



TESTED IN Z359.7/ISO 17025  
COMPLIANT LAB

# FAQ

## ANSI Z359.18-2017

The following information answers some of the most commonly asked questions we've received regarding Guardian's move to ANSI Z359.18-2017 compliance. For more background on Z359.18-2017, and our decision to seek Z359.18-2017 compliance, please see our white paper, Guardian Fall Protection and the New ANSI Z358.18-2017 Anchorage Connector Standard, [here](#).

### 1 WHAT IS ANSI Z359.18-2017?

ANSI Z359.18-2017 is a newly released ANSI standard that governs the manufacture and performance requirements of fall protection anchorage connectors.

### 2 WHAT IS ANSI Z359.1?

ANSI Z359.1 is the original ANSI standard for fall protection equipment and was released in 1992. It was last updated as a product standard in 2007. Since 2007, ANSI has introduced individual product standards, and in 2016, restructured Z359.1 away from a product standard and into an overview document for the entire Fall Protection Code.

### 3 CAN MANUFACTURERS CONTINUE TO COMPLY WITH OLDER VERSIONS OF ANSI Z359.1?

No. As of August 2017, Z359.1 is no longer a product standard. All fall protection products must follow the requirements of their respective individual ANSI product standard. While manufacturers may still sell product already marked to the old standard, they may not produce new product to the old standard after the grace period, which ended in February 2018. For a full list of the individual standards, please see the restructured ANSI Z359.1-2016 standard here. For a full list of the individual standards, please see the restructured ANSI Z359.1-2016 standard here.

### 4 WHY ARE GUARDIAN PRODUCTS TRANSITIONING TO ANSI Z359.18-2017?

With the sunset of ANSI Z359.1-2007 as a product standard, Guardian is choosing to maintain compliance with ANSI Z359.18-2017 for all anchorage connectors as part of its dedication to making fall protection products to the highest possible standards.

### 5 WHAT DO THE DIFFERENT ANCHOR TYPES IN ANSI Z359.18-2017 MEAN?

- **Type T** anchorage connectors are designed to support a suspended component/tie-back line or for an active fall protection system
- **Type D** anchorage connectors are designed to allow deformation or movement when arresting a fall with the purpose of absorbing fall energy and reducing the strength requirements of the anchorage to which it is attached. Deformation may be permanent or temporary. In some cases, these anchorage connectors may not be suitable for work positioning, rescue, rope access and suspended component tie-back because of their low serviceability load rating. Also, travel restraint may be acceptable based on the serviceability ratings and deformation limits of the individual product.
- **Type A** anchorage connectors are any anchorage connector other than a Type T or Type D for an active fall protection system

### 6 WHAT IS THE DIFFERENCE BETWEEN ANSI Z359.1-2007, OSHA 1926 SUBPART M, AND ANSI Z359.18-2017 AND IN REGARD TO TESTING?

ANSI Z359.1-2007 required anchors to withstand a static 5,000 lbs. load. OSHA 1926 Subpart M in effect follows the same requirements of Z359.1-2007, and requires anchors to be able to withstand a 5,000 lbs. load, or maintain a 2:1 safety factor relative to the potential impact energy of a falling worker. ANSI Z359.18-2017 requires a similar 5,000 lbs. static test, but has added a dynamic drop test, a residual strength drop test, and a serviceability (working load) test. In addition, anchors composed of ferrous (non-stainless or galvanized) materials must also be tested for corrosion resistance.

### 7 WHAT ARE THE DIFFERENT TESTS FOUND IN ANSI Z359.18-2017?

- **Static Strength:** Type A and Type T anchors must withstand a minimum 5,000 lb. load. Type D anchors must withstand a static load between 2,700 lbs. and 5,000 lbs., and their deformation must be measured so that it may be accounted for in fall clearance calculations.
- **Dynamic Strength:** Type A and Type T anchors must not allow a 282 lb. test weight to impact the ground when dropped with a 3 ft. free fall, while Type D anchors must do the same but with a 6 ft. free fall.
- **Residual Strength:** Is simply a repetition of the initial dynamic test for Type A and Type T anchors. Residual testing for Type D anchors is also a repeat of the dynamic strength test, but with a 3 ft. free fall.
- **Serviceability Load Test:** Serviceability load testing is not required for Type A anchors, however for Type T anchors it is done by applying the greater of twice the working load or 2,500 lbs., applied at up to 900 lbs. per minute and maintained for at least 3 minutes. For Type D anchors, serviceability testing is done by applying the greater of twice the working load or 450 lbs., applied gradually over at least 1 minute and maintained for at least 3 minutes.
- **Corrosion Testing:** For Type A and Type D anchors, ferrous components of the anchorage connector cannot show evidence of red rust or other corrosion after two, 24-hour salt spray exposures. For Type T anchors, ferrous components of the anchorage connector cannot show evidence of red rust or other corrosion over more than 5% of their surface area after a 500-hour salt spray exposure.

### 8 ARE ALL GUARDIAN ANCHORS ANSI Z359.18-2017 COMPLIANT?

While a portion of Guardian anchors are ANSI Z359.18-2017 compliant and will be released into the market on an ongoing basis, testing is a time and labor intensive process. Many anchors will be .18 rated, and where alternative solutions are needed, we will be rating anchors as OSHA compliant.

### 9 DOES GFP SELL ANCHORS THAT ARE COMPLIANT ONLY WITH OSHA 1926 SUBPART M REGULATIONS?

Due to ongoing testing and the directive to no longer claim compliance with the restructured ANSI Z359.1-2007 standard, Guardian will rate some products as OSHA compliant based on specific applications where it is most appropriate. Anchors rated as OSHA compliant have been rigorously tested to ensure OSHA compliance. However, we will be diligently work to bring all anchors to ANSI Z359.18-2017 compliance as soon as possible.

### 10 WHAT IS THE DIFFERENCE BETWEEN ANSI AND OSHA COMPLIANCE?

ANSI is a voluntary national consensus standard that offers additional testing and performance requirements as determined by industry and safety professionals. They are used by manufacturers to provide technical guidance in the design and performance of fall protection equipment.

OSHA regulations are legally binding, and compliance by employers is mandatory. Products that are compliant with OSHA regulations are safe for all applications as indicated by the manufacturer.

### 11 ARE ANSI Z359.1-2007 ANCHORS STILL SAFE TO BUY/USE?

Yes. ANSI Z359.1-2007-compliant anchors either already installed or manufactured prior to the effective date of ANSI Z359.18-2017 may continue to be used as directed by the manufacturer's instructions.

### 12 IS ANSI Z359.18-2017 RESULTING IN ANY CHANGE TO PRODUCT INSTALLATION, FASTENER REQUIREMENTS, OR SUBSTRATES?

Guardian will make every effort to maintain previous performance specifications regarding product installation, fastener requirements, or substrates. If testing results indicate a product change is necessary to maintain ANSI Z359.18-2017 compliance, Guardian may update the product installation, fasteners, or substrate requirements. Any changes will be noted in the instructions and the official online tech bulletin here.

### 13 WHO CAN TEST PRODUCTS TO ENSURE THEY'RE ANSI COMPLIANT?

ANSI compliance testing must be performed by a test lab accredited to the ISO 17025 standard. Guardian Fall Protection's test lab meets all necessary requirements for product testing.

### 14 WILL OSHA REQUIRE ANSI Z359.18-2017 COMPLIANCE?

ANSI standards are voluntary guidelines used by manufacturers to design, manufacture, and test fall protection equipment. OSHA may refer to the requirements found in ANSI standards indirectly, but OSHA does not explicitly require a product be ANSI compliant.

### 15 IS GUARDIAN FALL PROTECTION CHANGING ANY POLICY RELATING TO ALTERNATE FASTENER USE FOR FALL PROTECTION ANCHORAGE CONNECTORS?

Guardian will move away from specifying any name-brand fastener, and instead issue minimum technical specifications for compatible fasteners. This will provide more latitude for competent persons to select appropriate fasteners for installation.