

# CERTIFICATION Notice

An Urgent Bulletin from CSA Group

**Occupational Health & Safety Products No. 105B**  
(Replaces Notice Occupational Health and Safety Products No. 105A, Ref No: N18-065)

**Effective Date: February 1, 2020**

**Date: January 18, 2019**

**Apply Before June 1, 2019**

Announcing: Publication for CSA Z259.11-17 Personal Energy Absorbers and Lanyards

Class No: 7220 01, OCCUPATIONAL HEALTH AND SAFETY PRODUCTS - Fall Arresting Devices - Energy Absorbers and Lanyards

To purchase the Standard, visit us at [store.csagroup.org](http://store.csagroup.org)

## Who is affected?

Manufacturers of personal energy absorbers and lanyards.

## What do you do?

1. CSA Group Service Delivery staff will contact you to address compliance with each revision as applicable to the product designs covered in your affected Certification Reports. In addition to updates to your Certificate(s) of Compliance & Report(s), testing may be required to comply with these revisions.
2. Please respond within thirty (30) days of receiving CSA Group's "Application for CSA Certification Services" and "Quotation" communication. You must respond no later than June 1, 2019 in order to guarantee the update to your certification is completed by February 1, 2020. If testing is needed, we will inform you of the samples required.

## Approvals:

This is the third edition of CSA Z259.11, personal energy absorbers and lanyards. It supersedes the previous editions, published in 2005 under the title, energy absorbers and lanyards, and in 1992 under the title, shock absorbers for personal fall arrest systems.

This Standard was prepared by the Subcommittee on Energy Absorbers and Lanyards under the Technical Committee on Fall Protection, under the jurisdiction of The Strategic Steering Committee on Occupational Health and Safety, and has been formally approved By the Technical Committee.

## Major Revisions:

See attachment 1

## Background and Rationale:

See attachment 2

For questions specific to your file or products contact your CSA Group technical staff associate.

Go to <https://www.csagroup.org/testing-certification/product-listing/> and enter your Master Contract # and the class numbers associated with this Notice to determine which of your products are affected.

## For technical questions on this Certification Notice

Contact Sally Guo  
by phone 416-747-2348, fax 416-747-4149  
or e-mail [sally.guo@csagroup.org](mailto:sally.guo@csagroup.org)

The standard edition or amendments announced in this Notice may be used for certification as of the date of issue of this Notice. The "Effective date" in this Notice is the date on which the current requirements, applicable to Certified products listed in the affected class numbers, expire and the standard edition or amendments announced in this Notice become the only requirements that may be used for certification.

In the event that currently certified products do not comply with the latest requirements outlined in this Notice after the "effective date", the certification of such models may be discontinued.



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# ATTACHMENT 1

## Major Revisions

### 1. General

Clause	Changes
1 Scope	Clause 1.2 added two paragraphs to clarify the scope of the standard.
2 Reference publications	Added new reference standards and updated exiting standards.
3 Definitions	The following definitions are modified: Connectors, Fall Arrest System (FAS), Integral, Lanyard, Lineman's pole strap The following new definitions were added: Authority having jurisdiction, Snap hook, soft loop, Deployment factor (Dm), Free-fall distance (FFD), Performance factor (P), Maximum arrest force (MAF), Worker, Work Positioning System (WPS).

### 2. Changes for Energy absorber

Clause	Changes																											
Clause 4.5.1 Energy absorber performance and strength	Clause 4.5.1 Energy absorber performance and strength, removed the classification of E4 and E6 energy absorber in Z259.11-05 and added the new requirements for the maximum deceleration cumulative period of the deceleration ranges of 8g to 10g and average deceleration. Clause 4.5.1, 5.2.4 and 6.1.2 specifies the performance and strength requirements and test method.																											
5.1 general	Added a new clause 5.1																											
5.2.3 and 6.1.3.1 Energy absorber — Initial static resistance test	Clause 5.2.3 modified the elongation requirement of initial static resistance test from 40mm to 76mm. The static resistance test method of Clause 6.1.3.1 was also changed. It added an initial tensile load 200N. Measure the initial length while the load is applied. The final length was also changed to measure the final length while the load is applied.																											
5.2.4 Energy absorber — Dynamic drop tests	Clause 5.2.4 and 6.1.2 of Z259.11-17 modified the dynamic drop test method and requirements. See the tables for comparisons between Z259.11-05 and Z259.11-17.																											
6.1.2 Energy absorber — Dynamic drop test	<p>1. Energy absorber performance requirements and ambient dry drop test</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Performance Parameters</th> <th style="text-align: left;">Z259.11-05</th> <th style="text-align: left;">Z259.11-17</th> </tr> </thead> <tbody> <tr> <td>Class</td> <td>E4 and E6</td> <td>No Class</td> </tr> <tr> <td>Test mass</td> <td>100kg for E4 and 160kg for E6</td> <td>Maximum Rated Capacity of the energy absorber</td> </tr> <tr> <td>Free fall distance</td> <td>1.8m</td> <td>The maximum free fall distance shall be Specified by manufacturer and it would result 0.7-0.95 of the maximum deployment</td> </tr> <tr> <td>Xmax: Maximum deployment after the dynamic drop test</td> <td>1.2m for E4; 1.75m for E6</td> <td>The maximum deployment is related to the maximum free fall distance (FFD).</td> </tr> <tr> <td>Maximum Arrest Force</td> <td>4kN for E4; 6kN for E6</td> <td>8kN</td> </tr> <tr> <td>Maximum deceleration: Amax</td> <td>No requirement</td> <td>Amax≤10g for all masses permitted by the energy absorber.</td> </tr> <tr> <td>Cumulative time of the deceleration is between 8g to 10g: Tg</td> <td>No requirement</td> <td>Tg≤0.1s for all masses permitted by the energy absorber.</td> </tr> <tr> <td>Average deceleration: Ag</td> <td>No requirement</td> <td>Ag≤7.0 for all masses permitted by the energy absorber.</td> </tr> </tbody> </table>	Performance Parameters	Z259.11-05	Z259.11-17	Class	E4 and E6	No Class	Test mass	100kg for E4 and 160kg for E6	Maximum Rated Capacity of the energy absorber	Free fall distance	1.8m	The maximum free fall distance shall be Specified by manufacturer and it would result 0.7-0.95 of the maximum deployment	Xmax: Maximum deployment after the dynamic drop test	1.2m for E4; 1.75m for E6	The maximum deployment is related to the maximum free fall distance (FFD).	Maximum Arrest Force	4kN for E4; 6kN for E6	8kN	Maximum deceleration: Amax	No requirement	Amax≤10g for all masses permitted by the energy absorber.	Cumulative time of the deceleration is between 8g to 10g: Tg	No requirement	Tg≤0.1s for all masses permitted by the energy absorber.	Average deceleration: Ag	No requirement	Ag≤7.0 for all masses permitted by the energy absorber.
Performance Parameters	Z259.11-05	Z259.11-17																										
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Clause	Changes		
	Minimum performance factor	No requirement	P≥2.3 for all masses permitted by the energy absorber.
	2. Energy absorber performance requirements and other conditioning drop test		
	Performance Parameters	Z259.11-05	Z259.11-17
	Test mass	100kg for E4 and 160kg for E6	Maximum Rated Capacity of the energy absorber
	The maximum Free fall distance	1.8m	Specified by manufacturer and the maximum free fall would result 0.7-0.95 of the maximum deployment
	Maximum deployment after the dynamic drop test	1.2m for E4; 1.75m for E6	Not fully deployed after the drop test
	Maximum Arrest Force	Various	8kN
7.1 Markings — Energy absorbers	<ul style="list-style-type: none"> <li>- Clause 7.1.1 and Figure 14 added new marking requirements.</li> <li>- Clause 7.3 added new additional information requirements in the manufacturer's literature supplied with the energy absorber and energy absorber lanyard.</li> <li>- Clause 7.4 Instructions added new requirements for energy absorber and lanyards.</li> </ul>		

### 3. Changes for lanyard

Clause	Changes
4.6.1 Lanyard classifications	Clause 4.6.1, added a class Y lanyard.
4.6.2 Lanyard — Design requirements — Class A: Rope lanyard and 4.6.3 Lanyard — Design requirements — Class B: Web lanyard	Clause 4.6.2 and 4.6.3 modified the design requirements to allow the lanyard to have class I connectors or integral terminations that may be connected to other fall arrest system.
4.6.4 Lanyard — Design requirements — Class C: Wire rope lanyard	<p>Clause 4.6.4</p> <ol style="list-style-type: none"> <li>1. Modified the design requirement to allow the lanyard to have class I connectors or integral terminations that may be connected to other fall arrest system</li> <li>2. Added a new requirement that the wire rope lanyard shall have an integral energy absorber. The integral energy absorber shall meet the requirements of Clause 4.5 energy absorber design requirements and Clause 5.2 Energy absorber test requirements.</li> <li>3. Figure 3 changed from a wire rope lanyard without integral energy absorber to a wire rope lanyard with an integral energy absorber to reflect the new design requirement.</li> <li>4. Construction of the lanyard eyes formed by a bend-back eye with a swage construction was removed from Clause 4.6.4.</li> <li>5. Added a new requirement that covers over mechanical sleeves shall be clear in colour and allow for ease of worker inspection.</li> </ol>
4.6.5 Lanyard — Design requirements — Class D: Lineman's pole strap	Clause 4.6.5 removed "working positioning lanyard" from the title.
4.6.8 Lanyard — Design requirements — Class Y: Y-lanyard	Clause 4.6.8 added a new requirement that Y lanyard shall contain at least one energy absorber. The energy absorber shall meet the requirements of Clause 4.5 energy absorber design requirements and Clause 5.2 Energy absorber test requirements.
5.3.2 Lanyard — Samples to be tested	<ul style="list-style-type: none"> <li>- Clause 5.3.2.1 added Class Y lanyard in the title</li> <li>- Clause 5.3.2.2 Lanyard — Class C: Wire rope lanyard, changed one of the sample length from 600mm to 1830mm for the eyebolt dynamic drop test.</li> <li>- Clause 5.3.2.5 added a new requirement for Class F Adjustable work positioning lanyard. For adjustable work positioning lanyards longer than 2.5 m (8 ft), the rope adjuster shall meet the requirements for manual fall arresters in accordance with CSA Z259.2.5.</li> <li>- Added a Clause 5.3.2.6 for Class Y lanyard sample requirements.</li> </ul>
5.3.7 Lanyard — Residual static test requirement —	The title of Clause 5.3.7 removed class C and added class Y.

Clause	Changes
Classes A, B, D, E, F, and Y lanyards	
5.3.8 Lanyard — Dynamic drop test requirements — Eyebolt and beam wrap — Classes A, B, C, and Y lanyards	This Clause added Class Y. It also designates different test method clauses for class A, B and Y and Class C. This change was related to the change of Class C design requirement Clause 4.6.4 that an integral energy absorber is required for Class C lanyard. Thus the eyebolt drop test in the Z259.11-05 for Class C lanyard was changed. It needs to be tested to Clause 6.1.2 in Z259.11-17. Therefore Z259.11-17 added a new clause 6.2.8 for class C lanyard beam wrap drop test.
Clause 5.3.9.2 Lanyard — Dynamic drop test requirement	Clause 5.3.9.2 refers to test method Clause 6.2.6. The test method for Class E lanyards in 6.2.6 was changed.
5.3.11 Lanyard — Junction static strength test requirement — Class Y 6.1.3.3 Junction static strength test — Class Y only	Added a clause 5.3.11 and 6.1.3.3 for Class Y Lanyard — Junction static strength test requirement and test method.
7 Markings and instructions	<ul style="list-style-type: none"> <li>- Clause 7.2 added a new requirement for all Class A and B lanyards that do not have an integral energy absorber, the following warning shall be included in the markings: "Warning: For fall arrest, an energy absorber is recommended to be used with this lanyard." * The French equivalent wording is, "Avertissement: Il est recommandé d'utiliser un absorbeur d'énergie avec ce cordon d'assujettissement pour l'arrêt de chute."</li> <li>- Clause 7.3 added new additional information requirements in the manufacturer's literature supplied with the energy absorber and energy absorber lanyard.</li> <li>- Clause 7.4 Instructions added new requirements for energy absorber and lanyards.</li> </ul>

## **ATTACHMENT 2**

### Background and Rationale

Due to the significant number of changes in this edition of the Standard and in order to provide sufficient time to comply with the new requirements, CSA Group has extended the effective date of this Notice from February 1, 2019 to February 1, 2020.