.2:2012 Essential requirements for gas equipment - Part 2: Certification	No change
Clause 2	Standards and conditions applying to certification by bodies working within EU Directive 2009/142/EC or EU Directive 90/396/ECC	Replace reference to EU Directives with '(EU GAR) – Regulation (EU) 2016/426'	immediate citation as above
Clause 2(1)	<ul> <li>(1) This clause applies to a gas appliance or specified fittings certified by a body that is working within the certification regime of—</li> <li>(a) EU Directive 2009/142/EC; or</li> <li>(b) EU Directive 90/396/ECC, in the case of appliances not covered by EU Directive 2009/142/EC.</li> </ul>	(1) This clause applies to a gas appliance or specified fittings certified by a body that is working within the certification regime of (EU GAR) – Regulation (EU) 2016/426	immediate citation as above
Clause 2(2)	<ul> <li>(2) The appliance or fittings must be certified to the standard specified in subclause (7), subject to the following conditions:</li> <li>(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):</li> <li>(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:</li> <li>(c) a natural gas appliance must be certified to Category I2H:</li> <li>(d) a cabinet heater must be fitted with a label and notice that complies with Appendices 1 and 2 of NZS/AS 3645.</li> </ul>	We recommend that the reference to "Appendices 1 and 2 of NZS/AS 3645" in 2(d) be corrected to refer to: "Figure A1 and Figure A2 of NZS/AS 3645.2 Appendix A"	Immediate citation with no transition needed
Clause 2(6)	Standard A means EN 30-1-1:2008 + A3:2013 Domestic cooking appliances burning gas. Safety. General	Standard A means EN 30-1-1:2021 Domestic cooking appliances burning gas - Part 1-1: Safety - General	Cite new standard with immediate effect, with no transition necessary.
Clause 2(6)	Standard B means EN 203-1:2005 + A1:2008 Gas heated catering equipment. General safety rules.	Standard B means EN 203-1:2021 Gas heated catering equipment - Part 1: General safety requirements	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) Absorption refrigerators	EN 732:1998 Specifications for dedicated liquefied petroleum gas appliances—Absorption refrigerators	EN 732:1999 Specifications for dedicated liquefied petroleum gas appliances - Absorption refrigerators	No change
Clause 2(7) 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	Standard A, in conjunction with EN 30-1-3:2003+A1:2006 Domestic cooking appliances burning gas - Part 1-3: Safety - Appliances having a glass ceramic hotplate	Cite new standard with immediate effect, with no transition necessary.
Clause 2(7) 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	Standard A, in conjunction with EN 30-1-2:2023 Domestic cooking appliances burning gas - Part 1-2: Safety - Appliances having forced-convection ovens	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) 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	Standard A, in conjunction with 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	No change
	In conjunction with Standard A		
Clause 2(7) Boiling Pans	Standard B in conjunction with EN 203-2-3:2005 Gas heated catering equipment Part 2.3. Specific requirements–Boiling pans	Standard B, in conjunction with EN 203-2-3:2015 Gas heated catering equipment - Part 2-3: Specific requirements - Boiling pans	Cite new standard with immediate effect, with no transition necessary.
Clause 2(7) Brat pans and paella cookers	EN 203-2-8:2005 Gas heated catering equipment Part 2.8. Specific requirements–Brat pans and paella cookers	Standard B, in conjunction with EN 203-2-8:2016 Gas heated catering equipment - Part 2-8: Specific requirements - Brat pans and paella cookers	Cite new standard with immediate effect, with no transition necessary.
Clause 2(7) Decorative fuel-effect gas appliances	EN 509:1999 Decorative fuel-effect gas appliances	EN 509:1999+A1:2003+A2:2004 Decorative fuel-effect gas appliances	Cite new standard with immediate effect, with no transition necessary.
Clause 2(7) Dedicated liquefied petroleum gas appliances	EN 497:1997 Specification for dedicated liquefied petroleum gas appliances. Multi-purpose boiling burners for outdoor use	EN 497:2022 Specification for dedicated liquefied petroleum gas appliances - Multi purpose boiling burners for outdoor use - Cooking vessels with a diameter greater than 300 mm	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) 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	EN 15502-1:2021 Gas-fired heating boilers - Part 1: General requirements and tests In conjunction with EN 15502-2-1:2022 Gas-fired central heating boilers - Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW Or EN 15502-1:2021 Gas-fired heating boilers - Part 1: General requirements and tests In conjunction with EN 15502-2-2:2014 Gas-fired central heating boilers - Part 2-2: Specific standard for type B1 appliances	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) Fryers	Standard B in conjunction with EN 203-2-4:2005 Gas heated catering equipment. Specific requirements. Fryers	Standard B, in conjunction with EN 203-2-4:2021 Gas heated catering equipment - Part 2-4: Specific requirements - Fryers	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
Clause 2(7) Fuel cell gas heating	EN 50465:2008 Gas appliances. Fuel cell gas heating appliance. Fuel cell	EN 62282-3-400:2016 Fuel cell technologies - Part 3-	Cite new standard with immediate
appliances	gas heating appliance of nominal heat input inferior or equal to 70 kW	400: Stationary fuel cell power systems - Small stationary	effect, with a 12 month transition
		fuel cell power system with combined heat and power	in which older standard may be
			uscu.
		In conjunction with	
		IEC 62282-2:2012, Fuel cell technologies – Part 2: Fuel cell modules	
		and	
		IEC 62282-3-201:2013, Fuel cell technologies – Part 3-	
		201: Stationary fuel cell power systems	
		– Performance test methods for small fuel cell power	
		Systems	
		Or	Cite new standard with immediate
		IEC 62282-3-400-2016 Fuel cell technologies - Part 3-	effect, with a 12 month transition
		400: Stationary fuel cell power systems - Small stationary	used.
		fuel cell power system with combined heat and power	
		output	
		In conjunction with	
		IEC 62282-2:2012, Fuel cell technologies – Part 2: Fuel	
		and	
		IEC 62282-3-201:2013. Fuel cell technologies – Part 3-	
		201: Stationary fuel cell power systems	
		– Performance test methods for small fuel cell power	
Clause 2(7) Gas-fired absorption and	EN 12309-1:1999 Gas-fired absorption and adsorption air-conditioning	EN 12309-1:2023 Gas-fired sorption appliances for	Cite new standard with immediate
adsorption air-conditioning and/or	and/or heat pump appliances with a net heat input not exceeding 70 kW.	heating and/or cooling with a net heat input not	effect, with a 12 month transition
heat pump appliances	Safety	exceeding 70 kW - Part 1: Terms and definitions	in which older standard may be
		and	useu.
		EN 12309-2:2015/AC:2015 Gas-fired sorption appliances	
		for heating and/or cooling with a net heat input not exceeding 70 kW - Part 2: Safety	
Clause 2(7) Gas-fired central heating	EN 656:1999 A1:2006 Gas-fired central heating boilers. Type B boilers of	EN 15502-2-1:2022 Gas-fired central heating boilers -	Cite new standard with immediate
boilers of nominal heat input exceeding 70 kW, but not exceeding	nominal heat input exceeding 70 kW, but not exceeding 300 kW	Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not	effect, with a 12 month transition in which older standard may be
300 kW	OR	exceeding 1 000 kW	used.
	EN 16602 2 1:2012	In conjunction with	
	EN 13302-2-1.2012	EN 15502-1:2021/AC:2022 Gas-fired heating boilers -	
		Part 1: General requirements and tests	
		Or, as applicable	
		EN 15502-1:2021/AC:2022 Gas-fired heating hoilers -	
		Part 1: General requirements and tests	
		In conjunction with	
		EN 15502-2-2:2014 Gas-fired central heating boilers -	
NEW Clause 2(7) Cas fired control	Not applicable	Part 2-2: Specific standard for type B1 appliances	Cite new standard with immediate
heating boilers - Type B boilers of		boilers of nominal heat input exceeding 300 kW, but not	effect.
nominal heat input exceeding 300		exceeding 1 000 kW	
kw, but not exceeding 1 000 kW			
Clause 2(7) Gas-fired central heating	EN 483:1999 + A4:2007 Gas-fired central heating boilers. Type C boilers of	EN 15502-2-1:2022 Gas-fired central heating boilers -	Cite new standard with immediate
boilers of nominal heat input not	nominal heat input not exceeding 70 kW	Part 2-1: Specific standard for type C appliances and type	effect, with a 12 month transition
exceeding 70 kW		B2, B3 and B5 appliances of a nominal heat input not	in which older standard may be used
		CACCECINING I DOD NW	useu.
		In conjunction with	
		EN 15502-1:2021/AC:2022 Gas-fired heating boilers - Part 1: General requirements and tests	
		or as applicable	
		EN 15502-1:2021/AC:2022 Gas-fired heating boilers -	
		Part 1: General requirements and tests	
		In conjunction with	
		EN 15502-2-2:2014 Gas-fired central heating boilers -	
		Part 2-2: Specific standard for type B1 appliances	

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
Clause 2(7) 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	EN 15502-2-1:2022 Gas-fired central heating boilers - Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
		In conjunction with EN 15502-1:2021/AC:2022 Gas-fired heating boilers - Part 1: General requirements and tests	
		or as applicable	
		EN 15502-1:2021/AC:2022 Gas-fired heating boilers - Part 1: General requirements and tests	
		In conjunction with EN 15502-2-2:2014 Gas-fired central heating boilers - Part 2-2: Specific standard for type B1 appliances	
Clause 2(7) Gas-fired instantaneous water heaters	EN 26:1997 Gas-fired instantaneous water heaters for sanitary uses production, fitted with atmospheric burners (Including Corrigendum 1998)	EN 26:2023 Gas-fired instantaneous water heaters for the production of domestic hot water	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) Gas-fired overhead luminous radiant heaters	EN 419-1:2009 Non-domestic gas-fired overhead luminous radiant heaters. Safety	EN 419:2019 Gas-fired overhead luminous radiant heaters for non-domestic use - Safety and energy efficiency	Cite new standard with immediate effect.
Clause 2(7) Gas-fired storage water heaters	EN 89:1999 Gas-fired storage water heaters for the production of domestic hot water	EN 89:2015/PRA1:2016 Gas-fired storage water heaters for the production of domestic hot water	Cite new standard with immediate effect.
General domestic cooking appliances	EN 30-1-1:2008 + A3:2013 Domestic cooking appliances burning gas—Part 1-1: Safety—General	Standard A, in conjunction with EN 30-1-1:2021 Domestic cooking appliances burning gas - Part 1-1: Safety - General	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) General gas heated catering equipment	EN 203-1:2005 + A1:2008 Gas heated catering equipment—Part 1: General safety rules	Standard B, in conjunction with EN 203-1:2021 Gas heated catering equipment - Part 1: General safety requirements	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) Hot water heaters for beverage	EN 203-2-6:2005 Gas heated catering equipment. Specific requirements	Standard B, in conjunction with EN 203-2-6:2005 Gas heated catering equipment - Part 2-6: Specific requirements - Hot water heaters for beverage	No change
Independent gas-fired convection heaters	EN 613:2000 Independent gas-fired convection heaters	EN 613:2021 Independent closed-fronted gas-fired type B11, type C11, type C31 and type C91 heaters	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
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	EN 484:2019/AC:2020 Specification for dedicated liquefied petroleum gas appliances - Independent stoves, including those incorporating a grill for outdoor use	Cite new standard with immediate effect.
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	EN 1596:1998/A1:2004 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 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	EN 17082:2019 Domestic and non-domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) 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	Standard B, in conjunction with EN 203-2-1:2021 Gas heated catering equipment - Part 2-1: Specific requirements - Open burners and wok burners	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) Ovens	Standard B in conjunction with EN 203-2-2:2006 Gas heated catering equipment. Specific requirements. Ovens	Standard B, in conjunction with EN 203-2-2:2021 Gas heated catering equipment - Part 2-2: Specific requirements - Ovens	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) 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	EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances - Parasol patio heaters - Flueless radiant heaters for outdoor or amply ventilated area use	Cite new standard with immediate effect.
Clause 2(7) Portable vapour pressure liquefied petroleum gas appliances	EN 521:2006 Specifications for dedicated liquefied petroleum gas appliances. Portable vapour pressure liquefied petroleum gas appliances	Standard A, in conjunction with EN 521:2019+AC:2019 Specifications for dedicated liquefied petroleum gas appliances - Portable vapour pressure liquefied petroleum gas appliances	Cite new standard with immediate effect.
Clause 2(7) 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	No change to EN standard	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 2(7) 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/AC:2008 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats	Cite new standard with immediate effect.
Clause 2(7) Salamanders and rotisseries	EN 203-2-7:2007 Gas heated catering equipment. Specific requirements. Salamanders and rotisseries	Standard B, in conjunction with EN 203-2-7:2014 Gas heated catering equipment - Part 2-7: Specific requirements - Salamanders and rotisseries	Cite new standard with immediate effect.
Clause 2(7) 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	EN 416:2019 Gas-fired overhead radiant tube heaters and radiant tube heater systems for non-domestic use - Safety and energy efficiency	Cite new standard with immediate effect.
Clause 2(7) 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	Standard B, in conjunction with EN 203-2-9:2005 Gas heated catering equipment - Part 2-9: Specific requirements - Solid tops, warming plates and griddles	

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
NEW Clause 2(7) Domestic combination hot water and central heating boilers - hybrid units combining a gas-fired boiler and an electrical heat pump in a product		EN 15502-1:2021 Gas-fired heating boilers - Part 1: General requirements and tests In conjunction with EN 15502-2-3:2023 Gas-fired central heating boilers - Part 2-3: Specific standard for hybrid units combining a gas-fired boiler and an electrical heat pump in a product	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
NEW Clause 2(7) Forced draught		EN 676:2020 Forced draught burners for gaseous fuels	New citation
burners for gaseous fuels		Subject to the variation: that the appliance must be assessed and installed, prior to commissioning, to meet the requirements of clause A2.2, paragraphs a, b, and c of AS/NZS 5266	
Clause 3 (North American regime)			
Clause 3(3) 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	CSA/ANSI Z21.5.1-22/CSA 7.1-2022 Gas Clothes Dryers, Volume I, Type 1 Clothes Dryers	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 3(3) 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	CSA ANSI Z83.20-2016/CSA 2.34-2016 (R2021) Gas-Fired Tubular And Low-Intensity Infrared Heaters	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
Clause 3(3) 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 ANSI Z21.13-2010 • CSA 4.9-2010,	CSA/ANSI Z21.13-22/CSA 4.9-2022 Gas-Fired Low- Pressure Steam And Hot Water Boilers	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
	ANSI Z21.13a-2010 • CSA 4.9a-2010, and ANSI Z21.13b-2012 • CSA 4.9b- 2012 ANSI Z21.13-2013 • CSA 4.9-2013		
Clause 3(3) 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	CSA/ANSI Z83.26-20/CSA 2.37-2020 Gas-Fired Outdoor Infrared Patio Heaters	Cite new standard with immediate effect.
Clause 3(3) Gas storage water heaters	ANSI Z21.10.3-2013/ CSA 4.3-2013 Gas Water Heaters—Volume III,	CSA/ANSI Z21.10.3-19/CSA 4.3-2019 Gas-Fired Water	Cite new standard with immediate
with input ratings above 75,000 BTU per hour	Storage Water Heaters With Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous	Heaters, Volume III, Storage Water Heaters With Input Ratings Above 75,000 Btu Per Hour, Circulating And Instantaneous	effect.
	ANSI Z21.10.3-2015/CSA 4.3-2015		
Clause 3(3) 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	CSA/ANSI Z21.10.1-19/CSA 4.1-2019 Gas Water Heaters, Volume I, Storage Water Heaters With Input Ratings Of 75,000 Btu Per Hour Or Less	Cite new standard with immediate effect.
	ANSI Z21.10.1-2014/CSA 4.1-2014		
Clause 3(3) Gas-fired unvented room heaters	ANSI Z21.11.2-2011 American National Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters	CSA/ANSI Z21.11.2-2019 Gas-Fired Room Heaters, Volume II, Unvented Room Heaters	Cite new standard with immediate effect.
	ANSI Z21.11.2-2013		
Clause 3(3) Gas-fired waterless toilets	CGA 5.2-1971 Gas-fired waterless toilets Reconfirmed 2013	CSA CGA 5.2:71 (R2019) Gas-Fired Waterless Toilets	Cite new standard with immediate effect.
Clause 3(3) 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	CSA ANSI Z83.11-2016 (R2021)/CSA 1.8-2016 (R2021) Gas Food Service Equipment	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used
Clause 3(3) 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	CSA/ANSI Z21.1-2018/CSA 1.1-2018 Household Cooking Gas Appliances	Cite new standard with immediate effect.
Clause 3(3) 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	CSA/ANSI Z21.58-22/CSA 1.6-2022 Outdoor Cooking Gas Appliances	Cite new standard with immediate effect, with a 12 month transition in which older standard may be used.
	ANSI Z21.58b-2012/CSA 1.6b-2012 Outdoor cooking gas appliances		
Clause 3(3) 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	CSA/ANSI Z21.89-23/CSA 1.18-2023 Outdoor Cooking Specialty Gas Appliances	Cite new standard with immediate effect, with a 12 month transition in which older standard may be
	ANSI Z21.89b-2012/CSA 1.18b-2012 Outdoor cooking specialty gas appliances		useu.
	CSA 1.18-2007 (R2012) Withdrawn		
Clause 3(3) Outdoor decorativo gas	ANSI Z21.89-2013/CSA 1.18-2013	CSA ANSI 721 97-2017 (R2022)/CSA 2 41-2017 (R2022)	Cite new standard with immediate
appliances		Outdoor Decorative Gas Appliances	effect.
Clause 3(3) Portable type gas camp	ANSI Z21.72-2011/CSA 11.2-2011 American National Standard/CSA Standard For Portable Type Gas Camp Stoves	CSA/ANSI Z21.72-19/CSA 11.2-2019 Portable Type Gas	Cite new standard with immediate
Clause 3(3) Portable type gas camp	ANSI Z21.63/CSA 11.3 2011 Portable Type Gas Camp Heaters	CSA/ANSI Z21.63-19/CSA 11.3-2019 Portable Type Gas	Cite new standard with immediate
11CalCI3		Camp ricaters	

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
Clause 3(3) Portable type gas camp	ANSI Z21.73-2011/CSA 11.1-2011 American National Standard/CSA	ANSI Z21.73-2017/CSA 11.1-2017 Portable Type Gas	Cite new standard with immediate
lights	Standard For Portable Type Gas Camp Lights	Camp Lights	effect.
	ANSI Z21.73-2000/CSA 11.1-2000		
heaters	ANSI 221.88-2009/CSA 2.33-2009 Vented gas fireplace heaters	CSA/ANSI 221.88-19/CSA 2.33-2019 Vented Gas Fireplace Heaters	effect.
	ANSI Z21.88-2014/CSA 2.33-2014		
	ANSI Z21.88-2016/CSA 2.33-2016		
Clause 3(3) Vented gas fireplace	ANSI Z21.50-2012/CSA 2.22-2012 American National Standard/CSA Standard For Vented Gas Firenlaces	CSA/ANSI Z21.50-19/CSA 2.22-2019 Vented Decorative	Cite new standard with immediate
Clause 3(3) Vented gas-fired space	ANSI 221.50-2014/CSA 2.22-2014 ANSI 221.86-2008/CSA 2.32-2008 American National Standard/CSA	ANSI Z21.86-2016/CSA 2.32-2016 Vented Gas-Fired	Cite new standard with immediate
heating appliances	Standard For Vented Gas-Fired Space Heating Appliances	Space Heating Appliances	effect.
Clause 4 (Australian regime)			
Atmospheric steamers	AS 4563-2004 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate
	Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment		effect.
Balanced flue convection heaters	AS 4553-2008 Gas space heating appliances, including AS	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas	Cite new standard with immediate
	4553-2008/Amdt 1-2011 Gas space heating appliances Or NZS/AS 4553(Int).1:2013 Gas space heating appliances—	space heating appliances, including Amendment 1	effect.
	Part 1: Essential safety	In conjunction with	
	Or, until 30 June 2016: AS 4553-2000 Gas space heating appliance	AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Barbecues, charbroilers and	AS 4563-2004 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate
rotisseries	Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment		effect.
Boilers (central heating and/or water	AS 4552-2005 Gas-fired water heaters for hot water supply	AS/NZS 5263.1.2:2020 Gas appliances – Gas fired water	Cite new standard with immediate
heating)	and/or central heating Or, until 30 June 2016: AS 4552-2000 Gas-fired water	heaters for hot water supply and/or central heating	effect.
	heaters for hot water supply and/or central heating	In conjunction with	
		AS/N2S 5263.0:2023 Gas appliances, Part 0: General requirements	
Boiling tables (open and closed top)	AS 4563-2004 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate
	Or, until 30 June 2016: AS 4563-2003 Commercial catering		effect.
Boiling water units	AS 4563-2004 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate
Pullt in an along and average	Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment		effect.
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	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas cooking appliances	effect.
	Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	In conjunction with	
		AS/NZS 5263.0:2023 Gas appliances, Part 0: General	
		requirements	
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-	AS/NZS 2658:2022 LP Gas - Portable and mobile appliances	Cite new standard with immediate effect.
	2008/Amdt 3		
	appliances		
Caravan and marine cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas cooking appliances	Cite new standard with immediate effect.
	- ,		
		AS/NZS 5263.0:2023 Gas appliances, Part 0: General	
		requirements	
Chinese cooking tables	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
Cookers and barbecues	AS 2658-2008 LP Gas—portable and mobile appliances, including AS	AS/NZS 2658:2022 LP Gas - Portable and mobile	Cite new standard with immediate
	2658-2008/Amdt 1-2009, AS 2658-2008/Amdt 2-2011, and AS 2658- 2008/Amdt 3	appliances	effect.
	Or, until 30 June 2016: AS 2658-2003 LP Gas—portable and mobile		
Counter top cookers	AS 4551-2008 Domestic gas cooking appliances	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas	Cite new standard with immediate
	Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	cooking appliances	effect.
		In conjunction with	
		AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Domestic gas refrigerators	AS 4555-2002 (AG-105-2002) Domestic gas refrigerators, including AS	AS/NZS 5263.1.5:2019 Gas appliances, Part 1.5:	Cite new standard with immediate
	4555-2002 (AG 105-2002)/Amdt 1-2011	Domestic gas refrigerators	effect.
		In conjunction with	
		AS/N2S 5263.0:2023 Gas appliances, Part 0: General requirements	
Domestic outdoor gas barbecues	AS 4557-2004 Domestic outdoor gas barbecues, including AS 4557-	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas	Cite new standard with immediate
	2004/Amdt 1-2009 and AS 4557-2004/Amdt 2-2012 Or NZS/AS 4557(Int): 2013 Domestic outdoor gas barbecues	cooking appliances	effect.
	Or, until 30 June 2016: AS 4557-2001 Domestic outdoor gas barbecues	In conjunction with	
		AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Ducted heaters	AS 4556-2011 Indirect gas-fired ducted air-heaters	AS/NZS 5263.1.6:2020 Gas appliances, Part 1.6: Indirect	Cite new standard with immediate
	Or, until 30 June 2016: AS 4556-2000/AG 106-2000 Indirect gas-fired	gas-fired ducted air heaters	effect.
		In conjunction with	
		AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
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	AS/NZS 5263.1.6:2020 Gas appliances, Part 1.6: Indirect gas-fired ducted air heaters	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Elevated cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	AS/NZS 5263.1.6:2020 Gas appliances, Part 1.6: Indirect gas-fired ducted air heaters	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.8:2021 Gas appliances, Part 1.8: Decorative effect gas appliances, including Amendment 1	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1	Cite new standard with immediate effect.
	Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances	In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1.	Cite new standard with immediate effect.
	Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances	In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1,	Cite new standard with immediate effect.
	Or, until 30 June 2016: AS 4553-2000 Gas space heating appliances	In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Food warmers including bains marie	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1.	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Freestanding cookers	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas cooking appliances	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Fryers	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
Gas boosted solar water heaters	AS 4552-2005 Gas-fired water heaters for hot water supply and/or central heating Or until 30 lune 2016: AS 4552-2000 Gas-fired water heaters for hot	AS/NZS 5263.1.2:2020 Gas appliances – Gas fired water heaters for hot water supply and/or central heating	Cite new standard with immediate effect.
	water supply and/or central heating	In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Gas laundry dryers	AS 4554-2005 Gas laundry dryers Or, until 30 June 2016: AS 4554-2002 Gas laundry dryers	AS/NZS 5263.1.9:2019 Gas appliances, Part 1.9: Gas laundry dryers	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.8:2021 Gas appliances, Part 1.8: Decorative effect gas appliances, including Amendment 1.	Cite new standard with immediate effect.
	other fuel effect fires	In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
Gas pool heaters	AS 4560-2004 Gas pool heaters, including AS 4560-2004/Amdt 1-2009 Gas pool heaters	AS/NZS 5263.1.12 Gas appliances, Part 1.12: Gas pool heaters	Cite new standard with immediate effect.
Hotplates	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas cooking appliances	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS/NZS 5263.1.8:2021 Gas appliances, Part 1.8: Decorative effect gas appliances, including Amendment 1	Cite new standard with immediate effect.
		In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	
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	AS 3814:2018 Industrial and commercial gas-fired appliances	Cite new standard with immediate effect.

Clause/Appliance Type	GSMR Schedule 2A Current requirement	GSMR Schedule 2A Replacement	Transition
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	AS/NZS 5263.1.2:2020 Gas appliances – Gas fired water heaters for hot water supply and/or central heating In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
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	AS/NZS 5263.1.10:2019 Gas appliances, Part 1.10: Gas direct fired air heaters In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Miscellaneous 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	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1 In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Ovens	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
Overhead radiant tube gas heaters	AS 4643-2007 Overhead radiant tube gas heaters	AS/NZS 5263.1.4:2017 Gas Appliances, Part 1.4: Radiant gas heaters In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Pasta cookers and rethermalisers	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
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	AS/NZS 5263.1.4:2017 Gas Appliances, Part 1.4: Radiant gas heaters In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Ranges	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
Salamanders, grillers and griddles	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
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	AS/NZS 2658:2022 LP Gas - Portable and mobile appliances	Cite new standard with immediate effect.
Stockpots and brat pans	AS 4563-2004 Commercial catering gas equipment Or, until 30 June 2016: AS 4563-2003 Commercial catering gas equipment	AS 4563:2022 Commercial catering gas equipment	Cite new standard with immediate effect.
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	AS/NZS 5263.1.2:2020 Gas appliances – Gas fired water heaters for hot water supply and/or central heating In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Wall furnaces	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	AS/NZS 5263.1.3:2021 Gas appliances, Part 1.3: Gas space heating appliances, including Amendment 1 In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.
Wall ovens	AS 4551-2008 Domestic gas cooking appliances Or, until 30 June 2016: AS 4551-2000 Domestic gas cooking appliances	AS/NZS 5263.1.1:2020 Gas appliances – Domestic gas cooking appliances In conjunction with AS/NZS 5263.0:2023 Gas appliances, Part 0: General requirements	Cite new standard with immediate effect.

### Table 8: New standards and conditions applying to UK certifying bodies

NEW	Standards and conditions applying to UK approved bodies
	(1) This clause applies to a gas appliance or specified fittings certified by a body that is appointed by a LIK Competent

	Authority to undertake conformity assessment activities for the purposes of the Gas Appliances (Enforcement) and Miscellaneous Amendments Regulations 2018.
	<ul> <li>(2) The appliance or fittings must be certified to the standard specified in subclause (7), subject to the following conditions:</li> <li>(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):</li> </ul>
	<ul> <li>(b)</li> <li>an LPG appliance, other than an appliance for use with non-refillable cartridges, must be certified to Category I3B/P 30 or</li> <li>I3B/P 28-30:</li> <li>(c)</li> </ul>
	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 Figure A1 and Figure A2 of NZS/AS 3645.2 Appendix A.
Standard AB	BS EN 30-1-1:2021+A1:2023 Domestic cooking appliances burning gas - Safety. General

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NEW	Standards and conditions applying to UK approved bodies
Standard BB	BS EN 203-1:2021 - TC Gas heated catering equipment - General safety requirements
	BS EN 732:1999 Specifications for dedicated liquefied petroleum gas appliances. Absorption refrigerators
	Standard AB, in conjunction with BS EN 30-1-3:2003+A1:2006+AC1:2006 Domestic cooking appliances burning gas. Safety. Appliances having a glass ceramic hotplate
	Standard AB, in conjunction with BS EN 30-1-2:2023: Domestic cooking appliances burning gas, Safety. Appliances having forced-convection ovens
	Standard AB, in conjunction with BS EN 30-1-4:2012 Domestic cooking appliances burning gas. Safety. Appliances having one or more burners with an automatic burner control system
	Standard BB, in conjunction with BS EN 203-2-3:2014 - TC Gas heated catering equipment - Specific requirements. Boiling pans
	Standard BB, in conjunction with BS EN 203-2-8:2005 Gas heated catering equipment - Specific requirements. Brat pans and paella cookers
	Standard BB, in conjunction with BS EN 203-2-10:2007 Gas heated catering equipment. Specific requirements. Chargrills
	BS EN 509:2000 Decorative fuel-effect gas appliances
	BS EN 497:2022 Specification for dedicated liquefied petroleum gas appliances. Multi purpose boiling burners for outdoor use. Cooking vessels with a diameter greater than 300 mm
	BS EN 498:2012 Specification for dedicated liquefied petroleum gas appliances. Barbecues for outdoor use contact grills included
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers - General requirements and tests
	In conjunction with BS EN 15502-2-1:2022+A1:2023 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
	Or BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers - General requirements and tests
	In conjunction with BS EN 15502-2-2:2014 Gas-fired central heating boilers. Specific standard for type B1 appliances
	BS EN 449:2002+A1:2007 Specification for dedicated liquefied petroleum gas appliances. Domestic flueless space heaters (including diffusive catalytic combustion heaters).
	Standard BB, in conjunction with BS EN 203-2-4:2021+A1:2023 Gas heated catering equipment Specific requirements. Fryers
	BS EN 62282-3-400:2015 Fuel cell technologies. Part 3-400. Stationary fuel cell power systems. Small stationary fuel cell power system with combined heat and power output
	In conjunction with IEC 62282-2:2012, Fuel cell technologies – Part 2: Fuel cell modules
	and IEC 62282-3-201:2013, Fuel cell technologies – Part 3-201: Stationary fuel cell power systems – Performance test methods for small fuel cell power systems
	BS EN 12309-1:2023 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, Safety
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
	In conjunction with BS EN 15502-2-1:2022 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
	or as applicable
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
	In conjunction with BS EN 15502-2-2:2014 Gas-fired central heating boilers, Specific standard for type B1 appliances

BS EN 13836:2006 Gas fired central heating boilers. Type B boilers of nominal heat input exceeding 300 kW, but not exceeding 1000 kW
BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
In conjunction with BS EN 15502-2-1:2022 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
or as applicable
BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
In conjunction with BS EN 15502-2-2:2014 Gas-fired central heating boilers, Specific standard for type B1 appliances

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NEW	Standards and conditions applying to UK approved bodies
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
	In conjunction with BS EN 15502-2-1:2022 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
	or as applicable
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers General requirements and tests
	In conjunction with BS EN 15502-2-2:2014 Gas-fired central heating boilers, Specific standard for type B1 appliances
	BS EN 26:2023 TC Gas-fired instantaneous water heaters for the production of domestic hot water
	BS EN 419:2019 Gas-fired overhead luminous radiant heaters for non-domestic use. Safety and energy efficiency
	BS EN 89:2015 Gas-fired storage water heaters for the production of domestic hot water
	BS EN 12752-1:1999 Gas-fired type B tumble dryers of nominal heat input not exceeding 20 kW - Safety
	Standard AB, in conjunction with BS EN 30-1-1:2021 Domestic cooking appliances burning gas, Safety. General
	Standard BB, in conjunction with BS EN 203-1:2021 TC Gas heated catering equipment - General safety requirements
	Standard BB, in conjunction with BS EN 203-2-6:2005 Gas heated catering equipment. Specific requirements. Hot water heaters for beverage
	BS EN 1266:2002 Independent gas-fired convection heaters incorporating a fan to assist transportation of combustion air and/or flue gases
	BS EN 14829:2007 Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW
	BS EN 613:2021 TC Independent closed-fronted gas-fired type B11, type C11, type C31 and type C91 heaters
	BS EN 484:2019/AC:2020 Specification for dedicated liquefied petroleum gas appliances - Independent stoves, including those incorporating a grill for outdoor use
	BS EN 1596:1998/A1:2004 Specification for dedicated liquefied petroleum gas appliances. Mobile and portable non-domestic forced convection direct fired air heaters
	BS EN 17082:2019 Domestic and non-domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW
	Standard BB, in conjunction with BS EN 203-2-1:2021+A1:2023 Gas heated catering equipment, Specific requirements. Open burners and wok burners
	Standard BB, in conjunction with BS EN 203-2-2:2021 - TC Gas heated catering equipment - Specific requirements. Ovens
	BS EN 14543:2017 Specification for dedicated liquefied petroleum gas appliances. Parasol patio heaters. Flueless radiant heaters for outdoor or amply ventilated area use
	Standard BB, in conjunction with BS EN 203-2-11:2006 Gas heated catering equipment-Specific requirements-Pasta cookers
	Standard AB, in conjunction with BS EN 521:2019+AC:2019 Specifications for dedicated liquefied petroleum gas appliances. Portable vapour pressure liquefied petroleum gas appliances
	BS EN 624:2011 Specification for dedicated LPG appliances. Room sealed LPG space heating equipment for installation in vehicles and boats
	BS EN 15033:2006/AC:2008 Room sealed storage water heaters for the production of sanitary hot water using LPG for vehicles and boats
	Standard BB, in conjunction with BS EN 203-2-7:2014 Gas heated catering equipment - Specific requirements. Salamanders and rotisseries
	BS EN 416:2019 Gas-fired overhead radiant tube heaters and radiant tube heater systems for non-domestic use. Safety and energy efficiency
	Standard BB, in conjunction with BS EN 203-2-9:2005 Gas heated catering equipment. Specific requirements. Solid tops, warming plates and griddles
	BS EN 15502-1:2021+A1:2023 Gas-fired heating boilers - General requirements and tests
	In conjunction with BS EN 15502-2-3:2023 Gas-fired central heating boilers, Specific standard for hybrid units combining a gas-fired boiler and an electrical heat pump in a product
	BS EN 676:2020 Forced draught burners for gaseous fuels.
	Subject to the variation: that the appliance must be assessed and installed, prior to commissioning, to meet the requirements of clause A2.2, paragraphs a, b, and c of AS/NZS 5266

#### Section 2 - Proposed modifications to new and updated standards

This section details proposed modifications to be included in reference to accommodate local conditions, provide consistency with New Zealand settings, or to correct errors in the current versions of standards. The following has advice been provided by WorkSafe and will be incorporated into drafting.

AS/NZS 3001.1: 2022 – Site Supplies		
Suggested modification	Reason for change	
Delete clause 2.3.3.2 paragraph 3	This paragraph requires that, where overhead wiring crosses a roadway, additional flagged cables (or other	
We consider that this clause is out of scope of the ESR.	suitable warning cables) be installed on either side of the overhead wiring. We consider that this is potentially out of scope because the flagged cables are not used to convey electricity, so do not fall within the definition of an installation in the ESR.	
Delete clause 2.4.2.2	This clause requires that, when a service pillar is modified, all socket outlets on the pillar must be upgraded. We consider that this would be contrary to regulation 59(3) of the ESR which allows for low voltage installations to be maintained in their original condition.	
Replace the wording in clause 2.4.6.5(b) with: "Either type A in accordance with IEC 61009.1 or IEC 61008.1 Or Type F or Type B in accordance with IEC 62423."	This is to allow the use of Type B and F RCDs which are not blinded by the presence of DC current in the AC wave form, whereas the Type A RCD in normal use in New Zealand can be 'blinded' by DC current in the AC wave form. Blinded means that the RCD may not trip under fault conditions.	
Delete clause C.3.3.2	This clause requires the periodic inspection of the clause proposed for removal from clause 2.4.2.2 above.	
Delete clause C.4 We consider that this clause is out of scope of the ESR.	This clause relates to socket outlets for general use in a caravan park e.g. in a kitchen or bathroom. As these sockets are not intended to supply electricity to a connectable installation, they are not part of the site installation and outside the scope of the periodic inspection.	

AS/NZS 3001.2: 2022 – Connectable electrical installations		
Suggested modification	Reason for change	
Delete clause 1.1.3	Clause 1.1.3 provides that connectable electrical installations that are fixed in place are not subject to this standard. However, there are thousands of caravans in New Zealand that are permanently fixed in caravan parks e.g. by having their wheels removed. These installations would be unable to obtain a WoEF if <i>AS/NZS 3001.2</i> does not apply to them.	
	In addition, the clause also excludes other types of connectable installations from the standard. Our preference is for these installations to be covered by <i>AS/NZS 3001.2</i> where appropriate.	
Delete clause 5.7.2	This clause contains requirements for extra-low voltage socket-outlets. However, the definition of a connectable	
We consider that this clause is out of scope of the ESR.	installation in the ESR includes that it be designed or intended for connection to an external power supply that operates at a nominal voltage between 90 and 250 volts	

	AC at standard low voltage. As a result, we consider that
	these requirements are out of scope as extra-low voltage is
	not covered in relation to connectable installations.
Delete clause D.4.10, paragraph (a)	This clause would restrict the type of RCD that can be used
	with a connectable installation to Type A. There are
	existing installations with other types of RCDs that are
	considered electrically safe; replacing these for the
	purpose of the WoEFF would result in unnecessary costs.
Replace the wording in clause D.4.11(a)	This clause requires that RCDs must comply with specified
with:	standards for a Type A RCD before a WoEF can be issued.
"Any RCD provided shall operate in all	However, other types of RCDs currently in use are
live (active and neutral) conductors and	electrically safe so there would be unnecessary costs if
have a residual current rating not	owners were required to upgrade their connectable
exceeding 30 mA."	installation for the purpose of obtaining a WoEF.
Delete clause D.4.13.1 paragraph 2	This paragraph specifies that "three phase socket outlets
	shall provide a nominal 400V/50 Hz three phase supply".
We consider that this clause is out of	As this exceeds the voltage that a connectable installation
scope of the ESR.	can operate at, we consider that this requirement is
	outside the scope of the ESR.
Delete clause D.4.13.2	This clause requires the periodic inspection of the clause
	proposed for removal from clause 5.7.2 above.
Delete clause D.4.14	This clause sets requirements for electrical equipment near
	gas installations. We consider that the costs associated
	with upgrading existing connectable installations to meet
	these requirements would not be reasonable as existing
	fittings are electrically safe.
Delete clause D.4.15	This clause sets requirements for batteries and battery
	compartments. As batteries do not operate at standard
We consider that this clause is out of	low voltage, we consider that these requirements are
scope of the ESR.	outside the scope of the ESR.
Delete clause D.4.16	This clause sets requirements for photovoltaic arrays. As
	photovoltaic arrays operate on DC rather than AC, they do
We consider that this clause is out of	not fall within the definition of a connectable installation.
scope of the ESR.	As a result, we consider that these requirements are
	outside the scope of the ESR.
Replace the wording in clause D.5.2	This clause requires RCDs to be tested in accordance with
with:	Section 8 of AS/NZS 3000. RCDs that are not Type A would
"Any RCD provided shall operate in all	not pass this type of testing even though they are
live (active and neutral) conductors and	electrically safe.
have a residual current rating not	
exceeding 30 mA."	

We note that, if *AS/NZS 3001.1: 2022* and *AS/NZS 3001.2: 2022* are adopted, the references to AS/NZS 3001 in the body of the regulations would need to be updated. The changes that would be required are:

- regulation 60(1)(e) replace reference to "AS/NZS 3001" with "AS/NZS 3001.2".
- regulation 60(1)(f)(iv) replace reference to "AS/NZS 3001" with "AS/NZS 3001.1".
- regulation 75(1)(a) replace reference to "AS/NZS 3001" with "AS/NZS 3001.1".
- regulation 78(2) replace reference to "AS/NZS 3001" with "AS/NZS 3001.2".
- regulation 78(2)(c) replace reference to "AS/NZS 3001" with "AS/NZS 3001.2".

#### Proposed modifications to electricity safety standards

#### Schedule 2

# AS/NZS 5149.2: 2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Design, construction, testing, marking and documentation

As indicated on the standards tables, industry have identified errors in two of the formulae in Appendix F to this standard. We propose the following modifications to resolve these errors:

Replace formula F.1 with

$$L = \frac{0.2146d^{5}(P_{0}^{2} - P_{2}^{2})}{fC_{r}^{2}} - \frac{d\ln\left(\frac{P_{0}}{P_{2}}\right)}{6f}$$
(I-P)

And replace formula F.4 with

$$L = \frac{7.4381 \times 10^{-15} d^5 (P_0^2 - P_2^2)}{f C_r^2} - \frac{d \ln(\frac{P_0}{P_2})}{500 f}$$
(SI)

### AS/NZS 3000:2018 Electrical installations (known as the Australian/New Zealand Wiring Rules). Including Amendments 1, 2 and 3

We propose several modifications to this standard, which are noted in the table below along with the reasons for the change.

In addition, we will continue our work with Standards New Zealand to insert these changes into the substantive standard through the normal standards amendment process.

Suggested modification	Reason for change
Amend clause 1.5.6.3 by inserting the following wording at the end of paragraph 1: "Any RCD that forms part of an installation	This is to ensure that, where an RCD forms part of an installation, it is not blinded by the presence of DC current in the AC wave form.
shall be selected and installed to be compatible with the types of load intended to be used within the installation. Consideration shall be applied for potential pulsating and constant DC fault currents and waveform distortion."	Blinded means that the RCD may not trip under fault conditions. This is relevant to installations that have a DC component (such as the DC battery of an EV), where there would be a risk to safety if the RCD did not trip.
Delete clause 1.6.2(c) note (b)	In New Zealand the ESR prescribes standard low voltage, not IEC 60038.
Delete clauses 2.3.2.1.2(b) and 2.3.2.1.2(c)	These two clauses prevent the switching and/or isolation of the neutral and earthing conductors. However, there needs to be an ability to switch the neutral and earth for EV charging, Terra Terra (TT), and Isolated Terra (IT) circuits, as well as when an installation is operated independent of the grid.
Replace clause 2.6.2.2.3(b) with:	This is to allow the use of Type B and F RCDs which are
"Either type A in accordance with IEC	not blinded by the presence of DC current in the AC
61009.1 or IEC 61008.1	wave form, whereas the Type A RCD in normal use in
Or	New Zealand can be 'blinded' by DC current in the AC

Type F or Type B in accordance with IEC 62423."	wave form. Blinded means that the RCD may not trip under fault conditions.
Delete 2.6.3.3.2 Exception 2, bullet point 2	This exception is no longer needed due to a change in technology use. In addition, this clause is sometimes exploited as a cost-saving measure instead of providing adequate protection for young children.
Replace clause 2.6.3.3.3 with: "Where an installation or part installation has been installed in accordance with AS/NZS3003, the requirements of 2.6.3.3.1 do not apply."	To ensure that the facilitation of home medical treatment set out in AS/NZS 3003 can be effectively implemented without needing to install, what in this case are, redundant electrical products.
In clause 4.18.2.3 and figure 4.18 replace the words "hazardous area" with "exclusion zone".	Hazardous areas cannot be created in domestic premises. This is because the definition of a hazardous area is taken from the <i>AS/NZS 60079</i> series, which does not apply to domestic premises. However, as there are still hazards associated with electrical equipment in areas where there is gas supply in the home, we recommend changing the wording to exclusion zone.
In clause 4.18.5 and figure 4.20 replace the words "hazardous area" with "exclusion zone".	As per above row.
In clause 4.18.5 Reticulated lighter-than-air gas system, delete the words "lighter-than- air".	This is to allow this clause to apply to reticulated LPG installations as LPG is heavier than air.
In clause 8.3.10 paragraph 2 delete the words "either by the operation of the integral test device, or".	This is to ensure that RCDs are tested to ensure that they are working but are not deemed unsafe by regulation 24 due to the trip time.
<ul> <li>Then add in a new paragraph 5 after paragraph 4 to the effect that:</li> <li>"The function testing of the RCD must include: <ul> <li>trip time;</li> <li>confirmation that the functions of the RCD operate as intended;</li> <li>confirmation that operation of the RCD provides protection against electric shock for residual sinusoidal alternating current and residual pulsating direct current;</li> <li>the presence of DC leakage; and</li> <li>constant DC (where applicable)."</li> </ul> </li> </ul>	

#### AS/NZS 3004.1:2014 Electrical installations - Marinas and boats - Part 1: Marinas

WorkSafe proposes a variation to ensure that this standard does not prevent or cover the installation or electric vehicle (EV) supply equipment at marinas. The reason for this is that there is uncertainty in the industry about whether it is possible to install EV supply equipment for charging electric boats at marinas; the types of electrical installations provided for under the *AS/NZS 3004.1* are not suitable for EV charging due to the current rating and the shape of the plugs involved.

We recommend that the citation be modified by amending clause 2.4.2.2.2 by inserting a new paragraph following the Notes heading along the lines of:

"For clarity, nothing in this standard shall prevent the installation of electric vehicle supply equipment (EVSE) that is suitable for the safe supply of electricity to charge an electric vessel".

WorkSafe will include guidance for EVSE for electric vessels when we update our EV charging guide.

### AS/NZS 3004.2:2014 Electrical installations - Marinas and boats - Part 2: Boat installations, including Amendment 1

WorkSafe proposes that in Appendix C, clause 11.2, the third item under the heading 'RCD and insulation test' should be changed from "In New Zealand, RCDs for personnel protection shall be verified as being type A" to "Any RCD provided shall have a residual current rating not exceeding 30 mA."

The reason for this is that this clause would otherwise require existing electrical installations to be upgraded to enable the WoEF to be issued. If this clause is not modified, it would add compliance costs and would conflict with the usual approach that existing installations do not need to be upgraded to a newer standard if they are electrically safe.

#### AS/NZS 3012:2019 Electrical installations - Construction and demolition sites including Amendment 1

Suggested modification	Reason for change
Delete clause 2.9(D) 1st paragraph - under the notes	This clause requires a connectible electrical installation to be upgraded to enable compliance with this version of the standard and has not been consulted on.
Insert new paragraph at the end of clause 3.4: "Nothing in this standard requires the upgrading of an existing RCD in a transportable structure or transportable installation, merely because it does not provide protection against pulsating DC current."	This clause requires a connectible electrical installation to be upgraded to enable compliance with this version of the standard and has not been consulted on.
Replace last substantive paragraph of clause 3.4 with: "The RCD must be labelled as a type providing protection against electric shock that complies with the requirements of either type A in accordance with IEC 61009.1 or IEC 61008.1, or Type F or Type B in accordance with IEC 62423."	This is to allow the use of Type B and F RCDs.
In clause 1.4.17 delete the words "portable residual current device (PRCD)". Insert new paragraph in 1.4.17: "A PSOA is not considered to be a portable residual current device. All RCDs are to be either type A in accordance with IEC 61009.1 or IEC 61008.1, or Type F or Type B in accordance with IEC 62423."	To ensure that a PSOA is not seen as a portable RCD, as if they are, they would be deemed to be unsafe by regulation 24.
Delete note 1 and note 2	

#### AS/NZS 3112:2017 Approval and test specification – Plugs and socket-outlets including Amendment 1

We recommend that a new paragraph be inserted at the end of clause 3.12 with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material."

While products with these components are already deemed to be electrically unsafe in New Zealand, they could still be certified as meeting the requirements of this standard overseas. We suggest that modifying this clause through the citation in the ESR would help ensure that potential importers are aware of product limitations in New Zealand.

#### Schedule 4

#### Clause 1

# AS/NZS 5149.2:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Design, construction, testing, marking and documentation (ISO 5149-2:2014, MOD)

The modifications to AS/NZS 5149.2:2016 described above for the purposes of Schedule 2 are also needed where the standard is to be inserted into clause 1(2) of schedule 4. These are:

Replace formula F.1 with

$$L = \frac{0.2146d^5(P_0^2 - P_2^2)}{fC_r^2} - \frac{d\ln\left(\frac{P_0}{P_2}\right)}{6f}$$
(I-P)

And replace formula F.4 with



#### Clause 3

#### AS/NZS 3105:2014 Approval and test specification - Electrical portable outlet devices, including Amendment 1

We recommend that a new clause 5.5 be inserted with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material".

Some manufacturers have installed metallic springs related to the shutters. When the shutters have broken, the spring has moved onto a location that bridges the earth and live wires inside the socket outlet causing a risk of fire or short circuit. Inserting a new clause would ensure that this unsafe practice is eliminated, in line with regulation 22(a) which deems certain electrical fittings to be electrically unsafe.

While the product would already be deemed electrically unsafe in New Zealand, an overseas test lab could provide a report stating that the product complies with the relevant standards. As a result, the importer may incorrectly believe that the product can be supplied in New Zealand.

#### AS/NZS 3112:2017 Approval and test specification – Plugs and socket-outlets including Amendment 1

We have recommended a modification to *AS/NZS 3112:2017* for the purposes of Schedule 2. This modification is also needed where the standard is cited in Clause 3 of Schedule 4. The proposed modification is to insert a new paragraph at the end of clause 3.12 with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material." Clause 5

# AS/NZS 3190: 2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1

There are multiple rows in Schedule 4, Clause 5 where AS/NZS 3190 will be updated to the most recent version. While the same modifications are proposed for most of the places where AS/NZS 3190 is cited, there are some modifications that are specific to different types of equipment. As the ESR set out the applicable standards for each

type of equipment separately, we have included the suggested modifications under each device/equipment type below. However, PCO may wish to draft these modifications in a different way.

<u>Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses</u> (<u>RCBOs</u>)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

<u>Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses</u> (RCCBs)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

<u>Type F and type B residual current operated circuit-breakers with integral overcurrent protection for household and</u> <u>similar uses</u>

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

<u>Type F and type B residual current operated circuit-breakers without integral overcurrent protection for household</u> <u>and similar uses</u>

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring
	testing to the New Zealand variations contained

	in AS/NZS 3190 if the product already complies
	with IEC 62423 and IEC 62335. This creates a risk
	that the product may not have been confirmed to
	operate safely with the New Zealand supply
	voltage of 230 V.
In clause 7.1.1(b), add the following wording at	This is to ensure that RCDs brought in New
the end of the sentence:	Zealand are capable of being supplied with 230 V.
"which for New Zealand must include 230V or	
400 V"	

Portable residual current device (PRCD) (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

Portable socket outlet assembly (PSOA) - for construction site use (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 4.1(e), add the following wording at the end of the sentence: "This does not apply to a PSOA."	This is to ensure that in New Zealand a PSOA is not considered a 'portable RCD' (PRCD). Even though these are different products, AS/NZS 3190 indicates that a PSOA is a portable RCD.
	If a PSOA were treated as a portable RCD, it would be deemed to be electrically unsafe because it does not contain an RCD that complies with regulation 24 of the ESR. We consider that the type of RCD contained in a PSOA is suitable where it is used on a construction site.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.
Include a general note to the effect that where the standard refers to a PSOA as a PRCD, the requirements are to be followed, but that a PSOA is not a PRCD in New Zealand. Accordingly, a PSOA is not required to have an RCD that	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24. We consider that the type of

#### Portable socket outlet assembly (PSOA) - for household and similar general use (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.
With the modification that the finished product be labelled as follows: "not for construction site use"	We consider that it is appropriate for a PSOA to be treated as a portable RCD when used in domestic and general settings. As a result, we recommend that the product is labelled to make it clear that it is different to a PSOA used on a construction site.

#### Clause 10

### AS/NZS 3190: 2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1

We propose that two new items be inserted into Clause 10 of Schedule 4 to provide for PSOAs and RCDs to be used in medical settings. These devices would be subject to AS/NZS 3190: 2016, with similar modifications to those proposed in relation to Clause 5 above.

Portable medical socket outlet assembly for protection of medical procedures (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 4.1(e), add the following wording at the end of the sentence: "This does not apply to a PSOA."	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24. It is not possible to source a fail- safe RCD that operates at 10 mA, which is the specified residual current limit for medical devices. We consider that the type of RCD used with medical equipment provides adequate protection.
In clause 7.1.1(b), add the following wording at the end of the sentence:	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

"which for New Zealand must include 230V or 400 V"	
Include a general note to the effect that where the standard refers to a PSOA as a PRCD, the requirements are to be followed, but that a PSOA is not a PRCD in New Zealand. Accordingly, a PSOA is not required to have an RCD that continues to provide protection and automatically open on the failure of the supply voltage.	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24.

Portable residual current device for protection of medical procedures (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

#### AS/NZS 3012:2019 Electrical installations - Construction and demolition sites including Amendment 1

For new appliance type "Portable medical socket outlet assembly for protection of medical procedures" we propose that the standard be modified as follows:

In clause 2.6.10(f), insert the following wording at the end of the sentence: "and suitable for use for protection of medical procedures."

This change is to ensure that the user knows that a particular PSOA is suitable for use with medical procedures as PSOAs for construction or general use would not be suitable.

#### Schedule 2

## AS/NZS 5149.2: 2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Design, construction, testing, marking and documentation

As indicated on the standards tables, industry have identified errors in two of the formulae in Appendix F to this standard. We propose the following modifications to resolve these errors:

Replace formula F.1 with

$$L = \frac{0.2146d^{5}(P_{0}^{2} - P_{2}^{2})}{fC_{r}^{2}} - \frac{d\ln\left(\frac{P_{0}}{P_{2}}\right)}{6f}$$
(I-P)

$$L = \frac{7.4381 \times 10^{-15} d^5 (P_0^2 - P_2^2)}{f C_r^2} - \frac{d \ln(\frac{P_0}{P_2})}{500 f}$$
(SI)

# AS/NZS 3000:2018 Electrical installations (known as the Australian/New Zealand Wiring Rules). Including Amendments 1, 2 and 3

We propose several modifications to this standard, which are noted in the table below along with the reasons for the change.

In addition, we will continue our work with Standards New Zealand to insert these changes into the substantive standard through the normal standards amendment process.

Suggested modification	Reason for change
Amend clause 1.5.6.3 by inserting the following wording at the end of paragraph 1: "Any RCD that forms part of an installation	This is to ensure that, where an RCD forms part of an installation, it is not blinded by the presence of DC current in the AC wave form.
shall be selected and installed to be compatible with the types of load intended to be used within the installation. Consideration shall be applied for potential pulsating and constant DC fault currents and waveform distortion."	Blinded means that the RCD may not trip under fault conditions. This is relevant to installations that have a DC component (such as the DC battery of an EV), where there would be a risk to safety if the RCD did not trip.
Delete clause 1.6.2(c) note (b)	In New Zealand the ESR prescribes standard low voltage, not IEC 60038.
Delete clauses 2.3.2.1.2(b) and 2.3.2.1.2(c)	These two clauses prevent the switching and/or isolation of the neutral and earthing conductors. However, there needs to be an ability to switch the neutral and earth for EV charging, Terra Terra (TT), and Isolated Terra (IT) circuits, as well as when an installation is operated independent of the grid.
Replace clause 2.6.2.2.3(b) with: "Either type A in accordance with IEC 61009.1 or IEC 61008.1 Or Type F or Type B in accordance with IEC 62423."	This is to allow the use of Type B and F RCDs which are not blinded by the presence of DC current in the AC wave form, whereas the Type A RCD in normal use in New Zealand can be 'blinded' by DC current in the AC wave form. Blinded means that the RCD may not trip under fault conditions.
Delete 2.6.3.3.2 Exception 2, bullet point 2	This exception is no longer needed due to a change in technology use. In addition, this clause is sometimes exploited as a cost-saving measure instead of providing adequate protection for young children.
Replace clause 2.6.3.3.3 with: "Where an installation or part installation has been installed in accordance with AS/NZS3003, the requirements of 2.6.3.3.1 do not apply."	To ensure that the facilitation of home medical treatment set out in AS/NZS 3003 can be effectively implemented without needing to install, what in this case are, redundant electrical products.
In clause 4.18.2.3 and figure 4.18 replace the words "hazardous area" with "exclusion zone".	Hazardous areas cannot be created in domestic premises. This is because the definition of a hazardous area is taken from the <i>AS/NZS 60079</i> series, which does not apply to domestic premises. However, as there are still hazards associated with electrical equipment in areas where there is gas supply in the

	home, we recommend changing the wording to exclusion zone.
In clause 4.18.5 and figure 4.20 replace the words "hazardous area" with "exclusion	As per above row.
zone".	
In clause 4.18.5 Reticulated lighter-than-air	This is to allow this clause to apply to reticulated LPG
gas system, delete the words "lighter-than- air".	installations as LPG is heavier than air.
In clause 8.3.10 paragraph 2 delete the	This is to ensure that RCDs are tested to ensure that
words "either by the operation of the	they are working but are not deemed unsafe by
integral test device, or .	regulation 24 due to the trip time.
Then add in a new paragraph 5 after	
paragraph 4 to the effect that:	
"The function testing of the RCD must	
Include:	
<ul> <li>confirmation that the functions of</li> </ul>	
the RCD operate as intended;	
<ul> <li>confirmation that operation of the</li> </ul>	
RCD provides protection against	
electric shock for residual sinusoidal	
alternating current and residual	
puisating direct current;	
<ul> <li>constant DC (where applicable) "</li> </ul>	
Delete note 4.	

#### AS/NZS 3004.1:2014 Electrical installations - Marinas and boats - Part 1: Marinas

WorkSafe proposes a variation to ensure that this standard does not prevent or cover the installation or electric vehicle (EV) supply equipment at marinas. The reason for this is that there is uncertainty in the industry about whether it is possible to install EV supply equipment for charging electric boats at marinas; the types of electrical installations provided for under the *AS/NZS 3004.1* are not suitable for EV charging due to the current rating and the shape of the plugs involved.

We recommend that the citation be modified by amending clause 2.4.2.2.2 by inserting a new paragraph following the Notes heading along the lines of:

"For clarity, nothing in this standard shall prevent the installation of electric vehicle supply equipment (EVSE) that is suitable for the safe supply of electricity to charge an electric vessel".

WorkSafe will include guidance for EVSE for electric vessels when we update our EV charging guide.

## AS/NZS 3004.2:2014 Electrical installations - Marinas and boats - Part 2: Boat installations, including Amendment 1

WorkSafe proposes that in Appendix C, clause 11.2, the third item under the heading 'RCD and insulation test' should be changed from "In New Zealand, RCDs for personnel protection shall be verified as being type A" to "Any RCD provided shall have a residual current rating not exceeding 30 mA."

The reason for this is that this clause would otherwise require existing electrical installations to be upgraded to enable the WoEF to be issued. If this clause is not modified, it would add compliance costs and would conflict with the usual approach that existing installations do not need to be upgraded to a newer standard if they are electrically safe.

AS/NZS 3012:2019 Electrical installations - Construction and demolition sites including Amendment 1

Suggested modification	Reason for change
Delete clause 2.9(D) 1st paragraph - under the notes	This clause requires a connectible electrical installation to be upgraded to enable compliance with this version of the standard and has not been consulted on.
Insert new paragraph at the end of clause 3.4: "Nothing in this standard requires the upgrading of an existing RCD in a transportable structure or transportable installation, merely because it does not provide protection against pulsating DC current."	This clause requires a connectible electrical installation to be upgraded to enable compliance with this version of the standard and has not been consulted on.
Replace last substantive paragraph of clause 3.4 with: "The RCD must be labelled as a type providing protection against electric shock that complies with the requirements of either type A in accordance with IEC 61009.1 or IEC 61008.1, or Type F or Type B in accordance with IEC 62423."	This is to allow the use of Type B and F RCDs.
In clause 1.4.17 delete the words "portable residual current device (PRCD)". Insert new paragraph in 1.4.17: "A PSOA is not considered to be a portable residual current device. All RCDs are to be either type A in accordance with IEC 61009.1 or IEC 61008.1, or Type F or Type B in accordance with IEC 62423." Delete note 1 and note 2	To ensure that a PSOA is not seen as a portable RCD, as if they are, they would be deemed to be unsafe by regulation 24.

#### AS/NZS 3112:2017 Approval and test specification – Plugs and socket-outlets including Amendment 1

We recommend that a new paragraph be inserted at the end of clause 3.12 with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material."

While products with these components are already deemed to be electrically unsafe in New Zealand, they could still be certified as meeting the requirements of this standard overseas. We suggest that modifying this clause through the citation in the ESR would help ensure that potential importers are aware of product limitations in New Zealand.

#### Schedule 4

#### Clause 1

# AS/NZS 5149.2:2016 Refrigerating systems and heat pumps - Safety and environmental requirements Part 2: Design, construction, testing, marking and documentation (ISO 5149-2:2014, MOD)

The modifications to AS/NZS 5149.2:2016 described above for the purposes of Schedule 2 are also needed where the standard is to be inserted into clause 1(2) of schedule 4.

#### Clause 3

#### AS/NZS 3105:2014 Approval and test specification - Electrical portable outlet devices, including Amendment 1

We recommend that a new clause 5.5 be inserted with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material".

Some manufacturers have installed metallic springs related to the shutters. When the shutters have broken, the spring has moved onto a location that bridges the earth and live wires inside the socket outlet causing a risk of fire or short circuit. Inserting a new clause would ensure that this unsafe practice is eliminated, in line with regulation 22(a) which deems certain electrical fittings to be electrically unsafe.

While the product would already be deemed electrically unsafe in New Zealand, an overseas test lab could provide a report stating that the product complies with the relevant standards. As a result, the importer may incorrectly believe that the product can be supplied in New Zealand.

#### AS/NZS 3112:2017 Approval and test specification – Plugs and socket-outlets including Amendment 1

We have recommended a modification to *AS/NZS 3112:2017* for the purposes of Schedule 2. This modification is also needed where the standard is cited in Clause 3 of Schedule 4. The proposed modification is to insert a new paragraph at the end of clause 3.12 with the following wording: "Shutters and associated components shall not be conductive, nor be conductive and coated with non-conductive material." Clause 5

# AS/NZS 3190: 2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1

There are multiple rows in Schedule 4, Clause 5 where AS/NZS 3190 will be updated to the most recent version. While the same modifications are proposed for most of the places where AS/NZS 3190 is cited, there are some modifications that are specific to different types of equipment. As the ESR set out the applicable standards for each type of equipment separately, we have included the suggested modifications under each device/equipment type below. However, PCO may wish to draft these modifications in a different way.

<u>Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses</u> (RCBOs)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

<u>Type F and type B residual current operated circuit-breakers with integral overcurrent protection for household and similar uses</u>

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

<u>Type F and type B residual current operated circuit-breakers without integral overcurrent protection for household</u> <u>and similar uses</u>

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

Portable residual current device (PRCD) (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

Portable socket outlet assembly (PSOA) - for construction site use (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause would have the effect of not requiring testing to the New Zealand variations contained in AS/NZS 3190 if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to

	operate safely with the New Zealand supply voltage of 230 V.
In clause 4.1(e), add the following wording at the end of the sentence: "This does not apply to a PSOA."	This is to ensure that in New Zealand a PSOA is not considered a 'portable RCD' (PRCD). Even though these are different products, AS/NZS 3190 indicates that a PSOA is a portable RCD.
	If a PSOA were treated as a portable RCD, it would be deemed to be electrically unsafe because it does not contain an RCD that complies with regulation 24 of the ESR. We consider that the type of RCD contained in a PSOA is suitable where it is used on a construction site.
In clause 7.1.1(b), add the following wording at the end of the sentence:	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.
"which for New Zealand must include 230V or 400 V"	
Include a general note to the effect that where the standard refers to a PSOA as a PRCD, the requirements are to be followed, but that a PSOA is not a PRCD in New Zealand. Accordingly, a PSOA is not required to have an RCD that continues to provide protection and automatically open on the failure of the supply voltage.	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24. We consider that the type of RCD contained in a PSOA is suitable where it is used on a construction site.

Portable socket outlet assembly (PSOA) - for household and similar general use (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.
With the modification that the finished product be labelled as follows: "not for construction site use"	We consider that it is appropriate for a PSOA to be treated as a portable RCD when used in domestic and general settings. As a result, we recommend that the product is labelled to make it clear that it is different to a PSOA used on a construction site.

#### Clause 10

### AS/NZS 3190: 2016 Approval and test specification - Residual current devices (current-operated earth-leakage devices), including Amendment 1

We propose that two new items be inserted into Clause 10 of Schedule 4 to provide for PSOAs and RCDs to be used in medical settings. These devices would be subject to AS/NZS 3190: 2016, with similar modifications to those proposed in relation to Clause 5 above.

Portable medical socket outlet assembly for protection of medical procedures (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 4.1(e), add the following wording at the end of the sentence: "This does not apply to a PSOA."	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24. It is not possible to source a fail- safe RCD that operates at 10 mA, which is the specified residual current limit for medical devices. We consider that the type of RCD used with medical equipment provides adequate protection.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.
Include a general note to the effect that where the standard refers to a PSOA as a PRCD, the requirements are to be followed, but that a PSOA is not a PRCD in New Zealand. Accordingly, a PSOA is not required to have an RCD that continues to provide protection and automatically open on the failure of the supply voltage.	This is to ensure that in New Zealand a PSOA is not considered a PRCD. Otherwise, the common construction of PSOAs would be deemed unsafe by regulation 24.

Portable residual current device for protection of medical procedures (new item)

Suggested modification	Reason for change
Delete clause 3.2.2.3	This clause excludes the New Zealand variations contained in AS/NZS 3190 from testing if the product already complies with IEC 62423 and IEC 62335. This creates a risk that the product may not have been confirmed to operate safely with the New Zealand supply voltage of 230 V.
In clause 7.1.1(b), add the following wording at the end of the sentence: "which for New Zealand must include 230V or 400 V"	This is to ensure that RCDs brought in New Zealand are capable of being supplied with 230 V.

#### AS/NZS 3012:2019 Electrical installations - Construction and demolition sites including Amendment 1

For new appliance type "Portable medical socket outlet assembly for protection of medical procedures" we propose that the standard be modified as follows:

In clause 2.6.10(f), insert the following wording at the end of the sentence: "and suitable for use for protection of medical procedures."

This change is to ensure that the user knows that a particular PSOA is suitable for use with medical procedures as PSOAs for construction or general use would not be suitable.

#### New Clause 17

# ISO 17409:2020 Electrically propelled road vehicles — Conductive power transfer — Safety requirements and EN 50604-1:2016/A1:2021 Secondary lithium batteries for light EV (electric vehicle) applications – Part 1: General safety requirements and test methods

Both these standards have a scope that limits them to road vehicles. In other words, they do not apply to off-road vehicles. However, regulation 3(b) of the ESR provides that the regulations do not apply to "road vehicles other than road vehicles used in a mining operation". As a result, the ESR cannot set requirements for road vehicles.

We consider that these standards are appropriate to be used in respect of off-road vehicles (such as electric quad bikes or motor bikes), which are within scope of the ESR. As such, we recommend that the citation of both standards include a variation to the effect that, despite anything contrary in the relevant standard, the requirements apply to off-road vehicles.

#### Proposed modifications to citation of gas safety standards

#### Schedule 1

#### AS/NZS 5601.1:2013 Gas installations – General installations incorporating amendments 1, 2, 3 and 4

Suggested modification	Reason for change
Delete the following words from the first paragraph of 4.7.3 "compression joints, union joints"	This is to allow gasfitters to continue using an existing work practice which is considered safe.
Delete clause 5.1.8	As per above row.
In clause 6.6.5, insert "or endorsed" following the word "certified" in the final paragraph.	This is to ensure that endorsed appliances are also treated as Type A appliances for the purposes of this standard. This is needed as the GSMR allows for certification of appliances to be replaced by endorsement, which does not exist in Australia (where most of the committee members who produced the standard are based).

#### AS/NZS 5601.2:2020 Gas installations – LP Gas installations in caravans and boats for non-propulsive purposes

Suggested modification	Reason for change
Delete clause 2.13.2	This is to allow gasfitters to continue using an existing work practice which is considered safe.
In clause 2.13.3.3(a) replace "2.75" with "3.5"	This clause sets the maximum pressure for a gas appliance at 2.74 kPa. However, this is based on Australian limitations on LPG pressure which do not apply in New Zealand. We recommend that a nominal pressure of 3.5 kPA be set to allow for European and British appliances which operate at a higher pressure.
In clause 5.2.9, delete the following words from	This is to allow gasfitters to continue using an
the first paragraph:	existing work practice which is considered safe.
"compression joints, union joints,"	