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CSA C22.2 No. 2515:19
National Standard of Canada



Aboveground reinforced thermosetting resin conduit (RTRC) and fittings



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CSA C22.2 No. 2515:19
***Aboveground reinforced
thermosetting resin conduit (RTRC)
and fittings***



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Summary of Topics

The new Edition of includes References to the Mexican Electrical Installation Code, Reference Publications and ANCE References.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL, CSA, and ANCE are committed to updating this harmonized standard jointly.

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Association of Standardization and Certification
NMX-J-759-ANCE
First Edition



CSA Group
CSA C22.2 No. 2515:19
Second Edition



Underwriters Laboratories Inc.
UL 2515
Second Edition

Aboveground Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

February 5, 2019



ANSI/UL 2515-2019



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CONTENTS

Preface	5
1 Scope	7
2 Definitions	7
3 Reference publications and units of measurement	8
3.1 Reference publications	8
3.2 Units of measurement	10
4 Construction	10
4.1 General	10
4.2 Conduit with an integral belled end	11
4.3 Couplings	11
4.4 Elbows	11
4.5 Adapters	11
4.6 Conduit bodies	12
5 Qualification tests	13
5.1 Conditioning	13
5.2 Compression	14
5.3 Beam strength	14
5.4 Impact resistance at low temperature	15
5.5 Water absorption	16
5.6 Chemical resistance (optional)	16
5.7 Watertightness	18
5.8 Joint separation	18
5.9 Flattening resistance	18
5.10 Flame retardant properties	19
5.11 Vertical flame test (FT4) – conduit on cable tray (optional)	21
5.12 Halogen content	24
5.13 Deflection under heat and load	24
5.14 Weather resistance	24
5.15 Infrared spectroscopy	26
5.16 Tensile strength	27
5.17 Durability of printing (all types with surface-applied markings of ink, dyes, etc.)	27
5.18 Hosedown (conduit bodies)	28
5.19 External icing (conduit bodies)	28
5.20 Wire pull test (conduit bodies)	29
5.21 Volume variation (conduit bodies)	30
5.22 Extended support distance test (optional)	31
6 Marking	32
Annex A (informative) Guidelines for vertical flame test (FT4)	
A.1 Intake airflow	55
A.1.1 Natural airflow	55
A.1.2 Forced airflow	55
A.2 Trays	55
Annex B (normative) Method to determine the halogen content of a low-halogen material using the calculation method from pH and acid gas evolution	

B.1	General	56
B.2	Test equipment	56
B.2.1	General	56
B.2.2	Equipment layout	56
B.3	Test procedure	57
B.3.1	Sample preparation	57
B.3.2	Apparatus assembly	57
B.3.3	Acid gas evolution	58
B.3.4	Acid gas measurement	59

Annex C (informative) Rationale for threaded adapter dimensions for size 4-1/2 (116)

Preface

This is the harmonized ANCE, CSA Group, and UL standard for Aboveground Reinforced Thermosetting Resin Conduit (RTRC) and Fittings. It is the first edition of NMX-J-759-ANCE, the second edition of CSA C22.2 No. 2515, and the second edition of UL 2515. This edition of NMX-J-759-ANCE is the first edition published. This edition of CSA C22.2 No. 2515 supersedes the previous edition(s) published on July 31, 2009. This edition of UL 2515 supersedes the previous edition(s) published on July 31, 2009.

This harmonized standard was prepared by the Association of Standardization and Certification, (ANCE), CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the conduit manufacturing industry and the Technical Harmonization Subcommittee for Conduit and Tubing, of the Council of the Harmonization of Electrotechnical Standards for the Nations of the Americas (CANENA), are gratefully acknowledged.

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

The present Mexican standard was developed by the CT 23 Electrical Accessories (Wiring Devices) from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the electrical manufacturers and users.

This standard was reviewed by the CSA Integrated Committee on Nonmetallic Conduit, Tubing, and Fittings, under the jurisdiction of the CSA Technical Committee on Wiring Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA 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.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be 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 the IEC format but is not based on, nor is it considered equivalent to, an IEC standard.

This standard is published as an equivalent standard for ANCE, CSA Group and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

Reasons for differences from IEC

The Technical Harmonization Subcommittee identified several IEC standards that address electrical conduit and tubing included in the scope of this standard. The IEC standards for electrical conduit and tubing are recognized as being generally system-specific, containing the requirements for the relevant conduits and cables and associated fittings in several discrete IEC standards.

The THSC determined the safe use of electrical conduit and tubing is dependent on the design and performance of the conduit and tubing systems with which they are intended to be installed. Significant investigation is required to assess safety and system compatibility issues that may lead to harmonization of traditional North American electrical conduit and tubing and associated fittings with those presently addressed in the known IEC standards. The THSC agreed such future investigation might be facilitated by completion of harmonization of the North American standards for electrical conduit and tubing and their fittings.

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.

Aboveground Reinforced Thermosetting Resin Conduit (RTRC) and Fittings

1 Scope

1.1 This Standard specifies the requirements for low-halogen aboveground (Type AG) reinforced thermosetting resin conduit (RTRC) and fittings for installation and use in accordance with CSA C22.1, Canadian Electrical Code (CEC), Part I, NFPA 70, National Electrical Code (NEC) and NOM-001-SEDE, Standard for Electrical Installations (Mexico), in non-hazardous locations.

1.2 The products specified in this Standard are intended for use at -40°C (-40°F) to 110 °C (230°F). The products are for use above ground in exposed and concealed locations. The products are also suitable for use below ground by direct burial or by encasement in concrete.

1.3 Type AG conduit has not been evaluated for directional boring applications.

1.4 This Standard covers ID (dimensions based on inside diameters) and IPS (dimensions based on outside diameters of iron pipe sizes) conduit and fittings. Trade sizes (metric designators) are 1/2 (16) to 6 (155).

Note: The values in parenthesis are metric size designations of conduits and fittings and do not necessarily reflect metric trade sizes.

1.5 ID and IPS conduit are designated as SW (Standard Wall) or HW (Heavy Wall), which refer to specific wall thicknesses.

1.6 Fittings specified in this Standard include, but are not limited to, straight couplings, 5° angle couplings, adapters, and elbows with plain ends or integral belled ends at one or both ends, expansion joints, and conduit bodies.

Note: In Canada, conduit bodies are not evaluated as outlet boxes – they are fittings. Requirements in this standard for conduit bodies intended for use as outlet boxes do not apply in Canada. In Mexico and the United States, a conduit body may be used as an outlet box for the splicing of conductors.

1.7 For products intended for use in Canada, general requirements are given in CSA-C22.2 No. 0.

2 Definitions

2.1 The following definitions apply in this Standard:

2.2 Conduit body – a separate portion of a conduit system that provides access through a removable cover(s) to the interior of the system at a junction of two or more sections of the system or at a terminal point of the system.

2.3 Integral belled end – a belled end installed at the factory, either integrally wound or a permanently attached coupling.