



UL 6A

STANDARD FOR SAFETY

Electrical Rigid Metal Conduit –
Aluminum, Red Brass, and Stainless
Steel

UL Standard for Safety for Electrical Rigid Metal Conduit – Aluminum, Red Brass, and Stainless Steel, UL 6A

Second Edition, Dated October 31, 2008

Summary of Topics

This revision of ANSI/UL 6A dated March 5, 2021 includes an editorial correction in [5.5.2](#). No other changes are being incorporated into the standard.

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.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of UL.

UL provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will UL be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if UL or an authorized UL representative has been advised of the possibility of such damage. In no event shall UL's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold UL harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

No Text on This Page



Association of Standardization and Certification
NMX-J-576-ANCE
Second Edition



CSA Group
CSA C22.2 No. 45.2-08
First Edition



Underwriters Laboratories, Inc.
UL 6A
Second Edition

Electrical Rigid Metal Conduit – Aluminum, Red Brass, and Stainless Steel

October 31, 2008

(Title Page Reprinted: March 5, 2021)



ANSI/UL 6A-2019

Commitment for Amendments

This standard is issued jointly by the Association of Standardization and Certification (ANCE), Canadian Standards Association (operating as “CSA Group”), and Underwriters Laboratories Inc. (UL). Comments or proposals for revisions on any part of the standard may be submitted to ANCE, CSA Group, or UL at any time. Revisions to this standard will be made only after processing according to the standards development procedures of ANCE, CSA Group, and UL. CSA Group and UL will issue revisions to this standard by means of a new edition or revised or additional pages bearing their date of issue. ANCE will incorporate the same revisions into a new edition of the standard bearing the same date of issue as the CSA Group and UL pages.

Copyright © 2014 ANCE

Rights reserved in favor of ANCE.

ISBN 978-1-55436-679-8 © 2008 Canadian Standards Association

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

This Standard is subject to review within five years from the date of publication, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include “Proposal for change” in the subject line: Standard designation (number); relevant clause, table, and/or figure number; wording of the proposed change; and rationale for the change.

To purchase CSA Group Standards and related publications, visit CSA Group’s Online Store at store.csagroup.org or call toll-free 1-800-463-6727 or 416-747-4044.

Copyright © 2021 Underwriters Laboratories Inc.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through March 5, 2021. The most recent designation of ANSI/UL 6A as an American National Standard (ANSI) occurred on September 27, 2019. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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>.

To purchase UL Standards, visit UL's Standards Sales Site at <http://www.shopulstandards.com/HowToOrder.aspx> or call toll-free 1-888-853-3503.

CONTENTS

Preface	5
1 Scope	7
2 Normative references	7
3 Definitions	7
4 Units of measurement	8
5 Construction	8
5.1 Tube	8
5.2 Finished conduit	9
5.3 Protective coatings	10
5.4 Threading and chamfering	10
5.5 Nipples	11
5.6 Elbows	13
5.7 Threaded couplings	14
6 Test requirements	15
6.1 Tube	15
6.2 Protective coatings	15
7 Markings	15
Figures	17
 Annex A (normative)	
A1 Normative references	19
 Annex B (informative)	
B1 Dimensions of conduit	20
 Annex C (informative)	
C1 Examination of finished product by manufacturer	22
 Annex D (normative)	
D1 Alternative National Markings	23

No Text on This Page

Preface

This is the harmonized ANCE, CSA Group, and UL standard for electrical rigid metal conduit – aluminum, red brass, and stainless steel. It is the second edition of NMX-J-576-ANCE, the first edition of CSA C22.2 No. 45.2, and the second edition of UL 6A. This harmonized standard has been jointly revised on March 5, 2021. For this purpose, CSA Group and UL are issuing revision pages dated March 5, 2021, and ANCE is issuing a new edition dated March 5, 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 conduit manufacturing industry and the Technical Harmonization Subcommittee for Conduit and Tubing 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 CT Technical Committee 23 Electrical Accessories from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the metal conduit and tubing manufacturers and users.

This standard was reviewed by the CSA Subcommittee on Metal Conduit and Tubing, 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.

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 to be 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.