



**CSA
Group**

C22.2 No. 230-17

Tray cables

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Preface

This is the third edition of CSA C22.2 No. 230, *Tray cables*, one of a series of Standards issued by CSA Group under the *Canadian Electrical Code, Part II*. It supersedes the previous editions published in 2009 and 1988.

This Standard specifies requirements for single conductor and multi-conductor constructions, without metal sheath or armour, suitable for use in cable trays and other applications when installed in accordance with the *Canadian Electrical Code, Part I*.

This edition includes changes to allow additional cables being accepted as tray cables if they meet the requirements outlined in this Standard:

- a) wet rated cables from CSA C22.2 No 38, C22.2 No. 49, C22.2 No 75, C22.2 No 96, C22.2 No 96.1, C22.2 No 239, and C22.2 No 68.10, can now be certified as tray cables if they meet the requirements outlined in this Standard;
- b) clarification regarding the impact testing, oil resistance testing, and marking of the TC; and
- c) clarification regarding which cables are suitable for direct burial.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on Fixed Installation Wires and Cables, under the jurisdiction of the Technical Committee on Wiring Products and the Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

Interpretations: The Strategic Steering Committee on Requirements for Electrical Safety has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA’s procedures for interpretation shall be followed to determine the intended safety principle”.

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 Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

- 5) *This Standard is subject to review five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
- a) *Standard designation (number);*
 - b) *relevant clause, table, and/or figure number;*
 - c) *wording of the proposed change;*
 - d) *rationale for the change.*

C22.2 No. 230-17

Tray cables

1 Scope

1.1

This Standard applies to single conductor cables and multi-conductor cables, without metal sheath or armour, suitable for use in cable trays and other applications when installed in accordance with the *Canadian Electrical Code, Part I*.

1.2

The test and marking requirements of this Standard are in addition to the basic requirements for cable construction that appear in other published CSA Group product standards.

1.3

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto:

Note: *In cases where the editions listed below are amended, replaced by new editions, or superseded by another standard during the life of this referencing Standard, it is the responsibility of the users of this Standard to investigate the possibility of applying those amendments, new editions, or superseding standards.*

CSA Group

C22.1-15

Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-10 (R2015)

General Requirements — Canadian Electrical Code, Part II

C22.2 No. 30-M1986 (R2012)

Explosion-proof enclosures for use in Class I hazardous locations