



CSA C22.1HB:24

# Canadian Electrical Code Handbook

An Explanation of the Rules of the  
Canadian Electrical Code, Part I

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2024



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*CSA C22.1HB:24*

# ***Canadian Electrical Code Handbook***

*An Explanation of the Rules of the  
Canadian Electrical Code, Part I*



- The *Canadian Electrical Code, Part I*, is a voluntary code for adoption and enforcement by regulatory authorities.
- The *Canadian Electrical Code, Part I*, meets the fundamental safety principles of International Standard IEC 60364-1, *Low-voltage electrical installations*.
- Consult with local authorities regarding regulations that adopt and/or amend the Code.

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# Preface

This is the eleventh edition of CSA C22.1HB, the *Canadian Electrical Code Handbook*. It supersedes the previous editions published in 2021, 2018, 2015, 2012, 2009, 2006, 2002, 1998, 1994, and 1990.

Changes since the previous edition include the following:

- throughout the Code, the word "allowable" has been removed from "allowable ampacities";
- in Section [0](#), voltage definitions for dc circuit voltages have been revised;
- in Section [2](#), there are new requirements for reducing arc fault clearing times and clarifications on the use of ingress protection designations for enclosures;
- in Section [4](#), there is now recognition for conductors sized in mm<sup>2</sup> and Table D18 has been added in support of this;
- in Section [8](#), load calculations for installations with electric vehicle supply equipment have been revised, Table 38 has been deleted, and voltage drop calculations using Table D3 have been updated;
- in Section [12](#), sag and span requirements for overhead installations have been updated, and there are new Rules for non-metallic jacketed cable;
- in Section [18](#) and Annex [J18](#), sealing requirements have been revised;
- in Section [36](#), there are now Rules for installation of high-voltage couplers;
- in Section [64](#), the Rules for energy storage, renewable energy, and photovoltaic systems have been revised, there is a new Subsection for residential occupancies in Section [66](#), and ground fault circuit interrupter protection is now required for receptacles in temporary installations (such as tents) for outdoor functions;
- in Section [68](#), there are new disconnecting means and bonding requirements for conductive pool infrastructure;
- Table 11 has been formatted into two new Tables (11A and 11B) and laid out in a manner similar to Table 19;
- Annexes A.1 and A.2 of Appendix A have been reinstated, along with an index; and
- Appendix K has been deleted.

CSA gratefully acknowledges the outstanding contribution of Marcia Ranger to the development and publication of the 2024 *Canadian Electrical Code Handbook*.

**Notes:**

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Handbook is stated in its Introduction, it is important to note that it remains the responsibility of the users of this Handbook to judge its suitability for their particular purpose.*
- 3) *All enquiries regarding this Handbook should be addressed to CSA Group, 178 Rexdale Blvd., Toronto, Ontario, Canada M9W 1R3.*