UL 1638

STANDARD FOR SAFETY

Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories

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UL Standard for Safety for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, UL 1638

Sixth Edition, Dated April 27, 2023

Summary of Topics

This revision of ANSI/UL 1638 dated May 14, 2026 includes changes in requirements for Black Box Test Procedure Clarification, 20.3.6.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated February 16, 2026.

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Commitment for Amendments

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This ANSI/UL Standard for Safety consists of the Sixth Edition including revisions through May 14, 2026.

The most recent designation of ANSI/UL 1638 as an American National Standard (ANSI) occurred on May 14, 2026. 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 ULSE and ULC Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories. It is the fifth edition of CAN/ULC 526 and sixth edition of ANSI/UL 1638.

This common Standard was prepared by UL Standards & Engagement Inc. (ULSE), ULC Standards, and the NEMA Technical Harmonization Committee on Notification Appliances.

The standard was formally approved by the ULSE Technical Committee on Signal Appliances and the ULC Technical Committee on Fire Alarm and Life Safety Equipment and Systems. The efforts and support of the NEMA Technical Harmonization Committee, ULSE Technical Committee, and ULC Technical Committee are gratefully acknowledged.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

Annex C is identified as informative and is for informational purposes only.

Annexes A and B are identified as normative and form a mandatory part of this 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.

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INTRODUCTION

1 Scope

1.1 This Standard applies to visual signaling devices intended for indoor and/or outdoor installation:

a) In Canada only: in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations; and with ULC 524, Standard for Installation of Fire Alarm Systems.

b) In the United States only: in accordance with the National Electrical Code, NFPA 70, and the National Fire Alarm and Signaling Code, NFPA 72.

1.2 These requirements cover visible signal devices for use in ordinary (non-hazardous) indoor locations and outdoor locations. This includes:

a) Flashing visual devices used for fire alarm or emergency signaling in both public mode and private mode as defined in the glossary;

b) Emergency warning used to notify occupants that an emergency exists; and

c) Informative type visual signaling devices connected to or controlled by fire alarm or other emergency signaling system equipment, or both.

1.3 This Standard also applies to protective covers and accessories used with visible signals.

1.4 This Standard does not apply to visual signaling devices not intended for emergency signaling applications and intended for operation on Class 2 signal circuits as defined in:

a) In Canada only: CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations.

b) In the United States only: the National Electrical Code, NFPA 70.

1.5 Visible signaling devices for use in hazardous or corrosive locations shall comply with the requirements of this Standard and the applicable requirements of:

a) In Canada only: CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, with respect to the location hazard.

b) In the United States only: the National Electrical Code, NFPA 70.

NOTE: In the United States, general signaling appliances are covered by UL 464A.

1.6 A supplementary audible signal incorporated as part of a visible signaling device which is intended for fire alarm application shall comply with the requirements of this Standard and the applicable requirements of:

a) The Standard for Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, ULC 525 and UL 464; and

b) The Standard for Speakers for Fire Alarm and Signaling Systems, Including Accessories, ULC 541 and UL 1480.

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2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this Standard shall comply with the requirements for that component. See Annex A for a list of Standards covering components generally used in the products covered by this Standard.

2.2 A component need not comply with a specific requirement that:

a) Involves a feature or characteristic not needed in the application of the component in the product covered by this Standard; or

b) Is superseded by a requirement in this Standard.

2.3 A component shall be used in accordance with rating(s) established by its manufacturer for the intended conditions of use.

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Referenced Publications

4.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

4.2 The following publications are referenced in this Standard:

ASTM B86, *Specifications for Zinc and Zinc-Aluminum (ZA) Alloy Foundry and Die Castings*

ASTM B117, *Standard Practice for Operating Salt Spray (Fog) Apparatus*

ASTM E28, *Standard Test Methods for Softening Point of Resins Derived from Pine Chemicals and Hydrocarbons, by Ring-and-Ball Apparatus*

CSA C22.1, *Canadian Electrical Code, Part I, Safety Standard for Electrical Installations*

CSA C22.2 No. 0.4, *Bonding of Electrical Equipment*

CSA C22.2 No. 0.15, *Adhesive Labels*

CSA C22.2 No. 0.17, *Evaluation of Properties of Polymeric Materials*

CSA C22.2 No. 77, *Motors with Inherent Overheating Protection*

CSA C22.2 No. 198.1, *Extruded Insulating Tubing*

CSA C22.2 No. 60065, *Audio, Video, and Similar Electronic Apparatus – Safety Requirements*

CSA C22.2 No. 60086-4, *Primary Batteries – Part 4: Safety of Lithium Batteries*

IEC 60417, *Graphical symbols for use on equipment*

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