

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 #

S0106037

Declaration Date

1/6/2021

Tested Item #

68031AF2

Additional Items Conforming Under this Declaration:

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

OSHA 1926.502 & ASTM F887

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

PC-2092

K-580468-2011H05-R00

Authorized Signature

Name

Zachary Winters

Title

Engineering Manager

Date

1/6/2021



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

FallTech Test Report

Test Report No.	PC-2092	Rpt. Date	12/8/2020	Rpt. Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification(s)	OSHA 1926.502: (d)(15)(i)				
Part No.	68031AF2	Part No. Revision	A				
Part Description	Rescue Straps, Arc Flash, Kevlar/Nomex 2/pk						
Test Request No.	PC-2092	Date Complete	12/7/2020				
Test Operator(s)	Yesbet Sierra / Jay Sponholz						

Material/Sample Identification

Sample ID	Description
SST1	Rescue Straps, Arc Flash, Kevlar/Nomex 2/pk
SST2	Rescue Straps, Arc Flash, Kevlar/Nomex 2/pk


Test Summary

Test Specification	Test Criteria	Test Result	Pass/Fail
OSHA 1926.502 (d)(15)(i)	Static Strength	3600 Lbf. ≥ 1 Minute	3683.1 Lbf. Pass
	Static Strength	Withstand 3600 lb Load without breaking	No Breaking Pass
OSHA 1926.502 (d)(15)(i)	Static Strength	3600 Lbf. ≥ 1 Minute	3647.9 Lbf. Pass
	Static Strength	Withstand 3600 lb Load without breaking	No Breaking Pass

Conclusion

Based upon the samples provided to the Lab: FallTech P/N 68031AF2 Rev. A meets the requirements of OSHA 1926.502 and * ASTM F-887-18

Report Signatories and Approval

Lab Quality Manager		Date	12/8/2020
Witnessed by	Not Required	Date	N/A



QUALIFICATION TESTING - EXPOSURE TO AN ELECTRIC ARC

Test Specimen:

**FallTech, Rescue Strap, Style 68031AF2,
Webbing: Black Nomex**

Requested by:

**FallTech
1306 S Alameda St
Compton, CA 90221**

Test Standard:


ELECTRIC ARC TESTS: ASTM F887-20
OBSERVATION OF PERSONAL CLIMBING EQUIPMENT EXPOSED TO AN ELECTRIC ARC

Test Report:

K-580468-2011H05-R00


Sample Received November-18-2020	Test Date November-19-2020	Report Date December-14-2020
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Prepared by


Digitally signed
by Robert Ferraz
Date: 2020.12.14
13:34:36 -05'00'

Robert Ferraz
Technologist, HCL
TD Technologies, Kinectrics

Approved by


Claude Maurice
2020.12.14
17:38:01 -05'00'

Claude Maurice
Technical Specialist, HCL
TD Technologies, Kinectrics

For questions about this test report, please contact testing@arcwear.com



Revision History

Rev	Description		
00	Initial report creation		
	Issue Date	Prepared by	Approved by
	Dec-14-2020	Robert Ferraz	Claude Maurice
Rev	Description		
	Issue Date	Prepared by	Verified by

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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

- The test performed does not apply to electrical contact or electrical shock hazard.
- The test result is applicable only to the Test Specimens delivered to Kinectrics, other material, design or color may have a different response.
- It is the clients' responsibility to provide full and accurate information about the items supplied.
- No test is done to validate the fiber content or composition of the test item.
- Photographs of the test specimens and waveforms of the arc current, voltage and calorimeters with the circuit and arc exposure calibration records are available from Kinectrics and provided to the client separately from this report.



1 Test Standard:

Electrical arc test according to ASTM F887-20, Section 22

Standard Specifications for Personal Climbing Equipment, After Exposure to an Electric Arc Evaluation. Specimens are mounted on mannequins of panels having a distance of 30.5 cm (12 inches) from the centerline of the electrodes. The test standard requires that the finished personal climbing equipment be exposed to a level of 40 cal/cm² ± 5 cal/cm².

1.1 Test Description

Harnesses- The test program requires the specimens be placed on mannequins as normally worn. A minimum of eight samples are tested, four samples with the front facing the arc and four 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).

Energy 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.

Other effects than the thermal effects of an electric arc like noise, light emissions, pressure rise, hot oil, electric shock, the consequences of physical and mental shock or toxic influences are not covered by this standard.

1.2 Acceptance criteria for products exposed to electrical arc:

The procedure outlined in ASTM F887 is followed to verify the electric arc performance of the personal climbing equipment. The product is considered as having passed the visual inspection criteria if the parameters defined in Table 1-1 are met. As proof of performance following the arc exposure, the exposed test specimens shall be subjected to a drop test per ANSI Z359.13 as applicable. This shall be done as soon as practically possible. The samples have been returned to the client as directed to perform the drop test.

Table 1-1: Visual inspection Criteria for Electric Arc Performance of ASTM F887-20

Parameter	Criterion
Arc Energy	Electrical arc exposure of 40 cal/cm ² ± 5 cal/cm ²
Ignition	No electric arc ignition.
After-flame Time	Less than 5 seconds on load bearing materials and less than 15 seconds for accessories or non-load bearing components.
Melting/Dripping	No melting and dripping of molten materials to the floor of any load bearing material. Accessories are allowed to exhibit melting and dripping provided they are not ignited while dripping.

2 Test Condition:

The following test circuit parameters and conditions were used.

- Electric arc current: 8 kA rms \pm 10%, 60 Hz
- Open circuit voltage: 2500 V rms \pm 10%, 60 Hz
- Nominal Heat Flux Density: 2100 kW/m² (50 cal/cm²-s)
- Arc duration: 0.85 seconds \pm 0.1 s to obtain required incident energy
- Electrode gap: 305 mm (12 inches)
- Distance from mannequin to electrode: 305 mm (12 inches)

3 Test Specimen:

The following description of the test sample was provided by the client and confirmed by the identification tag shown in Figure 3.1.

Sample description: FallTech Rescue Strap

Sample identification: Style 68031AF2

Manufacturer: FallTech

Material of webbing: Black Kevlar

Producer: FallTech

Number of samples tested: 4

Deviations: Verification of arc performance for rescue straps is not the scope of ASTM F887-20.

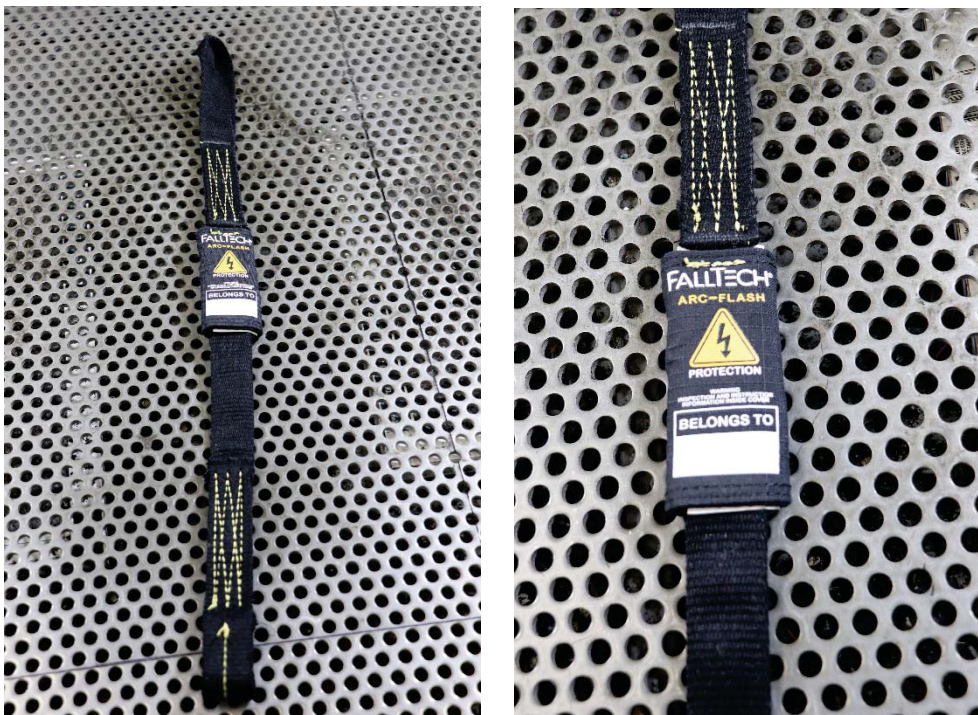


Figure 3.1: Sample photo of specimen



4 Test Results:

An arc exposure is performed on the samples as indicated.

If the conditions and evaluation of the samples meet the criteria in Table 1-1, the product has passed the electrical arc exposure and is candidate for the mechanical drop test to fully meet the arc performance requirements of ASTM F887-20. Photographs of the samples before and after the arc exposure are shown in Section 6.

Table 4-1: Summary of Test Results

Trial # 20-6700		
Mannequin	A	B
Item Serial #	n.a.	n.a.
Incident Energy	39 cal/cm ²	36 cal/cm ²
After-flame (sec.)	0	0
Ignition	N	N
Melting and Dripping	N	N
Acceptance Criteria	Meets	Meets

4.1 Observations:

Charring of the webbing was observed on all samples tested. The stitching and label pouch charred but no break-open. No after-flame was observed on the webbing. There was no evidence of dripping or ignition observed on any of the samples tested.

5 Interpretation of Results:

Based on the test results in Table 4-1 and observations, the product tested meets the requirements criteria of Table 1-1 as per ASTM F887-20 sections 22.1-22.4 and 22.6.1-22.6.2.

According to ASTM F887-20, Section 25, qualification of performance shall include a mechanical integrity (vertical drop test) as soon as possible following the arc exposure. This shall be arranged by the producer. The method and minimum quantity for the drop test for rescue straps is not covered in ASTM F887-20. A suitable test method shall be followed by the producer based on other applicable standards.