

Nonmetallic surface raceways and fittings



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PREFACE

This is the harmonized CSA Group and UL standard for Nonmetallic Surface Raceways and Fittings. It is the second edition of CSA C22.2 No. 62.1, and the fourth edition of UL 5A. This edition of CSA C22.2 No. 62.1 supersedes the previous edition(s) published in 2003. This edition of UL 5A supersedes the previous edition(s) published on July 18, 2003.

This harmonized standard was prepared by CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee 23A SNR Working Group 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.

This standard was reviewed by the CSA Subcommittee ICCM05-Surface Raceway Systems, 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 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 this 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 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 THSC determined the safe use of electrical surface raceway 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 electrical raceway and fittings with those presently addressed by the known IEC standards. The THSC agreed such future investigation might be facilitated by completion of harmonization of the North American standards for electrical surface raceway and 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.

CSA Group Effective Date

The effective date for CSA Group will be announced through a *CSA Informs* or *CSA Group Certification Notice*.

UL Effective Date

Information regarding the UL effective date is on the transmittal notice that accompanies the UL Standard.

Nonmetallic Surface Raceways and Fittings

1 Scope

1.1 These requirements cover nonmetallic raceways and fittings. These products are for use as surface wiring systems in accordance with the Rules of the Canadian Electrical Code, Part 1, and NFPA 70, National Electrical Code.

1.2 Raceways that are all nonmetallic and of any thickness are intended to enclose circuits operating at potentials not exceeding 600 V between conductors.

1.3 Nonmetallic raceways with metal covers are intended to enclose circuits operating at potentials in accordance with Table 1 or Table 1A.

1.4 These requirements do not cover surface metal raceways, cable trays, or wireways.

2 Definitions

2.1 For the purpose of this Standard, the following definitions apply:

ACCESSORY – a part that may be added to a raceway system for a special purpose (for example, guards, hangers, retainers).

FITTING, RACEWAY – a part used to connect, change direction, or terminate a surface raceway (for example, a transition coupler, an end cap, a corner, a tee, an adapter, or a box) or a system specific wiring device that completes the system.

FIXTURE BOX – a box used for the support of a lighting fixture, lampholder, or other equipment intended for similar installation.

GROUNDING/BONDING CONDUCTOR – a conductor that is defined in the National Electrical Code (NEC) as an Equipment Grounding Conductor, and a conductor that is defined in the Canadian Electrical Code (CE Code), Part I, as a Bonding Conductor.

NONMETALLIC – a polymeric part.

SURFACE NONMETALLIC RACEWAY – a raceway for surface or suspension mounting with a nonmetallic base and a nonmetallic or metal cover.

SURFACE RACEWAY SYSTEM – a system consisting of a surface raceway and associated fittings, which may include wiring devices and accessories.

WIRING DEVICE – a part of an electrical system intended to carry, provide a means of connection to, or provide control of electrical energy within a raceway system (for example, switches or receptacles).

3 General

3.1 General requirements

3.1.1 For products intended for use in Canada, general requirements are given in CSA Standard C22.2 No. 0, General Requirements – Canadian Electrical Code, Part II.