

Communications cables



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Revision History

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Update No. 2 — June 2021	Revision symbol (in margin)
Cover, copyright page, Preface, Clauses 3.9A, 5.2.1, 7.14.1, 8.3.3.1, 8.3.9.1, 8.4.7 – 8.4.10, and 9.1.9 Table 4 Annex C Note: Only the revised pages have been provided.	

Standard for Safety for Communications Cables

Eighth Edition, Dated January 20, 2017

Summary of Topics

This revision dated June 16, 2021 includes the following changes in requirements:

- ***Introduction of Optional Suffixes HF, LSHF and ST1; [8.3.3.1](#), [8.4.7](#) – [8.4.10](#)***
- ***Use of an Additional 14 AWG Conductor in a Multi-conductor Communications Cable; [5.2.1](#), [8.3.9.1](#), [9.1.9](#), [Table 4](#)***
- ***Criteria for FT6 flame test classification; [7.14.1](#)***
- ***Delete Annex [C](#) – Cable substitution***
- ***Add a definition – Grounding/Bonding Conductor; [3.9A](#)***



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CSA C22.2 No. 214-17
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Underwriters Laboratories Inc.
UL 444
Fifth Edition

Communications Cables

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CONTENTS

Preface	5
Communication Cables	
1 Scope	6
2 Reference publications	6
3 Definitions	6
4 General Requirements	9
5 Construction	9
5.1 Conductors	9
5.2 Insulation	10
5.3 Optical fibre members	11
5.4 Core assembly	11
5.5 Defective pairs	12
5.6 Spare pairs	12
5.7 Core binders	13
5.8 Core wrap	13
5.9 Shields	13
5.10 Jackets	13
5.11 Metallic covering	14
5.12 Metallic messenger	14
6 Manufacturing and Production Tests	14
6.1 Spark test after insulating	14
6.2 Continuity	15
6.3 Dielectric strength	15
7 Capability Tests	16
7.1 Corrosion resistance of uncoated copper conductors	16
7.2 Crush resistance of insulation	17
7.3 Insulation unaged and heat-aged requirements	18
7.4 Insulation shrinkback	19
7.5 Insulation cold bend	19
7.6 AC leakage current through overall jacket	19
7.7 Durability of printing	20
7.8 Unaged and heat-aged requirements of jacket	20
7.9 Flexibility (PVC jackets rated 125°C only)	21
7.10 Cable cold bend	21
7.11 Jacket peel test	22
7.12 Weatherometer test for Type CMX Cable	23
7.13 Cold impact of outdoor Type CMX cable	23
7.14 Flame and smoke requirements	24
7.15 Measuring thickness of insulation and rounding off the results	25
7.16 Conductor resistance	26
7.17 Conductor diameter or cross-sectional area	26
7.18 Compressive loading test for Type CMUC	27
7.19 Heat shock test for cross-connect wire	27
7.20 Deformation test for cross-connect wire	28
7.21 Dielectric tests for cross-connect wire	28
7.22 Sunlight resistant test	29
7.23 Circuit integrity test for cable marked "-CI"	29
7.24 Cable heating test for cables marked "-LP" (XX)	29

8	Marking of Cables	30
8.1	General	30
8.2	Type of marking	30
8.3	Required marking	30
8.4	Optional marking	32
8.5	Intervals	33
9	Marking on Tag, Reel, or Carton	33
9.1	General requirements	33
9.2	Other marking	34
10	Date of Manufacture	35

TABLES

ANNEX A Electrical codes for wire types

ANNEX B Guidelines for sample selection for flame and smoke test requirements

ANNEX C Cable substitutions

Preface

This is the common CSA and UL standard for communications cables. It is the eighth edition of CSA C22.2 No. 214 and the fifth edition of UL 444. This edition of CSA C22.2 No. 214 supersedes the previous editions published in 2008, 2002, 1994, 1990, 1988, 1986, and 1984. This UL edition supersedes the previous editions published in 2008, 2002, 1994 and 1990.

This common Standard was prepared by the Canadian Standards Association and Underwriters Laboratories Inc. The efforts of the UL 444/CSA 214 Harmonization Committee are greatly appreciated.

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

This Standard was reviewed by CSA ICWC05-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 approved by the American National Standards Institute (ANSI) as an American National Standard.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is considered a minimum quantity.

Note: 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.

Level of Harmonization

This standard uses an IEC format, but is not based on, nor is it to be considered equivalent to, an IEC standard. This standard is published as an identical standard. An identical standard is a standard that is the same in technical content except for conflicts in codes and governmental regulations. Presentation is word for word except for editorial changes.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

Communication Cables

1 Scope

1.1 This standard applies to 60 – 250°C single- or multiple-conductor jacketed or unjacketed, integral or nonintegral cables and single or multiple coaxial cables for telephone and other communication circuits such as voice, data, and audio for on-premise customer systems. These cables may contain one or more optical fibre members. For the purpose of this standard, a coaxial cable or coaxial member conductor is a single conductor with a shield. For the purpose of this standard, a single- or multiple-conductor unjacketed cable is a cross-connect wire.

1.2 This standard applies to communications cables that are intended primarily for installation in accordance with Section 60 of the *Canadian Electrical Code Part I*, and Article 800 of the *National Electrical Code (NEC)*, ANSI/NFPA 70. They are rated for 300 V applications, but are not so marked.

Note: See Annex A for a complete list of wire types covered by this Standard and the specific electrical codes for which they are intended.

1.3 This standard does not apply to communications cords.

1.4 In Canada, the Type “-CI” circuit integrity markings are not recognized by the Canadian Electrical Code, Part I.

In the US, Type CMH is not recognized in the NEC.

1.5 If a value for measurement is followed by a value in other units in parenthesis, the second value may be only approximate. The first stated value is the requirement.

2 Reference publications

Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CSA Group

C22.1–15

Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0–15

General Requirements – Canadian Electrical Code, Part II

CSA C22.2 No. 1500–15

Wire and Cable Test Methods

UL (Underwriters Laboratories)

UL 1501

Reference Standard for Electrical Wires, Cables, and Flexible Cords

UL 1666

Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts