

ANSI/ASSP Z359.4-2013 (R2022)

**Safety Requirements for Assisted-Rescue and Self-
Rescue Systems, Subsystems and Components**

Part of the Fall Protection Code



**AMERICAN SOCIETY OF
SAFETY PROFESSIONALS**



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American National Standard

**Safety Requirements for
Assisted-Rescue and Self-Rescue Systems,
Subsystems and Components**

Secretariat

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

Approved August 25, 2022

American National Standards Institute

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American National Standard

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Foreword

(This Foreword is not a part of American National Standard Z359.4-2013 (R2022).)

This standard, national in scope, was developed by the Z359 standards committee functioning under the procedures of the American National Standards Institute, with the American Society of Safety Professionals (ASSP) 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.

History: ANSI/ASSP Z359.4 was first published in 2013 and includes requirements established in ANSI/ASSP Z359.1-2007. Individuals engaged in rescue operations in areas where exposure to a fall hazard exists will benefit from the information contained in this standard. This standard addresses equipment and performance criteria for systems, subsystems and components used in preplanned assisted-rescue and self-rescue where a fall hazard exists. Requirements for adequate training and thorough pre-planning efforts prior to the initiation of assisted-rescue or self-rescue operations address the needs of both the rescuer and the rescue subject. This standard establishes criteria for equipment marking, testing, care and use.

This standard is part of a series of American National Standards for fall protection for all occupational and non-occupational activities. It is not intended to apply to sports activities such as mountaineering, nor to specialized rescue efforts that may be associated with such activities.

Whenever fall arrest systems are used, indeed, whenever a fall hazard exists, it is necessary to plan for the effective rescue of persons who have experienced a fall event, whether it be a self-rescue application or assisted rescue application. Considering the diverse technical and environmental circumstances that can be presented to rescue personnel, development of a comprehensive rescue plan is integral to the safety of rescue personnel, the rescue subject, and the eventual success of the rescue effort.

The comprehensive rescue plan predicts circumstances that might require rescue activities, anticipates hazards associated with rescue operations, identifies methods to control those hazards, recommends the appropriate response measures and identifies the fall arrest and retrieval equipment to be used. The rescue plan may call for methods or equipment that are outside the scope of this standard, such as technical rope rescue, when such methods are reasonable and feasible and estimated to be the most effective rescue method.

Normative Requirements: This standard uses the single column format. The normative requirements appear aligned to the left margin. To meet the requirements of this standard, machinery, equipment and process suppliers and users must conform to these normative requirements. These requirements typically use the verb “shall.”

NOTE: The informative or explanatory notes in this standard appear indented, in italics, in a reduced font size, which is an effort to provide a visual signal to the reader that this is an informative note, not normative text, and is not to be considered part of the requirements of this standard; this text is advisory in nature only. The suppliers and users are not required to conform to the informative note. The informative note is presented in this manner in an attempt to enhance readability and to provide explanation or guidance to the sections they follow.

Figures: Figures provided in the standard are used to show basic concepts of testing, types of products, examples of labels or other information from the standard. These figures are not to scale. They are for educational and informational purposes to explain content within a standard.

Suggestions for Improvements: Suggestions for improvements to this standard are welcome. They should be sent to: American Society of Safety Professionals (ASSP), 520 N. Northwest Highway, Park Ridge, IL 60068, Attention: Z359 Secretariat.

Revisions: The Z359 Committee welcomes proposals for revisions to this standard. Revisions are made to the standard periodically (usually every five years from the date of the standard) to incorporate changes that appear necessary or desirable, as demonstrated by experience gained from the application of the standard. Proposals should be as specific as possible, citing the relevant section number(s), the proposed wording, and the reason for the proposal. Pertinent documentation would enable the Z359 Committee to process the changes in a timely manner.

Interpretations: Upon a request in writing to the Secretariat, the Z359 Committee will render an interpretation of any requirement of the standard. The request for interpretation should be clear, citing the relevant section number(s) and phrased as a request for a clarification of a specific requirement. Oral interpretations are not provided.

Only the Z359 Committee (through the Z359 Secretariat) is authorized to provide any interpretation of this standard.

Approval: Neither the Z359 Committee nor the American National Standards Institute (ANSI) approves, certifies, rates or endorses any item, construction, proprietary device or activity.

Appendices: Appendices are included in most standards to provide the user with additional information related to the subject of the standard. Appendices are not part of the approved standard.

Committee Meetings: The Z359 Committee meets on a regular basis. Persons wishing to attend a meeting should contact the Secretariat for information.

Standard Approval: This standard was developed and approved for submittal to ANSI by the Z359 Secretariat. Committee approval of the standard does not necessarily imply (nor is it required) that all members voted for its approval. At the time this standard was approved, the Z359 Committee had the following members:

Thomas Kramer, P.E., CSP, Chair
Dan Henn, Vice Chair
Lauren Bauerschmidt, MS Engr, CSP, STS, Secretary
Jennie Dalesandro, Administrative Technical Support

Organization Represented	Name of Representative(s)
3M	Raymond Mann Steven McPherson
AES Indiana	Nick Hutchinson Michael Wright
American Contractors Insurance Group	Michael Overholt, CSP, ARM, CET, CRIS
American Society of Safety Professionals	Mike Dickerson, CSP, MS, CRIS Jubal Hamernik, Ph.D., P.E., DPE John Stephen Frost, CSP
Ballantyne Gear, Inc.	Flent Ballantyne Steven Ballantyne
Bashlin Industries, Inc.	Caleb Williams Bradley McGill
Battelle Energy Alliance, LLC	Lawrence McManamon
Bayer AG	Adam Chapin Chad McDanel
Boeing	Joey Junio, P.E. Segis Wright, CSP, SMS
Buckingham Manufacturing Company	DeForest Canfield Justin Drake
Cajun Industries, LLC	Troy Lake
CB&I Storage Solutions	Jeff Eggert, P.E. David Freeman
Certified Access	Dave Pasco Matthew Waskiewicz
Diversified Fall Protection	Kynan Wynne Travis Nelson, CSP, P.E.
Elevated Insight & Engineering Ltd.	Greg Small, P.Eng., M.Eng.
Elk River, Inc.	Mark Conover Delisa Calhoun
Ellis Fall Safety Solutions, LLC	John Whitty, P.E. J. Nigel Ellis, Ph.D., P.E., CSP, CPE
ExxonMobil	Freddie Johnson Zachary Shanklin
FallTech	Zachary Winters Bradley Rohlf
Formetco	James Poage Chris Adams

General Motors Company	Graham Parr
GME Supply Company	Ken Mahnick
Gorbel Inc.	Daniel Pobst
Gravitec Systems, Inc.	Chris Heitkamp
Guardian Fall	Allen Baughman
Harken, Inc.	Kevin Duhamel
Honeywell	David Lough
INSPEC International Ltd.	Andre Pelland
International Safety Equipment Association	Heather Robertson
Jelco	Matt Luedtke
Kee Safety, Inc.	Giovany Gil, MS, ID
Kiewit Corporation	Jesus Velasco Garcia
KMI Construction	Paul Clarke, CEng, MIMechE
Lawrence Berkeley National Laboratory	Steven Sum
Lawrence Livermore National Security, LLC	Diana Jones
Liberty Mutual	Kevin Denis
LJB Inc.	Philip Clemons
Malta Dynamics, LLC	William Parsons, P.Eng.
Martin/Martin Consulting Engineers	Graham Willmott
MSA	Rusty Brown, CSP
Murdock Webbing Company, Inc.	Steve Sanders, P.E., P.Eng.
National Association of Tower Erectors	Jim Kinateder
Pensafe Inc.	Kevin Goodwin, MS, CSP, SMS
Petzl	Samuel Harreschou, CIH, CSP, PMP, CHMM
Pigeon Mountain Industries	Evan Kirkpatrick, MS
	Kathy Brown, MS, ASP
	Russell Robinson, Jr., MS, CHST, ASP
	Brandon Rohlfs, CSP, ASP, CHST, CRIS
	Thomas Kramer, P.E., CSP
	Rupert Noton, CEng, MIStructE
	David Ivey
	Jenna Pitcher
	Fumi Hirose
	Andrew Emmons, P.E.
	Rob Willis
	Tim Botti
	Peter Cook
	Stephan Gelinas
	John "JP" Jones
	Justin Miller
	Keith Smith
	Jeremiah Wangsgard
	Keith Luscinski
	Jeff Bowles
	Loui McCurley

Port of Seattle	Robert McMurtray
Reliance Industries	Tim Mitchell
Rigid Lifelines	Dan Henn
Schreiber Foods	W. Joe Shaw
Shell Oil Company	Arnie Galpin, P.E.
SKYLOTEC North America LP	Mark Winchester
SPRAT	Eileen Hoff, Ph.D., CHFP
STE	Kevin Lord
Sturges Manufacturing, Inc.	Douglas Mercier
SureWerx/PeakWorks	Ross Balquist
Surface Solutions	Charley Rankin, MS
TEiC Construction Services, Inc.	Cedric Smith
Terracon	Michael Wright, P.E., CPE, CSP
Travelers	Mark Williams
Tritech Fall Protection Systems, Inc.	Tyler Griffith
U.S. Air Force	Gabriele Fusco, P.Eng.
U.S. Army Corps of Engineers	Samuel Terry
U.S. Bureau of Reclamation	Art Schneider
U.S. Department of Energy	Shayne Powers
U.S. Department of Interior - BSEE	Sarah Baker
U.S. Navy	Matt McElvogue, P.E., RWC, RRO
UAW	Adam Maier
UL	Scott Richert, CSP, ARM, ALCM
Vertical Access LLC	Craig Siciliani, P.E.
Wagman, Inc.	Meridith Conser, P.E.
Walt Disney Parks & Resorts	Robert Baker
Werner Co.	Robert Foster
Western Area Power Administration	David Kloewer, P.E.
	Jason Walsh, CSP, SMS
	Allison Cryns
	Corey Dickson
	Scott Wenholz, CIH, CSP
	Thomas Rizzi, D.C, CSP
	John Cushing, Jr.
	David Nedorostek
	Charles Gum, CSP, ASP
	Matthew Uptmor, OHST
	Beverly Stutts
	Andrew White
	Kelly Streeter, P.E.
	Chris Daniels, P.E.
	Ian Bevan
	Michael Cameron
	Cody Rappoport
	Edward Crowson

WJE

Zachry Group

Daniel Gach
Kurt Holloway, P.E., SE
Don Hurley, CSP

Independent Experts & Observers:

Flexible Lifeline Systems
High Engineering Ltd.
Lighthouse Safety, LLC
National Institute for Occupational Safety & Health
U.S. Department of Labor - OSHA

Michael Bailey, P.E.
Brendon Kerber, M.Eng., P.Eng.
Kaylie Lenz
Mathew Hause, BS
Mark Hagemann
William Zettler

Subgroup Z359.4 had the following members:

Bradley Rohlf, Chair
Laura Allen, ASP
Jason Bird
Andrew Bush
Paul Clarke, CEng, MIMechE
Kevin Denis
J. Nigel Ellis, Ph.D., P.E., CSP, CPE
Aaron Gibson, MS, CSP
Mark Green
George Jerome
Thomas Kramer, P.E., CSP
Loui McCurley
Matt McElvogue, P.E. RWC, RRO
Douglas Mercier
Charlie Rankin, MS
Alex Stroshane
Beverly Stutts
Diane Waghorne
Mark Winchester
Michael Wright, P.E., CPE, CSP

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AMERICAN NATIONAL STANDARD Z359.4
SAFETY REQUIREMENTS FOR
ASSISTED-RESCUE AND SELF-RESCUE SYSTEMS,
SUBSYSTEMS AND COMPONENTS

1. Scope, Purpose, Applications, Exceptions and Interpretations

1.1 Scope

This standard establishes requirements for the performance, design, marking, qualification, instruction, training, use, maintenance and removal from service of connectors, harnesses, lanyards, anchorage connectors, winches/hoists, descent control devices, rope tackle blocks and self-retracting lanyards with integral rescue capability comprising rescue systems utilized in pre-planned self-rescue and assisted-rescue applications for one to two persons.

1.2 Purpose and Application

The purpose of this standard is to establish criteria to ensure suitability of the equipment and methods defined herein for use in rescue situations where a fall hazard exists.

Rescue system elements, components or subsystems meeting the requirements of this standard may not be represented as complying with or used in personal fall arrest systems (PFAS) claiming compliance with ANSI/ASSP Z359.1-2007 or other relevant Z359 standards unless the requirements of that standard are additionally met. The requirements of this standard supersede any corresponding requirements in ANSI/ASSP Z359.1-2007 American National Standards

1.3 Exceptions

1.3.1 The requirements of this standard do not address sport-related activities, rope access rescue techniques utilized by certified rescue technicians or other tasks that have established national consensus standards. However, this does not preclude use of equipment addressed within this standard for such activities where appropriate.

1.3.2 The competent person shall determine the suitability of equipment addressed within this standard for activities conducted in hazardous atmospheres.

NOTE: For a definition of competent person refer to the ASSP Z359.0, Z359 Committee Guidance Document for Definitions and Nomenclature Used for Fall Protection and Fall Restraint Standards, and for additional information refer to ANSI/ASSP Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program.

1.4 Interpretations

Requests for interpretations of this standard shall be in writing and addressed to the Secretariat of this standard.

2. Definitions

Please refer to ASSP Z359.0, Z359 Committee Guidance Document for Definitions and Nomenclature Used for Fall Protection and Fall Restraint Standards, for definitions of terms used in this standard.

3. Requirements

3.1 System Requirements

3.1.1 A rescue system shall be used only if attached to an anchorage, or anchorage with anchorage connector, which complies with the requirements of this standard.

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