



Z359 COMMITTEE BULLETIN

Fall Protection and Related Systems

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QUESTION: As a building owner with anchorages on roofs used for a variety of purposes related to worker safety, I am working to fully comply with the OSHA regulations for anchorage certification. Does ANSI/ASSP Z359 address anchorage certification? If so, are anchorages required to be load tested per ANSI/ASSP Z359?

ANSWER: Certification of anchorages and active fall protection systems is addressed in ANSI/ASSP Z359.2-2017 and ANSI/ASSP Z359.6-2016. However, load testing of anchorages is not currently in the ANSI/ASSP Z359 Fall Protection Code. If you are looking for a specific interpretation from OSHA, you will need to submit such a request to the agency itself. However, from our view neither OSHA nor Z359 explicitly require field load testing of anchorages for fall protection. Since some anchorages are designed to deform and absorb energy during a fall arrest, load testing of these anchorages could render them unusable. Such anchorages may be non-certifiable via load testing due to the inelastic deformation mobilized to develop the required strength.

However, OSHA does require anchorages for rope descent systems and powered platforms to have their structural capacities certified before being placed into service and defines the required capacities. The means of certification is indicated by OSHA to be a test, but the means and methods of testing are not defined. Load testing of an

anchorage, in conjunction with evaluation of construction documents and/or observation of connections, may assist in demonstrating that the OSHA required capacity exists.

Structural building and materials codes contain provisions regarding in-situ load testing of structural elements to confirm their capacities, and applicable portions of these provisions should be utilized when conducting anchorage load tests for certification purposes.

In addition to code requirements, it is important to consider the following:

- Certification of a given capacity via load test can only be achieved by applying loads or load effects at least equal to the capacity being certified along with structural analysis, evaluation and observation.
- It is not possible to certify an anchorage to a given capacity using a test load of a lesser value unless the test is done in conjunction with extensive structural analysis or evaluation.
- The test load should be applied in each direction the anchorage may be loaded during its life.
- Use of structural analysis before load testing can identify potential deficiencies in the anchorage or supporting structure's design capacity before applying loads that may induce damage.
- One best practice to consider is load testing of anchorages to be performed under the direction and supervision of a qualified person.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he/she has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

Neither the standards committee, nor the secretariat, states that this standard is perfect or in its ultimate form. It is recognized that new developments are to be expected, and that revisions of the standard will be necessary as the state-of-the-art progresses and further experience is gained.

For more information about the Z359 Committee and fall protection/arrest standards visit:
[www.assp.org/standards/standards-topics/fall-protection-and-fall-restraint-\(z359\)](http://www.assp.org/standards/standards-topics/fall-protection-and-fall-restraint-(z359))