# Declaration of Conformity

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

FALLTECH®

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

| **Declaration #** | C0616039a | **Declaration Date** | 6/17/2016 |
|---|---|---|---|

**Tested Item #** **8242AF** **6' SAL Single Leg; Arc Flash w/ Snaphooks**

**Additional Items Conforming Under this Declaration:**

| | | |
|---|---|---|
| **82423AF** | **82424L** | **82426** |
| **8242L** | **8242** | **8242AFD** |
| **82423L** | **8243** | **8242LB** |

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

## ANSI Z359.13-2013 & ASTM F887

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

| **Level 1** | | **Level 2** | **X** | **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** **PC-0928** **PC-2403** **K-418926-1606H01-R00**

**Authorized Signature** 

**Name** Zachary Winters **Title** Engineering Manager **Date** 2/2/2022

IAS ACCREDITED Testing Laboratory

International Accreditation Service, Inc
3060 Saturn St, Ste 100
Brea, CA 92821 +1 562-364-8201

FallTech Lab - TL-594
ISO/IEC 17025:2017
Alexander Andrew Inc dba FallTech

Exova
3883 East Eagle Drive
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California
USA
92807

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F: +1 (714) 630-4443
E: sales@exova.com
W: www.exova.com

Testing. Advising. Assuring.

August 15, 2016

FallTech Testing Laboratory
1306 S. Alameda Street
Compton, CA 90221

Attention: Jay Sponholz
Quality Manager

Subject: **Attestation of Witnessing Testing**

| | |
|---|---|
| **Exova OCM Job #** | **361179-4** |
| **FallTech P.O.:** | **OPEN** |
| **Report No.:** | **PC-0928** |
| **Base Part No.** | **8242AF** |
| **Description:** | **Energy Absorbing Lanyard** |

Dear Mr. Sponholz:

The purpose of this attestation is to attest to the fact that a representative of Exova OCM was on site at FallTech's facilities to confirm suitability of the equipment used, calibration status of the equipment and to witness testing performed by FallTech employees. Details of this visit are included below:

- Date of Testing:
  - July 7, 2016
- Exova OCM Test Witness:
  - Robert Fortner
- FallTech Test Operators:
  - Yesbet Sierra and Jay Sponholz
- Specification:
  - ANSI Z359.13-2013 Sections 4.5, 4.6, 4.13.1, 4.13.2, 4.13.3
- Equipment Calibration Interval
  - 1 year, except weights which are 5 years

Exova
OCM

Attached to this attestation is the test report generated by FallTech Testing Laboratory. Exova OCM test witness certifies the report accurately presents the testing performed on the samples identified.

| Test Report # | Date | Base Part # | Description | Sample ID's | Results |
|---|---|---|---|---|---|
| PC-0928 | 7/11/2016 | 8242AF | Energy Absorbing Lanyard | A2<br>A3<br>A4<br>A2<br>A3<br>A4<br>W1<br>W2<br>W3<br>C1<br>C2<br>C3<br>H1<br>H2<br>H3 | Pass |

| *Test Witness Signature:* | *(Signed for and on behalf of Exova-OCM)* |
|---|---|
| **Robert Fortner**<br>**Technician**<br>**Mechanical Laboratory** | for Robert Fortner<br>OCM 054 CERT. APPROVAL |

| *Approval Signature:* | *(Signed for and on behalf of Exova-OCM)* |
|---|---|
| **Mark E. Kokosinski**<br>**General Manager** | OCM 058 CERT. APPROVAL |







Exova OCM 3883 East Eagle Drive Anaheim, CA 92807 USA

**FallTech Testing Laboratory**
1306 S. Alameda Street,
Compton, CA 90221-4803
Tel: (323) 752-0060
www.falltech.com

# FallTech Test Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Test Report Number** | PC-0928 | **Date** | 7/11/2016 | **Rev** | | **Rev Date** | |
| **Report Prepared For** | FallTech | | | | | | |
| **Initiated By** | Dan Redden | **Test Specification** | ANSI Z359.13-2013<br>4.5, 4.6, 4.13.1, 4.13.2, 4.13.3 | | | | |
| **Base Part #** | 8242AF | **Description** | Energy Absorbing Lanyard | | | | |
| **Proposed Part #** | N/A | **Built By Whom** | Production | | | **BOM** | No |
| **Test Request #** | PC-0928 | **Date Received** | 7/5/2016 | | **Date Complete** | | 7/7/2016 |
| **Test Operator** | Jay Sponholz | **Test Operator** | Yesbet Sierra | | | | |

## Material/Sample Identification

| Sample ID | Description |
|---|---|
| A2 | Energy Absorbing Lanyard |
| A3 | Energy Absorbing Lanyard |
| A4 | Energy Absorbing Lanyard |
| A2 | Energy Absorbing Lanyard |
| A3 | Energy Absorbing Lanyard |
| A4 | Energy Absorbing Lanyard |
| W1 | Energy Absorbing Lanyard |
| W2 | Energy Absorbing Lanyard |
| W3 | Energy Absorbing Lanyard |
| C1 | Energy Absorbing Lanyard |
| C2 | Energy Absorbing Lanyard |
| C3 | Energy Absorbing Lanyard |
| H1 | Energy Absorbing Lanyard |
| H2 | Energy Absorbing Lanyard |
| H3 | Energy Absorbing Lanyard |

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# FallTech Test Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Test Report Number** | PC-0928 | **Date** | 7/11/2016 | **Rev** | | **Rev Date** | |
| **Report Prepared For** | FallTech | | | | | | |
| **Initiated By** | Dan Redden | **Test Specification** | ANSI Z359.13-2013<br>4.5, 4.6, 4.13.1, 4.13.2, 4.13.3 | | | | |
| **Base Part #** | 8242AF | **Description** | Energy Absorbing Lanyard | | | | |
| **Proposed Part #** | N/A | **Built By Whom** | Production | | | **BOM** | No |
| **Test Request #** | PC-0928 | **Date Received** | 7/5/2016 | | **Date Complete** | | 7/7/2016 |

## Test Summary

| Test Specification | Test Criteria | | Test Result | Pass/Fail |
|---|---|---|---|---|
| ANSI Z359.13-2013 4.5 | Arrest Distance | ≤ 48" | 39.0" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1023.2 Lbf | Pass |
| | Avg Arrest Force | ≤ 900 Lbf | 810.2 Lbf | Pass |
| ANSI Z359.13-2013 4.5 | Arrest Distance | ≤ 48" | 39.6" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1031.4 Lbf | Pass |
| | Avg Arrest Force | ≤ 900 Lbf | 796.1 Lbf | Pass |
| ANSI Z359.13-2013 4.5 | Arrest Distance | ≤ 48" | 40.2" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1102.7 Lbf | Pass |
| | Avg Arrest Force | ≤ 900 Lbf | 808.2 Lbf | Pass |
| ANSI Z359.13-2013 4.6 | Static Strength | ≥ 5000 Lbf | 5040.1 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| ANSI Z359.13-2013 4.6 | Static Strength | ≥ 5000 Lbf | 5255.2 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| ANSI Z359.13-2013 4.6 | Static Strength | ≥ 5000 Lbf | 5050.2 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| ANSI Z359.13-2013 4.13.1 | Arrest Distance | ≤ 48" | 39.4" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 978.7 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 786.2 Lbf | Pass |
| ANSI Z359.13-2013 4.13.1 | Arrest Distance | ≤ 48" | 41.2" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1013.1 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 787.8 Lbf | Pass |
| ANSI Z359.13-2013 4.13.1 | Arrest Distance | ≤ 48" | 40.6" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 978.5 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 789.2 Lbf | Pass |

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# FallTech Test Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Test Report Number** | PC-0928 | **Date** | 7/11/2016 | **Rev** | | **Rev Date** | |
| **Report Prepared For** | FallTech | | | | | | |
| **Initiated By** | Dan Redden | **Test Specification** | | ANSI Z359.13-2013<br>4.5, 4.6, 4.13.1, 4.13.2, 4.13.3 | | | |
| **Base Part #** | 8242AF | **Description** | | Energy Absorbing Lanyard | | | |
| **Proposed Part #** | N/A | **Built By Whom** | | Production | | **BOM** | No |
| **Test Request #** | PC-0928 | **Date Received** | | 7/5/2016 | **Date Complete** | | 7/7/2016 |

| | | | | |
|---|---|---|---|---|
| ANSI Z359.13-2013 4.13.2 | Arrest Distance | ≤ 48" | 33.8" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1095.2 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 917.8 Lbf | Pass |
| ANSI Z359.13-2013 4.13.2 | Arrest Distance | ≤ 48" | 34.2" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1272.3 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 938.4 Lbf | Pass |
| ANSI Z359.13-2013 4.13.2 | Arrest Distance | ≤ 48" | 34.0" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1314.9 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 937.2 Lbf | Pass |
| ANSI Z359.13-2013 4.13.3 | Arrest Distance | ≤ 48" | 42.4" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1236.4 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 814.9 Lbf | Pass |
| ANSI Z359.13-2013 4.13.3 | Arrest Distance | ≤ 48" | 45.6" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1081.6 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 784.1 Lbf | Pass |
| ANSI Z359.13-2013 4.13.3 | Arrest Distance | ≤ 48" | 44.0" | Pass |
| | Max Arrest Force | ≤ 1800 Lbf | 1064.9 Lbf | Pass |
| | Avg Arrest Force | ≤ 1125 Lbf | 789.8 Lbf | Pass |

## Conclusion

FallTech P/N 8242AF meets the requirements of ANSI Z359.13-2013 and ASTM F-887-13

## Report Signatories and Approval

| | | | |
|---|---|---|---|
| Lab Quality Manager | Jay Sponholz | Date | 7/11/2016 |
| Witnessed by | for R. Fortner | Date | 8/15/16 |

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# FallTech Test Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Test Report No.** | PC-2403 | **Rpt. Date** | 10/11/2021 | **Rpt. Rev** | | **Rev Date** | |
| **Report Prepared For** | FallTech | | | | | | |
| **Initiated By** | Dan Redden | **Test Specification(s)** | | ANSI Z359.3-2017: 4.2.2, 4.2.3 | | | |
| **Part No.** | 8209ABF | | | **Part No. Revision** | A | | |
| **Part Description** | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook | | | | | | |
| **Test Request No.** | PC-2403 | | | **Date Complete** | 10/8/2021 | | |
| **Test Operator(s)** | Yesbet Sierra / Jay Sponholz | | | | | | |

## Material/Sample Identification

| Sample ID | Description |
|---|---|
| SST1 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |
| SST2 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |
| SST3 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |
| DST1 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |
| DST2 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |
| DST3 | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook |

## Test Summary

| Test Specification | Test Criteria | | Test Result | Pass/Fail |
|---|---|---|---|---|
| ANSI Z359.3-2017 4.2.2 | Static Strength | ≥ 1000 Lbf | 1039.0 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| | Slippage | ≤ 3" Slippage | 0.0" | Pass |
| | Static Strength | ≥ 5000 Lbf | 5028.0 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| ANSI Z359.3-2017 4.2.2 | Static Strength | ≥ 1000 Lbf | 1028.1 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| | Slippage | ≤ 3" Slippage | 0.0" | Pass |
| | Static Strength | ≥ 5000 Lbf | 5028.0 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| ANSI Z359.3-2017 4.2.2 | Static Strength | ≥ 1000 Lbf | 1031.3 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |
| | Slippage | ≤ 3" Slippage | 0.0" | Pass |
| | Static Strength | ≥ 5000 Lbf | 5024.9 Lbf | Pass |
| | Hold | ≥ 1 Minute | 1 Minute | Pass |

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# FallTech Test Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Test Report No.** | PC-2403 | **Rpt. Date** | 10/11/2021 | **Rpt. Rev** | | **Rev Date** | |
| **Report Prepared For** | FallTech | | | | | | |
| **Initiated By** | Dan Redden | **Test Specification(s)** | | ANSI Z359.3-2017: 4.2.2, 4.2.3 | | | |
| **Part No.** | 8209ABF | | | **Part No. Revision** | A | | |
| **Part Description** | Adjustable Restraint Lanyard; Arc Flash 4' to 6' w/Snap Hook | | | | | | |
| **Test Request No.** | PC-2403 | | | **Date Complete** | 10/8/2021 | | |

## Test Summary (Continued)

| Test Specification | Test Criteria | | Test Result | Pass/Fail |
|---|---|---|---|---|
| ANSI Z359.3-2017 4.2.3 | Dynamic Strength | Peak Impact Load ≥ 3,600 Lbf | 5549.0 Lbf | Pass |
| | Hold | Remain Suspended ≥ 1 Minutes | 1 Minutes | Pass |
| ANSI Z359.3-2017 4.2.3 | Dynamic Strength | Peak Impact Load ≥ 3,600 Lbf | 5543.2 Lbf | Pass |
| | Hold | Remain Suspended ≥ 1 Minutes | 1 Minutes | Pass |
| ANSI Z359.3-2017 4.2.3 | Dynamic Strength | Peak Impact Load ≥ 3,600 Lbf | 5456.5 Lbf | Pass |
| | Hold | Remain Suspended ≥ 1 Minutes | 1 Minutes | Pass |

## Conclusion

Based upon the samples provided to the Lab:
FallTech P/N 8209AFB Rev. A meets the requirements of ANSI Z359.3-2017 and ASTM F887-20

## Report Signatories and Approval

| | | | |
|---|---|---|---|
| Lab Quality Manager | Jay Sponholz | Date | 10/11/2021 |

Test Performed for
ArcWear.com
Louisville, KY 40223
www.ArcWear.com

Personal Climbing Equipment provided by
**FallTech**
**1306 S Alameda St**
**Compton, CA 90221**
**800-719-4619**

## Model 8242, 6' Energy Absorbing Lanyard

ASTM F887-13 Standard Specifications for Personal Climbing Equipment
Section 22, Electric Arc Performance Evaluation

## Kinectrics Inc. Report No.: K-418926-1606H01-R00

Item received: June 17, 2016
Test Date: June 17, 2016

Client representative: Hugh Hoagland
ArcWear

Prepared by: Andrew Haines
Technologist
Kinectrics Inc

Approved by: Stephen Cress, P. Eng
Department Manager, DAM
Transmission and Distribution Technologies
Kinectrics Inc



Note about this report

- The test performed does not apply to electrical contact or electrical shock hazard
- The test result is applicable only to the Test Item, other material or color may have a different response.
- The findings of this report are based on the current test method as described in the Reference Standard
- It is assumed that the information supplied by the client was valid and complete

# Electric Arc Exposure Test Report

## Test Description

*Harnesses*- The test program requires the specimens be placed on mannequins as normally worn. A minimum of six samples are tested, three samples with the front facing the arc and three samples with the back side toward the arc. The mannequin is positioned as to have the arc centered on the chest for front facing exposure and centered on the fall arrest attachment for the back facing exposure.

*Harness accessories, loops etc.* - Three specimens of each accessory or loop are required to be exposed to the arc. These may be attached webbing or other suitable means to allow the item to be held against the mannequin or panel at a distance of 30.5 cm (12 inches).

*Shock Absorbing Lanyard* - Three specimens of each lanyard are required to be exposed to the arc. These are placed over the shoulder and held against the mannequin or panel at a distance of 30.5 cm (12 inches). Several lanyards may be tested at one time on the same mannequin.

## Test Requirements

The test standard requires that the finished personal climbing equipment be exposed to a level of 40±5 cal/cm². In the case where the arc exposure is out of range of the standard, extra samples may be performed if available. There shall be no ignition of any component, no greater than 5 seconds afterflame and no melting and dripping of any materials.

As proof of performance following the arc exposure, the exposed test specimens shall be subjected to a drop test per ANSI Z359.1 or Z349.13 as applicable. This shall be done as soon as practically possible. ArcWear has arranged to have the test items returned to the client or other laboratory to perform the drop test.

## Results and Observations

The following test data was recorded for each trial:

- Arc exposure electrical conditions: arc trial number, RMS arc current, arc voltage, arc duration, energy dissipated in arc, plots of arc current and arc voltage
- Average incident energy from monitors.
- Photographs of exposed samples before and after exposure
- Video recording during and immediately after the exposure to record after-flame
- Examination of the samples after the test for evidence of ignition, melting and dripping or any other material problems.

The essential test data and test results with a representative photograph of the samples are presented in the following pages. The observations are performed by a qualified observer that has knowledge of behavior of materials in an arc exposure and in depth knowledge of arc testing specifications and requirements.

## Quality Management

The arc testing performed to the above mentioned Standard is accredited by the Standards Council of Canada (SCC) to conform to the requirements of CAN-P-4E (ISO/IEC 17025:2005). Accreditation by the Standards Council of Canada (SCC) is a mark of competence and reliability recognized throughout the world.

**Sample description:** **6' Energy Absorbing Lanyard**
**Sample identification:** **Model 8242**
**Manufacturer** **FallTech**
**Material of webbing:** **Kevlar**

| **Trial # 16-3193** | | |
|---|---|---|
| Mannequin | A | B |
| Item Serial # | Quantity - 2 | Quantity - 1 |
| Ei, cal/cm² | 42.3 | 35.4 |
| Afterflame | 1, Absorber Cover Fabric | 0 |
| Ignition | N | N |
| Melting and dripping | N | N |
| Comment | Evidence of ablation of energy absorber cover fabric, but no concerns with material response. | Evidence of ablation of energy absorber cover fabric, but no concerns with material response. |

## Conclusions

The Model 8242 6' Energy Absorbing Lanyard has met the no melting, no dripping, no ignition criteria of ASTM F887-13 section 22.8. In order to satisfy the Electric Arc Performance requirements in accordance with section 22 of the standard, the test specimens must pass the specified drop test following arc exposure.