

## Fall Protections' most confusing term is...

With so many to terms choose from, it's difficult to think what the most confusing fall protection term is! I vote for the word **certified**. There is a general misunderstanding that all equipment goes through some type of national certification or a consumer-protection type agency because it's life-saving equipment. This isn't true. The act of certification isn't really confusing, it's all of the certification options, who certifies, what gets certified, and how. Certification is defined as "officially recognized as possessing certain qualifications or meeting certain standards". This definition works for fall protection equipment. It gets confusing when we look at who is doing the official recognition and what qualifications or certain standards are being met.



I'm going to make some general statements in this article and am not writing about exceptions or any specific piece of equipment. I'm writing according to the practices found in the United States for safety professionals operating under Federal OSHA (I am however going to mention Canada and the CSA). Reach out to me if you have questions, I'm always happy to chat, but my objective with this article is to explain the basic process, not the exceptions or minutia of products and testing. I'm going to use the who, what, when, where, why, and how method, but am changing the order to why, what, who, how, where, and when.

**WHY Certify?** Fall protection products are certified to ensure design, manufacturing, and specifications are met and to demonstrate compliance with occupational health and safety laws. Other reasons are sales and liability related, but for the safety professional the two main reasons are quality and compliance. People want to know that the equipment they purchase is of good quality and legal to use.

**WHAT gets Certified?** The individual piece(s) of fall protection equipment is what gets certified. Fall protection equipment is organized into groups or families based on purpose and common design. These groups include harnesses, lanyards, self-retracting devices, horizontal lifelines, fall arrestors, anchorage connectors, hardware components, and energy absorbers (fall protection systems can be certified too, refer to [ANSI Z359.6](#)). To certify equipment, a list of specifications must exist. In the US, there are two main sources of specifications for fall protection products (I know there are several more, but I try to keep articles to two pages). The first source is the Occupational Health & Safety Administration (OSHA). Specifications for products exist in 1926.502 and 1910.140 and test methods are found in the appendices to both of these regulations (there are others I know, again, two-page article). The second source is voluntary consensus standards published by the American National Standards Institute (ANSI). Neither of these organizations performs testing or certifications, they only provide the specifications. The Canadian Standards Association (CSA) also has specifications for fall protection equipment. There is some synergy between ANSI and CSA specifications since many manufacturers supply equipment to both countries and you often see products labeled with OSHA, ANSI, and CSA.

Product Tested	"Certified to" Options		
	OSHA	ANSI	CSA
Harnesses	Subpart M & App C / Subpart I & App D	Z359.11	Z259.10
Connectors	Subpart M & App C / Subpart I & App D	Z359.12	Z259.12
Energy Absorbing Lanyards	Subpart M & App C / Subpart I & App D	Z359.13	Z259.11
Self-retracting Devices	Subpart M & App C / Subpart I & App D	Z359.14	Z259.2.2
Horizontal Lifelines	Subpart M & App C / Subpart I & App D	N/A	Z259.13
Lifelines & Fall Arrestors	Subpart M & App C / Subpart I & App D	Z359.15	Z259.2.5
Anchorage Connectors	Subpart M & App C / Subpart I & App D	Z359.18	Z259.15

This isn't a complete list. There are several other products (descent control devices, rescue products, hoists, ladder systems, nets, guardrails, etc.) and several other standards (ASTM, CI, NFPA, other ANSI standards, etc.). The point to emphasize is requiring or asking for certified products isn't enough if you don't ask or know to which standard or

regulation the product is certified. There are two parts to certification; who officially recognizes it and to what specification. If someone states the product is certified, the next question should be “by whom and to what specification?”.

**WHO Certifies the product?** The manufacturer of the product certifies it. OSHA does not certify products and neither does ANSI. Search “does OSHA certify products?” and you will find several letters regarding OSHA’s position. In any ANSI Z359 standard, read the Forward and the preceding page to understand ANSI’s position or search “voluntary consensus standard”. Unfortunately, it’s common to read or be told products are “OSHA certified” or “ANSI certified”. Although the product may meet OSHA or ANSI specifications, the subtlety in the wording is important. To be accurate, products are certified **to** OSHA specifications, not **by** OSHA. Products are certified **to** ANSI standards specifications, not **by** ANSI. It’s a minor distinction and many times is an honest mistake to make. Most people may not have the time or care to understand the difference, but whenever I hear someone stating the XXX is OSHA or ANSI certified they either don’t know or are taking advantage of this misunderstanding to sell a product.

Ultimately, it’s the manufacturer of the product who certifies it. Some products will carry a ‘third-party’ certification where an organization other than the manufacturer certifies the product. Third-party certification builds consumer confidence, but it isn’t required or conducted on all products and it is still driven by the manufacturer. The manufacturer certifies the product by indicating the standard or regulation number on the label (as well as instructions, web pages, sell sheets, declarations, certificates, etc.). It’s important to understand in regards to WHO, that no consumer agency, inspector, government board, or entity exists that approves or disapproves equipment being certified or sold.

**HOW do products get Certified?** In the US, products get certified by vetting them through a series of tests and audits dictated by the specifications (design, marking, strength, labeling, performance, documentation, etc.). The equipment manufacturer has three basic ways to accomplish this. #1) If they are buying an OEM product, they can use the certification provided by the OEM. The OEM has conducted the testing and the manufacturer has not made any changes to the product, so the OEM certification is used. #2) The manufacturer can test the product themselves and certify. If the manufacturer has the facility and related equipment, they can test to the applicable regulation or standard and certify the product. #3) The manufacturer can contract a third party who does all the testing and certifies the product. In theory, all of these options should be the same because they are all tested to the same specification.

**WHERE do products get Certified?** Products are tested in a testing facility that has the necessary weights, drop towers, measuring equipment, and supporting resources (people, software, recording equipment, etc.). If the product is being marketed as compliant with an ANSI Z359 standard, the test facility must be accredited to [ISO 17025 Testing and Calibration Laboratories](#). ISO 17025 accreditation ensures the test facility is following accepted and sound calibration, testing, and documentation practices. An ISO 17025 test lab must be used regardless of who conducts the certification (OEM, manufacturer, or third-party).

**WHEN do products get Certified?** Ideally, products are certified before they are made available to the public. OSHA does not specify a time or maintenance frequency, but ANSI Z359 products undergo qualification testing before the product can be labeled with the ANSI number. After being qualified, products are put on a two or five-year cycle of verification testing to maintain product certification (See [ANSI Z359.7](#)). Keep in mind that these timelines only apply to products being marketed as compliant with an ANSI Z359 standard. Products marked to an OSHA standard only need to be tested once. Products marked to CE, NFPA, CSA, or other standards may have different testing frequencies.

The vast majority of fall protection equipment in the US has been tested in an ISO testing facility and certified to an OSHA or ANSI specification. Unfortunately, without a national watchdog or enforcement agency; counterfeiting, fraudulently labeled products, mistakes, and interpretation still occurs. When shenanigans occur, the only option a consumer has is to not buy the product. People can take legal action, but unless there are some damages, a refund is about as far as someone will get. Blatant fraud is very rare, but it’s possible that fall protection equipment can make its way to a user without ever even being tested, it’s still a buyer-beware market. Generally speaking, consumers do not have to worry

when sourcing equipment from major manufacturers. Sourcing equipment from Bill & Ted's Harness Emporium will have issues, but not with major manufacturers.

I encourage everyone to ask who, what, when, and where before investing in fall protection equipment. Before you invest in equipment, do some investigation. Talk to your local safety supplier or your purchaser. Find out who made it, who tested it, to what specifications, and where testing was conducted. You don't have to be an expert or understand all of the answers. As a consumer, you are looking for answers that make sense, give you confidence in your purchase, and can be validated. It doesn't take much to uncover suspicious activity. Every reputable manufacturer is very open with where the product was made, how it was tested, and to what specifications.

I hope I didn't create more confusion.

Work-at-Height provides training and consultation services to fall protection professionals and organizations. If you are interested in training for [WAH Fall Protection Specialist](#), [Competent Person](#), [Competent Trainer](#), or [Program Manager](#), e-mail me at [denis@wahmember.com](mailto:denis@wahmember.com) for more information.