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 #

B0401152b

Declaration Date

1/6/2022

Tested Item #

7054FDM

Arc Flash Nylon Std Climbing Non-belted FBH 1D+FD QC Legs/QC Chest

Additional I	Additional Items Conforming Under this Declaration:								
7054FDXS	7054FD3X	70512X	7051BFDL	7054BFDS	7054BFD3X				
7054FDS	7049	8087	7051BFDXL	7054BFDM					
7054FDL	7049XL	7051BFDXS	7051BD2X	7054BFDL					
7054FDXL	7051	7051BFDS	7051BFD3X	7054BFDXL					
7054FD2X	7051XL	7051BFDM	7054BFDXS	7054BFD2X					

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 & 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-2207

K-580521-2102H05-R00

Authorized Signature

Name Zachary Winters Title Engineering Manager

Date

1/6/2022



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

FLT-23 Rev D





FallTech Test Report								
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date		
Report Prepared For	FallTech							
Initiated By	Dan Redden	Test Specification(s) ANSI Z359.11-2014: 4.3.5, 4.3.3, 4.3.4, 4.3.6 ASTM F-887-18						
Part No.	7054FD			Part No. Re	evision	Α		
Part Description	Arc Flash Nylon Standard	Climbing Non	-Belted FBH	S 1D + FD C	C Legs/QC	Chest		
Test Request No.	PC-2207 Date Complete 3/24/2021							
Test Operator(s)	est Operator(s) Yesbet Sierra / Jay Sponholz							

	Material/Sample Identification					
Sample ID	Description					
5706813	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706815	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706811	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706816	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706809	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706819	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5767856	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706821	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706818	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5767857	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706812	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706822	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5767858	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706820	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706814	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706825	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706826	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					
5706823	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest					







	FallTech Test Report							
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date		
Report Prepared For	FallTech							
Initiated By	Dan Redden	Test Specific	cation(s)	ANSI Z359. ASTM F-88		3.5, 4.3.3, 4.	3.4, 4.3.6	
Part No.	7054FD			Part No. Re	evision	Α		
Part Description	Part Description Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest							
Test Request No.	PC-2207			Date Comp	lete	3/24/2021		

Test Summary								
Test Specification	Tes	t Criteria	Test Result	Pass/Fail				
	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3618.3 Lbf	Pass				
ANGL 7250 44 2044	Static Strength (Dorsal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI Z359.11-2014 4.3.5	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.5.5	Tear Distance (Buckle)	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				
	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3624.6 Lbf	Pass				
ANG 7250 44 204 4	Static Strength (Dorsal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI Z359.11-2014 4.3.5	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.3.3	Tear Distance (Buckle)	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				
	Static Strength (Dorsal D-ring)	3600 Lbf ≥ 1 Minute	3618.2 Lbf	Pass				
	Static Strength (Dorsal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI Z359.11-2014	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.3.5	Tear Distance (Buckle)	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				







	FallTech Test Report								
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date			
Report Prepared For	FallTech								
Initiated By	Dan Redden	Test Specific	cation(s)	ANSI Z359. ASTM F-88		3.5, 4.3.3, 4.	3.4, 4.3.6		
Part No.	7054FD			Part No. Re	evision	Α			
Part Description	Part Description Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest								
Test Request No.	PC-2207			Date Comp	lete	3/24/2021			

	Test Summary (Continued)							
Test Specification	Tes	t Criteria	Test Result	Pass/Fail				
	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3625.2 Lbf	Pass				
ANGL 7350 44 2044	Static Strength (Sternal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI Z359.11-2014 4.3.5	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.5.5	Tear Distance	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				
	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3623.6 Lbf	Pass				
ANGL 7350 44 2044	Static Strength (Sternal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI Z359.11-2014 4.3.5	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.5.5	Tear Distance	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				
	Static Strength (Sternal D-ring)	3600 Lbf ≥ 1 Minute	3623.4 Lbf	Pass				
ANSI 7359.11-2014	Static Strength (Sternal D-ring)	Harness Shall Not Release Test Torso	Did Not Release	Pass				
ANSI 2359.11-2014 4.3.5	Adjuster Slippage	Slippage ≤ 1"	0.0"	Pass				
4.3.3	Tear Distance	Shall Not Tear a Distance > 1" or Adjacent Eyelet	Did Not Tear Through	Pass				
	Tearing	Straps Shall Not Show Any Signs of Tearing	Did Not Tear	Pass				





	FallTech Test Report								
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date			
Report Prepared For	FallTech								
Initiated By	Dan Redden	Test Specific	cation(s)	ANSI Z359. ASTM F-88		3.5, 4.3.3, 4.	3.4, 4.3.6		
Part No.	7054FD			Part No. Re	evision	Α			
Part Description	Part Description Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest								
Test Request No.	PC-2207			Date Comp	lete	3/24/2021			

Test Summary (Continued)							
Test Specification	Test	Criteria	Test Result	Pass/Fail			
	Dynamic Performance Dorsal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	4424.2 Lbf	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring (Feet First)	Remain Suspended for ≥ 5 Minutes	5 Minutes	Pass			
4.5.5	Dynamic Performance Dorsal D-ring (Feet First)	Angle at Rest ≤ 30°	1.9°	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	8.8"	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	4460.3 Lbf	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring (Feet First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass			
4.3.3	Dynamic Performance Dorsal D-ring (Feet First)	Angle at Rest ≤ 30°	0.8°	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	9.5"	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	4253.4 Lbf	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass			
ANSI Z359.11-2014 4.3.3	Dynamic Performance Dorsal D-ring (Feet First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass			
4.3.3	Dynamic Performance Dorsal D-ring (Feet First)	Angle at Rest ≤ 30°	3.3°	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass			
	Dynamic Performance Dorsal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	10.4"	Pass			





	FallTech Test Report								
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date			
Report Prepared For	FallTech								
Initiated By	Dan Redden	Test Specific	cation(s)	ANSI Z359. ASTM F-88		3.5, 4.3.3, 4.	3.4, 4.3.6		
Part No.	7054FD			Part No. Re	evision	Α			
Part Description	Part Description Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest								
Test Request No.	PC-2207			Date Comp	lete	3/24/2021			

	Test Summary (Continued)								
Test Specification	Test	Criteria	Test Result	Pass/Fail					
	Dynamic Performance Dorsal D-ring (Head First)	Peak Impact Load ≥ 3,600 Lbf	2980.4 Lbf	*					
ANG 7050 44 0044	Dynamic Performance Dorsal D-ring (Head First)	Harness Shall Not Release Test Torso	Did Not Release	Pass					
ANSI Z359.11-2014 4.3.4	Dynamic Performance Dorsal D-ring (Head First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	Angle at Rest ≤ 30°	8.2°	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	Peak Impact Load ≥ 3,600 Lbf	2564.1 Lbf	*					
ANGL 7250 44 2044	Dynamic Performance Dorsal D-ring (Head First)	Harness Shall Not Release Test Torso	Did Not Release	Pass					
ANSI Z359.11-2014 4.3.4	Dynamic Performance Dorsal D-ring (Head First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	Angle at Rest ≤ 30°	11.6°	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	Peak Impact Load ≥ 3,600 Lbf	2131.9 Lbf	*					
ANGL 7250 44 2044	Dynamic Performance Dorsal D-ring (Head First)	Harness Shall Not Release Test Torso	Did Not Release	Pass					
ANSI Z359.11-2014 4.3.4	Dynamic Performance Dorsal D-ring (Head First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	Angle at Rest ≤ 30°	13.4°	Pass					
	Dynamic Performance Dorsal D-ring (Head First)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass					







	FallTech Test Report								
Test Report No.	PC-2207	Rpt. Date	3/29/2021	Rpt. Rev		Rev Date			
Report Prepared For	FallTech								
Initiated By	Dan Redden	Test Specific	ration(e)	ANSI Z359. ASTM F-88		3.5, 4.3.3, 4.3.4, 4.3.6			
Part No.	7054FD			Part No. Re	vision	А			
Part Description	Part Description Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest								
Test Request No.	PC-2207			Date Comp	lete	3/24/2021			

Test Summary (Continued)					
Test Specification	Test Criteria		Test Result	Pass/Fail	
	Dynamic Performance Sternal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	2818.3 Lbf	*	
	Dynamic Performance Sternal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass	
ANSI Z359.11-2014	Dynamic Performance Sternal D-ring (Feet First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass	
4.3.3	Dynamic Performance Sternal D-ring (Feet First)	Angle at Rest ≤ 50°	26.1°	Pass	
	Dynamic Performance Sternal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass	
	Dynamic Performance Sternal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	12.5"	Pass	
	Dynamic Performance Sternal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	2894.2 Lbf	*	
	Dynamic Performance Sternal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass	
ANSI Z359.11-2014	Dynamic Performance Sternal D-ring (Feet First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass	
4.3.3	Dynamic Performance Sternal D-ring (Feet First)	Angle at Rest ≤ 50°	24.4°	Pass	
	Dynamic Performance Sternal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass	
	Dynamic Performance Sternal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	13.0"	Pass	



FallTech Testing Laboratory

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

FallTech Test Report					
Test Report No.	PC-2207				
Report Prepared For	FallTech				
Initiated By	Dan Paddan II ast Snacitication(s)		ANSI Z359.11-2014: 4.3.5, 4.3.3, 4.3.4, 4.3.6 ASTM F-887-18		
Part No.	7054FD Part No. Revision A				
Part Description	Arc Flash Nylon Standard Climbing Non-Belted FBH S 1D + FD QC Legs/QC Chest				
Test Request No.	PC-2207 Date Complete 3/24/2021				

Test Summary (Continued)				
Test Specification	Test Criteria		Test Result	Pass/Fail
	Dynamic Performance Sternal D-ring (Feet First)	Peak Impact Load ≥ 3600 Lbf	3310.7 Lbf	*
	Dynamic Performance Sternal D-ring (Feet First)	Harness Shall Not Release Test Torso	Did Not Release	Pass
ANSI Z359.11-2014	Dynamic Performance Sternal D-ring (Feet First)	Remain Suspended for <u>></u> 5 Minutes	5 Minutes	Pass
4.3.3	Dynamic Performance Sternal D-ring (Feet First)	Angle at Rest ≤ 50°	30.2°	Pass
	Dynamic Performance Sternal D-ring (Feet First)	At Least One Fall Arrest Indicator Shall be Deployed Visibly and Permanently	Visibly and Permanently Deployed	Pass
	Dynamic Performance Sternal D-ring (Feet First)	Harness Stretch Shall Not Exceed 18"	13.0"	Pass
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Test (Doral D-ring)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Test (Doral D-ring)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass
ANSI Z359.11-2014 4.3.6	Fall Arrest Indicator Test (Doral D-ring)	At Least One Fall Arrest Indicator Shall Deploy	Visibly and Permanently Deployed	Pass

Conclusion

Based upon the samples provided to the Lab:

FallTech P/N 7054FD Rev. A meets the requirements of ANSI Z359.11-2014 and * ASTM F-887-18

Test Exceptions

* Harness has been dynamically tested and subjected to forces of 5,000 Lbs. or more. Energy absorbing properties inherent to the harness prevented residual force readings equal to or greater than the 3,600 Lbs. required by the standard.

Report Signatories and Approval				
Lab Quality Manager	Jay Sponholz	Date	3/29/2021	
		- 1		
Witnessed by	Not Required	Date	N/A	







TESTING - EXPOSURE TO AN ELECTRIC ARC

Test Specimen:

Harness, Style 7054FDM Webbing: Yellow Nylon

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-580521-2102H05-R00

Sample Received Febuary-19-2021	Test Date February-24-2021	Report Date March-01-2021
Prepared by	Approved	l by
Robert Ferraz Technologist, HCL TD Technologies, Kinectrics	Techni	Maurice cal Specialist, HCL chnologies, Kinectrics

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

KINECTRICS INC. 800 Kipling Ave, Unit 2, M8Z 5G5, Toronto, ON, Canada www.kinectrics.com



Revision History

Rev	Description			
00	Initial report creation			
	Issue Date Prepared by Approved by			
	March-01-2021	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 Requirements

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.

Harness accessories, loops etc. - Three specimens of each accessory or loop are required to be exposed to the arc.

Energy Absorbing Lanyard - Three specimens of each lanyard are required to be exposed to the arc.

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. 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 ± 10%, 60 Hz
Open circuit voltage: 2500 V rms ± 10%, 60 Hz

- Nominal Heat Flux Density: 2100 kW/m² (50 cal/cm²·s)

- Arc duration: 0.85 seconds ± 0.1 s to obtain required incident energy

- Electrode gap: 305 mm (12 inches)

- Distance from mannequin to electrode: 305 mm (12 inches)

Note: The measurement uncertainty, MU, for the measured values of this test method are well within the requirements of the test standard and are defined on a 95% confidence interval basis over the full test range, as follows:

- Temperature: ± 2 °C Incident Energy: ± 1.5% - Arc Current: ± 2.5% Voltage: ± 2.2%

- Time zero reference: ± 3 ms

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, Harness Sample identification: Style 7054FDM

Manufacturer: Falltech

Material of webbing: Yellow Nylon with Nomex Kevlar Ripstop Leg and Shoulder Yoke Pads

Number of samples tested: 12 Deviations: None

Note: Product modified from as-received state. Suspension Trauma Safety

Strap Packs removed from harness prior to testing, as requested by the

manufacturer.



Figure 3.1: Sample photo of Identification Tag



4 Test Results:

Arc exposures were performed on twelve 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 # 21-1154	
Mannequin	A – Front	B – Back
Item Serial #	5706821	5706822
Incident Energy	37.4 Cal/cm ²	39.8 Cal/cm ²
After-flame	0	0
Ignition	N	N
Melting and Dripping	N	N
Acceptance Criteria	Meets	Meets
	Trial # 21-1155	
Mannequin	A – Front	B – Back
Item Serial #	5706823	5706841
Incident Energy	38.7 Cal/cm ²	44.3 Cal/cm ²
After-flame	0	0
Ignition	N	N
Melting and Dripping	N	N
Acceptance Criteria	Meets	Meets
	Trial # 21-1156	
Mannequin	A – Front	B – Back
Item Serial #	5706820	5706818
Incident Energy	37.7 Cal/cm ²	40.1 Cal/cm ²
After-flame	0	0
Ignition	N	N
Melting and Dripping	N	N
Acceptance Criteria	Meets	Meets
	Trial # 21-1157	
Mannequin	A – Front	B – Back
Item Serial #	5706809	5706815
Incident Energy	40.7 Cal/cm ²	38.2 Cal/cm ²
After-flame	0	0
Ignition	N	N
Melting and Dripping	N	N
Acceptance Criteria	Meets	Meets



Trial # 21-1158					
Mannequin	A – Front	B – Back			
Item Serial #	5706812	5706811			
Incident Energy	40.2 Cal/cm ²	40.3 Cal/cm ²			
After-flame	0	0			
Ignition	N	N			
Melting and Dripping	N	N			
Trial # 21-1159					
Mannequin	A – Front	B – Back			
Item Serial #	5706819	5706810			
Incident Energy	38.2 Cal/cm ²	41.0 Cal/cm ²			
After-flame	0	7			
Ignition	N	N			
Melting and Dripping	N	N			
Acceptance Criteria	Meets	Meets			

4.1 Observations:

Light charring of the outer layer of webbing was observed on all samples tested. Afterflame was observed on the identification tag cover of one of the samples tested lasting less than 15 seconds as described in Table 4-1. There was no evidence of melting, dripping or ignition 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. If any accessories are to be added to the product, or the product undergoes modification from what has been reported, it must be re-tested.