



2012 National Safety Council
CONGRESS & EXPO
one hundred years



**Understanding ANSI/ASSE
Z359.14-2012
Self-Retracting Devices**

Celebration of the century



Safety Requirements for Self-Retracting Devices

• Overview

- On August 20, 2012, ANSI/ASSE published Z359.14-2012, a new standard for self-retracting devices. This new standard establishes requirements for the performance, design, qualification testing, markings and instructions, inspections, maintenance and storage, and removal from service of self-retracting devices (SRD's) including self-retracting lanyards (SRL's), self-retracting lanyards with integral rescue capability (SRL-R's), and self-retracting lanyards with leading edge capability (SRL-LE's).

Z359.14-2012

- The new standard also establishes requirements for SRD's 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).
- This new standard affects and addresses all types and styles of self-retracting devices including the traditional style SRL and SRL with retrieval capability commonly referred to as a 3-way SRL device.

Z359.14-2012

- **New - Classifications of Self-Retracting Devices**
 - These classifications have been developed to address applications where fall clearance may be reduced or limited for which a Class A device would be more appropriate.
 - **Class A** - Maximum arresting distance up to 24 inches. Average arresting force not to exceed 1350 pounds
 - **Class B** - Maximum arresting distance up to 54 inches. Average arresting force not to exceed 900 pounds.
- Note: OSHA 29 CFR 1910.66 and 1926.502 regulations limit the maximum arresting distance to 42 inches.

Z359.14-2012

- **New - Leading Edge Self-Retracting Devices**
 - Identified for the first time within an ASSE/ANSI standard, SRD's intended for use in leading edge applications shall be required to meet specific testing criteria and be identified by the manufacturer as being rated for the application.

Z359.14-2012

- **New – Visual Load Indicator**

- SRD's will now be required to include a visual load impact indicator. The load indicator should be visible to the user at full extension of the line prior to use. Devices may incorporate load indicators near the SRD snap hook or housing. Integral energy absorbers may also be utilized as visual load indicators.

Z359.14-2012

- **New – Inspection Requirements**

- This new standard includes the requirements for more frequent and formal inspections by manufacturer authorized distributors, repair centers, users, etc.
- Detailed SRD inspection requirements will be identified in the user instruction manuals provided with each product.

Z359.14-2012

Inspection Table Source: ANSI/ASSE Z359.14-2012

Type Of Use	Application Examples	Conditions Of Use	Inspection Frequency Competent Person	Factory Authorized Inspection
Infrequent to Light	Rescue and confined space, factory maintenance	Good storage conditions, indoor or infrequent outdoor use, room temperature, clean environments	Annually	At least every 2-5 years, but not longer than intervals required by the manufacturer
Moderate to Heavy	Transportation, residential construction, utilities, warehouse	Fair storage conditions, indoor and extended outdoor use, all temperatures, clean or dusty environments	Semi-annually to annually	At least every 1-2 years, but not longer than intervals required by the manufacturer
Severe to Continuous	Commercial construction, oil and gas, mining	Harsh storage conditions, prolonged or continuous outdoor use, all temperatures, dirty environment	Quarterly to semi-annually	At least annually, but not longer than intervals required by the manufacturer

Z359.14-2012

- Questions and Answers
 - **Q.** Will SRD product labels marked to this new standard identify the specific device classification?
 - **A.** Yes. Each SRD product label marked with this new standard must identify Class A or B and identify ratings for leading edge applications, rescue and retrieval.

Z359.14-2012

- Questions and Answers

- **Q.** Will units manufactured to previous ANSI/ASSE standards be required to be immediately removed from service and replaced with units compliant to the most recent standard?
- **A.** No. SRD's manufactured to previous ANSI/ASSE standards do not require immediate removal from service or disposal. These devices must however continue to meet the full inspection requirements as defined on the product labeling and / or user instruction documentation provided by the manufacturer.

Z359.14-2012

- Questions and Answers

- **Q.** Will all SRD's marked to this new standard be required to be equipped with a visual load impact indicator?
- **A.** Yes. All SRD's marked to this new standard must be equipped with a visual load impact indicator that is visible throughout the entire usable length of the device. Load impact indicators are typically located at the hook end of the SRD line constituent but may also be located at the housing of the SRD.

Z359.14-2012

- Questions and Answers

- **Q.** Has the ANSI/ASSE Z359.1-2007 standard document been replaced addressing performance requirements of self-retracting devices?
- **A.** Yes. The requirements of the new standard supersede any corresponding requirements in either the ANSI/ASSE Z359.1-2007 or ANSI/ASSE Z359.4-2007 American National Standards.

Z359.14-2012

- Closing

- The ANSI/ASSE Z359.14-2012 version was issued in August of 2012. Copies are available for purchase from the ANSI standards store at www.webstore.ansi.org/

The information contained in this presentation summarizes some notable changes to ANSI/ASSE Z359.14-2012, but not all changes. You should obtain a copy of the standard and refer to it for more detailed information.

THANK YOU FOR ATTENDING