

Declaration of Conformity

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

Declaration #: DOC-UFH10501G Declaration Date: 06/05/2024

Item #: UFH10501G

Description: KStrong® EndurX™ 5-Point Full Body Harness, Abrasion Resistant Shoulder Pad, Deluxe Leg Pads, Enhanced Dorsal D-ring Plus™, Quick Slide Adjusters, Trauma Relief Straps,

QC Chest, TB Legs (SS), 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):**

UFH10501G(XS)

UFH10501G(S)

UFH10501G(M)

UFH10501G(L)

UFH10501G(XL)

UFH10501G(2XL)

UFH10501G(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-UFH10501G.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





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



Test Verification of Conformity

Verification Number: 105848516CRT-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: UFH10531G, UFH10501G, UFH10501Q

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: 04/27/2023 – 04/28/2023

Test Report Number(s): 105848516CRT-001

Signature:

Name: Matthew Stevens
Position: Team Leader
Date: 06/05/2024

SCC Accredited LAB



This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



KSTRONG INC. TEST REPORT

SCOPE OF WORK

Standard Evaluation to ANSI Z359.11-2021 Safety Requirements for Full Body Harnesses

REPORT NUMBER

105848546CRT-001

ORIGINAL REPORT NUMBER

105431545CRT-002

ISSUE DATE

June 5, 2024

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Report No.: 105848516CRT-001

Date: June 5, 2024

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

Report Number:	105848516CRT-001
Signed Quote Number:	Qu-01456282
PO Number:	NA
Name of Testing Laboratory Preparing the Report:	Intertek Testing Services NA Inc.
Test Specification:	
Standard::	ANSI/ASSP Z359.11-2021
Date(s) of Testing:	4/27/2023 – 4/28/2023
Product Description::	
Product Type::	Full Body Harness
Model Number::	UFH10531G
Shared Model Number::	UFH10501G, UFH10501Q
Date(s) Samples Received:	4/18/2023

Report No.: 105848516CRT-001

Date: June 5, 2024

SECTION 1

SUMMARY OF TESTING

TESTS COMPLETED	ANSI/ASSP Z359.11-2021 CLAUSE	STATUS
Design	3	PASS
Dynamic Feet First Drop (Dorsal)	4.3.3	PASS
Dynamic Headfirst Drop (Dorsal)	4.3.4	PASS
Fall Arrest Indicator (Dorsal)	4.3.6	PASS
Static Feet First (Dorsal)	4.3.5	PASS
Static Feet First (Hip)	4.3.5	PASS
Static Feet First for Lanyard Parking Attachment	4.3.7	PASS

SECTION 2

This test report concludes the work anticipated in the testing phase of your project. Original Testing performed to 2014 Edition. Data evaluated to 2021 version as no differences in test procedures. If there are any questions regarding this report, please contact the undersigned at 607-753-6711.

COMPLETE D BY:	Alex Smith	REVIEWED BY:	Matthew Stevens
TITLE:	Technician	TITLE:	Team Leader
SIGNATURE:	Ales Smith	SIGNATURE	Alfred
DATE	06/05/2024	DATE:	06/05/2024

Please see attached test data for details.

Report No.: 105848516CRT-001

Date: June 5, 2024

SECTION 3

TESTING EQUIPMENT CALIBRATION INFORMATION

USED FOR TEST	DESCRIPTION	MANUFACTURER	CONTROL NO.	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE
X	Drop Test Structure	Intertek	NA	CAT. 3	-	N/A	N/A
Χ	Test Torso	NA	15064	220 lbs	-	VBU	VBU
Х	Load Cell	Interface	G119	-	-	5/25/22	5/25/23
X	Tape Measure	Kobalt	H422	-	-	5/13/22	5/13/23

SECTION 3

SUPPLEMENTAL TEST DATA

Paragraph	Test Description	est Description Results		
3	Requirements			
3.1	Design Requirements			
3.1.1	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	
3.1.5	All shoulder straps shall come together and be connected at the dorsal location	YES	PASS	
3.1.6	All FBH's shall permanently incorporate a waist belt or a back strap for controlling the separation of the shoulder straps	YES	PASS	
3.1.7	Modular components shall design requirements		NA	
3.1.7.1	Modular components shall be attached to the harness using connections that meet section 3		NA	
3.1.7.2	Attachment element extender can be no longer than 24-inches		NA	
3.1.8	FBH integrated into a vest shall allow visual inspection or entire FBH		NA	
3.1.9	All FBH shall be equipped with a fall arrest indicator that will deploy during dynamic testing	YES	PASS	
3.1.10	FBH/EA/EAL combinations shall meet the requirements of Z359.11 and Z359.13	YES	PASS	
3.1.11	FBH shall include keepers for straps	YES	PASS	
3.1.12	FBH shall include lanyard parking attachment	YES	PASS	
3.1.13	It shall not be possible to remove elements	YES	PASS	
3.1.14	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	
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	

Report No.: 105848516CRT-001

Paragraph	Test Description	Results		Compliance
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	VEC		DACC
	alternative fall arrest attachment	YES		PASS
3.2.2.1	The sternal attachment may be used for travel			NA
3.2.2.2	restraint or rescue Sternal attachment design shall direct the load			
3.2.2.2	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	T DS		17155
	type FA's where no chance of fall in a feet first		NA	NA
	direction (may be used for work positioning)			
3.2.3.1	Frontal Attachment Element Requirements			NA
3.2.3.1.1	Dynamic Feet First – see section 4.3.3			NA
3.2.3.1.2	Static Feet First – see section 4.3.5			NA
3.2.4	Shoulder attachments shall be used as a pair, also			NA
2241	for rescue and entry/retrieval not for FA.			
3.2.4.1	Shoulder Attachment Elements Requirements			NA
3.2.4.1.1	Static Feet First – see section 4.3.5			NA
3.2.5	Waist, rear attachment for travel restraint only			NA
3.2.5.1	Waist, rear attachment shall be subjected to minimal loading, not used for FA			NA
3.2.5.2	Waist Attachment Elements Requirements			NA
3.2.5.2.1	Static Feet First – see section 4.3.5			NA
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)	<u> </u>		PASS
3.3.1.2	Minimum breaking strength of 5,000 lbs per			
	section 7.1.1	YES		PASS
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

Report No.: 105848516CRT-001

Paragraph	Test Description		Results			Compliance
3.3.1.6	In areas of concentrated wear straps shall be protected	be		YES		PASS
3.3.1.7	Spacing between eyelets centers shall be b 1-1/8- 2 inches	etween	7	YES		PASS
3.3.2	Thread and Stitching			YES		PASS
3.3.2.1	Shall have the same material as load bearing	ng straps		YES		PASS
3.3.2.2	All stitching shall be lock stitched and bac	kstitched		YES		PASS
3.3.2.3	All stitching used to connect load bearing shall be contrasting in color at a distance of inches			YES		PASS
3.3.3	Connecting Components			YES		PASS
3.3.3.1	Hardware shall conform to Z359.12 (exceptoops)	pt soft	,	YES		PASS
3.3.3.2	Soft loops attachments may be used in place metal connecting components			YES		PASS
3.3.3.3	Soft loop attachments shall be constructed materials that meet section 3.3.1	of			NA	NA
3.3.3.4	Soft loops shall include protection from we	ear			NA	NA
4	Qualification Testing					
		"DO	RSAL ATTACHMENT"			
	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	Drop Ho Max Ar Hi- initi Hf- fina He – Ha Harness which is whiches Release Support fall Shall su greater t At least	n of Dorsal Attachment Element eight rest Force al height		inches Ft Lbs inches inches inches inches	PASS

Report No.: 105848516CRT-001

Paragraph	Test Description	Results		Compliance
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	Feet First DORSAL Attachm Requirements per Section 3.2. Sample ID: 2 Location of Dorsal Attachment Element Drop Height Max Arrest Force Hi- initial height Hf- final height He – Harness Effect (Hi-Hf) Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated Release from the torso Support the torso for a period of 5-minutes post fall Shall support the torso post fall of an angle not greater than 30° to vertical At least one fall arrest indicator deployed visibly and permanently	inches Ft Lbs inches inches inches inches	PASS
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	Feet First DORSAL Attachm Requirements per Section 3.2.1 Sample ID: 3 Location of Dorsal Attachment Element Drop Height Max Arrest Force Hi- initial height Hf- final height He – Harness Effect (Hi-Hf) Harness effect shall not exceed 18-inches or which is stated in the Mfg. Instructions, whichever is less. Stated: Release from the torso Support the torso for a period of 5-minutes post fall Shall support the torso post fall of an angle not greater than 30° to vertical At least one fall arrest indicator deployed visibly and permanently	inches Ft Lbs inches inches inches inches	PASS

Report No.: 105848516CRT-001

Paragraph	Test Description	Results		Compliance
4.3.4	Dynamic Head First Drop Test: Test Set-up (Dorsal): 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	Head First DORSAL Attachment Requirements per Section 3.2.1.3. Sample ID: 1 Location of Dorsal Attachment Element Drop Height Max Arrest Force Release from the torso Support the torso for a period of 5-minutes post fall Shall support the torso post fall of an angle not greater than 30° to vertical At least one fall arrest indicator deployed visibly and permanently	inches ft lbs	PASS
4.3.4	Dynamic Head First Drop Test: Test Set-up (Dorsal): 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	Head First DORSAL Attachment Requirements per Section 3.2.1.3. Sample ID: 2 Location of Dorsal Attachment Element Drop Height Max Arrest Force Release from the torso Support the torso for a period of 5-minutes post fall Shall support the torso post fall of an angle not greater than 30° to vertical At least one fall arrest indicator deployed visibly and permanently	inches ft lbs	PASS
4.3.4	Dynamic Head First Drop Test: Test Set-up (Dorsal): 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	Head First DORSAL Attachment Requirements per Section 3.2.1.3. Sample ID: 3 Location of Dorsal Attachment Element Drop Height Max Arrest Force Release from the torso Support the torso for a period of 5-minutes post fall Shall support the torso post fall of an angle not greater than 30° to vertical At least one fall arrest indicator deployed visibly and permanently	inches Ft Lbs 8.0°	PASS

Report No.: 105848516CRT-001

Paragraph	Test Description	Results			Compliance
4.3.5	Static Feet First Test: Test Set-up (Dorsal): 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	Feet First DORSAL Attachment Requirements per Section 3.2.1.3 Sample ID: 1,2,3 Release from the torso Slippage – Crotch Strap Adjuster, Right Slippage – Crotch Strap Adjuster, Left Slippage – Chest Strap Adjuster, Center Slippage – Chest Strap Adjuster, Right Slippage – Chest Strap Adjuster, Right Slippage – Chest Strap Adjuster, Left Slippage – Other Slippage – Other Strap tear further than adjacent eyelet adjuster Straps shall show no signs of tearing "Slippage through any adjuster shall not exceed 1-in	0 0 0 0 0 0 na na Yes	no inches inches inches inches inches inches inches	PASS
4.3.6	Fall Arrest Indicator Test: Test Set-up (Dorsal): 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	DORSAL Attachment Requirements per Section 3.2.1.3 Sample ID: 1,2,3 At least one fall arrest indicator shall deploy visibly and permanently		Yes	PASS

Report No.: 105848516CRT-001

Paragraph	Test Description	Results		Compliance
<u> </u>	•	"HIP ATTACHMENT"		
4.3.5	Static Feet First Test: Test Set-up (Hip): 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	Feet First HIP Attachment Requirements per Section 3.2.6.1. Sample ID: 1,2,3 Release from the torso Slippage – Crotch Strap Adjuster, Right Slippage – Crotch Strap Adjuster, Left Slippage – Chest Strap Adjuster, Center Slippage – Chest Strap Adjuster, Right Slippage – Chest Strap Adjuster, Right Slippage – Chest Strap Adjuster, Left Slippage – Other Slippage – Other Strap tear further than adjacent eyelet adjuster Straps shall show no signs of tearing "Slippage through any adjuster shall not exceed 1-in	no 0 incl 0 incl 0 incl 0 incl 0 incl na incl na yes	hes hes hes PASS
4.3.7	1) Secure the crotch of the test torso to the static test equipment ensuring the direction of the pull on the attachment simulates a feet first fall 2) Connect the attachment element to the static test equipment using a test lanyard. 3) Apply and steadily increase the load until a disengagement load of not more than 120 pounds (0.5 Kn)	Sample ID: 1-3 Sample 1 (break load) Sample 2 (break load) Sample 3 (break load)	24 23 26	PASS lbs lbs lbs

Report No.: 105848516CRT-001

Date: June 5, 2024

SECTION 5

REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
105431545CRT-002	04/28/2023	Original Report	Alex Smith	Matthew Stevens
105848516CRT-001	06/05/2024	Report Extension	Alex Smith	Matthew Stevens

SECTION 6

PHOTOGRAPHS:

UFH10531G



UFH10501G



UFH10501Q

