



Certificate of Compliance

Certificate: 80099286

Master Contract: 603295

Project: 80140665

Date Issued: September 8, 2022

Issued To: SEGMA S.A.
Avenida Carlos Valdovinos N 2199,
Santiago, RM, 8460028
Chile

The products listed below are eligible to bear the CSA Mark shown



Issued by: *Faith A. Caprio*
Faith A. Caprio

PRODUCTS

CLASS - 7219 01 - OCCUPATIONAL HEALTH AND SAFETY PRODUCTS Fall Arresting Devices - Harnesses

The following products comply with the requirements of CSA Standard Z259.10-18:

Class A: Models: (see Note #1 for more details)

- 41102221E

Class A, P: Models: (see Note #1 for more details)

- U3302, 41108101E

Class A, D, L, P: Models:

- U4202, 41104241^E, 41104111E, 41104257^E, 41102221E

Note #1: otherwise specified, all models are in Size 'Universal', 'XS', 'S/M', 'L/XL', '2XL/3XL'



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APPLICABLE REQUIREMENTS

- CSA Standard Z259.10-18 - Full Body Harnesses.

MARKINGS & INSTRUCTIONS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

(1).-Markings:

The following markings shall appear in both English and French on a durable label intended to last the life of the product, and shall be affixed to the full body harness:

- Identification of the manufacturer and/or vendor (i.e. Manufacturer Name or Logo, Manufacturer Registered Trademark or CSA Master Contract);
- Model Number or Model Identification;
- CSA Monogram: ;
- The designation of CSA Standard "CSA Z259.10-18";
- The applicable class(es) marked in words as Class 'A', 'D', 'E', 'L' and/or 'P', and in pictograms with a minimum height of 20mm (0.8 in) in accordance with the applicable figures for appropriate Class (or Classes) in the Standard;
- Size (the words "size" and "grandeur" shall appear on the label);
- Date of manufacture (by year and month);
- Space for personal identification.

(2).- Information:

The following information in both English and French shall be provided with each full body harness offered for sale:

- a. Intended purpose of the device;
- b. Any hazard warning;
- c. Instructions on proper method and limitations of use;
- d. The expected stretch Value "xh" of the harness when arresting a fall and the instruction that this distance be taken into account when calculating the clearance required below a worker where there is a possibility of falling;
- e. Instructions for fitting and adjusting (including the applicable pictograms);



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- f. Recommendations for care (cleaning, maintenance, storage) and inspection (including frequency) of the device;
- g. Information on the purpose and function of the fall arrest indicator;
- h. A warning that if a fall occurs or an inspection reveals an unsafe condition, the device is to be taken out of service until a qualified person determines whether it is safe for use or should be destroyed;
- i. For any evacuation device designed to be used with the full body harness, instructions for its proper application, use, and connection to the full body harness; and
- j. Manufacturer's name, address, and telephone number.

Note: Certain jurisdictions outside Canada may require caution markings to be also in other language besides English and French. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to this "Markings".



PRODUCTS

CLASS – 7220 81 - OCCUPATIONAL HEALTH AND SAFETY PRODUCTS PE Absorbers and EA Lanyards - Cert to US Std

CLASS – 7220 01 - OCCUPATIONAL HEALTH AND SAFETY PRODUCTS Fall Arresting Devices -Energy Absorbers and Lanyards

Energy Absorbing Lanyards: ('Shock Pack'- Twin Leg' Construction) Model # 41402103.

Energy Absorbing Lanyards: ('Shock Pack'- Twin Leg' Construction) Model # 41402070.

This Certification does not extend to the substitution of materials or changes in the construction or composition of products, nor change in factory location without CSA-Group 's prior written agreement.

APPLICABLE REQUIREMENTS

CSA Standard Z259.11-17 – Personal Energy Absorbers and Lanyards

US Standard ANSI/ASSE Z359.13-2013 (Version 3) – Personal Energy Absorbers and Energy Absorbing Lanyards

Notes:

Products certified under Class C722001, C722081 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

MARKINGS & INFORMATION



Part (I): Products comply with the requirements of CSA Standard Z259.11-17, where applicable:

(A).- Personal Energy Absorbers: (where applicable)

(1).- The following information shall be durably and legibly marked or labelled in both English and French in accordance with Figure 14 of CSA-Z259.11-17:

- a) a warning to the worker to read the instructions before use;
- b) the maximum free-fall distance;
- c) the maximum deployment (X_{max}) in accordance with Clause 5.2.5 CSA-Z259.11-17;
- d) the maximum deployment factor (D_m) obtained from the test performed in Clause 6.1.2.3 of CSA-Z259.11-17 rounded to the nearest 0.1, where,
 - D_m = the deployment factor, $= 1/(P-1)$

Where, P is the performance factor of the energy absorber as determined in Clause 5.2.4 of CSA-Z259.11-17

- e) the permitted worker mass range including tools.

(2).- Additional markings— Personal Energy absorbers

The following additional information shall be durably and legibly marked or labelled in both English and French:

- a) identification of the manufacturer (company name, registered trademark, or CSA LM legacy file number or Master Contract number);
- b) the maximum worker mass allowed by the manufacturer;
- c) the model number;
- d) CSA Mark, 
- e) the date of manufacture (year and month).

(B).- Lanyards: (where applicable)

(1).- The following shall be durably and legibly marked or labelled in both English and French:

- (a) identification of the manufacturer (company name, registered trademark, or CSA LM legacy file number or Master Contract number);
- (b) the model number;
- (c) CSA Mark, 
- (d) “CSA Z259.11” and the class (in accordance with Clause 4.6.1 of CSA-Z259.11-17); and
- (e) the date of manufacture (year and month).

(2).- 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.”



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(C).- Additional information in the manufacturer's literature - Personal Energy Absorber:

- (1) The following information (required to design fall protection systems in accordance with CSA Z259.16) shall be included in the manufacturer's literature supplied with the energy absorber or energy absorbing lanyard
- the manufacturer's published value of maximum deployment (X_{max}) in accordance with Clause 5.2.5 of CSA-Z259.11-17; and,
 - the manufacturer's published value of average arrest force (F_{avg}) calculated as follows:

$F_{avg} = Pmg/1000$, where:

P=the performance factor from Clause 5.2.4.1 of CSA-Z259.11-17

m=the maximum permitted mass (also the test mass)

g=gravity 9.81 m/s².

Note: The factor of 1000 is added to adjust the units from Newtons, N, to Kilonewtons, kN.

(D).- Instructions: Energy absorbers and lanyards

The following instructions and information shall be provided in English and French:

- the intended purpose of the device;
- any hazard warnings;
- instructions on attaching, adjusting, and using the device;
- recommendations for maintenance and inspection of the device, including frequency;
- recommended service life;
- a warning that if a fall occurs or an inspection reveals an unsafe condition, the device is to be taken out of service until a competent person determines whether it is safe for use or should be destroyed.
- a table, chart, or graphic illustration showing the amount of deployment of the energy absorber (XPEA) based on the worker weight and free-fall distance. The table, chart, or graphic illustration shall cover the range of weights and free-fall distances permitted by the manufacturer for the device. The data depicted within the table, chart, or graphic illustration may be generated by actual test results or theoretical calculations using the maximum weight performance factor (P) and the deceleration ratio (D1) applicable for the particular weights.

(E).- The table, chart, or graphic illustration shall clearly indicate

(i) a statement above the table, chart or graphic illustration indicating that the worker's weight includes that of any tools or clothing; and

(ii) a statement above the table, chart or graphic illustration indicating that if the worker's weight is in between weight increments listed that the next highest weight bracket shall be used.

Note: The following may be used for theoretical calculations:

a) $X_{PEA} = D_{m1} \times h$

b) For desired mass (m_1), deployment factor (D_{m1}) is calculated as follows:

$$D_{m1} = \frac{m1}{(P_{m_{max}} * m_{max}) - m1}$$

where

$$m_{min} \leq (m_1) \leq m_{max}$$

$P_{m_{max}}$ = the manufacturer's value which is $\leq$ the value obtained during performance testing (see Clause 6.1.2).

If the deployment force is not constant through the entire deployment of the energy absorber, the manufacturer should provide a range of D_{m1} values or an additional equation to calculate D_{m1} for various worker masses, or may provide a table, chart, or graphic based on testing only.

c) When calculating D_{m1} , $P_{m_{max}}$ is used to obtain correct worker mass and deployment distances.

For example:

Lanyard mass range 54 kg – 140 kg, $P_{m_{max}} = 2.5$, $m_1 = 100$ kg, $h = 2$ m

$$D_{m1} = 100 \text{ kg} / ((2.5 \times 140 \text{ kg}) - 100 \text{ kg}) = 0.4$$

$$X_{PEA} = D_{m1} \times h = 2 \text{ m} \times 0.4 = 0.8 \text{ m}$$

d) For clearance calculations, see Figure 15 of CSA Z259.11-17.

e) For free-fall distance calculations, see Figure 16 of CSA Z259.11-17.

Part (II): Products comply with US Standard ANSI/ASSE Z359.13-2013 (Version 3), where applicable:

(a).- Marking and reference Literature

(1).- General Marking Requirements:

The Markings shall be in English. The legibility and attachment of required markings shall endure for the life of the component, subsystems or system being marked.

NOTE: In the U.S.A, both English and Spanish markings may be required. It is the responsibility of the manufacturer to determine whether this is applicable.

Equipment shall be marked with the following:

- CSA Monogram with "ANSI/ASSE Z359.13" indicator adjacent to, or the CSA Monogram with the indicator "US" beneath it,  ;
- part number and model designation;
- year of manufacture;
- manufacturer (submitter's) name or logo, "LM", or Master Contract number;
- capacity rating;
- serial number;



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- warning specifying that the manufacturer's instructions included with the equipment at time of shipment from the manufacturer.

(b).- Specific Marking Requirements:

(1).- Personal Energy Absorbers and Energy Absorbing Lanyards:

Note: In addition to the General Marking Requirements, Personal Energy Absorbers and Energy Absorbing Lanyards shall be marked to identify:

- the fiber used in the material of construction;
- the length;
- the need to avoid contact with sharp edges and abrasive surfaces;
- the need to make only compatible connections;
- the maximum elongation;
- restriction, if any, on the types of components, subsystems, or systems with which the personal energy absorber is designed to be used;
- the average arrest force, maximum free fall distance and capacity of the personal energy absorber on a separate label identical in size, color, and content as Figure 17a and 17b in Standard;
- 6 ft FF personal energy absorbers shall be in black print on a contrasting white background. See Figure 17a in Standard;
- 12 ft FF personal energy absorbers shall be in white print on a contrasting black background. See Figure 17b in Standard.

(2).- Y-Lanyard:

Note: In addition to the General and Specific Marking Requirements, Personal Energy Absorbers and Energy Absorbing Lanyards shall be marked to identify:

- Y-lanyards that fail the Dynamic Hip test detailed in 3.2.10 in the Standard, must include a warning label on both connecting ends of the lanyard specifically directing users how to safely store the unused leg of the lanyard.

(c).- General Instruction Requirements:

Instructions shall be provided to the user, printed English, and affixed to the equipment at the time of shipment from the manufacturer.

Instructions shall contain the following information:

- a statement that the manufacturer's instructions shall be provided to the users;
- manufacturer's name, address and telephone number;
- manufacturer's part number and model designation for the equipment;
- intended use and purpose of the equipment;
- proper method of use and limitations on use of the equipment;



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- illustrations showing locations of markings on the equipment;
- reproduction of printed information on all markings;
- inspection procedures required to assure the equipment is in serviceable condition and operating correctly;
- anchorage requirements;
- an illustration of how to calculate free fall distances;
- criteria for discarding equipment which fails inspection;
- procedures for cleaning, maintenance, and storage;
- reference to the ANSI/ASSE Z359.13, Personal Energy Absorbers and Energy Absorbing Lanyards, standard and applicable regulations governing occupational safety.

Instructions shall require that only the equipment manufacturer, or person or entities authorized in writing by the manufacturer, shall make repairs to the equipment.

Instructions shall require the user to remove equipment from field service if it has been subjected to the forces of arresting a fall.

(d).- Specific Instruction Requirements:

(1).- Personal Energy Absorbers:

In addition to general instruction requirements, written instructions for personal energy absorbers shall include:

- the material used in personal energy absorber construction;
- the need to make only compatible connections and limitations of compatibility;
- proper method of coupling the personal energy absorber to adjacent components of the system;
- the maximum arrest force of the personal energy absorber when dynamically tested in accordance with the requirements of this standard;
- the maximum elongation of the personal energy absorber when dynamically tested in accordance with the requirements of this standard;
- a reference chart that indicates the deployment distance of the personal emerge absorber according to the user weight and free fall distance.
- A statement that indicates information necessary in designing fall protection systems shall be made available from the manufacturer. Manufacturers may provide designers of fall protection systems a representative graph(s) of the time history plot of the loading from a drop test.

(e).- User Inspection, Maintenance and Storage of Equipment:

Users of PFAS shall, at a minimum, comply with all manufacturer instructions regarding the inspection, maintenance and storage of the equipment. The user's organization shall retain the manufacturer's instructions and make them readily available to all users.



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- Inspection.
 - Equipment shall be inspected by the user before each use and, additionally, by a competent person other than the user at intervals of no more than one year.
 - Inspection criteria for the equipment shall be set by the users' organization. Such criteria for the equipment shall equal or exceed the greater of the criteria established by this standard or the manufacturer's instructions.
 - When inspection reveals defects in, damage to or inadequate maintenance of equipment, the equipment shall be permanently removed from service or undergo adequate corrective maintenance before return to service.
 - In addition to the inspection requirements set forth in the manufacturer's instructions, the equipment shall be inspected at both user inspection level described in 6.1.1 for:
 - Absence or illegibility of markings;
 - Absence of any elements affecting the equipment form, fit or function;
 - Evidence of activation or fall arrest service such as a warning flag or label on the personal energy absorber or energy absorbing lanyard;
 - Evidence of defects in or damage to hardware elements including cracks, sharp edges, deformation, corrosion, chemical attack, excessive heating, alteration and excessive wear;
 - Evidence of defects in or damage to straps or ropes including fraying, unsplicing, unlaying, kinking, knotting, roping, broken or pulled stitches, excessive elongation, chemical attack, excessive soiling, abrasion, alteration, needed or excessive lubrication, excessive aging and excessive wear.
- Maintenance and Storage
 - Maintenance and storage of equipment shall be conducted by the user's organization in accordance with the manufacturer's instructions. Unique issues, which may arise due to conditions of use, shall be addressed with the manufacturer.
 - Equipment which is in need of or scheduled for maintenance shall be tagged as "unusable" and removed from service.
 - Equipment shall be stored in a manner as to preclude damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors or other degrading elements.

Part (III): Products comply with both CSA Standard Z259.11-17 and US Standard ANSI/ASSE Z359.13-2013 (Version 3), where applicable:

- Both Part (I) & Part (II) above are applied; and
- CSA Monogram .

Note: Certain jurisdictions outside Canada may require markings to be also in other language besides English and French. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to this Markings



Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description															
80140665	September 8, 2022	Update Multiple Listing with below model. Model comparison with Report 301207-80064159 (80104342). Class: 7219 01.															
<table border="1"> <thead> <tr> <th>Submitter Report</th><th>Submitter Model Number</th><th>Listee Model Number</th></tr> </thead> <tbody> <tr> <td>301207-80064159 (80104342)</td><td>FP2604DU</td><td>41102221E</td></tr> </tbody> </table>			Submitter Report	Submitter Model Number	Listee Model Number	301207-80064159 (80104342)	FP2604DU	41102221E									
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301207-80064159 (80104342)	FP2604DU	41102221E															
80113516	2022-01-20	Update to Multiple Listing 603295.80099286.80105069 with SEGMA S.A., Santiago, Chile. Listee ID: 603295. For the addition of models: 41402103, 41402070; Submitter report 80064160(80103000). Classes: 7220-01/81															
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80064160	EAL2101	41402103															
	EAL2101FR	41402070															
80105069	2021-11-02	Update to Multiple Listing 603295.80099286 with: SEGMA S.A., Santiago, RM, CHILE. LISTEE ID 603295. For the addition of models: 41104111E, 41104257E, 41108101E; Submitter report 80064159(80068720). Classes: 7219-01															
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	U3501	41108101E															
80099286	2021-09-10	New Multiple Listing with: SEGMA S.A., Santiago, RM, CHILE. LISTEE ID 603295. For the addition of models: 41102221E, 41104241E, U4202, U3302; Submitter report 80064159(80068720). Classes: 7219-01															
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