

AMERICAN NATIONAL STANDARD

ANSI/ASSE Z359.1-2007 Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

Part of the Fall Protection Code

VERSION **3**



AMERICAN SOCIETY OF
SAFETY ENGINEERS



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American National Standard

Safety Requirements for Personal Fall Arrest Systems, Subsystems, and Components

Secretariat

American Society of Safety Engineers
1800 East Oakton Street
Des Plaines, Illinois 60018-2187

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Foreword (This Foreword is not a part of American National Standard Z359.1-2007.)

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.

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 need for this standards activity grew out of the continuing development of a series of fall protection related standards. The focus is to tie the elements of those standards together and provide the tools with which employers may develop the programs that incorporate those elements. This standard also brings together the administrative requirements of those fall protection standards. It should be noted, as in all Z359-series standards, that this standard applies to all occupational and non-occupational activities except those in SIC Division C (construction). It also is not intended to apply to sports activities such as mountaineering.

Neither the standards committee, nor the secretariat, states that this standard is perfect or in its ultimate 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 felt, however, that uniform guidelines for fall protection programs are very much needed and that the standard in its present form provides for the minimum criteria necessary to develop and implement a comprehensive managed fall protection program.

The Z359 Committee acknowledges the critical role of design in influencing the use of proper fall protection equipment. Designs which eliminate fall hazards through the proper application of the hierarchy of safety controls are the preferred method for fall protection. Design deficiencies often increase the risk for employees who may be exposed to fall hazards: examples are (1) lack of rail systems to prevent falls from machines, equipment and structures; (2) failure to provide engineered anchorages where use of personal fall arrest systems are anticipated; (3) no provision for safe access to elevated work areas; (4) installation of machines or equipment at heights, rather than floor/ground level to preclude access to elevated areas; (5) failure to plan for the use of travel restriction or work positioning devices. To that end, this series of standards also provides guidance for design considerations for new buildings and facilities.

Basic fall safety principles have been incorporated into these standards, including hazard survey, hazard elimination and control, and education and training. The primary intent is to ensure a proactive approach to fall protection. However, the reactive process of accident investigation is also addressed to ensure that adequate attention is given to causation of falls.

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, 1800 E. Oakton Street, Des Plaines, IL 60018-2187.

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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This is a preview of "ANSI/ASSE Z359.1-200...". [Click here to purchase the full version from the ANSI store.](#)

STANDARD REQUIREMENTS

1. SCOPE, PURPOSE, APPLICATION, EXCEPTIONS, AND INTERPRETATIONS

1.1 Scope. This standard establishes requirements for the performance, design, marking, qualification, instruction, training, inspection, use, maintenance, and removal from service of connectors, full body harnesses, lanyards, energy absorbers, anchorage connectors, fall arresters, vertical lifelines, and self-retracting lanyards comprising personal fall arrest systems for users within the capacity range of 130 to 310 pounds (59 to 140 kg).

1.2 Purpose and Application.

1.2.1 This standard addresses only personal fall arrest systems (PFAS) incorporating full body harnesses. Whenever the term "system" is used in the standard it refers to a personal fall arrest system.

1.2.2 This standard addresses equipment used in occupations requiring personal protection against falls from heights and applies to the manufacturers, distributors, purchasers, and users of such equipment.

1.2.3 Body belts, window cleaner belts, chest-waist harnesses, and chest harnesses, even when referred to as body supports, are not addressed by the provisions of this fall arrest standard.

1.2.4 Before any equipment shall bear the marking Z359.1 or be represented in any way as being in compliance with this standard, all requirements of this standard shall be met.

1.3 Exceptions.

1.3.1 The requirements of this standard do not address the construction industry (SIC Division C), window cleaning belts, and sports-related activities.

1.3.2 Although personal fall arrest systems incorporating horizontal lifelines (as well as personal protective systems for climbing, man riding, travel

EXPLANATORY INFORMATION

(Not part of American National Standard Z359.1)

E1.1 See Figures 1 through 29 for illustrations of the equipment covered by this standard. Equipment used in personal fall arrest systems is commonly referred to as "personal protective equipment" (PPE) in the literature of the safety field. Also see ANSI/ASSE Z359.0 for definition of "Capacity". The manufacturer should apply a quality assurance system such as ANSI/ASQC Q94-1987. See reference 8.6.1.

E1.2.1 See Appendix A for explanation of acronyms used within this standard.

E1.2.2 This is a voluntary consensus standard. The legal requirements for protection against falls from heights are established by applicable regulatory bodies governing occupational safety.

E1.2.3 For definitions of window cleaner belts, see reference 8.7.1.

E1.3.1 See reference 8.1.1 for definition of SIC Division C.

E1.3.2 See 3.1.4.