Declaration of Conformity

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

Declaration #: DOC-UFH10533Q
Declaration Date: 06/06/2024

Item #: UFH10533Q

Description: KStrong® EndurX™ 5-Point Full Body Harness, Abrasion Resistant Shoulder Pad, Deluxe Leg Pads, Enhanced Dorsal D-ring Plus™, Shoulder D-rings, Quick Slide Adjusters, Trauma Relief Straps, QC Chest/Legs, All Aluminum Hardware

Brand Name: KStrong

Manufacturer: KStrong

Address: 150 N. Radnor Chester Road, Suite F200, Radnor, PA 19087

Additional Items Conforming Under this Declaration (If Applicable):

UFH10533Q(XS)
UFH10533Q(S)
UFH10533Q(M)
UFH10533Q(L)
UFH10533Q(XL)
UFH10533Q(2XL)
UFH10533Q(3XL)

KStrong declares that the product(s) listed above is in conformity with the requirements of the following performance standard(s):

ANSI Z359.11-2021

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

- ○ **Level 1:** KStrong Lab Outside the Scope of ISO/IEC Standard 17025:2017
- ○ **Level 2:** KStrong Lab Within the Scope of ISO/IEC Standard 17025:2017
- ● **Level 3:** Independent 3rd Party Lab accredited to ISO/IEC Standard 17025:2017

Supporting Documentation: KS-Test-UFH10533Q.pdf

This Certificate is a guarantee that the above standard(s) was met by the requirements of such standard. Testing was performed under normal operation mode. The results of testing apply only to the particular sample tested and the specific test carried out. This Certificate is only issued for products which have passed the testing requirements of listed standard(s).

Authorized Signature:

John H. Kemp Jr.
President - KStrong

ISO 17025 Accredited Test Laboratory

Intertek Testing Services NA, Inc.
3933 US Rt. 11
Cortland, NY 13045
Tel: 1 607-753-6711
www.intertek.com

Accrediting Agency

A2LA
5202 Presidents Court, Ste 220
Frederick, MD 21703
Tel: 301.644.3248
info@A2LA.org

Test Verification of Conformity

Verification Number: 105844345CRT-002

On the basis of the referenced test report(s), sample(s) of the below product have been found to comply with the harmonized standards and Directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it(them).

Applicant Name & Address:	KStrong INC 150 N. Radnor Chester Rd. Suite F200 Radnor, PA 19087 USA
Product Description:	Full Body Harness
Models/Type References:	UFH10541G, UFH10551Q Shared Model: UFH10511G, UFH10511Q, UFH10531Q, UFH10551G, UFH10502G, UFH11502Q, UFH10533G, UFH10533Q, UFH10541Q
Brand Name:	KStrong Inc.
Relevant Standards:	ANSI Z359.11-2021
Verification Issuing Office Name & Address:	Intertek Testing Services NA, Inc. 3933 US Rt-11 Cortland, NY 13045 USA
Date of Tests:	09/11/2023
Test Report Number(s):	105844345CRT-001

Signature:

Name: **Matthew Stevens**
Position: **Team Leader**
Date: **06/10/2024**

SCC Accredited LAB

ACCREDITED

intertek
Total Quality. Assured.

KSTRONG INC.
TEST REPORT

SCOPE OF WORK
ANSI Z359.11-2021 Safety Requirements for Full Body Harnesses

REPORT NUMBER
105844345CRT-001

ORIGINAL REPORT NUMBER
105167073CRT-002

ISSUE DATE
June 6, 2024

PAGES
14

DOCUMENT CONTROL NUMBER
GFT-OP-10a (6-March-2017)

3933 US Rt. 11
Cortland, NY 13045

Telephone: 1 607-753-6711
www.intertek.com

TEST REPORT FOR KSTRONG INC.
Report No.: 105844345CRT-001
Date: June 6, 2024

KStrong Inc.
150 N. Radnor Chester Rd. Suite F200
Radnor, PA 19087
USA

Report Number..... : 105844345CRT-001

Signed Quote Number..... : Qu-01453270

PO Number. ..... : N/A

Name of Testing Laboratory Preparing the Report ..... : Intertek Testing Services NA Inc.

Test Specification:

Standard..... : ANSI/ASSP Z359.11-2021

Date(s) of Testing..... : 9/11/2023

Product Description..... :

Product Type: ..... : Full Body Harness

Brand Name: ..... : KStrong

Model Number(s): ..... : UFH10541G, UFH10551Q

Model Sharing.....: UFH10511G, UFH10511Q, UFH10531Q, UFH10551G, UFH10502G, UFH11502Q, UFH10533G, UFH10533Q, UFH10541Q

Date(s) Samples Received ..... : 8/25/2023

SECTION 1

SUMMARY OF TESTING

TESTS COMPLETED	ANSI/ASSP Z359.11-2021 CLAUSE	STATUS
Design	3 Data from 105167073CRT-001	PASS
Dynamic Feet First Drop (Dorsal)	4.3.3 Data from 105167073CRT-001	PASS
Dynamic Feet First Drop (Sternal)	4.3.3	PASS
Dynamic Head First Drop (Dorsal)	4.3.4 Data from 105167073CRT-001	PASS
Static Feet First (Dorsal)	4.3.5 Data from 105167073CRT-001	PASS
Static Feet First (Sternal)	4.3.5	PASS
Visual Indicator Test (purchase EAL for test)	4.3.6 Data from 105167073CRT-001	PASS
Static Feet First (Hip)	4.3.5 Data from 105167073CRT-001	PASS
Static Feet First (Shoulder)	4.3.5 Data from 105167073CRT-001	PASS
Static Feet First Test for Lanyard Parking Attachment Element	4.3.7 Data from 105167073CRT-001	PASS
Markings and Instructions	5 Data from 105167073CRT-001	PASS

SECTION 2

This test report concludes the work anticipated in the testing phase of your project. If there are any questions regarding this report, please contact the undersigned at 607-753-6711.

COMPLETED BY:	Alex Smith	**REVIEWED BY:**	Matthew Stevens
TITLE:	Technician	**TITLE:**	Team Leader
SIGNATURE:	Alex Smith	**SIGNATURE**	
DATE	06/06/2024	**DATE:**	06/10/2024

Please see attached test data for details.

SECTION 3
TESTING EQUIPMENT CALIBRATION INFORMATION

USED FOR TEST	DESCRIPTION	MANUFACTURER	CONTROL NO.	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE
X	Level	MD	L096	NA	NA	6/6/23	6/6/24
X	Test Torso	NA	15064	220 lbs	-	VBU	VBU
X	Load Cell	Interface	G139	-	-	11/15/22	11/15/23
X	Tape Measure	NA	H338	-	-	5/11/23	5/11/24

SECTION 3
SUPPLEMENTAL TEST DATA

Paragraph	Test Description	Results				Compliance
3	Requirements					
3.1	Design Requirements					
3.1.2	Permanently incorporate a dorsal or sternal attachment		YES			PASS
3.1.2	Materials and constructions shall meet requirements		YES			PASS
3.1.3	FBH w/ dorsal attachment shall permanently include a sub-pelvic strap and /or waist belt		YES			PASS
3.1.4	FBH w sternal attachment shall permanently include a waist belt		YES			PASS
3.1.4	All shoulder straps shall come together and be connected at the dorsal location		YES			PASS
3.1.4	All FBH's shall permanently incorporate a waist belt or a back strap for controlling the separation of the shoulder straps		YES			PASS
3.1.5	Modular components shall design requirements		YES			PASS
3.1.5.1	Modular components shall be attached to the harness using connections that meet section 3		YES			PASS
3.1.5.2	Attachment element extender can be no longer than 24-inches		YES			PASS
3.1.6	FBH integrated into a vest shall allow visual inspection or entire FBH		YES			PASS
3.1.7	All FBH shall be equipped with a fall arrest indicator that will deploy during dynamic testing		YES			PASS
3.1.8	FBH/EA/EAL combinations shall meet the requirements of Z359.11 and Z359.13		YES			PASS
3.1.9	FBH shall include keepers for straps		YES			PASS
3.1.10	FBH shall include lanyard parking attachment		YES			PASS
3.1.11	It shall not be possible to remove elements		YES			PASS
3.1.12	All single point attachment elements must be located within 2-inches of the vertical centerline		YES			PASS
3.2	Attachment Element Requirements		YES			PASS
3.2.1	Dorsal- shall be used as the primary fall arrest attachment		YES			PASS
3.2.1.1	May be used in travel restraint or rescue		YES			PASS
3.2.1.2	Dorsal attachment shall direct the load through the shoulder straps and around the thighs		YES			PASS

Paragraph	Test Description	Results				Compliance
3.2.1.3	Dorsal Attachment Element requirements		YES			PASS
3.2.1.3.1	Dynamic Feet First- see section 4.3.3		YES			PASS
3.2.1.3.2	Dynamic Head First – see section 4.3.4		YES			PASS
3.2.1.3.3	Static Feet First- see section 4.3.5		YES			PASS
3.2.1.3.4	Fall Arrest Indicator – see section 4.3.6		YES			PASS
3.2.2	The sternal attachment may be used as an alternative fall arrest attachment		YES			PASS
3.2.2.1	The sternal attachment may be used for travel restraint or rescue		YES			PASS
3.2.2.2	Sternal attachment design shall direct the load through the shoulder straps and thighs		YES			PASS
3.2.2.3	Sternal Attachment Element Requirements		YES			PASS
3.2.2.3.1	Dynamic Feet First – see section 4.3.3		YES			PASS
3.2.2.3.2	Static Feet First – see section 4.3.5		YES			PASS
3.2.2.3.3	Fall Arrest Indicator – see section 4.3.6		YES			PASS
3.2.3	Frontal attachment to be used for ladder guided type FA's where no chance of fall in a feet first direction (may be used for work positioning)				NA	NA
3.2.3.1	Frontal Attachment Element Requirements		YES			PASS
3.2.3.1.1	Dynamic Feet First – see section 4.3.3		YES			PASS
3.2.3.1.2	Static Feet First – see section 4.3.5		YES			PASS
3.2.4	Shoulder attachments shall be used as a pair, also for rescue and entry/retrieval not for FA.		YES			PASS
3.2.4.1	Shoulder Attachment Elements Requirements		YES			PASS
3.2.4.1.1	Static Feet First – see section 4.3.5		YES			PASS
3.2.5	Waist, rear attachment for travel restraint only		YES			PASS
3.2.5.1	Waist, rear attachment shall be subjected to minimal loading, not used for FA		YES			PASS
3.2.5.2	Waist Attachment Elements Requirements		YES			PASS
3.2.5.2.1	Static Feet First – see section 4.3.5		YES			PASS
3.2.6	Hip attachments shall be used as a pair and solely for work positioning, not used for FA		YES			PASS
3.2.6.1	Hip Attachment Element Performance Requirements		YES			PASS
3.2.6.1.1	Static Feet First – see section 4.3.5		YES			PASS
3.2.7	Suspension seat shall be used as a pair and solely for work positioning, not used for FA				NA	NA
3.2.7.1	Suspension Seat Attachment Element Performance Requirements				NA	NA
3.2.7.1.1	Static Feet First – see section 4.3.5		YES			PASS
3.3	Component Requirements		YES			PASS
3.3.1	Load Bearing Straps		YES			PASS
3.3.1.1	Shall not be less than 1-5/8" (41mm)		YES			PASS
3.3.1.2	Minimum breaking strength of 5,000 lbs per section 7.1.1		YES			PASS

Paragraph	Test Description	Results				Compliance
3.3.1.3	Straps shall be pure, non-recycled synthetic material. Any restrictions shall be marked on the FBH		YES			PASS
3.3.1.4	Straps shall be hot cut, sealed, covered, or stitched to prevent fraying		YES			PASS
3.3.1.5	After abrasion conditioning per 7.1.2, straps shall have a breaking strength of at least 3,600 lbs when tested to 7.1.1		YES			PASS
3.3.1.6	In areas of concentrated wear straps shall be protected		YES			PASS
3.3.1.7	Spacing between eyelets centers shall be between 1-1/8- 2 inches		YES			PASS
3.3.2	Thread and Stitching		YES			PASS
3.3.2.1	Shall have the same material as load bearing straps		YES			PASS
3.3.2.2	All stitching shall be lock stitched and backstitched		YES			PASS
3.3.2.3	All stitching used to connect load bearing members shall be contrasting in color at a distance of 12-inches		YES			PASS
3.3.3	Connecting Components		YES			PASS
3.3.3.1	Hardware shall conform to Z359.12 (except soft loops)		YES			PASS
3.3.3.2	Soft loops attachments may be used in place of metal connecting components		YES			PASS
3.3.3.3	Soft loop attachments shall be constructed of materials that meet section 3.3.1				NA	NA
3.3.3.4	Soft loops shall include protection from wear				NA	NA
4	Qualification Testing					
	"DORSAL ATTACHMENT"					
4.3.3	Dynamic **Feet First** Drop Test: Test Set-up (Dorsal): 1. Don the harness on the test torso 2. Position dorsal attachment per the Mfg Instructions. 3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard 4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor) 5. Raise torso to predetermined height, release, measure MAF, measure and record final height					PASS

Feet First DORSAL Attachment Requirements per Section 3.2.1.3.1		
Sample ID:	1	
Location of Dorsal Attachment Element	8	inches
Drop Height	3	ft
Max Arrest Force	4894	lbs
Hi- initial height	112 ½	inches
Hf- final height	118 ½	inches
He – Harness Effect (Hi-Hf)	6	inches
Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated:	18	inches
Release from the torso		no
Support the torso for a period of 5-minutes post fall	Yes	
Shall support the torso post fall of an angle not greater than 30° to vertical	Yes	9.2°
At least one fall arrest indicator deployed visibly and permanently	Yes	

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>4.3.3</td><td>Dynamic <u>Feet First</u> Drop Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor)
5. Raise torso to predetermined height, release, measure MAF, measure and record final height</td><td>
<table>
<tr><td colspan="3">Feet First DORSAL Attachment
Requirements per Section 3.2.1.3.1</td></tr>
<tr><td>Sample ID:</td><td colspan="2">2</td></tr>
<tr><td>Location of Dorsal Attachment Element</td><td>8</td><td>inches</td></tr>
<tr><td>Drop Height</td><td>3</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>5528</td><td>lbs</td></tr>
<tr><td>Hi- initial height</td><td>112 ½</td><td>inches</td></tr>
<tr><td>Hf- final height</td><td>119 ¾</td><td>inches</td></tr>
<tr><td>He – Harness Effect (Hi-Hf)</td><td>7 ¼</td><td>inches</td></tr>
<tr><td>Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated: -</td><td>18</td><td>inches</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>6.8°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>4.3.3</td><td>Dynamic <u>Feet First</u> Drop Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor)
5. Raise torso to predetermined height, release, measure MAF, measure and record final height</td><td>
<table>
<tr><td colspan="3">Feet First DORSAL Attachment
Requirements per Section 3.2.1.3.1</td></tr>
<tr><td>Sample ID:</td><td colspan="2">3</td></tr>
<tr><td>Location of Dorsal Attachment Element</td><td>8</td><td>inches</td></tr>
<tr><td>Drop Height</td><td>3</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>4242</td><td>lbs</td></tr>
<tr><td>Hi- initial height</td><td>112 ½</td><td>inches</td></tr>
<tr><td>Hf- final height</td><td>120 ¼</td><td>inches</td></tr>
<tr><td>He – Harness Effect (Hi-Hf)</td><td>7 ¾</td><td>inches</td></tr>
<tr><td>Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated:</td><td>18</td><td>inches</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>8.1°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>4.3.3</td><td>Dynamic <u>Feet First</u> Drop Test:

<u>Test Set-up (Sternal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor)
5. Raise torso to predetermined height, release, measure MAF, measure and record final height</td><td>
<table>
<tr><td colspan="3">Feet First STERNAL Attachment
Requirements per Section 3.2.1.3.1</td></tr>
<tr><td>Sample ID:</td><td colspan="2">3</td></tr>
<tr><td>Drop Height</td><td>4</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>3937</td><td>lbs</td></tr>
<tr><td>Hi- initial height</td><td>130 ¾”</td><td>inches</td></tr>
<tr><td>Hf- final height</td><td>137 ½”</td><td>inches</td></tr>
<tr><td>He – Harness Effect (Hi-Hf)</td><td>6 ¾”</td><td>inches</td></tr>
<tr><td>Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated:</td><td>18</td><td>inches</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>28.3°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>4.3.3</td><td>Dynamic <u>Feet First</u> Drop Test:

<u>Test Set-up (Sternal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor)
5. Raise torso to predetermined height, release, measure MAF, measure and record final height</td><td>
<table>
<tr><td colspan="3">Feet First STERNAL Attachment
Requirements per Section 3.2.1.3.1</td></tr>
<tr><td>Sample ID:</td><td colspan="2">3</td></tr>
<tr><td>Drop Height</td><td>4</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>4066</td><td>lbs</td></tr>
<tr><td>Hi- initial height</td><td>130 ¾”</td><td>inches</td></tr>
<tr><td>Hf- final height</td><td>138”</td><td>inches</td></tr>
<tr><td>He – Harness Effect (Hi-Hf)</td><td>7 ¼”</td><td>inches</td></tr>
<tr><td>Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated:</td><td>18</td><td>inches</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>29.2°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>4.3.3</td><td>Dynamic <u>Feet First</u> Drop Test:

<u>Test Set-up (Sternal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Determine drop height, attach quick release to the torso neck, lower torso to remove slack, measure height (lowest point of torso to floor)
5. Raise torso to predetermined height, release, measure MAF, measure and record final height</td><td>
<table>
<tr><td colspan="3">Feet First STERNAL Attachment
Requirements per Section 3.2.1.3.1</td></tr>
<tr><td>Sample ID:</td><td colspan="2">3</td></tr>
<tr><td>Drop Height</td><td>4</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>3954</td><td>lbs</td></tr>
<tr><td>Hi- initial height</td><td>130 ¾”</td><td>inches</td></tr>
<tr><td>Hf- final height</td><td>137”</td><td>inches</td></tr>
<tr><td>He – Harness Effect (Hi-Hf)</td><td>6 ¼”</td><td>inches</td></tr>
<tr><td>Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated:</td><td>18</td><td>inches</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>29.6°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>4.3.4</td><td>Dynamic <u>Head First</u> Drop Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment bearing point 8 +/- 1 inch below the top of the shoulder (or maximum lowest position)
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Attach quick release to the torso crotch, lower torso to remove slack
5. Raise torso to predetermined height, release, measure MAF</td><td>
<table>
<tr><td colspan="3">Head First DORSAL Attachment
Requirements per Section 3.2.1.3.2</td></tr>
<tr><td>Sample ID:</td><td colspan="2">1</td></tr>
<tr><td>Location of Dorsal Attachment Element</td><td>8</td><td>inches</td></tr>
<tr><td>Drop Height</td><td>6</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>2175</td><td>lbs</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>11.2°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>4.3.4</td><td>Dynamic <u>Head First</u> Drop Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment bearing point 8 +/- 1 inch below the top of the shoulder (or maximum lowest position)
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Attach quick release to the torso crotch, lower torso to remove slack
5. Raise torso to predetermined height, release, measure MAF</td><td>
<table>
<tr><td colspan="3">Head First DORSAL Attachment
Requirements per Section 3.2.1.3.2</td></tr>
<tr><td>Sample ID:</td><td colspan="2">2</td></tr>
<tr><td>Location of Dorsal Attachment Element</td><td>8</td><td>inches</td></tr>
<tr><td>Drop Height</td><td>6</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>2800</td><td>lbs</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>Yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>Yes</td><td>11.5°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>Yes</td><td></td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>4.3.4</td><td>Dynamic <u>Head First</u> Drop Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment bearing point 8 +/- 1 inch below the top of the shoulder (or maximum lowest position)
3. If equipped with chest strap (section 4.3.2), locate strap +/-2 inches on torso from datum E figure 5 and 1b of standard
4. Attach quick release to the torso crotch, lower torso to remove slack
5. Raise torso to predetermined height, release, measure MAF</td><td>
<table>
<tr><td colspan="4">Head First DORSAL Attachment
Requirements per Section 3.2.1.3.2</td></tr>
<tr><td>Sample ID:</td><td colspan="3">3</td></tr>
<tr><td>Location of Dorsal Attachment Element</td><td>8</td><td>inches</td></tr>
<tr><td>Drop Height</td><td>6</td><td>ft</td></tr>
<tr><td>Max Arrest Force</td><td>2670</td><td>lbs</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Support the torso for a period of 5-minutes post fall</td><td>yes</td><td></td></tr>
<tr><td>Shall support the torso post fall of an angle not greater than 30° to vertical</td><td>yes</td><td>12.1°</td></tr>
<tr><td>At least one fall arrest indicator deployed visibly and permanently</td><td>yes</td><td>no</td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>4.3.5</td><td>Static <u>Feet First</u> Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Secure crotch of test torso to test equipment
3. connect to attachment element
4. mark locations of buckles and adjusters
5. apply 3,600 lb load and maintain for 1-minute
6. Release load and evaluate sample</td><td>
<table>
<tr><td colspan="4">Feet First DORSAL Attachment
Requirements per Section 3.2.1.3.3</td></tr>
<tr><td>Sample ID:</td><td colspan="3">1,2,3</td></tr>
<tr><td>Release from the torso</td><td></td><td>no</td></tr>
<tr><td>Slippage – Crotch Strap Adjuster, Right</td><td>0</td><td>inches</td></tr>
<tr><td>Slippage – Crotch Strap Adjuster, Left</td><td>0</td><td>inches</td></tr>
<tr><td>Slippage – Chest Strap Adjuster, Center</td><td>0</td><td>inches</td></tr>
<tr><td>Slippage – Chest Strap Adjuster, Right</td><td>0</td><td>inches</td></tr>
<tr><td>Slippage – Chest Strap Adjuster, Left</td><td>0</td><td>inches</td></tr>
<tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr>
<tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr>
<tr><td>Strap tear further than adjacent eyelet adjuster</td><td></td><td>na</td></tr>
<tr><td>Straps shall show no signs of tearing</td><td>yes</td><td></td></tr>
</table>

“Slippage through any adjuster shall not exceed 1-inch”
</td><td>PASS</td></tr>
<tr><td>4.3.6</td><td>Visual Indicator Test:

<u>Test Set-up (Dorsal):</u>

1. Don the harness on the test torso
2. Position dorsal attachment per the Mfg Instructions.
3. Attach quick release to the neck of the test torso
4. Attach a Z359.13 compliant 6-foot EAL to the test anchorage
5. lower torso until test shackles are straight but no load
6. raise torso 24-inches</td><td>
<table>
<tr><td colspan="3">DORSAL Attachment
Requirements per Section 3.2.1.3.4</td></tr>
<tr><td>Sample ID:</td><td colspan="2">1,2,3</td></tr>
<tr><td>At least one fall arrest indicator shall deploy visibly and permanently</td><td colspan="2">YES</td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th colspan="4">Results</th><th>Compliance</th></tr>
<tr><td></td><td colspan="6">“STATIC FEET FIRST TEST FOR HIP /SHOULDER ATTACHMENT ELEMENT”</td></tr>
<tr><td>4.3.5</td><td>Static <u>Feet First</u> Test:

<u>Test Set-up (Hip):</u>

1. Don the harness on the test torso
2. Secure crotch of test torso to test equipment
3. connect to attachment element
4. mark locations of buckles and adjusters
5. apply 3,600 lb load and maintain for 1-minute
6. Release load and evaluate sample</td><td colspan="4"><table><tr><td colspan="4">Feet First Hip Attachment
Requirements per Section 3.2.1.3.3</td></tr><tr><td>Sample ID:</td><td colspan="3">1,2,3</td></tr><tr><td>Release from the torso</td><td></td><td>no</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Center</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Strap tear further than adjacent eyelet adjuster</td><td></td><td></td><td>na</td></tr><tr><td>Straps shall show no signs of tearing</td><td>yes</td><td></td></tr></table>
“Slippage through any adjuster shall not exceed 1-inch”</td><td>PASS</td></tr>
<tr><td>4.3.5</td><td>Static <u>Feet First</u> Test:

<u>Test Set-up (Sternal):</u>

1. Don the harness on the test torso
2. Secure crotch of test torso to test equipment
3. connect to attachment element
4. mark locations of buckles and adjusters
5. apply 3,600 lb load and maintain for 1-minute
6. Release load and evaluate sample</td><td colspan="4"><table><tr><td colspan="4">Feet First Hip Attachment
Requirements per Section 3.2.1.3.3</td></tr><tr><td>Sample ID:</td><td colspan="3">1,2,3</td></tr><tr><td>Release from the torso</td><td></td><td>no</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Center</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Strap tear further than adjacent eyelet adjuster</td><td></td><td></td><td>na</td></tr><tr><td>Straps shall show no signs of tearing</td><td>yes</td><td></td></tr></table>
“Slippage through any adjuster shall not exceed 1-inch”</td><td>PASS</td></tr>
<tr><td>4.3.5</td><td>Static <u>Feet First</u> Test:

<u>Test Set-up (Shoulder):</u>

1. Don the harness on the test torso
2. Secure crotch of test torso to test equipment
3. connect to attachment element
4. mark locations of buckles and adjusters
5. apply 3,600 lb load and maintain for 1-minute
6. Release load and evaluate sample</td><td colspan="4"><table><tr><td colspan="4">Feet First Shoulder Attachment
Requirements per Section 3.2.1.3.3</td></tr><tr><td>Sample ID:</td><td colspan="3">1,2,3</td></tr><tr><td>Release from the torso</td><td></td><td>no</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Crotch Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Center</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Right</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Chest Strap Adjuster, Left</td><td>0</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Slippage – Other</td><td>na</td><td>inches</td></tr><tr><td>Strap tear further than adjacent eyelet adjuster</td><td></td><td></td><td>na</td></tr><tr><td>Straps shall show no signs of tearing</td><td>yes</td><td></td></tr></table>
“Slippage through any adjuster shall not exceed 1-inch”</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>4.3.7</td><td>Static <u>Feet First</u> Test for Lanyard Parking Attachment Element:

<u>Test Set-up:</u>

1. Don the harness on the test torso
2. Secure crotch of test torso to test equipment
3. connect to attachment element
4. apply steady load until connection between lanyard parking attachment and test lanyard separate
6. Record maximum force applied</td><td>
<table>
<tr><td colspan="3">Static Feet First
Requirements per Section 3.1.12</td></tr>
<tr><td>Sample ID:</td><td colspan="2">1</td></tr>
<tr><td>Maximum disengagement load</td><td>93</td><td>lbs</td></tr>
<tr><td>Load exceed 120 lbs</td><td colspan="2">no</td></tr>
</table>
<table>
<tr><td colspan="3">Static Feet First
Requirements per Section 3.1.12</td></tr>
<tr><td>Sample ID:</td><td colspan="2">2</td></tr>
<tr><td>Maximum disengagement load</td><td>99</td><td>lbs</td></tr>
<tr><td>Load exceed 120 lbs</td><td colspan="2">no</td></tr>
</table>
<table>
<tr><td colspan="3">Static Feet First
Requirements per Section 3.1.12</td></tr>
<tr><td>Sample ID:</td><td colspan="2">3</td></tr>
<tr><td>Maximum disengagement load</td><td>95</td><td>lbs</td></tr>
<tr><td>Load exceed 120 lbs</td><td colspan="2">no</td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>5</td><td colspan="3">“Marking and Instructions”</td></tr>
<tr><td>5.1</td><td colspan="3">Marking Requirements</td></tr>
<tr><td>5.1.1</td><td>Shall be in English</td><td></td><td>PASS</td></tr>
<tr><td>5.1.2</td><td>Required markings shall endure the life of the component, when PSL’s are used they shall comply with UL969-2001 (section 7.2.1)</td><td></td><td>PASS</td></tr>
<tr><td>5.1.3</td><td>Full Body Harnesses shall be marked with the following:

<table>
<tr><th>Marking</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>Materials of Construction</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Size or range of sizes</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Part number and model designation</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Year of manufacture</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturer’s name or logo</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning to follow the manufacturer’s instructions included with the equipment at time of shipment from the manufacturer</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>A label permanently attached to the lanyard parking attachment which states, “Park Lanyard Here”, See Instructions</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>A label as defined in figure 10a & 10b of the standard</td><td></td><td>X</td><td></td><td></td></tr>
</table>
</td><td></td><td>PASS</td></tr>
<tr><td>5.2</td><td colspan="3">Instructions Requirements</td></tr>
<tr><td>5.2.1</td><td>Instructions shall be in English, and affixed to the equipment at time of shipment from the manufacturer</td><td></td><td>PASS</td></tr>
</table>

<table>
<tr><th>Paragraph</th><th>Test Description</th><th>Results</th><th>Compliance</th></tr>
<tr><td>5.2.2</td><td>Instructions shall contain the following information:
<table>
<tr><th>Instructions</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>Appendix A of the standard in it’s entirety</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>A statement that the manufacturer’s instructions shall be provided to the users</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturers name, address, and telephone number</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturer’s part number and model designation for the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Intended use and purpose of the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Length of Harness Effect</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Proper method of use and limitations on use of the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Illustrations showing locations of markings on the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Reproduction of printed information on all markings</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Inspection procedures required to assure the equipment is in serviceable condition and operating correctly</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Criteria for discarding equipment which fails inspection</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Procedures for cleaning. maintenance, and storage</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Reference to Z359.11</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Acceptable use for all attachment elements (see Appendix A of the standard)</td><td></td><td>X</td><td></td><td></td></tr>
</table></td><td></td><td>PASS</td></tr>
<tr><td>5.2.3</td><td>Instructions shall require that only the equipment manufacturer, or persons or entities authorized in writing by the manufacturer, shall make repairs to the equipment</td><td></td><td>PASS</td></tr>
<tr><td>5.2.4</td><td>Instructions shall require the user to remove equipment from service if it has been subjected to the forces of arresting a fall and will include information on inspection of load indicators</td><td></td><td>PASS</td></tr>
<tr><td>5.2.5</td><td>Instructions shall require the user to have a rescue plan and the means at hand to implement it when using the equipment</td><td></td><td>PASS</td></tr>
<tr><td>5.2.6</td><td>Instructions shall provide warnings regarding:
<table>
<tr><th>Warnings</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>Altering the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Misusing the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using combinations of components or sub-systems, or both, which may affect or interfere with the safe function of each other</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Exposing the equipment to chemicals, heat, flames, or other environmental conditions, which may produce a harmful effect and to consult the manufacturer in case of doubt</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using the equipment around moving machinery and electrical hazards</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using the equipment near sharp edges or abrasive surfaces</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Exposure to light (UV degradation)</td><td></td><td></td><td></td><td>X</td></tr>
</table></td><td></td><td>PASS</td></tr>
</table>

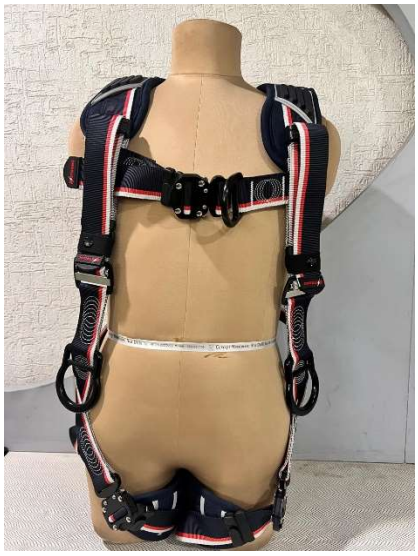
SECTION 5
REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
105167073CRT-001	08/31/2022	Original Report	Steven Morey	Matthew Stevens
105167073CRT-002	09/11/2023	Added Sternal Drop (4.3.3) & Sternal Static (4.3.5)	Alex Smith	Matthew Stevens
105844345CRT-001	06/10/2024	Report Extension	Alex Smith	Matthew Stevens

SECTION 6
PHOTOGRAPH(S)

UFH10541G

UFH10551Q



UFH10511G

UFH10511Q

UFH10531Q

UFH10551G

UFH10502G

UFH11502Q

UFH10533G

UFH10533Q

UFH10541Q