

FRONTLINE FALL PROTECTION TEST REPORT

SCOPE OF WORK

ANSI Z359.4 – 2013 Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components

REPORT NUMBER

104387579CRT-001

104359786CRT-001 **Original Report**

ISSUE DATE

9/8/2020

PAGES

14

DOCUMENT CONTROL NUMBER

GFT-OP-10a (6-March-2017)

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TEST REPORT FOR FRONTLINE FALL PROTECTION

Report No.: 104387579CRT-001

Date Issued: September 8, 2020

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TEST STANDARD

ANSI Z359.4 – 2013 Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components

AUTHORIZATION

Job Number: 104387579CRT-001
Quote Number: Qu-01090467
Purchase Order Number: None
Purchase Order Date: NA

PRODUCT DESCRIPTION

Product type: Manual Hoist / Winch
Brand Name: Frontline Fall Protection
Model Numbers: RUW60
Additional Models Covered: None

SAMPLE INFORMATION

Dates Tested: 6/4/2020 – 6/8/2020
Dates Samples Received: 5/28/20

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Date: September 3, 2020

SECTION 1**TEST PLAN SUMMARY**

The following tests were identified as applicable under the scope of this report. These tests were conducted to determine compliance with the minimum test requirements ANSI Z359.4 – 2013 Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components.

SECTION	TEST	TEST DATES	STATUS
3	Design	6/8/20	PASS
4.3.6.1	Static Strength Test, Hoist Line Termination	6/4/20	PASS
4.3.6.2	Static Strength Test, Hoist	6/4/20	PASS
4.3.6.3	Function Test, Force to Raise/Lower (AMBIENT)	6/5/20	PASS
4.3.6.3	Function Test, Force to Raise/Lower (HEAT)	6/8/20	PASS
4.3.6.3	Function Test, Force to Raise/Lower (COLD)	6/8/20	PASS
4.3.6.3	Function Test, Force to Raise/Lower (WET)	6/5/20	PASS
4.3.6.4	Function Test, Slippage (AMBIENT)	6/5/20	PASS
4.3.6.4	Function Test, Slippage (HEAT)	6/8/20	PASS
4.3.6.4	Function Test, Slippage (COLD)	6/8/20	PASS
4.3.6.4	Function Test, Slippage (WET)	6/5/20	PASS
4.3.6.5	Function Test, Primary Brake (AMBIENT)	6/5/20	PASS
4.3.6.5	Function Test, Primary Brake (HEAT)	6/8/20	PASS
4.3.6.5	Function Test, Primary Brake (COLD)	6/8/20	PASS
4.3.6.5	Function Test, Primary Brake (WET)	6/5/20	PASS
4.3.6.9	Function Test, Secondary Brake (AMBIENT)	6/5/20	PASS
4.3.6.9	Function Test, Secondary Brake (HEAT)	6/8/20	PASS
4.3.6.9	Function Test, Secondary Brake (COLD)	6/8/20	PASS
4.3.6.9	Function Test, Secondary Brake (WET)	6/5/20	PASS
8.2.2	Line Constituent of Hoist – Wire Rope	6/4/20	PASS
8.2.1	Corrosion Protection	6/5/20	PASS
5	Marking and Instructions	6/8/20	PASS

SECTION 2**CONCLUSION**

The results illustrated in this report are for use and evaluation by the client, within the scope of the limitation statement. This test report completes our portion of the evaluation of your product based on tests identified.

The RUW60 identified and manufactured by Frontline Fall Protection has met the above testing requirements identified as applicable for minimum performance requirements defined in ANSI Z359.4 – 2013 Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components.

TEST REPORT FOR FRONTLINE FALL PROTECTION

Report No. 104387579CRT-001

Date: September 3, 2020

Project Owner:	Theodore Brown
Title:	Technician
Signature:	
Date	9/3/2020

Project Reviewer:	Matthew Stevens
Title:	Associate Engineer
Signature	
Date:	9/8/2020

SECTION 3**TEST EQUIPMENT INFORMATION****TEST EQUIPMENT:**

Used for Test	Description	Manufacturer	Control No.	Model No.	Serial No.	Cal. Date	Cal. Due
X	Drop Test Structure	Intertek	T1223	NA	NA	NA	NA
X	Tape Measure	Stanley	N1407	25'	NA	9/26/19	9/26/20
X	Force Gauge	Shimpo	T1564	-	-	9/16/19	9/16/20
X	Load Cell	Interface	L099	25K	NA	10/9/19	10/9/20

SECTION 4**SYSTEM VERIFICATION INFORMATION**

SYSTEM VERIFICATION PRIOR TO TESTING			
THE SYSTEM INCLUDES:	Load Cell (L099)	NI Input Card	Labview Program
Attach weight to load cell	Weight (lbs) = 300.2		
Attach weight to load cell	Weight (lbs) = 375.4		
Record Weight	Weight Recorded (lbs) = 300.2		
Record Weight	Weight Recorded (lbs.) = 375.4		
Completed by and Date:	By: TB	Date: 6/4/20	

SECTION 5

ANSI Z359.4 – 2013 TEST DATA

Section (Test)	Requirement	Results	Compliance								
4.3.6.1	<p>Static Strength Test, Hoist Line Termination.</p> <p>The static tensile strength test equipment shall be as specified in 4.1.6. Apply a load of 3,100 pounds (13.8kN) using the static tensile test equipment to the winding drum connection and maintain this load for a period of one minute. Release the load and evaluate the hoist in accordance with 3.2.8.4. the hoist shall sustain a static load equal to four times the maximum capacity of the hoist for a period of at least one minute. Following this static test, the hoist shall successfully complete the tests conducted in accordance with 4.3.6.2 and 4.3.6.3.</p>	<table border="1" data-bbox="870 600 1325 873"> <thead> <tr> <th>Sample</th> <th>Sustain Load?</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>YES</td> </tr> <tr> <td>2</td> <td>YES</td> </tr> <tr> <td>3</td> <td>YES</td> </tr> </tbody> </table> <p>Notes:</p>	Sample	Sustain Load?	1	YES	2	YES	3	YES	PASS
Sample	Sustain Load?										
1	YES										
2	YES										
3	YES										
4.3.6.2	<p>Static Strength Test, Hoist</p> <p>The static tensile strength test equipment shall be as specified in 4.1.6. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. The hoist shall be prepared for the test by fixing the input shaft or mechanism such that the load will be transmitted through the entire hoist drive train from the input to the winding drum. All brakes, including the primary brake shall be disengaged. Apply a load using the static tensile test equipment equal to four times the maximum capacity of the hoist via the hoist line and maintain this load for a period of one minute. Release the load and rotate or activate the hoist input to produce movement of the drum equal to one quarter of the total drive train reduction and repeat the static test. Following the static test, conduct the function, slippage test in 4.3.6.4 and the function test, primary brake in 4.3.6.5. Compare the results to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="870 1140 1325 1413"> <thead> <tr> <th>Sample</th> <th>Sustain Load?</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>YES</td> </tr> <tr> <td>2</td> <td>YES</td> </tr> <tr> <td>3</td> <td>YES</td> </tr> </tbody> </table> <p>Notes:</p>	Sample	Sustain Load?	1	YES	2	YES	3	YES	PASS
Sample	Sustain Load?										
1	YES										
2	YES										
3	YES										

Date: September 3, 2020

Section (Test)	Requirement	Results	Compliance														
4.3.6.3	<p>Function Test, Force to Raise/Lower. (AMBIENT)</p> <p>The test weight and force measurement gage shall be in accordance with 4.1.2 and 4.1.7 respectively. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to the maximum capacity of the hoist to the end of the hoist line. Using the manual operating means of the hoist, raise the load until it is fully suspended by the hoist line. Using the force measurement gage, measure the force required to raise the load as it would be applied in use by the rescuer. Conduct this measurement three times over one full revolution of the hoist-winding drum. Determine the average of the three measurements and compare this result to the requirements of 3.2.8.5. Using the same procedure as above, determine the force required to lower the load. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="896 375 1292 485"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Raise</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>16.8 lbf</td> </tr> </tbody> </table> <p>Notes:</p> <p>Max Force Applied shall be no greater than 30lbs.</p> <table border="1" data-bbox="896 779 1292 888"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Lower</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8.5 lbf</td> </tr> </tbody> </table>	Sample	Avg Load Required Raise	1	16.8 lbf	Sample	Avg Load Required Lower	1	8.5 lbf	PASS						
Sample	Avg Load Required Raise																
1	16.8 lbf																
Sample	Avg Load Required Lower																
1	8.5 lbf																
4.3.6.3	<p>Function Test, Force to Raise/Lower. (HEAT)</p> <p>The test weight and force measurement gage shall be in accordance with 4.1.2 and 4.1.7 respectively. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to the maximum capacity of the hoist to the end of the hoist line. Using the manual operating means of the hoist, raise the load until it is fully suspended by the hoist line. Using the force measurement gage, measure the force required to raise the load as it would be applied in use by the rescuer. Conduct this measurement three times over one full revolution of the hoist-winding drum. Determine the average of the three measurements and compare this result to the requirements of 3.2.8.5. Using the same procedure as above, determine the force required to lower the load. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 1083 1325 1247"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>54 C</td> <td>54 C</td> </tr> <tr> <td>85% RH</td> <td>84.7% RH</td> </tr> </tbody> </table> <p>Max Force Applied shall be no greater than 30lbs.</p> <table border="1" data-bbox="896 1457 1292 1566"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Raise</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>19.93 lbf</td> </tr> </tbody> </table> <table border="1" data-bbox="896 1692 1292 1801"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Lower</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20.37 lbf</td> </tr> </tbody> </table>	Required Conditions (2hr Min)	Actual Conditions	54 C	54 C	85% RH	84.7% RH	Sample	Avg Load Required Raise	1	19.93 lbf	Sample	Avg Load Required Lower	1	20.37 lbf	PASS
Required Conditions (2hr Min)	Actual Conditions																
54 C	54 C																
85% RH	84.7% RH																
Sample	Avg Load Required Raise																
1	19.93 lbf																
Sample	Avg Load Required Lower																
1	20.37 lbf																

Date: September 3, 2020

Section (Test)	Requirement	Results	Compliance												
4.3.6.3	<p>Function Test, Force to Raise/Lower. (COLD)</p> <p>The test weight and force measurement gage shall be in accordance with 4.1.2 and 4.1.7 respectively. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to the maximum capacity of the hoist to the end of the hoist line. Using the manual operating means of the hoist, raise the load until it is fully suspended by the hoist line. Using the force measurement gage, measure the force required to raise the load as it would be applied in use by the rescuer. Conduct this measurement three times over one full revolution of the hoist-winding drum. Determine the average of the three measurements and compare this result to the requirements of 3.2.8.5. Using the same procedure as above, determine the force required to lower the load. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 302 1325 432"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>-40 C</td> <td>-40 C</td> </tr> </tbody> </table> <p>Max Force Applied shall be no greater than 30lbs.</p> <table border="1" data-bbox="898 642 1292 753"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Raise</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>17.67 lbf</td> </tr> </tbody> </table> <table border="1" data-bbox="898 879 1292 991"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Lower</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>17.97 lbf</td> </tr> </tbody> </table>	Required Conditions (2hr Min)	Actual Conditions	-40 C	-40 C	Sample	Avg Load Required Raise	1	17.67 lbf	Sample	Avg Load Required Lower	1	17.97 lbf	PASS
Required Conditions (2hr Min)	Actual Conditions														
-40 C	-40 C														
Sample	Avg Load Required Raise														
1	17.67 lbf														
Sample	Avg Load Required Lower														
1	17.97 lbf														
4.3.6.3	<p>Function Test, Force to Raise/Lower. (WET)</p> <p>The test weight and force measurement gage shall be in accordance with 4.1.2 and 4.1.7 respectively. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to the maximum capacity of the hoist to the end of the hoist line. Using the manual operating means of the hoist, raise the load until it is fully suspended by the hoist line. Using the force measurement gage, measure the force required to raise the load as it would be applied in use by the rescuer. Conduct this measurement three times over one full revolution of the hoist-winding drum. Determine the average of the three measurements and compare this result to the requirements of 3.2.8.5. Using the same procedure as above, determine the force required to lower the load. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 1083 1325 1194"> <thead> <tr> <th colspan="2">Spray Hoist with water for 3 Hours (18 Gal per Hour)</th> </tr> </thead> <tbody> <tr> <td>Time Exposed</td> <td>3 Hrs.</td> </tr> </tbody> </table> <p>Max Force Applied shall be no greater than 30lbs.</p> <table border="1" data-bbox="898 1404 1292 1516"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Raise</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>18.4 lbf</td> </tr> </tbody> </table> <table border="1" data-bbox="898 1677 1292 1789"> <thead> <tr> <th>Sample</th> <th>Avg Load Required Lower</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>21.8 lbf</td> </tr> </tbody> </table>	Spray Hoist with water for 3 Hours (18 Gal per Hour)		Time Exposed	3 Hrs.	Sample	Avg Load Required Raise	1	18.4 lbf	Sample	Avg Load Required Lower	1	21.8 lbf	PASS
Spray Hoist with water for 3 Hours (18 Gal per Hour)															
Time Exposed	3 Hrs.														
Sample	Avg Load Required Raise														
1	18.4 lbf														
Sample	Avg Load Required Lower														
1	21.8 lbf														

Section (Test)	Requirement	Results	Compliance										
<p>4.3.6.4</p>	<p>Function Test, Slippage. (AMBIENT) The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise and lower the load over a distance of at least 10 feet (3m). Observe the hoisting function for any slippage of the load as it is raised or lowered. Conduct this test three times and compare the results with the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="898 378 1292 564"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> <tr> <td>2</td> <td>0 Inches</td> </tr> <tr> <td>3</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Sample	Slippage (In.)	1	0 Inches	2	0 Inches	3	0 Inches	<p>PASS</p>		
Sample	Slippage (In.)												
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3	0 Inches												
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Required Conditions (2hr Min)	Actual Conditions												
54 C	54 C												
85% RH	84.7% RH												
Sample	Slippage (In.)												
1	0 Inches												

Date: September 3, 2020

Section (Test)	Requirement	Results	Compliance								
4.3.6.4	<p>Function Test, Slippage. (COLD)</p> <p>The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise and lower the load over a distance of at least 10 feet (3m). Observe the hoisting function for any slippage of the load as it is raised or lowered. Conduct this test one time and compare the results with the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 363 1325 491"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>-40 C</td> <td>-40 C</td> </tr> </tbody> </table> <table border="1" data-bbox="898 575 1292 672"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Required Conditions (2hr Min)	Actual Conditions	-40 C	-40 C	Sample	Slippage (In.)	1	0 Inches	PASS
Required Conditions (2hr Min)	Actual Conditions										
-40 C	-40 C										
Sample	Slippage (In.)										
1	0 Inches										
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Spray Hoist with water for 3 Hours (18 Gal per Hour)											
Time Exposed	3hrs										
Sample	Slippage (In.)										
1	0 Inches										
			PASS								

Section (Test)	Requirement	Results	Compliance										
4.3.6.5	<p>Function Test, Primary Break. (AMBIENT)</p> <p>The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise the load until it is completely suspended and at least 2 feet (0.6m) above the ground. Measure and record the level of the weight relative to the ground (or other fixed reference point). Without raising or lowering the weight from this position, release the operating control of the hoist. Measure and record the new position of the weight and determine the distance the weight traveled following release of control. Conduct this measurement process three times over one full revolution of the hoist-winding drum. Determine the average of the three measurements and compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="898 333 1292 525"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> <tr> <td>2</td> <td>0 Inches</td> </tr> <tr> <td>3</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Sample	Slippage (In.)	1	0 Inches	2	0 Inches	3	0 Inches			
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Required Conditions (2hr Min)	Actual Conditions												
54 C	54 C												
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Sample	Slippage (In.)												
1	0 Inches												

Date: September 3, 2020

Section (Test)	Requirement	Results	Compliance										
<p>4.3.6.5</p>	<p>Function Test, Primary Break. (COLD) The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise the load until it is completely suspended and at least 2 feet (0.6m) above the ground. Measure and record the level of the weight relative to the ground (or other fixed reference point). Without raising or lowering the weight from this position, release the operating control of the hoist. Measure and record the new position of the weight and determine the distance the weight traveled following release of control. Conduct this measurement process one time over one full revolution of the hoist-winding drum. compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 302 1325 432"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>-40 C</td> <td>-40 C</td> </tr> </tbody> </table> <table border="1" data-bbox="896 512 1292 611"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Required Conditions (2hr Min)	Actual Conditions	-40 C	-40 C	Sample	Slippage (In.)	1	0 Inches	<p>PASS</p>		
Required Conditions (2hr Min)	Actual Conditions												
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1	0 Inches												

Date: September 3, 2020

Section (Test)	Requirement	Results	Compliance								
4.3.6.9	<p>Function Test, Secondary Break. (AMBIENT)</p> <p>The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line and the primary brake shall be disabled. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise the load until it is completely suspended and at least 4 feet (1.2m) above the ground. Measure and record the level of the weight relative to the ground (or other fixed reference point). Without raising or lowering the weight from this position, release the operating control of the hoist to allow the secondary brake to activate. Measure and record the new position of the weight and determine the distance the weight traveled following release of control. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> <tr> <td>2</td> <td>0 Inches</td> </tr> <tr> <td>3</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Sample	Slippage (In.)	1	0 Inches	2	0 Inches	3	0 Inches	PASS
Sample	Slippage (In.)										
1	0 Inches										
2	0 Inches										
3	0 Inches										

Section (Test)	Requirement	Results	Compliance										
4.3.6.9	<p>Function Test, Secondary Break. (HEAT)</p> <p>The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line and the primary brake shall be disabled. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise the load until it is completely suspended and at least 4 feet (1.2m) above the ground. Measure and record the level of the weight relative to the ground (or other fixed reference point). Without raising or lowering the weight from this position, release the operating control of the hoist to allow the secondary brake to activate. Measure and record the new position of the weight and determine the distance the weight traveled following release of control.</p>	<table border="1"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>54 C</td> <td>54 C</td> </tr> <tr> <td>85% RH</td> <td>84.7% RH</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Required Conditions (2hr Min)	Actual Conditions	54 C	54 C	85% RH	84.7% RH	Sample	Slippage (In.)	1	0 Inches	PASS
Required Conditions (2hr Min)	Actual Conditions												
54 C	54 C												
85% RH	84.7% RH												
Sample	Slippage (In.)												
1	0 Inches												

Date: September 3, 2020

	Compare this result to the requirements of 3.2.8.5.										
4.3.6.9	<p>Function Test, Secondary Break. (COLD)</p> <p>The test weight shall be in accordance with 4.1.2. Install the hoist to the test structure in accordance with the manufacturer’s instructions. For this test, the hoist drum shall be filled to capacity (maximum useable length) with hoist line and the primary brake shall be disabled. Connect a rigid weight equal to 125% of the maximum capacity of the hoist to the end of the hoist line. Using the manual or powered operating means of the hoist, raise the load until it is completely suspended and at least 4 feet (1.2m) above the ground. Measure and record the level of the weight relative to the ground (or other fixed reference point). Without raising or lowering the weight from this position, release the operating control of the hoist to allow the secondary brake to activate. Measure and record the new position of the weight and determine the distance the weight traveled following release of control. Compare this result to the requirements of 3.2.8.5.</p>	<table border="1" data-bbox="846 338 1325 468"> <thead> <tr> <th>Required Conditions (2hr Min)</th> <th>Actual Conditions</th> </tr> </thead> <tbody> <tr> <td>-40 C</td> <td>-40 C</td> </tr> </tbody> </table> <table border="1" data-bbox="898 520 1292 617"> <thead> <tr> <th>Sample</th> <th>Slippage (In.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0 Inches</td> </tr> </tbody> </table> <p>Notes: Sample Line must not slip more than 4” when released.</p>	Required Conditions (2hr Min)	Actual Conditions	-40 C	-40 C	Sample	Slippage (In.)	1	0 Inches	PASS
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Section (Test)	Requirement	Results	Compliance										
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Date: September 3, 2020

	Compare this result to the requirements of 3.2.8.5.														
8.2.2	<p>Line Constituent of Hoist – Wire Rope. Wire rope used as a line constituent of a hoist shall be constructed of stainless steel or galvanized steel strand having a minimum nominal diameter of 0.1875 inches (4.8mm) and a minimum breaking strength of 3,400 pounds (15.1kN) when tested in accordance with reference 8.2.2</p>	<p>Minimum breaking strength of 3,400 lbs when tested to Section ASTM E8-04, <i>Standard Test Methods for Tension Testing of Metallic Materials</i></p> <table border="1"> <thead> <tr> <th>Sample</th> <th>Minimum Breaking Strength</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>>3400 Lbs</td> </tr> <tr> <td>2</td> <td>>3400 Lbs</td> </tr> <tr> <td>3</td> <td>>3400 Lbs</td> </tr> <tr> <td>4</td> <td>>3400 Lbs</td> </tr> <tr> <td>5</td> <td>>3400 Lbs</td> </tr> </tbody> </table> <p>Diameter of Wire Rope:</p>	Sample	Minimum Breaking Strength	1	>3400 Lbs	2	>3400 Lbs	3	>3400 Lbs	4	>3400 Lbs	5	>3400 Lbs	PASS
Sample	Minimum Breaking Strength														
1	>3400 Lbs														
2	>3400 Lbs														
3	>3400 Lbs														
4	>3400 Lbs														
5	>3400 Lbs														

Section (Test)	Requirement	Results	Compliance								
8.2.1	<p>Corrosion Resistance. ASTM B117-03, <i>Standard Practice for Operating Salt Spray (Fog) Apparatus</i> Protection shall, at a minimum, allow these devices to operate and show no signs of corrosion, which, if left unchecked, could result in corrosion-related failure of the device, after being salt spray (fog) tested for 96 hours in accordance with the method described in reference 8.2.1.</p>	<table border="1"> <tr> <td></td> <td>Sample: 1-3</td> </tr> <tr> <td>Operate as intended:</td> <td>YES</td> </tr> <tr> <td>Signs of corrosion (visual only):</td> <td>NO</td> </tr> <tr> <td>Corrosion Related Failure:</td> <td>NO</td> </tr> </table>		Sample: 1-3	Operate as intended:	YES	Signs of corrosion (visual only):	NO	Corrosion Related Failure:	NO	PASS
	Sample: 1-3										
Operate as intended:	YES										
Signs of corrosion (visual only):	NO										
Corrosion Related Failure:	NO										
5	Markings and Instructions		PASS								

SECTION 6

REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
104387579CRT-001	9/8/2020	Extension to Frontline Fall Protection	Theodore Brown	Matthew Stevens