FRONTLINE FALL PROTECTION INC.

TEST REPORT

SCOPE OF WORKs
ANSI/ASSP Z359.14-2021 – SELF RETRACTING DEVICES

REPORT NUMBER
105874305CRT-004

ORIGINAL REPORT NUMBER
104972760CRT-001

ISSUE DATE
July 15, 2024

PAGES
8

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

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TEST REPORT FOR FRONTLINE FALL PROTECTION INC.

Report No.: 105874305CRT-004
Date: July 15, 2024

FRONTLINE FALL PROTECTION INC. Phone: 1+ 305-721-4407
6 Lee BLVD
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UNITED STATES
info@frontlinefall.com

Report Number. ..... :	105874305CRT-004
Signed Quote Number. ..... :	Qu-01456258-3
PO Number.....:	N/A
Name of Testing Laboratory Preparing the Report..... :	Intertek Testing Services NA Inc.
Test Specification:	
Standard..... :	ANSI/ASSP Z359.14-2021
Date(s) of Testing..... :	3/14/22-3/22/22
Product Description:	
Product Type: ..... :	Self-Retracting Device
Brand Name:..... :	Frontline Fall Protection
Model Number(s):..... :	RPW20
Model Share:.....:	RPW11, RPW20R
Dates Samples Received:	3/4/2022

SECTION 1
SUMMARY OF TESTING

TESTS COMPLETED	TEST DATE	ANSI/ASSP Z359.14-2021 CLAUSE	STATUS
General Requirements	4/1/22	3.1	**PASS**
Markings and instructions/User inspection, Maintenance	4/1/22	5.1, 5.2/6	**PASS**
Line Constituent of Self Retracting Devices (Webbing or Wire Rope) *Supply Line only – 5' Sections terminated on both ends*	3/21/22	3.1.6/7. 1, 7. 2, or 7. 3	**PASS**
Static Strength Testing of SRD's	3/21/22	3.2.1/4.2.1	**PASS**
Dynamic Performance (ambient)	3/21/22	3.3/4.3.1	**PASS**
Energy Capacity (Rotary Break Only)	3/22/22	4.4	**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:		**SIGNATURE**	
DATE	07/15/2024	**DATE:**	07/15/2024

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	Test Weight	NA	NA	310 lbs	-	VBU	VBU
X	Load Cell	PCB	N1392	-	-	7/22/21	7/22/22
X	Tape Measure	Stanley	H339	25'	-	5/10/21	5/10/22
X	Load Cell	Interface	L099	-	-	5/10/21	5/10/22

SECTION 4

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3</td><td>"Marking and Instructions"</td><td></td><td></td></tr>
<tr><td>5.1.1</td><td>Shall be in English</td><td></td><td>PASS</td></tr>
<tr><td>5.1.3</td><td>Self-Retracting Devices 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>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>Capacity Range</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Unique ID Number</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Standard Number (Z359.14)</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>How to inspect the visual indicator</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>Warning of the need for inspection in accordance with the manufacturer's instructions</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The fiber or other materials used in the lanyard construction</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The lanyard working length</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Average arresting force for the SRD class</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Arresting distance</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Proper installation means</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning on the need for testing the device for locking and retraction before each use</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>SRD class and arrest distance</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces (not required for LE devices)</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Free fall limit</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Suitability for use with horizontal lifelines</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Suitability for horizontal use</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Suitability for Leading Edge capability</td><td></td><td></td><td></td><td>x</td></tr>
</table></td><td></td><td>PASS</td></tr>
</table>

5.2.1	Instructions shall be in English, and affixed to the equipment at time of shipment from the manufacturer		**PASS**
Section (Test)	Requirement	Results	**Compliance**
5.2.2	Instructions shall contain the following information:		**PASS**

Instructions	Comments	YES	NO	NA
A statement that the manufacturer's instructions shall be provided to the users		X		
Manufacturers name, address, and telephone number		X		
Manufacturer's part number and model designation for the equipment		X		
Intended use and purpose of the equipment		X		
Proper method of use and limitations on use of the equipment		X		
Illustrations showing locations of markings on the equipment		X		
Reproduction of printed information on all markings		X		
Inspection procedures required to assure the equipment is in serviceable condition and operating correctly		X		
Anchorage requirements		X		
Criteria for discarding equipment which fails inspection		X		
Procedures for cleaning. maintenance, and storage		X		
Reference to Z359 standards		X		
Proper installation means and limitations on the type of anchorage connectors used		X		
The fiber or other materials used in the lanyard construction		X		
The lanyard length		X		
The average arresting force when dynamically tested in accordance with the requirements of the standard		X		
SRD class and arrest distance when dynamically tested in accordance with the requirements of the standard		X		
How to determine fall clearance		X		
Testing the device for locking before each use		X		

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		**PASS**
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 or affecting a rescue		**PASS**

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		**PASS**

Section (Test)	Requirement	Results	Compliance
5.2.6	Instructions shall provide warnings regarding:		**PASS**

Warnings	Comments	YES	NO	NA
Altering the equipment		X		
Misusing the equipment		X		
Using combinations of components or sub-systems, or both, which may affect or interfere with the safe function of each other		X		
Exposing the equipment to chemicals, high heat, severe cold, or other harsh environments which may produce a harmful effect and to consult the manufacturer in case of doubt		X		
Using the equipment around moving machinery and electrical hazards		X		
Using the equipment near sharp edges or abrasive surfaces		X		
Risk of striking an object or obstruction during a swing fall		X		
That the consequences of improperly using the device, not following instructions or markings may cause serious injury or death		X		

SUPPLEMENTAL TEST DATA

Section (Test)	Requirement	Results	Compliance
3.2.1/4.2.1	**Line Constituent of Self Retracting Devices** : (Webbing or Wire Rope) *Supply Line only – 5' Sections terminated on both ends*		**PASS**

Sample ID	1	2	3
Class 1/2	Class 1	Class 1	Class 1
Broke At	**4950 lbf.**	**4910 lbf.**	**4865 lbf.**

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3.2.1/4.2.1</td><td><u>Static Strength:</u> (ambient) shall withstand 3,600 lbs. when tested to:
- apply a 3,600 lbs load and maintain for 1-minute to the point of SRL line connection to the SRL drum (across the device)</td><td>
<table>
<tr><th></th><th>Sample: 1</th><th>Sample: 2</th><th>Sample: 3</th></tr>
<tr><td>Withstand load</td><td>YES</td><td>YES</td><td>YES</td></tr>
</table>
</td><td>PASS</td></tr>
<tr><td>3.3/4.3.1</td><td><u>Dynamic Performance</u>: “AMBIENT”

1. connect 310 lb. weight
2. extract enough line for a 36-inch free fall per Fig 5 in Test Standard.
3. release the test weight
4. Max Arrest distance shall not exceed 42 inches.

<table>
<tr><th></th><th>Sample: 4</th><th>Sample: 5</th><th>Sample: 6</th></tr>
<tr><td>Conditioning in:</td><td></td><td></td><td></td></tr>
<tr><td>SN or ID:</td><td>4</td><td>5</td><td>6</td></tr>
<tr><td>Payout and retract the line per 3.3.1.2 following test</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Lock function shall operate per 3.3.1.1</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Visual indicator shall activate</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Max. Arrest Force: (lbs.)
Class 1 & 2 < 1,800 lbs.</td><td>725</td><td>825</td><td>864</td></tr>
<tr><td>Avg Arrest Force (lbs.):
Class 1 <1,350 lbs.
Class 2 < 900 lbs.</td><td>643</td><td>669</td><td>674</td></tr>
<tr><td>Distance Initial (in): D1</td><td>54”</td><td>54”</td><td>54”</td></tr>
<tr><td>Distance Final (in): D2</td><td>78”</td><td>76 ½”</td><td>71 ¼”</td></tr>
<tr><td>Arrest Distance (in): D2-D1
< 42 Inches</td><td>24”</td><td>22 ½”</td><td>17 ¼”</td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3.3/4.3.1</td><td colspan="2">Energy Capacity (Rotary Brake Only) “AMBIENT”

1. Shorten the line so that retractable length is 42 inches.
2. connect 310 lb. weight
3. Hoist the weight so that 36 inches is extended from the nozzle.
4. Clamp off 36-inch point so it cannot retract.
5. Raise the weight so that there is a 24-inch free fall
6. release the test weight
7. Max Arrest distance shall not exceed 42 inches.

<table><tr><th></th><th>Sample: 4</th><th>Sample: 5</th><th>Sample: 6</th></tr><tr><td>Max. Arrest Force: (lbs.)
Class 1 & 2 < 1,800 lbs.</td><td>1133</td><td>1157</td><td>1318</td></tr><tr><td>Avg Arrest Force (lbs.):
Class 1 <1,350 lbs.
Class 2 < 900 lbs.</td><td>880</td><td>820</td><td>857</td></tr></table></td><td>PASS</td></tr>
</table>

SECTION 5
REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
104972760CRT-001a	03/22/2022	Original Report	Steve Morey	Matthew Stevens
104972760CRT-001	04/1/2022	Markings/User Information/Gen. Requirements	Steve Morey	Matthew Stevens
104972760CRT-001	04/24/2023	Revised Classes to “1&2”	Steve Morey	Matthew Stevens
104972760CRT-001	05/31/2023	Revised 4.2.1 to 3,600lbs	Steve Morey	Matthew Stevens
105874305CRT-004	07/15/2024	Report Extension	Alex Smith	Matthew Stevens