CSA Group

C22.2 No. 52-15

Underground secondary and service-entrance cables

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P.M. Leblanc	General Cable Industries, Inc. BICC Brand Utility Cable, Highland Heights, Kentucky, USA

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S. Moore	Draka Cableteq USA, Schuylkill Haven, Pennsylvania, USA
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D. Wasilewski	Draka Cableteq USA, Schuylkill Haven, Pennsylvania, USA	
C.D. White	Southwire Co., Carrollton, Georgia, USA	
E.H. Wiebe	Innovative Solutions Engineering Inc., Winnipeg, Manitoba	
A. Popa	CSA Group, Toronto, Ontario	*Project Manager*

Preface

This is the seventh edition of CSA C22.2 No. 52, *Underground secondary and service-entrance 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, 1996, 1989, 1970, 1955, and 1941 under the title *Underground Service-Entrance Cables*.

This Standard specifies requirements for 600-volt-class copper and aluminum conductor underground secondary and service-entrance cables.

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.

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 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.

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. 52-15
Underground secondary and service-entrance cables

1 Scope

1.1

This Standard specifies requirements for copper and aluminum conductor secondary and service-entrance cables intended for use on systems having a nominal voltage of 600 V or less in underground installation

a) by direct burial; or
b) in duct systems.

This Standard also applies to multiple-conductor cable assemblies.

The products specified in this Standard are designed to be installed in accordance with the rules of the *Canadian Electrical Code, Part I.*

Note: *Portions of the cable covered by this Standard will be exposed to sunlight on terminal poles and during storage.*

1.2

This Standard applies to cable with

a) a maximum allowable conductor temperature of
   i) 75 °C; or
   ii) 90 °C; and
b) cold impact and cold bend ratings of –40 °C.

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.

