

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 #

B1215059g

Declaration Date

12/23/2015

Tested Item #

8073RFDM

Arc Flash Construction Climbing FBH 3D+FD

Additional Items Conforming Under this Declaration:

8073RFDS	8073RFDL	8073RFDXL	8073FDS	8073FDM	8073FDL	8073FDXL	8073RS
8073RM	8073RL	8073RXL	8073R2X	8073R3X	8073R4X	8073S	8073M
8073L	8073XL	8073QCS	8073QCM	8073QCL	8073QCXL	8073QC2X	8073QC3X

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

ANSI Z359.11-2014 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

PC-0762

K-418809-1509H13-R00

PC-0762HF

Authorized Signature

Name

Zachary Winters

Title

Engineering Manager

Date

10/13/2020



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

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

FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
Test Operator	Yesbet Sierra	Test Operator	Oscar Jaramillo				

Material/Sample Identification

Sample ID	Description
2613393	Full Body Harness
2613383	Full Body Harness
2613382	Full Body Harness
2613384	Full Body Harness
2613376	Full Body Harness
2613386	Full Body Harness
2613388	Full Body Harness
2613387	Full Body Harness
2613394	Full Body Harness
2613378	Full Body Harness
2613389	Full Body Harness
2613364	Full Body Harness
2613385	Full Body Harness
2613380	Full Body Harness
2613381	Full Body Harness
2613390	Full Body Harness
2613373	Full Body Harness
2613375	Full Body Harness
2613392	Full Body Harness
2613377	Full Body Harness
2613372	Full Body Harness

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Summary

Test Specification	Test Criteria		Test Result	Pass/Fail
ANSI Z359.11-2014 4.3.5	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3647.7 Lbf	Pass
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass
ANSI Z359.11-2014 4.3.5	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3635.1 Lbf	Pass
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass
ANSI Z359.11-2014 4.3.5	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3635.7 Lbf	Pass
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.5	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3634.7 Lbf	Pass			
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
ANSI Z359.11-2014 4.3.5	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3651.4 Lbf	Pass			
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
ANSI Z359.11-2014 4.3.5	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3656.3 Lbf	Pass			
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			

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).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.5	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3657.3 Lbf	Pass			
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
ANSI Z359.11-2014 4.3.5	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3687.9 Lbf	Pass			
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
ANSI Z359.11-2014 4.3.5	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3637.1 Lbf	Pass			
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring	Peak Impact Load ≥ 3,600 Lbf	7296.7 Lbf	Pass			
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Dorsal D-ring	Angle at Rest ≤ 30°	5.45°	Pass			
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	8.88"	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring	Peak Impact Load ≥ 3,600 Lbf	6439.8 Lbf	Pass			
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Dorsal D-ring	Angle at Rest ≤ 30°	1.15°	Pass			
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	9.84"	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring	Peak Impact Load $\geq 3,600$ Lbf	7624.9 Lbf	Pass			
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Dorsal D-ring	Angle at Rest $\leq 30^\circ$	2.40°	Pass			
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	11.40"	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Sternal D-ring	Peak Impact Load $\geq 3,600$ Lbf	3528.7 Lbf	Pass			
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Sternal D-ring	Angle at Rest $\leq 30^\circ$	23.45°	Pass			
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	14.64"	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.3	Dynamic Performance Sternal D-ring	Peak Impact Load $\geq 3,600$ Lbf	3540.3 Lbf	Pass			
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Sternal D-ring	Angle at Rest $\leq 30^\circ$	21.80°	Pass			
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	13.68"	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Sternal D-ring	Peak Impact Load $\geq 3,600$ Lbf	4232.8 Lbf	Pass			
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Sternal D-ring	Angle at Rest $\leq 30^\circ$	23.90°	Pass			
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	11.40"	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Static Strength Test, Dorsal D-ring, Full Body Harness						
Test Method	ANSI Z359.11-2014 4.3.5						
Acceptance Criteria	ANSI Z359.11-2014 3.2.1.3.3						
Test Procedure	TI-090						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	67.7° F / 52.4 % R.H.						
Test By	Yesbet Sierra			Test Date	11/24/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Load Cell	10,000 Lbs.	221731	10/27/2015
Caliper	x0.001"	ALE-95796	4/25/2015

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613393	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3647.7 Lbf	Pass
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
2613383	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3635.1 Lbf	Pass			
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
2613382	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3635.7 Lbf	Pass			
	Static Strength (Dorsal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Static Strength Test, Sternal D-ring, Full Body Harness						
Test Method	ANSI Z359.11-2014 4.3.5						
Acceptance Criteria	ANSI Z359.11-2014 3.2.2.3.2						
Test Procedure	TI-092						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	68.3° F / 54.0 % R.H.						
Test By	Yesbet Sierra			Test Date	11/24/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Load Cell	10,000 Lbs.	221731	10/27/2015
Caliper	x0.001"	ALE-95796	4/25/2015

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613384	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3634.7 Lbf	Pass
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
2613376	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3651.4 Lbf	Pass			
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
2613386	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3656.3 Lbf	Pass			
	Static Strength (Sternal D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Static Strength Test, Side D-ring, Full Body Harness						
Test Method	ANSI Z359.11-2014 4.3.5						
Acceptance Criteria	ANSI Z359.11-2014 3.2.6.1.1						
Test Procedure	TI-097						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	71.3°F /39.0% RH						
Test By	Yesbet Sierra			Test Date	11/19/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Load Cell	10,000 Lbs.	221731	10/27/2015
Caliper	x0.001"	ALE-95796	4/25/2015

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613388	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3657.3 Lbf	Pass
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
2613387	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3687.9 Lbf	Pass			
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			
2613394	Static Strength (Side D-ring)	3600 Lbf ≥ 1 Minute	3637.1 Lbf	Pass			
	Static Strength (Side D-ring)	Harness shall not release Test Torso	Did Not Release	Pass			
	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass			
	Tear Distance	Shall not tear further than adjacent eyelet	Did Not Tear	Pass			
	Tearing	Straps shall not show any signs of tearing	Did Not Tear	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Dynamic Performance Test, Dorsal D-ring, Full Body Harness, Feet First						
Test Method	ANSI Z359.11-2014 4.3.3						
Acceptance Criteria	ANSI Z359.11-2014 3.2.1.3.1						
Test Procedure	TI-088						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	73.1°F / 49.9% RH						
Test By	Yesbet Sierra			Test Date	11/24/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Altimeter	100 Ft	26230	4/17/2015
Digital Protractor	0.1°	CP120266	6/18/2015
Stop Watch	0.001%	140839448	12/30/2014

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613378	Dynamic Performance Dorsal D-ring	Peak Impact Load ≥ 3,600 Lbf	7296.7 Lbf	Pass
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass
	Dynamic Performance Dorsal D-ring	Angle at Rest ≤ 30°	5.45°	Pass
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	8.88"	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
2613389	Dynamic Performance Dorsal D-ring	Peak Impact Load $\geq 3,600$ Lbf	6439.8 Lbf	Pass			
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Dorsal D-ring	Angle at Rest $\leq 30^\circ$	1.15°	Pass			
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	9.84"	Pass			
2613364	Dynamic Performance Dorsal D-ring	Peak Impact Load $\geq 3,600$ Lbf	7624.9 Lbf	Pass			
	Dynamic Performance Dorsal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Dorsal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Dorsal D-ring	Angle at Rest $\leq 30^\circ$	2.40°	Pass			
	Dynamic Performance Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring	Harness Stretch Shall Not Exceed 18"	11.40"	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Dynamic Performance Test, Sternal D-ring, Full Body Harness, Feet First						
Test Method	ANSI Z359.11-2014 4.3.3						
Acceptance Criteria	ANSI Z359.11-2014 3.2.2.3.1						
Test Procedure	TI-091						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	72.4°F / 49.3% RH						
Test By	Yesbet Sierra			Test Date	11/24/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Altimeter	100 Ft	26230	4/17/2015
Digital Protractor	0.1°	CP120266	6/18/2015
Stop Watch	0.001%	140839448	12/30/2014

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613385	Dynamic Performance Sternal D-ring	Peak Impact Load > 3,600 Lbf	3528.7 Lbf	Pass
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass
	Dynamic Performance Sternal D-ring	Angle at Rest ≤ 30°	23.45°	Pass
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed	Visibly and Permanently Deployed	Pass
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	14.64"	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
2613380	Dynamic Performance Sternal D-ring	Peak Impact Load $\geq 3,600$ Lbf	3540.3 Lbf	Pass			
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Sternal D-ring	Angle at Rest $\leq 30^\circ$	21.80°	Pass			
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	13.68"	Pass			
2613381	Dynamic Performance Sternal D-ring	Peak Impact Load $\geq 3,600$ Lbf	4232.8 Lbf	Pass			
	Dynamic Performance Sternal D-ring	Harness Shall Not Release Test Torso	Did Not Release	Pass			
	Dynamic Performance Sternal D-ring	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
	Dynamic Performance Sternal D-ring	Angle at Rest $\leq 30^\circ$	23.90°	Pass			
	Dynamic Performance Sternal D-ring	At Least One Fall Arrest Indicator Shall Be	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Sternal D-ring	Harness Stretch Shall Not Exceed 18"	11.40"	Pass			

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Fall Arrest Indicator Test, Dorsal D-ring, Full Body Harness						
Test Method	ANSI Z359.11-2014 4.3.6						
Acceptance Criteria	ANSI Z359.11-2014 3.2.1.3.4						
Test Procedure	TI-099						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	60.4 °F / 34.2 % RH						
Test By	Yesbet Sierra			Test Date	12/1/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Altimeter	100 Ft	26230	4/17/2015

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613390	Fall Arrest Indicator Test Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
2613373	Fall Arrest Indicator Test Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
2613375	Fall Arrest Indicator Test Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		

Test Information

Description of Test	Fall Arrest Indicator Test, Sternal D-ring, Full Body Harness						
Test Method	ANSI Z359.11-2014 4.3.6						
Acceptance Criteria	ANSI Z359.11-2014 3.2.2.3.3						
Test Procedure	TI-099						
Conditioning Requirements	Not Applicable		Actual Conditions	Not Applicable			
Time Removed from Conditioning	Not Applicable		Time Tested	Not Applicable			
Test Environment	64.2 °F / 30.9 % RH						
Test By	Yesbet Sierra			Test Date	12/1/2015		

Equipment Used

Equipment Used	Size/Type	Control Number	Calibration Date
Test Torso	220 Lbs.	TOR220	4/16/2014
Altimeter	100 Ft	26230	4/17/2015

Test Results

Sample ID	Characteristic	Criteria	Test Data	Pass/Fail
2613392	Fall Arrest Indicator Test Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
2613377	Fall Arrest Indicator Test Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
2613372	Fall Arrest Indicator Test Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass

End of Report

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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.



FallTech Test Report

Test Report Number	PC-0762	Date	12/23/2015	Rev		Rev Date	
Report Prepared For	FallTech						
Initiated By	Dan Redden	Test Specification	ANSI Z359.11-2014 4.3.5, 4.3.3, 4.3.6, 4.3.7 ASTM F887-13				
Base Part #	8073RFD	Description	Full Body Harness				
Proposed Part #	N/A	Built By Whom	Production	BOM	NO		
Test Request #	PC-0762	Date Received	11/10/2015	Date Complete	12/1/2015		
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Dorsal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Sternal D-ring	At Least One Fall Arrest Indicator Shall Be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass			
ANSI Z359.11-2014 4.3.7	Lanyard Parking Attachment Element	Disengagement load < 120 Lbf	Previously tested and Passed under PC-0761	Pass			

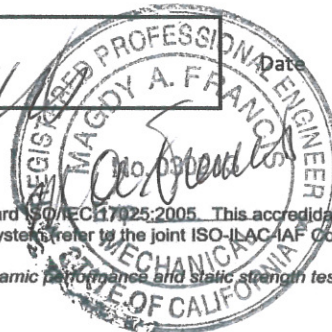
Conclusion

FallTech P/N 8073RFD meets the requirements of ANSI Z359.11-2014 and ASTM F887-13.

Report Signatories and Approval

Lab Quality Manager	<i>Jay Spornholz</i>	Date	12/23/2015
----------------------------	----------------------	-------------	------------

Witnessed by	<i>M A Francis</i>	Date	12/29/15
---------------------	--------------------	-------------	----------



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 Communique dated January 2009).

FallTech Testing Laboratory allows for a +/- 5% tolerance on dynamic performance and static strength test results.





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

8073RFDM, Full Body Harness

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

Kinectrics Inc. Report No.: K-418809-1509H13-R00

Item received: September 23, 2015

Test Date: September 23, 2015

Client representative: Hugh Hoagland _____
ArcWear

Prepared by: Andrew Haines _____
Technologist
Kinectrics Inc

Approved by: Claude Maurice _____
Laboratory Manager, HCL
Kinectrics Inc

Kinectrics Inc takes reasonable steps to ensure that all work performed shall meet the industry standards as set out in Kinectrics Inc.'s Quality Manual, and that all reports shall be reasonably free of errors, inaccuracies or omissions. KINECTRICS INC. DOES NOT MAKE ANY WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY INFORMATION CONTAINED IN THIS REPORT OR THE RESPECTIVE WORKS OR SERVICES SUPPLIED OR PERFORMED BY KINECTRICS INC. Kinectrics Inc. does not accept any liability for any damages, either directly, consequentially or otherwise resulting from the use of this report.

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

Kinectrics Inc., 800 Kipling Avenue, Toronto, Ontario, Canada, M8Z 6C4
Tel: 416-207-6305, FAX: 416-207-5717
www.kinectrics.com

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: Full Body Harness
Sample identification: 8073RFDM
Material of webbing: Nomex

Trial # 15-6260		
Mannequin	A – front exposure	B – back exposure
Item Serial #	N/A	N/A
Ei, cal/cm ²	42.2	40.3
Afterflame	1	1
Ignition	N	N
Melting and dripping	N	N
Comment	Pass	Pass
Trial # 15-6262		
Mannequin	A – front exposure	B – back exposure
Item Serial #	N/A	N/A
Ei, cal/cm ²	42.8	41.0
Afterflame	1	1
Ignition	N	N
Melting and dripping	N	N
Comment	Pass	Pass
Trial # 15-6263		
Mannequin	A – front exposure	B – back exposure
Item Serial #	N/A	N/A
Ei, cal/cm ²	44.0	39.7
Afterflame	1.5	1.0
Ignition	N	N
Melting and dripping	N	N
Comment	Pass	Pass

Conclusions

The 8073RFDM Full Body Harness 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.