Test Report ANSI/ASSP Z359.11-2021

Pure Safety Group, Inc.
607 East Sam Houston Pkwy S
Suite 800, Pasadena, TX 77053

Test Report Number: 2022062021082
Job Number: Test 233, Qualification 540
Product SKU#: 21082
Product Type: Full Body Harness
Product Description: Cyclone Tower Harness Black/Yellow, QC Shoulder Buckle / QC Leg Buckle, 1 Dorsal / 1 Sternal D-Ring for Fall Arrest / 1 Ventral D-Ring for Rope Access / 2 Side D-Rings, Size S-L
Testing Standard: ANSI/ASSP Z359.11-2021 Safety Requirements for Full Body Harnesses
Date(s) of Manufacture: 10/01/2021, 5/01/2022
Date(s) of Testing: 4/14/2022, 4/19/2022, 4/22/2022, 4/27/2022, 5/05/2022, 6/16/2022, 6/17/2022

REQUIREMENT VERIFICATION

Requirement Description	Clause/Section	Result
General Requirements	3.1 Design Requirements	Meets or Exceeds
Markings and Instructions	5. Markings and Instructions	Meets or Exceeds

QUALIFICATION TESTING

Test Description	Test Date	Clause/Section	Result
Dynamic Performance FF (Dorsal)	4/14/2022	4.3.3 Dynamic Feet First Drop Test	Pass
Dynamic Performance FF (Sternal)	4/19/2022	4.3.3 Dynamic Feet First Drop Test	Pass
Dynamic Performance HF (Dorsal)	6/16/2022	4.3.4 Dynamic Head First Drop Test	Pass
Static Strength FF (Dorsal)	4/22/2022	4.3.5 Static Feet First Test	Pass
Static Strength FF (Sternal)	4/22/2022	4.3.5 Static Feet First Test	Pass
Static Strength FF (Frontal)	5/05/2022	4.3.5 Static Feet First Test	Pass
Static Strength FF (Hip)	4/27/2022	4.3.5 Static Feet First Test	Pass
Fall Arrest Indicator (Dorsal)	6/17/2022	4.3.6.1 Visual Indicator Test, Dynamic Test Method	Pass
Static Lanyard Parking Attachment	4/27/2022	4.3.7 Static Feet First Test for Lanyard Parking Attachment Element	Pass
Abrasion Test	6/05/2020	7.1.2 FED-STD-171A/5309, Abrasion Resistance of Textile Webbing	Pass

This test report covers these additional products:

21083

Please contact quality@guardianfall.com for signed report

TEST EQUIPMENT		
EQUIPMENT	MODEL	SERIAL
Load Cell	1210AF-10K-B	470679A
Load Cell	1210AF-10K-B	916507A
Load Cell	1220ACK-25K-B	347989A
Test Torso	220 lb	TOR01
Tape Measure	KTS1-25	20243698
Scales	Totalcomp	02314063019

Notes

All measurements expressed at approximately 95% confidence level using coverage factor K=2

3.1	Design Requirements	
3.1.1	**Values**. In this standard, values for measurement are followed by a metric equivalent in parentheses, but only the first stated value shall be regarded as the requirement. Values in parentheses may be approximate.	
3.1.1.1	**Tolerances**. Unless otherwise specified, the values stated in this standard are expressed as nominal values. Except for temperature limits, values which are not stated as maxima or minima shall be subject to a tolerance of ± 5%. Unless otherwise specified, the ambient temperature for testing shall be between 35°F (1.7°C) and 100°F (37.7°C) and the temperature limits shall be subject to an accuracy of ± 2°F (± 1°C).	
3.1.2	FBHs shall permanently incorporate a dorsal attachment element described in 3.2.1. FBHs may contain any combination of other elements but limited to those described in Section 3.2. Additionally, FBHs shall permanently include a load bearing sub-pelvic strap, except those described in 3.1.14.	Meets or Exceeds
3.1.3	Shoulder straps on FBHs shall come together at the dorsal location and either cross, be connected by webbing that meets the requirements of Section 3.3 or attach with a connector meeting the requirements of ANSI/ASSP Z359.12.	Meets or Exceeds
3.1.4	FBHs shall permanently incorporate a waist belt or back strap, or other means of controlling the separation of the shoulder straps on the back of the FBH. When the FBH is mounted per manufacturer's instructionsonto the test torso defined in 4.2.2, some portion of the back strap or waist belt shall be located between datum levels G and K.	Meets or Exceeds
3.1.5	Modular components or assemblies for FBHs designed for the removal of different attachment elements (such as suspension seats or belts) shall meet the specific attachment element requirements of Section 3.2 while attached to a compatible FBH.	Meets or Exceeds
3.1.5.1	Modular components shall be attached to the harness using connections that meet Section 3.3.3, and those connections shall have a minimum breaking strength of 5,000 pounds (22.2kN). Connections may be a single choked connection as in an attachment element extender. If buckles are used, they must meet ANSI/ASSP Z359.12 and at least be used in pairs.	Meets or Exceeds
3.1.5.2	When attached to the FBH, an attachment element extender shall be no longer than 24 inches (610mm). This distance shall be measured from the new bearing point of the extended attachment element, along the extender's length to a point on the main body of the FBH which would be adjacent to the user's body when donned.	Meets or Exceeds
3.1.6	For FBHs integrated into a vest or other garment, the design of the garment shall allow visual inspection of the FBH.	Meets or Exceeds
3.1.7	All FBHs shall be equipped with a visual indicator that will deploy during dynamic testing defined in 3.2.1.3.1 and 3.2.1.3.2, when attached to the dorsal attachment element. All indicators shall be located where they can be visually inspected.	Meets or Exceeds
3.1.7.1	If visual indicators are present on other attachment elements of the FBH, they must activate when tested in accordance with 4.3.6.	Meets or Exceeds
3.1.8	FBH with attached connecting subsystem combinations shall meet the requirements of ANSI/ASSP Z359.11 for the FBH and the appropriate Z359 component standard for the attached subsystem(s) when tested respectively. All elements that are included in the combination shall be qualified with either the FBH or the connecting subsystem in the same configuration as they would be when integrated. Any combinations that cannot be separated and tested individually are outside the scope of this standard and cannot be marked as meeting ANSI/ASSP Z359.11. A specific example of this configuration is reviewed in section 3.1.8.1.	Meets or Exceeds

Notes

3.1.8.1	**FBH with Integral Energy Absorber.** A FBH that includes an energy absorber or energy absorbing lanyard permanently connected can be marked to ANSI/ASSP Z359.11.	
	1. Samples of the harness and energy absorber or energy absorbing lanyard shall be tested independently via procedures and quantities from their respective standards ANSI/ASSP Z359.11 and ANSI/ASSP Z359.13.	NA
	2. The energy absorber or energy absorbing lanyard shall be tested with the connector used in the full body harness.	NA
	3. The harness and energy absorber or energy absorbing lanyard shall be marked and labeled per their most recent respective standards ANSI/ASSP Z359.11 and ANSI/ASSP Z359.13.	NA
3.1.9	All FBHs shall include strap retainers (keepers) or other components which serve to control the loose ends of straps.	Meets or Exceeds
3.1.10	All FBHs shall include at least one lanyard parking attachment element having a disengagement load of not more than 120 pounds (0.5kN) when tested in accordance with 4.3.7. Testing of multiple lanyard parking attachment elements of the same design is not required.	Meets or Exceeds
3.1.11	It shall not be possible to remove elements of the FBH that support the shoulders/upper torso from those that support the legs/lower torso.	Meets or Exceeds
3.1.12	Single point attachment elements shall be located laterally within 2 inches (51mm) of the vertical centerline of the FBH.	Meets or Exceeds
3.1.13	Sternal attachments that consist of two elements intended to be connected at a single point for use shall be fixed and not adjustable vertically. Both elements shall be clearly marked to only be used together.	Meets or Exceeds
3.1.14	FBHs that do not include a sub-pelvic strap shall incorporate both frontal and sternal attachment elements, an integral waist belt and leg loop suspension straps (satisfying the requirements specified in 3.3), two at the front and two at the rear, all integrally attached to the waist belt (see Figure 1d).	Meets or Exceeds

Notes

5	Markings and Instructions	
5.1	Marking Requirements	
5.1.1	Markings shall be in English	Meets or Exceeds
5.1.2	The legibility and attachment of required markings shall be designed to endure for the life of the component, subsystem or system being marked. When pressure-sensitive labels are used, they shall comply with the applicable provision of 7.2.1. When labels are concealed, a permanent marking shall be visible to the unaided eye that describes how to access the labels.	Meets or Exceeds
5.1.3	Full body harnesses shall be marked with:	
	a. The material of construction.	Meets or Exceeds
	b. The size or range of sizes.	Meets or Exceeds
	c. Part number and/or model designation.	Meets or Exceeds
	d. The month and year of manufacture.	Meets or Exceeds
	e. The manufacturer's name or logo.	Meets or Exceeds
	f. An identifying number, unique to each individual FBH produced by the manufacturer.	Meets or Exceeds
	g. A warning to follow manufacturer instructions included with the equipment at the time of shipment from the manufacturer.	Meets or Exceeds
	h. A label permanently attached to the lanyard parking attachment which either states "Park Lanyard Here. See Instructions." verbally or conveys this by means of a pictogram.	Meets or Exceeds
	i. If the harness stretch measurement for the frontal attachment exceeds 18 inches (457mm) in 3.2.3.1.1, then the harness shall include a warning with the stated stretch out distance.	Meets or Exceeds
	j. If the FBH includes an integrated D-ring extender, a warning shall be included on the D-ring extender that increased free fall should be considered when using this product.	Meets or Exceeds
	k. Applicable pictograms in Figure 12 with a minimum height of 0.8 inch (20mm) or applicable pictograms from CSA Z259.10-18 Figure 1-Figure 8.	Meets or Exceeds
	l. A label as defined in Figure 11a and 11b:	
	1. The label shall be placed in a prominent location on the FBH.	Meets or Exceeds
	2. If the label is part of a label pack or book, the label shall be placed so that the user will see it first.	Meets or Exceeds
	3. The label may be modified to include the mark of the qualification body and may include a part number located on the label outside of the border as needed by the manufacturer as defined in Figure 11a and 11b.	Meets or Exceeds

5.2	Instruction Requirements	
5.2.1	Instructions shall be provided to the user in English and affixed to the equipment at the time of shipment from the manufacturer.	Meets or Exceeds
5.2.2	Instructions shall contain the following information:	
	a. Annex A in its entirety, either incorporated throughout the manufacturer's instructions, as an appendix to the manufacturer's instructions, or separately provided with the product along with the manufacturer's instructions.	Meets or Exceeds
	b. A statement that the manufacturer's instructions shall be provided to the users.	Meets or Exceeds
	c. Manufacturer's name, address and telephone number.	Meets or Exceeds
	d. Manufacturer's part number and/or model designation for the equipment.	Meets or Exceeds
	e. Intended use and purpose of the equipment.	Meets or Exceeds
	f. Length of FBH stretch HS, and warning to include other factors such as D-ring/connector length, settling of the user's body and all other contributing elements when calculating fall clearance.	Meets or Exceeds
	g. Proper method of use and limitations of the equipment.	Meets or Exceeds
	h. Illustrations showing locations and markings on the equipment.	Meets or Exceeds
	i. An illustration demonstrating the load indicator before and after deployment.	Meets or Exceeds
	j. Reproduction of printed information on all markings.	Meets or Exceeds
	k. Inspection procedures (including frequency) required to assure the equipment is in serviceable condition and operating correctly.	Meets or Exceeds
	l. Criteria for discarding equipment that fails inspection.	Meets or Exceeds
	m. Procedures for cleaning, maintenance and storage.	Meets or Exceeds
	n. Reference to ANSI/ASSP Z359.11 (full body harnesses) and applicable regulations governing occupational safety.	Meets or Exceeds
	o. Acceptable use for all attachment elements (see Annex A).	Meets or Exceeds
5.2.3	Instructions shall require that only the equipment manufacturer, or persons or entities authorized in writing by the manufacturer, make repairs to the equipment.	Meets or Exceeds
5.2.4	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.	
5.2.5	Instructions shall require the user to have a rescue plan and the means at hand to implement it when using the FBH for fall arrest.	Meets or Exceeds
5.2.6	Instructions shall provide warnings against:	
	a. Altering equipment.	Meets or Exceeds
	b. Misusing equipment.	Meets or Exceeds
	c. Using combinations of components or subsystems, or both, which may affect or interfere with the safe function of each other.	Meets or Exceeds
	d. 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.	Meets or Exceeds
	e. Using the equipment around moving machinery and electrical hazards.	Meets or Exceeds
	f. Using the equipment near sharp edges or abrasive surfaces.	Meets or Exceeds
	g. Exposure to light (UV degradation).	Meets or Exceeds

4.3.3 Dynamic Feet First Drop Test - Dorsal
Requirements per Section 3.2.1.3.1

a) For an FBH with a sliding dorsal attachment element, position the bearing point of the attachment element on the FBH in accordance with manufacturer's instructions.

b) Attach the hoist/quick-release mechanism to the neck of the test torso and raise as needed to attach the test lanyard from the point of the test anchorage to the attachment element of the FBH using test shackles. Connection to bilateral attachment elements shall be through the use of the test yoke described in 4.2.8, except those described in 3.1.13, which will be connected at a single point.

c) Using the hoist, lower the torso to an elevation where all slack is removed from the test lanyard and connecting components, but not placing a load on the attachment element.

d) For dorsal, sternal and frontal attachment elements, measure and record the initial height (HI)as the vertical distancefrom the lowest point on the test torso to the floor.

e) Raise the torso to a height necessary to apply a peak impact load of not less than 3,600 pounds (16kN) to the attachment element(s) of the FBH when released.

f) Release the test torso and evaluate the FBH in accordance with requirements in 3.2 for the attachment element(s) being tested.

g) Measure and record the MAF. Any failure above 4,000 pounds (17.7kN) negates the test, and the test has to be repeated; however, any pass above 3,600 pounds (16kN) is acceptable.

h) For dorsal, sternal and frontal attachment elements, measure and record the final height (HF)as the vertical distancefrom the lowest point on the test torso to the floor, post fall. To calculate FBH stretch (HS): HS = HI - HF.

4.3.3 Dynamic Feet First Drop Test - Dorsal
Requirements per Section 3.2.1.3.1

Samples	Sample # 04A	Sample # 05A	Sample # 06A
Drop Height (ft)	3.5	3.5	3.5
Max Arrest Force >3,600 lb	3951.63	3904.19	4413.55
Hi - Initial Height (in.)	56.25	56.25	58.5
Hf - Final Height (in.)	46.5	47	43.25
FBH shall not release test torso	Yes	Yes	Yes
FBH shall support test torso for 5 min post fall	Yes	Yes	Yes
FBH shall support test torso at <30°	5°	5°	7°
At least one fall arrest indicator deployed visibly and permanently	Yes	Yes	Yes
FBH stretch <18" or that which is stated by mfg - whichever is less	9.75	9.25	15.25
Result/Assessment	Pass	Pass	Pass

Notes

4.3.3 Dynamic Feet First Drop Test - Sternal
Requirements per Section 3.2.2.3.1

a) For an FBH with a sliding dorsal attachment element, position the bearing point of the attachment element on the FBH in accordance with manufacturer's instructions.

b) Attach the hoist/quick-release mechanism to the neck of the test torso and raise as needed to attach the test lanyard from the point of the test anchorage to the attachment element of the FBH using test shackles. Connection to bilateral attachment elements shall be through the use of the test yoke described in 4.2.8, except those described in 3.1.13, which will be connected at a single point.

c) Using the hoist, lower the torso to an elevation where all slack is removed from the test lanyard and connecting components, but not placing a load on the attachment element.

d) For dorsal, sternal and frontal attachment elements, measure and record the initial height (HI)as the vertical distancefrom the lowest point on the test torso to the floor.

e) Raise the torso to a height necessary to apply a peak impact load of not less than 3,600 pounds (16kN) to the attachment element(s) of the FBH when released.

f) Release the test torso and evaluate the FBH in accordance with requirements in 3.2 for the attachment element(s) being tested.

g) Measure and record the MAF. Any failure above 4,000 pounds (17.7kN) negates the test, and the test has to be repeated; however, any pass above 3,600 pounds (16kN) is acceptable.

h) For dorsal, sternal and frontal attachment elements, measure and record the final height (HF)as the vertical distancefrom the lowest point on the test torso to the floor, post fall. To calculate FBH stretch (HS): HS = HI - HF.

4.3.3 Dynamic Feet First Drop Test - Sternal
Requirements per Section 3.2.2.3.1

Samples	Sample # 07	Sample # 08	Sample # 10
Drop Height (ft)	3.5	3.5	3.5
Max Arrest Force >3,600 lb	4163.68	4540.68	4735.81
Hi - Initial Height (in.)	57.5	58.5	57.5
Hf - Final Height (in.)	53	55	53.5
FBH shall not release test torso	Yes	Yes	Yes
FBH shall support test torso for 5 min post fall	Yes	Yes	Yes
FBH shall support test torso at <50°	46°	47°	43°
At least one fall arrest indicator deployed visibly and permanently	Yes	Yes	Yes
FBH stretch <18" or that which is stated by mfg - whichever is less	4.5	3.5	4
Result/Assessment	Pass	Pass	Pass

Notes

4.3.4 Dynamic Head First Drop Test - Dorsal
Requirements per Section 3.2.1.3.2

a) For a FBH with a sliding dorsal attachment element, position the bearing point of the attachment element on the FBH 8 inches ± 1 inch (200mm ± 25mm) below the top of the shoulder module (datum level A of Figure 5) on the test torso or at the maximum lowest position on the FBH.

b) Attach the hoist/quick-release mechanism to the crotch of the test torso and raise as needed to attach the test lanyard from the point of the test anchorage to the attachment element of the FBH using test shackles.

c) Using the hoist, lower the torso to an elevation where all slack is removed from the test lanyard and connecting components, but not placing a load on the attachment element.

d) Raise the torso to a height of 6 feet (1.8m) or to a height necessary to apply a peak impact load of not less than 3,600 pounds (16kN) to the attachment element(s) of the FBH when released, whichever is less.

e) Release the test torso and evaluate the FBH in accordance with requirements in 3.2 for attachment element(s) being tested.

f) Measure and record the MAF. Any failure above 4,000 pounds (17.7kN) would negate the test and would need to be repeated; however, any pass above 3,600 pounds (16kN) or with a drop height of 6 feet (1.8m) or greater is acceptable.

4.3.4 Dynamic Head First Drop Test - Dorsal
Requirements per Section 3.2.1.3.2

Samples	Sample # 12	Sample # 12A	Sample # 12B
Drop Height (ft)	6	6	6
Max Arrest Force >3,600 lb	2902.55	2721.6	3372.99
FBH shall not release test torso	Yes	Yes	Yes
FBH shall support test torso for 5 min post fall	Yes	Yes	Yes
FBH shall support test torso ≤30°	30°	29°	30°
Min. one fall arrest indicator deployed visibly and permanently	Yes	Yes	Yes
Result/Assessment	Pass	Pass	Pass

4.3.5 Static Feet First Test - Dorsal
Requirements per Section 3.2.1.3.3

a) 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.

b) Connect the attachment element(s) to the static test equipment using either a test lanyard or test yoke as appropriate.

c) Prior to loading the FBH, mark the location of buckles and adjusters as needed to facilitate measurement of tearing or slippage.

d) Apply a load of 3,600 pounds (16kN) to the attachment elements and maintain the load for a period of 1 minute.

e) Release the load and evaluate the FBH in accordance with requirements in 3.2 for the attachment element being tested.

4.3.5 Static Feet First Test - Dorsal
Requirements per Section 3.2.1.3.3

Samples	Sample # 13	Sample # 14	Sample # 15
FBH released test torso?	No	No	No
Slippage through any adjuster >1 in?	No	No	No
Tongue buckle tears >1 in. or to the adjacent eyelet?	No	No	No
Straps tear (other than those above)?	No	No	No
Result/Assessment	Pass	Pass	Pass

Notes

4.3.5 Static Feet First Test - Sternal
Requirements per Section 3.2.1.3.3

a) 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.

b) Connect the attachment element(s) to the static test equipment using either a test lanyard or test yoke as appropriate.

c) Prior to loading the FBH, mark the location of buckles and adjusters as needed to facilitate measurement of tearing or slippage.

d) Apply a load of 3,600 pounds (16kN) to the attachment elements and maintain the load for a period of 1 minute.

e) Release the load and evaluate the FBH in accordance with requirements in 3.2 for the attachment element being tested.

4.3.5 Static Feet First Test - Sternal
Requirements per Section 3.2.1.3.3

Samples	Sample # 16	Sample # 17	Sample # 18
FBH released test torso?	No	No	No
Slippage through any adjuster >1 in?	No	No	No
Tongue buckle tears >1 in. or to the adjacent eyelet?	No	No	No
Straps tear (other than those above)?	No	No	No
Result/Assessment	Pass	Pass	Pass

4.3.5 Static Feet First Test - Frontal
Requirements per Section 3.2.3.1.2

a) 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.

b) Connect the attachment element(s) to the static test equipment using either a test lanyard or test yoke as appropriate.

c) Prior to loading the FBH, mark the location of buckles and adjusters as needed to facilitate measurement of tearing or slippage.

d) Apply a load of 3,600 pounds (16kN) to the attachment elements and maintain the load for a period of 1 minute.

e) Release the load and evaluate the FBH in accordance with requirements in 3.2 for the attachment element being tested.

4.3.5 Static Feet First Test - Frontal
Requirements per Section 3.2.3.1.2

Samples	Sample # 25	Sample # 26	Sample # 27
FBH released test torso?	No	No	No
Slippage through any adjuster >1 in?	No	No	No
Tongue buckle tears >1 in. or to the adjacent eyelet?	No	No	No
Straps tear (other than those above)?	No	No	No
Result/Assessment	Pass	Pass	Pass

4.3.5 Static Feet First Test - Hip
Requirements per Section 3.2.6.1.1

a) 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.

b) Connect the attachment element(s) to the static test equipment using either a test lanyard or test yoke as appropriate.

c) Prior to loading the FBH, mark the location of buckles and adjusters as needed to facilitate measurement of tearing or slippage.

d) Apply a load of 3,600 pounds (16kN) to the attachment elements and maintain the load for a period of 1 minute.

e) Release the load and evaluate the FBH in accordance with requirements in 3.2 for the attachment element being tested.

4.3.5 Static Feet First Test - Hip
Requirements per Section 3.2.6.1.1

Samples	Sample # 19	Sample # 20	Sample # 21
FBH released test torso?	No	No	No
Slippage through any adjuster >1 in?	No	No	No
Tongue buckle tears >1 in. or to the adjacent eyelet?	No	No	No
Straps tear (other than those above)?	No	No	No
Result/Assessment	Pass	Pass	Pass

4.3.6.1 Fall Indicator Test
Requirements per Sections 3.2.1.3.4 & 3.2.2.3.3

a) Attach the hoist/quick-release mechanism to the neck of the test torso.

b) Attach an ANSI/ASSP Z359.13 compliant 6-f oot (1.8m) free fall personal energy absorber from the point of the test anchorage to the attachment element to be tested using test shackles. Connection to bilateral attachment elements shall be through the use of the test yoke described in 4.2.8, unless the bilateral connections are designed to come together as a single connection point as described in 3.1.13.

c) Using the hoist, lower the torso to an elevation where the test shackles are straight, but not placing a load on the attachment element.

d) Raise the torso 24 inches (610mm).

e) Release the test torso and evaluate the FBH in accordance with requirements in 3.2 for the attachment element being tested.

4.3.6.1 Fall Indicator Test - Dorsal
Requirements per Sections 3.2.1.3.4

Samples	Sample # 28	Sample # 29	Sample # 30
One Fall Arrest Indicator Deployed?	Yes	Yes	Yes
Result/Assessment	Pass	Pass	Pass

4.3.7 Static Feet First Test for Lanyard Parking Attachment Element
Requirements per Section 3.1.10

a) 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.

b) Connect the attachment element to the static test equipment using a test lanyard.

c) Apply and steadily increase the load until the connection between the lanyard parking attachment and the test lanyard separates completely.

d) Record the maximum force applied to the attachment element and compare this with the requirement given in 3.1.10.

4.3.7 Static Feet First Test for Lanyard Parking Attachment Element
Requirements per Section 3.1.10

Samples	Sample # 22	Sample # 23	Sample # 24
Parking element broke under 120 lb?	Yes	Yes	Yes
Result/Assessment	Pass	Pass	Pass

7.1.2 Abrasion Test
Requirements per Section 3.3.1.5

a) Per FEDSTD191A, place each 54in. (1372mm) sample in abrasion tester with a 5.2lb +/- .02oz weight attached to the end.

b) Secure sample to 16in. (406mm) drum.

c) Pass the sample over the .250 +/- .001in. (6.35 +/-. 03mm) steel hexagonal rod with a radius of .020 +/- .004in. (.5 +/- .1mm) at a 85 +/- 2 degree angle.

d) Oscillate the drum so the specimen traverses 12+/-1in. (305 +/- 25mm) over the rod at a rate of 60 +/- 2 strokes (30 +/- cycles) per minute for 5,000 strokes (2,500 cycles).

e) Per 3.3.1.5 & 7.1.1, after abrasion, the sample shall be pulled at a rate of 3 +/- 1in. (76 +/- 25mm) per minute until it is ruptured.

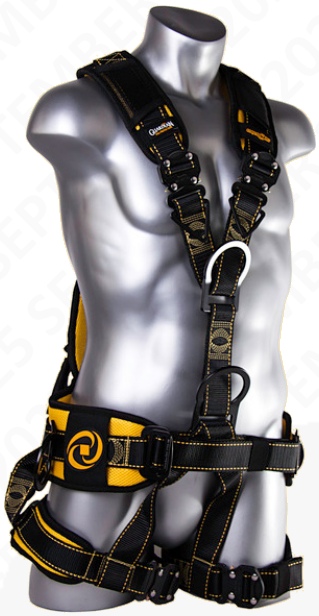
f) When sample ruptures, the breaking (actual) load shall be recorded.

Section 7.1.2 Abrasion Test
Requirements per 3.3.1.5 & 7.1.2 post FEDSTD191A

Samples	Sample # 01	Sample # 02	Sample # 03	Sample # 04B	Sample # 05B
SKU# of Strap	ND011	ND011	ND011	ND011	ND011
Description	1.75 in. Polyester Webbing, multiple colors	1.75 in. Polyester Webbing, multiple colors	1.75 in. Polyester Webbing, multiple colors	1.75 in. Polyester Webbing, multiple colors	1.75 in. Polyester Webbing, multiple colors
Actual Load >3,600 lb	4329.96 lb	5366.88 lb	3631.13 lb	4494.89 lb	4432.44 lb
Breaking Strength Maintained?	Yes	Yes	Yes	Yes	Yes
Result/Assessment	Pass	Pass	Pass	Pass	Pass

Notes

Pictured: 21082
Represents all part #s



Notes

Labels

Represents all part #s

ANSI Z359.11–2021

ANSI Z359 recognizes the use of this harness only within the capacity range of:

130–310 lbs.

90782-C-1

Compliant with:
OSHA 1910.140
OSHA 1926.502,
ANSI Z359.11-2021,
& CSA Z259.10-2018

Cumplir con:
OSHA 1910.140
OSHA 1926.502,
ANSI Z359.11-2021,
y CSA Z259.10-2018

Conforme aux normes de:
l'OSHA 1910.140,
de l'OSHA 1926.502,
de l'ANSI Z359.11-2021,
et CSA Z259.10-2018

90782-C-2

GUARDIAN

www.guardianfall.com

Material: Polyester & steel
Materiales: poliéster y acero
Matériaux: polyester et acier

Made in China
Hecho en China
Fabriqué aux Chine

DO NOT REMOVE LABELS
NO DESPRENDA LAS ETIQUETAS
NE RETIREZ PAS LES ÉTIQUETTES

90782-C-3

Make only compatible connections. Prior to use, inspect equipment for rips, tears, fraying, or any possible structural deficiency that might compromise the equipment in a fall. Avoid contact with sharp and abrasive surfaces.

Haga solo conexiones compatibles. Antes de usar este equipo, inspecciónelo para detectar desgarres, roturas, deshilachados o cualquier otro defecto estructural que podría poner en peligro el equipo en caso de una caída. Evite el contacto con superficies afiladas y abrasivas.

Ne faites que des connexions compatibles. Avant l'utilisation, inspectez l'équipement pour détecter les accrocs, les déchirures, l'effilochage ou toute défectuosité de structure possible qui pourraient nuire à l'équipement lors d'une chute. Évitez tout contact avec des surfaces tranchantes et abrasives.

90782-C-4

⚠WARNING

Prior to use, understand all manufacturer instructions included with equipment at time of shipment. Improper use of this equipment could result in serious injury or death. IMMEDIATELY remove from service if subjected to a fall or if harness fails inspection.

⚠ADVENTENCIA

Antes de usar este producto, entienda todas las instrucciones del fabricante que vienen con el equipo. El uso incorrecto del equipo puede causar lesiones graves o muerte. Ponga DE INMEDIATO el equipo fuera de servicio si estuvo expuesto a una caída o si el arnés no pasa la inspección.

⚠AVERTISSEMENT

Avant l'utilisation, comprenez toutes les instructions du fabricant incluses avec l'équipement au moment de l'expédition. L'utilisation abusive de cet équipement pourrait entraîner des blessures graves ou la mort. Mettez IMMÉDIATEMENT le harnais hors service s'il est soumis à une chute ou s'il ne satisfait pas l'inspection.

90782-C-5

User must inspect prior to EACH use. Competent Person must complete formal inspection every 12 months. Competent Person to inspect and initial.

Product lifetime is indefinite as long as equipment passes pre-use and Competent Person inspections.

El usuario debe inspeccionar el equipo antes de CADA uso. Una persona competente debe completar una inspección formal al menos cada 12 meses. La persona competente debe inspeccionar y firmar con sus iniciales.

La vida útil del producto es indefinida, siempre que pase las inspecciones previas al uso y las inspecciones de la persona competente.

L'utilisateur doit inspecter l'équipement avant CHAQUE utilisation. Une personne compétente doit effectuer une inspection officielle au moins tous les 12 mois. Elle doit inspecter et apposer ses initiales.

La durée de vie du produit est indéterminée à condition que l'équipement soit conforme aux inspections avant l'utilisation et par une personne compétente.

90782-C-6

INSPECTION GRID
CUADRÍCULA DE INSPECCIÓN
GRILLE D'INSPECTION

Date of First Use
Fecha del primer uso
Date de la première utilisation

_____

MO / YR	20___	20___	20___	20___	20___
J					
F					
M					
A					
M					
J					
J					
A					
S					
O					
N					
D					

90782-C-7

Refer to below chart for allowed worker weight capacity range per specific fall protection regulation. **Always defer to applicable connecting device to determine permitted worker weight capacity range for complete system.**

Consulte la siguiente tabla para conocer el rango de capacidad de peso permitido para el trabajador según la regulación específica de protección contra caídas. **Siempre diferir a el dispositivo de conexión correspondiente para determinar el rango de capacidad de peso para trabajador permitido para el sistema completo.**

Reportez-vous toujours au dispositif de connexion applicable pour déterminer la plage de capacité de charge de travail autorisée pour un système complet. **Reportez-vous toujours à la gamme de poids de votre connecteur pour déterminer la capacité du système complet.**

	ANSI	OSHA	CSA
130-310 Lbs.	●		
100-420 Lbs.		●	●

90782-C-8

GUARDIAN

Size:
☐ S ☐ S-M ☐ M ☐ L
☐ S-L ☐ M-L ☐ M-XL ☐ L-XL
☐ XL ☐ XXL ☐ XL-XXL

Material: Polyester & steel

Part #:

DOM:

Serial#:

90782-C-9