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**C22.2 No. 208-18**  
**National Standard of Canada**



## **Fire alarm and signal cable**

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# *National Standard of Canada*

*C22.2 No. 208-18*

## *Fire alarm and signal cable*



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# Technical Committee on Wiring Products

<b>P. Desilets</b>	Leviton Manufacturing of Canada Limited, Pointe-Claire, Québec, Canada <i>Category: Producer Interest</i>	<i>Chair</i>
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<b>C. Davis</b>	Electro Cables Incorporated, Trenton, Ontario, Canada <i>Category: Producer Interest</i>	
<b>S.W. Douglas</b>	International Association of Electrical Inspectors, Toronto, Ontario, Canada <i>Category: General Interest</i>	
<b>D. Drysdale</b>	Nexans Canada Inc., Fergus, Ontario, Canada <i>Category: Producer Interest</i>	
<b>R.W. Horner</b>	Atkore International (Allied Tube & Conduit Corporation), Harvey, Illinois, USA <i>Category: Producer Interest</i>	
<b>J. Imlah</b>	Imlah Electrical Consulting, Alpha, Oregon, USA <i>Category: User Interest</i>	
<b>R.J. Kelly</b>	Government of Nunavut — Department of Community & Government Services, Iqaluit, Nunavut, Canada <i>Category: Regulatory Authority</i>	
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<b>S. Mercier</b>	Régie du bâtiment du Québec, Montréal, Québec, Canada <i>Category: Regulatory Authority</i>	
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<b>A.Z. Tsisserev</b>	AES Engineering, Vancouver, British Columbia, Canada <i>Category: General Interest</i>	
<b>J. Turner</b>	Swansea Consulting, Toronto, Ontario, Canada <i>Category: User Interest</i>	
<b>L. Letea</b>	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>

# ***Subcommittee on Control, Instrument, Communication, and Marine Cables***

<b>D. Drysdale</b>	Nexans Canada Inc., Fergus, Ontario, Canada	<i>Chair</i>
<b>S.P. Hawkins</b>	Deca Cables Inc., Trenton, Ontario, Canada	<i>Vice-Chair</i>
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<b>R. Bright</b>	Nexans AmerCable, Houston, Texas, USA	
<b>S. Cho</b>	Shawcor Connection Systems, Toronto, Ontario, Canada	
<b>J. Conrad</b>	RSCC Wire & Cable LLC, East Granby, Connecticut, USA	
<b>E. Cometa</b>	CSA Group, Toronto, Ontario, Canada	
<b>W. Constantine</b>	Draka Cable Co USA, North Dighton, Massachusetts, USA	
<b>P. Crawford</b>	The Okonite Company, Carlisle, New Jersey, USA	
<b>W. Crawford</b>	The Okonite Company, Ramsey, New Jersey, USA	
<b>J. Crossman</b>	Domtech Inc., Trenton, Ontario, Canada	
<b>A. L. Hobbins</b>	RSCC Wire & Cable LLC, East Granby, Connecticut, USA	
<b>C. Davis</b>	Electro Cables Incorporated, Trenton, Ontario, Canada	

---

<b>G.L. Dorna</b>	Belden Wire & Cable Company Engineering Center, Richmond, Indiana, USA
<b>R. Drury</b>	nVent Thermal Canada Ltd, Trenton, Ontario, Canada
<b>S. Gerretsen</b>	General Cable Industries, Inc., Willimantic, Connecticut, USA
<b>D. Harris</b>	Northern Cables Inc., Brockville, Ontario, Canada
<b>B. Iyer</b>	Lake Cable, LLC, Bensenville, Illinois, USA
<b>J. Johnson</b>	Electro Cables Incorporated, Trenton, Ontario, Canada
<b>A. Kanouni</b>	HELUKABEL Canada Inc., Mississauga, Ontario, Canada
<b>R. Kerr</b>	HELUKABEL Canada Inc., Mississauga, Ontario, Canada
<b>D. Kiddoo</b>	Communications Cable & Connectivity Association (CCCA), Phoenix, Maryland, USA
<b>R. Kummer</b>	Southwire Company, Carrollton, Georgia, USA
<b>P. Laudicina</b>	Nexans AmerCable, Houston, Texas, USA
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<b>M. Levitre</b>	Southwire Company, Carrollton, Georgia, USA
<b>A. McInnes</b>	PolyOne Canada, Inc., Orangeville, Ontario, Canada

---

<b>N. Moubed</b>	Anixter Canada Inc., Mississauga, Ontario, Canada	
<b>I. Müller</b>	Nexans Canada Inc., Markham, Ontario, Canada	
<b>S. Murali</b>	General Cable Industries, Inc., Willimantic, Connecticut, USA	
<b>T. Rudd</b>	Shawcor Connection Systems, Toronto, Ontario, Canada	
<b>J. Schroeder</b>	General Cable Industries, Inc., Willimantic, Connecticut, USA	
<b>J. Singh</b>	Domtech Inc., Trenton, Ontario, Canada	
<b>M. Sparano</b>	Gendon Polymer Services Inc., Bolton, Ontario, Canada	
<b>R. Speer</b>	Cable Components Group, Pawcatuck, Connecticut, USA	
<b>G. Straniero</b>	AFC Cable Systems, Inc., Freehold, New Jersey, USA	
<b>A. Tsisserev</b>	AES Engineering, Vancouver, British Columbia, Canada	
<b>J. Turner</b>	Swansea Consulting, Toronto, Ontario, Canada	
<b>D. Verhage</b>	Domtech Inc., Trenton, Ontario, Canada	
<b>C. White</b>	Southwire Co., Carrollton, Georgia, USA	
<b>J. Willner</b>	Bolton, Ontario, Canada	
<b>A. Popa</b>	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>

# Preface

This is the fourth edition of CSA C22.2 No. 208, *Fire alarm and signal cable*. It supersedes the previous editions published in 2014, 2003, and 1986. It is one in a series of Standards issued under Part II of the *Canadian Electrical Code*.

The main changes to this edition are the following:

- a) inclusion of new requirements for Type FAS cables rated for direct burial/wet locations;
- b) addition of equivalent metric sizes of conductors;
- c) addition of optional markings and applicable requirements for sunlight resistant, direct burial, and halogen-free characteristics; and
- d) addition of missing “150 °C thermoplastic” and “105 °C thermoset” columns in Tables 4 and 5.

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 Control, Instrument, Communication, and Marine 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.

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.

**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 CSA committee interpretation has not already been published, CSA Group’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](mailto:inquiries@csagroup.org) and include “Request for interpretation” in the subject line:*
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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](http://standardsactivities.csa.ca).*

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- b) *relevant clause, table, and/or figure number;*
- c) *wording of the proposed change; and*
- d) *rationale for the change.*

# C22.2 No. 208-18

## Fire alarm and signal cable

### 1 Scope

#### 1.1

This Standard applies to single- and multiple-conductor fire alarm and signal cables with a maximum nominal voltage rating of 300 V and a minimum temperature rating of 60 °C for use in buildings and other structures in dry, damp, or wet locations in accordance with the *Canadian Electrical Code, Part I*.

#### 1.2

Because other CSA Group Standards specify requirements for certain constructions suitable for use as fire alarm and signal cable, this Standard does not cover all such constructions.

#### 1.3

The designations for constructions covered by this Standard use the letters FAS followed, for constructions rated above 60 °C, by the temperature rating. The type designations are as follows:

- a) FAS;
- b) FAS 90;
- c) FAS 105;
- d) FAS 150; and
- e) FAS 200.

#### 1.4

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.