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CSA C22.2 No. 85:14
National Standard of Canada
(reaffirmed 2018)



Rigid PVC boxes and fittings



Standards Council of Canada
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Rigid PVC boxes and fittings



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Preface

This is the second edition of CSA C22.2 No. 85, *Rigid PVC boxes and fittings*, one of a series of Standards issued under Part II of the *Canadian Electrical Code*. It supersedes the previous editions published in 1989 and 1968.

For general information on the Standards of the *Canadian Electrical Code, Part II*, see the Preface of CAN/CSA-C22.2 No. 0.

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 Non-metallic Conduit, Tubing and Fittings, 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”.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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.*
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 - 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, and 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; and*
 - d) *rationale for the change.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA’s periodical Info Update, which is available on the CSA Web site at www.csa.ca.

CSA C22.2 No. 85:14

Rigid PVC boxes and fittings

1 Scope

1.1

This Standard applies to rigid unplasticized poly (vinyl chloride)* boxes and fittings of the following types that are intended to be installed and used with rigid PVC conduit at a maximum working temperature of 75 °C in accordance with the rules of the *Canadian Electrical Code, Part I*:

- a) junction boxes with an interior volume of 1640 mL† or less that are intended to provide access to wiring and to enclose splices and taps but not to support wiring devices;
- b) conduit boxes with an interior volume of 1640 mL† or less that are intended to be used as pull boxes but not to enclose splices and taps or support wiring devices;
- c) surface mounted device boxes with an interior volume of 1640 mL† or less that are intended primarily to support wiring devices but may also be used as a pull box or to enclose wiring joints;
- d) box covers of the blank and device types;
- e) expansion joints that are intended to compensate for the linear expansion of a span of rigid PVC conduit;
- f) junction box terminal adapters that are intended to connect a length of PVC conduit by an elbow or other bend to a box;
- g) female adapters that are intended to connect a length of PVC conduit to a length of rigid metal conduit;
- h) reducers that are intended to connect lengths of two different sizes of rigid PVC conduit;
- i) caps that are intended to close the ends of unused lengths of rigid PVC conduit; and
- j) bell ends that are intended to provide a bushed opening at the open end of a length of rigid PVC conduit.

* For convenience, the shorter term PVC is used in this Standard.

† 1640 mL is the volume of trade size known as 100 cubic inches.

1.2

General requirements applicable to this Standard are given in CSA C22.2 No. 0, *General Requirements — Canadian Electrical Code, Part II*.

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 and 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 (nonmandatory) to define their application.

2 Reference publications and definitions

2.1 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:

CSA Group

C22.1-12

Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-10

General Requirements — Canadian Electrical Code, Part II

CAN/CSA-C22.2 No. 0.17-00 (R2009)

Evaluation of properties of polymeric materials

C22.2 No. 18.2-06 (R2011)

Nonmetallic outlet boxes

C22.2 No. 211.2-06 (R2011)

Rigid PVC (unplasticized) conduit

2.2 Definitions

The following definitions shall apply in this Standard:

Floor box — a box mounted in the floor intended for use with a floor box cover or other components to complete the enclosure.

Floor box cover — a component of a floor box assembly intended to complete the enclosure.

Raised-floor box — a floor box intended for use in a raised floor, such as in an electronic computer/data processing equipment room.

Recessed access floor box — a floor box with provisions for mounting wiring devices below the floor surface.

3 Construction

3.1 General

3.1.1

The material used to manufacture the boxes and fittings shall be unplasticized PVC.