UNDERSTANDING ANSI Z359.14-2021 SRL STANDARD

On June 17, 2021, ANSI approved the new Z359.14-2021 revision, with updated safety requirements and categorization for Self-Retracting Devices (SRDs). This revision supersedes the previous Z359.14-2014 revision and went into effect on August 1, 2023.

KEY CHANGES IN ANSI Z359.14-2021

- Types SRL-LE removed, SRL-P added
- New test weights and specific SRL-P tests added
- New label marking requirements by Class
- **Class** Classes changed from A and B to Class 1 and Class 2 with revised performance requirements. All SRL's must now have class marking on product labels to help ensure the right product is used in the application





Comparison between the old and new standard

ANSI Z359.14-2014 (Old)

Types:

- SRL : Self Retracting Lanyard
- SRL-R SRL's with integral rescue capability
- SRL-LE SRL's designed to meet Leading Edge requirements.

Class A:

- Tested overhead w / 282 lbs. (128 kg)
- Must arrest within 24 in. (0.61 m)
- Average Force 1350 lbs. (6 kN)

Class B:

- Tested overhead w / 282 lbs. (128 kg)
- Must arrest within 54 in. (1.37 m)
- Average Force less then 900 lbs. (4 kN)
- Only "LE" models were required to meet Leading Edge requirements

ANSI Z359.14-2021 (New)

SRL Types:

- SRL : Self Retracting Lanyard
- SRL-R SRL's with integral rescue capability.
- SRL-P SRL's designed to installed on the user's harness

Class 1:

- Tested overhead w / 310 lbs. (140 kg)
- Must arrest within 42 in. (1.22 m)
- Max Free Fall of 2 ft. (0.61 m)

Class 2:

- Tested Meet Class 1 overhead w / 310 lbs. (140 kg)
- Must arrest fall within 42 in. (1.22 m)
- Average Force less then 1350 lbs. (6 kN)
- Meet Leading edge requirements
- Arrest distance printed on label and instruction
- Max Free Fall of 6 ft. (1.8 m)

STATIC AND DYNAMIC STRENGTH TESTING

-Hold 3000 lbs. (1360 kg) for 1 minute

- -Drop test with a 282 lbs. (128 kg) weight
- -Specific test for SRL-P did not exist

-Hold 3600 lbs. (1632 kg) for 1 minute

-Drop test with a 310 lbs. (140 kg) weight

Specific Test for SRL-P:

- Dual static to 3600 lbs. (1632 kg)
- Dual connection 1800 lbs. (8 kN) Force
- Abrasion test to 3600 lbs. (1632 kg) after abrasion for Tie-Back models