

# ANSI/ASSP Z359.12-2019

Connecting Components  
for Personal Fall Arrest Systems

Part of the Fall Protection Code



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**



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**American National Standard**

**Connecting Components  
for Personal Fall Arrest Systems**

Secretariat

**American Society of Safety Professionals**  
520 N. Northwest Highway  
Park Ridge, Illinois 60068

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## Foreword

(This Foreword is not a part of American National Standard Z359.12-2019.)

This standard, national in scope, was developed by the Z359 Committee functioning under the procedures of the American National Standards Institute, with the American Society of Safety Professionals (ASSP) as secretariat.

It is intended that every employer whose operations fall within the scope and purpose of the standard will adopt the guidelines and requirements detailed in this standard.

The need for this standards activity grew out of the continuing development of a series of fall protection-related standards. The focus is to tie the elements of those standards together and provide the tools with which employers may develop the programs that incorporate those elements. This standard also brings together the administrative requirements of those fall protection standards. It should be noted, as in all Z359-series standards, that this standard applies to occupational activities. It does not apply to sports activities such as mountaineering.

Neither the standards committee, nor the secretariat, states that this standard is perfect or in its ultimate form. It is recognized that new developments are to be expected, and that revisions of the standard will be necessary as the state-of-the-art progresses and further experience is gained. It is felt, however, that uniform guidelines for fall protection programs are very much needed and that the standard in its present form provides for the minimum criteria necessary to develop and implement a comprehensive managed fall protection program.

The Z359 Committee acknowledges the critical role of design in influencing the use of proper fall protection equipment. Designs which eliminate fall hazards through the proper application of the hierarchy of safety controls are the preferred method for fall protection. Design deficiencies often increase the risk for employees who may be exposed to fall hazards: examples are 1) lack of rail systems to prevent falls from machines, equipment and structures; 2) failure to provide engineered anchorages where use of personal fall arrest systems are anticipated; 3) no provision for safe access to elevated work areas; 4) installation of machines or equipment at heights, rather than floor/ground level to preclude access to elevated areas; 5) failure to plan for the use of travel restriction or work positioning devices. To that end, this series of standards also provides guidance for design considerations for new buildings and facilities.

Basic fall safety principles have been incorporated into these standards, including hazard survey, hazard elimination and control and education and training. The primary intent is to ensure a proactive approach to fall protection. However, the reactive process of accident investigation is also addressed to ensure that adequate attention is given to causation of falls.

## Normative Requirements

This standard uses the single-column format. The normative requirements appear aligned to the left margin. To meet the requirements of this standard, machinery, equipment and process suppliers and users must conform to these normative requirements. These requirements typically use the verb "shall."

*NOTE: The informative or explanatory notes in this standard appear indented, in italics, in a reduced font size, which is an effort to provide a visual signal to the reader that this is informative note, not normative text, and is not to be considered part of the requirements of this standard; this text is advisory in nature only. The suppliers and users are not required to conform to the informative note. The informative note is presented in this manner in an attempt to enhance readability and to provide explanation or guidance to the sections they follow.*

## **Figures**

Figures provided in the standard are illustrated to show basic concepts of testing, types of products, examples of labels or other information from the standard. These figures are not to scale, nor do they represent absolute systems and requirements. They are for educational and informational purposes to explain content within a standard.

## **Suggestions for Improvements**

Suggestions for improvements to this standard are welcome. They should be sent to: American Society of Safety Professionals (ASSP), 520 N. Northwest Highway, Park Ridge, IL 60068  
Attention: Z359 Secretariat.

## **Revisions**

The Z359 Committee welcomes proposals for revisions to this standard. Revisions are made to the standard periodically (usually five years from the date of the standard) to incorporate changes that appear necessary or desirable, as demonstrated by experience gained from the application of the standard. Proposals should be as specific as possible, citing the relevant section number(s), the proposed wording and the reason for the proposal. Pertinent documentation would enable the Z359 Committee to process the changes in a timely manner.

## **Interpretations**

Upon a request in writing to the secretariat, the Z359 Committee will render an interpretation of any requirement of the standard. The request for interpretation should be clear, citing the relevant section number(s) and phrased as a request for a clarification of a specific requirement. Oral interpretations are not provided.

No one but the Z359 Committee (through the Z359 Secretariat) is authorized to provide any interpretation of this standard.

## **Approval**

Neither the Z359 Committee nor the American National Standards Institute (ANSI) approves, certifies, rates or endorses any item, construction, proprietary device or activity.

## **Appendices**

Appendices are included in most standards to provide the user with additional information related to the subject of the standard. Appendices are not part of the approved standard.

## **Committee Meetings**

Persons wishing to attend a meeting or join the committee should contact the secretariat for information.

## **Standard Approval**

This standard was processed and approved for submittal to ANSI by the Z359 Secretariat. Approval of the standard does not necessarily imply (nor is it required) that all committee members voted for its approval. At the time this standard was approved, the Z359 Committee had the following members:

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## Contents

1. Scope, Purpose, Applications, Exceptions and Interpretations .....	10
1.1 Scope .....	10
1.2 Purpose and Applications .....	10
1.3 Exceptions .....	10
1.4 Interpretations .....	11
2. Definitions .....	11
3. Requirements .....	12
3.1 Component and Element Requirements .....	12
4. Qualification Testing .....	13
4.1 Test Equipment and Test Specimens .....	13
4.2 Component, Constituent and Element Testing .....	15
5. Marking and Instructions .....	17
5.1 General Marking Requirements .....	17
5.2 Specific Marking Requirements .....	18
5.3 Specific Instruction Requirements .....	18
6. User Inspection, Maintenance and Storage .....	19
6.1 Inspection .....	19
6.2 Maintenance and Storage .....	19
7. Equipment Selection .....	19
8. References .....	19

## AMERICAN NATIONAL STANDARD Z359.12 CONNECTING COMPONENTS FOR PERSONAL FALL ARREST SYSTEMS

### 1. Scope, Purpose, Applications, Exceptions and Interpretations

#### 1.1 Scope

This standard establishes requirements for the performance, design, marking, qualification, test methods and removal from service of connectors.

*NOTE: See Figures 1 and 2 for illustrations of the equipment covered by this standard. Connectors are commonly referred to as fall protection hardware. Equipment used in personal fall protection systems is commonly referred to as personal protective equipment (PPE) in the literature of the safety field.*

#### 1.2 Purpose and Applications

**1.2.1** This standard addresses only components that are used in the interconnection of a complete unit, intended to be used as a primary single link to a permanent anchorage connector and/or intended to be used as a primary attachment point.

*NOTE: Examples of common connectors are snaphooks, carabiners, D-rings, O-rings, buckles and adjusters.*

**1.2.2** This standard addresses fall protection hardware used in occupations requiring personal protection against falls from heights and applies to the manufacturers, distributors, purchasers, test labs and users of such equipment.

*NOTE: This is a voluntary consensus standard. The legal requirements for protection against falls from heights are established by applicable regulatory bodies governing occupational safety.*

**1.2.3** Before any equipment shall bear the marking Z359.12 or be represented in any way as being in compliance with this standard, all applicable requirements of this standard shall be met. Such compliance shall be established in accordance with the requirements specified in ANSI/ASSP Z359.7.

#### 1.3 Exceptions

**1.3.1** The requirements of this standard do not address material handling or sports-related activities.

**1.3.2** Although personal fall protection systems (as well as personal protective systems for climbing, man riding, travel restriction, rescue and evacuation) incorporating horizontal lifelines may suitably incorporate components or subsystems specified herein, those systems and components and subsystems which are unique to them are outside the scope of this standard for personal fall arrest systems.

*NOTE: Hardware incorporated into work positioning systems outlined by ANSI/ASSP Z359.3 are covered by this standard.*

**1.3.3** Body belts, window cleaner belts, chest-waist harnesses and chest harnesses, even when referred to as body supports, are not addressed by the provisions of this fall protection standard.