

# ANSI/ASSP Z359.14-2021

Safety Requirements for Self-Retracting Devices  
for Personal Fall Arrest and Rescue Systems

Part of the Fall Protection Code



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**



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**ANSI/ASSP Z359.14 – 2021**

**American National Standard**

**Safety Requirements for Self-Retracting Devices for  
Personal Fall Arrest and Rescue Systems**

Secretariat

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

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# American National Standard

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## Foreword

(This Foreword is not a part of American National Standard Z359.14-2021.)

**History:** ANSI/ASSP Z359.14 was first published in 2012 and included historical requirements previously established in ANSI/ASSP Z359.1-1992 (R1999) and ANSI/ASSP Z359.1-2007. Additional requirements were developed for devices of different types; specifically, self-retracting devices with integral rescue capability (SRL-R) and self-retracting devices with leading edge capability (SRL-LE).

The requirements for SRL-Rs were largely extracted from ANSI/ASSP Z359.4-2007, while the requirements for SRL-LEs were new developments, inspired by existing data and procedures developed by international organizations exploring this issue. Since the publication of the ANSI/ASSP Z359.14-2012 standard, personal self-retracting devices have proliferated considerably, as have SRL-LEs. Additionally, these two classifications have merged, and personal SRL-LEs have become a very highly influential component of commonly utilized personal fall arrest systems. As a result, it has become clear that a more focused set of requirements have become necessary to ensure higher factors of safety are achieved in this highly influential class of product.

These products and the practice of foot-level tie-off is controversial due to the increased risk of injury to the users of such equipment as a result of likely contact with the structure or structural edge as well as the considerable increase in fall clearance required.

In an effort to focus users of these devices on the most effective practices relative to fall arrest, this committee has redefined the types and classes and has established more stringent requirements for all self-retracting devices with the objective of increasing overall factors of safety.

**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.*

**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 ASSP Z359 Secretariat) is authorized to provide any interpretation of this standard.

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**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:** The Z359 Committee solicits public input that may suggest revisions to the standard. Such input should be sent to the Secretariat, American Society of Safety Professionals, 520 N. Northwest Highway, Park Ridge, Illinois 60068.

**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 Z359.14  
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.