

# **UL 50E**

# STANDARD FOR SAFETY

Enclosures for Electrical Equipment, Environmental Considerations



OCTOBER 15, 2020 - UL 50E tr1

UL Standard for Safety for Enclosures for Electrical Equipment, Environmental Considerations, UL 50E

Third Edition, Dated October 15, 2020

### **Summary of Topics**

This new edition of ANSI/UL 50E dated October 15, 2020 includes the following changes in requirements:

Adhesives Used to Secure Observation Windows; 7.1.1, 7.1.3, 7.1.4, Annex B

Alternate Investigation to Tensile Strength and Elongation Test for Gaskets; <u>7.7.1</u>, Section <u>8.13.5</u>

Clarification of Additional Corrosion Protection; 7.2.1.1

Expand Eligible Grades of Austenitic Stainless Steel in UL 50E; Title of Section 7.2.3, 7.2.4.1, 8.8.2.1.1, Section 8.9

Alternative Aging for Gasket Tensile Strength and Elongation Tests; 8.13.2.1, 8.13.2.2

Allowance of X Ray Spectrometry for Metallic Coating Thickness Test; 7.2.3.1, Annex B

Allowance for Type Rated Ventilated Enclosures; <u>7.3.1.1</u>, <u>7.3.5.1</u>, <u>7.4.3.2</u>, <u>7.5.1</u>, <u>8.1.2</u>, 8.4.1.1.1, 8.4.2.1.1.2, 8.4.2.2.1.1, Table 1, Table 2, Table 6

Orientation of Sample for Hosedown Test; 8.4.1.2.1 – 8.4.1.2.3, 8.6.1 – 8.6.3

Length of Conduit for Misalignment Test; 8.15.1.2, 8.15.1.3

Required Torque for Conduit Hubs for Misalignment Test; 8.15.1.1

Sealants Used with Enclosures; Sections 7.8 and 8.17

New Annex E for Adhesives, Enclosures, Non-mechanical Means of Securement; Annex B

Requirements for Encapsulated Enclosures; Annex F

Typo Correction in Table 4

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated July 12, 2019, February 14, 2020 and May 8, 2020.

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.



Association of Standardization and Certification NMX-J-235/2-ANCE-2020 Fourth Edition



CSA Group CSA C22.2 No. 94.2:20 Third Edition



Underwriters Laboratories Inc. UL 50E Third Edition

# **Enclosures for Electrical Equipment, Environmental Considerations**

October 15, 2020



This is a preview. Click here to purchase the full publication.

#### **Commitment for Amendments**

This standard is issued jointly by the Association of Standardization and Certification (ANCE), the 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 anytime. 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 © 2020 ANCE

Rights reserved in favor of ANCE.

#### ISBN 978-1-77139-755-1 © 2020 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 © 2020 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 Third Edition.

The most recent designation of ANSI/UL 50E as an American National Standard (ANSI) occurred on October 15, 2020. 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.