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AMERICAN NATIONAL STANDARD

American National Standard

ANSI Z535.5-1998

AMERICAN NATIONAL STANDARD

ACCIDENT PREVENTION TAGS (FOR TEMPORARY HAZARDS)

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
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ANSI Z535.5-1998

AMERICAN NATIONAL STANDARD

for Accident Prevention Tags

(for Temporary Hazards)

Secretariat

National Electrical Manufacturers Association

Approved December 17, 1997

American National Standards Institute

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Table of Contents

	Foreword	iii
1	Introduction	1
2	Scope and purpose	1
	2.1 Scope	1
	2.2 Purpose	1
3	Definitions	1
4	Accident prevention tag classifications	2
	4.1 DANGER tags	2
	4.2 WARNING tags	2
	4.3 CAUTION tags	2
5	Tag format and color criteria	2
	5.1 Color	2
	5.2 Safety alert symbol	2
	5.3 Signal word panel	2
	5.4 Message panel	4
6	Tag location, attachment methods, life expectancy, authorization	4
	6.1 Tag location	4
	6.2 Attachment methods	4
	6.3 Life expectancy	4
	6.4 Authorization	4
7	Letter style, viewing distance, tag size and shape	4
	7.1 Letter style	4
	7.2 Viewing distance/letter height	5
	7.3 Tag size and shape	5
8	Symbols/pictorials	5
	8.1 General	5
9	References	5
	Revisions 2001	7
	Form for Proposals	8

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Foreword (This foreword is not part of American National Standard Z535.5-1998.)

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.

Five subcommittees were created and assigned the tasks of updating the ANSI Z53 and Z35 Standards, and writing two new standards. The five standards include:

- ANSI Z535.1, Safety Color Code [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, Accident Prevention Tags (For Temporary Hazards) [ANSI Z35.2-1974 was updated and combined into this standard in 1991.]

This standard was prepared by Subcommittee Z535-5 on Accident Prevention Tags.

Together, these five standards contain information needed to specify formats, colors, and symbols for safety signs used in environmental and facility applications, product applications, and accident prevention tags.

Immediately following publication in 1991, the Z535 Committee began to consider revisions to the standards. The committee carefully considered all suggestions which were submitted. All changes which the committee thought would improve safety, promote uniformity, or make the standards clearer and easier to use are included in this addition.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Safety Signs and Colors, ANSI Z535. 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:

Gary M. Bell, Chairman
Anthony L. Martino, Vice Chairman
Ronald R. Runkles, Secretary

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American Society of Safety Engineers	J. Paul Frantz
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Subcommittee Z535-5 on Accident Prevention Tags, which developed the standard, had the following members:

Thomas A. Standard, Chairperson
Ronald R. Runkles, Secretary

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G. Bell
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R. Marhefka
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American National Standard

for Accident Prevention Tags (for Temporary Hazards)

1 Introduction

An accident prevention tag (safety tag, tag) is a means of alerting persons to temporary hazards often associated with installation, maintenance, repair, lockout, or other transient conditions. This standard provides guidance for the design and use of accident prevention tags. It employs the graphic principles set forth in ANSI Z535.4-1998, *Product Safety Signs and Labels* and ANSI Z535.2-1998, *Environmental and Facility Safety Signs.*

2 Scope and purpose

2.1 Scope

An accident prevention tag shall be used to identify a temporary hazard. It shall be used only until such time as the identified hazard is eliminated or the hazardous operation is completed. For example, an accident prevention tag would be appropriate for use during lockout/tagout procedures. An accident prevention tag would be appropriate for use on a damaged tool until the tool can be properly removed from the work area. Accident prevention tags would be appropriate for use to identify hazards exposed only during equipment troubleshooting procedures. A tag shall not be used in place of a permanent sign or label intended for hazards in normal use, operation, or maintenance. If a permanent sign or label is presented in a tag configuration, it shall comply with the provisions of ANSI Z535.4-1998, or ANSI Z535.2-1998.

2.2 Purpose

The purpose of this standard is to define the requirements for the design and use of accident prevention tags. No other type of tag is addressed by this standard.

2.2.1 There are a number of existing American National Standards which are recognized for particular industries or specific use. Compliance with these standards may be considered for such particular industries or uses. It is not the intent of this ANSI Z535.5-1998 standard to replace existing standards or regulations, which are uniquely applicable to a specific industry or use. It is the intent to encourage adoption of this standard in subsequent revisions of other standards and regulations.

3 Definitions

3.1 accident: An occurrence in a sequence of events that produces unintended death, injury, or property damage.

3.2 accident prevention tag (safety tag, tag): A device usually made of card stock, paper, paperboard, plastic, or other material on which letters, markings, symbols, or combinations thereof, appear for the purpose of alerting persons to the presence of a temporary hazard or hazardous condition created by situations such as shipment, setup, service, or repair. The tag is removed when the hazard or hazardous condition no longer exists.

3.3 colors: Colors specified in this standard shall conform to ANSI Z535.1-1998.

3.4 hazard: A source of potential injury to a person or to property.

3.5 Intent

3.5.1 may: This word is understood to be permissive.

3.5.2 shall: This word is understood to be mandatory.

3.5.3 should: This word is understood to be advisory.

3.6 panel: Area of the accident prevention tag that is clearly delineated and contains a specific type of information.

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3.6.1 message panel: Area of the accident prevention tag that indicates in written text, symbolic form, or both written and symbolic form, the specific hazardous condition or the instruction to be communicated.

3.6.2 signal word panel: Area of the accident prevention tag that contains the signal word. For personal injury hazards, the signal word panel also contains the safety alert symbol (see Figure 1).

3.7 permanent facility / environmental safety sign: Signs used at fixed locations, such as industrial facilities, to warn against exposure to hazards in the environment. The sign is permanently attached so that it cannot be easily removed.

3.8 permanent product safety sign or label: Information affixed to a product to warn against exposure to hazards inherent in the normal use of or associated with the product, or which might be created during reasonably anticipated product use. The sign or label is permanently attached to the product so that it cannot be easily removed.

3.9 safety alert symbol: A symbol which indicates a potential personal injury hazard. It is composed of an equilateral triangle surrounding an exclamation mark. The safety alert symbol should not be used to alert persons to property damage only accidents.



Figure 1

3.10 signal word: The word or words that call attention to the safety tag and designate a degree or level of hazard seriousness. The signal words for accident prevention tags are DANGER, WARNING, and CAUTION.

3.11 symbol/pictorial: A graphic representation intended to convey a message. It may represent a hazard, a hazardous situation, a precaution to avoid a hazard, the result of not avoiding a hazard, or any combination of these messages.

4 Accident prevention tag classifications

4.1 DANGER tags. DANGER tags indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury. The signal word DANGER is to be limited to the most extreme situations. DANGER tags should not be used for property damage hazards unless personal injury risk appropriate to this level is also involved.

4.2 WARNING tags. WARNING tags indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury. WARNING tags should not be used for property damage hazards unless personal injury risk appropriate to this level is also involved.

4.3 CAUTION tags. CAUTION tags indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. CAUTION tags may also be used to alert against unsafe practices that may cause property damage.

5 Tag format and color criteria

5.1 Color

Tag colors shall conform to ANSI Z535.1-1998 Safety Color Code.

5.2 Safety alert symbol

5.2.1 Color. When used in the preferred signal word panel formats shown in section 5.3, the solid triangle portion shall be the same color as the signal word lettering and the exclamation mark portion shall be the same color as the signal word panel background.

5.2.2 Format. The safety alert symbol shall precede the signal word. The base of the symbol shall be on the same horizontal line as the base of the letters of the signal word. The height of the safety alert symbol shall be equal to or exceed the signal word letter height.

5.3 Signal word panel

All accident prevention tags shall contain a signal word which designates a degree or level of hazard seriousness. The signal word shall be either

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DANGER, WARNING or CAUTION. The signal word panel shall be located near the top of the tag, above the message panel. No other word or symbol shall be used within these specified shapes or color arrangements.

Two signal word panel formats are shown for each signal word; a preferred format and an alternate format. In order to achieve a national system for hazard identification for facility/environmental safety signs, product safety signs and labels, and temporary tags, the preferred format should be used. The alternate format may be used if consistency with existing signs or tags is desired.

5.3.1 DANGER tags

5.3.1.2 Signal word panel - preferred format. Danger tags should have the signal word "DANGER" in safety white letters on a rectangular safety red background.



Figure 2 — Preferred format for the DANGER signal word panel - white letters on safety red background, safety red exclamation mark.

5.3.1.3 Signal word panel - alternate format. Danger tags may, as an alternative, have the signal word "DANGER" in safety white letters on a safety red oval background with a safety white border on a safety black rectangular field.



Figure 3 —Alternate format for the DANGER signal word panel — white letters on safety red oval with white outline on black rectangle.

5.3.2 WARNING tags

5.3.2.1 Signal word panel - preferred format. Warning tags should have the signal word "WARNING" in safety black letters on a rectangular safety orange background.



Figure 4 — Preferred format for the WARNING signal word panel — black letters on safety orange background, safety orange exclamation mark.

5.3.2.2 Signal word panel - alternate format. Warning tags may, as an alternative, have the signal word "WARNING" in safety black letters within a safety orange truncated diamond on a safety black rectangular background.



Figure 5 — Alternate format for the WARNING signal word panel — black letters on safety orange diamond on black rectangle.

5.3.3 CAUTION tags

5.3.3.1 Signal word panel - preferred format. Caution tags should have the signal word "CAUTION" in safety black letters on a rectangular safety yellow background.



Figure 6 — Preferred format for the CAUTION signal word panel — black letters on safety yellow background, safety yellow exclamation mark.

5.3.3.2 Signal word panel - alternate format. Caution tags may, as an alternative, have the signal word "CAUTION" in safety yellow letters within a safety black rectangular background.



Figure 7— Alternate format for the CAUTION signal word panel — safety yellow letters on black background.

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5.3.4 CAUTION tags — property damage only.

5.3.4.1 Signal word panel. The safety alert symbol is omitted on Caution tags used to indicate property damage only accidents. These tags have the signal word "CAUTION" in safety black letters on a rectangular safety yellow background.



Figure 8 — Property damage only CAUTION signal word panel — black letters on safety yellow background.

5.4 Message panel

5.4.1 All accident prevention tags shall contain a message panel which indicates the specific hazardous condition or the instruction to be communicated or both. The message may be presented in either written text, symbolic form, or both written text and symbolic form (See section 8.1). The message should be concise and readily understood.

5.4.2 A single tag shall address one topic only. The signal word panel should be reproduced on both sides of the tag. Either the message panel, or general support information, may be printed on the back of the tag. Examples of general support information are : "Do not remove - see reverse" or "Contact supervisor before removing."

5.4.3 Message panel color. The message panel shall be safety white for high contrast and for good legibility of information. Lettering, or symbols, or both should be safety black. Other high contrast color pairs may be used for symbolic and pictorial representations.

6 Tag location, attachment methods, life expectancy, authorization

6.1 Tag location

Tags shall be affixed as close as safely possible to their respective hazards, or at the switches, levers or other points of control that would activate the hazards, and be readily visible to the intended user. Where other tags are used in addition to an accident prevention tag, they should not detract from the impact or visibility of the signal word and major message of the accident prevention tag.

6.2 Attachment methods

Tags shall be affixed by a positive means such as string, wire, adhesive or other connecting means that reduce the likelihood of loss or unintentional removal. The tag should be strong enough to prevent accidental removal and it is recommended that tags, when used with locks, should have a reinforced hole that is big enough to accommodate a lock shank.

6.3 Life expectancy

The tag shall be capable of withstanding the environment to which it is exposed for the maximum period of time that the temporary hazard is expected to exist.

6.4 Authorization

Facility/environmental accident prevention tags should include a provision for identifying and contacting the person authorizing or applying the tag. Tags used for product safety do not require this provision.

7 Letter style, viewing distance, tag size and shape

7.1 Letter style

7.1.1 Signal words shall be in sans serif letters in upper case only.

7.1.2 Message panel lettering should be a combination of upper and lower case sans serif letters. Serif lettering may be used for longer text messages. Upper case only lettering may be used for short messages or emphasis of individual words.

7.1.3 Examples of acceptable sans serif type faces are shown in Figure 9.

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Arial/Helvetica
Arial/Helvetica Bold
Folio Medium
Franklin Gothic
Futura
News Gothic Bold
Meta Bold
Univers

Figure 9

7.1.4 Handwritten tags should be legibly printed. If tags have preprinted lines to guide the location of handwritten text, a suitable amount of space should exist between lines.

7.2 Viewing distance/letter height

The tag signal word shall be legible under normal viewing conditions at a distance of 5 feet (1.52m) or such greater distance as warranted by the hazard. Minimum signal word letter height should be 3/8 inch (.95 cm). Message panel text shall be legible under normal viewing conditions.

7.3 Tag size and shape

The tag shall have a rectangular shape and shall be no smaller than 3 in. x 5 in. (7.7 cm x 13.8 cm). The corners may be square cut, chamfered or rounded (see Figure 10).

8 Symbols/pictorials

8.1 General

8.1.1 Symbols and pictorials are graphic representations chosen to clearly convey a specific alerting message.

8.1.2 The conveyed message of a symbol/pictorial is to describe the type of hazard, potential consequences of the hazard, or evasive/avoidance actions to be taken. When used, the symbol/pictorial must be compatible with the word message(s).

8.2 Symbol/pictorial use

Symbols and pictorials may be used to clarify, supplement or substitute for a portion of the word message found in the message panel of product safety signs. Symbols/pictorials that have not been validated for recognition may only be used to supplement or clarify the word message on the tag.

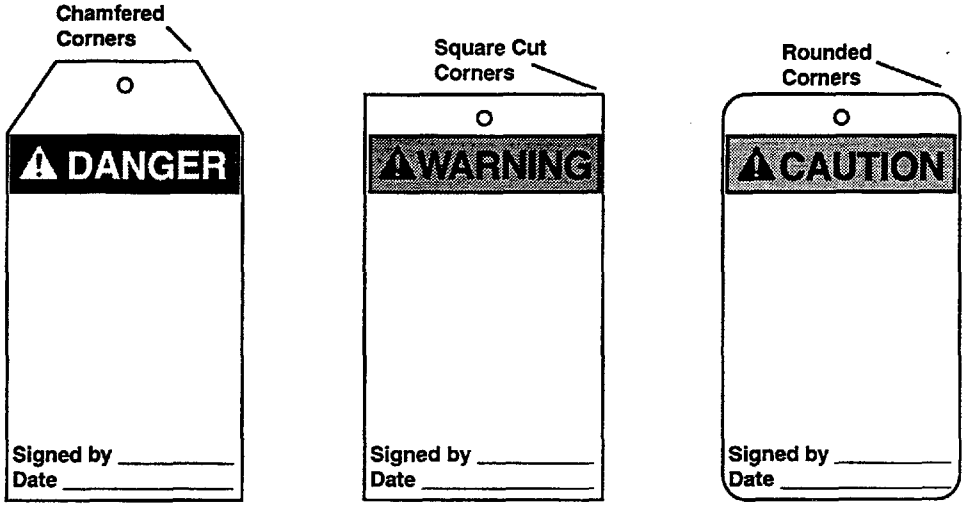

Figure 10

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9 References

See the following documents for reference and information.

1. ANSI Z535.1 1998, *Safety Color Code*

2. ANSI Z535.2-1998, *Environmental and Facility Safety Signs*

3. ANSI Z535.3-1998, *Criteria for Safety Symbols*

4. ANSI Z535.4-1998, P*roduct Safety Signs and Labels.*

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Revisions 2001

The ANSI Accredited Standards Committee Z535 plans to issue the next revisions of the Z535 Standards (.1 through .5) in December 2001. In order to meet that deadline, the committee developed the following tentative timetable:

All proposed changes are due:	June 30, 1999
Revisions will be finalized for letter balloting:	April 11, 2000
Letter balloting will be completed by:	July 18, 2000
Public reviews will be completed by:	March 1, 2001
Drafts will be ready to submit to the publisher:	May 21, 2001
Published:	December 15, 2001

All proposed changes must be submitted by June 30, 1999. Any proposals received after that date will be deferred to subsequent revisions. In order to facilitate the next revision, proposed changes must be submitted on a form for that specific purpose, which is on the back of this page. Please send this form to:

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ANSI Accredited Standards Committee Z535
On Safety Signs and Colors

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Date_____ Name_____ Telephone #_____

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2. Proposal recommends (check one): New Text
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3. Proposal (Include the proposed new or revised text, or identify the words to be deleted.)

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