

# ANSI/ASSP Z359.4-2013 (R2022)

Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components

Part of the Fall Protection Code



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**



PREVIEW ONLY

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**ANSI/ASSP Z359.4 – 2013 (R2022)**

**American National Standard**

**Safety Requirements for  
Assisted-Rescue and Self-Rescue Systems,  
Subsystems and Components**

Secretariat

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

**Approved August 25, 2022**

**American National Standards Institute**

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## Foreword

(This Foreword is not a part of American National Standard Z359.4-2013 (R2022).)

This standard, national in scope, was developed by the Z359 standards 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.

**History:** ANSI/ASSP Z359.4 was first published in 2013 and includes requirements established in ANSI/ASSP Z359.1-2007. Individuals engaged in rescue operations in areas where exposure to a fall hazard exists will benefit from the information contained in this standard. This standard addresses equipment and performance criteria for systems, subsystems and components used in preplanned assisted-rescue and self-rescue where a fall hazard exists. Requirements for adequate training and thorough pre-planning efforts prior to the initiation of assisted-rescue or self-rescue operations address the needs of both the rescuer and the rescue subject. This standard establishes criteria for equipment marking, testing, care and use.

This standard is part of a series of American National Standards for fall protection for all occupational and non-occupational activities. It is not intended to apply to sports activities such as mountaineering, nor to specialized rescue efforts that may be associated with such activities.

Whenever fall arrest systems are used, indeed, whenever a fall hazard exists, it is necessary to plan for the effective rescue of persons who have experienced a fall event, whether it be a self-rescue application or assisted rescue application. Considering the diverse technical and environmental circumstances that can be presented to rescue personnel, development of a comprehensive rescue plan is integral to the safety of rescue personnel, the rescue subject, and the eventual success of the rescue effort.

The comprehensive rescue plan predicts circumstances that might require rescue activities, anticipates hazards associated with rescue operations, identifies methods to control those hazards, recommends the appropriate response measures and identifies the fall arrest and retrieval equipment to be used. The rescue plan may call for methods or equipment that are outside the scope of this standard, such as technical rope rescue, when such methods are reasonable and feasible and estimated to be the most effective rescue method.

**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 an 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 used to show basic concepts of testing, types of products, examples of labels or other information from the standard. These figures are not to scale. 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 every 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.

Only 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:** The Z359 Committee meets on a regular basis. Persons wishing to attend a meeting should contact the Secretariat for information.

**Standard Approval:** This standard was developed and approved for submittal to ANSI by the Z359 Secretariat. Committee approval of the standard does not necessarily imply (nor is it required) that all 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 .....	11
1.1 Scope .....	11
1.2 Purpose and Application .....	11
1.3 Exceptions .....	11
1.4 Interpretations .....	11
2. Definitions .....	11
3. Requirements.....	11
3.1 System Requirements .....	11
3.2 Component and Element Requirements .....	12
3.3 Corrosion Protection.....	16
4. Qualification Testing .....	17
4.1 Test Equipment and Test Specimens .....	17
4.2 Reserved for Future Use .....	17
4.3 Component, Constituent and Element Testing.....	17
5. Marking and Instructions.....	30
5.1 General Marking Requirements .....	30
5.2 Specific Marking Requirements.....	30
5.3 General Instruction Requirements.....	32
5.4 Specific Instruction Requirements.....	32
6. Inspection, Maintenance and Storage of Equipment .....	34
6.1 Inspection .....	34
6.2 Maintenance and Storage .....	35
7. Equipment Selection, Rigging, Use and Training .....	35
7.1 Equipment Selection .....	36
7.2 Equipment Rigging and Use.....	36
7.3 Training .....	38
8. References.....	39

**AMERICAN NATIONAL STANDARD Z359.4  
SAFETY REQUIREMENTS FOR  
ASSISTED-RESCUE AND SELF-RESCUE SYSTEMS,  
SUBSYSTEMS AND COMPONENTS**

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

**1.1 Scope**

This standard establishes requirements for the performance, design, marking, qualification, instruction, training, use, maintenance and removal from service of connectors, harnesses, lanyards, anchorage connectors, winches/hoists, descent control devices, rope tackle blocks and self-retracting lanyards with integral rescue capability comprising rescue systems utilized in pre-planned self-rescue and assisted-rescue applications for one to two persons.

**1.2 Purpose and Application**

The purpose of this standard is to establish criteria to ensure suitability of the equipment and methods defined herein for use in rescue situations where a fall hazard exists.

Rescue system elements, components or subsystems meeting the requirements of this standard may not be represented as complying with or used in personal fall arrest systems (PFAS) claiming compliance with ANSI/ASSP Z359.1-2007 or other relevant Z359 standards unless the requirements of that standard are additionally met. The requirements of this standard supersede any corresponding requirements in ANSI/ASSP Z359.1-2007 American National Standards

**1.3 Exceptions**

**1.3.1** The requirements of this standard do not address sport-related activities, rope access rescue techniques utilized by certified rescue technicians or other tasks that have established national consensus standards. However, this does not preclude use of equipment addressed within this standard for such activities where appropriate.

**1.3.2** The competent person shall determine the suitability of equipment addressed within this standard for activities conducted in hazardous atmospheres.

*NOTE: For a definition of competent person refer to the ASSP Z359.0, Z359 Committee Guidance Document for Definitions and Nomenclature Used for Fall Protection and Fall Restraint Standards, and for additional information refer to ANSI/ASSP Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program.*

**1.4 Interpretations**

Requests for interpretations of this standard shall be in writing and addressed to the Secretariat of this standard.

**2. Definitions**

Please refer to ASSP Z359.0, *Z359 Committee Guidance Document for Definitions and Nomenclature Used for Fall Protection and Fall Restraint Standards*, for definitions of terms used in this standard.

**3. Requirements**

**3.1 System Requirements**

**3.1.1** A rescue system shall be used only if attached to an anchorage, or anchorage with anchorage connector, which complies with the requirements of this standard.