CAN/ULC 590:2019 (R2024)

Standard for Design, Installation, Inspection, Testing and Maintenance of Safety Way Guidance System

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Copies of this National Standard of Canada may be ordered from ULC Standards.

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

Standard for Design, Installation, Inspection, Testing and Maintenance of Safety Way Guidance System, CAN/ULC 590

First Edition, Dated May 31, 2019

Summary of Topics

This revision of CAN/ULC 590 dated September 17, 2024 is being issued to update the title page to reflect the reaffirmation of this First Edition National Standard of Canada. No changes in requirements are involved.

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 requirements are substantially in accordance with Proposal(s) on this subject dated March 28, 2024.

PLEASE NOTE THAT CERTAIN CODES MAY REFER TO A SUPERSEDED VERSION OF THIS STANDARD. IN THOSE INSTANCES, THE RELEVANT VERSIONS ARE AVAILABLE FOR PURCHASE.

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CAN/ULC 590:2019 (R2024)

STANDARD FOR DESIGN, INSTALLATION, INSPECTION, TESTING AND MAINTENANCE OF SAFETY WAY GUIDANCE SYSTEM

ICS 01.080.20; 01.080.10

FIRST EDITION . . . . . **MAY 31, 2019**
REAFFIRMED . . . . . SEPTEMBER 17, 2024

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PREFACE

This is the First Edition of CAN/ULC 590, Standard for the Design, Installation, Inspection, Testing and Maintenance of Safety Way Guidance Systems.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Life Safety Accessory Devices.

This Standard has been developed in compliance with the requirements of SCC for accreditation of a Standards Development Organization.

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.

Annexes A and B, identified as Normative, form a mandatory part of this Standard.

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.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

This CAN/ULC 590 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

This Standard is intended to be used for conformity assessment.

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1 Scope

1.1 This Standard covers the principles governing the design and application of visual components used to create a safety way guidance system (SWGS) and requirements for the installation, inspection, testing and maintenance of SWGS.

1.2 This Standard contains general principles valid both for electrically powered and for photoluminescent components. Special information which is related to the type of component is given to assist in defining the environment of use, choice of material, layout, installation and maintenance of SWGS.

NOTE: This Standard recognizes that a safety way guidance systems may have additional features or functions differing from those detailed in these requirements, if the features or functions enhance the life safety of the occupants of the building.

1.3 This Standard does not provide guidance for egress safety evaluations. Applications with different risks to the occupants typically require different layouts and types of SWGS. SWGS is to be reviewed by qualified persons.

1.4 This Standard also does not include the special considerations of possible tactile or audible components of SWGS, nor does it include requirements for high mounted components of the emergency egress / emergency means of egress lighting, especially the design and application of emergency egress / emergency means of egress lighting.

1.5 The installation of components not covered by these requirements shall be in accordance with good engineering practice and manufacturer's published installation instructions.

2 Reference Publication

2.1 The documents shown below are referenced in the text of this Standard. Unless otherwise stated elsewhere in this Standard such reference shall be considered to indicate the edition and/or revisions of the document available at the date on which the Committee approved this ULC Standard. All undated references shall be interpreted as referring to the latest edition of that document.

Documents Published by the CSA Group
5060 Spectrum Way, Mississauga, ON L4W 5N6 Canada
Telephone: (416) 747-4000 or 1-800-469-6727
www.csagroup.ca

- CSA C22.1-18, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations
- CSA C22.2 No. 141-15, Emergency Lighting Equipment
- CSA C22.2. No. 250.0-08 (R2013), Luminaires
- CAN/CSA C282-15, Emergency Electrical Power Supply for Buildings

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Standards published by the International Organization for Standardization (ISO) Available from:
ISO Central Office
1, ch. de la Voie-Creuse, Case postale 56 Ch-1211 Geneva 20, Switzerland
Telephone: 41-22-734-0150
www.iso.ch

- ISO 3864-1-2011, Graphical Symbols – Safety Colours and Safety Signs – Part 1: Design principles for safety signs in workplaces and public areas
- ISO 3864-4-2011, Graphical Symbols – Safety Colours and Safety Signs – Part 4: Colorimetric and photometric properties of safety sign materials

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• ISO 7010-2011 (Including Amendments 1-6: 2014), Graphical Symbols – Safety Colours and Safety Signs – Registered safety signs

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Telephone: (416) 757-3611 or 1-866-9373-ULC
E-mail: publications@ulc.ca www.ulc.ca

• CAN/ULC-S572:2017, Standard for Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems

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Document Published by Underwriters Laboratories, Inc. (ULI)
333 Pfingsten Road, Northbrook, IL 60062-2096 U.S.A.
Telephone: (847) 272-8800
www.ul.com

• UL 410-06, Slip Resistance of Floor Surface Materials
• UL 1994-15, Luminous Egress Path Marking Systems

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3 Glossary

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

3.1 ACCESS TO EXIT – Means that part of a means of egress within a floor area that provides access to an exit serving the floor area.

3.2 AUTHORITY HAVING JURISDICTION (AHJ) – The governing body responsible for the enforcement of any part of this Standard or the official or agency designated by that body to exercise such a function.

3.3 BUILDING – Means any structure used or intended for supporting or sheltering any use or occupancy.

3.4 COLOUR CONTRAST – In visual perception of the real world, contrast is determined in the difference in colour of the object contrasting with other objects within the same field of view.

3.5 DECISION POINTS – Points in the emergency egress / means of egress where evacuees have alternative means or direction of egress.

NOTE: The intent of this information is to be unambiguous in providing direction.

3.6 EMERGENCY EGRESS / EMERGENCY MEANS OF EGRESS SIGN – A component of a safety way guidance system, indicating the means of egress, including exit signs and supplemental signs.

3.7 EMERGENCY EXIT SIGN – A device in a public facility (such as a building) which indicates the location of the closest emergency exit in case of fire or other emergency, typically specified in the relevant building codes.

3.8 EXIT – Means that part of a means of egress, including doorways, that leads from the floor area it serves to a separate building, an open public thoroughfare, or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare.

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