Test Report
ANSI/ASSE Z359.14-14

6305 S 231st Street
Kent, WA 98032
800-466-6385

Test Report Number: 2022011432100
Job Number: PPE259768/1/PJT/2018, Qualification 441, PPE161127/5/PJT/2012
Product SKU#: 32100
Product Type: SRD
Product Description: 30 FT cable SRL-LE (Red Housing)
Testing Standard: ANSI/ASSE Z359.14-2014 Safety Requirements for Self-Retracting Devices
Date(s) of Testing: 11/23/2012, 10/18/2018, 7/19/2019

REQUIREMENT VERIFICATION

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

VERIFICATION TESTING

Test Description	Test Date	Clause/Section	Result
Dynamic Performance (Ambient)	10/18/2018	4.2.1 Dynamic Performance Testing of SRDs	Pass
Dynamic Performance (Hot)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance (Cold)	10/18/2018	4.2.8.2 Dyanmic Performance Testing Cold	Pass
Dynamic Performance (Wet)	10/18/2018	4.2.8.3 Dynamic Performance Testing Wet	Pass
Dynamic Performance, LE (Perpendicular, Ambient)	10/18/2018	4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test	Pass
Dynamic Performance, LE (Perpendicular, Hot)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance, LE (Perpendicular, Cold)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance, LE (Perpendicular, Wet)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance, LE (Offset, Ambient)	10/18/2018	4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test	Pass
Dynamic Performance, LE (Offset, Hot)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance, LE (Offset. Cold)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Performance, LE (Offset, Wet)	10/18/2018	4.2.8.1 Dynamic Performance Testing Hot	Pass
Dynamic Strength (Ambient)	10/18/2018	4.2.3 Dynamic Strength Testing of SRDs	Pass
Residual Dynamic Strength	10/18/2018	4.2.3 Dynamic Strength Testing of SRDs	Pass
Static Strength	7/19/2019	4.2.5 Static Stength Testing of SRDs	Pass

This test report covers these additional products:

Please contact quality@guardianfall.com for signed report.

3.1	General Requirements	
3.1.1	Integral Connectors. Snaphooks or carabiners which are integral to self-retracting devices shall meet the requirements of ANSI/ASSE Z359.12. Integral rings or similar openings intended to accept a snaphook or carbiner shall be designed to minimize the possibility of rollout of a mating snaphook or carabiner.	Meets or Exceeds
3.1.2	Locking Function. Self-retracting devices shall be automatic in their locking (fall stopping) function. It shall not be possible to override the self-locking feature of the device when in use. The design of working parts, their location and the protection afforded to them shall be such as to prevent the possibility of performance being impaired by casual interference.	Meets or Exceeds
3.1.3	Energy Absorbtion. Self-retracting devices which perform an energy absorbtion function shall be designed such that the energy absorbtion function is available throughout the usable working range of the device. The working range or length is defined as the amount of travel allowed by the device starting from full retraction to full extension under normal working tension.	Meets or Exceeds
3.1.4	Visual Indicator. Self-retracting devices shall include a visual indicator that will activate in accordance with the requirements of Section 3.1.9.	Meets or Exceeds
3.1.5	Corrosion Protection. Corrosion protection shall be afforded to all elements (parts) of self-retracting devices. Protection shall, at a minimum, allow the device to operate as intended and show no signs of corrosion which, if left unchecked, could result in corrosion-related failure of the device afer being salt spray (for) tested for 96 hours in accordance with 7.4.	Meets or Exceeds

Notes

5	**Instruction Requirements**	
5.1	**Marking Requirements**	
5.1.1	Markings shall be in English	Meets or Exceeds
5.1.2	Markings shall remain legible and ensure for the life of the component, subsystem, or system being marked. Pressure-sensitive labels must conform to UL 969-2001, Marking and Labeling Systems	Meets or Exceeds
5.1.3	**Self-Retracting Devices shall be marked with:**	
	a) part number and model designation	Meets or Exceeds
	b) year of manufacture	Meets or Exceeds
	c) manufacturer's name or logo	Meets or Exceeds
	d) capacity range	Meets or Exceeds
	e) unique ID number	Meets or Exceeds
	f) standard number (Z359.14)	Meets or Exceeds
	g) how to inspect visual indicator	Meets or Exceeds
	h) warning to follow the manufacturer's instructions included with the equipment at the time of shipment from manufacterer	Meets or Exceeds
	i) warning of the need for inspection in accordance with the manufacturer's instructions	Meets or Exceeds
	j) the fiber or other materials used in the lanyard construction	Meets or Exceeds
	k) the lanyards working length	Meets or Exceeds
	l) average arresting force for the SRD class	Meets or Exceeds
	m) proper installation means	Meets or Exceeds
	n) warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces	Meets or Exceeds
	o) SRD class and arrest distance	Meets or Exceeds
	p) warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces	Meets or Exceeds
	q) free fall limit	Meets or Exceeds
	r) suitability for use with horizontal lifelines	Meets or Exceeds
	s) suitability for horizontal use	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 fom the manufacturer	Meets or Exceeds
5.2.2	**Instructions shall contain the following information:**	
	a) a statement that the manufacturer's instructions shall be provided to users	Meets or Exceeds
	b) manufacturer's name, address, and telephone number	Meets or Exceeds
	c) manufacturer's part number or model designation for the equipment	Meets or Exceeds
	d) intended use and purpose of the equipment	Meets or Exceeds
	e) proper method of use and limitations on use of the equipment	Meets or Exceeds
	f) illustrations showing locations of markings on the equipment	Meets or Exceeds
	g) reproduction of printed information on all markings	Meets or Exceeds
	h) inspection procedures required to asure the equipment is in serviceable condition and operating correctly	Meets or Exceeds
	i) anchorage requirements	Meets or Exceeds
	j) criteria for discarding equipment which fails inspection	Meets or Exceeds
	k) procedures for cleaning, maintenance, and storage	Meets or Exceeds
	l) reference to the Z359 standards and applicable regulations governing occupational safety	Meets or Exceeds
	m) proper installation means and limitations on the type of anchorage connectors used, if any	Meets or Exceeds
	n) the diameter of rope or wire rope, and width and thickness of webbing use in the lanyard	Meets or Exceeds
	o) the fiber or other materials used in the lanyard construction	Meets or Exceeds
	p) SRD class and arrest distance when dynamically tested in accordance with the requirements of this standard	Meets or Exceeds
	q) how to determine fall clearance	Meets or Exceeds
	r) testing of the device for locking before each use	Meets or Exceeds
5.2.3	Instructions shall require that only the equipment manufacturer, or persons or entities authorized in writing by the manufacturer shall make repairs to the equipment	Meets or Exceeds
5.2.4	Instructions shall require the user to remove equipment manufacturer, or persons or entities authorized in writing by the manufacturer shall make repairs to the equipment	Meets or Exceeds
5.2.5	Instructions shall require the user to have a written rescue plan and the means at hand to implement it when using the equipment	Meets or Exceeds

5.2.6	Instructions shall provide warnings regarding:	
	a) altering the equipment	Meets or Exceeds
	b) misusing the 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, high heat, severe cold or other harsh environments which may prouce a harmful effect and to consult the manufacturer in cases 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 and abrasive surfaces	Meets or Exceeds
	g) risk of striking an object or obstruction during a swing fall	Meets or Exceeds
	h) that the consequences or improperly using the device, not following instructions or markings may cause serious injury or death	Meets or Exceeds

Notes

4.2.1 Dynamic Performance Testing of Self-Retracting Devices

Requirements per 3.1.9

a) Attach load cell to the drop test structure with the test anchorage connector used to qualify the drop test structure

b) Connect 282lb (128kg) test weight to lanyard of the device. Attach quick release mechanism to the test weight and attach the hoisting means to the quick release mechanism

c) Hoist test weight so that 36±1in. (914±25mm) of device line is extended from the orifice. The horizontal distance between the quick release mechanism and the device shall not exceed 12in. (305mm)

d) Do not lock device and do not inhibit retraction of the lanyard

e) Release test weight by activating the quick release mechanism

f) Record the average arresting force, arrest distance, and retraction tension

g) Check for visual indicator activation

4.2.1 Dynamic Performance Testing of Self-Retracting Devices

Requirements per 3.1.9

Samples	Sample # 01
SRL Locks per 3.1.2	Yes
Visual Indicator Activities	Yes
Max Arrest Force <1,800lb	726.13
Arrest Distance: Class A <= 24” / Class B <= 54”	32.28
Payout/Rectraction Test per 3.1.6 (data below)	Yes
Result/Assessment	Pass

4.2.6 Retraction Tension Testing of Self-Retracting Device Line

requirements per 3.1.6

Retraction Tension (lb)	Sample# 02
Force @ 1’	9.2
Force @ 20%	9.8
Force @ 40%	11.8
Force @ 60%	10.2
Force @ 80%	11.4
Force @ 100%	13.2
Retracted length less than 60”?	Yes

Notes

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - hot

Requirements per 3.1.9

a) Attach load cell to the drop test structure with the test anchorage connector used to qualify the drop test structure

b) Connect 282lb (128kg) test weight to lanyard of the device. Attach quick release mechanism to the test weight and attach the hoisting means to the quick release mechanism

c) Hoist test weight so that 36±1in. (914±25mm) of device line is extended from the orifice. The horizontal distance between the quick release mechanism and the device shall not exceed 12in. (305mm)

d) Do not lock device and do not inhibit retraction of the lanyard

e) Release test weight by activating the quick release mechanism

f) Record the average arresting force, arrest distance, and retraction tension

g) Check for visual indicator activation

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - hot

Requirements per 3.1.9

Samples	Sample # 09
SRL Locks per 3.1.2	Yes
Visual Indicator Activities	Yes
Max Arrest Force <1,800lb	910.47
Arrest Distance: Class A <= 24” / Class B <= 54”	32.28
Payout/Rectraction Test per 3.1.6 (data below)	Yes
Result/Assessment	Pass

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - Cold

Requirements per 3.1.9

a) Attach load cell to the drop test structure with the test anchorage connector used to qualify the drop test structure

b) Connect 282lb (128kg) test weight to lanyard of the device. Attach quick release mechanism to the test weight and attach the hoisting means to the quick release mechanism

c) Hoist test weight so that 36±1in. (914±25mm) of device line is extended from the orifice. The horizontal distance between the quick release mechanism and the device shall not exceed 12in. (305mm)

d) Do not lock device and do not inhibit retraction of the lanyard

e) Release test weight by activating the quick release mechanism

f) Record the average arresting force, arrest distance, and retraction tension

g) Check for visual indicator activation

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - Cold

Requirements per 3.1.9

Samples	Sample # 17
SRL Locks per 3.1.2	Yes
Visual Indicator Activities	Yes
Max Arrest Force <1,800lb	811.56
Arrest Distance: Class A <= 24” / Class B <= 54”	40.94
Payout/Rectraction Test per 3.1.6 (data below)	Yes
Result/Assessment	Pass

Notes

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - wet

Requirements per 3.1.9

a) Attach load cell to the drop test structure with the test anchorage connector used to qualify the drop test structure

b) Connect 282lb (128kg) test weight to lanyard of the device. Attach quick release mechanism to the test weight and attach the hoisting means to the quick release mechanism

c) Hoist test weight so that 36±1in. (914±25mm) of device line is extended from the orifice. The horizontal distance between the quick release mechanism and the device shall not exceed 12in. (305mm)

d) Do not lock device and do not inhibit retraction of the lanyard

e) Release test weight by activating the quick release mechanism

f) Record the average arresting force, arrest distance, and retraction tension

g) Check for visual indicator activation

4.2.1 Dynamic Performance Testing of Self-Retracting Devices - wet

Requirements per 3.1.9

Samples	**Sample # 25**
SRL Locks per 3.1.2	Yes
Visual Indicator Activities	Yes
Max Arrest Force <1,800lb	854.27
Arrest Distance: Class A <= 24” / Class B <= 54”	26.77
Payout/Rectraction Test per 3.1.6 (data below)	Yes
Result/Assessment	Pass

Notes

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Ambient

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Ambient

Requirements per 3.1.9

Samples	Sample # 31/1
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

4.2.6 Retraction Tension Testing of Self-Retracting Device Line

requirements per 3.1.6

Retraction Tension (lb)	Sample# 03
Force @ 1'	7.4
Force @ 20%	11
Force @ 40%	9.4
Force @ 60%	8
Force @ 80%	8
Force @ 100%	10.6
Retracted length less than 60"?	Yes

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Hot

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Hot

Requirements per 3.1.9

Samples	Sample # 31/3
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Cold

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Cold

Requirements per 3.1.9

Samples	Sample # 31/5
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Wet

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Perpendicular - Wet

Requirements per 3.1.9

Samples	Sample # 31/7
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Ambient

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Ambient

Requirements per 3.1.9

Samples	Sample # 31/2
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Hot

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Hot

Requirements per 3.1.9

Samples	Sample # 31/4
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Cold

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Cold

Requirements per 3.1.9

Samples	Sample # 31/6
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Wet

Requirements per 3.1.9

a) Attach the SRL-Le to a rigid anchorage meeting the elastic deformation requirements of 4.1.1 in accordance with the manufacturer's instructions for anchoring the device on the same level as the edge

b) Two drop tests are to be performed. one with the line perpendicular to the edge and a second with a lateral offset of 5 feet (1.5m). A new device may be used for each test. Drop the test weight from a level 5 feet +/- 1.0 inch (1.5m +/- 25mm) above and at a horizontal distance of 20 inches (.5m) +/- 1.0 inch (1.5m +/- 25mm) measured perpendicular from the edge, or in accordance with the following as necessary.

c) The horizontal distance of the test weight from the edge shall be increased beyond 20 inches (.5m) as needed to ensure the line element (webbing, rope, wire rope, etc.) of the SrD makes the initial contact with the edge during the tests. other elements of the line constituent (snaphooks, energy absorbers, end fittings, etc.) shall be positioned away from the edge. The tests shall be conducted with the SRL-Le fully extended (maximum of its working range)

d) Attach the load cell (transducer) specified in 4.1.3 between the lanyard connector of the SRL-Le and the [300] pound [(136kg)] test weight. Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the prescribed level and location relative to the edge and the SRL-Le. Release the test weight by activating the quick release mechanism)

f) Allow the test weight to swing unrestrained for a period of not less than [2 minutes] following initial arrest. Before removing the test weight, increase the static load as required by 3.1.9 (the applied load shall be within +2/-0%) and maintain the load for one minute.

g) compare the test results with the requirements set forth in 3.1.9.

4.2.2 Dynamic Performance Testing of SRL-LE, Edge Test, Offset - Wet

Requirements per 3.1.9

Samples	Sample # 31/8
Remained locked until Release	Yes
Test Weight did not strike ground	Yes
Maintained static load	Yes
Result/Assessment	Pass

Notes

Per 4.2.2: "The dynamic strength test of 4.2.4 may be eliminated if the test weight used for the dynamic performance testing is increased to 300 pounds (136kg) and the swing time is increased to 2 minutes, provided that all requirements of 3.1.9 are met."

4.2.3 Dynamic Strength Testing of Self-Retracting Devices

Requirements per 3.1.8

a) Attach device directly to drop test structure

b) Connect 300lb (136kg) test weight to SRL lifeline

c) Extract line from the device and prevent retraction by means of a clamp on the line just outside the device orifice. Extract enough line to allow a 4ft (1.2m) fall. Do not lock the device

d) Attach quick release mechanism to the test weight and attach the hoisting means to the quick release mechanism.

e) Hoist test weight to permit 4ft (1.2m) free fall. The horizontal distance between the quick release mechanism and the orifice of the device shall not exceed 12in. (305mm)

f) Release test weight using the quick release mechanism and evaluate in accordance with 3.1.8

4.2.3 Dynamic Strength Testing of Self-Retracting Devices

Requirements per 3.1.8

Samples	Sample # 25	Sample # 26
SRL locks	Yes	Yes
SRL remains locked until released	Yes	Yes
Test weight shall not strike ground	Yes	Yes
Result/Assessment	Pass	Pass

4.2.3 Residual Dynamic Strength Testing of Self-Retracting Devices

Requirements per 3.1.8

a) In accordance with the manufacturer's anchoring instructions, attach the device directly to the drop test structure specified in 4.1.1.

b) Connect the 300 pound (136kg) test weight specified in 4.1.2 to the line constituent of the device.

c) Extract line from the device and prevent it from retracting by means of a clamp on the line just outside the device orifice. Extract enough line to allow a 4 foot (1.2m) fall of the test weight before the line begins to pay out as evidenced by movement of the clamp. Do not lock the device.

d) Attach the quick release mechanism specified in 4.1.4 to the test weight and attach the hoisting means to the quick release mechanism. Hoist the test weight to the elevation permitting a 4 foot (1.2m) fall of the test weight excluding activation distance. the horizontal distance between the quick release mechanism and the orifice of the device shall not exceed 12 inches (305mm). See figure 6.

e) Release the test weight using the quick release mechanism. Evaluate the line constituent strength over the affected section in accordance with 7.1, 7.2, 7.3 or 7.5 whichever is applicable.

f) Compare the test results with the requirements set forth in 3.1.8.

4.2.3 Residual Dynamic Strength Testing of Self-Retracting Devices

Requirements per 3.1.8

Samples	Sample # 25	Sample # 26
SRL locks	Yes	Yes
SRL remains locked until released	Yes	Yes
Test weight shall not strike ground	Yes	Yes
Result/Assessment	Pass	Pass

4.2.5 Static Strength Testing of Self-Retracting Devices

Requirements per 3.1.7

a) Shorten the lanyard constituent from the free end to allow installation in the static tensile test equipment specified in 4.1.5. See Figure 7.

b) With the lanyard constituent fully extracted, install the device in the tensile test equipment and apply a load of 3,000 +60/-0 pounds (13.3 +.26/-0kn) across the device. maintain the load for a period of one minute.

c) Compare the test results with the requirements set forth in 3.1.7.

4.2.5 Static Strength Testing of Self-Retracting Devices

Requirements per 3.1.7

Samples	Sample # 04
SRL Withstands tensile load	Yes
Actual load applied >3,000lb	3004.27
Result/Assessment	Pass

Notes