ANSI Z359 A New Lift to Fall Protection Standards – Quick Tips

The Fall Protection Standards System is a series of interdependent existing and planned voluntary national consensus fall protection-related standards developed by the American National Standards Institute (ANSI) and American Society of Safety Professionals (ASSP). These standards were introduced in 1992 with the publication of ANSI/ASSP Z359.1. It was the first standard that addressed personal fall arrest systems in general industry. Since that time standards for common definitions, managed fall protection program elements, positioning and travel restraint systems, rescue systems, and more have been added. All of these standards are designed to educate workers concerning proper use of equipment and overall safe work strategies and systems to minimize the distances and consequences of falls from heights should they occur.

ANSI/ASSP Z359 Fall Protection Standards

As of this writing, the current Z359 Fall Protection Standards System includes:

Z359.0-2018 – Guidance Document for Definitions and Nomenclature Used in Z359 Fall Protection and Fall Restraint Standards

This standard provides terminology and definitions used in the ANSI/ASSP Z359 series of standards for fall protection programs, systems, and equipment. It is intended to be a reference, so that standards developers, manufacturers, system designers and specifiers, user organizations and regulators have a common language for important terminology.

Z359.1-2020 – The Fall Protection Code

A set of standards that covers program management; system design; training; qualification and testing; equipment, component and system specifications for the processes used to protect workers at height in a managed fall protection program. Provides a key to understanding and applying all of the various ANSI/ASSP Z359 that make up the Fall Protection Code.

Z359.2-2017 – Minimum Requirements for a Comprehensive Managed Fall Protection Program

Establishes guidelines and requirements for an employer’s managed fall

protection program including policies, duties and training; fall protection procedures; eliminating and controlling fall hazards; rescue procedures; incident investigations; and evaluating program effectiveness.

Z359.3-2019 – Safety Requirements for Lanyards and Positioning Lanyards

Establishes requirements for the performance, design, marking, qualification and verification testing and instructions for lanyards and positioning lanyards for users within the capacity range of 130 to 310 pounds.

Z359.4-2013 – Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components

Establishes requirements for performance, design, marking, qualification, instruction, training, use, maintenance, and removal from service of equipment used in preplanned assisted-rescue and self-rescue for one or two workers.

Z359.6-2016 – Specifications and Design Requirements for Active Fall Protection Systems

Specifies requirements for the design and performance of complete active fall protection systems, including travel-restraint and vertical and horizontal fall-arrest systems and is intended for engineers with expertise in designing fall-protection systems.

Z359.7-2019 – Qualification and Verification Testing of Fall Protection Products

Sets requirements for certification of ANSI Z359 Fall Protection Code products and components as well as requirements for third-party testing, witness testing and manufacturer self-certification of fall protection products and components.

Z359.11-2021 – Safety Requirements for Full Body Harnesses

Establishes requirements for the performance, design, marking, qualification, instruction, training, test methods, inspection, use, maintenance, and removal from service of full body harnesses used for fall arrest, positioning, restraint, suspension and/or rescue applications.

Z359.12-2019 – Connecting Components for Personal Fall Arrest Systems

Sets requirements for the performance, design, marking, qualification, test methods and removal from service of connectors.

Z359.13-2013 – Personal Energy Absorbers and Energy Absorbing Lanyards

Establishes requirements for the performance, design, marking, qualification, instructions, inspection, maintenance, and removal from service of energy absorbing lanyards and personal energy absorbers.

Z359.14-2021 – Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems

Sets requirements for performance, design, qualification testing, marking and instructions, inspection, maintenance and storage, and removal from service of self-retracting devices including self-retracting lanyards (SRLs), self-retracting lanyards with integral rescue capability (SRL-Rs), and self-

retracting lanyards with leading edge capability (SRL-LEs), comprising personal fall arrest or rescue systems.

Z359.15-2014 – Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest and Rescue Systems

Sets requirements for the design criteria, qualification testing (performance requirements), marking and instructions, user inspections, maintenance and storage and removal from service of single anchor lifelines and fall arresters for users within the capacity range of 130 to 310 pounds.

Z359.16-2016 – Safety Requirements for Climbing Ladder Fall Arrest Systems

Sets requirements for the performance; design; marking; qualification testing; instructions for use; inspection; maintenance and storage; and removal from service of vertically oriented climbing ladder fall arrest systems lifelines.

Z359.18-2017 – Safety Requirements for Anchorage Connectors for Active Fall Protection Systems

Establishes requirements for the performance, design, testing, marking and instructions for the use of anchorage connectors in travel restraint, fall arrest, rescue, work position, rope access and suspended component/tie-back line systems.

Z459.1-2021 – Safety Requirements for Rope Access Systems

Establishes accepted practices for rope access work. It is applicable for use in any environment where ropes are suspended from or connected to a structure or natural feature and used as the primary means of access, egress or support and as the primary means of secondary protection against a fall.

Future Activity

Planned ANSI/ASSP Z359 standards activity includes:

New standards in development:

Z359.9 – "Personal Equipment for Protection Against Falls – Descending Devices"
Z359.17 – "Safety Requirements for Horizontal Lifelines for Personal Fall Arrest Systems"

Summary

The ANSI/ASSP Z359 Fall Protection Standards System are constantly evolving and regularly revised. They provide organizations with a comprehensive resource for protecting workers at height.

ANSI/ASSP Z359.1-2020 is the guiding umbrella standard and will be kept up to date as other Z359 standards are revised, developed and published. Products must meet the requirements of the current version of the applicable standard when purchased. Products in use when revisions or new standards become effective may continue to be used until they are removed from service.

The ANSI/ASSP Z359 Fall Protection Standards System provides the requirements to help minimize serious injuries often caused by misuse, poor product selection,

inadequate training or possibly damaged/worn fall protection equipment. This document provides a basic understanding of the standards and the key changes that have either been incorporated or are in development. It is intended to provide an overview of the standards only. It is not an exhaustive, all-inclusive, account of every change in all of the included or planned standards.

Sources

ANSI – American National Standards Institute Z359 Fall Protection Standards System

Frequently Asked Questions

Q: Does ANSI Z359 apply to the construction industry?

A: Originally, ANSI/ASSP Z359 did not cover fall protection in construction activities. This changed in February 2015, when the Z359 committee voted that going forward its standards would cover equipment used in construction and demolition operations. Managed fall protection programs for construction and demolition operations are still under the ANSI A10.32- 2012 “Personal Fall Protection for Use in Construction and Demolition Operations” standard.

Q: What are “active” fall protection systems?

A: ANSI defines an “active” fall protection system as “a means of providing fall protection that requires workers to take specific actions, including wearing and otherwise using personal fall protection equipment and following prescribed procedures. Examples include travel restraint and fall arrest systems.”

Q: Is it okay to attach a lanyard snap hook to the side d-rings of a harness when not in use?

A: Connecting a lanyard to other areas of a harness in some cases could produce dangerous conditions. When connected to side d-rings the lanyard could drag on the ground, snag the webbing or cause a trip hazard. Generally, all harnesses should have pull-free lanyard rings on the chest strap as a convenient location to connect a lanyard that is not in use.

Source: Grainger Know How – https://www.grainger.com/know-how