

Safety Requirements for Personal Fall Arrest Systems

The Z359 Accredited Standards Committee (ASC) is currently revising ANSI Z359.1, Safety Requirements for Personal Fall Arrest Systems. In this interview excerpt, Randy Wingfield, chair of the Z359 ASC on Fall Protection and Related Systems, provides an update on the standard's revision process.

PS: What is the status of the revision of ANSI Z359.1 and what changes will be included?

RW: The technical committee has voted on and approved the majority of the standard. We hope that it will go to public ballot and be ready for release in late 2006.

The Z359.1 standard originated in 1992. It underwent minor revisions in 1999 and it has remained unchanged since then. While the existing standard focuses primarily on the design and testing of specific fall equipment items, the revised standard will include this information along with additional specifications for fall protection program development, fall hazard assessment, key person responsibility, training and program maintenance. The standard now also includes information on work-positioning systems and rescue systems, and features new sections such as a comprehensive guide for the development of a managed fall protection program.

The revised standard is designed to be a living document that will change as industry and technology advance. It will offer those interested in fall protection a comprehensive document that will facilitate the generation of a new fall protection program or will augment an existing one.

PS: How is third-party certification of fall arrest and protection equipment performed? Why do you believe it is of value to SH&E professionals?

RW: Third-party certification of equipment requires that each item of equipment be tested and sent to an independent, unbiased outside testing organization to determine whether the equipment meets the design and performance requirements given in the standard. Historically, ANSI has not required third-party testing for fall protection equipment. Therefore, manufacturers have performed their own testing and have attested to the equipment's compliance with the standard. Since the testing methods and standards may allow some interpretation, combined with the variation in testing abilities from one manufacturer to another, inconsistencies have resulted. The lack of unbiased third-party testing has allowed items to be labeled as meeting the ANSI standard when, in fact, they do not.

Most large equipment manufacturers have conducted third-party certification for years because their product lines are sold in other countries or in specific industries that require it. This creates a market that can be confusing for consumers because it is difficult to determine which items have been independently tested and which have not. Third-party testing is beneficial, not only for SH&E professionals, but also for the entire industry, as it standardizes testing and increases equipment quality. If an independent organization has tested equipment according to a set standard, consumer confidence will increase.



Randall Wingfield

is founder, president and CEO of Gravitec Systems Inc., a Bainbridge Island, WA-based firm that offers fall protection education and training; engineering systems design; industrial rescue; design and development of courses;

PS: What measures will the ASC take to ensure that state and federal governments recognize the revised Z359.1 standard? Do you anticipate any challenges?

RW: OSHA has participated in the development of Z359.1 since its conception. Governing bodies recognize advancements in the industry, and recognition and acceptance of the standard by federal and state governments will occur over time.

PS: Do you believe the revised Z359.1 standard should be recognized in other areas?

RW: The Z359.1 standard was not written with a specific industry in mind. We believe the standard has something to offer every organization that encounters fall hazards. For example, the construction industry could use the standard's hazard assessment sections, and the communications industry could benefit from the training sections.

PS: What other projects does the Z359 ASC have in development?

RW: The Z359.1 committee is proud of the commitment that everyone has given to the revision of this standard during the past four years. Although this standard is quite comprehensive, the committee plans to develop additional information for engineered systems (horizontal lifelines), hardware compatibility, rope access and rescue. These issues are scheduled as future projects for the committee.

training and engineering; and consulting in systems design and equipment purchases. He has been involved in the continuing development of national and international standards for fall protection equipment and training, and is president of the International Society for Fall Protection, chair of the ANSI Z359 Committee, and past vice chair of the Canadian Standards Association Z259 Committee. Wingfield is a member of ASSE's Puget Sound Chapter.