

COUNCIL ON PRACTICES AND STANDARDS

Serving the Specialist of the
Safety, Health and Environmental
(SH&E) Profession

ASSE's Council on Practices and Standards provides you with the following article.

If you would like to reprint this article in your Chapter Newsletter, please notify Rennie Heath at rheath@asse.org and credit the Council on Practices and Standards. In addition, please refer readers to the <http://www.asse.org/practicespecialties> website.

An Inside Look at the Z359 Fall Protection Code Through Capital Safety

Capital Safety's Craig Firl, North American Technical Manager, and Tom Wolner, Vice President of Engineering, each have more than 25 years of experience in the fall protection industry and have contributed significantly to the development and widespread implementation of the new ANSI/ASSE Z359 Fall Protection Code.

In this interview, Firl and Wolner explain their involvement in the Code and discuss its impact on Capital Safety.

How were you each involved in the development of the new ANSI/ASSE Z359 Fall Protection Code?

Wolner: I have been involved with the ANSI/ASSE Z359 Accredited Standards Committee for Fall Protection since its formation in the mid-1980s. I served as Subcommittee Chair of the rescue portion of the new Code.

Firl: I help deliver the information in the Code and educate people on its requirements. Capital Safety has created online programs and has presented in the field to further educate the public on this important Code.

In what ways has the Code impacted the manufacture of Capital Safety's fall protection equipment?

First, connectors (snap hooks and carabiners) that met the Code's requirements needed to be developed, tested and manufactured. These new connectors needed to be incorporated into the many lanyard, lifeline and self-retracting lanyard configurations across our product offerings.

Other provisions of the Code needed to be revised and validated for each fall protection product offering. This included testing to new requirements, updating product markings and revising product instructions where necessary. In general, the manufacturing process was monitored closely as we transitioned to new Z359.1-2007-compliant products. Snap hooks and carabiners in particular were monitored to ensure that inventory levels met demands.

Additionally, the Code's release has impacted our view of the future as we look to develop new solutions that make it easier for our customers to comply with the Code.

How have Capital Safety's customers reacted to the Code since its release in 2007? Does customer feedback vary by industry or line of business?

In general, acceptance can be described as cautious, but steady. Changes to the snap hook gate strengths have been one of the driving forces behind many companies accepting and adopting the new standard.

We see no noticeable differences in acceptance among industries. Many large companies have led the adoption of the new standard, and most customers have replaced their old products with Z359.1-2007-compliant products.

Capital Safety refers to the standard "Minimum Requirements for a Comprehensive Managed Fall Protection Program" (ANSI/ASSE Z359.2-2007) in its training and consulting services. What other aspects of the Code (or other standards) does Capital Safety include when training or consulting, and how have students and clients responded? What are their greatest fall protection training and consulting needs?

Many areas are covered or discussed during training, especially "Safety Requirements for Positioning and Travel Restraint Systems" (ANSI/ASSE Z359.3-2007) and "Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components" (ANSI/ASSE Z359.4-2007). These topics are not addressed in detail in any OSHA standard. Therefore, when people seek guidance on positioning, travel restraint or rescue, the Code provides assistance in setting up and using these types of systems.

We also use "Definitions and Nomenclature Used for Fall Protection and Fall Arrest" (ANSI/ASSE Z359.0) in many areas of training.

Does Capital Safety implement the Code in its own manufacturing processes?

Yes we do. Whenever our personnel use fall protection in our facility or in the field, they follow the Code. For example, our maintenance workers are trained in accordance with and comply with the Code's requirements when working at height on plant equipment.

The Code is used as the basis for training of our sales agents, with many graduating to competent or qualified person competency levels.

How has Capital Safety's product line changed to meet the Z359 Fall Protection Code?

Most of our product offering is similar, but we have made it compliant with the Code.

How has Capital Safety addressed 3,600-lb. gate within its own product line?

Developing new hooks and carabiners to comply with the new gate strength requirements and ensuring that the hooks were continuously available required a significant amount of work.

During the transition periods, the new hooks, as well as the original hooks, needed to be supported. A second set of SKUs were created for lanyards with the new hooks.

Harnesses are manufactured for workers between 130-310 lbs. fully loaded. How has Capital Safety addressed harnesses for total worker loads more than 310 lbs.?

Capital Safety offers harnesses with a capacity of 420 lbs. We have designed a test program to verify that the harness is capable of supporting this weight.

Tom Wolner, you served as Z359.4 Subcommittee Chair. How do you believe the standard, "Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components" (ANSI/ASSE Z359.4), will change rescue procedures?

The major focus of the Z359.4 standard was to emphasize the need for preplanning each potential rescue scenario with the expectation that employers and equipment users will use the Code to develop effective rescue procedures. This preplanning process includes analysis of rescue needs, equipment selection, training and periodic evaluation of training effectiveness. The equipment types and performance requirements included in the Code were specifically geared toward preplanned rescue events to support this approach.

ASSE has received many questions regarding equipment that meets the older version of the standard, "Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components" (ANSI/ASSE Z359.1) but not the newer version. How does Capital Safety advise clients who want their equipment to meet the new Z359.1 standard?

With a few exceptions, equipment that complied with the 1992 version of the Z359.1 standard cannot be made compliant with the 2007 version. We advise customers to use their existing equipment until it must be replaced then to purchase new equipment that complies with the 2007 version.

What areas of fall protection standardization do you believe the ANSI/ASSE Z359 Accredited Standards Committee for Fall Protection should pursue in the future?

A standard is needed that addresses horizontal lifeline systems used for fall protection. This is a current work item for the committee, and we look forward to its publication. Likewise, other new work items are addressing gaps in the Code.

How do you predict the Code will impact the overall safety, health and environmental (SH&E) profession in the long term?

Overall, the Code is extremely comprehensive and provides the most current information on fall protection. Capital Safety believes that the Code will help provide a safer environment for workers at height and will ultimately help reduce injuries and deaths from falls.

What advice do you have for SH&E professionals who wish to incorporate the Code successfully into their current fall protection program?

Read the entire code and become familiar with it. Consult with organizations, including equipment manufacturers, to understand what products and training services are available.



Craig Firl

Capital Safety designs and manufactures height safety and fall protection equipment. For more than 25 years, Craig Firl has served the company in many capacities, including engineering support, quality assurance, customer support, marketing and technical services. Firl has extensive knowledge in the areas of fall protection applications, product support and service, product development and fall protection standards/regulations. He has helped teach clients the requirements of ANSI standards and OSHA regulations and how to comply. He has conducted research and has given presentations on all topics related to fall protection to associations and work councils as well as to the International Society for Fall Protection (ISFP). Firl has also authored many articles on fall protection and confined space principles that have appeared in a variety of safety and industry-specific trade publications.



Tom Wolner

Tom Wolner is Vice President of Engineering for Capital Safety and serves on the American National Standards Committee on Standards for Fall Protection and other related standards committees.

For more information on the Z359 Fall Protection Code, visit:

<http://www.asse.org/cartpage.php?link=Z359-PKG>

To meet the Z359 Accredited Standards Committee for Fall Arrest & Protection, visit:

<http://www.asse.org/publications/standards/z359/committee.php>