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HEALTH SAFETY ENVIRONMENTAL

SAFETY ALERT

Alert #: SA 05-24 Date: February 22, 2024

SRL Updates

As many of you may know, we have started sending out “new” SRLs to the field. This Safety Alert is to provide a little more clarity on the reason and use of these devices.

Background

In August 2023, the American National Standards Institute's (ANSI) revision of their Z359.14 standard officially took effect, implementing new changes to their safety requirements of self-retracting devices for personal fall arrest and rescue systems. The revised ANSI Z359.14 standard, approved on June 17, 2021, remains a consistent authoritative guide to fall protection and influences regulatory compliance for organizations like OSHA. For manufacturers, this new standard means complying with the ***classification, labeling, and testing*** of these new devices.

Most notable changes to the standard:

CLASS & CATEGORY CHANGES FOR SRLS

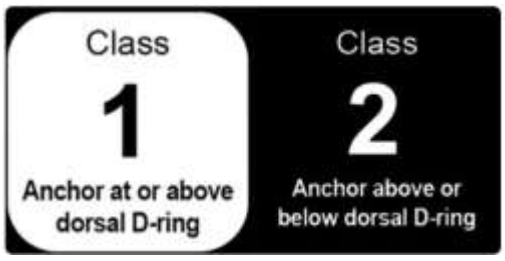
Before, SRLs were organized by type (SRL, SRL-R for devices with rescue/retrieval functions, or SRL-LE for leading edge capability) and class (Class A or Class B). Now with the latest revision, ANSI introduced new classifications for types and classes to help manufacturers better determine the specific testing needed to perform on each design they offer.

The ***new SRL types*** from the latest revision include:

- **SRL**: The standard version of self-retracting lanyards. These come in the form of mechanical fall arresters that feature locking mechanisms and work to limit the falling forces imparted on users.
- **SRL-P**: This version is compact enough to be worn by the user on a full-body harness to be used as a fall arrest connector and/or mounted to an anchorage.
- **SRL-R**: This standard, which includes integral rescue capability, contains means for assisted rescue by raising or lowering the rescue subject.

Additionally, ANSI ***removed the previous Classes A and B*** and introduced ***the new class types listed below***:

- **Class 1**: The new standard of Class 1 SRDs consists of "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." Class 1 devices work for anchorages placed at or above the dorsal D-ring location.
- **Class 2**: This standard describes Class 2 SRDs as "devices [...] 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." Class 2 devices work for anchorages above, at, or up to 5 feet below the dorsal D-ring. Also, all SRL-LE-type devices are now designated under Class 2 devices.



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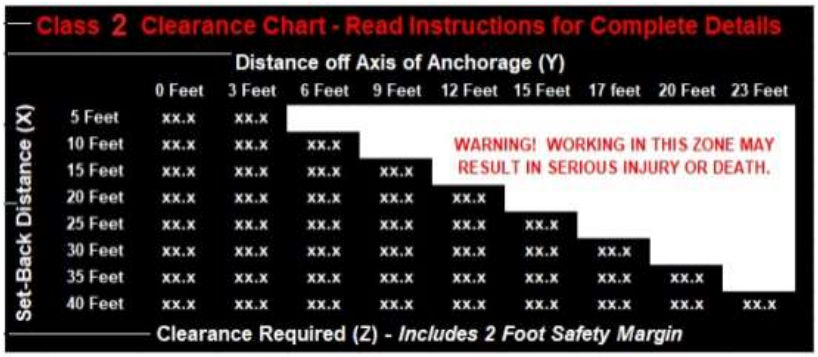
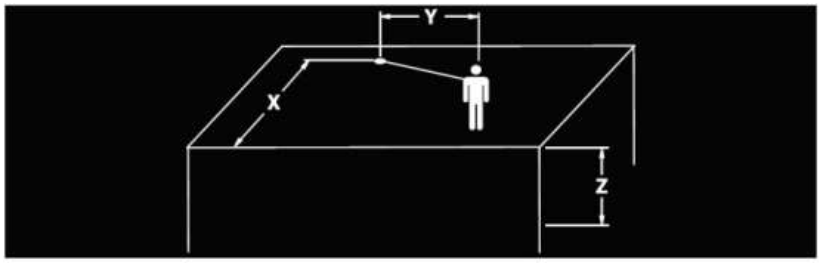
LABELING FOR SRLS

With the new classifications listed above, the ANSI Z359.14 revision requires standardized labeling for SRDs to help users identify which device they need for their specific fall hazards. The labels shown above include the clear and conspicuous verbiage dictating where they connect.

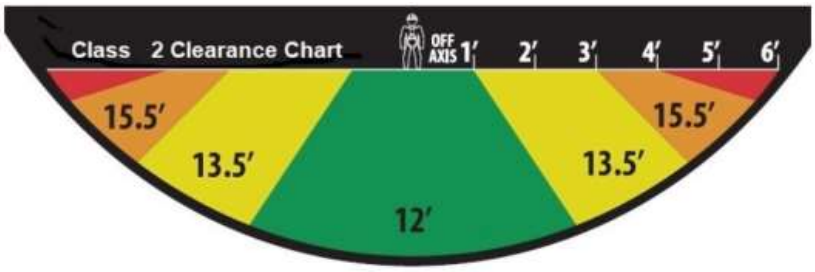
Additionally, ***Class 2*** devices require safety labels illustrating a fall clearance chart and diagram of the axes, shown both where the device connects to the harness. For Class 2 SRL-P devices, they must include a label for leading edge clearance requirement. The following labels are shown below:



CLASS 2 Integral Clearance Chart Example



CLASS 2 Illustration of Axes Example



SAFETY TESTING FOR SRLS

All types of SRLs must meet specific thresholds of performance in order to be compliant. The following performance criteria for Class 1 and Class 2 self-retracting devices includes:

- A Maximum Arrest Force of 1,800 lbs.
- An Average Arrest Force of 1,350 lbs.
- An Arrest Distance of 42 inches.
- Capable of withstanding a 3,600-lb. static load for one minute; 1,800-lb. static load for SRLs without internal braking systems.

Class 2 devices underwent updates and added new changes to their testing requirements amidst the addition of SRL-LE devices to the class:

- Class 2 devices require an energy absorber on the lifeline. This excludes SRLP devices where the device attaches to the dorsal D-rings instead of anchorages.
- Webbing and synthetic rope must have a minimum tensile breaking strength of 5,000 lbs.
- Class 2 devices, along with SRL-Ps do NOT need to retract after the overhead dynamic performance tests.
- Class 2 devices must pass a dynamic test over an edge with 310 pound weight

If you should have any further questions or concerns regarding this incident, please contact the Corporate HSE Department.