ANSI Z535.2-2011 (R2017)
Reaffirmation of
ANSI Z535.2-2011

American National Standard for Environmental and Facility Safety Signs

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword

In 1979, the ANSI Z535 Committee on Safety Colors was combined with the ANSI Z535 Committee on Safety Signs to form the ANSI Z535 Committee on Safety Signs and Colors. The Z535 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 Z535 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 six 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 ANSI 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]

Together, these six 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, and in temporary safety tag and barricade tape applications.

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

This ANSI Z535.2 standard was prepared by the Z535.2 Subcommittee on Environmental and Facility Safety Signs. The foreword and all annexes in this standard are considered to be informative and not normative. 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. The body of this standard is “normative,” meaning that this information is considered to be mandatory.

This standard was formulated to provide a visual alerting system to aid in identifying potential hazards known to exist in facilities and the environment. Together, ANSI Z535.1, Z535.2, and Z535.3 contain information needed to specify formats, colors, and symbols for safety signs used in environmental and facility applications. The ANSI Z535.4 and Z535.5 standards are harmonized with this standard to provide appropriate hazard avoidance information for products that might be encountered in the environment (ANSI Z535.4) or temporary changes to the environment (ANSI Z535.5). It is desirable that new signs, symbols, and colors for environmental and facility safety signs specified after the approval of this standard comply with this standard.

The ANSI Z35 Committee on Safety Signs and ANSI Z53 Committee on Safety Colors were combined in 1979 to form the ANSI Z535 Committee on Safety Signs and Colors. The ANSI Z535.4 standard addresses the design of safety signs and labels for application to products and was first published in 1991. In that standard, the format specified for the signal word panel was a simple rectangle. The rectangle contained the safety alert symbol and a signal word (DANGER, CAUTION, or WARNING), and specific safety colors were designated to be used with those signal words (DANGER / Safety Red; WARNING / Safety Orange; CAUTION / Safety Yellow). This contrasted with the longstanding format of

the black rectangle with red oval and white letters used for danger signs. The initial impetus for the new ANSI Z535.4-1991 header format was that products often had limited space for a sign or label and omitting the older format allowed for bigger letters for the signal word. The ANSI Z535.2-1991 standard retained the longstanding DANGER heading format and created a similar format (using a truncated diamond) for the new warning sign head. Z535.2-1991 allowed the user to use the format of Z535.4-1991 and vice versa.

The ANSI Z535.2-1998 standard showed the preferred format for environmental and safety signs to be the simple header style of the ANSI Z535.4 standard for product safety signs and labels; both standards included the older system. The ANSI Z535.2-1998 standard also stated a preference to use a white background for the message panel to increase contrast and viewing distance. Like the ANSI Z535.4 standard, the Z535.2-1998 standard also required the sign to give information of the consequences of not avoiding the hazard, if the consequence is not obvious.

The ANSI Z535.2-1998 standard was carefully crafted so that the new requirements scheduled to become mandatory in the 2002 edition were stated as *preferred* in the 1998 edition. As of the 2002 standard, the older format is no longer included; the simple header with larger letters and the more referential color is set forth.

ANSI Z535.2-2007 included definitional changes and safety alert symbol formats intended to clarify the distinction between signal words and improve harmonization with international standards. The 2007 edition added a new annex of informative references and a new annex on risk estimation and choice of signal words. The 2007 edition also started the process of eliminating the use of the CAUTION signal word panel without the safety alert symbol for procedures not related to physical safety, such as property damage. The preferred signal word is NOTICE. The use of CAUTION for that purpose is phased out in the 2011 edition.

The 2011 edition of this standard is revised to better harmonize with the ANSI Z535.4, Z535.5, and Z535.6 standards. The standard is also reorganized to describe better the five types of safety signs used in facilities and the environment (i.e., hazard alerting signs, notice signs, safety instruction signs, safety equipment location signs, and fire equipment location signs). In tandem with these changes, the definitions for “accident,” “harm,” and “incident” are refined to more clearly delineate a separation between physical injury and other safety-related issues (e.g., property damage, sanitation, housekeeping).

Due to differences in color printing technologies and color monitors, the appearance of colors in this standard may not be accurate. See the ANSI Z535-2011 Safety Color Chart to view accurate colors.

The 2011 version of this standard was reaffirmed in 2017.

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:

Geoffrey Peckham, Chair
J. Paul Frantz, Vice Chair
Paul Orr, Secretary

Organization Represented:	*Name of Representative:*
American Society of Safety Engineers	J. Paul Frantz Thomas F. Bresnahan (Alt.) Timothy Rhoades (Alt.)
American Welding Society	August F. Manz

Applied Materials	Edward Karl Edwin Palmero (Alt.)
Applied Safety and Ergonomics	Steve Hall Judith J. Isaacson (Alt.) Stephen Young (Alt.)
Association for Manufacturing Technology	David Felinski
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Clarion Safety Systems, LLC	Geoffrey Peckham
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National Spray Equipment Manufacturers Association	Angela Redlund-Spieker
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Whirlpool Corporation	Sondra McAndrew Evelyn Fisher (Alt.)
World Kitchen, LLC	Celeste Levindoski

At the time it prepared this standard for Z535 Committee vote, Subcommittee Z535.2 on Environmental and Facility Safety Signs had the following members:

Steven Chybowski, Chair
Paul Orr, Secretary

Barbe Lewis	World Safety Organization
Thomas F. Bresnahan	American Society of Safety Engineers
Steven Chybowski	Rockwell Automation
Charles Crowell	Caterpillar

Donna Ehrmann	National Association of Graphic and Product Identification Manufacturers
Steve Hall	Applied Safety and Ergonomics
Michael Kalsher	Human Factors & Ergonomics, Inc.
Geoffrey Peckham	Clarion Safety Systems
Phillip Peckham	Clarion Safety Systems
David Roy	Travelers Insurance Company

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1 Introduction

The basic mission and fundamental purpose of the ANSI Z535 Committee is to develop, refine, and promote a single uniform graphic system used for presenting safety and accident prevention information. Such an approach assists standard users in the efficient development of environmental and facility safety signs and assists sign viewers in recognizing signs as being related to safety.

This standard sets forth a system for presenting safety and accident prevention information through environmental and facility safety signs. It consolidates a number of previous graphic approaches into a common design direction selected to present hazard information in an orderly and visually consistent manner.

This standard sets forth a hazard communication system that is designed to complement the ANSI Z535.4-2011(R2017), ANSI Z535.5-2011(R2017), and ANSI Z535.6-2011(R2017) standards. While these standards are similar in many respects, they each address different physical and visual requirements. As a result, the Z535 Committee has recognized and affirmed the need for these separate standards.

2 Scope and Purpose

2.1 Scope

This standard sets forth requirements for the design, application, and use of safety signs in facilities and in the environment.

2.2 Purpose

The purposes of this standard are to:

a. establish a uniform and consistent visual layout for safety signs to be located in facilities and in the environment;

b. minimize the proliferation of designs for environmental and facility safety signs; and

c. establish a national uniform system for signs that communicate safety information.