



UL 44

STANDARD FOR SAFETY

Thermoset-Insulated Wires and Cables

UL Standard for Safety for Thermoset-Insulated Wires and Cables, UL 44

Nineteenth Edition, Dated January 9, 2018

Summary of Topics

This revision of ANSI/UL 44 dated May 14, 2021 includes a Modification of Requirements for Conductor Stranding Marking on Product; [6.1.5](#) and [Table 49](#)

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated October 9, 2020.

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This ANSI/UL Standard for Safety consists of the Nineteenth Edition including revisions through May 14, 2021. The most recent designation of ANSI/UL 44 as an American National Standard (ANSI) occurred on May 14, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

The Department of Defense (DoD) has adopted UL 44 on April 5, 1985. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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CONTENTS

PREFACE	7
1 Scope	9
2 General	9
2.1 Units of measure	9
2.2 Reference publications	9
2.3 General requirements	13
3 Definitions	13
4 Construction	14
4.1 Conductors	14
4.2 Insulation	18
4.3 Jackets or fibrous coverings over single conductors	19
4.4 Shielding (optional)	20
4.5 Multiple-conductor cables	20
4.6 Color coding	21
4.7 Fillers and protective materials	22
4.8 Jacket separators	22
4.9 Jackets	22
4.10 Evaluation of new materials – Establishment of dry temperature rating of alternative insulation and jacketing materials for use in this Standard	23
4.11 Assemblies that include single-conductor thermoset-insulated wires	23
5 Test Requirements	23
5.1 General	23
5.2 Conductor resistance	23
5.3 Tests on aluminum conductors	24
5.4 Long-term insulation resistance in water	24
5.5 Long-term insulation resistance in air for 90°C rated conductors	25
5.6 Capacitance and relative permittivity	26
5.7 Conductor corrosion	26
5.8 Insulation fall-in	26
5.9 Heat shock of thermoplastic jacket	26
5.10 Flexibility of separator under a thermoplastic jacket	27
5.11 Cold bend and cold impact	27
5.12 Deformation	27
5.13 Hot-creep elongation and hot-creep set	28
5.14 Flame and smoke	28
5.15 Weather (sunlight) resistance (optional)	31
5.16 Oil resistance (optional)	31
5.17 Gasoline and oil resistance (optional)	31
5.18 Crushing resistance	32
5.19 Dielectric breakdown after glancing impact	32
5.20 Durability of ink printing	32
5.21 Shrinkback	32
5.22 Evaluation of new materials – establishment of temperature rating	32
5.23 AC spark test	32
5.24 Dielectric voltage-withstand in water	33
5.25 Insulation resistance in water at 15°C	33
5.26 Electrical continuity	33
6 Marking	33
6.1 Marking on product	33
6.2 Marking on package	36
7 Deep-Well Submersible Water-Pump Cable	37
7.1 General	37

7.2 Construction.....	37
7.3 Markings.....	39
7.4 Tests	40
TABLES	41

Annex A (informative) – Conductor types covered by this Standard

Annex B (informative) – Summary of requirements

Annex C (normative) – Chemical composition of aluminum conductors

Annex D (normative) – Copper-clad aluminum conductors

D.1 General.....	85
D.2 Sizes and stranding	85
D.3 Conductor resistance	85
D.4 Physical properties	85
D.5 Marking requirements	85

Annex E (informative) – Metric sizes

Annex F (informative) – Rope-lay stranded flexible conductors

Annex G (normative) – Protective coverings other than jackets

G.1 General.....	91
G.2 Tapes	91
G.3 Cotton braids.....	91
G.3.1 General	91
G.3.2 Coverage	92
G.4 All-glass and glass/cotton braids.....	94
G.4.1 General	94
G.4.2 Glass content	94
G.5 Cotton wraps and servings	95
G.5.1 General	95
G.5.2 Coverage	95
G.6 Glass wraps	96
G.7 Braids and wraps.....	96
G.8 Saturation of fibrous coverings other than tapes	96
G.9 Finish	97

Annex H (normative for Canada) – Color identification of circuit conductors

Annex I (normative) – Formulas for calculating insulation resistance of types having parameters other than as specified in this Standard

Annex J (normative) – Alternative national markings

Annex K (normative) – Requirements for Types RW75, R90, and RW90 rated 5000 V

K.1	General.....	106
K.2	Construction	106
	K.2.1 Conductors	106
	K.2.2 Conductor shielding.....	106
	K.2.3 Insulation.....	106
	K.2.4 Jackets	106
K.3	Tests	106
	K.3.1 Long-term insulation resistance in water.....	106
	K.3.2 Insulation resistance in air for Type R90, rated 5000 V	106
	K.3.3 Dielectric voltage-withstand in water	106
	K.3.4 Insulation resistance in water at 15°C.....	107
	K.3.5 Resistivity of extruded semiconducting shielding.....	107

No Text on This Page

PREFACE

This is the harmonized ANCE, CSA Group, and UL standard for Thermoset-Insulated Wires and Cables. It is the Sixth edition of NMX-J-451-ANCE, the Eleventh edition of CSA C22.2 No. 38, and the Nineteenth edition of UL 44. This edition of NMX-J-451-ANCE supersedes the previous edition published in March 28, 2014. This edition of CSA C22.2 No. 38 supersedes the previous edition published in March 28, 2014. This edition of UL 44 supersedes the previous edition published in March 28, 2014. This harmonized standard has been jointly revised on May 14, 2021. For this purpose, CSA Group and UL are issuing revision pages dated May 14, 2021, and ANCE is issuing a new edition dated May 14, 2021.

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 Technical Harmonization Committee for Electrical Wires and Cables, of the Council on the Harmonization of Electrotechnical Standards of 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 20 Conductores from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the SC 20B Conductores para Baja Tensión.

This standard was reviewed by the CSA Integrated Committee on Fixed Installation Wires and Cables, 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.

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 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 provides requirements for insulated wires and cables for use in accordance with the electrical installation codes of Canada, Mexico, and the United States. At present there is no IEC standard for wires and cables for use in accordance with these codes. Therefore, this standard does not employ any IEC standard for base requirements.

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,