

UL 1441

ISBN 1-55989-897-6

Coated Electrical Sleeving



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UL Standards for Safety are developed under a procedure which provides for participation and comment from the affected public as well as industry. The procedure takes into consideration a survey of known existing standards and the needs and opinions of a wide variety of interests concerned with the subject matter of the standard. Thus manufacturers, consumers, individuals associated with consumer-oriented organizations, academicians, government officials, industrial and commercial users, inspection authorities, insurance interests and others provide input to UL in the formulating of UL Standards for Safety, to keep them consonant with social and technological advances.

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October 31, 1995

Standard for

Coated Electrical Sleeving

UL 1441, Third Edition

Accompanying this transmittal notice is a copy of the Third edition of UL 1441.

THIS EDITION OF THE STANDARD IS NOW IN EFFECT.

The requirements in this standard are substantially in accordance with UL's bulletin on this subject dated December 2, 1994. This bulletin is now obsolete and may be discarded.

Revised and/or additional pages may be issued from time to time.



Documents

Document Sharing Hub

Canadian Standards Association
C22.2 No. 198.3
First Edition

Underwriters Laboratories, Inc.
UL 1441
Third Edition



Coated Electrical Sleeving

October 31, 1995

Commitment for Amendments

This Standard is issued jointly by Canadian Standards Association and Underwriters Laboratories Inc. Amendments to this Standard will be made only after processing according to the Standards writing procedures by both Canadian Standards Association and Underwriters Laboratories Inc.

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Preface

This is the common UL and CSA Standard for coated electrical sleeving. It is the first edition of CSA Standard C22.2 No. 198.3 and the third edition of UL 1441. This Standard supersedes the following:

- a) CSA Bulletin No. 1389B; and
- b) the second edition of UL 1441.

This Standard addresses safety requirements for various types of coated electrical sleeving.

This common Standard was prepared by the Canadian Standards Association and Underwriters Laboratories Inc., and the electrical tubing and sleeving industry. The efforts and support of the Joint NEMA/EFC Technical Committee for Electrical Tubing and Sleeving Products are gratefully acknowledged. The following is a list of individuals who participated in the Technical Committee:

Gerry Landry	Essex Group, Inc./Suflex Products, Newmarket, New Hampshire, USA	<i>Joint Chair</i>
Peter Jackson	Shaw Industries Ltd., Etobicoke, Ontario, Canada	<i>Joint Chair</i>
Jim Balquist	Raychem Corporation, Menlo Park, California, USA	
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Steve Paniri	Canadian Standards Association, Etobicoke, Ontario, Canada	<i>CSA Representative</i>
Joe Salvini	Underwriters Laboratories Inc., Research Triangle Park, North Carolina, USA	<i>UL Representative</i>

Dora Carter**National Electrical Manufacturers
Association,
Washington, D.C., USA****NEMA Staff Representative****The Standard was**

- a) reviewed by the Joint NEMA/EFC Technical Committee for Electrical Tubing and Sleeving Products and approved by the Codes and Standards Committees of both NEMA and EFC; and
- b) reviewed by the CSA Subcommittee on C22.2 No. 198.1 and the CSA Technical Committee on Wiring Products under the jurisdiction of the CSA Standards Steering Committee on the Canadian Electrical Code, Part II and was formally approved by these Committees; and
- c) reviewed by the Industry Advisory Group of UL for Coated Electrical Sleeving, UL's Electrical Council, Subscribers to UL's Standards Service for Coated Electrical Sleeving, and Authorities Having Jurisdiction.

This Standard will be submitted to the Standards Council of Canada for approval as a National Standard of Canada and to the American National Standards Institute (ANSI) for publication as an American National Standard.

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.*

UL Effective Date

As of October 31, 1995 all products Listed or Recognized by UL must comply with the requirements in this Standard.

CSA Effective Date

The effective date for CSA will be announced through *CSA Informs*.

Foreword (CSA)

Certification organizations, as accredited by the Standards Council of Canada, have their own criteria procedures for certification services. The following paragraphs define CSA Certification policies.

The Canadian Standards Association provides certification services for manufacturers who, under license from CSA, wish to use the appropriate registered CSA Marks on certain products of their manufacture to indicate conformity with CSA Standards.

CSA Certification for a number of products is provided in the interest of maintaining agreed-upon standards of quality, performance, interchangeability and/or safety, as appropriate. Where applicable, certification may form the basis for acceptance by inspection authorities responsible for enforcement of regulations. Where feasible, programs will be developed for additional products for which certification is desired by producers, consumers or other interests.

In performing its functions in accordance with its objectives, CSA does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of the Association represent its professional judgement given with due consideration to the necessary limitations of practical operation and state of the art at the time the Standard is processed.

Products in substantial accord with this Standard but which exhibit a minor difference or a new feature may be deemed to meet the Standard providing the feature or difference is found acceptable utilizing appropriate CSA Certification Division Operating Procedures. Products which comply with this Standard shall not be certified if they are found to have additional features which are inconsistent with the intent of this Standard. Products shall not be certifiable if they are discovered to contravene applicable Federal laws or regulations.

Testing techniques, test procedures and instrumentation frequently must be prescribed by the CSA Certification Division in addition to the technical requirements contained in Standards of CSA. In addition to markings specified in the Standard the CSA Certification and Testing Division may require special cautions, markings and instructions that are not specified by the Standard.

Some tests required by CSA Standards may be inherently hazardous. The Association neither assumes nor accepts any responsibility for any injury or damage that may occur during or as the result of tests, wherever performed, whether performed in whole or in part by the manufacturer or the Association.

Manufacturers should note that, in the event of the failure of the CSA Certification and Testing Division to resolve an issue arising from the interpretation of requirements, there is an appeal procedure: the complainant should submit the matter, in writing, to the Secretary of the Canadian Standards Association.

If this Standard is to be used in obtaining CSA Certification please remember, when making application for certification, to request all current Amendments, Bulletins, Notices and Technical Information Letters that may be applicable and for which there may be a nominal charge. For such information or for further information concerning details about CSA Certification please address your inquiry to the Applications and Records Section, Canadian Standards Association, 178 Rexdale Boulevard, Etobicoke, Ontario M9W 1R3.

Foreword (UL)

A. This Standard contains basic requirements for products covered by Underwriters Laboratories Inc. (UL) under its Follow-Up Service for this category within the limitations given below and in the Scope section of this Standard. These requirements are based upon sound engineering principles, research, records of tests and field experience, and an appreciation of the problems of manufacture, installation, and use derived from consultation with and information obtained from manufacturers, users, inspection authorities, and others having specialized experience. They are subject to revision as further experience and investigation may show is necessary or desirable.

B. The observance of the requirements of this Standard by a manufacturer is one of the conditions of the continued coverage of the manufacturer's product.

C. A product which complies with the text of this Standard will not necessarily be judged to comply with the Standard if, when examined and tested, it is found to have other features which impair the level of safety contemplated by these requirements.

D. A product employing materials or having forms of construction differing from those detailed in the requirements of this Standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be judged to comply with the Standard.

E. UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of UL represent its professional judgment given with due consideration to the necessary limitations of practical operation and state of the art at the time the Standard is processed. UL shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. UL shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of or reliance upon this Standard.

F. Many tests required by the Standards of UL are inherently hazardous and adequate safeguards for personnel and property shall be employed in conducting such tests.

