



UL 1653

Underwriters Laboratories Inc. Standard for Safety

Electrical Nonmetallic Tubing



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UL Standard for Safety for Electrical Nonmetallic Tubing, UL 1653

Second Edition, Dated May 19, 2006

Summary of Topics

This revision of ANSI/UL 1653 is being issued to reaffirm approval as an American National Standard. No changes in requirements are involved.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL and CSA are committed to updating this harmonized standard jointly. However, the revision pages dated October 27, 2010 will not be jointly issued by UL and CSA as these revision pages only address UL ANSI approval dates.

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This ANSI/UL Standard for Safety consists of the second edition including revisions through October 26, 2010. The most recent designation of ANSI/UL 1653 as a Reaffirmed American National Standard (ANS) occurred on October 26, 2010. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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Preface

This is the common CSA and UL standard for *Electrical Nonmetallic Tubing*. It is the fourth edition of CSA C22.2 No. 227.1 and the second edition of UL 1653. This edition of CSA C22.2 No. 227.1 supersedes the previous edition published in 1997. This edition of UL 1653 supersedes the previous edition published in 1997.

This common standard was prepared by the Canadian Standards Association (CSA) and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Committee 23A ENT Working Group of the Council on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA) are gratefully acknowledged.

This standard was reviewed by the CSA Subcommittee 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 will be submitted to the Standards Council of Canada (SCC) for approval as a National Standard of Canada.

This standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

A UL standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest set of revised requirements.

Where reference is made to a specific number of samples to be tested, the specified number shall 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 shall it be considered equivalent to, an IEC standard. This standard is published as an equivalent standard for CSA 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 Committee determined the safe use of electrical nonmetallic tubing and fittings is dependent on the design and performance of the raceway and cable 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 nonmetallic tubing and fittings with those presently addressed in the known IEC standards. The THC agreed such future investigation might be facilitated by completion of harmonization of the North American standards for electrical nonmetallic tubing and fittings.

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