

# Electrical installations (known as the Australian/New Zealand Wiring Rules)

## Amendment No. 2

### Revised text amendment

#### Publishing and Approval Dates

Council of Standards Australia Approval: 15 April 2021

New Zealand Standards Approval Board Approval: 7 April 2021

Published: 30 April 2021

#### Summary

This Amendment applies to the following elements:

- Preface
- Clauses 1.5.3.1, 2.6.2.2.1, 2.6.2.2.2, 2.6.3.2.2, 2.6.3.2.5, 2.6.3.2.6, 2.6.3.3.1, 2.10.2.2, 2.10.3.2, 3.4.3, 3.6.2, 3.8.3.3, 4.1.2, 4.3.1, 4.18.4, 6.2.4.1, 7.3.4.1, 8.3.2, 8.3.2.1, 8.3.2.2 (new), 8.3.7, 8.3.8, 8.3.10
- Table 6.1
- Figures 7.3, 7.4, 7.5 and 7.6
- Appendix A
- Appendix C, C4.2
- Appendix F, F1.2.4
- Index

#### Amendment Details

AS/NZS 3000:2018 is amended as follows. The amendments should be inserted in the locations as instructed.

| Element             | Instruction / New text                                                                                                                                                                                                                                                                    |
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| <b>Preface</b>      | <i>Add</i> the following after the second paragraph:<br>Amendment No. 2 includes text in Clause 2.6.2.2.2 that has transitional implementation arrangements. Users of this document should consult with regulatory authorities to confirm the implementation dates of these requirements. |
| <b>Cl 1.5.3.1</b>   | <i>Delete</i> second paragraph and <i>replace</i> with the following:<br>Live parts shall not be accessible without the use of a tool or a key, either under normal conditions or under single fault conditions.                                                                          |
| <b>Cl 2.6.2.2.1</b> | 1 <i>Add</i> the following new second paragraph before the Notes:                                                                                                                                                                                                                         |

| Element      | Instruction / New text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|              | <p>With the increased adoption of electronics, renewables and emerging technologies by end users, there is a greater impact due to d.c. waveforms on the a.c. supply. It is recommended that Type A RCDs are used as the general type for installations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | <p>2 <i>Delete</i> the second sentence in Note 1(a).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CI 2.6.2.2.2 | <p><i>Delete</i> Items (a) and (b) and <i>replace</i> with the following:</p> <p>RCDs may have any number of poles. As a minimum, RCDs shall interrupt all active conductors.</p> <p>NOTE: Other Standards may require the interruption of all live (active and neutral) conductors.</p> <p>RCDs located beside a socket-outlet or incorporated into a socket-outlet (SRCs) shall interrupt all live (active and neutral) conductors.</p> <p>RCDs shall be of the type for which tripping is ensured —</p> <ul style="list-style-type: none"> <li>(a) for residual sinusoidal alternating current; or</li> <li>(b) for residual sinusoidal alternating current and residual pulsating direct current.</li> </ul> <p>For 24 months from the date of publication of Amendment No. 2, either Item (a) or (b) may apply. Following that time, Type AC RCDs as described in Item (a) shall not be installed.</p> |
| CI 2.6.3.2.2 | <p><i>Add</i> the following new Exception to Item (c), after the Note:</p> <p><i>Exception: Final subcircuits of multiple residential installations may instead comply with Clause 2.6.3.2.3 if they supply only equipment not located within or supplied from any residential living unit, e.g. lifts, central air conditioning plant, fire systems, drainage pumps.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CI 2.6.3.2.5 | <p><i>Delete</i> Item (a) and <i>replace</i> with the following:</p> <p><b>Alterations</b> For alterations to existing installations, RCD protection shall be provided as required by Clauses 2.6.3.2.2, 2.6.3.2.3 or 2.6.3.2.4 as applicable to the type of installation.</p> <p>For existing domestic and residential installations, RCDs installed for the protection of additional socket-outlets, electrical equipment or lighting points shall be installed at the origin of the final subcircuit.</p> <p>NOTE: For the purposes of this Clause, combination fan, light and heater units, smoke alarms, exhaust and ceiling sweep fans are all regarded as electrical equipment.</p>                                                                                                                                                                                                                  |
| CI 2.6.3.2.6 | <p>1 <i>Delete</i> the existing Clause, including the Note, and <i>replace</i> with the following:</p> <p><i>Repairs—Australia only</i></p> <p>The requirements of this Clause (2.6.3) for RCD protection need not apply to the following applications that are deemed to be repairs to an existing installation:</p> <ul style="list-style-type: none"> <li>(a) Where a socket-outlet, luminaire or single item of electrical equipment that is not RCD protected is replaced with an equivalent item in the same location.</li> <li>or</li> <li>(b) Where a single socket-outlet is replaced with a multiple socket-outlet assembly.</li> <li>or</li> <li>(c) Where an unswitched socket-outlet is installed— <ul style="list-style-type: none"> <li>(i) in a roof space or at a height of more than 3 m above the ground, floor or platform; and</li> </ul> </li> </ul>                                  |

| Element      | Instruction / New text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|              | <p>(ii) at an existing lighting point specifically for the connection of a replacement luminaire or lighting point.</p> <p>NOTE: For the purposes of this Clause, combination fan, light and heater units, smoke alarms, exhaust and ceiling sweep fans are all regarded as lighting points.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CI 2.6.3.3.1 | <p>Replace the existing Note to Item (b) with the following:</p> <p>NOTE: For the purposes of this Clause, combination fan, light and heater units, smoke alarms, exhaust and ceiling sweep fans are all regarded as lighting points.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CI 2.10.2.2  | <p>Delete the existing Clause text but excluding all figures and <i>replace</i> with the following:</p> <p><b>2.10.2.2</b> <i>Accessibility and emergency exit facilities</i></p> <p><b>2.10.2.2.1</b> <i>Switchboards</i></p> <p>Switchboards shall comply with the following provisions:</p> <p>(a) Located so that the switchboard and access to it is not obstructed by the structure or contents of the building or by fittings and fixtures within the building.</p> <p>and</p> <p>(b) Provided with sufficient space around the switchboard on all sides to allow persons to pass to enable all electrical equipment to be safely and effectively operated and adjusted.</p> <p>This requirement shall be achieved by the following:</p> <p>(i) A 1.0 m minimum distance from all faces of a closed switchboard that need to be accessed.</p> <p><i>Exception: In a domestic electrical installation the 1.0 m distance may be reduced to 0.6 m from the face of the switchboard.</i></p> <p>(ii) An unimpeded space of at least 0.6 m around switchboards with switchgear doors in any position and with switchgear in a fully racked out position.</p> <p>NOTE: Figures 2.19 to 2.23 illustrate access requirements for typical switchboard arrangements.</p> <p>and</p> <p>(c) Provided with sufficient exit paths to enable a person to leave the vicinity of a switchboard under emergency conditions.</p> <p>NOTE: Consideration should be given to providing means of escape from the immediate vicinity of the switchboard in more than one direction, in case of an arcing fault occurring while work is in progress at the switchboard.</p> <p><b>2.10.2.2.2</b> <i>Switchboard rooms</i></p> <p>Doors shall open in the direction of egress without the use, on the switchboard side of the door, of a key or tool.</p> <p><i>Exception: This requirement need not apply to domestic electrical installations.</i></p> <p>Where a switchboard is rated at 800 A or greater per phase, or is more than 3.0 m in length, switchboard rooms, or similar enclosed spaces housing the switchboard, to which a person is required to enter in order to access the switchboard, shall comply with the following provisions:</p> <p>(a) A minimum of two emergency exit paths spaced well apart providing means of escape from the switchboard room.</p> <p><i>Exception: Where a clear space of at least 3.0 m is provided in front of the switchboard and its equipment, including switchboard doors, in all normal positions of operating, opening and withdrawal, only one emergency exit path need be provided. (See Figure 2.24.)</i></p> |