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Z259.15-17

Anchorage connectors

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Anchorage connectors

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CSA Group and the Subcommittee extend their appreciation and gratitude to Alex Tsen for his leadership, dedication, and expertise as the TSC Chair for the development phase of this new edition.

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Preface

This is the second edition of CSA Z259.15, *Anchorage connectors.* It supersedes the previous edition published in 2012 under the same title. It is part of a series of Standards on components of fall-protection systems. This Standard specifies performance, design, testing, marking, classification, and other requirements related to anchorage connectors in travel-restraint, fall-arrest, work-positioning, and suspended component/tie-back line systems.

Major changes in this edition include the following:

a) The annex on Class A or AT weld-on or bolt-on metallic anchorage connectors was updated. (See Annex C);
b) The annex on Class AD tie-back self-retracting devices for use as fall-protection anchorage connectors was deleted and an updated version was incorporated into Z259.2.2-17; and
c) The annex titled "Class A tie-back lanyards for use as fall-protection anchorage connectors" was updated and renamed to "Class AD tie-back lanyards for use as fall-protection anchorage connectors". (See Annex G).

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

CSA Group acknowledges that the development of this Standard was made possible, in part, by the financial support of the Canadian government departments responsible for occupational health and safety.

This Standard was prepared by the Subcommittee on Anchorage Connectors, under the jurisdiction of the Technical Committee on Fall Protection and the Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* ***standardsactivities.csa.ca****.*
5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

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Z259.15-17
Anchorage connectors

1 Scope

1.1
This Standard specifies performance, design, testing, marking, classification, and other requirements related to anchorage connectors in travel-restraint, fall-arrest, work-positioning, and suspended component/tie-back line systems.

1.2
The requirements of this Standard include (where applicable) anchorage connectors attached to an anchorage. Methods of verifying the actual strength of anchorages in the field are not included.
Note: *See CSA Z259.16 for anchorage design and construction requirements.*

1.3
This Standard does not differentiate between temporary, portable, and permanent anchorage connectors.

1.4
With the exception of multi-legged frames (e.g., tripods) and personnel davit arms, this Standard does not apply to ballasted, friction, counterweight, or vacuum anchorage connectors that rest on but are not fastened to an anchorage.
Note: *See CSA Z259.16 for requirements for some of these types of anchorage connectors.*

1.5
This Standard does not apply to
a) equipment davit arms meeting the requirements of CAN/CSA-Z271;
b) anchorage connectors that are
   i) custom engineered for limited or site-specific applications for fall protection in accordance with CSA Z259.16; or
   ii) custom engineered for suspended component/tie-back line applications only meeting the requirements of CAN/CSA-Z271;
c) installation requirements for the anchorage connectors with the exception of information for use [see Clause 9.2 a)]; and
d) verification of the strength of the structures or anchorage with the exception of information for use [see Clause 9.2 a)].

1.6
In CSA standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

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Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (nonmandatory) to define their application.

1.7

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only. Unless otherwise stated within this Standard, all units have an acceptable tolerance range of ± 2%.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA Group

W47.1-09 (R2014)
Certification of companies for fusion welding of steel

W47.2-11 (R2015)
Certification of companies for fusion welding of aluminum

W59-13
Welded steel construction (metal arc welding)

W59.2-M1991 (R2013)
Welded aluminum construction

CAN/CSA-Z91-02 (R2013)
Health and safety code for suspended equipment operations

Z259 series of Standards

Z259.1-05 (R2015)
Body belts and saddles for work positioning and travel restraint

Z259.2.2-17
Self-retracting devices

CAN/CSA-Z259.2.3:16
Descent devices

Z259.2.4-15
Fall arresters and vertical rigid rails

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Z259.2.5-17
Fall arresters and vertical lifelines

CAN/CSA-Z259.10-12 (R2016)
Full body harnesses

Z259.11-17
Personal energy absorbers and lanyards

Z259.12-16
Connecting components for personal fall-arrest systems (PFAS)

Z259.13-16
Manufactured horizontal lifeline systems

CAN/CSA-Z259.14-12 (R2016)
Fall restrict equipment for wood pole climbing

Z259.16-15
Design of active fall-protection systems

Z259.17-16
Selection and use of active fall-protection equipment and systems

CAN/CSA-Z271-10 (R2015)
Safety code for suspended platforms

ANSI/AWS (American National Standards Institute/American Welding Society)

D1.1/D1.1M:2015
Structural Welding Code — Steel

D1.2/D1.2M:2014
Structural Welding Code — Aluminum

ISO (International Organization for Standardization)

9227:2012
Corrosion tests in artificial atmospheres — Salt spray tests

SSPC/NACE International (Society for Protective Coatings/National Association of Corrosion Engineers)

SSPC-SP5/NACE No.1-94
White Metal Blast Cleaning

3 Definitions

The following definitions shall apply in this Standard:

Anchorage — a secure connecting point capable of safely withstanding the impact forces applied by a fall-protection system or anchorage subsystem.

Note: *Examples of anchorages include beams, columns, walls, floors, and roofs.*

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