



## Retractable Level # 1 & 2

In 2024, the construction profession recorded the highest number of workplace deaths since 2011. According to the Bureau of Labor Statistics' Census of Fatal Occupational Injuries, released on December 19, 2024, construction workers had the most fatalities among all industry sectors in both 2023 and 2024. There were 1,075 construction worker fatalities in 2023, and 1,069 in 2024. Drilling down into the data, in 2024 the majority were fatal falls—559 (52%). Overall, falls from heights remained the leading cause of construction worker fatalities, accounting for one in every two deaths.

### ISSUES: COMMON CAUSES OF FALL ACCIDENTS:

1. No fall protection
2. Inadequate fall protection
3. Ignoring or not knowing the proper SOP for fall protection
4. Scaffolding and ladder-related incidents
5. Unprotected sides and edges
6. Slippery or cluttered surfaces
7. Lack of training

### ISSUES: COMMON CAUSES OF FALL ACCIDENTS:

1. Injuries and fatalities
2. Property damage
3. Project delays
4. Legal and financial repercussions

### REGULATIONS: COMPLYING WITH 1926.502 (A THROUGH N) PFAS (PERSONAL FALL ARREST SYSTEMS) COMPLIANCE:

#### WHAT IS CHANGING?

Previously, lanyards and self-retracting lifelines were categorized in Class A, B, and LE (Leading Edge) with sub-designations P (personal) and R (rescue). Classes A and B were both specific to overhead anchorage, with the differences being in the Average Arresting Force (force emitted to the body) and Arresting Distance (up to 24" for Class A, and up to 54" for Class B). Class

LE lifelines pertained to Leading Edge devices, with testing parameters for LE set for foot level/below D-ring anchorage situations.

Going forward, Class A, B, and LE will be replaced with Class 1 and Class 2, while the sub-designations P and R remain.

The new standard defines Class 1 (Level 1) lanyards and SRDs as:

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

Class 1 (Level 1) devices are designed only for anchorage at or above the user's dorsal D-ring location. Class 2 (Level 2) devices are intended for applications where overhead anchorages may not be available or feasible and may, in practical application, be subjected to a free fall of no more than 6 feet (1.8 m) over an edge. Class 2 (Level 2) devices are designed for anchorage above, at, or up to 5 feet below the dorsal D-ring of the user and rated for use during leading-edge work.

Not all Class 2 (Level 2) Self-Retracting Lifelines (SRLs) are specifically designed for leading-edge applications, though they can be used in those scenarios. ANSI Z359.14-2021 defines Class 2 (Level 2) SRLs as those that can be anchored at, above, or up to 5 feet below the dorsal D-ring and are tested for use near edges. While many Class 2 SRLs are designed with leading-edge capabilities, the standard does not explicitly require all Class 2 SRLs to be leading-edge rated.

ANSI/ASSP Z359.14-2021 went into effect on August 1, 2023. ANSI issued this higher safety standard to better ensure workplace fall protection. All organizations with voluntary or mandatory ANSI compliance need SRLs certified Z359.14-2021-compliant.

## ISSUES: COMMON CAUSES OF FALL

### ACCIDENTS:

- **June 16, 2021:** OSHA investigated the death of a 21-year-old laborer. The resulting decision found that the death occurred because the worker's fall arrest harness was not tethered as per regulatory requirements during building construction.
- **June 24, 2025:** Buckingham Township, PA – A 58-year-old man working on the roof of Holicong Middle School died after apparently tripping and falling 30 feet to the ground.
- **March 21, 2025:** A 20-year-old construction worker died after falling from the 19th floor of a building in downtown Atlanta. OSHA is investigating.
- **December 17, 2024:** Construction worker Tyrone Wilson, 22, fell to his death from a 6-story building while working on the VI Resort construction site in Glendale.

### WHAT YOU NEED TO KNOW:

ANSI Z359.14-2021 became effective on August 1, 2023, two years after publication. The American National Standards Institute (ANSI) and the American Society of Safety Professionals (ASSP) enacted the guidelines to simplify classifications and increase safety for Self-Retracting Lifelines (SRLs).

## REGULATIONS: COMPLYING WITH 1926.502 (A THROUGH N) PFAS (PERSONAL FALL ARREST SYSTEMS) COMPLIANCE:

### LEVEL 1 (CLASS #1) VS LEVEL 2 (CLASS #2)

#### Key Points:

1. Positioning, anchor points, and relationship to sharp edges determine classification.
2. Class 2 Lanyards and SRLs differ from Class 1 in two key ways:
  - Class 1 anchors at or above the dorsal D-ring only.
  - Class 2 includes shock-absorbing factors tested and rated for leading-edge environments.

3. The term "leading edge" is now incorporated into the broader Level 2 category.
4. Not all Level 2 devices are explicitly labeled as "leading edge," so focus on the Level 2 designation.

### IMPORTANT DO'S:

1. Select the correct lanyard or SRL for your anchoring options and fall hazards.
2. Identify the specific tasks and environment.
3. Limit the free-fall distance in all applications
4. Remember that shock-absorbing lanyards reduce impact force during falls, while self-retracting lanyards are ideal for areas with limited fall clearance.

### IMPORTANT DON'TS:

1. Don't grab any lanyard or SRL without confirming it will protect you.
2. Don't use Class 1 lanyards or SRLs for leading-edge work.
3. Don't ignore manufacturer's instructions and labels
4. Don't use shock-absorbing lanyards for heights under 18½ feet.
5. Don't skip daily inspections.
6. Don't use equipment showing wear or with unreadable labels—remove it from service immediately.
7. Don't exceed the 5-year lifespan for lanyards and SRLs after being placed in service.

Bureau of Labor Statistics. Census of Fatal Occupational Injuries (CFOI) – Current. Industry by Event or Exposure. U.S. Department of Labor, 2019, <https://www.bls.gov/iif/oshcfoi1.htm>.

American National Standards Institute (ANSI) and American Society of Safety Professionals (ASSP). ANSI/ASSP Z359.14-2021: Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems. ANSI, 2021.

"Construction Worker Falls to Death from 6-Story Building in Glendale." VI Resort Construction Incident Report, 17 Dec. 2024.

"Man Dies After Fall from Roof at Holicong Middle School." Patch, 24 June 2025, 2:16 p.m., <https://patch.com>.

OSHA. Fatality Investigation Report – Fall Arrest Harness Not Tethered. Occupational Safety and Health Administration, 16 June 2021.

## OUR PURPOSE

Lead. Make a difference. Build a better future!

## OUR VALUES

**Safety:** First. Last. Always!

**Steadfast Integrity:** Be honest. Treat other with respect.

**Exceptional Service:** Align goals. Add value. Develop lasting relationships.

**Commitment to Excellence:** Take ownership. Constantly improve.

**Focus on Team:** Listen. Collaborate. Communicate. Execute.

