

Declaration of Conformity

In Accordance with ANSI/ISEA 125-2014 and ANSI/ASSP Z359.7-2019



Alexander Andrew, Inc. 1306 S. Alameda St Compton, CA 90221 (800) 719-4619

Declaration # CC0320001

Declaration Date 3.4.20

Tested Item # C8256 6' SAL VPack w/Slide-D TieBack-Canada

Additional Items Conforming Under this Declaration:

C8254 C82543 C82563

Alexander Andrew, Inc. declares that the product(s) listed above is in conformity with the requirements of the following product standard(s):

CSA Z259.11-17

Conformity Assessment Method in accordance with ANSI/ISEA 125-2014

Level 1

Level 2

Level 3

Level 1: FallTech Lab
Outside the Scope of
ISO/IEC Standard 17025:2005

Level 2: FallTech Lab
Within the Scope of
ISO/IEC Standard 17025:2005

Level 3: Independent 3rd Party Lab
accredited to
ISO/IEC Standard 17025:2005

Supporting Documentation 269976

Authorized Signature

Name Mark Sasaki

Title Director of Engineering

Date 3.5.20



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FallTech Lab - TL-594
ISO/IEC 17025:2005
Alexander Andrew Inc dba FallTech



Fall Tech Inc
1306 S. Alameda St
Compton, CA 90221
USA

Master Contract # 269976
Project: 70198037
Date: March 4, 2020

Attention: Mr. John Aldrich

Subject:

Certification of the following products as per CSA Standard Z259.11-17:

Energy Absorbers:

- “ViewPack” Series: Model # C8254, C82543, C8256, C82562, C82563, C8257, C826073, C8260732D, C8260734, C826073A,
- “WeldTech” Series: Model # C8242, C82423, C8242Y3, C8242Y.

Dear Mr. Aldrich:

We have completed the evaluation of the above subject products to determine whether the products you have submitted to us for CSA Certification comply with the requirements of the CSA Standard Z259.11-17. This Findings Letter provides the results of this evaluation.

REQUIREMENTS

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

TEST RESULTS:

All performance tests have been conducted with satisfactory results as per above standards.


EXAMINATION:**MARKINGS & INFORMATION****MARKING:****(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,
 - $D_m = \text{the deployment factor,} = 1/(P-1)$
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.”

(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: 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

FACTORY TESTS

To demonstrate continuous compliance of the certified product with the requirements, the manufacturer shall carry out the Factory Tests, which confirm that at least the following minimum Factory test schedule, where applicable, will be maintained on the Certified Production of the subject products.

(A).- The following Factory Tests, where applicable, must be conducted at the factory location, where the CSA Certified Products are manufactured or final assembled, and the CSA Monogram (or CSA Logo) is applied.

(a).- Energy Absorbers:

From every 500 units of any given model produced or from any batch produced, whichever is smaller in quantity, at least one unit shall be selected at random. This unit will be subjected to the following factory test:

- Clause 5.2.4.1 / 6.1.2 – Energy Absorber – Ambient Dry Drop Test.

Pass/Fail Criteria:

- have a maximum arrest force (MAF) that shall not exceed 8 kN (1800 lbf);
- have a maximum deceleration, A_{max} , not greater than 8 g for not more than a total of 0.1 s throughout the test event, and never more than 10 g, for all masses permitted by the energy absorber;

Note: *This ensures the maximum acceleration experienced by a worker in the permitted mass range, and particularly the smallest mass, is not more than 10 g and not above 8 g for more than 0.1 s in the aggregate for the entire fall-arrest event. This is determined by examination of the force-time test trace. The threshold force on the force-time test trace for 8 g is 8mmin g (8 times the minimum weight permitted) as described by the manufacturer. Similarly, the threshold force on the force-time test trace for 10 g is 10mmin g (10 times the minimum weight permitted).*

- have an average deceleration factor, A_g , not greater than 7.0 for all masses permitted by the energy absorber when calculated as follows:

$$A_g = \frac{P * (m_{max})}{m_{min}} \leq 7.0$$

Note: *This ensures the average acceleration experienced by any worker in the permitted mass range, and particularly the smallest mass, is not more than 7 g; and*

- have a performance factor, P , not less than 2.3 when calculated as follows:

$$P = 1 + \frac{h}{X_a}$$

Where:

P = the performance factor of the energy absorber

h = free-fall distance of the test mass, m

X_a = deployment of the energy absorber (arrest distance), m.

Note: *This ensures the minimum acceleration experienced by a worker in the permitted mass range is 2.3 g so that the energy absorber is effective in arresting a fall, particularly for the largest mass.*

(b).- Lanyards:

From each 500 units of any given model produced or from any batch produced, whichever is smaller in quantity, at least one unit shall be selected at random. This unit will be subjected to the following factory tests:

(1).- For Class A, B and Y Lanyards:

- Clause 6.2.7 Lanyard — Dynamic drop test — Classes A, B, and Y
 - For Class ‘A, B and Y’ safety lanyards with fixed or adjustable length of less than 2.5 m (8.2 ft), the drop height of one (1) meter (3.3 ft) shall be used in the Dynamic Drop test (eyebolts) as per Clause 6.2.7 of CSA Standard Z259.11-17.
 - For Class ‘A, B and Y’ safety lanyards with fixed or adjustable length 2.5 m (8.2 ft) and greater, a sample of 2.5 m (8.2 ft) should be specially made with same constructions in terms of lanyards' material, connectors, etc, and the drop height of two (2) meters (6.6 ft) shall be used in the Dynamic Drop test (beam-wrap) as per Clause 6.2.7 of CSA Standard Z259.11-17.

Pass/Fail Criteria

When tested in accordance with Clause 6.2.7 (Class A, B, and Y), all lanyards in the sample shall successfully arrest the drop of the test mass without breaking. In addition, the snap hook(s) on the lanyard shall not have distorted sufficiently to allow the keeper to be released. Adjustable lanyards shall not elongate more than 100 mm (3.9 in) beyond the recorded original test length.

Note: As per Clause 4.6.8 Lanyard — Design requirements — Class Y, Y-lanyard shall contain at least one energy absorber; For non-CSA certified energy absorber used in the Y lanyard, it is Submitter's responsibility to carry out the factory tests of the energy absorber at the submitter's factory location as stated in Part 1(a) above.

(2).- For Class C Wire Rope lanyards: with integrally attached Energy Absorbers;

- For Class ‘C’ wire rope lanyards with length of less than 2.5 m (8.2 ft): Carry out test as per Part 1(a) above.
- For Class ‘C’ wire rope lanyards with length of 2.5 m (8.2 ft) or greater:
Test Method:
 - Clause 6.2.8 dynamic drop test (beam wrap);
 - The test mass shall be the maximum rated capacity of the energy absorber as specified by the manufacturer. The drop height $h=2.0\text{m}$ (6.6ft).\

Pass/Fail Criteria:

- When tested in accordance with Clause 6.2.8 (Class C), all lanyards in the sample shall successfully arrest the drop of the test mass without breaking. In addition, the snap hook(s) on the lanyard shall not have distorted sufficiently to allow the keeper to be released. Adjustable lanyards shall not elongate more than 100 mm (3.9 in) beyond the recorded original test length.

(3).- Class D work position lanyard:

- Clause 6.2.5 Lanyard — Dynamic drop test — Class D: Lineman's pole strap
 - Class D work position lanyard, one end of the lineman's pole strap shall be abraded as per Clause 6.2.3 before the drop test.
 - The drop height of one (1) meter (3.3 ft) shall be used in the Dynamic Drop test (eyebolts) as per Clause 6.2.5.

Pass/Fail Criteria:

- Clause 5.3.9.1 Lanyard — Dynamic drop test requirement — Class D lanyards. When tested in accordance with Clause 6.2.5, the tested sample shall hold the test mass without breakage of any of its components. The adjuster does not have to be operational after the test.

(4).- For Class E Chain work positioning lanyard

- Clause 6.2.6.2 Lanyard — Dynamic drop test — Class E: Chain work positioning lanyard (see Figure 17A of Z259.11-17);
- The webbing test lanyard that meets the requirement of 6.2.6.1 shall be used;
- The tests shall be conducted as per 6.2.6.2;
- The drop height of two point four (2.4) meter (8 ft) shall be used in the Dynamic Drop test (eyebolts) as per Clause 6.2.6.

Pass/Fail Criteria:

- Clause 5.3.9.2.1 - Lanyard — Dynamic drop test requirement — Class E lanyards. When tested in accordance with Clause 6.2.6, the tested sample shall hold the test mass without breakage of any of its components. The adjuster, if applicable, does not have to be operational after the test.

(5).- Class F adjustable work positioning lanyard:

- Clause 6.2.9 Lanyard — Dynamic drop test Class F: Adjustable work positioning lanyards.
- The drop height of one (1) meter (3.3 ft) shall be used in the Dynamic Drop test (eyebolts) as per Clause 6.2.9.

Pass/Fail Criteria:

- Clause 5.3.9.3 - Lanyard — Dynamic drop test requirement — Class F lanyards.
- When tested in accordance with Clause 6.2.9, the tested sample shall hold the test mass without breakage of any of its components. The adjuster does not have to be operational after the test.

(B).- General:

All components of Fall Arrest System shall be used in production in sequential order by date and lot number. (Should a problem develop with any component, this procedure will facilitate traceability and isolation of defective production).

The production from which test sample is selected shall not be released for sale until the test sample(s) has demonstrated compliance with the CSA Standard(s).

Records of the above tests shall be kept and available for review by CSA representatives. The records shall readily relate the samples tested to the production sold by date of manufacture or serial number stamped into the tested sample.

If a sample should fail a drop test, the defective component(s) shall be traced by means of the date, lot number and sequential usage system, plus additional testing, to the probable group of suspect components.

All production incorporating such suspect components shall be quarantined. Reworked production shall be tested at least three times the normal rate. Records shall be kept of the corrective action taken in the event of sample failure. Such records should be brief and to the point.

(C).- Connectors:

All connectors used shall be either CSA Certified products, or been evaluated (tested) to meet the requirements of CSA Standard Z259.12-16.

For CSA certified connectors, the Factory Tests have been carried out by the connectors' manufacturer.

For non-CSA certified connectors, it is Submitter's responsibility to carry out the following factory tests at the submitter's factory location:

The received production of the subject components shall be subjected to the following quality control 'Tensile Testing' schedule as per CSA Standard Z259.12-16:

Components	Tensile Test (kN)	Clause	Rate
Carabiners/Hooks - Class I	22.5	5.1	1 in 2000
Rings – Class I	22.5	5.1	1 in 2000
All carabiners/ Hooks/Rings – Class I	16	5.3	100% (exclude “Soft Loop”)
All Buckles – Class II	15	7.1.1	1 in 3000

Pass/Fail Criteria:

- All Class I connectors shall withstand a tensile strength of 22.5 kN.
- All Class I connectors shall withstand a proof load strength of 16 kN for metallic connectors, only.
- All Class II connectors shall withstand a tensile strength of 15 kN.

(D).- The production from which test sample is selected shall not be released for sale until the test sample(s) has demonstrated compliance with CSA Standard Z259.11-17.

Records of the above tests shall be kept and available for review by CSA representatives. The records shall readily relate the samples tested to the production sold by date of manufacture or serial number stamped into the tested sample.

Warning: The factory test(s) specified may present a hazard of injury to personnel and/or property and should only be performed by persons knowledgeable of such hazards and under conditions designed to minimize the possibility of injury.

GENERAL REMARKS:

- (A) Upon the completion of our Certification work, CSA will provide copies of the Certification Record denoting the products your company currently has certified.
- (B) When this Certification is completed and you have received our written confirmation that the subject equipment has been "Certified", your products will be eligible to bear a CSA Mark.
- (C) In order to continue the certification process, the following items need confirmation from you in writing:
- 1.- The applicable markings & information must appear on the CSA Certified products (the details are listed as per above “Markings & Information” section).
 - 2.- The above mentioned Factory Tests (compliance control testing) will be performed on the daily productions at the factory location .



Master Contract # 269976

Project: 70198037

March 4, 2020

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Upon receipt of your complete reply to this Findings Letter, we will endeavour to complete the Certification work for you as soon as possible. Please do not hesitate to contact the writer if any assistance is required.

Best regards,

A handwritten signature in blue ink that reads 'Henry T.L. Tran'.

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c.c. Dan Redden, Brad Rohlf