

ANSI/ASSP Z359.1-2024

The Fall Protection Code



AMERICAN SOCIETY OF
SAFETY PROFESSIONALS



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ANSI/ASSP Z359.1 – 2024

American National Standard

The Fall Protection Code

Secretariat

American Society of Safety Professionals
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Park Ridge, Illinois 60068

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Foreword (This Foreword is not a part of American National Standard Z359.1-2024.)

The first edition of ANSI/ASSP Z359.1, published in 1992, was the first American National Standard for personal fall arrest systems in non-construction occupations. It established requirements for performance, design, marking, qualification, instruction, training, inspection, use, maintenance, and removal from service of full body harnesses, connectors, lanyards, energy absorbers, anchorage connectors, fall arresters, vertical lifelines, and self-retracting lanyards.

This standard was reaffirmed in 1999 and revised in 2007. The 2007 revision was accompanied by new ANSI/ASSP Z359 standards for managed fall protection program elements, positioning and travel restraint systems, and rescue systems. Additionally, the definitions common to all ANSI/ASSP Z359 standards were published in a separate standard. Along with other changes, the 2007 publication of this standard increased the snaphook and carabiner gate strength to 3,600 pounds. This requirement was subsequently adopted by OSHA in the 2017 updates to General Industry Subpart I (29 CFR 1910.140(c)(8)). In the years since then, new standards have been developed for the products and systems covered by ANSI/ASSP Z359.1-2007, and the requirements of that standard have been superseded. This set of ANSI/ASSP Z359 standards is referred to collectively as the Fall Protection Code.

The 2016 edition of ANSI/ASSP Z359.1 introduced a change in technical content and intent of the standard, not a revision of the requirements of the previous editions. The intent of this standard is to provide a key to understanding and applying the standards within the ANSI/ASSP Z359 Fall Protection Code, as well as a single point of reference to define compliance with the Fall Protection Code. This allows organizations the ability to identify ANSI/ASSP Z359.1 as a single reference when accepting the Fall Protection Code.

In addition to this standard, ANSI/ASSP Z359.2, *Minimum Requirements for a Comprehensive Managed Fall Protection Program*, should be the first document that someone within a user's organization should become familiar with. Subsequent product standards contain relevant information that provides guidance on the use and limitations associated with a specific product category along with creating consistency and minimum requirements for products offered by manufacturers and distributors. Manufacturers and distributors are also required to provide this information in the instruction material provided with the product. As product standards are updated, user guides are being added to provide guidance to users of the specific product and also will be made available as stand-alone documents. The ANSI/ASSP Z359 Fall Protection Code excludes material handling operations or sports related activities.

The interdependence of the ANSI/ASSP Z359 standards is key to their use as the Fall Protection Code. Although the equipment aspect of fall protection is likely the most visible element, all applicable standards must be implemented to create a safe and truly compliant fall protection system and program. For example, training, fall hazard surveys and procedures are critical to safely identifying, evaluating, and controlling fall hazards based on the hierarchy of controls. The ANSI/ASSP Z359.2 standard contains these items and should be integral to your overall program. Furthermore, it is becoming more common, and in some instances a requirement, that a qualified person who is commonly an engineer design the overall system. This act of design includes selecting the system, ensuring strength of the anchorage(s), specifying equipment components, preparing use and rescue procedures, and verifying the implementation of general and system-specific training. Requirements for engineered systems are found in ANSI/ASSP Z359.6.

The standards in the Fall Protection Code are constantly evolving and are revised on a regular schedule in conformity to ANSI requirements. ANSI/ASSP Z359.1 is periodically updated as

new standards and revisions are developed and published. The use of national consensus standards is voluntary. Please note that the revised Fall Protection Code requires that new products are manufactured to conform to the current version of the relevant standard. Products in use when new standards or revisions to existing standards become effective can continue to be used until they are removed from service.

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.

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.

For the most accurate dates for the most recent ANSI Z359 standards, please use the following link: <https://www.assp.org/standards/standards-topics/fall-protection-and-fall-restraint-z359>

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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AMERICAN NATIONAL STANDARD Z359.1 THE FALL PROTECTION CODE

1. Scope, Purpose and Application, Exceptions, and Interpretations

1.1 Scope

1.1.1 The Fall Protection Code is a set of standards that covers the following for the processes used to protect workers at height in a managed fall protection program:

- program management
- system design
- training
- qualification and testing
- equipment, component, and system specifications.

This standard identifies those requirements and establishes their role in the Fall Protection Code and their interdependence.

1.1.2 The Fall Protection Code encompasses standards for personal fall protection systems that incorporate a full body harness intended to protect the user against falls from a height either by preventing or arresting free falls. In general, systems that prevent a free fall are preferable to systems that arrest a free fall. The types of systems that shall be addressed by this Fall Protection Code include:

- a. Travel restraint systems
- b. Work positioning systems
- c. Rope access systems
- d. Fall arrest systems
- e. Rescue systems

1.2 Purpose and Application

1.2.1 This standard specifies minimum requirements for the processes, systems, sub-systems, and components used in a managed fall protection program that meets all of the requirements of the ANSI/ASSP Z359 Fall Protection Code.

1.2.2 Before any product shall bear an ANSI/ASSP Z359 marking or be represented in any way as being in compliance with any ANSI/ASSP Z359 standard, the requirements of the associated product standard shall be met.

1.2.3 No product, component, or system shall be labeled as meeting ANSI/ASSP Z359.1.

NOTE: ANSI/ASSP Z359.1 ceased being a product standard with the 2016 publication.

1.3 Exceptions

1.3.1 The ANSI/ASSP Z359 product standards do not apply to material handling and sports-related activities.

1.4 Interpretations

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

2. Definitions

Definitions applicable to this standard are listed below in alphabetical order. Definitions from other Z359 standards that are used in this document, but not defined herein, can be found in ASSP Z359.0, Z359 Committee Guidance Document for Definitions and Nomenclature Used in Z359 Fall Protection and Fall Restraint Standards.

Can. The word “can” is used to indicate that something is possible or a statement of fact.

May. The word “may” is used to indicate that something is permitted.

Shall. The word “shall” is to be understood as denoting a mandatory requirement.

Should. The word “should” denotes a recommendation.

NOTE: The current version of the committee guidance document can be obtained from the [ASSP website](#).

3. Compliance

3.1 General

3.1.1 A complete fall protection program shall be in compliance with the ANSI/ASSP Z359 Fall Protection Code when all of the applicable requirements of this section are met.

3.1.2 The fall protection program shall be designed and conducted in conformity with ANSI/ASSP Z359.2.

NOTE: One of the basic elements of a fall protection program is the fall hazard hierarchy of controls, which differs from standard safety hierarchy of controls. The preferred option is to prevent or eliminate exposure, followed by passive fall protection, then active fall protection systems (travel restraint and then fall arrest).

3.1.3 Personal fall protection equipment used while working at height shall only be part of a complete personal fall protection system.

3.1.4 Equipment used in the fall protection program shall conform to the requirements of the applicable ANSI/ASSP Z359 standards listed in Section 3.2 and 3.3.

3.1.5 Fall protection systems designed by a qualified person shall conform to ANSI/ASSP Z359.6.

3.2 Component Oriented Standards

3.2.1 General Requirements. Product standards bearing an ANSI/ASSP Z359 designation establish requirements for the performance, design, marking, qualification, instructions, inspection, maintenance, and removal from service of fall protection products that fit within the scope of each standard. See Appendices A and B for a summary and description of scope of these standards.

3.2.1.1 Standards can have user guides that assist users with understanding component standards and should be taken into consideration prior to selection and integration of components into the site-specific fall protection plan.

3.2.2 Lanyards and Positioning Lanyards. Equipment used in positioning and restraint systems, including lanyards and associated hardware, shall meet the requirements of ANSI/ASSP Z359.3.

3.2.3 Descent Controllers. Equipment used for controlled descent shall meet the requirements of ANSI/ASSP Z359.9.

3.2.4 Full Body Harnesses. Full body harnesses shall meet the requirements of ANSI/ASSP Z359.11.

3.2.5 Connecting Components. Connecting components such as snaphooks, carabiners, O-Rings, D-Rings, buckles, and adjusters shall meet the requirements of ANSI/ASSP Z359.12.

3.2.6 Personal Energy Absorbers and Energy Absorbing Lanyards. Personal energy absorbers and energy absorbing lanyards shall meet the requirements of ANSI/ASSP Z359.13.

3.2.7 Self-Retracting Devices. Self-retracting devices shall meet the requirements of ANSI/ASSP Z359.14.

3.2.8 Single Anchor Lifelines and Fall Arresters. Single anchor lifelines and fall arresters shall meet the requirements of ANSI/ASSP Z359.15.

3.2.9 Climbing Ladder Fall Arrest Systems. Climbing ladder fall arrest systems shall meet the requirements of ANSI/ASSP Z359.16.

3.2.10 Anchorage Connectors. Anchorage connectors shall meet the requirements of ANSI/ASSP Z359.18.

3.3 System Oriented Standards

3.3.1 General Requirements. System standards bearing an ANSI/ASSP Z359 designation establish requirements for the performance, design, marking, qualification, instruction, training, use, maintenance, and removal from use of system-based products. See Appendix A for descriptions of these standards.

3.3.2 Rescue Systems. Equipment used in assisted-rescue and self-rescue systems shall meet the requirements of ANSI/ASSP Z359.4.

NOTE: ANSI/ASSP Z359.4-2013 (R2022) includes requirements for descent controllers, harnesses, anchorage connectors and self-retracting lanyards used in rescue systems.

3.3.3 Rope Access Systems. Equipment used in rope access systems shall meet the requirements of ANSI/ASSP Z459.1.

3.4 Conformity Assessment

3.4.1 As required by the component-oriented and system-oriented standards, qualification and verification testing of all equipment shall be conducted in accordance with the requirements of ANSI/ASSP Z359.7.

3.4.2 Products shall meet all requirements of an applicable standard for a manufacturer to mark a product as complying to or claim product compliance to the relevant standard.

NOTE: Products shall not claim conformance to portions or segments of components or system-oriented ANSI/ASSP Z359 standards.

The current version of the standards can be obtained from the [ASSP website](#). ANSI/ASSP standards are commonly referred to in an abbreviated manner (e.g., ANSI/ASSP Z359.1) whereas a full standard number will include a suffix denoting the year of publication. When a new edition is published, it automatically supersedes previous editions of the standard.

4. Required Sections of ANSI/ASSP Z359 Standards

NOTE: This section provides a way to understand how to read the ANSI/ASSP Z359 standards. There are common sections within each standard and those sections are described here to enable the user to identify where additional information may be obtained.

All ANSI/ASSP Z359 component-oriented and system-oriented standards contain the following sections:

4.1. Requirements. This section contains design and performance criteria, including component and element requirements.

NOTE: Design and performance criteria may include as applicable: user weight range, activation forces, static strength, environmental conditioning, dynamic strength and performance, abrasion testing, component specific tests and common misuse configuration tests specific to component or system.

4.2. Testing. This section contains requirements for testing instrumentation, testing parameters and test series. The standard may incorporate references to Z359.7 for testing parameters.

NOTE: Testing criteria may include as applicable: drop test structure, test weight, test lanyard, test instrumentation, abrasion tester, arrest forces, component specific static and dynamic performance tests and common product misuse testing.

4.3 Markings and Instructions. This section contains the following information for a product, as applicable:

- Marking requirements
- Instruction requirements

4.4 Inspection, Maintenance, and Storage of Equipment. This section provides the following information for a product, as applicable:

- Inspection
- Maintenance
- Storage

4.5 References. This section contains a listing of all standards, government regulations, laws, technical documents, or other documents referred to in the standard, including the publisher.

NOTE: The references, inclusive of their designated revision, apply to the respective standard. In the respective Z359 standard, any reference to a code or standard without a date refers to the latest edition of that document. If any of the listed references is revised or deemed obsolete by its issuer, the reference continues to apply to this standard unless and until this standard is officially revised.

Appendix A

At the time of approval of this standard, the following is a summary of the Z359 standards including title, published dates, audience, and notes:

Number	Title	Publication Dates	Primary Audience	Secondary Audience	User Guide Available	Notes
Z359.0	Z359 Committee Guidance Document for Definitions and Nomenclature Used in Z359 Fall Protection and Fall Restraint Standards	2023, 2012, 2007	All		No	As of 2017, this is no longer an ANSI standard. Currently an ASSP Z359 Committee Guidance Document. See Appendix C.
Z359.1	Fall Protection Code	2024, 2020, 2016, 2007, 1999, 1992	All		No	See foreword of this document
Z359.2	Minimum Requirements for a Comprehensive Managed Fall Protection Program	2023, 2017, 2007	Users, Engineers, Trainers	Manufacturers, Testing Laboratories, Distributors	No	
Z359.3	Safety Requirements for Lanyards and Positioning Lanyards	2019, 2017, 2007	Manufacturers, Testing Laboratories	Engineers, Users, Trainers, Distributors	No	Original title: Safety Requirements for Positioning and Travel Restraint Systems
Z359.4	Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components	R2022, 2013, 2007	Manufacturers, Testing Laboratories	Engineers, Users, Trainers, Distributors	No	
Z359.6	Specifications and Design Requirements for Active Fall Protection Systems	2016, 2009	Engineers	Users, Trainers, Manufacturers, Testing Laboratories, Distributors	No	
Z359.7	Qualification and Verification Testing of Fall Protection Products	2019, 2011	Testing Laboratories, Manufacturers	Users, Trainers, Engineers, Distributors	No	

Number	Title	Publication Dates	Primary Audience	Secondary Audience	User Guide Available	Notes
Z359.9	Personal Equipment for Protection Against Falls – Descent Controllers	2021	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.11	Safety Requirements for Full Body Harnesses	2021, 2014	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.12	Connecting Components for Personal Fall Arrest Systems	2019, 2009	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.13	Personal Energy Absorbers and Energy Absorbing Lanyards	R2022, 2013	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.14	Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems	2021, 2014, 2012	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	Yes	
Z359.15	Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems	2014	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.16	Safety Requirements for Climbing Ladder Fall Arrest Systems	2016	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z359.18	Safety Requirements for Anchorage Connectors for Active Fall Protection Systems	2017	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	
Z459.1	Safety Requirements for Rope Access Systems	2021	Manufacturers, Distributors, Testing Laboratories	Engineers, Users, Trainers	No	

Appendix B

At the time of approval, the following is a list of all current [ANSI/ASSP Z359](#) standards with their Section 1 information included. This is provided to help the reader understand the scope of each of the standards comprising the Z359 Fall Protection Code.

[ANSI/ASSP Z359.2-2023, Minimum Requirements for a Comprehensive Managed Fall Protection Program](#)

1. Scope, Purpose, Exceptions, and Interpretations

1.1 Scope

1.1.1 This standard establishes criteria and requirements for an employer’s fall protection program including policies, responsibilities, training, survey and identification of fall hazards, procedures, controlling fall hazards, rescue planning, program implementation, incident investigation and evaluating program effectiveness (see Figure 1).

NOTE: The intent of the program is that each fall hazard is identified, the fall hazard hierarchy of controls is used to evaluate controls, a control method is selected, a rescue plan is developed, employees are trained according to the control method and the specific work practice is documented through written procedures.

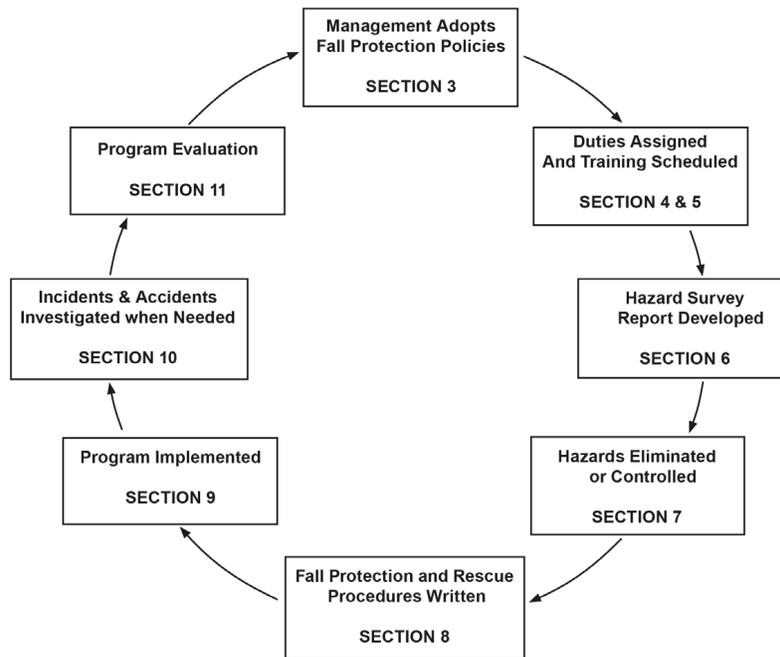


Figure 1: The Managed Fall Protection Program

1.1.2 This standard is for use by employers with employees working at heights using personal fall protection and rescue equipment (referred to as “equipment” for the remainder of the standard).

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1.1.3 The scope of rescue in this standard is limited to employers and does not apply to professional rescue services.

1.2 Purpose

1.2.1 The purpose of this standard is to establish minimum requirements of a fall protection and rescue program (referred to as “program” for the remainder of the standard) that will enable an employer to identify, evaluate and control fall hazards in the workplace.

1.3 Exceptions and Exclusions

1.3.1 The criteria and requirements of this standard do not apply to sporting activities.

1.3.2 This standard does not apply to professional rescuers, organizations, emergency rescue teams, standby rescue teams, medical professionals, or similar groups which are not part of an employer’s organization.

1.3.3 This standard does not include fall protection practices where exposure to a fall exists, and the protection method does not offer a physical means of protection. (e.g., safety monitors, controlled access zones).

1.4 Interpretations

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

[ANSI/ASSP Z359.3-2019, Safety Requirements for Lanyards and Positioning Lanyards](#)

1. Scope, Purpose and Application, Exceptions and Interpretations

1.1 Scope

This standard establishes requirements for the design, performance, qualification testing, test methods, marking, instruction, training, maintenance and removal from service of lanyards and positioning lanyards for users within the capacity range of 130 to 310 pounds (59 to 140 kg).

NOTE: Although appearing similar to each other, positioning lanyards and lanyards have different functions. Positioning lanyards serve a support function, usually connecting hip to hip and holding a user in a working position, always under load when used. Lanyards serve a tethering function and are not routinely under load.

1.2 Purpose and Application

The purpose of this standard is to establish minimum requirements for the design, testing and marking of lanyards and positioning lanyards, and is intended for use by manufacturers, distributors, purchasers, regulators, users and certifying bodies of lanyards and positioning lanyards.

1.2.1 Before any lanyards and positioning lanyards shall bear the marking ANSI/ASSP Z359.3-2019 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, *Qualification and Verification Testing of Fall Protection Products*.

1.2.2 Users of active fall protection systems require proper training and instruction, including detailed procedures for the safe use of such equipment in their work application. Refer to ANSI/ASSP Z359.2, *Minimum Requirements for a Comprehensive Managed Fall Protection Program*, for training requirements.

1.2.3 This standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed in section 7. For dated references, subsequent amendments to or revisions of any of these publications apply to this American National Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

1.3 Exceptions

1.3.1 This standard does not apply to sport and recreational related equipment and personal climbing equipment under the scope of ASTM F887, *Standard Specifications for Personal Climbing Equipment*.

1.4 Interpretations

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

[ANSI/ASSP Z359.4-2013 \(R2022\), Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components](#)

1. SCOPE, PURPOSE, APPLICATION, 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 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 Standard.

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.

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

[ANSI/ASSP Z359.6-2016, Specifications and Design Requirements for Active Fall Protection Systems](#)

1. SCOPE, PURPOSE, APPLICATIONS, EXCEPTIONS AND INTERPRETATIONS

1.1 Scope. This standard is intended for engineers who are trained as qualified persons and who have expertise in the design of active fall protection systems. It specifies requirements for the design and performance of complete active fall protection systems, including travel restraint and vertical and horizontal fall arrest systems.

1.2 Purpose and Application.

1.2.1 This standard has been developed as a consensus document to provide uniform practice in the design of active fall protection systems. The intent of this standard is to provide specification and design requirements for conventional active fall protection systems.

1.2.2 This standard involves the design of active fall protection systems, such as travel restraint and fall arrest, as defined in ANSI/ASSP Z359.0.

1.2.3 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered as the requirement, as these values can be approximate.

1.2.4 Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values that are not stated as maxima or minima shall be subject to a tolerance of +/- 5%. Unless otherwise specified, systems shall be designed for service in an ambient temperature range between 35°F (2°C) and 100°F (38°C) and the temperature limits shall be subject to an accuracy of +/- 2°F (1°C).

1.2.5 The use of the singular nouns may also include the plural (and vice versa), when the context allows.

1.2.6 The use of the term anchorage may also include the term anchorage connector, and vice versa, when the context of the requirement applies to design strength.

1.2.7 Within this standard, “shall” is used to express a requirement that must be obliged in order to comply with the standard; “should” is used to express a recommendation, which is advised

but not required; and “may” is used to express an option, which is permissible within the limits of the standard. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Legends to equations and figures are considered requirements.

1.2.8 E-column commentary that accompanies sections does not include requirements or alternative requirements; the purpose of the E-column is to separate requirements of the standard from the explanatory commentary and informative material.

1.3 Exceptions.

1.3.1 This standard does not specify design or performance requirements for active fall protection equipment components or systems when there exists a standard, within ANSI/ASSP Z359 Fall Protection Code, that details qualification and verification testing for the component or system. Qualification and verification testing of ANSI/ASSP Z359 components and systems shall meet the requirements of the relevant component or system standard and the requirements of ANSI/ASSP Z359.7. Components or systems shall not be marked as being in compliance with this standard as a substitute when another relevant ANSI/ASSP Z359 standard exists.

1.3.2 This standard does not cover the design of passive fall protection systems, such as guardrails and safety nets, except when passive systems are also designed to serve as anchorage for an active fall protection system.

1.3.3 This standard does not cover the design of positioning systems.

1.3.4 This standard establishes requirements for required structural strength of active fall protection systems. It does not cover the determination of design strength of components or anchorages. Design strength may be determined by empirical testing, numerical techniques or by design specification, including but not limited to ACI 318, ACI 530, AISC 360 and NDS, for the materials and structural systems being used.

1.3.5 The design of active systems for users heavier than 310 pounds (140 kg) or lighter than 130 pounds (59 kg) is outside the scope of this standard.

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

[ANSI/ASSP Z359.7-2019, Qualification & Verification Testing of Fall Protection Products](#)

1. Scope, Purpose, Application and Interpretations

1.1 Scope

This standard specifies requirements for equipment, facilities, specimens to be sampled and documentation when testing ANSI/ASSP Z359 Fall Protection Code products. This standard commonly addresses the requirements for qualification and verification testing for all ANSI/ASSP Z359 product standards, as required by ANSI/ASSP Z359.1, *The Fall Protection Code*.

1.2 Purpose and Application

1.2.1 The purpose of this standard is to provide a process for fall protection products to be qualified, verified and documented as conforming to the testing requirements of ANSI/ASSP Z359 product standards. Specific provisions are provided for:

- qualification testing, data collection and maintenance
- verification testing
- substantiation of processes to maintain manufacturing quality
- declaration of conformity
- roles and responsibilities of manufacturers, testing facilities and certification bodies that participate in the process

1.2.2 Before any product shall bear an ANSI/ASSP Z359 number or be represented in any way as being in compliance with any ANSI/ASSP Z359 standard, the requirements of this standard as well as the respective product standard shall be met.

1.3 Interpretations

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

[ANSI/ASSP Z359.9-2021, Personal Equipment for Protection Against Falls – Descent Controllers](#)

1. Scope, Purpose and Application, Exceptions and Interpretations

1.1 Scope

This standard establishes requirements for the design, performance, testing, test methods, marking, instruction, maintenance and removal from service of descent controllers for users within the capacity range of 130 to 310 pounds (59 to 140 kg).

1.2 Purpose and Application

The purpose of this standard is to establish minimum requirements for automatic and manual descent controllers intended for use in the workplace in rope access, rope descent, and evacuation. Descent controller types are defined according to function and performance.

NOTE: Type 2 devices are not within the scope of this standard.

1.2.1 Before any descent controller shall bear the marking ANSI/ASSP Z359.9 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.

1.2.2 Users of active fall protection systems require proper training and instruction, including detailed procedures for the safe use of such equipment in their work application. Refer to ANSI/ASSP Z359.2, *Minimum Requirements for a Comprehensive Managed Fall Protection Program* for training requirements.

1.2.3 This standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed in Section 7. For dated references, subsequent amendments to or revisions of any of these publications apply to this American National Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

1.3 Exceptions

1.3.1 This standard does not apply to sports activities such as mountaineering.

1.3.2 Type 2 devices are not covered in this standard. The designation “Type 2” has been intentionally not assigned to avoid confusion with international standards (e.g., ISO 22159, EN 341).

1.4 Interpretations

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

[ANSI/ASSP Z359.11-2021, Safety Requirements for Full Body Harnesses](#)

1. Scope, Purpose, Application, Exceptions and Interpretations

NOTE: It is expected that products be compliant to the requirements of this standard within 12 months after the publication of this standard.

1.1 Scope

This standard establishes requirements for the performance, design, marking, qualification, instruction, training, test methods, inspection, use, maintenance and removal from service of full body harnesses (FBH). FBHs are used for fall arrest, positioning, travel restraint, suspension and/or rescue applications for users within the capacity range of 130 to 310 pounds (59 to 140kg).

NOTE: See Figures 1a through 1e for five basic examples of full body harnesses covered under this standard.

At the time of this standard’s development, insufficient scientific data existed regarding the human response related to use of FBHs outside of the weight capacity defined. While there are methods that can demonstrate the efficacy of the FBH’s load bearing components, such as the webbing, sewn webbing terminations, buckles and other connectors, the ability of the human body is more nuanced. Therefore, the committee believes more research is needed to determine an individual’s physical attributes needed to withstand an impact and suspension for a period of time to be determined before a rescue is completed.

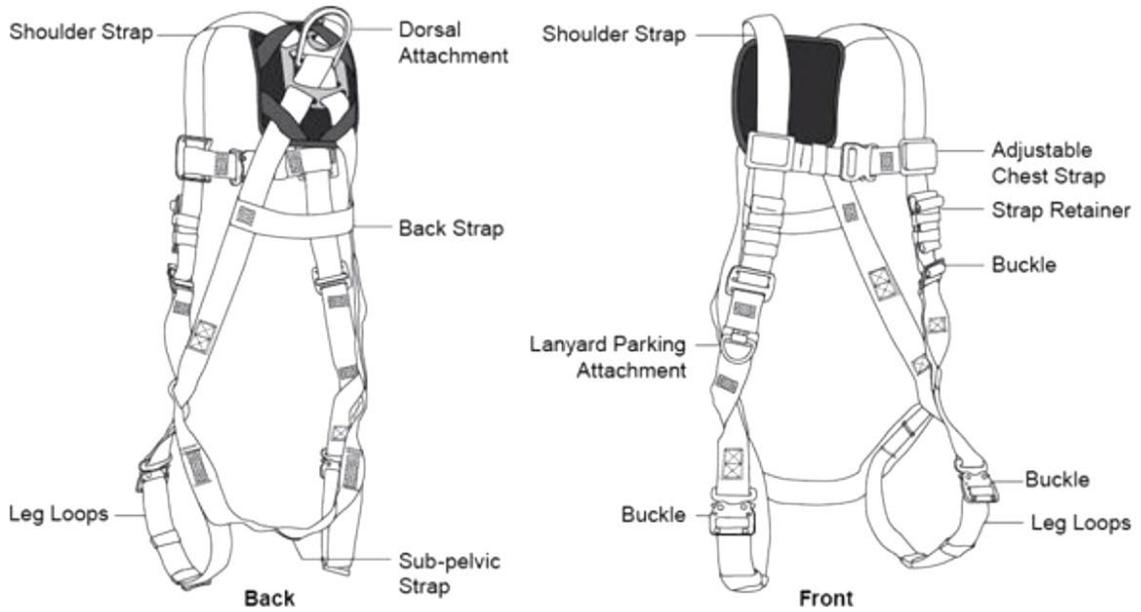


Figure 1a: Example of a Typical Full Body Harness

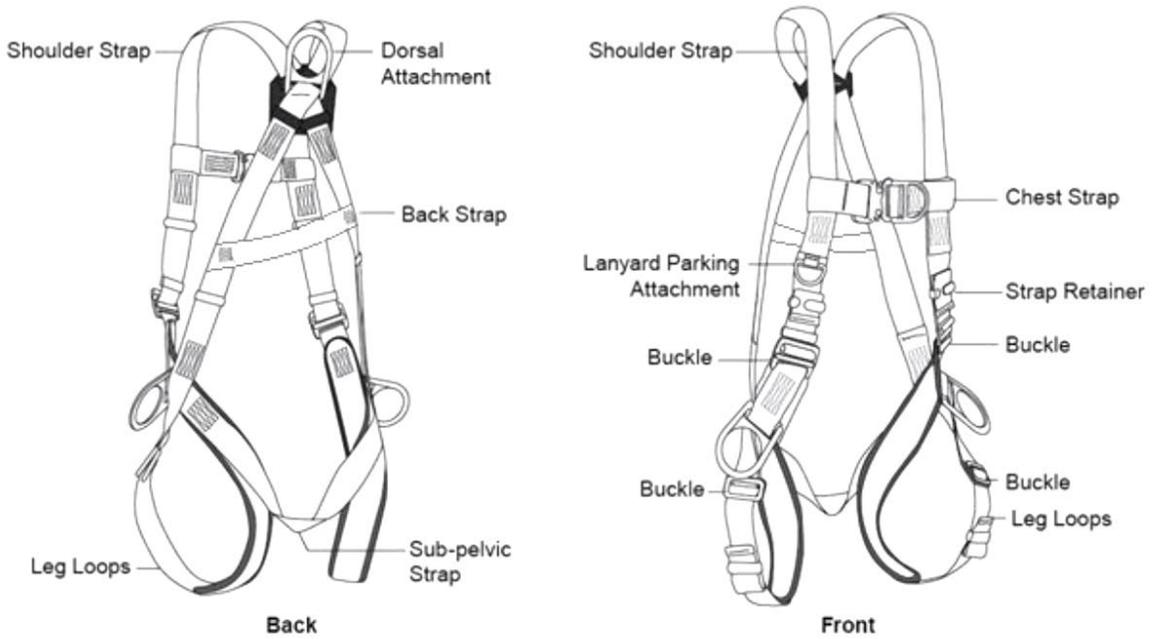


Figure 1b: Example of a Typical Full Body Harness

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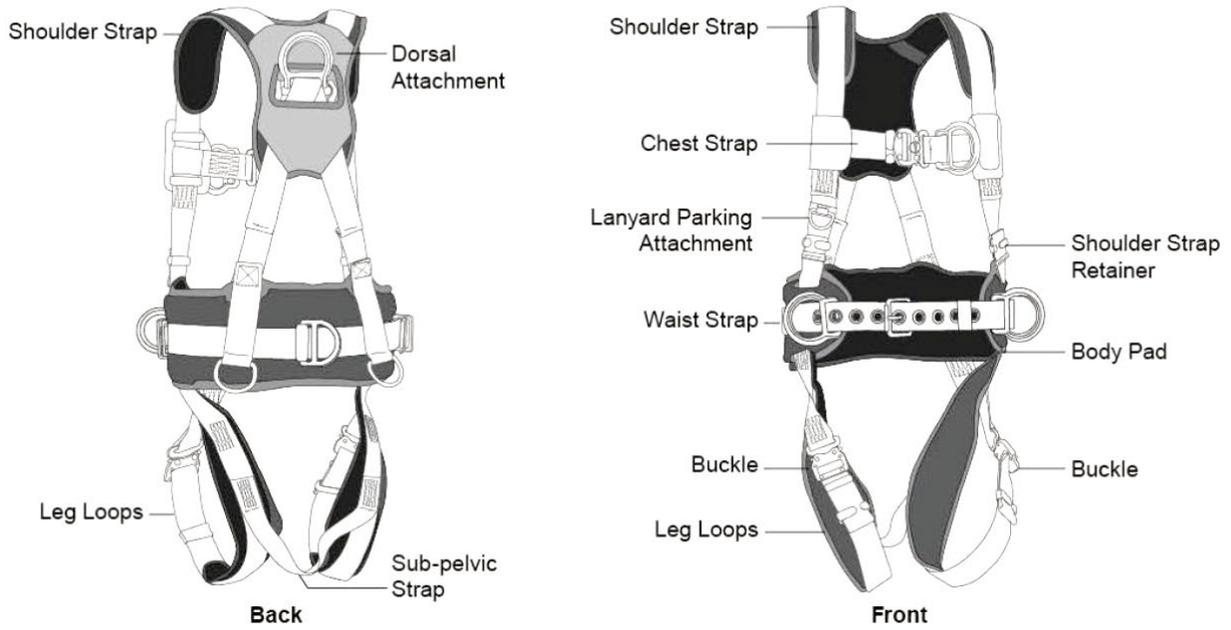


Figure 1c: Example of a Typical Full Body Harness

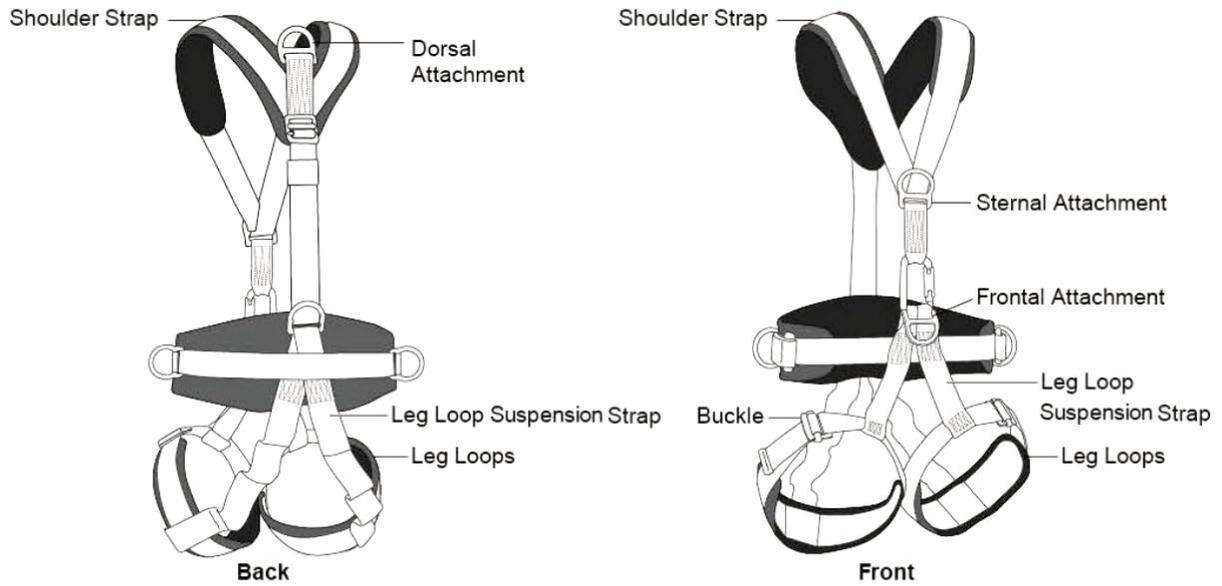


Figure 1d: Example of a Typical Y-Style Full Body Harness

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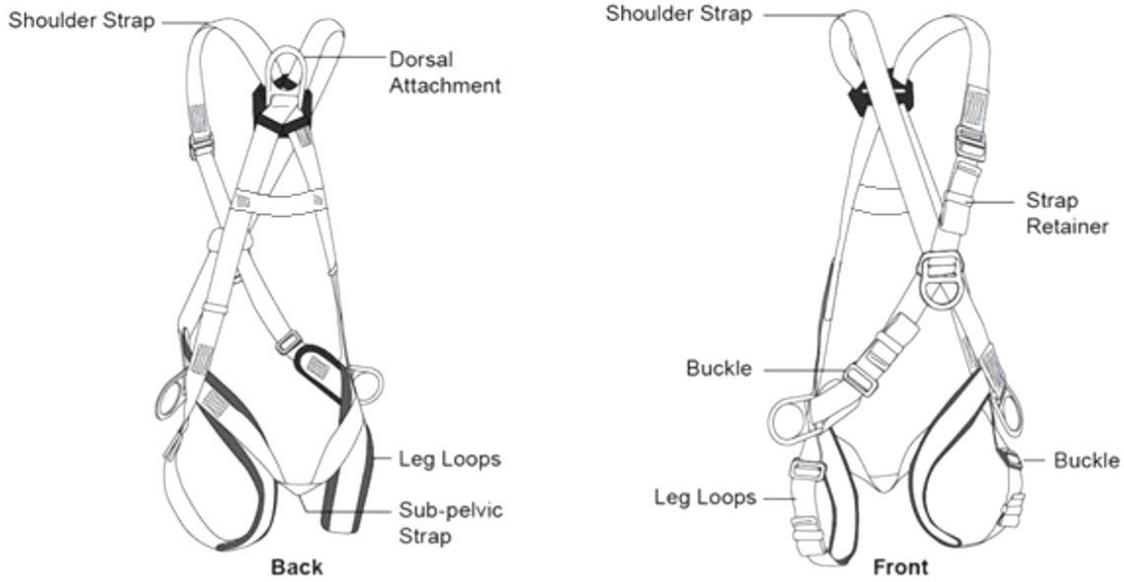


Figure 1e: Example of a Typical X-Style Full Body Harness

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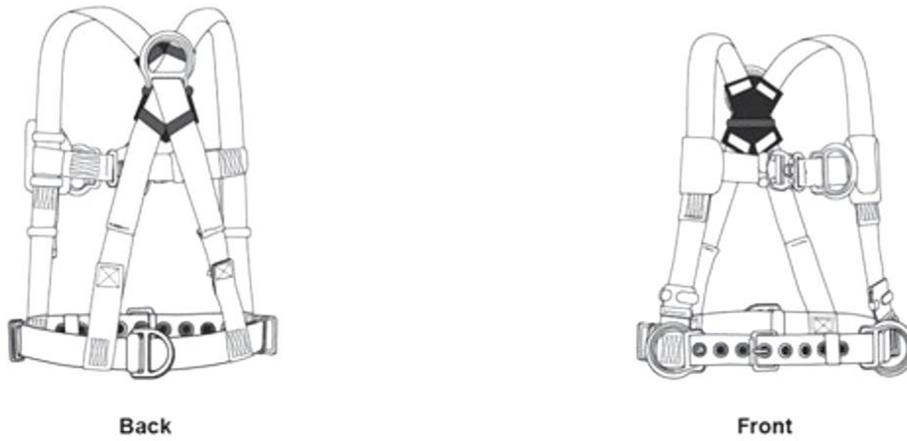
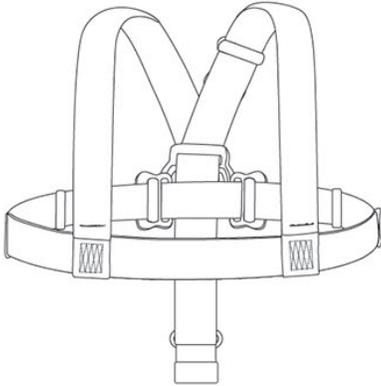


Figure 1f: Example of a Typical Chest-Waist Harness
(Deemed unacceptable for use by this Standard)

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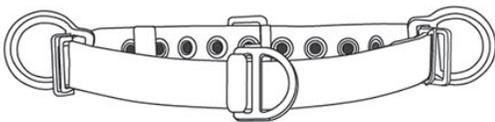
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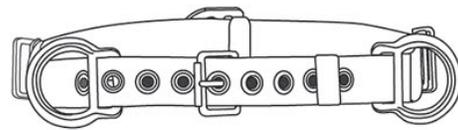
Figure 1g: Example of a Typical Chest Harness
(Deemed unacceptable for use by this Standard)

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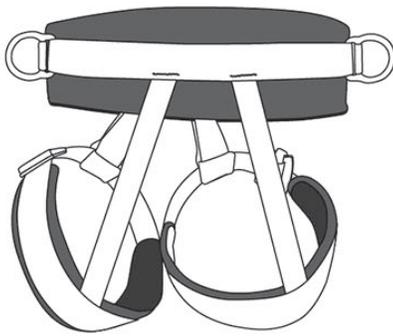
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Figure 1h: Example of a Typical Body Belt
(Deemed unacceptable for use by this Standard)

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**Figure 1i: Example of a Typical
Seat Harness**
(Deemed unacceptable for use by this Standard)

1.2 Purpose and Application

1.2.1 This standard applies to FBHs used in occupations requiring personal protection against falls from heights and if required, shall allow for the specialized functions of travel restraint, positioning, suspension and/or rescue.

1.2.2 This standard applies only to FBHs and auxiliary equipment designed specifically for use as part of the FBH.

NOTE: Integrated and non-integrated equipment such as a vest, suspension seat and extended dorsal or specialized attachment elements are included within this standard.

1.2.3 This standard is intended to be used by the manufacturers, distributors, purchasers and users of FBHs as well as testing, certifying and regulating bodies.

1.2.4 Before any FBH shall bear the marking ANSI/ASSP Z359.11 or be represented in any way as being in compliance with this standard, all applicable requirements of this standard shall be met.

1.2.5 FBHs which meet this standard are intended to be used with other components of a system that limits maximum arrest force to 1,800 pounds (8kN) or less.

NOTE: It is essential that the users of this type of equipment receive proper training and instruction, including detailed procedures for the safe use of such equipment in their work application. Refer to ANSI/ASSP Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program, for guidance on training requirements. Proper fit of a FBH is essential to performance. Users must be trained to select and maintain the fit of their FBH.

1.2.6 The requirements of this standard supersede any corresponding requirements in ANSI/ASSP Z359.1, Z359.3 and Z359.4 American National Standards.

1.2.7 This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed in Section 8. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

1.3 Exceptions

This standard does not apply to body belts which are not attached to a FBH or chest-waist harnesses for purposes of fall arrest.

NOTE: The US Occupational Safety and Health Administration (OSHA) has deemed body belts unsuitable for fall arrest. Figures 1f through 1i show example harnesses and belts that are not acceptable for use under the requirements of this standard.

1.4 Interpretations

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

[ANSI/ASSP Z359.12-2019, 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.

1.4 Interpretations

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

1.5 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered as the requirement, as these values can be approximate.

1.6 Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values which are not stated as maxima or minima shall be subject to a tolerance of $\pm 5\%$. Unless otherwise specified, the ambient temperature for testing shall be between 35°F (1.7 C) and 100°F (37.8 C) and the temperature limits shall be subject to an accuracy of $\pm 2^\circ\text{F}$ ($\pm 2^\circ\text{C}$).

[ANSI/ASSP Z359.13-2013 \(R2022\), Personal Energy Absorbers and Energy Absorbing Lanyards](#)

1. SCOPE, PURPOSE, APPLICATIONS, EXCEPTIONS AND INTERPRETATIONS

1.1 Scope.

1.1.1 This standard establishes requirements for the performance, design criteria, marking, qualification and verification testing, instructions, inspections, maintenance and removal from service of personal energy absorbers and energy absorbing lanyards for users within the capacity range of 130 to 310 pounds (59 - 140 kg.).

1.1.2 This standard is for use by organizations where employees are exposed to fall hazards.

1.2 Purpose and Applications.

1.2.2 Before any equipment shall bear the marking Z359.13 (personal energy absorbers and energy absorbing lanyards) or be represented in any way as being in compliance with this standard, all requirements of this standard shall be met.

1.3 Exceptions. The requirements of this standard do not address window cleaning belts and sports related activities.

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

1.5 The requirements of this standard supersede any corresponding requirements in the ANSI/ASSP Z359.1-2007, *Safety Requirements for Personal Fall Arrest Systems, Subsystems, and Components*.

[ANSI/ASSP Z359.14-2021, Safety Requirements for Self-Retracting Devices For Personal Fall Arrest and Rescue Systems](#)

1. Scope, Purpose and Application

1.1 Scope

This standard establishes requirements for the performance, design, qualification testing, markings and instructions, inspections, maintenance and storage, and removal from service of

self-retracting devices (SRDs) including self-retracting lanyards (SRLs), self-retracting lanyards with integral rescue capability (SRL-Rs), and self-retracting lanyards, personal (SRL-Ps). This standard establishes requirements for SRDs intended for use in personal fall arrest or rescue systems for authorized persons within the capacity range of 130 to 310 pounds (59 to 141kg).

1.2 Purpose and Application

1.2.1 The purpose of this standard is to establish minimum requirements for self-retracting devices that are used in occupations requiring personal protection against falls from heights and applies to the manufacturers, distributors, purchasers and authorized persons who use such equipment.

1.2.2 Before any equipment shall bear the marking Z359.14 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 Self-Retracting Device Types

1.3.1 Self-retracting lanyard (SRL). Defined in Section 2. See Figure 1.

1.3.2 Self-retracting lanyard, personal (SRL-P). Defined in Section 2. See Figure 1.

1.3.3 Self-retracting lanyard with integral rescue capability (SRL-R). Defined in Section 2. See Figure 1.

1.4 Self-Retracting Device Classes

1.4.1 Class 1. Self-retracting devices which shall be used only on overhead anchorages and shall be subjected to a maximum free fall of 2 feet (610mm) or less, in practical application.

1.4.2 Class 2. Self-retracting devices which are intended for applications wherein overhead anchorages may not be available or feasible and which may, in practical application, be subjected to a free fall of no more than 6 feet (1.8m) over an edge prescribed in Section 4.

1.4.3 Any of the device types in 1.3 may be qualified according to the requirements of these classes. Before a device may be qualified according to the requirements of Class 2, it shall first meet the requirements of Class 1.

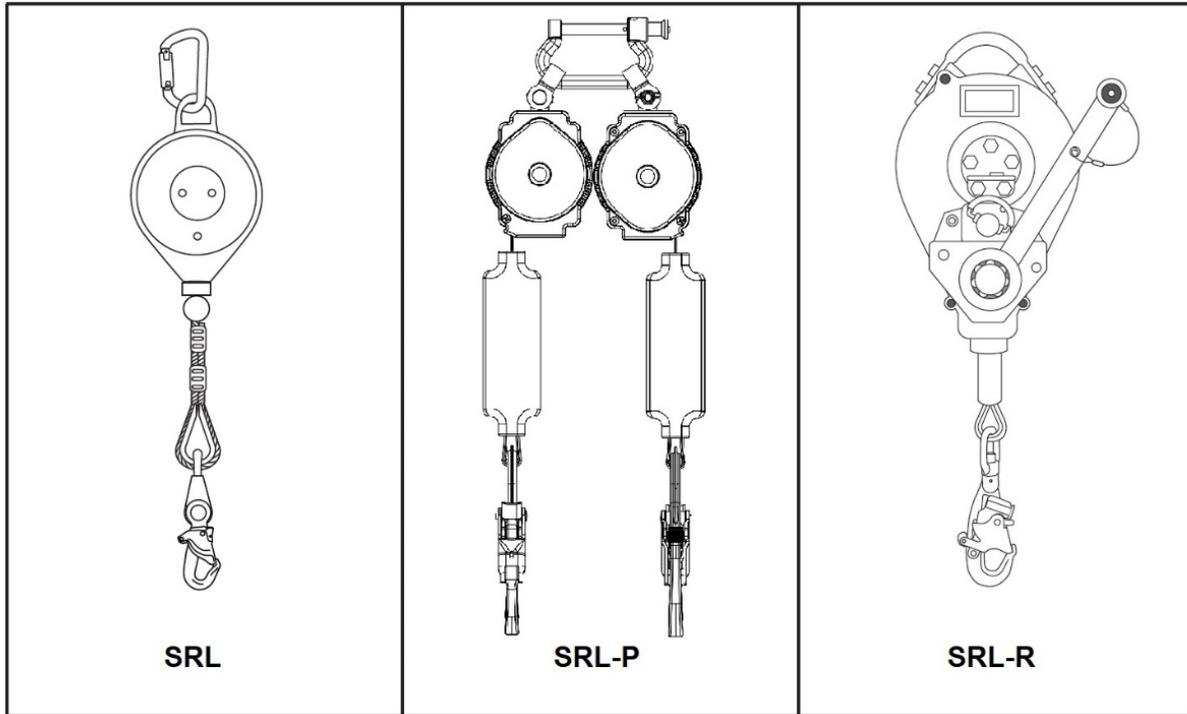


Figure 1: Examples of Self-Retracting Devices (reference only)

1.5 Exceptions

The requirements of this standard do not apply to self-retracting devices used for arresting loads when handling materials or similar devices used in sport and recreational activities.

1.6 Interpretations

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

[ANSI/ASSP Z359.15-2014, Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems](#)

1. SCOPE, PURPOSE, APPLICATION, EXCEPTIONS AND INTERPRETATIONS

1.1 Scope. This standard establishes requirements for the design criteria, qualification testing (performance requirements), marking and instructions, user inspections, maintenance and storage and removal from service of single anchor lifelines and fall arresters for users within the capacity range of 130 to 310 pounds (59 to 140 kg).

1.2 Purpose and Application.

1.2.1 This standard addresses minimum guidelines for the design, manufacture and testing of single anchor lifelines and fall arresters.

1.2.2 This standard applies to single anchor lifelines and fall arresters used in fall arrest applications.

1.2.3 Before any equipment shall bear the marking Z359.15 or be represented in any way as being in compliance with this standard, all requirements of this standard shall be met through qualification and verification testing according to ANSI/ASSP Z359.7.

1.2.4 Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values, which are not stated as maxima or minima, shall be subject to a tolerance of +/- 5%. Unless otherwise specified, the ambient temperature for testing shall be between 35°F (1.6°C) and 100°F (37.7°C) and the temperature limits shall be subject to an accuracy of +/- 2°F (+/- 1°C).

1.2.5 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered the requirement, as these values can be approximate.

1.3 Exceptions.

1.3.1 The requirements of this standard do not address window cleaning belts and sports-related activities.

1.3.2 The requirements of this standard do not address horizontal lifelines.

1.3.3 The requirements of this standard do not address fall arresters used on horizontal lifelines.

1.3.4 The requirements of this standard do not apply to rope adjusters used in positioning or travel restraint systems.

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

1.5 The requirements of this standard supersede any corresponding requirements in the ANSI/ASSP Z359.1-2007, *Safety Requirements for Personal Fall Arrest Systems, Subsystems, and Components*.

[ANSI/ASSP Z359.16-2016, Safety Requirements for Climbing Ladder Fall Arrest Systems](#)

1. SCOPE, PURPOSE, APPLICATION, EXCEPTIONS AND INTERPRETATIONS

1.1 Scope. This standard establishes requirements for the performance, design, marking, qualification testing, instructions for use, inspection, maintenance, storage, and removal from service of vertically oriented Climbing Ladder Fall Arrest Systems (CLFAS) consisting of flexible and rigid carriers with multiple attachment points and associated carrier sleeves for users within the capacity range of 130 to 310 pounds (59 to 141kg). See Figure 1 for examples of CLFAS equipment.

1.2 Purpose and Application.

1.2.1 This standard applies to manufacturers, distributors, purchasers and authorized persons that use climbing ladder fall arrest systems in occupations requiring personal protection against falls from heights. It applies only to installations that are vertical (90 +/- 1 degrees) when viewed from the front elevation, and within 15 degrees of vertical when viewed from the side elevation and that do not slope towards the climber. See Figure 2 for installation configurations.

1.2.2 Before any equipment shall bear the marking “Z359.16” or be represented in any way as being in compliance with this standard, all requirements of this standard shall be met through qualification and verification testing according to ANSI/ASSP Z359.7, Qualification and Verification of Fall Protection Products.

1.2.3 Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values, which are not stated as maxima or minima, shall be subject to a tolerance of +/- 5%. Unless otherwise specified, the ambient temperature for testing shall be between 35°F (1.7°C) and 100°F (37.8°C) and the temperature limits shall be subject to an accuracy of +/- 2°F (+/- 1°C).

1.2.4 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered the requirement, as these values can be approximate.

1.2.5 This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed in Section 8. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

1.2.6 All equipment within the scope of this standard that is marked or represented in any way as being in compliance with an ANSI/ASSP Z359 standard shall meet the requirements of this standard within 180 days of this standard’s publication date.

1.3 Exceptions. The requirements of this standard do not address material handling and sports-related activities.

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

[ANSI/ASSP Z359.18-2017, Safety Requirements for Anchorage Connectors for Active Fall Protection Systems](#)

1. SCOPE, PURPOSE, APPLICATION, EXCEPTIONS AND INTERPRETATIONS

1.1 Scope. This standard establishes requirements for the performance, design, testing, marking, and instructions for use of anchorage connectors in travel restraint, fall arrest, rescue, work position, rope access, and suspended component/tie-back line systems only.

1.2 Purpose and Application.

1.2.1 The purpose of this standard is to protect workers in occupations requiring personal protection from falls from heights, by providing verifiable requirements for the design and performance of anchorage connectors, along with test methods to assess conformity to these requirements.

1.2.2 This standard applies to manufacturers, distributors, testing organizations, regulators, purchasers and authorized users of personal fall protection equipment, as well as personnel responsible for the design and implementation of fall protection systems.

1.2.3 This standard partially addresses the quality and abilities of the substrate structure (anchorage) to which the anchorage connector is attached. Therefore, the anchorage connector also relies on users properly following users instructions provided by the manufacturer to create a safe anchorage system to which anchorage connectors are affixed. See Figure 1.

1.2.4 This standard does not differentiate between temporary, portable, and permanent anchorage connectors.

1.2.5 Before any anchorage connector shall bear the marking ANSI Z359.18 or be represented in any way as being in compliance with this standard, it shall meet all applicable requirements of this standard. Establish such compliance in accordance with the requirements specified in ANSI/ASSP Z359.7-2011.

1.2.6 The requirements of this standard supersede those previously established under Z359.1-2007.

1.3 Exceptions. This standard does not apply to:

1.3.1 Equipment davit arms, anchorage connectors that are custom engineered for site-specific applications for fall protection, or to anchorage connectors that are custom engineered for suspended component/tie-back line applications only.

1.3.2 Anchorage connectors that require the user to simultaneously connect their fall arrest system (using a snaphook or carabiner) to two connection points at once, to secure the anchorage connector around the anchorage.

1.3.3 Horizontal Lifelines and Rigid Rails.

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

[ANSI/ASSP Z459.1-2021, Safety Requirements for Rope Access Systems](#)

1. Scope, Purpose, Application, Exceptions and Interpretations

1.1 Scope

1.1.1 This standard sets forth accepted practices for rope access work. It is applicable for use in any environment where ropes are suspended from or connected to a structure or natural feature

and used as the primary means of access, egress or support and as the primary means of secondary protection against a fall.

NOTE: This standard includes minimum program, equipment, component and element requirements for the use and application of the two-rope system, including both progress system and backup system, required for use during rope access work.

1.1.2 Where applicable, this standard establishes requirements for the performance, design, marking, qualification, test methods and instructions of key equipment comprising rope access systems for authorized rope access technicians within the capacity range of 130 pounds to 310 pounds (59kg to 141kg).

1.1.3 This standard should be used in conjunction with other fall protection requirements standards in order to achieve a balanced managed fall protection program.

NOTE: Additional guidance on training, use, maintenance, removal from service of rope access systems is addressed in ANSI/ASSP Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program, which provides the requirements for overall program management.

1.2 Purpose

1.2.1 This standard addresses minimum requirements for system planning and use as well as, design, manufacture and testing of equipment used for rope access.

1.2.2 This standard addresses principles and equipment for rope access systems.

NOTE: Parts of these systems may be similar in appearance to that used for restraint, positioning or fall arrest. However, because such equipment differs in design, use and application, the user should exercise caution to not confuse rope access equipment with these conventional systems.

1.2.2.1 This standard addresses all forms of rope access that involve movement up or down and working while being suspended from ropes. This may include traversing, aid climbing, lead climbing and other forms of suspended access.

1.2.3 This standard addresses all aspects of an effective rope access program, which is not limited to equipment only. The comprehensive rope access program shall be written to include provision for:

- effective management;
- competence specific to rope access;
- suitable equipment.

NOTE: Rope access technicians, designers, safety managers, competent rope access technicians, purchasing personnel, trainers, clients and regulatory authorities should always consider the entire system of work to ensure correct operation of a rope access system:

- system management and planning;
- certification of competent rope access technicians and appropriate team composition;
- equipment selection, use and maintenance;
- proper organization and execution of working methods.

Other factors may also warrant consideration depending upon the nature and location of work to be performed, competence and experience of rope access technicians and variation in regulatory requirements.

Additional guidance toward competence and management of a comprehensive managed fall protection program may be found in ANSI/ASSP Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program.

1.2.4 This document sets forth the provisions that equipment must meet in order to bear the marking “Z459.1” or be represented in any way as being in compliance with this standard.

1.2.5 This document sets forth the intent that before any person shall engage in rope access work, they shall be properly trained in the necessary skills and possess the knowledge specific to rope access, and their competency in rope access be verified by the employer’s rope access program administrator.

NOTE: Additional information regarding appropriate training for authorized rope access technicians may be found in the authorized rope access technician section of Z359.2. Additional information regarding appropriate training for rope access competent rope access technicians may be found in the competent rope access technician section of Z359.2.

1.2.6 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered as the requirement, as these values can be approximate.

1.2.7 Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values which are not stated as maxima or minima shall be subject to a tolerance of $\pm 5\%$. Unless otherwise specified, the ambient temperature for testing shall be between 35°F and 100°F and all other temperature limits shall be subject to an accuracy of $\pm 2^\circ\text{F}$.

1.2.8 Products, systems and programs shall be compliant to requirements of this standard (effective date) within 12 months after the standard’s publication date.

1.2.9 For the purposes of this standard, the terms “Authorized Rope Access Technician,” “Competent Rope Access Technician,” “Qualified Rope Access Person,” and “Rope Access Program Administrator” shall have the meanings unique to rope access as defined in Section 2.

1.3 Exceptions

1.3.1 Body belts are not addressed by this standard unless incorporated into a full body harness.

1.3.2 When a rope access technician uses fall protection that is identified as conventional fall protection, and/or that falls under the scope of another applicable standard, the standards applicable to that type of protection shall be met.

NOTE: Conventional methods of fall protection, as referenced in this document, refer to systems for fall arrest, restraint, positioning and/or rescue as found in ANSI/ASSP Z359.1, The Fall Protection Code.

1.3.3 This standard is not intended to apply to recreational use of ropes or to methods used by professional emergency response personnel.

1.4 Interpretations

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

Appendix C

Supplemental Z359 documents are available at the following link:

<https://www.assp.org/standards/standards-topics/fall-protection-and-fall-restraint-z359>

- *ASSP Z359.0, Z359 Committee Guidance Document for Definitions and Nomenclature Used in Z359 Fall Protection and Fall Restraint Standards*
- User Guides
- Technical Bulletins
- Podcasts
- Additional information

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