

# ANSI/ASSP Z359.6-2016

## Specifications and Design Requirements for Active Fall Protection Systems

### Part of the Fall Protection Code

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**American National Standard**

**Specifications and Design Requirements  
for Active Fall Protection Systems**

**Secretariat**

**American Society of Safety Engineers**  
520 N. Northwest Highway  
Park Ridge, Illinois 60068

**Approved December 21, 2016**

**American National Standards Institute, Inc.**

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## Foreword (This Foreword is not a part of American National Standard Z359.6-2016.)

This standard, national in scope, was developed by an Accredited Standards Committee functioning under the procedures of the American National Standards Institute, with the American Society of Safety Engineers (ASSE) as secretariat. The purpose of this standard is to specify requirements for the design and performance of active fall-protection systems, including travel-restraint and vertical and horizontal fall-arrest systems. It is intended that every employer whose operations fall within the scope and purpose of the standard will adopt the guidelines and requirements detailed in this standard.

The original need for the Z359.6 standard grew out of the continuing development of a series of fall protection-related standards, known as the Z359 Fall Protection Code. The purpose of the fall protection code is to provide employers with tools that can be used to develop fall protection programs for employee protection. This is the second edition of Z359.6, the original was published in 2009. This standard, as for all Z359-series standards, applies only to occupational activities. It is not intended to apply to sports activities, such as mountaineering.

It is intended that this standard provide clarity to the Occupational Safety & Health Administration's (OSHA) regulatory requirement that fall protection systems be "designed, installed and used under the supervision of a qualified person." It has been argued that this regulation does not provide employers with sufficient information to ensure that fall protection systems are properly designed, installed and used. This standard attempts to remedy this issue.

Although this standard contains performance specifications that may be applicable to fall protection products, it is not a product standard. Individual products and components are tested and evaluated to meet the requirements of their applicable Z359-series standard.

Neither the standards committee, nor the secretariat, states that this standard is perfect in its current form. It is recognized that new developments are to be expected, and that revisions of the standard will be necessary as the state-of-the-art progresses and further experience is gained. It is believed, however, that uniform guidelines for the design of active fall protection systems are very much needed and that the standard in its present form provides for the minimum criteria necessary.

The Z359 Committee solicits public input that may suggest the need for revisions to this standard. Such input should be sent to the Secretariat, ASC Z359, American Society of Safety Engineers, 520 N. Northwest Highway, Park Ridge, Illinois 60068.

This standard was developed and approved for submittal to ANSI by the American National Standards Committee on Standards for Fall Protection, Z359. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z359 Committee had the following members:

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**STANDARD REQUIREMENTS****1. SCOPE, PURPOSE, APPLICATIONS, EXCEPTIONS AND INTERPRETATIONS**

**1.1 Scope.** This standard is intended for engineers who are trained as qualified persons and who have expertise in the design of active fall protection systems. It specifies requirements for the design and performance of complete active fall protection systems, including travel restraint and vertical and horizontal fall arrest systems.

**1.2 Purpose and Application.**

**1.2.1** This standard has been developed as a consensus document to provide uniform practice in the design of active fall protection systems. The intent of this standard is to provide specification and design requirements for conventional active fall protection systems.

**1.2.2** This standard involves the design of active fall protection systems, such as travel restraint and fall arrest, as defined in ANSI/ASSE Z359.0.

**1.2.3** In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Equivalent values in parentheses are not considered as the requirement, as these values can be approximate.

**1.2.4** Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values that are not stated as maxima or minima shall be subject to a tolerance of  $\pm 5\%$ . Unless otherwise specified, systems shall be designed for service in an ambient temperature range between 35°F (2°C) and 100°F (38°C) and the temperature limits shall be subject to an accuracy of  $\pm 2^\circ\text{F}$  (1°C).

**EXPLANATORY INFORMATION**

(Not part of American National Standard Z359.6)

**E1.1** ANSI/ASSE Z359.0 defines a qualified person as a person with a recognized degree or professional certificate and with extensive knowledge, training and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating and specifying fall protection and rescue systems to the extent required by these standards.

**E1.2.1** Unique applications may require specification and design criteria that are outside the scope of this standard.

**E1.2.2** ANSI/ASSE Z359.2 covers the application of active fall protection systems and the fall hazard hierarchy of controls, which includes preventing or eliminating exposure, and passive and active controls. Following the fall hazard hierarchy of controls, safer options for the employee protection should always be considered prior to the employer selecting the use of an active fall protection system.