

Declaration of Conformity

In Accordance with ANSI/ISEA 125-2014



Alexander Andrew, Inc. 1306 S. Alameda St Compton, CA 90221

Declaration #

C0114002

Declaration Date

1.15.14

Tested Item #

8209AF

Arc Flash Adjustable Restraint Lanyard 4'-6'

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 performance standard(s):

ANSI Z359.3-2007 and ASTM F887-13

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

20140805

1401T09

Authorized Signature

Name

Dustin Hawkins

Title

VP Business Development

Date

11.18.14

FallTech Test Report

Test Report Number	20140805	Date	8/5/2014	Rev	A	Rev Date	11/11/2014
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.3-2007 4.2.2.2, 4.2.2.3				
Base Part #	8209 AF	Description	6' Arc Flash Adj Restraint Lanyard				
Proposed Part #	N/A	Built By Whom	Production	BOM	No		
Test Request #	PC-0086	Date Received		Date Complete	8/4/2014		
Test Operator	Dan Redden	Test Operator	N/A				

Material/Sample Identification

Sample ID	Description
PC-0086A	6' Arc Flash Adj Restraint Lanyard
PC-0086B	6' Arc Flash Adj Restraint Lanyard

Test Summary

Test Specification	Test Criteria	Test Result	Pass/Fail	
ANSI Z359.3-2007 4.2.2.2	Static Strength	1,000 Lbf \geq 1 Minute	1048.9 Lbf	Pass
	Static Strength	Maintain Adjusted Length \leq 3"	0.25"	Pass
	Static Strength	5,000 Lbf \geq 1 Minute	5029.8 Lbf	Pass
ANSI Z359.3-2007 4.2.2.3	Dynamic Strength	300 Lb Test Weight, 48" Free Fall	Did Not Break	Pass
	Dynamic Strength	Retain Test Weight for \geq 1 Minute	Held	Pass

Conclusion

FallTech P/N 8209 AF Adjustable Restraint Lanyard meets the requirements of ANSI Z359.3-2007.

Report Signatories and Approval

Lab Quality Manager Soung Liew		Date	8/5/2014
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Witnessed by	Not Applicable	Date	Not Applicable
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Rev A	Created Digital Copy
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This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to the joint ISO-ILAC-IAF Communiqué dated January 2009).



Hugh Hoagland Consulting, Inc.

ArcWear.com

Electric Arc Exposure Tests

For FallTech

Personal Climbing Equipment

Lanyard

6' Arc Flash Restraint Lanyard

Style: 8209 AF

Report Number: 1401T09 Revision number: 00

January 15, 2014

Tests Conducted at Kinectrics High Current Laboratory
Toronto, Ontario, Canada

Evaluation of Personal Climbing Equipment

ASTM F887-13 Standard Specifications for Personal Climbing Equipment.

Arc Exposure Tests at Kinectrics High Current Laboratory

General

At the request of Dan Redden, electric arc exposure tests were conducted on three samples of the Lanyard for FallTech. Dan Redden arranged with ArcWear.com to conduct tests at the High Current Laboratory of Kinectrics in Toronto and review test data.

The samples of the Lanyard were tested according to:

- ASTM F887-13 Standard Specifications for Personal Climbing Equipment.

This Standard evaluates personal climbing equipment products for ignition, melting and afterflame.

Test Samples

Test samples were received on January 13, 2014.

There is no special sample preparation for arc exposure testing is required by the Standard.

Test Results

The test program includes three two-mannequin arc trials for climbing equipment with front and back sides totaling to six samples exposed to an electric arc. The test program for other single sided equipment includes one two-mannequin trial or one three-panel trial totaling to three samples exposed to an electric arc.

The following test data was recorded for each trial:

- arc exposure electrical conditions: arc trial number, RMS arc current, peak arc current, arc voltage, arc duration, energy dissipated in arc, plots of arc current and arc voltage
- temperature rise response from two monitor for each mannequin or panel in each trial, plot of average responses from two monitor sensors, plot of Incident energy distribution E_i from bare shot analysis
- photographs of exposed material panels
- video

Above mentioned test data is part of report and is available for download from ArcWearOnline.com arc testing website. Test data is accessible only to and protected with FallTech unique password.

Essential test data and test results are presented in the table below and on the attached data pages as follows:

- test specimen description
- subjective evaluation

Detailed observation details for each trial are shown in Table 1 below.

Table 1

Test results and observations			
Trial # 14-0362			
Panel	A	B	C
Exposure level, cal/cm ²	36.6	42.7	49.3
Afterflame, sec	0.0	<1	<1
Melting	No	No	No
Dripping	No	No	No
Ignition	No	No	No

Conclusions

The Lanyard described in the Table 2 **passed** arc exposure test.

Table 2

Customer	FallTech
Test Equipment Type and Manufacture Name if different from Customer's	Lanyard
Design	6' Arc Flash Restraint Lanyard
Style	8209 AF
Number of samples tested	three

Arc exposed samples of Lanyard are **recommended** for follow up required Drop Test.

Requested by: Dan Redden

Approved by Hugh Hoagland
Arcwear.com

Neither Hugh Hoagland Consulting, Inc. dba/ArcWear, nor its affiliates, nor any person acting on behalf of any of them:

- a) makes any warranty, express or implied, with respect to the use of any information, apparatus, method, or process disclosed in this report or that such use may not infringe privately owned rights; or*
- b) assumes any liabilities with respect to the use of, or for damages resulting from the use of, any information, apparatus, method, or process disclosed in this report*

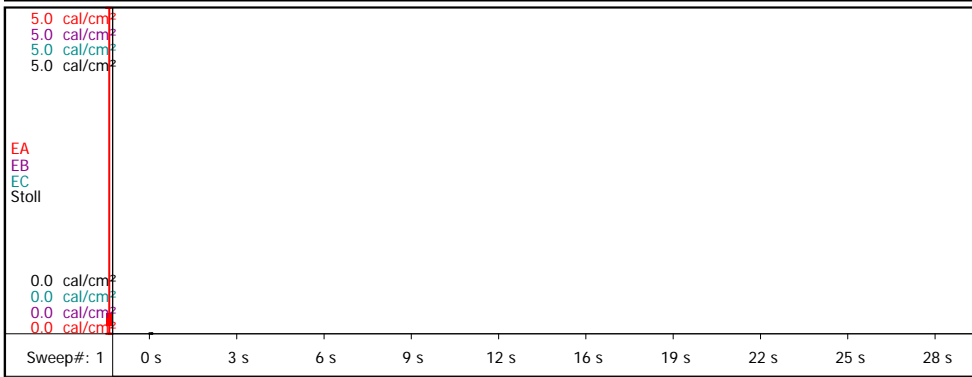
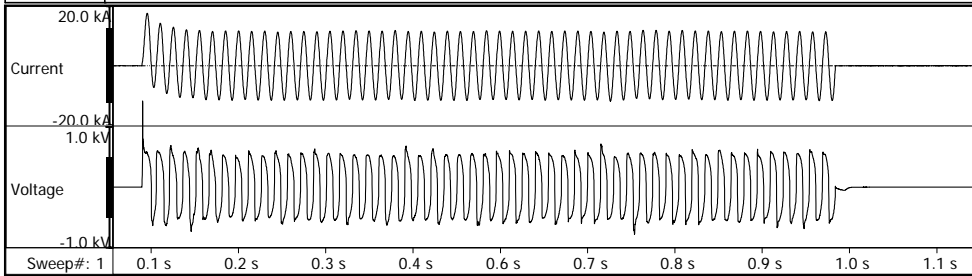
High Current Lab

Kinectrics Inc
800 Kipling Ave
Toronto, Ontario



Record #	K-418608-362		
Project #	K-418608	Client:	ArcWear

Standard:	ASTM F887 - 12e1 Standard Specifications for Personal Climbing Equipment		
Var. to Std:	None		
Fabric	FallTech, Style 8209 AF, 6' Arc Flash Restraint Lanyard, ArcWear# 1401T09		



Current Total RMS	8.200 kA	Panel A:	Panel B:	Panel C:
Current Peak	17.61 kA	Ei = 36.6 cal/cm ²	Ei = 42.7 cal/cm ²	Ei = 49.3 cal/cm ²
Arc Voltage	465.0 V			
Duration (cycles)	53.16 cycles			
Duration (time)	885.6 ms			
Arc Energy	3.109 MJ	Date (mm/dd/yyyy)	1/15/2014	