



Z535.7-2024

*American National Standard
Product Safety Information in Electronic Media*

Secretariat

National Electrical Manufacturers Association

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Foreword

In 1979, the ANSI Z53 Committee on Safety Colors was combined with the ANSI Z35 Committee on Safety Signs to form the ANSI Z535 Committee on Safety Signs and Colors. This committee has the following scope:

To develop standards for the design, application, and use of signs, colors, and symbols intended to identify and warn against specific hazards and for other accident prevention purposes.

While the basic mission and fundamental purpose of the ANSI Z535 committee is to develop, refine, and promote a single uniform graphic system used for communicating safety and accident prevention information, the committee recognizes that this information can also be effectively communicated using other graphic systems.

The Z535 committee created subcommittees to update the Z53 and Z35 standards and to write new standards. To date, the following seven standards comprise the ANSI Z535 series:

- ANSI Z535.1 *Safety Colors* (ANSI Z53.1-1979 was updated and combined into this standard in 1991)
- ANSI Z535.2 *Environmental and Facility Safety Signs* (ANSI Z35.1-1972 and Z35.4-1972 were updated and combined into this standard in 1991)
- ANSI Z535.3 *Criteria for Safety Symbols* (new in 1991)
- ANSI Z535.4 *Product Safety Signs and Labels* (new in 1991)
- ANSI Z535.5 *Safety Tags and Barricade Tapes (for Temporary Hazards)* (ANSI Z35.2-1974 was updated and combined into this standard in 1991)
- ANSI Z535.6 *Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials* (new in 2006)
- ANSI Z535.7 *Product Safety Information in Electronic Media* (new in 2024)

Together, these seven standards contain the information needed to specify formats, colors, and symbols for safety signs used in environmental and facility applications; in product and product literature applications; in electronic media; and in temporary safety tag and barricade tape applications.

Published separately is the ANSI Z535 *Safety Color Chart*. This chart gives the user a sample of each of the safety colors: red, orange, yellow, green, blue, purple, brown, gray, white, and black. It also describes each color's ink formulation and closest PANTONE® color.

This ANSI Z535.7 standard was prepared by Subcommittee Z535.7 on Product Safety Information in Electronic Media. The foreword and all the annexes are considered to be informative and are not an official part of this standard. In the vocabulary of writing standards, the word “informative” is meant to convey that the information presented is for informational purposes only and is not considered to be mandatory in nature. The body of this standard is “normative,” meaning that this information is considered to be mandatory.

This standard provides guidelines for the design of product safety information in electronic media. The core guidelines contained in this standard were initially published in this first edition of this standard. This first edition became available in 2024.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee Z535 on Safety Signs and Colors. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z535 Committee had the following members:

Steve Hall, Chair
Judith Isaacson, Vice Chair
Paul Crampton, Secretary

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Applied Safety & Ergonomics (A
Rimkus Company)

Applied Safety & Ergonomics (A
Rimkus Company)

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Clarion Safety Systems

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Schneider Electric

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1 Introduction

Historically, there has been a lack of widely available or generally applicable graphic systems for presenting safety information in electronic media. The absence of such systems, combined with the increased awareness and use of ANSI Z535.4, *Standard for Product Safety Signs and Labels*, and ANSI Z535.6, *Standard for Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials*, has led to attempts to apply various aspects of ANSI Z535.4 and ANSI Z535.6 to the presentation of safety information in electronic media. Since ANSI Z535.4 was not designed for that purpose, it is not well-suited for broad application beyond the domain of product safety signs and labels. While ANSI Z535.6 does apply to printable electronic documents, and some aspects of the standard can serve as a reference for the design of product safety information for some types of electronic media, ANSI Z535.6 specifically excludes “audio and video materials, or dynamic or electronic media (e.g., electronic documents with animation, sound, or other features that are not printable).” See Section 4.2 of ANSI Z535.6-20XX. The limited applicability of these standards stems from differences between traditional static media such as product signs, labels, and printed documents and the numerous forms of electronic media.

Electronic media can vary significantly in terms of their format, purpose, content, and/or length. Electronic media take a vast array of forms. For example, electronic media may include but are not necessarily limited to video, on-product electronic displays, websites, apps, and augmented reality. Different formats for safety messages may be required and/or expected compared to printed information.

There are also differences that may exist between safety information in electronic media and safety messages for printed materials, including product safety signs and labels, product manuals, instructions, and other collateral materials. For example:

Electronic media can:

- be dynamic, using video or animations;
- include both visual and auditory components;
- be interactive;
- contain information not accessed in a linear fashion (i.e., not page by page) and/or that can be reached from multiple access points (e.g., links from different locations leading to the same destination);
- contain information in multiple locations (either temporally or within a system) that cannot be viewed simultaneously; and
- provide information that would be impractical or impossible to provide on product safety signs or in printed product manuals (e.g., rapidly or automatically updating information; situationally based information, etc.).

Presentation may vary by device, operating system, etc., outside of the control of the manufacturer. For example, if the same content is accessed via a smartphone or a computer, the appearance to the user may vary depending on the device type and size, resolution, color rendering, display settings, etc.

To respond to these differences, this standard sets forth a communication system developed specifically for product safety information in electronic media. It incorporates elements of the graphical approaches used by other ANSI Z535-series standards into a common design direction selected to provide product safety information in an orderly and visually consistent manner.