Northstar Edge & Northstar Coastal Edge

SRLs Manual

STANDARDS	
ANSI	Z359.14-2021
OSHA	1910.140, 1910.66

Class **2** Anchor above or below dorsal D-ring

Read and understand instructions before using equipment!
Do not throw away instructions!

Always verify the latest revision of the Safewaze Manual is being utilized.
Visit the Safewaze website, or contact Customer Service, for updated manuals.

⚠IMPORTANT:

- Please refer to this manual for essential instructions on the use, care, or suitability of this equipment for your application. Contact Safewaze for any additional questions.
- Record all important product information prior to use. Documentation of all Competent Person annual inspections is required in the Inspection Log.

▶ USER INFORMATION

Date of First Use: _____

Serial Number: _____

Trainer: _____

User: _____

▶ SAFETY INFORMATION AND PRECAUTIONS

- The manufacturer's instructions must be provided to users of this equipment.
- The user must read, understand, and follow all safety and usage information contained within this manual.
- The user must safely and effectively use the SRL and all equipment used in conjunction with the product.
- Failure to follow all safety and usage information can result in serious injury or death.

⚠Warnings:

Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

The warnings indicated below are designed to minimize risk associated with the use of a Safewaze SRL and associated equipment.

- Users should consult with their doctor to verify ability to safely absorb the forces of a fall arrest event. Fitness level, age, and other health conditions can greatly affect an individual's ability to withstand fall arrest forces. Women who are pregnant and individuals considered minors must not use any Safewaze equipment.
- Do not alter or misuse equipment. Only Safewaze, or entities authorized in writing by Safewaze, may make repairs to Safewaze fall protection equipment.
- A Competent Person must conduct an analysis of the workplace and anticipate where workers will be conducting their duties, the route they will take to reach their work, and any existing and potential fall hazards. The Competent Person must choose the fall protection equipment to be utilized. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased in new and unused condition.
- If work is conducted in a high heat environment, ensure that Arc Flash or other suitable fall protection equipment is utilized.
- Use of a body belt is not authorized for fall arrest applications.
- Work directly under the anchor point as much as possible to minimize swing fall hazards.
- The user must ensure that there is adequate fall clearance when working at height.
- Equipment that is exposed to fall arrest forces must be immediately removed from service and destroyed.
- Training of Authorized Persons to correctly install, inspect, disassemble, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.
- If conducting training operations with this equipment, a secondary fall protection system must be installed and utilized to ensure the trainee is not exposed to unintended fall hazards.
- Equipment designated for fall protection must never be used to lift, hang, support, or hoist tools or equipment unless specifically certified for such use.
- Avoid using the SRL in applications where engulfment hazards exist.
- Avoid moving machinery, sharp and/or abrasive edges, and any other hazard that could damage or degrade the component.
- Utilize extra caution to keep lifeline free from any obstructions including, but not limited to, surrounding objects, tools, equipment, moving machinery, co-workers, yourself, or possible impact from overhead objects.
- User must inspect the SRL prior to each use and check for proper locking and retraction functions.
- Never allow slack to form in the SRL lifeline. Never tie or knot the lifeline.
- Never connect the snap hook of one SRL to the lifeline of another SRL or lanyard.
- Avoid making sudden or quick movements that could cause the SRL to inadvertently lock.
- Do not use D-ring extenders when using this product in a Leading Edge environment.
- Never exceed maximum allowable weight capacity or maximum free fall distance of the fall protection equipment.

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PART NUMBERS AND CONFIGURATIONS COVERED:

NORTHSTAR EDGE

Standards: ANSI Z359.14-2021
OSHA 1910.140, 1910.66

Capacity: ANSI 130-310 lbs. (59-141 kg)
OSHA Up to 420 lbs. (191kg)

Part Number	SRL Class	Single Leg (S) / Dual Leg (D)	Working Length (ft.)	Lifeline Material	Lifeline Dimensions (in.)	Housing Material	Weight (lbs.)	CONNECTOR: Steel Snap Hook ①	Steel Swivel Snap Hook ②	ALU Snap Hook ③	Dielectric Snap Hook ④	Stainless Steel Swivel Snap Hook ⑤	Steel Rebar Hook ⑥	LI Steel Swivel Rebar Hook ⑦	Steel Swivel Rebar Hook ⑧	ALU Rebar Hook ⑨	Steel Captive Eye Carabiner ⑩	ALU Captive Eye Carabiner ⑪	ALU Swivel Carabiner ⑫	ATTACHMENT: No Attachment	Steel Carabiner ⑬	Trip. Lock Steel Carabiner ⑭	ALU Carabiner ⑮	ALU Captive Eye Carabiner ⑪	ALU Snap Hook ③	FS-EX313 ⑯	Cab Mount Bracket ⑰	Soft Loop ⑱	Integrated BWB ⑲	1014 BWB ⑳	9012 BWB ㉑	9013 BWB ㉒
022-5300	1, 2	S	20	Steel Cable	Ø3/16	Nylon	11.0		X												X											
022-5301	1, 2	S	30	Steel Cable	Ø3/16	Nylon	13.4		X												X											
022-5302	1, 2	S	50	Steel Cable	Ø3/16	Nylon	17.8		X												X											

NORTHSTAR COASTAL EDGE

Standards: ANSI Z359.14-2021
OSHA 1910.140, 1910.66

Capacity: ANSI 130-310 lbs. (59-141 kg)
OSHA Up to 420 lbs. (191kg)

Part Number	SRL Class	Single Leg (S) / Dual Leg (D)	Working Length (ft.)	Lifeline Material	Lifeline Dimensions (in.)	Housing Material	Weight (lbs.)	CONNECTOR: Steel Snap Hook ①	Steel Swivel Snap Hook ②	ALU Snap Hook ③	Dielectric Snap Hook ④	Stainless Steel Swivel Snap Hook ⑤	Steel Rebar Hook ⑥	LI Steel Swivel Rebar Hook ⑦	Steel Swivel Rebar Hook ⑧	ALU Rebar Hook ⑨	Steel Captive Eye Carabiner ⑩	ALU Captive Eye Carabiner ⑪	ALU Swivel Carabiner ⑫	ATTACHMENT: No Attachment	Steel Carabiner ⑬	Trip. Lock Steel Carabiner ⑭	ALU Carabiner ⑮	ALU Captive Eye Carabiner ⑪	ALU Snap Hook ③	FS-EX313 ⑯	Cab Mount Bracket ⑰	Soft Loop ⑱	Integrated BWB ⑲	1014 BWB ⑳	9012 BWB ㉑	9013 BWB ㉒
022-5292	1, 2	S	20	S.S. Cable	Ø13/64	Nylon	10.6					x											x									
022-5293	1, 2	S	30	S.S. Cable	Ø13/64	Nylon	12.8					x											x									
022-5294	1, 2	S	50	S.S. Cable	Ø13/64	Nylon	17.4					x											x									

▶ 1.0 INTRODUCTION

Thank you for purchasing a Safewaze Self-Retracting Lifeline (SRL). This manual must be read and understood in its entirety and used as part of an employee training program as required by OSHA or any applicable state agency.

The Northstar Edge/Coastal Edge SRLs are intended for use as part of a complete Personal Fall Arrest, Restraint, Work Positioning, or Rescue System. Safewaze SRLs are designed to safely arrest the user in a fall event, while minimizing forces on the body. Safewaze Northstar Edge/Coastal Edge SRLs are designed for a single user whose weight (including clothing, tools, equipment, etc.) is:

ANSI 130-310 lbs. (58.96-140.61 kg)
OSHA Up to 420 lbs. (190.51 kg)

Safewaze SRLs are authorized for use with Horizontal Lifeline Systems (HLL) but must NEVER be used as the lifeline constituent of an HLL System. Class 1 SRLs must only be used in overhead applications and are not authorized for use below the Dorsal D-ring. Maximum allowable Free Fall for Class 1 SRLs is 2 ft. (0.6 m). The SRLs in this

manual are Class 2 SRLs. Class 2 SRLs can be used in overhead and below the Dorsal D-ring applications. Maximum allowable Free Fall for Class 2 SRLs is 6 ft. (1.8 m).

The configuration table on Page 5 indicates the SRL models included in the Northstar Edge and Northstar Coastal Edge Series, as well as their configurations.

▶ 2.0 INTENDED USE

The equipment covered in this manual is intended for use as part of a complete Personal Fall Arrest, Restraint, Work Positioning, or Rescue System. Use of this equipment for any other purpose including, but not limited to, sports or recreational activities, material handling applications, or other action not described in these instructions is not approved by Safewaze. Use of this equipment in a manner outside the scope of those covered within this manual can result in serious injury or death. The equipment covered in this manual must only be used by trained personnel in workplace applications.

▶ 3.0 APPLICABLE SAFETY STANDARDS

When used according to instructions, this product meets **ANSI Z359.14-2021** standard and **OSHA 1910.66 and 1910.140** regulations. Applicable standards and regulations depend on the type of work being done and may include state-specific regulations.

Refer to local, state, and federal requirements for additional information on the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS).

The system has been tested in compliance with requirements of **ANSI/ASSP Z359.7**. The testing does not extend to the substrate to which the system is attached.

ANSI requires SRLs to be classified according to their intended use and are tested either as Class 1 or Class 2 units. Northstar Edge and Northstar Coastal Edge SRLs are Class 2 SRLs. Dynamic performance testing begins by installing the SRL in a controlled test environment. With the SRL attached to a suitable anchorage, the lifeline constituent is attached to a test weight. The weight is then dropped to simulate a fall arrest event.

Note: The SRL must be tested in all installation configurations allowed per its user instructions. Test results are recorded.

Parameters recorded are the Arrest Distance (AD), Average Arrest Force (AAF), and Maximum Arrest Force (MAF).

The Arrest Distance is the total vertical distance required to completely arrest a fall. AD includes the deceleration distance and the activation distance. The Average Arrest Force is the average of the forces applied to the body and the anchorage by the fall protection system. The Maximum Arrest Force is the maximum amount of force that may be applied to the body and the anchorage by the fall protection system.

These tests are conducted in ambient conditions. The units must also be tested in extreme atmospheric conditions. There are three conditions: Cold, Hot, and Wet (units are saturated in water and tested). Separate units may be used for each test. All test results are recorded. This test data is then used to establish the fall clearance guidelines published in this instruction manual.

Class 1 and Class 2:

- **Class 1:** Self-retracting devices which shall be used only on overhead anchorages and shall be subjected to a maximum free fall of 2 feet (0.6 m) or less, in practical application.
- **Class 2:** Self-retracting devices which are intended for applications wherein overhead anchorages may not be available or feasible and which may, in practical application, be subjected to a free fall of no more than 6 feet (1.8 m) over an edge.

When the SRL is anchored overhead of the user, ANSI Z359.14-2021 specifies that both Class 1 and Class 2 SRLs shall have an AD of less than 42 in. (1.1 m). AAF must not exceed 1,350 lbs. (612.35 kg). Conditioned testing of the units allows a slightly higher AAF of 1,575 lbs. (714.41 kg), but MAF must always remain below 1,800 lbs. (816.47 kg).

See Section 8 of this manual for how to calculate your Minimum Required Fall Clearance (MRFC).

Classification information found on product labels is based on test results.

Note: Arrest Distance is one of several parts of the MRFC. OSHA requires an SRL limit the free fall to 2 feet (0.6 m) or less. If the maximum free fall distance must be exceeded, the employer must document, based on test data, that the maximum arresting force will not be exceeded, and the personal fall arrest system will function properly.

▶ 4.0 WORKER CLASSIFICATIONS

Read and understand the definitions of those who work in proximity of, or may be exposed to, fall hazards:

Qualified Engineer: A person with a Bachelor of Science in Engineering degree from an accredited college or university. They are able to assume personal responsibility for the development and application of engineering science and knowledge in the design, construction, use, and maintenance of their projects.

Qualified Person: One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the project.

Competent Person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Authorized Person: A person approved or assigned by the employer to perform a specific type of duty or duties, or to be at a specific location or locations, at the jobsite.

It is the responsibility of a Qualified Person or Engineer to supervise the jobsite and ensure safety regulations are met.

▶ 5.0 RESCUE PLAN

Prior to the use of this equipment, employers must create a rescue plan in the event of

a fall and provide the means to implement the plan through training. The rescue plan must be specific to the project. The rescue plan must allow for employees to rescue themselves or be promptly rescued by alternative means.

This plan must be communicated to/understood by all equipment users, authorized persons, and rescuers. Rescue operations may require specialized equipment beyond the scope of this manual. Every user must be trained in the inspection, installation, operation, and proper usage of their Rescue Equipment and Rescue Plan. See ANSI Z359.4-2013 for specific rescue information. Immediately seek medical attention in the event a worker suffers a fall arrest incident.

Note: Special rescue measures may be required for a fall over an edge.

▶ 6.0 PRODUCT LIMITATIONS

When installing or using this equipment always refer to the following requirements and limitations:

- **Capacity Range**: ANSI 130-310 lbs. (59-141 kg) and OSHA up to 420 lbs. (191 kg). *including clothing, tools, equipment, etc.

- **Anchorage**: Anchorages selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:

    1. 5,000 lbs. (2267.9 kg) for non-certified anchorages, or
    2. Two times the maximum arresting force for certified anchorages, or
    3. 3,100 lbs. for Rescue applications.

  When more than one fall arrest system is attached to an anchorage, the strengths set forth in one of the above shall be multiplied by the number of systems attached to the anchorage.

  From OSHA 1926.502 and 1910.66: Anchorages used for attachment of personal fall arrest systems shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 lbs. (2267.9 kg) per user attached. Or, anchorages for attachment should be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two and is under the supervision of a Qualified Person.

- **Locking Speed**: The nature of this equipment requires a clear fall path to ensure the SRL will lock in the event of a fall. Working in obstructed fall paths, cramped areas, or on moving materials like sand and grain, may not allow the user's body to gain enough speed buildup to cause the SRL to engage and lock in the event of a fall.

- **Free Fall**: The distance a user falls before the fall arrester activates.

- **Swing Falls**: As the user moves laterally away from an overhead anchor point, the risks related to swing falls increase. The force of striking an object involving swing fall can in some instances generate more forces than a fall with the user wearing no fall protection equipment. Minimize swing falls by working as directly below the anchorage point as possible.

- **Swing Fall Drop Distance**: The additional clearance added from excess lifeline being paid out when working at a lateral offset from the anchorage.
- **Fall Clearance**: The amount of feet required below the working surface for the personal fall arrest system to work correctly.
- **Hazards**: Extra precautions should be taken if this equipment is used in an environment where hazards exist. Hazards can include, but are not limited to, moving machinery, high voltage equipment or power lines, caustic chemicals, corrosive environments, toxic or explosive gases, or high heat. Avoid working in an area where overhead equipment or personnel could fall and contact the user, fall protection equipment, or the lifeline. Areas where the user's lifeline may cross or tangle with the lifeline of another user should be avoided. Do not allow the lifeline to pass under arms or between the legs.
- **Sharp Edges:** Safewaze **Class 1 SRLs** are NOT designed for use in Leading Edge Environments. Should a specific work area have an extremely sharp edge/ edges that may come into contact with the lifeline constituent of the SRL, a Class 2 SRL is required.
- Use only the applicable D-ring for intended use.

▶ 7.0 PRODUCT SPECIFICATIONS

- The Northstar Edge and Northstar Coastal Edge SRLs are Class 2 Units and can be anchored at, above, or below the Dorsal D-ring.
- Average Arrest Force: ≤ 1,350 lbs. (612.35 kg)
- Maximum Arrest Force: ≤ 1,800 lbs. (816.47 kg)
- Maximum Free Fall Distance: 72 in. (183 cm)
- Actual Arrest Distance and Fall Clearance calculations vary by unit can be found in Section 8.

NORTHSTAR EDGE MATERIALS	
Housing	Thermoplastic Polymer (Nylon)
Lifeline	3⁄16 in. Galvanized Steel Cable
Handle	Nylon
Drum	Aluminum
Swivel	Aluminum
Connector/Attachment	Steel
Locking Pawls	Brass
Main Shaft	Stainless Steel
Springs	Stainless Steel
Energy Absorber	Polyester

NORTHSTAR COASTAL EDGE MATERIALS	
Housing	Thermoplastic Polymer (Nylon)
Lifeline	13⁄64 in. Stainless Steel Cable
Handle	Nylon
Drum	Aluminum
Swivel	Aluminum
Connector/Attachment	Aluminum & Stainless Steel
Locking Pawls	Brass
Main Shaft	Stainless Steel
Springs	Stainless Steel
Energy Absorber	Polyester

▶ 8.0 FALL CLEARANCE

Always select a personal fall arrest system and anchor point location that limits free fall and swing fall as much as possible. A free fall of more than 6 ft. could cause excessive arrest forces that could result in serious injury or death.

- **Free Fall**: The distance a user falls before the fall arrester activates. The user must determine the amount of Free Fall present in the system as this can increase or reduce the Fall Clearance. Determine height of anchorage from the D-ring, lateral offset from anchorage, anchorage setback from working edge, and the SRL model number being used to select the appropriate clearance table.

- **Actual Arrest Distance (AD)**: Table 1 reflects the Class 1 Actual Arrest Distances of the Northstar Edge and Table 2 reflects the Class 1 Actual Arrest Distances of Northstar Coastal Edge series when subjected to Ambient, Wet, Hot, and cold testing. These Actual Arrest Distances are typically lower than the 42” maximum as specified per ANSI. Table 3 reflects the Class 2 Actual Arrest Distances of the Northstar Edge and and Table 4 reflects the Class 2 Actual Arrest Distsances of Northstar Coastal Edge series when subjected to Ambient, Wet, Hot, and cold testing.

- **Harness Stretch:** The distance the harness stretches after forces have been absorbed by the harness.

- **Worker Height:** The distance between the working surface to the Dorsal D-ring.

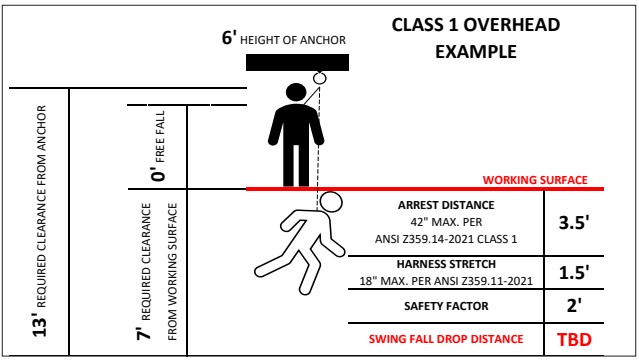
- **Swing Fall Drop Distance:** The additional clearance added from excess lifeline being paid out when working at a lateral offset from the anchorage when using an SRL.

- **Safety Factor:** Additional fall clearance added to ensure a safe distance from any obstruction after a fall. Safewaze uses a 2 ft. Safety Factor.

- **Fall Clearance:** The total combined values of Free Fall, Arrest Distance, Harness Stretch, Worker Height (working surface to dorsal D-ring), Swing Fall Drop Distance,

and Safety Factor. An additional 3 ft. (1 m) of Fall Clearance is required for falls from a kneeling or crouched position. If a Swing Fall hazard exists, the total vertical fall distance will be greater than if the user had fallen directly under the anchor point.

THE FOLLOWING DIAGRAMS ARE ONLY EXAMPLES.
Note: Numbers used in these examples are based on ZERO offset and setback with the anchor directly overhead or below, to represent an in-line Fall Clearance calculation. Consult with a Competent Person when working in different scenarios and when using non-Safewaze equipment.



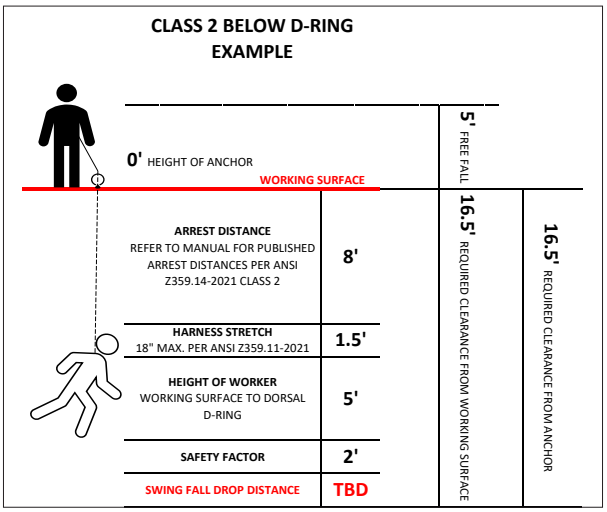


TABLE 1: NORTHSTAR EDGE ACTUAL ARREST DISTANCES (CLASS 1 DYNAMIC)				
Model	**Ambient***	**Wet**	**Hot**	**Cold**
022-5300	39" (99 cm)	36" (91 cm)	35" (89 cm)	35" (89 cm)
022-5301	35" (89 cm)	36" (91 cm)	41" (104 cm)	39" (99 cm)
022-5302	42" (107 cm)	35" (89 cm)	41" (104 cm)	41" (104 cm)

*ANSI Z359.6-2016 defines the ambient temperature range as 35°F (2°C) to 100°F (38°C).

TABLE 2: NORTHSTAR COASTAL EDGE ACTUAL ARREST DISTANCES (CLASS 1 DYNAMIC)				
Model	**Ambient***	**Wet**	**Hot**	**Cold**
022-5292	40" (102 cm)	38" (97 cm)	37" (94 cm)	41" (104 cm)
022-5293	41" (104 cm)	35" (89 cm)	41" (104 cm)	31" (79 cm)
022-5294	39" (99 cm)	38" (97 cm)	34" (86 cm)	34" (86 cm)

*ANSI Z359.6-2016 defines the ambient temperature range as 35°F (2°C) to 100°F (38°C).

TABLE 3: NORTHSTAR EDGE ACTUAL ARREST DISTANCES (CLASS 2 DYNAMIC)				
Model	**Ambient***	**Wet**	**Hot**	**Cold**
022-5300	76" (193 cm)	73" (185 cm)	78" (198 cm)	69" (175 cm)
022-5301	79" (201 cm)	73" (185 cm)	78" (198 cm)	68" (173 cm)
022-5302	76" (193 cm)	71" (180 cm)	75" (191 cm)	67" (170 cm)

*ANSI Z359.6-2016 defines the ambient temperature range as 35°F (2°C) to 100°F (38°C).

TABLE 4: NORTHSTAR COASTAL EDGE ACTUAL ARREST DISTANCES (CLASS 2 DYNAMIC)				
Model	**Ambient***	**Wet**	**Hot**	**Cold**
022-5292	86" (218 cm)	83" (211 cm)	92" (234 cm)	79" (201 cm)
022-5293	84" (213 cm)	82" (208 cm)	89" (226 cm)	78" (198 cm)
022-5294	85" (216 cm)	83" (211 cm)	91" (231 cm)	77" (196 cm)

*ANSI Z359.6-2016 defines the ambient temperature range as 35°F (2°C) to 100°F (38°C).

Minimum Required Fall Clearance (MRFC): The Minimum Required Fall Clearance distances for both Nothstar Edge and Northstar Coastal Edge Class 1 (Table 5 & Table 6) and Class 2 in (Table 7 & Table 8) are calculated using the greatest Actual Arrest Distance out of the four tests performed on each model. Refer to the chart that coincides with the product's model number.

Note: A Qualified Person must determine if MRFCs can be adjusted based upon actual jobsite atmospheric conditions or additional factors.

TABLE 5: NORTHSTAR EDGE MINIMUM REQUIRED FALL CLEARANCE (CLASS 1)		
Model	**Actual Arrest Distance**	**Minimum Required Fall Clearance**
022-5300	39" (99 cm)	6' 9" (2.1 m)
022-5301	41" (104 cm)	6' 11" (2.1 m)
022-5302	42" (107 cm)	7' (2.1 m)

TABLE 6: NORTHSTAR COASTAL EDGE MINIMUM REQUIRED FALL CLEARANCE (CLASS 1)		
Model	**Actual Arrest Distance**	**Minimum Required Fall Clearance**
022-5292	41" (104 cm)	6' 11" (2.1 m)
022-5293	41" (104 cm)	6' 11" (2.1 m)
022-5294	39" (99 cm)	6' 9" (2.1 m)

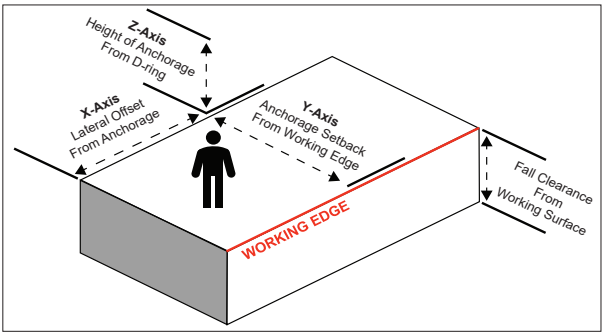
TABLE 7: NORTHSTAR EDGE MINIMUM REQUIRED FALL CLEARANCE (CLASS 2)		
Model	**Actual Arrest Distance**	**Minimum Required Fall Clearance**
022-5300	78" (198 cm)	15' 0" (4.6 m)
022-5301	79" (201 cm)	15' 1" (4.6 m)
022-5302	76" (193 cm)	14' 10" (4.5 m)

TABLE 8: NORTHSTAR COASTAL EDGE MINIMUM REQUIRED FALL CLEARANCE (CLASS 2)		
Model	**Actual Arrest Distance**	**Minimum Required Fall Clearance**
022-5292	92" (234 cm)	16' 2" (4.9 m)
022-5293	89" (226 cm)	15' 11" (4.9 m)
022-5294	91" (231 cm)	16' 1" (4.9 m)

FALL CLEARANCE CHARTS

***For the Overhead Use (white) Class 1 chart**: Safewaze Northstar Edge and Northstar Coastal Edge meet all ANSI 130-310 lbs. (59-141 kg) and OSHA up to 420 lbs. (191 kg) requirements for a Class 1 SRL when anchored overhead. Clearance Values come from combined values of Arrest Distance, Harness Stretch, Swing Fall Drop Distance, and 2 ft. safety factor. This table is calculated based on the ANSI maximum 42" arrest distance.

***For the Below D-Ring (black) Class 2 chart**: The Northstar Edge and Northstar Coastal Edge series are designed and tested for use below the Dorsal D-ring. The user must account for additional clearance requirements when the anchor point is located below the D-ring. Clearance Values come from combined values of Free Fall, Arrest Distance, Harness Stretch, Worker Height (working surface to dorsal D-ring), Swing Fall Drop Distance, and 2 ft. safety factor. This table is calculated based on the greatest Actual Arrest Distance out of the four tests performed.



CLASS 1: NORTHSTAR EDGE

Fall Clearance Table: Overhead Use ANSI (Class 1) Northstar Edge 20'-50'

Z-Axis: Height of Anchorage From D-Ring	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'6" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'4" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	8'11" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'8" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'6" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'5" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'8" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASS 1: NORTHSTAR COASTAL EDGE

Fall Clearance Table: Overhead Use ANSI (Class 1) Northstar Coastal Edge 20'-50'

Z-Axis: Height of Anchorage From D-Ring	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'6" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'4" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	8'11" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'8" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'6" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'5" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'8" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASS 2: 20' NORTHSTAR EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Edge 20'

Y-Axis: Anchorage Setback From Working Edge	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)
20'0" (6.1m)	15'0" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'7" (5.1m)	17'5" (5.3m)	18'4" (5.6m)	19'5" (5.9m)
15'0" (4.6m)	15'0" (4.6m)	15'2" (4.6m)	15'7" (4.7m)	16'2" (4.9m)	17'0" (5.2m)	18'1" (5.5m)	19'3" (5.9m)	20'7" (6.3m)
10'0" (3.0m)	15'0" (4.6m)	15'3" (4.6m)	15'10" (4.8m)	16'8" (5.1m)	17'10" (5.4m)	19'2" (5.8m)	20'8" (6.3m)	22'3" (6.8m)
5'0" (1.5m)	15'0" (4.6m)	15'5" (4.7m)	16'5" (5.0m)	17'10" (5.4m)	19'6" (5.9m)	21'3" (6.5m)	23'0" (7.0m)	24'11" (7.6m)
0'0" (0.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASS 2: 30' NORTHSTAR EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Edge 30'

Y-Axis: Anchorage Setback From Working Edge	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)
30'0" (9.1m)	15'1" (4.6m)	15'2" (4.6m)	15'4" (4.7m)	15'8" (4.8m)	16'2" (4.9m)	16'9" (5.1m)	17'5" (5.3m)	18'2" (5.5m)	19'1" (5.8m)	20'1" (6.1m)
25'0" (7.6m)	15'1" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'10" (4.8m)	16'4" (5.0m)	17'0" (5.2m)	17'10" (5.4m)	18'9" (5.7m)	19'9" (6.0m)	20'11" (6.4m)
20'0" (6.1m)	15'1" (4.6m)	15'2" (4.6m)	15'6" (4.7m)	16'0" (4.9m)	16'8" (5.1m)	17'5" (5.3m)	18'5" (5.6m)	19'6" (5.9m)	20'8" (6.3m)	22'0" (6.7m)
15'0" (4.6m)	15'1" (4.6m)	15'3" (4.6m)	15'7" (4.8m)	16'3" (5.0m)	17'1" (5.2m)	18'1" (5.5m)	19'4" (5.9m)	20'7" (6.3m)	22'0" (6.7m)	23'6" (7.2m)
10'0" (3.0m)	15'1" (4.6m)	15'3" (4.7m)	15'10" (4.8m)	16'9" (5.1m)	17'11" (5.5m)	19'3" (5.9m)	20'9" (6.3m)	22'4" (6.8m)	23'11" (7.3m)	25'8" (7.8m)
5'0" (1.5m)	15'1" (4.6m)	15'6" (4.7m)	16'6" (5.0m)	17'11" (5.5m)	19'6" (6.0m)	21'3" (6.5m)	23'1" (7.0m)	24'11" (7.6m)	26'10" (8.2m)	28'9" (8.8m)
0'0" (0.0m)	15'1" (4.6m)	17'1" (5.2m)	19'1" (5.8m)	21'1" (6.4m)	23'1" (7.0m)	25'1" (7.6m)	27'1" (8.3m)	29'1" (8.9m)	31'1" (9.5m)	33'1" (10.1m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!
WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

CLASS 2: 50' NORTHSTAR EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Edge 50'

Y-Axis: Anchorage Setback From Working Edge	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
50'0" (15.2m)	14'10" (4.5m)	14'10" (4.5m)	14'12" (4.6m)	15'2" (4.6m)	15'6" (4.7m)	15'10" (4.8m)	16'3" (5.0m)	16'9" (5.1m)	17'4" (5.3m)	18'0" (5.5m)	18'8" (5.7m)	19'5" (5.9m)
45'0" (13.7m)	14'10" (4.5m)	14'10" (4.5m)	15'0" (4.6m)	15'3" (4.6m)	15'6" (4.7m)	15'11" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'7" (5.4m)	18'4" (5.6m)	19'1" (5.8m)	19'11" (6.1m)
40'0" (12.2m)	14'10" (4.5m)	14'11" (4.5m)	15'0" (4.6m)	15'3" (4.7m)	15'7" (4.8m)	16'1" (4.9m)	16'7" (5.1m)	17'3" (5.2m)	17'11" (5.5m)	18'8" (5.7m)	19'7" (6.0m)	20'6" (6.2m)
35'0" (10.7m)	14'10" (4.5m)	14'11" (4.5m)	15'1" (4.6m)	15'4" (4.7m)	15'9" (4.8m)	16'3" (4.9m)	16'10" (5.1m)	17'6" (5.3m)	18'4" (5.6m)	19'2" (5.8m)	20'2" (6.1m)	21'2" (6.5m)
30'0" (9.1m)	14'10" (4.5m)	14'11" (4.5m)	15'1" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'5" (5.0m)	17'2" (5.2m)	17'11" (5.5m)	18'10" (5.7m)	19'10" (6.0m)	20'11" (6.4m)	22'0" (6.7m)
25'0" (7.6m)	14'10" (4.5m)	14'11" (4.5m)	15'2" (4.6m)	15'6" (4.7m)	16'1" (4.9m)	16'9" (5.1m)	17'7" (5.4m)	18'6" (5.6m)	19'6" (5.9m)	20'8" (6.3m)	21'10" (6.7m)	23'2" (7.1m)
20'0" (6.1m)	14'10" (4.5m)	14'11" (4.6m)	15'3" (4.6m)	15'9" (4.8m)	16'4" (5.0m)	17'2" (5.2m)	18'2" (5.5m)	19'3" (5.9m)	20'5" (6.2m)	21'9" (6.6m)	23'1" (7.0m)	24'7" (7.5m)
15'0" (4.6m)	14'10" (4.5m)	15'0" (4.6m)	15'4" (4.7m)	16'0" (4.9m)	16'10" (5.1m)	17'10" (5.4m)	19'0" (5.8m)	20'4" (6.2m)	21'9" (6.6m)	23'3" (7.1m)	24'10" (7.6m)	26'5" (8.1m)
10'0" (3.0m)	14'10" (4.5m)	15'0" (4.6m)	15'7" (4.8m)	16'6" (5.0m)	17'8" (5.4m)	19'0" (5.8m)	20'5" (6.2m)	22'0" (6.7m)	23'8" (7.2m)	25'5" (7.7m)	27'2" (8.3m)	29'0" (8.8m)
5'0" (1.5m)	14'10" (4.5m)	15'3" (4.6m)	16'3" (4.9m)	17'8" (5.4m)	19'3" (5.9m)	21'0" (6.4m)	22'10" (7.0m)	24'8" (7.5m)	26'7" (8.1m)	28'6" (8.7m)	30'5" (9.3m)	32'5" (9.9m)
0'0" (0.0m)	14'10" (4.5m)	16'10" (5.1m)	18'10" (5.7m)	20'10" (6.3m)	22'10" (7m)	24'10" (7.6m)	26'10" (8.2m)	28'10" (8.8m)	30'10" (9.4m)	32'10" (10m)	34'10" (10.6m)	36'10" (11.2m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!
WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

CLASS 2: 20' NORTHSTAR COASTAL EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Coastal Edge 20'

Y-Axis: Anchorage Setback From Working Edge									
	20'0" (6.1m)	16'2" (4.9m)	16'3" (5.0m)	16'7" (5.1m)	17'1" (5.2m)	17'9" (5.4m)	18'6" (5.7m)	19'6" (5.9m)	20'7" (6.3m)
	15'0" (4.6m)	16'2" (4.9m)	16'4" (5.0m)	16'8" (5.1m)	17'4" (5.3m)	18'2" (5.5m)	19'2" (5.9m)	20'5" (6.2m)	21'8" (6.6m)
	10'0" (3.0m)	16'2" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'10" (5.4m)	19'0" (5.8m)	20'4" (6.2m)	21'10" (6.6m)	23'5" (7.1m)
	5'0" (1.5m)	16'2" (4.9m)	16'7" (5.0m)	17'7" (5.4m)	19'0" (5.8m)	20'7" (6.3m)	22'4" (6.8m)	24'2" (7.4m)	26'1" (7.9m)
	0'0" (0.0m)	16'2" (4.9m)	18'2" (5.5m)	20'2" (6.2m)	22'2" (6.8m)	24'2" (7.4m)	26'2" (8.0m)	28'2" (8.6m)	30'2" (9.2m)
		0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**
	X-Axis: Lateral Offset From Anchorage								

X'X" (X.Xm)	**Safe Work Zone**	**X'X" (X.Xm)**	**WARNING!**
X'X" (X.Xm)	**Use Caution**	**WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH**	

CLASS 2: 30' NORTHSTAR COASTAL EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Coastal Edge 30'

Y-Axis: Anchorage Setback From Working Edge											
	30'0" (9.1m)	15'11" (4.9m)	16'0" (4.9m)	16'2" (4.9m)	16'6" (5.0m)	17'0" (5.2m)	17'7" (5.3m)	18'3" (5.6m)	19'0" (5.8m)	19'11" (6.1m)	20'11" (6.4m)
	25'0" (7.6m)	15'11" (4.9m)	16'0" (4.9m)	16'3" (4.9m)	16'8" (5.1m)	17'2" (5.2m)	17'10" (5.4m)	18'8" (5.7m)	19'7" (6.0m)	20'7" (6.3m)	21'9" (6.6m)
	20'0" (6.1m)	15'11" (4.9m)	16'0" (4.9m)	16'4" (5.0m)	16'10" (5.1m)	17'6" (5.3m)	18'3" (5.6m)	19'3" (5.9m)	20'4" (6.2m)	21'6" (6.6m)	22'10" (7.0m)
	15'0" (4.6m)	15'11" (4.9m)	16'1" (4.9m)	16'5" (5.0m)	17'1" (5.2m)	17'11" (5.5m)	18'11" (5.8m)	20'2" (6.1m)	21'5" (6.5m)	22'10" (7.0m)	24'4" (7.4m)
	10'0" (3.0m)	15'11" (4.9m)	16'1" (4.9m)	16'8" (5.1m)	17'7" (5.4m)	18'9" (5.7m)	20'1" (6.1m)	21'6" (6.6m)	23'1" (7.0m)	24'9" (7.6m)	26'6" (8.1m)
	5'0" (1.5m)	15'11" (4.9m)	16'4" (5.0m)	17'4" (5.3m)	18'9" (5.7m)	20'4" (6.2m)	22'1" (6.7m)	23'11" (7.3m)	25'9" (7.9m)	27'8" (8.4m)	29'7" (9.0m)
	0'0" (0.0m)	15'11" (4.9m)	17'11" (5.5m)	19'11" (6.1m)	21'11" (6.7m)	23'11" (7.3m)	25'11" (7.9m)	27'11" (8.5m)	29'11" (9.1m)	31'11" (9.7m)	33'11" (10.3m)
		0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**	**16'0" (4.9m)**	**18'0" (5.5m)**
	X-Axis: Lateral Offset From Anchorage										

X'X" (X.Xm)	**Safe Work Zone**	**X'X" (X.Xm)**	**WARNING!**
X'X" (X.Xm)	**Use Caution**	**WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH**	

CLASS 2: 50' NORTHSTAR COASTAL EDGE

Fall Clearance Table: Below D-Ring Use ANSI (Class 2) Northstar Coastal Edge 50'

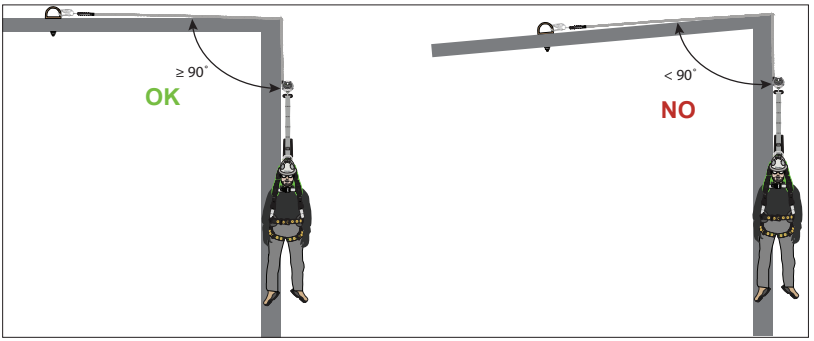
Y-Axis: Anchorage Setback From Working Edge												
	50'0" (15.2m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (4.9m)	16'5" (5.0m)	16'8" (5.1m)	17'0" (5.2m)	17'6" (5.3m)	18'0" (5.5m)	18'7" (5.7m)	19'2" (5.8m)	19'11" (6.1m)	20'8" (6.3m)
	45'0" (13.7m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (4.9m)	16'5" (5.0m)	16'9" (5.1m)	17'2" (5.2m)	17'7" (5.4m)	18'2" (5.5m)	18'10" (5.7m)	19'6" (5.9m)	20'4" (6.2m)	21'2" (6.4m)
	40'0" (12.2m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (5.0m)	16'6" (5.0m)	16'10" (5.1m)	17'3" (5.3m)	17'10" (5.4m)	18'5" (5.6m)	19'2" (5.8m)	19'11" (6.1m)	20'9" (6.3m)	21'8" (6.6m)
	35'0" (10.7m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (5.0m)	16'7" (5.0m)	16'11" (5.2m)	17'5" (5.3m)	18'1" (5.5m)	18'9" (5.7m)	19'6" (6.0m)	20'5" (6.2m)	21'4" (6.5m)	22'5" (6.8m)
	30'0" (9.1m)	16'1" (4.9m)	16'1" (4.9m)	16'4" (5.0m)	16'8" (5.1m)	17'1" (5.2m)	17'8" (5.4m)	18'4" (5.6m)	19'2" (5.8m)	20'1" (6.1m)	21'0" (6.4m)	22'1" (6.7m)	23'3" (7.1m)
	25'0" (7.6m)	16'1" (4.9m)	16'2" (4.9m)	16'4" (5.0m)	16'9" (5.1m)	17'4" (5.3m)	18'0" (5.5m)	18'9" (5.7m)	19'8" (6.0m)	20'9" (6.3m)	21'10" (6.7m)	23'1" (7.0m)	24'4" (7.4m)
	20'0" (6.1m)	16'1" (4.9m)	16'2" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'7" (5.4m)	18'5" (5.6m)	19'4" (5.9m)	20'6" (6.2m)	21'8" (6.6m)	22'11" (7.0m)	24'4" (7.4m)	25'9" (7.9m)
	15'0" (4.6m)	16'1" (4.9m)	16'2" (4.9m)	16'7" (5.1m)	17'2" (5.2m)	18'1" (5.5m)	19'1" (5.8m)	20'3" (6.2m)	21'7" (6.6m)	23'0" (7.0m)	24'6" (7.5m)	26'1" (7.9m)	27'8" (8.4m)
	10'0" (3.0m)	16'1" (4.9m)	16'3" (5.0m)	16'10" (5.1m)	17'9" (5.4m)	18'10" (5.7m)	20'2" (6.2m)	21'8" (6.6m)	23'3" (7.1m)	24'11" (7.6m)	26'8" (8.1m)	28'5" (8.7m)	30'3" (9.2m)
	5'0" (1.5m)	16'1" (4.9m)	16'5" (5.0m)	17'5" (5.3m)	18'10" (5.7m)	20'6" (6.2m)	22'3" (6.8m)	24'1" (7.3m)	25'11" (7.9m)	27'10" (8.5m)	29'9" (9.1m)	31'8" (9.7m)	33'7" (10.2m)
	0'0" (0.0m)	16'1" (4.9m)	18'1" (5.5m)	20'1" (6.1m)	22'1" (6.7m)	24'1" (7.3m)	26'1" (7.9m)	28'1" (8.5m)	30'1" (9.2m)	32'1" (9.8m)	34'1" (10.4m)	36'1" (11.0m)	38'1" (11.6m)
		0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
	X-Axis: Lateral Offset From Anchorage												

X'X" (X.Xm)	Safe Work Zone	X'X" (X.Xm)	WARNING!
X'X" (X.Xm)	Use Caution	WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

Use of a Leading Edge SRL requires extra precautions which the user must observe:

- A fall over an edge may require specialized rescue measures.
- The anchor point for Leading Edge SRLs must be situated at the same height, or higher, than the edge over which a fall may occur. An anchor point below the level of the edge is dangerous, as this causes the lifeline to redirect at a sharper than 90 degree angle.
- The user must not work on the far side of an opening opposite the Leading Edge SRL anchor point.
- The redirection angle of the lifeline at an edge over which a fall may occur shall be at least 90 degrees.

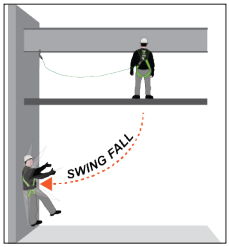
ANCHOR POINT FOR SRL-LE



- **Swing Falls**: Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to, or in line with, the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall. Ensure a Competent Person includes swing fall in calculations if the hazard exists.

- **Swing Fall Drop Distance**: The additional clearance added from excess cable being paid out when working at a lateral offset from your anchorage.

SWING FALL



Swing Fall Drop Distance Table: Overhead Use (SRL)

Z-Axis: Height of Anchorage From D-Ring

	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'5" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'10" (1.2m)	4'5" (1.3m)
100'0" (30.5m)																
95'0" (29.0m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'1" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'0" (1.2m)	4'7" (1.4m)
90'0" (27.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'1" (0.3m)	1'5" (0.4m)	1'9" (0.5m)	2'2" (0.6m)	2'8" (0.8m)	3'2" (1.0m)	3'8" (1.1m)	4'3" (1.3m)	4'10" (1.5m)
85'0" (25.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'6" (0.5m)	1'11" (0.6m)	2'4" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'11" (1.2m)	4'6" (1.4m)	5'2" (1.6m)
80'0" (24.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'1" (1.3m)	4'9" (1.4m)	5'5" (1.6m)
75'0" (22.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'2" (0.6m)	2'7" (0.8m)	3'2" (1.0m)	3'9" (1.1m)	4'5" (1.3m)	5'1" (1.6m)	5'9" (1.8m)
70'0" (21.3m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'9" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'10" (0.6m)	2'3" (0.7m)	2'10" (0.9m)	3'5" (1.0m)	4'0" (1.2m)	4'8" (1.4m)	5'5" (1.6m)	6'2" (1.9m)
65'0" (19.8m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'1" (0.3m)	1'6" (0.5m)	1'11" (0.6m)	2'5" (0.7m)	3'0" (0.9m)	3'7" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'9" (1.8m)	6'7" (2.0m)
60'0" (18.3m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'7" (0.5m)	2'1" (0.6m)	2'8" (0.8m)	3'3" (1.0m)	3'11" (1.2m)	4'7" (1.4m)	5'5" (1.6m)	6'3" (1.9m)	7'1" (2.2m)
55'0" (16.8m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'9" (0.5m)	2'3" (0.7m)	2'10" (0.9m)	3'6" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'10" (1.8m)	6'9" (2.0m)	7'8" (2.3m)
50'0" (15.2m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'8" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'11" (0.6m)	2'6" (0.8m)	3'2" (1.0m)	3'10" (1.2m)	4'8" (1.4m)	5'6" (1.7m)	6'4" (1.9m)	7'4" (2.2m)	8'4" (2.5m)
45'0" (13.7m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'2" (0.6m)	2'9" (0.8m)	3'6" (1.1m)	4'3" (1.3m)	5'1" (1.6m)	6'0" (1.8m)	7'0" (2.1m)	8'0" (2.4m)	9'1" (2.8m)
40'0" (12.2m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'10" (0.2m)	1'3" (0.4m)	1'9" (0.5m)	2'5" (0.7m)	3'1" (0.9m)	3'10" (1.2m)	4'9" (1.4m)	5'8" (1.7m)	6'8" (2.0m)	7'8" (2.3m)	8'10" (2.7m)	10'0" (3.0m)
35'0" (10.7m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'11" (0.3m)	1'5" (0.4m)	2'0" (0.6m)	2'8" (0.8m)	3'6" (1.1m)	4'4" (1.3m)	5'4" (1.6m)	6'4" (1.9m)	7'5" (2.3m)	8'7" (2.6m)	9'10" (3.0m)	11'1" (3.4m)
30'0" (9.1m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'7" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'4" (0.7m)	3'1" (0.9m)	4'0" (1.2m)	5'0" (1.5m)	6'1" (1.8m)	7'2" (2.2m)	8'5" (2.6m)	9'8" (3.0m)	11'0" (3.4m)	12'5" (3.8m)
25'0" (7.6m)	0'0" (0.0m)	0'1" (0.0m)	0'4" (0.1m)	0'9" (0.2m)	1'3" (0.4m)	1'11" (0.6m)	2'9" (0.8m)	3'8" (1.1m)	4'8" (1.4m)	5'10" (1.8m)	7'0" (2.1m)	8'4" (2.5m)	9'8" (2.9m)	11'1" (3.4m)	12'6" (3.8m)	14'1" (4.3m)
20'0" (6.1m)	0'0" (0.0m)	0'1" (0.0m)	0'5" (0.1m)	0'11" (0.3m)	1'6" (0.5m)	2'4" (0.7m)	3'4" (1.0m)	4'5" (1.3m)	5'7" (1.7m)	6'11" (2.1m)	8'3" (2.5m)	9'9" (3.0m)	11'3" (3.4m)	12'10" (3.9m)	14'5" (4.4m)	16'1" (4.9m)
15'0" (4.6m)	0'0" (0.0m)	0'2" (0.1m)	0'6" (0.2m)	1'2" (0.4m)	2'0" (0.6m)	3'0" (0.9m)	4'3" (1.3m)	5'6" (1.7m)	6'11" (2.1m)	8'5" (2.6m)	10'0" (3.0m)	11'8" (3.5m)	13'4" (4.1m)	15'0" (4.6m)	16'9" (5.1m)	18'6" (5.7m)
10'0" (3.0m)	0'0" (0.0m)	0'2" (0.1m)	0'9" (0.2m)	1'8" (0.5m)	2'10" (0.9m)	4'2" (1.3m)	5'7" (1.7m)	7'2" (2.2m)	8'10" (2.7m)	10'7" (3.2m)	12'4" (3.8m)	14'2" (4.3m)	16'0" (4.9m)	17'10" (5.4m)	19'9" (6.0m)	21'7" (6.6m)
5'0" (1.5m)	0'0" (0.0m)	0'5" (0.1m)	1'5" (0.4m)	2'10" (0.9m)	4'5" (1.4m)	6'2" (1.9m)	8'0" (2.4m)	9'10" (3.0m)	11'9" (3.6m)	13'8" (4.2m)	15'7" (4.8m)	17'7" (5.4m)	19'6" (5.9m)	21'6" (6.5m)	23'5" (7.1m)	25'5" (7.7m)
0'0" (0.0m)	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution
X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

Swing Fall Drop Distance Table: Below D-Ring Use-- Anchored at Foot Level (SRL)

Y-Axis: Anchorage Setback From Working Edge	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)
100'0" (30.5m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'5" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'10" (1.2m)	4'5" (1.3m)
95'0" (29.0m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'1" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'0" (1.2m)	4'7" (1.4m)
90'0" (27.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'1" (0.3m)	1'5" (0.4m)	1'9" (0.5m)	2'2" (0.6m)	2'8" (0.8m)	3'2" (1.0m)	3'8" (1.1m)	4'3" (1.3m)	4'10" (1.5m)
85'0" (25.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'6" (0.5m)	1'11" (0.6m)	2'4" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'11" (1.2m)	4'6" (1.4m)	5'2" (1.6m)
80'0" (24.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'1" (1.3m)	4'9" (1.4m)	5'5" (1.6m)
75'0" (22.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'2" (0.6m)	2'7" (0.8m)	3'2" (1.0m)	3'9" (1.1m)	4'5" (1.3m)	5'1" (1.6m)	5'9" (1.8m)
70'0" (21.3m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'9" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'10" (0.6m)	2'3" (0.7m)	2'10" (0.9m)	3'5" (1.0m)	4'0" (1.2m)	4'8" (1.4m)	5'5" (1.6m)	6'2" (1.9m)
65'0" (19.8m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'1" (0.3m)	1'6" (0.5m)	1'11" (0.6m)	2'5" (0.7m)	3'0" (0.9m)	3'7" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'9" (1.8m)	6'7" (2.0m)
60'0" (18.3m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'7" (0.5m)	2'1" (0.6m)	2'8" (0.8m)	3'3" (1.0m)	3'11" (1.2m)	4'7" (1.4m)	5'5" (1.6m)	6'3" (1.9m)	7'1" (2.2m)
55'0" (16.8m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'9" (0.5m)	2'3" (0.7m)	2'10" (0.9m)	3'6" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'10" (1.8m)	6'9" (2.0m)	7'8" (2.3m)
50'0" (15.2m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'8" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'11" (0.6m)	2'6" (0.8m)	3'2" (1.0m)	3'10" (1.2m)	4'8" (1.4m)	5'6" (1.7m)	6'4" (1.9m)	7'4" (2.2m)	8'4" (2.5m)
45'0" (13.7m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'2" (0.6m)	2'9" (0.8m)	3'6" (1.1m)	4'3" (1.3m)	5'1" (1.6m)	6'0" (1.8m)	7'0" (2.1m)	8'0" (2.4m)	9'1" (2.8m)
40'0" (12.2m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'10" (0.2m)	1'3" (0.4m)	1'9" (0.5m)	2'5" (0.7m)	3'1" (0.9m)	3'10" (1.2m)	4'9" (1.4m)	5'8" (1.7m)	6'8" (2.0m)	7'8" (2.3m)	8'10" (2.7m)	10'0" (3.0m)
35'0" (10.7m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'11" (0.3m)	1'5" (0.4m)	2'0" (0.6m)	2'8" (0.8m)	3'6" (1.1m)	4'4" (1.3m)	5'4" (1.6m)	6'4" (1.9m)	7'5" (2.3m)	8'7" (2.6m)	9'10" (3.0m)	11'1" (3.4m)
30'0" (9.1m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'7" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'4" (0.7m)	3'1" (0.9m)	4'0" (1.2m)	5'0" (1.5m)	6'1" (1.8m)	7'2" (2.2m)	8'5" (2.6m)	9'8" (3.0m)	11'0" (3.4m)	12'5" (3.8m)
25'0" (7.6m)	0'0" (0.0m)	0'1" (0.0m)	0'4" (0.1m)	0'9" (0.2m)	1'3" (0.4m)	1'11" (0.6m)	2'9" (0.8m)	3'8" (1.1m)	4'8" (1.4m)	5'10" (1.8m)	7'0" (2.1m)	8'4" (2.5m)	9'8" (2.9m)	11'1" (3.4m)	12'6" (3.8m)	14'1" (4.3m)
20'0" (6.1m)	0'0" (0.0m)	0'1" (0.0m)	0'5" (0.1m)	0'11" (0.3m)	1'6" (0.5m)	2'4" (0.7m)	3'4" (1.0m)	4'5" (1.3m)	5'7" (1.7m)	6'11" (2.1m)	8'3" (2.5m)	9'9" (3.0m)	11'3" (3.4m)	12'10" (3.9m)	14'5" (4.4m)	16'1" (4.9m)
15'0" (4.6m)	0'0" (0.0m)	0'2" (0.1m)	0'6" (0.2m)	1'2" (0.4m)	2'0" (0.6m)	3'0" (0.9m)	4'3" (1.3m)	5'6" (1.7m)	6'11" (2.1m)	8'5" (2.6m)	10'0" (3.0m)	11'8" (3.5m)	13'4" (4.1m)	15'0" (4.6m)	16'9" (5.1m)	18'6" (5.7m)
10'0" (3.0m)	0'0" (0.0m)	0'2" (0.1m)	0'9" (0.2m)	1'8" (0.5m)	2'10" (0.9m)	4'2" (1.3m)	5'7" (1.7m)	7'2" (2.2m)	8'10" (2.7m)	10'7" (3.2m)	12'4" (3.8m)	14'2" (4.3m)	16'0" (4.9m)	17'10" (5.4m)	19'9" (6.0m)	21'7" (6.6m)
5'0" (1.5m)	0'0" (0.0m)	0'5" (0.1m)	1'5" (0.4m)	2'10" (0.9m)	4'5" (1.4m)	6'2" (1.9m)	8'0" (2.4m)	9'10" (3.0m)	11'9" (3.6m)	13'8" (4.2m)	15'7" (4.8m)	17'7" (5.4m)	19'6" (5.9m)	21'6" (6.5m)	23'5" (7.1m)	25'5" (7.7m)
0'0" (0.0m)	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution
X'X" (X.Xm)	WARNING!

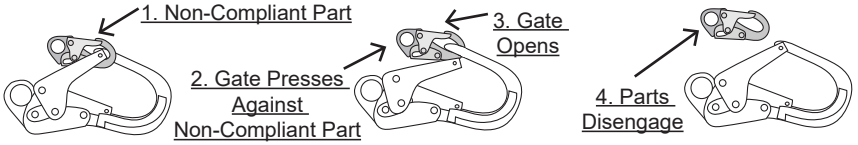
WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

▶ 9.0 COMPATIBILITY OF CONNECTORS

- Safewaze equipment is designed for, and tested with, associated Safewaze components or systems. If substitutions or replacements are made, ensure all components meet the applicable ANSI requirements. Read and follow manufacturer's instructions for all components and subsystems in your PFAS. Not following this guidance may jeopardize compatibility of equipment and possibly affect the safety and reliability of the system.
- Connectors are compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented.
- Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22 kN).
- Connectors must be compatible with the anchorage or other system components.
- Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage.
- Connectors must be compatible in size, shape, and strength.

- Self-locking snap hooks and carabiners are required by OSHA guidelines.
- Some specialty connectors have additional requirements. Contact Safewaze if you have any questions about compatibility.

UNINTENTIONAL DISENGAGEMENT



Using a connector that is undersized or irregular in shape (1) to connect a snap hook or carabiner could allow the connector to force open the gate of the snap hook or carabiner. When force is applied, the gate of the hook or carabiner presses against the non-compliant part (2) and forces open the gate (3). This allows the snap hook or carabiner to disengage (4) from the connection point.

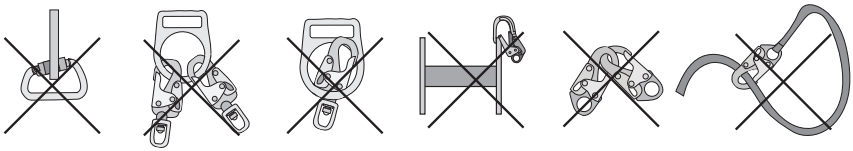
▶ 10.0 MAKING CONNECTIONS

Snap hooks and carabiners used with this equipment must be double locking and/or twist lock. Ensure all connections are compatible in size, shape, and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

Safewaze connectors (hooks, carabiners, and D-rings) are designed to be used only as specified in each product's manual. See figure below for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- To a D-ring to which another connector is attached.
- In a manner that would result in a load on the gate (with the exception of tie-back hooks).
- In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
- To each other.
- By wrapping the web lifeline around an anchor and securing to lifeline, except as allowed for tie-back models.
- To any object which is shaped or sized in a way that the snap hook or carabiner will not close and lock, or that roll-out could occur.
- In a manner that does not allow the connector to align properly while under load.

INAPPROPRIATE CONNECTIONS



Large throat snap hooks must not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies with ANSI Z359.1-2020 or ANSI Z359.12-2019 and is equipped with a 3,600 lb. (16 kN) gate.

▶ 11.0 INSTALLATION / OPERATION OF NORTHSTAR EDGE & NORTHSTAR COASTAL EDGE SRLs

Step 1: Inspect the SRL prior to use.

Step 2: Mount the carabiner of the SRL to an approved anchor point and connect its snap hook to the dorsal D-ring of a full body harness.

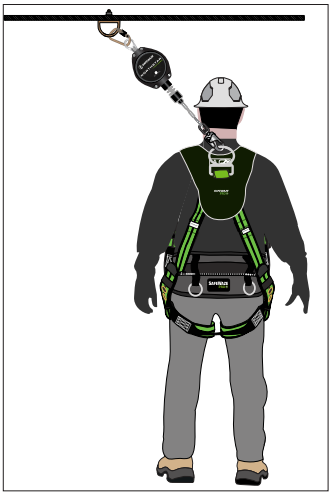
Step 3: When fully attached, the user is then free to move about within the recommended working area. When working with an SRL, always allow the lifeline to retract back into the device in a controlled manner. Do not release the unit to "free-wheel" back into itself.

When used properly, the lifeline of the SRL will extend and retract freely, with no slack or hesitation, as the user moves at normal speeds.

In the event of a fall, Safewaze SRLs are equipped with a speed-sensing braking system. The braking system will activate, stop the fall, and absorb much of the energy created by the fall. Due to the speed-sensing braking system, the user should avoid quick or sudden movements, as they may cause the SRL to inadvertently lock. If the user is performing operations near the end of the working length of the SRL, a reserve line is incorporated within the SRL to reduce fall arrest forces.

The figure below illustrates the harness and anchorage connection for Northstar Edge and Northstar Coastal Edge SRLs.

SYSTEM CONNECTIONS



Class 1 or Class 2 Tie Off

Class 2 ONLY Tie Off

▶ 12.0 INSPECTION / MAINTENANCE

The user must keep instructions available for reference and record the date of first use on Page 2.

The user must immediately remove the system from service if defects or damage are found, if visual fall indicator is deployed, or if exposed to forces of fall arrest.

Work Area:

- Inspect the work area to ensure the location is free of any damage including, but not limited to, debris, cracking, rot, decay, structural deterioration, rust, and any hazardous materials.
- A Competent Person must determine that the installation location to be utilized will support the intended loads.

Frequency:

- A Competent Person, other than the user, must inspect the SRL at least once annually.
- While conducting inspections, the Competent Person must consider all applications and hazards that the equipment may have been subjected to while in use.
- Competent Person inspections must be recorded in the Inspection Log included in this manual (Page 28), or the inspection table labels on each product individually. The Competent Person must place their initials in the block which corresponds with the month and year that the inspection is performed. All individual labels on the equipment will be initialed in the same manner.

INSPECTION FREQUENCY

Type of Use	Application Examples	Conditions of Use	Inspection Frequency by Competent Person
Infrequent to Light	Rescue and Confined Space, Factory Maintenance	Good Storage Conditions, Indoor or Infrequent Outdoor Use, Room Temperature, Clean Environments	Annually
Moderate to Heavy	Transportation, Residential Construction, Utilities, Warehouse	Fair Storage Conditions, Indoor and Extended Outdoor Use, All Temperatures, Clean or Dusty Environments	Semi-Annually to Annually
Severe to Continuous	Commercial Construction, Oil and Gas, Mining	Harsh Storage Conditions, Prolonged or Continuous Outdoor Use, All Temperatures, Dirty Environment	Quarterly to Semi-Annually

Directions:

- Prior to each use, inspect the SRL for possible deficiencies including, but not limited to, missing parts, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. Inspect all components of the device including the housing, connectors, fasteners, labels, and entire length of lifeline.
- Prior to each use, the user must inspect and verify that **each individual component** of the SRL is safe for use:

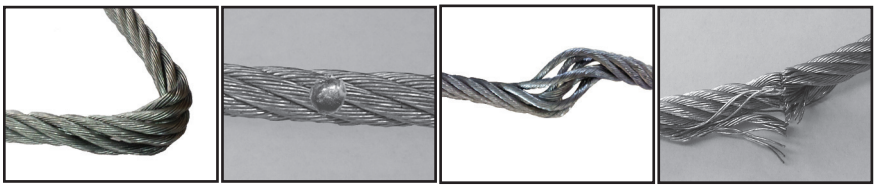
1. The cable from the unit should pay out and retract smoothly.

b. Pull the lifeline sharply to test its locking function.

c. The lifeline should lock, and subsequently retract, smoothly and completely back into the unit without hesitation or stoppage.

d. Inspect the entire length of lifeline for any damage including, but not limited to, fraying, crushing, bird caging, chemical exposure, heat/ welding spatter, and kinking. The user should always wear gloves when inspecting the lifeline to prevent injury in the event of cable damage.

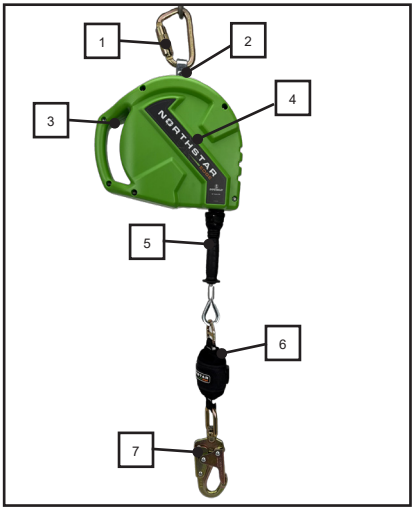
CABLE DAMAGE EXAMPLES



Maintenance:

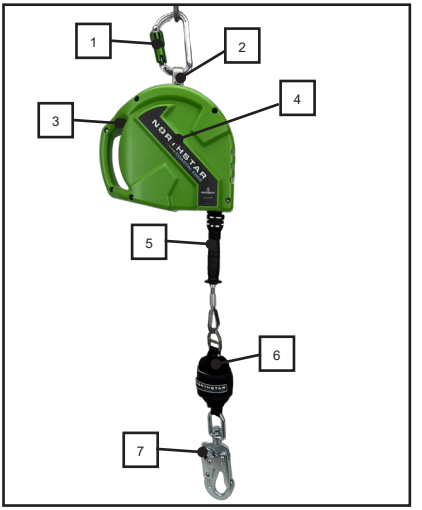
- **Repairs**: Only Safewaze, or entities authorized in writing by Safewaze, may make repairs to Safewaze fall protection equipment.
- **Cleaning**: The SRL can be cleaned with water and mild soap. The user should remove all dirt, possible corrosives, and contaminants from the system prior to, and after, each use. Never use any type of corrosive substance to clean the system. Excess water should be blown out with compressed air. Hardware can be wiped off with a clean, dry cloth. Do not store system if wet or damp. Allow equipment to fully dry before being stored.
- **Storage**: Prior to installation, store the SRL in a cool, dry area where it will not be exposed to extreme light, extreme heat, excessive moisture, or possibly corrosive chemicals or materials.
- **Lifespan**: The working life of the SRL is determined by work conditions, care, and inspection provided. So long as the system and all components pass inspection, it may remain in service.
- **Disposal**: Dispose of the SRL if inspection reveals an unsafe or defective condition. If damaged and unserviceable, the system should be destroyed and the lifeline cut so as not to allow accidental re-use.

NORTHSTAR EDGE COMPONENT INSPECTION



1	Carabiner
2	Swivel Top
3	Housing
4	Label
5	Cable Lifeline/Handle
6	Energy Absorber*
7	Swivel Snap Hook

NORTHSTAR COASTAL EDGE COMPONENT INSPECTION



1	Carabiner
2	Swivel Top
3	Housing
4	Label
5	Cable Lifeline/Handle
6	Energy Absorber*
7	Swivel Snap Hook

***Load Indicator:**

13.0 LABELS

470-00308

SAFEWAZE
225 Wilshire Ave SW
Concord, NC 28025
USA
(800) 230-0319
www.safewaze.com

732388043149

MODEL #: 022-5300
DESCRIPTION: Northstar Edge 20' Cable SRL

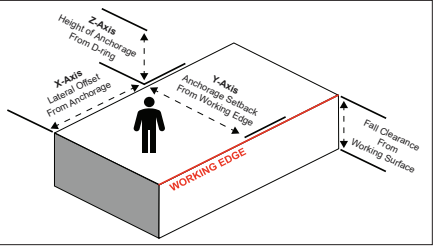
SERIAL #: XXXXXXX MFG DATE: XX/XXXX
SPECIFICATIONS: Materials: 3/16" galvanized steel cable, steel hardware, thermoplastic polymer housing, polyester shock pack
Working length: 20 ft. (6.1 m)
Capacity: ANSI 130-310 lbs. (59-141 kg), OSHA 420 lbs. (191 kg)
*including clothing, tools, & equipment
Average arrest force: 1350 lbs. (612.35 kg)
Max. arrest force: 1800 lbs. (816.47 kg)
Actual arrest distance: ≤ 78 in. (198 cm)
Max. free fall distance: 72 in. (183 cm)
Min. required fall clearance: 15' (4.6 m) ***See charts for more info**
Standards: ANSI Z359.14-2021, OSHA 1910.140 and OSHA 1910.66

CLASS 2 UNIT
(Anchor above or below dorsal d-ring)

20'

MUST FOLLOW ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

470-00309



470-00310

Fall Clearance Table: Below D-ring Use (Class 2) Northstar Edge 20' Cable

Y-Axis: Anchorage Setback From Working Edge	X-Axis: Lateral Offset From Anchorage									
	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)		
20'0" (6.1m)	15'0" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'7" (5.1m)	17'5" (5.3m)	18'4" (5.6m)	19'5" (5.9m)	X'X" (X.Xm)	Safe Work Zone
15'0" (4.6m)	15'0" (4.6m)	15'2" (4.6m)	15'7" (4.7m)	16'2" (4.9m)	17'0" (5.2m)	18'1" (5.5m)	19'3" (5.9m)	20'7" (6.3m)		
10'0" (3.0m)	15'0" (4.6m)	15'3" (4.6m)	15'10" (4.8m)	16'8" (5.1m)	17'10" (5.4m)	19'2" (5.8m)	20'8" (6.3m)	22'3" (6.8m)	X'X" (X.Xm)	Use Caution
5'0" (1.5m)	15'0" (4.6m)	15'5" (4.7m)	16'5" (5.0m)	17'10" (5.4m)	19'6" (5.9m)	21'3" (6.5m)	23'0" (7.0m)	24'11" (7.6m)		
0'0" (0.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)	X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

470-00311

Fall Clearance Table: Overhead Use (Class 1) Northstar Edge 20'-50'

Z-Axis: Height of Anchorage From D-Ring	X-Axis: Lateral Offset From Anchorage									
	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'3" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'5" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'5" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	9'0" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'7" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'8" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'1" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'9" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X'X" (X.Xm) Safe Work Zone

X'X" (X.Xm) Use Caution

X'X" (X.Xm) WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

470-00179

WARNING: This is a single user fall arrester device. Device must be inspected prior to each use. Connection of this device to a full body harness is to be made to the dorsal D-ring only. User must ensure that any connection to anchorage is properly secured prior to use. Make only compatible connections. Dual connections shall only be used for 100% tie-off transitions. Refer to instruction manual for minimum anchorage strength requirements. Elevate anchorage to reduce the fall clearance and limit risk when possible. Fall clearances must be calculated by a competent person prior to use. Ensure adequate fall clearance exists to avoid contact with lower level or obstructions. Avoid swing fall hazards by working directly under anchorage. If possible, avoid exposure to sharp or serrated structural edges to prevent damage to the lifeline. Avoid chemical, thermal and/or electrical hazards. This product is suitable for use horizontally and with horizontal lifelines. Adhere to the hierarchy of controls in Z359.2.

USER MUST READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

DO NOT ATTEMPT TO SERVICE OR REPAIR THIS UNIT! CONTACT SAFEWAZE FOR SERVICE OR REPAIR INFORMATION. Device must be inspected prior to each use in accordance with the manufacturer's instructions. Perform th Locking Function Test (sharp pull test) and retraction test. Inspect the device for label legibility, any evidence of damage or defects, and missing components or parts. Inspect all components of device including the housing, connectors, fasteners, a the entire length of the lifeline for any damage or defects. Refer to instruction manual for inspection frequency. Unit must be removed from service if exposed to fall arrest forces. If visual fall indicator is deployed, immediately remove unit from servic

	J	F	M	A	M	J	J	A	S	O	N	D

Inspection Log - Do Not Remove Label

470-00312

LOAD INDICATOR
PASS FAIL

If tear webbing from shock pack is deployed and visible. Immediately remove from service.

SAFEWAZE

INSPECTION LOG
ANNUAL FORM

Inspection Date:	Inspector:	Pass/Fail:	Comments/ Corrective Action:

SAFEWAZE

Address: 225 Wilshire Ave SW, Concord, NC 28025
Phone: 800-230-0319
Fax: 704-262-9051
Email: info@safewaze.com
Website: safewaze.com

Manual sobre SRL Northstar Edge & Northstar Coastal Edge

NORMAS	
ANSI	Z359.14-2021
OSHA	1910.140, 1910.66

Class **2** Anchor above or below dorsal D-ring

Asegúrese de leer y comprender las instrucciones antes de usar el equipo.
¡No descarte las instrucciones!

Siempre compruebe que está utilizando la versión más reciente del manual de Safewaze. Visite el sitio web de Safewaze o comuníquese con el Servicio al Cliente para obtener los manuales actualizados.

⚠IMPORTANTE:

- Consulte este manual para conocer las instrucciones fundamentales sobre el uso, el cuidado o la idoneidad del equipo para su aplicación. Comuníquese con Safewaze si tiene otras preguntas.
- Registre toda la información importante sobre el producto antes de usarlo. En el registro de inspecciones, es obligatorio documentar todas las inspecciones anuales de las personas competentes.

▶ INFORMACIÓN SOBRE EL USUARIO

Fecha del primer uso: _____

Número de serie: _____

Capacitador: _____

Usuario: _____

▶ INFORMACIÓN DE SEGURIDAD Y PRECAUCIONES

- Los usuarios de este equipo deben recibir las instrucciones del fabricante.
- El usuario debe leer, comprender y seguir toda la información de seguridad y de uso incluida en este manual.
- El usuario debe usar la línea salvavidas autorretráctil (Self-Retracting Lifeline, SRL) y todo el equipo que se usa junto con el producto de manera segura y efectiva.
- Si no se respeta toda la información de seguridad y de uso, pueden provocarse lesiones graves o la muerte.

⚠ Advertencias:

Las normas incluidas en este documento no son exhaustivas, solo sirven de referencia y no pretenden reemplazar el criterio de una persona competente o su conocimiento de los estándares federales o estatales.

Las siguientes advertencias tienen el objetivo de minimizar el riesgo relacionado con el uso de una SRL de Safewaze y el equipo que la acompaña.

- Los usuarios deben consultarle a su médico si tienen la capacidad de absorber la fuerza de un evento de detención de caídas de manera segura. El estado físico, la edad y otros aspectos de la salud pueden afectar enormemente la capacidad de una persona de soportar las fuerzas de la detención de caídas. Las mujeres embarazadas y las personas que se consideren menores de edad no deben usar ningún equipo de Safewaze.
- No modifique el equipo ni lo use de manera incorrecta. Solo Safewaze, o las entidades a las que Safewaze autorizó por escrito, pueden hacer reparaciones al equipo de protección contra caídas de Safewaze.
- Una persona competente debe analizar el lugar de trabajo y anticipar dónde realizarán las tareas los trabajadores, el camino que tomarán para llegar al trabajo y cualquier peligro de caídas existente y posible. La persona competente debe elegir el equipo de protección contra caídas que se utilizará. La elección dependerá de las condiciones potencialmente peligrosas del lugar de trabajo. Todo el equipo de protección contra caídas debe adquirirse nuevo y sin usar.
- Si el trabajo se realizará en un entorno de altas temperaturas, se deberá utilizar un equipo de protección contra arcos eléctricos u otros equipos de protección contra caídas adecuados.
- No se permite utilizar cinturones para detener una caída.
- En la medida de lo posible, se debe trabajar directamente debajo del punto de anclaje para minimizar los peligros de caídas pendulares.
- Cuando trabaja en las alturas, el usuario debe asegurarse de que haya una altura de caída adecuada.
- Una vez que un equipo se expuso a las fuerzas de detención de una caída, debe quitarse del servicio inmediatamente y destruirse.
- Una persona competente debe capacitar a las personas autorizadas sobre las formas correctas de instalación, inspección, desmontaje, mantenimiento, almacenamiento y uso del equipo. Este entrenamiento debe incluir la capacidad de reconocer peligros de caídas, minimizar la posibilidad de que haya peligros de caídas y el uso correcto de los sistemas personales de detención de caídas.
- Si la capacitación se dicta con este equipo, debe instalarse y utilizarse un sistema de protección contra caídas secundario para garantizar que el aprendiz no esté expuesto a peligros de caídas accidentales.
- El equipo designado para la protección contra caídas nunca debe usarse para levantar, colgar, sostener o elevar herramientas u otros equipos a menos que tenga la certificación específica para ese uso.
- Evite utilizar la SRL en aplicaciones en las que exista riesgo de quedar atrapado.
- Evite manipular maquinaria, bordes filosos o abrasivos, y cualquier otro elemento peligroso que podría dañar o deteriorar el componente.
- Preste especial atención para que la línea salvavidas esté libre de obstáculos, que pueden incluir, entre otros, objetos cercanos, herramientas, equipos, maquinaria en movimiento, compañeros de trabajo, usted mismo u objetos que podrían impactarlo desde arriba.
- El usuario debe inspeccionar la SRL antes de cada uso y comprobar que las funciones de bloqueo y retracción funcionan correctamente.
- Nunca permita que se forme holgura en la línea salvavidas SRL. Nunca ate ni haga nudos en la línea salvavidas.
- Nunca conecte el gancho de seguridad de una SRL a la línea salvavidas de otra SRL o cordón.
- Evite realizar movimientos bruscos o rápidos que puedan provocar el bloqueo involuntario de la SRL.
- No utilice extensores con anillo en D cuando utilice este producto en un entorno con borde abierto.
- Nunca exceda la capacidad máxima de peso permitida ni la distancia máxima de caída libre del equipo de protección contra caídas.

ÍNDICE

NÚMEROS DE PIEZA Y CONFIGURACIONES CUBIERTAS:

NORTHSTAR EDGE

Standards: ANSI Z359.14-2021
OSHA 1910.140, 1910.66

Capacity: ANSI 130-310 lbs. (59-141 kg)
OSHA Up to 420 lbs. (191kg)

Part Number	SRL Class	Single Leg (S) / Dual Leg (D)	Working Length (ft.)	Lifeline Material	Lifeline Dimensions (in.)	Housing Material	Weight (lbs.)	CONNECTOR: Steel Snap Hook ①	Steel Swivel Snap Hook ②	ALU Snap Hook ③	Dielectric Snap Hook ④	Stainless Steel Swivel Snap Hook ⑤	Steel Rebar Hook ⑥	LI Steel Swivel Rebar Hook ⑦	Steel Swivel Rebar Hook ⑧	ALU Rebar Hook ⑨	Steel Captive Eye Carabiner ⑩	ALU Captive Eye Carabiner ⑪	ALU Swivel Carabiner ⑫	ATTACHMENT: No Attachment	Steel Carabiner ⑬	Trip. Lock Steel Carabiner ⑭	ALU Carabiner ⑮	ALU Captive Eye Carabiner ⑪	ALU Snap Hook ③	FS-EX313 ⑯	Cab Mount Bracket ⑰	Soft Loop ⑱	Integrated BWB ⑲	1014 BWB ⑳	9012 BWB ㉑	9013 BWB ㉒
022-5300	1, 2	S	20	Steel Cable	Ø3/16	Nylon	11.0		X												X											
022-5301	1, 2	S	30	Steel Cable	Ø3/16	Nylon	13.4		X												X											
022-5302	1, 2	S	50	Steel Cable	Ø3/16	Nylon	17.8		X												X											

NORTHSTAR COASTAL EDGE

Standards: ANSI Z359.14-2021
OSHA 1910.140, 1910.66

Capacity: ANSI 130-310 lbs. (59-141 kg)
OSHA Up to 420 lbs. (191kg)

Part Number	SRL Class	Single Leg (S) / Dual Leg (D)	Working Length (ft.)	Lifeline Material	Lifeline Dimensions (in.)	Housing Material	Weight (lbs.)	CONNECTOR: Steel Snap Hook ①	Steel Swivel Snap Hook ②	ALU Snap Hook ③	Dielectric Snap Hook ④	Stainless Steel Swivel Snap Hook ⑤	Steel Rebar Hook ⑥	LI Steel Swivel Rebar Hook ⑦	Steel Swivel Rebar Hook ⑧	ALU Rebar Hook ⑨	Steel Captive Eye Carabiner ⑩	ALU Captive Eye Carabiner ⑪	ALU Swivel Carabiner ⑫	ATTACHMENT: No Attachment	Steel Carabiner ⑬	Trip. Lock Steel Carabiner ⑭	ALU Carabiner ⑮	ALU Captive Eye Carabiner ⑪	ALU Snap Hook ③	FS-EX313 ⑯	Cab Mount Bracket ⑰	Soft Loop ⑱	Integrated BWB ⑲	1014 BWB ⑳	9012 BWB ㉑	9013 BWB ㉒
022-5292	1, 2	S	20	S.S. Cable	Ø13/64	Nylon	10.6					x											x									
022-5293	1, 2	S	30	S.S. Cable	Ø13/64	Nylon	12.8					x											x									
022-5294	1, 2	S	50	S.S. Cable	Ø13/64	Nylon	17.4					x											x									

▶ 1.0 INTRODUCCIÓN

Gracias por adquirir una línea salvavidas autorretráctil (Self-Retracting Lifeline, SRL) de Safewaze. Este manual debe leerse y comprenderse en su totalidad y utilizarse como parte del programa de capacitación de empleados requerido por la OSHA o por cualquier agencia estatal aplicable.

El uso previsto de las SRL Northstar Edge/Coastal Edge es formar parte de un sistema personal completo de detención, de caídas, restricción de movimiento, posicionamiento de trabajo o rescate. Las SRL de Safewaze están diseñadas para detener al usuario de manera segura en caso de una caída, reduciendo al mínimo las fuerzas sobre el cuerpo. Las SRL Northstar Edge/Coastal Edge de Safewaze están diseñadas para un único usuario cuyo peso (incluida la ropa, las herramientas, el equipo, etc.) sea:

ANSI 130-310 lb (58.96-140.61 kg)
OSHA hasta 420 lb (190.51 kg)

Las SRL de Safewaze están autorizadas para usarse con sistemas de líneas salvavidas horizontales (Horizontal Lifeline, HLL), pero NUNCA deben utilizarse como la línea salvavidas de un sistema de HLL. Las SRL de Clase 1 deben usarse únicamente en aplicaciones por encima de la cabeza y no están autorizadas para utilizarse por debajo del anillo en D dorsal. La caída libre máxima permitida para las SRL de Clase 1 es de 2 pies (0.6 m). Las SRL incluidas en este

Manual son SRL de Clase 2. Las SRL de Clase 2 pueden utilizarse tanto en aplicaciones por encima de la cabeza como por debajo del anillo en D dorsal. La caída libre máxima permitida para las SRL de Clase 2 es de 6 pies (1.8 m).

En la tabla de configuraciones de la página 5, se muestran los modelos de SRL incluidos en las series Northstar Edge y Northstar Coastal Edge junto con sus configuraciones.

▶ 2.0 USO PREVISTO

El equipo descrito en este manual está diseñado para utilizarse como parte de un sistema personal completo de detención de caídas, restricción de movimiento, posicionamiento de trabajo o rescate. El uso de este equipo para cualquier otro propósito, que incluye, entre otros, actividades deportivas o recreativas, manipulación de materiales u otras acciones no descritas en estas instrucciones, no está aprobado por Safewaze. Si se usa este equipo de un modo no especificado en este manual, podría provocar lesiones graves o la muerte. Solo el personal capacitado debe usar el equipo detallado en este manual para aplicaciones en su lugar de trabajo.

▶ 3.0 NORMAS DE SEGURIDAD APLICABLES

Cuando se utiliza conforme a las instrucciones, este producto cumple con la norma **Z359.14-2021** del ANSI y con las regulaciones **1910.66 y 1910.140** de la OSHA. Los estándares y las normas aplicables dependerán del tipo de trabajo que se realice y podrían incluir normas específicas del estado.

Consulte los requisitos locales, estatales y federales para obtener más información sobre la legislación de la seguridad laboral respecto de los sistemas personales de detención de caídas (Personal Fall Arrest Systems, PFAS).

El sistema se ha probado conforme a los requisitos de la norma **ANSI/ASSP Z359.7**. Las pruebas no se extienden al sustrato al cual se fija el sistema.

La norma ANSI exige que las SRL se clasifiquen según su uso previsto y se prueben como unidades de Clase 1 o Clase 2. Las SRL Northstar Edge y Northstar Coastal Edge son SRL de Clase 2. Las pruebas de rendimiento dinámico comienzan instalando la SRL en un entorno de prueba controlado. Con la SRL fijada a un anclaje adecuado, la línea salvavidas se conecta a un peso de prueba. Luego, el peso se deja caer para simular un evento de detención de caídas.

Nota: La SRL debe probarse en todas las configuraciones de instalación permitidas según sus instrucciones de uso. Los resultados de las pruebas deben registrarse.

Los parámetros registrados son la distancia de detención (Arrest Distance, AD), la fuerza promedio de detención (Average Arrest Force, AAF) y la fuerza máxima de detención (Maximum Arrest Force, MAF).

La distancia de detención es la distancia vertical total necesaria para detener completamente una caída. La AD incluye la distancia de desaceleración y la distancia de activación. La fuerza promedio de detención es el promedio de las fuerzas que aplica el sistema de protección contra caídas al cuerpo y al anclaje. La fuerza máxima de detención es la mayor fuerza que aplica el sistema de protección contra caídas al cuerpo y al anclaje.

Estas pruebas se realizan en condiciones ambientales normales. Las unidades también deben probarse en condiciones atmosféricas extremas. Hay tres condiciones: frío, calor y humedad (las unidades se saturan en agua antes de la prueba). Se pueden utilizar unidades diferentes para cada prueba. Se deben registrar todos los resultados de la prueba. Estos datos se utilizan para establecer las pautas de altura de caída publicadas en este manual de instrucciones.

Clase 1 y Clase 2:

- **Clase 1:** dispositivos autorretráctiles que deben usarse únicamente con anclajes por encima de la cabeza y que, en la práctica, estarán sujetos a una caída libre máxima de 2 pies (0.6 m) o menos.
- **Clase 2:** dispositivos autorretráctiles destinados a aplicaciones en las que los anclajes por encima de la cabeza no estén disponibles o sean inviables, y que, en la práctica, pueden estar sujetos a una caída libre máxima de 6 pies (1.8 m) sobre un borde.

Cuando la SRL está anclada por encima del usuario, la norma Z359.14-2021 del ANSI especifica que tanto las SRL de Clase 1 como las de Clase 2 deben tener una AD inferior a 42 pulg. (1.1 m). La AAF no debe exceder 1,350 lb (612.35 kg). Las pruebas condicionadas de las unidades permiten una AAF ligeramente mayor, de 1,575 lb (714.41 kg), pero la MAF debe mantenerse siempre por debajo de 1,800 lb (816.47 kg).

Consulte la Sección 8 de este manual para aprender a calcular su altura de caída mínima necesaria (Minimum Required Fall Clearance, MRFC).

La información de clasificación que figura en las etiquetas del producto se basa en los resultados de las pruebas.

Nota: La distancia de detención es uno de los varios componentes de la MRFC. La OSHA exige que una SRL limite la caída libre a 2 pies (0.6 m) o menos. Si se debe exceder la distancia máxima de caída libre, el empleador debe documentar, con base en datos de prueba, que no se superará la fuerza máxima de detención y que el sistema personal de detención de caídas funcionará correctamente.

▶ 4.0 CLASIFICACIÓN DE LOS TRABAJADORES

Asegúrese de leer y comprender las definiciones de las personas que trabajan en lugares con riesgos de caídas o pueden estar expuestos a ellos:

Ingeniero calificado: una persona que posee un título universitario en ingeniería de una institución acreditada. Puede asumir responsabilidad individual para el desarrollo y la aplicación de la ingeniería y sus conocimientos en el diseño, la construcción, el uso y el mantenimiento de sus proyectos.

Persona calificada: alguien que, debido a que posee un título o certificado reconocido, historia profesional o vastos conocimientos, capacitaciones y experiencia, ha comprobado ser capaz de solucionar o resolver problemas relacionados con un tema específico, el trabajo o el proyecto.

Persona competente: alguien que es capaz de identificar peligros existentes y previsibles a sus alrededores o condiciones laborales insalubres, riesgosas o peligrosas para los empleados, y que tiene la autorización para llevar a cabo medidas correctivas inmediatas para resolverlo.

Persona autorizada: una persona a quien el empleador aprobó o asignó para realizar un tipo específico de tareas o para estar en una ubicación específica en el lugar de trabajo.

La persona o el ingeniero calificados tienen la responsabilidad de supervisar el lugar de trabajo y garantizar que se cumplan las normas de seguridad.

▶ 5.0 PLAN DE RESCATE

Antes de utilizar este equipo, los empleadores deben crear un plan de rescate en el caso de una caída y proporcionar los medios para implementar el plan mediante

capacitaciones. El plan de rescate debe ser específico de cada proyecto. Debe permitirles a los empleados que puedan rescatarse a sí mismos o que los puedan rescatar otros inmediatamente con medios alternativos.

Todos los usuarios del equipo, las personas autorizadas y los rescatistas deben conocer y comprender el plan. Se puede necesitar equipo especializado no incluido en el alcance de este manual para las operaciones de rescate. Todos los usuarios deben recibir capacitación sobre la inspección, la instalación, la operación y el uso adecuado de su equipo de rescate y del plan de rescate. Consulte la norma Z359.4-2013 del ANSI para obtener información específica sobre el rescate. Debe buscar atención médica inmediata si un trabajador se expone a un incidente de detención de caídas.

Nota: Pueden necesitarse medidas de rescate especiales para caídas de un borde.

▶ 6.0 LIMITACIONES DEL PRODUCTO

Consulte los siguientes requisitos y limitaciones cuando instale o utilice este equipo:

- **Rango de capacidad**: según el ANSI, 130-310 lb (59-141 kg) y, según la OSHA, hasta 420 lb (191 kg). *Incluye el peso de la ropa, las herramientas, el equipo, etc.

- **Anclaje**: los anclajes seleccionados para los sistemas de detención de caídas deben tener una fuerza capaz de soportar cargas estáticas aplicadas en las direcciones permitidas por el sistema de, al menos:

    1. 5,000 lb (2267.9 kg) para anclajes no certificados.
    2. El doble de la fuerza de detención máxima para anclajes certificados, o
    3. 3,100 lb para aplicaciones de rescate.

  Si se conecta más de un sistema de detención de caídas a un anclaje, la fuerza que se indica arriba debe multiplicarse por la cantidad de sistemas conectados al anclaje.

  Según las normas 1926.502 y 1910.66 de la OSHA: los anclajes que se utilicen para la conexión de sistemas personales de detención de caídas deben ser independientes de cualquier anclaje que se utilice para soportar o suspender plataformas y debe ser capaz de soportar, al menos, 5,000 lb (2267.9 kg) por usuario. De otro modo, los anclajes para la conexión deben diseñarse, instalarse y utilizarse como parte de un PFAS completo que mantenga un factor de seguridad de al menos 2 y esté bajo la supervisión de una persona calificada.

- **Velocidad de bloqueo**: la naturaleza de este equipo requiere una trayectoria de caída despejada para garantizar que la SRL se bloquee en caso de caída. Si se trabaja en caminos de caída obstaculizados, zonas estrechas o con movimiento de materiales, como arena y granos, puede suceder que el cuerpo del usuario no alcance la velocidad necesaria para que la SRL se active y se bloquee durante la caída.

- **Caída libre**: la distancia que recorre un usuario durante la caída antes de que se activen los mecanismos de detención.

- **Caídas pendulares**: si el usuario se mueve lateralmente alejándose del punto de anclaje sobre la cabeza, aumenta el riesgo de que se produzca una caída pendular. La fuerza producida por golpear un objeto en una caída pendular, en algunos casos, generar más fuerzas que una caída sin que el usuario utilice equipo de protección. Dentro de lo posible, se debe trabajar directamente debajo del punto de anclaje para minimizar el riesgo de caídas pendulares.

- **Distancia de caída pendular**: la altura que se agrega debido al despliegue de la cuerda cuando se trabaja en un ángulo lateral al anclaje.

- **Altura de caída**: la cantidad de pies que debe haber debajo de la superficie de trabajo para que el sistema personal de detención de caídas funcione correctamente.

- **Peligros**: si este equipo se usa en un entorno donde existen peligros, se deben tener precauciones adicionales. Los peligros pueden incluir, entre otros, maquinaria en movimiento, equipos de alta tensión o líneas eléctricas, sustancias químicas irritantes, entornos corrosivos, gases tóxicos o explosivos, o calor extremo. Se debe evitar trabajar en zonas donde el equipo o el personal que se encuentra por encima de la cabeza pueden caerse y golpear contra el usuario, el equipo de protección contra caídas o la línea salvavidas. Se deben evitar las zonas en las que la línea salvavidas del usuario puede cruzarse o enredarse con la de otro usuario. La línea salvavidas no debe pasar por debajo de los brazos o entre las piernas.

- **Bordes afilados: las SRL Clase 1** de Safewaze NO están diseñadas para su uso en entornos con bordes abiertos. Si un área de trabajo específica tiene uno o varios bordes extremadamente afilados que pueden entrar en contacto con el componente de la línea salvavidas de la SRL, se requiere una SRL de Clase 2.

- Solo se debe usar el anillo en D aplicable para su uso previsto.

▶ 7.0 ESPECIFICACIONES DEL PRODUCTO

- Las SRL Northstar Edge y Northstar Coastal Edge son unidades de Clase 2 y se pueden anclar al anillo en D dorsal o por encima o por debajo de este.
- Fuerza promedio de detención: ≤1,350 lb (612.35 kg)
- Fuerza máxima de detención: ≤1,800 lb (816.47 kg)
- Distancia máxima de caída libre: 72 pulg. (183 cm)
- Los cálculos de la distancia real de detención y de la altura de caída pueden variar según la unidad y se encuentran en la Sección 8.

MATERIALES DE NORTHSTAR EDGE	
Carcasa	Termoplástico (nailon)
Línea salvavidas	Cable de acero galvanizado de 3⁄16 pulg.
Mango	Nailon
Tambor	Aluminio
Rótula	Aluminio
Conector/Fijador	Acero
Trinquete de cierre	Latón
Eje principal	Acero inoxidable
Resortes	Acero inoxidable
Amortiguador	Poliéster

MATERIALES DE NORTHSTAR COASTAL EDGE	
Carcasa	Termoplástico (nailon)
Línea salvavidas	de 13⁄64 pulg. Cable de acero inoxidable
Mango	Nailon
Tambor	Aluminio
Rótula	Aluminio
Conector/Fijador	Aluminio y acero inoxidable
Trinquete de cierre	Latón
Eje principal	Acero inoxidable
Resortes	Acero inoxidable
Amortiguador	Poliéster

▶ 8.0 ALTURA DE CAÍDA

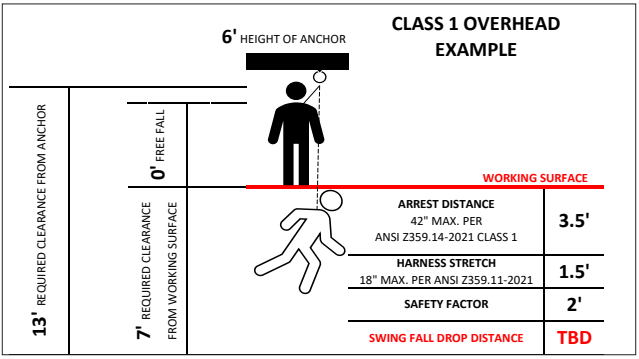
Siempre seleccione un sistema personal de detención de caídas y un punto de anclaje que limiten al máximo la caída libre y la caída pendular. Una caída libre de más de 6 pies puede generar fuerzas de detención excesivas que podrían causar lesiones graves o la muerte.

- **Caída libre**: la distancia que recorre un usuario durante la caída antes de que se activen los mecanismos de detención. El usuario debe determinar la cantidad de caída libre presente en el sistema, ya que esto puede aumentar o reducir la altura de caída. Determine la altura del anclaje desde el anillo en D, el desplazamiento lateral desde el anclaje, el retroceso del anclaje desde el borde de trabajo y el número de modelo de la SRL que se utiliza para seleccionar la tabla de alturas adecuada.
- **Distancia de detención (AD) real**: en la Tabla 1, se muestran las distancias de detención reales de Clase 1 de Northstar Edge; y en la Tabla 2, se muestran las distancias de detención reales de Clase 1 de Northstar Coastal Edge cuando se los sometió a pruebas en condiciones ambientales, de humedad, de calor y de frío. Estas distancias de detención reales suelen ser menores a las 42” máximas especificadas por el ANSI. En la Tabla 3, se muestran las distancias de detención reales de Clase 2 de Northstar Edge; y en la Tabla 4, se muestran las distancias de detención reales de Clase 2 de Northstar Coastal Edge cuando se los sometió a pruebas en condiciones ambientales, de humedad, de calor y de frío.
- **Estiramiento del arnés:** la distancia que puede estirarse el arnés una vez que absorbió las fuerzas.
- **Altura del trabajador:** la distancia entre la superficie de trabajo y el anillo en D dorsal.
- **Distancia de caída pendular:** la altura adicional que se agrega al exceso de longitud de la línea salvavidas cuando se trabaja con un desplazamiento lateral respecto al anclaje al usar una SRL.
- **Factor de seguridad:** altura de caída adicional que se agrega para asegurar una altura libre respecto de cualquier obstáculo después de una caída. Safewaze utiliza un factor de seguridad de 2 pies.
- **Altura de caída:** es la suma total de los valores de caída libre, distancia de detención, estiramiento del arnés, altura del trabajador (superficie de trabajo al anillo en D dorsal), distancia de caída pendular y factor de seguridad.

Se requiere una altura de caída adicional de 3 pies (1 m) para caídas desde una posición arrodillada o en cuclillas. Si existe un riesgo de caída pendular, la distancia vertical total de la caída será mayor que si la persona hubiera caído directamente debajo del punto de anclaje.

LOS SIGUIENTES DIAGRAMAS SON SOLO EJEMPLOS.

Nota: Los números utilizados en estos ejemplos se basan en un desplazamiento y retroceso CERO con el anclaje directamente encima o debajo, para representar un cálculo de altura de caída en línea. Consulte con una persona competente cuando trabaje en escenarios diferentes y cuando utilice equipos que no sean de Safewaze.



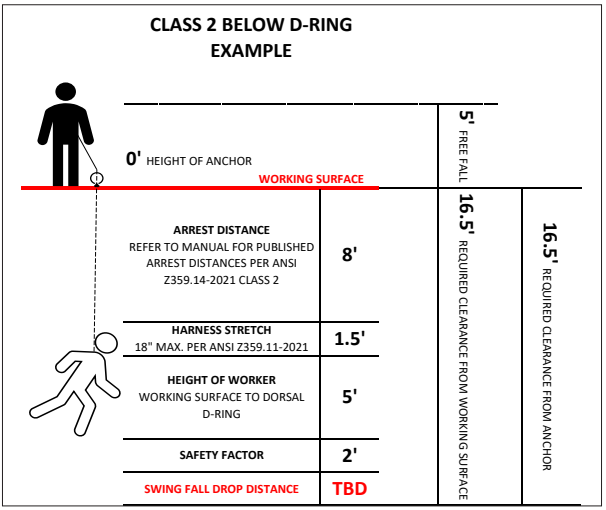


TABLA 1: DISTANCIAS DE DETENCIÓN REALES DE NORTHSTAR EDGE (DINÁMICA DE CLASE 1)

Modelo	Condiciones ambientales*	Humedad	Calor	Frío
022-5300	39" (99 cm)	36" (91 cm)	35" (89 cm)	35" (89 cm)
022-5301	35" (89 cm)	36" (91 cm)	41" (104 cm)	39" (99 cm)
022-5302	42" (107 cm)	35" (89 cm)	41" (104 cm)	41" (104 cm)

*La norma Z359.6-2016 del ANSI define el rango de temperatura ambiente como de 35 °F (2 °C) a 100 °F (38 °C).

TABLA 2: DISTANCIAS DE DETENCIÓN REALES DE NORTHSTAR COASTAL EDGE (DINÁMICA DE CLASE 1)				
Modelo	**Condiciones ambientales***	**Humedad**	**Calor**	**Frío**
022-5292	40" (102 cm)	38" (97 cm)	37" (94 cm)	41" (104 cm)
022-5293	41" (104 cm)	35" (89 cm)	41" (104 cm)	31" (79 cm)
022-5294	39" (99 cm)	38" (97 cm)	34" (86 cm)	34" (86 cm)

*La norma Z359.6-2016 del ANSI define el rango de temperatura ambiente como de 35 °F (2 °C) a 100 °F (38 °C).

TABLA 3: DISTANCIAS DE DETENCIÓN REALES DE NORTHSTAR EDGE (DINÁMICA DE CLASE 2)				
Modelo	**Condiciones ambientales***	**Humedad**	**Calor**	**Frío**
022-5300	76" (193 cm)	73" (185 cm)	78" (198 cm)	69" (175 cm)
022-5301	79" (201 cm)	73" (185 cm)	78" (198 cm)	68" (173 cm)
022-5302	76" (193 cm)	71" (180 cm)	75" (191 cm)	67" (170 cm)

*La norma Z359.6-2016 del ANSI define el rango de temperatura ambiente como de 35 °F (2 °C) a 100 °F (38 °C).

TABLA 4: DISTANCIAS DE DETENCIÓN REALES DE NORTHSTAR COASTAL EDGE (DINÁMICA DE CLASE 2)				
Modelo	**Condiciones ambientales***	**Humedad**	**Calor**	**Frío**
022-5292	86" (218 cm)	83" (211 cm)	92" (234 cm)	79" (201 cm)
022-5293	84" (213 cm)	82" (208 cm)	89" (226 cm)	78" (198 cm)
022-5294	85" (216 cm)	83" (211 cm)	91" (231 cm)	77" (196 cm)

*La norma Z359.6-2016 del ANSI define el rango de temperatura ambiente como de 35 °F (2 °C) a 100 °F (38 °C).

Altura de caída mínima necesaria (Minimum Required Fall Clearance, MRFC): las distancias de altura de caída mínimas necesarias tanto para Nothstar Edge como para Northstar Coastal Edge de Clase 1 (Tabla 5 y Tabla 6) y de Clase 2 (Tabla 7 y Tabla 8) se calculan utilizando la mayor distancia de detención real de las cuatro pruebas realizadas con cada modelo. Consulte el cuadro que coincide con el número de modelo del producto.

Nota: Una persona calificada debe determinar si las MRFC se pueden ajustar en función de las condiciones atmosféricas reales del lugar de trabajo o de otros factores.

TABLA 5: ALTURA DE CAÍDA MÍNIMA NECESARIA PARA NORTHSTAR EDGE (CLASE 1)		
Modelo	**Distancia de detención real**	**Altura de caída mínima necesaria**
022-5300	39" (99 cm)	6' 9" (2.1 m)
022-5301	41" (104 cm)	6' 11" (2.1 m)
022-5302	42" (107 cm)	7' (2.1 m)

TABLA 6: ALTURA DE CAÍDA MÍNIMA NECESARIA PARA NORTHSTAR COASTAL EDGE (CLASE 1)		
Modelo	**Distancia de detención real**	**Altura de caída mínima necesaria**
022-5292	41" (104 cm)	6' 11" (2.1 m)
022-5293	41" (104 cm)	6' 11" (2.1 m)
022-5294	39" (99 cm)	6' 9" (2.1 m)

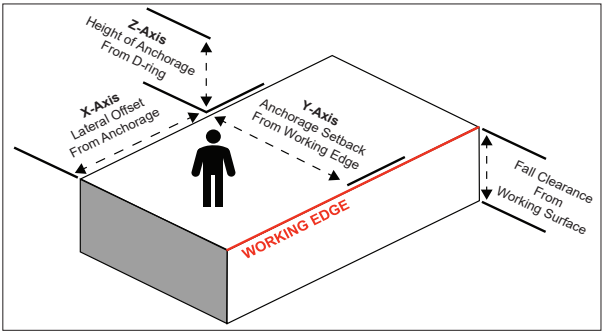
TABLA 7: ALTURA DE CAÍDA MÍNIMA NECESARIA PARA NORTHSTAR EDGE (CLASE 2)		
Modelo	**Distancia de detención real**	**Altura de caída mínima necesaria**
022-5300	78" (198 cm)	15' 0" (4.6 m)
022-5301	79" (201 cm)	15' 1" (4.6 m)
022-5302	76" (193 cm)	14' 10" (4.5 m)

TABLA 8: ALTURA DE CAÍDA MÍNIMA NECESARIA PARA NORTHSTAR COASTAL EDGE (CLASE 2)		
Modelo	**Distancia de detención real**	**Altura de caída mínima necesaria**
022-5292	92" (234 cm)	16' 2" (4.9 m)
022-5293	89 in (226 cm)	15' 11" (4.9 m)
022-5294	91" (231 cm)	16' 1" (4.9 m)

CUADROS DE ALTURAS DE CAÍDA

***Para el cuadro Uso por encima de la cabeza (blanco) de Clase 1**: Safewaze Northstar Edge y Northstar Coastal Edge cumplen con todos los requisitos del ANSI 130-310 lb (59-141 kg) y, según la OSHA, hasta 420 lb (191 kg) para una SRL de Clase 1 cuando se ancla por encima de la cabeza. Los valores de altura provienen de la combinación de la distancia de detención, el estiramiento del arnés, la distancia de caída pendular y un factor de seguridad de 2 pies. Esta tabla se calcula con base en la distancia máxima de detención de 42" establecida por el ANSI.

***Para el cuadro Uso debajo del anillo en D (negro) de Clase 2**: las series Northstar Edge y Northstar Coastal Edge se diseñaron y se probaron para usarse por debajo del anillo en D dorsal. El usuario debe tener en cuenta los requisitos adicionales de altura de caída cuando el punto de anclaje se encuentra debajo del anillo en D. Los valores de altura provienen de la combinación de la caída libre, la distancia de detención, el estiramiento del arnés, la altura del trabajador (desde la superficie de trabajo hasta el anillo en D dorsal), la distancia de caída pendular y un factor de seguridad de 2 pies. Esta tabla se calcula con base en la mayor distancia de detención real de las cuatro pruebas realizadas.



CLASE 1: NORTHSTAR EDGE

Tabla de alturas de caída: Northstar Edge de 20'-50' conforme con el ANSI (Clase 1) para uso por encima de la cabeza

Z-Axis: Height of Anchorage From D-Ring	X-Axis: Lateral Offset From Anchorage											
	0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**	**16'0" (4.9m)**	**18'0" (5.5m)**	**20'0" (6.1m)**	**22'0" (6.7m)**
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'6" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'4" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	8'11" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'8" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'6" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'5" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'8" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASE 1: NORTHSTAR COASTAL EDGE

Tabla de alturas de caída: Northstar Coastal Edge de 20'-50' conforme con el ANSI (Clase 1) para uso por encima de la cabeza

Z-Axis: Height of Anchorage From D-Ring												
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'6" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'4" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	8'11" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'8" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'6" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'5" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'8" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)
	0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**	**16'0" (4.9m)**	**18'0" (5.5m)**	**20'0" (6.1m)**	**22'0" (6.7m)**
X-Axis: Lateral Offset From Anchorage												

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASE 2: NORTHSTAR EDGE DE 20'

Tabla de alturas de caída: Northstar Edge de 20' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

Y-Axis: Anchorage Setback From Working Edge									
20'0" (6.1m)	15'0" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'7" (5.1m)	17'5" (5.3m)	18'4" (5.6m)	19'5" (5.9m)
15'0" (4.6m)	15'0" (4.6m)	15'2" (4.6m)	15'7" (4.7m)	16'2" (4.9m)	17'0" (5.2m)	18'1" (5.5m)	19'3" (5.9m)	20'7" (6.3m)
10'0" (3.0m)	15'0" (4.6m)	15'3" (4.6m)	15'10" (4.8m)	16'8" (5.1m)	17'10" (5.4m)	19'2" (5.8m)	20'8" (6.3m)	22'3" (6.8m)
5'0" (1.5m)	15'0" (4.6m)	15'5" (4.7m)	16'5" (5.0m)	17'10" (5.4m)	19'6" (5.9m)	21'3" (6.5m)	23'0" (7.0m)	24'11" (7.6m)
0'0" (0.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)
	0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**
X-Axis: Lateral Offset From Anchorage									

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution

X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASE 2: NORTHSTAR EDGE DE 30'

Tabla de alturas de caída: Northstar Edge de 30' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

Y-Axis: Anchorage Setback From Working Edge												
	30'0" (9.1m)	15'1" (4.6m)	15'2" (4.6m)	15'4" (4.7m)	15'8" (4.8m)	16'2" (4.9m)	16'9" (5.1m)	17'5" (5.3m)	18'2" (5.5m)	19'1" (5.8m)	20'1" (6.1m)
	25'0" (7.6m)	15'1" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'10" (4.8m)	16'4" (5.0m)	17'0" (5.2m)	17'10" (5.4m)	18'9" (5.7m)	19'9" (6.0m)	20'11" (6.4m)
	20'0" (6.1m)	15'1" (4.6m)	15'2" (4.6m)	15'6" (4.7m)	16'0" (4.9m)	16'8" (5.1m)	17'5" (5.3m)	18'5" (5.6m)	19'6" (5.9m)	20'8" (6.3m)	22'0" (6.7m)
	15'0" (4.6m)	15'1" (4.6m)	15'3" (4.6m)	15'7" (4.8m)	16'3" (5.0m)	17'1" (5.2m)	18'1" (5.5m)	19'4" (5.9m)	20'7" (6.3m)	22'0" (6.7m)	23'6" (7.2m)
	10'0" (3.0m)	15'1" (4.6m)	15'3" (4.7m)	15'10" (4.8m)	16'9" (5.1m)	17'11" (5.5m)	19'3" (5.9m)	20'9" (6.3m)	22'4" (6.8m)	23'11" (7.3m)	25'8" (7.8m)
	5'0" (1.5m)	15'1" (4.6m)	15'6" (4.7m)	16'6" (5.0m)	17'11" (5.5m)	19'6" (6.0m)	21'3" (6.5m)	23'1" (7.0m)	24'11" (7.6m)	26'10" (8.2m)	28'9" (8.8m)
	0'0" (0.0m)	15'1" (4.6m)	17'1" (5.2m)	19'1" (5.8m)	21'1" (6.4m)	23'1" (7.0m)	25'1" (7.6m)	27'1" (8.3m)	29'1" (8.9m)	31'1" (9.5m)	33'1" (10.1m)
		0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)
	X-Axis: Lateral Offset From Anchorage										

X'X" (X.Xm)	Safe Work Zone	X'X" (X.Xm)	WARNING!
X'X" (X.Xm)	Use Caution	WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

CLASE 2: NORTHSTAR EDGE DE 50'

Tabla de alturas de caída: Northstar Edge de 50' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

Y-Axis: Anchorage Setback From Working Edge												
	50'0" (15.2m)	14'10" (4.5m)	14'10" (4.5m)	14'12" (4.6m)	15'2" (4.6m)	15'6" (4.7m)	15'10" (4.8m)	16'3" (5.0m)	16'9" (5.1m)	17'4" (5.3m)	18'0" (5.5m)	18'8" (5.7m)	19'5" (5.9m)
	45'0" (13.7m)	14'10" (4.5m)	14'10" (4.5m)	15'0" (4.6m)	15'3" (4.6m)	15'6" (4.7m)	15'11" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'7" (5.4m)	18'4" (5.6m)	19'1" (5.8m)	19'11" (6.1m)
	40'0" (12.2m)	14'10" (4.5m)	14'11" (4.5m)	15'0" (4.6m)	15'3" (4.7m)	15'7" (4.8m)	16'1" (4.9m)	16'7" (5.1m)	17'3" (5.2m)	17'11" (5.5m)	18'8" (5.7m)	19'7" (6.0m)	20'6" (6.2m)
	35'0" (10.7m)	14'10" (4.5m)	14'11" (4.5m)	15'1" (4.6m)	15'4" (4.7m)	15'9" (4.8m)	16'3" (4.9m)	16'10" (5.1m)	17'6" (5.3m)	18'4" (5.6m)	19'2" (5.8m)	20'2" (6.1m)	21'2" (6.5m)
	30'0" (9.1m)	14'10" (4.5m)	14'11" (4.5m)	15'1" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'5" (5.0m)	17'2" (5.2m)	17'11" (5.5m)	18'10" (5.7m)	19'10" (6.0m)	20'11" (6.4m)	22'0" (6.7m)
	25'0" (7.6m)	14'10" (4.5m)	14'11" (4.5m)	15'2" (4.6m)	15'6" (4.7m)	16'1" (4.9m)	16'9" (5.1m)	17'7" (5.4m)	18'6" (5.6m)	19'6" (5.9m)	20'8" (6.3m)	21'10" (6.7m)	23'2" (7.1m)
	20'0" (6.1m)	14'10" (4.5m)	14'11" (4.6m)	15'3" (4.6m)	15'9" (4.8m)	16'4" (5.0m)	17'2" (5.2m)	18'2" (5.5m)	19'3" (5.9m)	20'5" (6.2m)	21'9" (6.6m)	23'1" (7.0m)	24'7" (7.5m)
	15'0" (4.6m)	14'10" (4.5m)	15'0" (4.6m)	15'4" (4.7m)	16'0" (4.8m)	16'10" (5.1m)	17'10" (5.4m)	19'0" (5.8m)	20'4" (6.2m)	21'9" (6.6m)	23'3" (7.1m)	24'10" (7.6m)	26'5" (8.1m)
	10'0" (3.0m)	14'10" (4.5m)	15'0" (4.6m)	15'7" (4.8m)	16'6" (5.0m)	17'8" (5.4m)	19'0" (5.8m)	20'5" (6.2m)	22'0" (6.7m)	23'8" (7.2m)	25'5" (7.7m)	27'2" (8.3m)	29'0" (8.8m)
	5'0" (1.5m)	14'10" (4.5m)	15'3" (4.6m)	16'3" (4.9m)	17'8" (5.4m)	19'3" (5.9m)	21'0" (6.4m)	22'10" (7.0m)	24'8" (7.5m)	26'7" (8.1m)	28'6" (8.7m)	30'5" (9.3m)	32'5" (9.9m)
	0'0" (0.0m)	14'10" (4.5m)	16'10" (5.1m)	18'10" (5.7m)	20'10" (6.3m)	22'10" (7m)	24'10" (7.6m)	26'10" (8.2m)	28'10" (8.8m)	30'10" (9.4m)	32'10" (10m)	34'10" (10.6m)	36'10" (11.2m)
		0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
	X-Axis: Lateral Offset From Anchorage												

X'X" (X.Xm)	Safe Work Zone	X'X" (X.Xm)	WARNING!
X'X" (X.Xm)	Use Caution	WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

CLASE 2: NORTHSTAR COASTAL EDGE DE 20'

Tabla de alturas de caída: Northstar Coastal Edge de 20' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

Y-Axis: Anchorage Setback From Working Edge									
	20'0" (6.1m)	16'2" (4.9m)	16'3" (5.0m)	16'7" (5.1m)	17'1" (5.2m)	17'9" (5.4m)	18'6" (5.7m)	19'6" (5.9m)	20'7" (6.3m)
	15'0" (4.6m)	16'2" (4.9m)	16'4" (5.0m)	16'8" (5.1m)	17'4" (5.3m)	18'2" (5.5m)	19'2" (5.9m)	20'5" (6.2m)	21'8" (6.6m)
	10'0" (3.0m)	16'2" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'10" (5.4m)	19'0" (5.8m)	20'4" (6.2m)	21'10" (6.6m)	23'5" (7.1m)
	5'0" (1.5m)	16'2" (4.9m)	16'7" (5.0m)	17'7" (5.4m)	19'0" (5.8m)	20'7" (6.3m)	22'4" (6.8m)	24'2" (7.4m)	26'1" (7.9m)
	0'0" (0.0m)	16'2" (4.9m)	18'2" (5.5m)	20'2" (6.2m)	22'2" (6.8m)	24'2" (7.4m)	26'2" (8.0m)	28'2" (8.6m)	30'2" (9.2m)
		0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**
	X-Axis: Lateral Offset From Anchorage								

X'X" (X.Xm)	**Safe Work Zone**
X'X" (X.Xm)	**Use Caution**
X'X" (X.Xm)	**WARNING!**

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASE 2: NORTHSTAR COASTAL EDGE DE 30'

Tabla de alturas de caída: Northstar Coastal Edge de 30' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

Y-Axis: Anchorage Setback From Working Edge										
	30'0" (9.1m)	15'11" (4.9m)	16'0" (4.9m)	16'2" (4.9m)	16'6" (5.0m)	17'0" (5.2m)	17'7" (5.3m)	18'3" (5.6m)	19'0" (5.8m)	19'11" (6.1m)	20'11" (6.4m)
	25'0" (7.6m)	15'11" (4.9m)	16'0" (4.9m)	16'3" (4.9m)	16'8" (5.1m)	17'2" (5.2m)	17'10" (5.4m)	18'8" (5.7m)	19'7" (6.0m)	20'7" (6.3m)	21'9" (6.6m)
	20'0" (6.1m)	15'11" (4.9m)	16'0" (4.9m)	16'4" (5.0m)	16'10" (5.1m)	17'6" (5.3m)	18'3" (5.6m)	19'3" (5.9m)	20'4" (6.2m)	21'6" (6.6m)	22'10" (7.0m)
	15'0" (4.6m)	15'11" (4.9m)	16'1" (4.9m)	16'5" (5.0m)	17'1" (5.2m)	17'11" (5.5m)	18'11" (5.8m)	20'2" (6.1m)	21'5" (6.5m)	22'10" (7.0m)	24'4" (7.4m)
	10'0" (3.0m)	15'11" (4.9m)	16'1" (4.9m)	16'8" (5.1m)	17'7" (5.4m)	18'9" (5.7m)	20'1" (6.1m)	21'6" (6.6m)	23'1" (7.0m)	24'9" (7.6m)	26'6" (8.1m)
	5'0" (1.5m)	15'11" (4.9m)	16'4" (5.0m)	17'4" (5.3m)	18'9" (5.7m)	20'4" (6.2m)	22'1" (6.7m)	23'11" (7.3m)	25'9" (7.9m)	27'8" (8.4m)	29'7" (9.0m)
	0'0" (0.0m)	15'11" (4.9m)	17'11" (5.5m)	19'11" (6.1m)	21'11" (6.7m)	23'11" (7.3m)	25'11" (7.9m)	27'11" (8.5m)	29'11" (9.1m)	31'11" (9.7m)	33'11" (10.3m)
		0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**	**16'0" (4.9m)**	**18'0" (5.5m)**
	X-Axis: Lateral Offset From Anchorage										

X'X" (X.Xm)	**Safe Work Zone**
X'X" (X.Xm)	**Use Caution**
X'X" (X.Xm)	**WARNING!**

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

CLASE 2: NORTHSTAR COASTAL EDGE DE 50'

Tabla de alturas de caída: Northstar Coastal Edge de 50' conforme con el ANSI (Clase 2) para uso por debajo del anillo en D

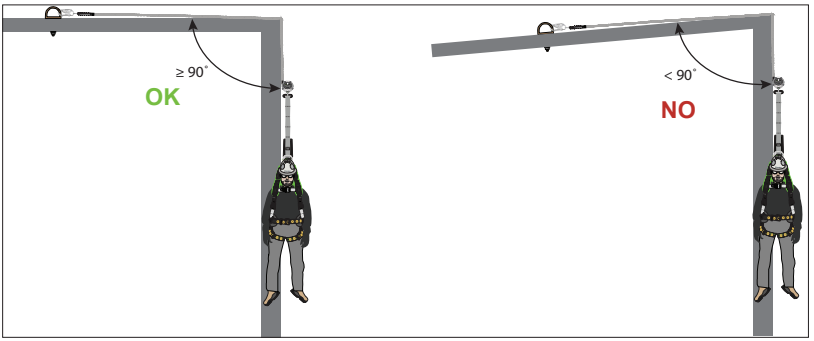
Y-Axis: Anchorage Setback From Working Edge												
50'0" (15.2m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (4.9m)	16'5" (5.0m)	16'8" (5.1m)	17'0" (5.2m)	17'6" (5.3m)	18'0" (5.5m)	18'7" (5.7m)	19'2" (5.8m)	19'11" (6.1m)	20'8" (6.3m)
45'0" (13.7m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (4.9m)	16'5" (5.0m)	16'9" (5.1m)	17'2" (5.2m)	17'7" (5.4m)	18'2" (5.5m)	18'10" (5.7m)	19'6" (5.9m)	20'4" (6.2m)	21'2" (6.4m)
40'0" (12.2m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (5.0m)	16'6" (5.0m)	16'10" (5.1m)	17'3" (5.3m)	17'10" (5.4m)	18'5" (5.6m)	19'2" (5.8m)	19'11" (6.1m)	20'9" (6.3m)	21'8" (6.6m)
35'0" (10.7m)	16'1" (4.9m)	16'1" (4.9m)	16'3" (5.0m)	16'7" (5.0m)	16'11" (5.2m)	17'5" (5.3m)	18'1" (5.5m)	18'9" (5.7m)	19'6" (6.0m)	20'5" (6.2m)	21'4" (6.5m)	22'5" (6.8m)
30'0" (9.1m)	16'1" (4.9m)	16'1" (4.9m)	16'4" (5.0m)	16'8" (5.1m)	17'1" (5.2m)	17'8" (5.4m)	18'4" (5.6m)	19'2" (5.8m)	20'1" (6.1m)	21'0" (6.4m)	22'1" (6.7m)	23'3" (7.1m)
25'0" (7.6m)	16'1" (4.9m)	16'2" (4.9m)	16'4" (5.0m)	16'9" (5.1m)	17'4" (5.3m)	18'0" (5.5m)	18'9" (5.7m)	19'8" (6.0m)	20'9" (6.3m)	21'10" (6.7m)	23'1" (7.0m)	24'4" (7.4m)
20'0" (6.1m)	16'1" (4.9m)	16'2" (4.9m)	16'5" (5.0m)	16'11" (5.2m)	17'7" (5.4m)	18'5" (5.6m)	19'4" (5.9m)	20'6" (6.2m)	21'8" (6.6m)	22'11" (7.0m)	24'4" (7.4m)	25'9" (7.9m)
15'0" (4.6m)	16'1" (4.9m)	16'2" (4.9m)	16'7" (5.1m)	17'2" (5.2m)	18'1" (5.5m)	19'1" (5.8m)	20'3" (6.2m)	21'7" (6.6m)	23'0" (7.0m)	24'6" (7.5m)	26'1" (7.9m)	27'8" (8.4m)
10'0" (3.0m)	16'1" (4.9m)	16'3" (5.0m)	16'10" (5.1m)	17'9" (5.4m)	18'10" (5.7m)	20'2" (6.2m)	21'8" (6.6m)	23'3" (7.1m)	24'11" (7.6m)	26'8" (8.1m)	28'5" (8.7m)	30'3" (9.2m)
5'0" (1.5m)	16'1" (4.9m)	16'5" (5.0m)	17'5" (5.3m)	18'10" (5.7m)	20'6" (6.2m)	22'3" (6.8m)	24'1" (7.3m)	25'11" (7.9m)	27'10" (8.5m)	29'9" (9.1m)	31'8" (9.7m)	33'7" (10.2m)
0'0" (0.0m)	16'1" (4.9m)	18'1" (5.5m)	20'1" (6.1m)	22'1" (6.7m)	24'1" (7.3m)	26'1" (7.9m)	28'1" (8.5m)	30'1" (9.2m)	32'1" (9.8m)	34'1" (10.4m)	36'1" (11.0m)	38'1" (11.6m)
	0'0" (0.0m)	**2'0" (0.6m)**	**4'0" (1.2m)**	**6'0" (1.8m)**	**8'0" (2.4m)**	**10'0" (3.0m)**	**12'0" (3.7m)**	**14'0" (4.3m)**	**16'0" (4.9m)**	**18'0" (5.5m)**	**20'0" (6.1m)**	**22'0" (6.7m)**
	X-Axis: Lateral Offset From Anchorage											

X'X" (X.Xm)	Safe Work Zone	X'X" (X.Xm)	WARNING!
X'X" (X.Xm)	Use Caution	WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH	

El uso de una SRL en bordes externos requiere precauciones adicionales que el usuario debe observar:

- Una caída sobre un borde puede requerir medidas de rescate especializadas.
- El punto de anclaje de las SRL en bordes externos debe ubicarse a la misma altura o por encima del borde sobre el cual puede producirse una caída. Un punto de anclaje por debajo del nivel del borde es peligroso, ya que hace que la línea salvavidas se redireccione con un ángulo menor que 90 grados.
- El usuario no debe trabajar en el lado opuesto de una abertura respecto al punto de anclaje de la SRL de borde externo.
- El ángulo de redirección de la línea salvavidas en un borde sobre el cual puede producirse una caída debe ser de, al menos, 90 grados.

PUNTO DE ANCLAJE PARA SRL-LE



- **Caídas pendulares**: antes de la instalación o el uso, se deben tomar medidas para eliminar o minimizar todos los riesgos de caídas pendulares. Las caídas pendulares ocurren cuando el anclaje no está directamente sobre el lugar donde ocurre la caída. Siempre trabaje lo más cerca posible o en línea con el punto de anclaje. Las caídas pendulares aumentan significativamente la probabilidad de sufrir lesiones graves o la muerte en caso de una caída. Asegúrese de que una persona competente incluya los cálculos de una caída pendular si existe el peligro.

- **Distancia de caída pendular**: la altura que se agrega debido al cable que se despliega cuando se trabaja en un ángulo lateral al anclaje.

CAÍDA PENDULAR

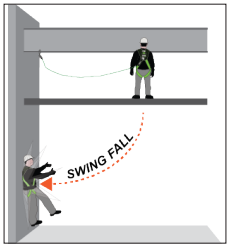


Tabla de distancias de caída pendular: uso sobre la cabeza (SRL)

Z-Axis: Height of Anchorage From D-Ring

	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)
100'0" (30.5m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'5" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'10" (1.2m)	4'5" (1.3m)
95'0" (29.0m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'1" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'0" (1.2m)	4'7" (1.4m)
90'0" (27.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'1" (0.3m)	1'5" (0.4m)	1'9" (0.5m)	2'2" (0.6m)	2'8" (0.8m)	3'2" (1.0m)	3'8" (1.1m)	4'3" (1.3m)	4'10" (1.5m)
85'0" (25.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'6" (0.5m)	1'11" (0.6m)	2'4" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'11" (1.2m)	4'6" (1.4m)	5'2" (1.6m)
80'0" (24.4m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'1" (1.3m)	4'9" (1.4m)	5'5" (1.6m)
75'0" (22.9m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'2" (0.6m)	2'7" (0.8m)	3'2" (1.0m)	3'9" (1.1m)	4'5" (1.3m)	5'1" (1.6m)	5'9" (1.8m)
70'0" (21.3m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'9" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'10" (0.6m)	2'3" (0.7m)	2'10" (0.9m)	3'5" (1.0m)	4'0" (1.2m)	4'8" (1.4m)	5'5" (1.6m)	6'2" (1.9m)
65'0" (19.8m)	0'0" (0.0m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'1" (0.3m)	1'6" (0.5m)	1'11" (0.6m)	2'5" (0.7m)	3'0" (0.9m)	3'7" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'9" (1.8m)	6'7" (2.0m)
60'0" (18.3m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'7" (0.5m)	2'1" (0.6m)	2'8" (0.8m)	3'3" (1.0m)	3'11" (1.2m)	4'7" (1.4m)	5'5" (1.6m)	6'3" (1.9m)	7'1" (2.2m)
55'0" (16.8m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'9" (0.5m)	2'3" (0.7m)	2'10" (0.9m)	3'6" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'10" (1.8m)	6'9" (2.0m)	7'8" (2.3m)
50'0" (15.2m)	0'0" (0.0m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'8" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'11" (0.6m)	2'6" (0.8m)	3'2" (1.0m)	3'10" (1.2m)	4'8" (1.4m)	5'6" (1.7m)	6'4" (1.9m)	7'4" (2.2m)	8'4" (2.5m)
45'0" (13.7m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'2" (0.6m)	2'9" (0.8m)	3'6" (1.1m)	4'3" (1.3m)	5'1" (1.6m)	6'0" (1.8m)	7'0" (2.1m)	8'0" (2.4m)	9'1" (2.8m)
40'0" (12.2m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'10" (0.2m)	1'3" (0.4m)	1'9" (0.5m)	2'5" (0.7m)	3'1" (0.9m)	3'10" (1.2m)	4'9" (1.4m)	5'8" (1.7m)	6'8" (2.0m)	7'8" (2.3m)	8'10" (2.7m)	10'0" (3.0m)
35'0" (10.7m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'11" (0.3m)	1'5" (0.4m)	2'0" (0.6m)	2'8" (0.8m)	3'6" (1.1m)	4'4" (1.3m)	5'4" (1.6m)	6'4" (1.9m)	7'5" (2.3m)	8'7" (2.6m)	9'10" (3.0m)	11'1" (3.4m)
30'0" (9.1m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'7" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'4" (0.7m)	3'1" (0.9m)	4'0" (1.2m)	5'0" (1.5m)	6'1" (1.8m)	7'2" (2.2m)	8'5" (2.6m)	9'8" (3.0m)	11'0" (3.4m)	12'5" (3.8m)
25'0" (7.6m)	0'0" (0.0m)	0'1" (0.0m)	0'4" (0.1m)	0'9" (0.2m)	1'3" (0.4m)	1'11" (0.6m)	2'9" (0.8m)	3'8" (1.1m)	4'8" (1.4m)	5'10" (1.8m)	7'0" (2.1m)	8'4" (2.5m)	9'8" (2.9m)	11'1" (3.4m)	12'6" (3.8m)	14'1" (4.3m)
20'0" (6.1m)	0'0" (0.0m)	0'1" (0.0m)	0'5" (0.1m)	0'11" (0.3m)	1'6" (0.5m)	2'4" (0.7m)	3'4" (1.0m)	4'5" (1.3m)	5'7" (1.7m)	6'11" (2.1m)	8'3" (2.5m)	9'9" (3.0m)	11'3" (3.4m)	12'10" (3.9m)	14'5" (4.4m)	16'1" (4.9m)
15'0" (4.6m)	0'0" (0.0m)	0'2" (0.1m)	0'6" (0.2m)	1'2" (0.4m)	2'0" (0.6m)	3'0" (0.9m)	4'3" (1.3m)	5'6" (1.7m)	6'11" (2.1m)	8'5" (2.6m)	10'0" (3.0m)	11'8" (3.5m)	13'4" (4.1m)	15'0" (4.6m)	16'9" (5.1m)	18'6" (5.7m)
10'0" (3.0m)	0'0" (0.0m)	0'2" (0.1m)	0'9" (0.2m)	1'8" (0.5m)	2'10" (0.9m)	4'2" (1.3m)	5'7" (1.7m)	7'2" (2.2m)	8'10" (2.7m)	10'7" (3.2m)	12'4" (3.8m)	14'2" (4.3m)	16'0" (4.9m)	17'10" (5.4m)	19'9" (6.0m)	21'7" (6.6m)
5'0" (1.5m)	0'0" (0.0m)	0'5" (0.1m)	1'5" (0.4m)	2'10" (0.9m)	4'5" (1.4m)	6'2" (1.9m)	8'0" (2.4m)	9'10" (3.0m)	11'9" (3.6m)	13'8" (4.2m)	15'7" (4.8m)	17'7" (5.4m)	19'6" (5.9m)	21'6" (6.5m)	23'5" (7.1m)	25'5" (7.7m)
0'0" (0.0m)	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution
X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

Tabla de distancias de caída pendular: uso por debajo del anillo en D, anclado a la altura de los pies (SRL)

Y-Axis: Anchorage Setback From Working Edge	0'0" (0.0m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'5" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'10" (1.2m)	4'5" (1.3m)
100'0" (30.5m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'5" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'10" (1.2m)	4'5" (1.3m)
95'0" (29.0m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'0" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'1" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'0" (1.2m)	4'7" (1.4m)
90'0" (27.4m)	0'0" (0.0m)	0'1" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'1" (0.3m)	1'5" (0.4m)	1'9" (0.5m)	2'2" (0.6m)	2'8" (0.8m)	3'2" (1.0m)	3'8" (1.1m)	4'3" (1.3m)	4'10" (1.5m)
85'0" (25.9m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'6" (0.5m)	1'11" (0.6m)	2'4" (0.7m)	2'10" (0.9m)	3'4" (1.0m)	3'11" (1.2m)	4'6" (1.4m)	5'2" (1.6m)
80'0" (24.4m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'3" (0.4m)	1'7" (0.5m)	2'0" (0.6m)	2'6" (0.8m)	3'0" (0.9m)	3'6" (1.1m)	4'1" (1.3m)	4'9" (1.4m)	5'5" (1.6m)
75'0" (22.9m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'8" (0.5m)	2'2" (0.6m)	2'7" (0.8m)	3'2" (1.0m)	3'9" (1.1m)	4'5" (1.3m)	5'1" (1.6m)	5'9" (1.8m)
70'0" (21.3m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'5" (0.1m)	0'9" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'10" (0.6m)	2'3" (0.7m)	2'10" (0.9m)	3'5" (1.0m)	4'0" (1.2m)	4'8" (1.4m)	5'5" (1.6m)	6'2" (1.9m)
65'0" (19.8m)	0'0" (0.0m)	0'1" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'9" (0.2m)	1'1" (0.3m)	1'6" (0.5m)	1'11" (0.6m)	2'5" (0.7m)	3'0" (0.9m)	3'7" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'9" (1.8m)	6'7" (2.0m)
60'0" (18.3m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'6" (0.2m)	0'10" (0.2m)	1'2" (0.4m)	1'7" (0.5m)	2'1" (0.6m)	2'8" (0.8m)	3'3" (1.0m)	3'11" (1.2m)	4'7" (1.4m)	5'5" (1.6m)	6'3" (1.9m)	7'1" (2.2m)
55'0" (16.8m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'7" (0.2m)	0'11" (0.3m)	1'4" (0.4m)	1'9" (0.5m)	2'3" (0.7m)	2'10" (0.9m)	3'6" (1.1m)	4'3" (1.3m)	5'0" (1.5m)	5'10" (1.8m)	6'9" (2.0m)	7'8" (2.3m)
50'0" (15.2m)	0'0" (0.0m)	0'2" (0.1m)	0'4" (0.1m)	0'8" (0.2m)	1'0" (0.3m)	1'5" (0.4m)	1'11" (0.6m)	2'6" (0.8m)	3'2" (1.0m)	3'10" (1.2m)	4'8" (1.4m)	5'6" (1.7m)	6'4" (1.9m)	7'4" (2.2m)	8'4" (2.5m)
45'0" (13.7m)	0'0" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'8" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'2" (0.6m)	2'9" (0.8m)	3'6" (1.1m)	4'3" (1.3m)	5'1" (1.6m)	6'0" (1.8m)	7'0" (2.1m)	8'0" (2.4m)	9'1" (2.8m)
40'0" (12.2m)	0'0" (0.0m)	0'2" (0.1m)	0'5" (0.1m)	0'10" (0.2m)	1'3" (0.4m)	1'9" (0.5m)	2'5" (0.7m)	3'1" (0.9m)	3'10" (1.2m)	4'9" (1.4m)	5'8" (1.7m)	6'8" (2.0m)	7'8" (2.3m)	8'10" (2.7m)	10'0" (3.0m)
35'0" (10.7m)	0'0" (0.0m)	0'3" (0.1m)	0'6" (0.2m)	0'11" (0.3m)	1'5" (0.4m)	2'0" (0.6m)	2'8" (0.8m)	3'6" (1.1m)	4'4" (1.3m)	5'4" (1.6m)	6'4" (1.9m)	7'5" (2.3m)	8'7" (2.6m)	9'10" (3.0m)	11'1" (3.4m)
30'0" (9.1m)	0'0" (0.0m)	0'3" (0.1m)	0'7" (0.2m)	1'1" (0.3m)	1'7" (0.5m)	2'4" (0.7m)	3'1" (0.9m)	4'0" (1.2m)	5'0" (1.5m)	6'1" (1.8m)	7'2" (2.2m)	8'5" (2.6m)	9'8" (3.0m)	11'0" (3.4m)	12'5" (3.8m)
25'0" (7.6m)	0'0" (0.0m)	0'4" (0.1m)	0'9" (0.2m)	1'3" (0.4m)	1'11" (0.6m)	2'9" (0.8m)	3'8" (1.1m)	4'8" (1.4m)	5'10" (1.8m)	7'0" (2.1m)	8'4" (2.5m)	9'8" (2.9m)	11'1" (3.4m)	12'6" (3.8m)	14'1" (4.3m)
20'0" (6.1m)	0'0" (0.0m)	0'5" (0.1m)	0'11" (0.3m)	1'6" (0.5m)	2'4" (0.7m)	3'4" (1.0m)	4'5" (1.3m)	5'7" (1.7m)	6'11" (2.1m)	8'3" (2.5m)	9'9" (3.0m)	11'3" (3.4m)	12'10" (3.9m)	14'5" (4.4m)	16'1" (4.9m)
15'0" (4.6m)	0'0" (0.0m)	0'6" (0.2m)	1'2" (0.4m)	2'0" (0.6m)	3'0" (0.9m)	4'3" (1.3m)	5'6" (1.7m)	6'11" (2.1m)	8'5" (2.6m)	10'0" (3.0m)	11'8" (3.5m)	13'4" (4.1m)	15'0" (4.6m)	16'9" (5.1m)	18'6" (5.7m)
10'0" (3.0m)	0'0" (0.0m)	0'9" (0.2m)	1'8" (0.5m)	2'10" (0.9m)	4'2" (1.3m)	5'7" (1.7m)	7'2" (2.2m)	8'10" (2.7m)	10'7" (3.2m)	12'4" (3.8m)	14'2" (4.3m)	16'0" (4.9m)	17'10" (5.4m)	19'9" (6.0m)	21'7" (6.6m)
5'0" (1.5m)	0'0" (0.0m)	1'5" (0.4m)	2'10" (0.9m)	4'5" (1.4m)	6'2" (1.9m)	8'0" (2.4m)	9'10" (3.0m)	11'9" (3.6m)	13'8" (4.2m)	15'7" (4.8m)	17'7" (5.4m)	19'6" (5.9m)	21'6" (6.5m)	23'5" (7.1m)	25'5" (7.7m)
0'0" (0.0m)	0'0" (0.0m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)
	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)	24'0" (7.3m)	26'0" (7.9m)	28'0" (8.5m)	30'0" (9.1m)

X-Axis: Lateral Offset From Anchorage

X'X" (X.Xm)	Safe Work Zone
X'X" (X.Xm)	Use Caution
X'X" (X.Xm)	WARNING!

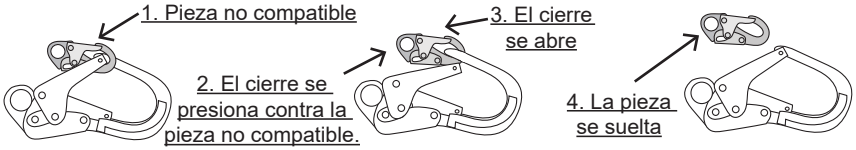
WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

9.0 COMPATIBILIDAD DE LOS CONECTORES

- El equipo de Safewaze está diseñado y probado con los componentes o sistemas asociados de Safewaze. Si se realizan sustituciones o reemplazos, asegúrese de que todos los componentes cumplan con los requisitos aplicables del ANSI. Lea y siga las instrucciones del fabricante para todos los componentes y subsistemas de su PFAS. Si no se siguen estas indicaciones, se puede poner en riesgo la compatibilidad del equipo y afectar la seguridad y la fiabilidad del sistema.
- Los conectores son compatibles con los elementos de conexión cuando están diseñados para trabajar juntos de modo que sus tamaños y formas no provoquen la apertura accidental de los mecanismos de cierre, sin importar su orientación.
- Los conectores (ganchos, mosquetones y anillos en D) deben poder soportar, al menos, 5,000 lb (22 kN).
- Los conectores deben ser compatibles con el anclaje u otros componentes del sistema.
- No utilice equipo que no sea compatible. Los conectores no compatibles pueden soltarse accidentalmente.
- Los conectores deben ser compatibles en tamaño, forma y resistencia.

- Los ganchos de cierre automático y los mosquetones son obligatorios según las normas de la OSHA.
- Algunos conectores especiales tienen requisitos adicionales. Comuníquese con Safewaze si tiene alguna pregunta sobre la compatibilidad.

DESENGANCHE ACCIDENTAL



Si se usa un conector que sea demasiado pequeño o tenga una forma irregular (1) para conectar un gancho de cierre o un mosquetón, puede ocurrir que el conector fuerce la apertura del cierre del gancho o del mosquetón. Cuando se aplica fuerza, el cierre del gancho o del mosquetón presiona contra la parte no compatible (2) y fuerza la apertura del cierre (3). Esto permite que el gancho de cierre o el mosquetón se suelte (4) del punto de conexión.

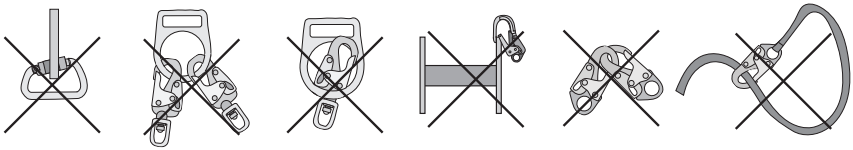
▶ 10.0 CONEXIONES

Los ganchos de cierre y los mosquetones utilizados con este equipo deben ser de doble cierre y/o de cierre giratorio. Asegúrese de que todas las conexiones sean compatibles en tamaño, forma y resistencia. No utilice equipo que no sea compatible. Verifique que todos los conectores estén completamente cerrados y bloqueados.

Los conectores de Safewaze (ganchos, mosquetones y anillos en D) están diseñados para usarse únicamente según las especificaciones del manual de cada producto. Consulte la figura a continuación para ver ejemplos de conexiones inapropiadas. No conecte ganchos de cierre ni mosquetones:

- a un anillo en D al que ya esté unido otro conector.
- de manera que se genere una carga sobre el cierre (excepto en ganchos de sujeción de retorno).
- en una conexión falsa, donde partes salientes del gancho de cierre o del mosquetón se enganchen al anclaje y, sin confirmación visual, parezca que están completamente sujetos al punto de anclaje.
- entre sí.
- enrollando la línea salvavidas de correa tejida alrededor de un anclaje y asegurándola a la misma línea salvavidas, excepto en los modelos con sujeción de retorno.
- a cualquier objeto cuya forma o tamaño impidan que el gancho de cierre o el mosquetón se cierre y bloquee correctamente, o que pueda provocar liberación accidental.
- de manera que no permita que el conector se alinee correctamente cuando está cargado.

CONEXIONES INAPROPIADAS



Los ganchos de cierre de boca ancha no deben conectarse a anillos en D de tamaño estándar ni a objetos similares que generen carga sobre el cierre si el gancho o el anillo en D se tuercen o giran, a menos que el gancho de cierre cumpla con la norma Z359.1-2020 o Z359.12-2019 del ANSI e incluya un cierre de 3,600 lb (16 kN).

▶ 11.0 INSTALACIÓN/OPERACIÓN DE LAS SRL NORTHSTAR EDGE Y SRL NORTHSTAR COASTAL EDGE

Paso 1: Revise la SRL antes de utilizarla.

Paso 2: Fije el mosquetón de la SRL a un punto de anclaje homologado y conecte su gancho de seguridad al anillo en D dorsal de un arnés de cuerpo entero.

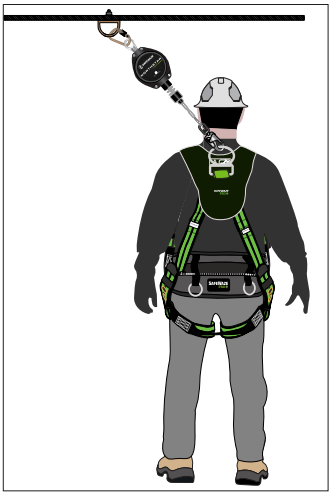
Paso 3: Una vez que esté completamente conectada, el usuario puede moverse libremente dentro del área de trabajo recomendada. Cuando trabaje con una SRL, siempre permita que la línea salvavidas se retraiga hacia el dispositivo de forma controlada. No deje que se retraiga “libremente” hacia el interior del equipo.

Cuando se utiliza correctamente, la línea salvavidas de la SRL se extenderá y retraerá libremente, sin holguras ni trabas, a medida que el usuario se mueva a velocidades normales.

En caso de una caída, las SRL de Safewaze están equipadas con un sistema de frenado sensible a la velocidad. Este sistema se activará, detendrá la caída y absorberá gran parte de la energía generada por ella. Debido a este sistema de frenado, el usuario debe evitar movimientos bruscos o rápidos, ya que pueden hacer que la SRL se bloquee de forma accidental. Si el usuario realiza tareas cerca del límite de longitud de trabajo de la SRL, esta cuenta con una cuerda de reserva incorporada para reducir las fuerzas de detención de caídas.

En la siguiente figura, se muestra el arnés y la conexión al anclaje para las SRL Northstar Edge y Northstar Coastal Edge.

CONEXIONES DEL SISTEMA



Amarre de Clase 1 o Clase 2

Amarre SOLO de Clase 2

▶ 12.0 INSPECCIÓN/MANTENIMIENTO

El usuario debe contar con las instrucciones en todo momento para su referencia y registrar la fecha del primer uso en la página 2.

El usuario debe retirar inmediatamente el sistema del servicio si se detectan defectos o daños, si se utiliza un indicador visual de caída, o si se expone a fuerzas de detención de caídas.

Área de trabajo:

- Se debe inspeccionar el área de trabajo para garantizar que la ubicación no tenga daños, como, entre otros, escombros, grietas, podredumbre, desmoronamiento, deterioro estructural, óxido y cualquier material peligroso.
- Una persona competente debe determinar si la ubicación donde se realizará la instalación soportará las cargas previstas.

Frecuencia:

- Una persona competente, que no sea el usuario, debe inspeccionar la SRL al menos una vez al año.
- Durante la inspección, la persona competente debe tener en cuenta todas las aplicaciones y los peligros a los que pudo haber estado expuesto el equipo durante el uso.
- La persona competente debe registrar las inspecciones en el Registro de inspecciones que se incluye en este manual (página 28) o en las etiquetas de la tabla de inspección de cada producto individual. La persona competente debe anotar sus iniciales en el lugar correspondiente junto con el mes y el año en el que se realizó la inspección. Todas las etiquetas individuales del equipo deben tener las mismas iniciales.

FRECUENCIA DE LA INSPECCIÓN

Tipo de uso	Ejemplos de aplicación	Condiciones de uso	Frecuencia de la inspección por parte de la persona competente
Poco frecuente a leve	Rescates y espacios reducidos, mantenimiento en fábricas	Buenas condiciones de almacenamiento, uso en interiores o uso poco frecuente en exteriores, temperatura ambiente, entornos limpios	Anual
Moderado a frecuente	Transporte, construcciones residenciales, servicios, almacenes	Condiciones de almacenamiento razonables, uso en interiores y uso intenso en exteriores, todas las temperaturas, entornos limpios o polvorientos	Semestral a anual
Intensa a continua	Construcciones comerciales, petróleo y gas, minería	Condiciones de almacenamiento adversas, uso prolongado o continuo en exteriores, todas las temperaturas, entornos sucios	Trimestral a semestral

Indicaciones:

- Antes de cada uso, inspeccione la SRL en busca de posibles defectos, que incluyen, entre otros, partes faltantes, corrosión, deformación, picaduras, rebabas, superficies ásperas, bordes filosos, grietas, óxido, acumulaciones de pintura, calor excesivo, alteraciones y etiquetas faltantes o ilegibles. Inspeccione todos los componentes del dispositivo, incluidos la carcasa, los conectores, los sujetadores, las etiquetas y la línea salvavidas en toda su longitud.
- Antes de cada uso, el usuario debe inspeccionar y verificar que **cada componente individual** de la SRL esté en condiciones seguras para su uso:

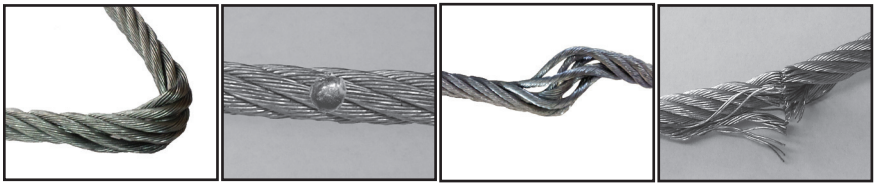
1. El cable de la unidad debe poder extenderse y retraerse de manera fluida.

b. Tire bruscamente de la línea salvavidas para probar su función de bloqueo.

c. La línea salvavidas debería bloquearse y, posteriormente, retraerse de manera fluida y completa hacia el interior de la unidad, sin vacilaciones ni interrupciones.

d. Inspeccione toda la línea salvavidas en toda su longitud para verificar si presenta algún daño, incluidos, entre otros, deshilachado, aplastamiento, "jaula de pájaro", exposición a productos químicos, salpicaduras de calor o soldadura, y torceduras. El usuario siempre debe usar guantes al inspeccionar la línea salvavidas para evitar lesiones en caso de que el cable esté dañado.

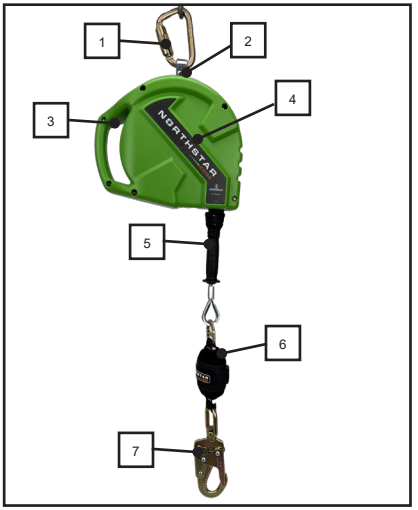
EJEMPLOS DE DAÑOS EN LOS CABLES



Mantenimiento:

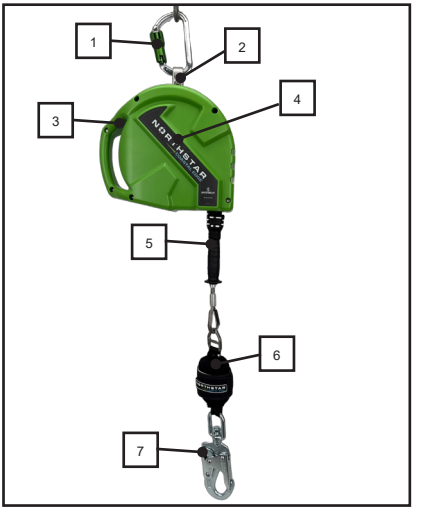
- **Reparaciones**: solo Safewaze, o las entidades a las que Safewaze autorizó por escrito, pueden hacer reparaciones al equipo de protección contra caídas de Safewaze.
- **Limpieza**: la SRL puede limpiarse con agua y jabón neutro. El usuario debe eliminar toda la suciedad, posibles sustancias corrosivas y contaminantes del sistema antes y después de cada uso. Nunca utilice ningún tipo de sustancia corrosiva para limpiar el sistema. El exceso de agua debe eliminarse con aire comprimido. El hardware puede secarse con un paño limpio y seco. No guarde el sistema húmedo o mojado. Permita que el equipo se seque completamente antes de guardarlo.
- **Almacenamiento**: antes de la instalación, guarde la SRL en un lugar fresco y seco donde no esté expuesta a luz intensa, calor extremo, humedad excesiva o materiales o productos químicos posiblemente corrosivos.
- **Vida útil**: La vida útil de la SRL depende de las condiciones de trabajo, el cuidado y las inspecciones realizadas. Siempre que el sistema y todos sus componentes pasen la inspección, puede permanecer en servicio.
- **Eliminación**: Deseche la SRL si la inspección revela una condición insegura o defectuosa. Si el sistema está dañado o no es apto para su uso, debe destruirse y cortarse la línea salvavidas para evitar una reutilización accidental.

INSPECCIÓN DE LOS COMPONENTES DE NORTHSTAR EDGE



1	Mosquetón
2	Rótula superior
3	Carcasa
4	Etiqueta
5	Mango/línea salvavidas
6	Amortiguador*
7	Gancho de cierre de la rótula

INSPECCIÓN DE LOS COMPONENTES DE NORTHSTAR COASTAL EDGE



1	Mosquetón
2	Rótula superior
3	Carcasa
4	Etiqueta
5	Mango/línea salvavidas
6	Amortiguador*
7	Gancho de cierre de la rótula

***Indicador de carga:**

13.0 ETIQUETAS

470-00308

SAFEWAZE
225 Wilshire Ave SW
Concord, NC 28025
USA
(800) 230-0319
www.safewaze.com

732388043149

MODEL #: 022-5300
DESCRIPTION: Northstar Edge 20' Cable SRL

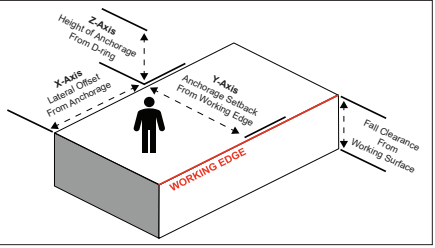
SERIAL #: XXXXXXX MFG DATE: XX/XXXX
SPECIFICATIONS: Materials: 3/16" galvanized steel cable, steel hardware, thermoplastic polymer housing, polyester shock pack
Working length: 20 ft. (6.1 m)
Capacity: ANSI 130-310 lbs. (59-141 kg), OSHA 420 lbs. (191 kg)
*including clothing, tools, & equipment
Average arrest force: 1350 lbs. (612.35 kg)
Max. arrest force: 1800 lbs. (816.47 kg)
Actual arrest distance: ≤ 78 in. (198 cm)
Max. free fall distance: 72 in. (183 cm)
Min. required fall clearance: 15' (4.6 m) ***See charts for more info**
Standards: ANSI Z359.14-2021, OSHA 1910.140 and OSHA 1910.66

CLASS 2 UNIT
(Anchor above or below dorsal d-ring)

20'

MUST FOLLOW ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

470-00309



470-00310

Fall Clearance Table: Below D-ring Use (Class 2) Northstar Edge 20' Cable

Y-Axis: Anchorage Setback From Working Edge	X-Axis: Lateral Offset From Anchorage									
	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)		
20'0" (6.1m)	15'0" (4.6m)	15'2" (4.6m)	15'5" (4.7m)	15'11" (4.8m)	16'7" (5.1m)	17'5" (5.3m)	18'4" (5.6m)	19'5" (5.9m)	X'X" (X.Xm)	Safe Work Zone
15'0" (4.6m)	15'0" (4.6m)	15'2" (4.6m)	15'7" (4.7m)	16'2" (4.9m)	17'0" (5.2m)	18'1" (5.5m)	19'3" (5.9m)	20'7" (6.3m)		
10'0" (3.0m)	15'0" (4.6m)	15'3" (4.6m)	15'10" (4.8m)	16'8" (5.1m)	17'10" (5.4m)	19'2" (5.8m)	20'8" (6.3m)	22'3" (6.8m)	X'X" (X.Xm)	Use Caution
5'0" (1.5m)	15'0" (4.6m)	15'5" (4.7m)	16'5" (5.0m)	17'10" (5.4m)	19'6" (5.9m)	21'3" (6.5m)	23'0" (7.0m)	24'11" (7.6m)		
0'0" (0.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)	X'X" (X.Xm)	WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

470-00311

Fall Clearance Table: Overhead Use (Class 1) Northstar Edge 20'-50'

Z-Axis: Height of Anchorage From D-Ring	X-Axis: Lateral Offset From Anchorage									
	0'0" (0.0m)	2'0" (0.6m)	4'0" (1.2m)	6'0" (1.8m)	8'0" (2.4m)	10'0" (3.0m)	12'0" (3.7m)	14'0" (4.3m)	16'0" (4.9m)	18'0" (5.5m)	20'0" (6.1m)	22'0" (6.7m)
50'0" (15.2m)	7'0" (2.1m)	7'0" (2.1m)	7'2" (2.2m)	7'4" (2.2m)	7'8" (2.3m)	8'0" (2.4m)	8'5" (2.6m)	8'11" (2.7m)	9'6" (2.9m)	10'2" (3.1m)	10'10" (3.3m)	11'8" (3.5m)
45'0" (13.7m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'3" (2.3m)	7'8" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'2" (2.8m)	9'9" (3.0m)	10'5" (3.2m)	11'3" (3.4m)	12'1" (3.7m)
40'0" (12.2m)	7'0" (2.1m)	7'1" (2.1m)	7'2" (2.2m)	7'5" (2.3m)	7'10" (2.4m)	8'3" (2.5m)	8'9" (2.7m)	9'5" (2.9m)	10'1" (3.1m)	10'10" (3.3m)	11'9" (3.6m)	12'8" (3.9m)
35'0" (10.7m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'6" (2.3m)	7'11" (2.4m)	8'5" (2.6m)	9'0" (2.7m)	9'8" (3.0m)	10'6" (3.2m)	11'5" (3.5m)	12'4" (3.8m)	13'4" (4.1m)
30'0" (9.1m)	7'0" (2.1m)	7'1" (2.2m)	7'3" (2.2m)	7'7" (2.3m)	8'1" (2.5m)	8'7" (2.6m)	9'4" (2.8m)	10'1" (3.1m)	11'0" (3.4m)	12'0" (3.7m)	13'1" (4.0m)	14'2" (4.3m)
25'0" (7.6m)	7'0" (2.1m)	7'1" (2.2m)	7'4" (2.2m)	7'9" (2.3m)	8'3" (2.5m)	9'0" (2.7m)	9'9" (3.0m)	10'8" (3.2m)	11'7" (3.6m)	12'10" (3.9m)	14'0" (4.3m)	15'4" (4.7m)
20'0" (6.1m)	7'0" (2.1m)	7'1" (2.2m)	7'5" (2.3m)	7'11" (2.4m)	8'8" (2.6m)	9'4" (2.9m)	10'4" (3.1m)	11'1" (3.5m)	12'7" (3.8m)	13'11" (4.2m)	15'3" (4.7m)	16'9" (5.1m)
15'0" (4.6m)	7'0" (2.1m)	7'2" (2.2m)	7'6" (2.3m)	8'2" (2.5m)	9'0" (2.7m)	10'0" (3.1m)	11'3" (3.4m)	12'6" (3.8m)	13'11" (4.2m)	15'5" (4.7m)	17'0" (5.2m)	18'8" (5.7m)
10'0" (3.0m)	7'0" (2.1m)	7'2" (2.2m)	7'9" (2.4m)	8'8" (2.6m)	9'10" (3.0m)	11'2" (3.4m)	12'7" (3.8m)	14'2" (4.3m)	15'10" (4.8m)	17'7" (5.4m)	19'4" (5.9m)	21'2" (6.5m)
5'0" (1.5m)	7'0" (2.1m)	7'5" (2.3m)	8'5" (2.6m)	9'10" (3.0m)	11'5" (3.5m)	13'2" (4.0m)	15'0" (4.6m)	16'10" (5.1m)	18'9" (5.7m)	20'9" (6.3m)	22'7" (6.9m)	24'7" (7.5m)
0'0" (0.0m)	7'0" (2.1m)	9'0" (2.7m)	11'0" (3.4m)	13'0" (4.0m)	15'0" (4.6m)	17'0" (5.2m)	19'0" (5.8m)	21'0" (6.4m)	23'0" (7.0m)	25'0" (7.6m)	27'0" (8.2m)	29'0" (8.8m)

X'X" (X.Xm) Safe Work Zone

X'X" (X.Xm) Use Caution

X'X" (X.Xm) WARNING!

WORKING IN THIS AREA MAY RESULT IN SERIOUS INJURY OR DEATH

470-00179

WARNING: This is a single user fall arrester device. Device must be inspected prior to each use. Connection of this device to a full body harness is to be made to the dorsal D-ring only. User must ensure that any connection to anchorage is properly secured prior to use. Make only compatible connections. Dual connections shall only be used for 100% tie-off transitions. Refer to instruction manual for minimum anchorage strength requirements. Elevate anchorage to reduce the fall clearance and limit risk when possible. Fall clearances must be calculated by a competent person prior to use. Ensure adequate fall clearance exists to avoid contact with lower level or obstructions. Avoid swing fall hazards by working directly under anchorage. If possible, avoid exposure to sharp or serrated structural edges to prevent damage to the lifeline. Avoid chemical, thermal and/or electrical hazards. This product is suitable for use horizontally and with horizontal lifelines. Adhere to the hierarchy of controls in Z359.2.

USER MUST READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

DO NOT ATTEMPT TO SERVICE OR REPAIR THIS UNIT! CONTACT SAFEWAZE FOR SERVICE OR REPAIR INFORMATION. Device must be inspected prior to each use in accordance with the manufacturer's instructions. Perform th Locking Function Test (sharp pull test) and retraction test. Inspect the device for label legibility, any evidence of damage or defects, and missing components or parts. Inspect all components of device including the housing, connectors, fasteners, a the entire length of the lifeline for any damage or defects. Refer to instruction manual for inspection frequency. Unit must be removed from service if exposed to fall arrest forces. If visual fall indicator is deployed, immediately remove unit from servic

	J	F	M	A	M	J	J	A	S	O	N	D

Inspection Log - Do Not Remove Label

470-00312

LOAD INDICATOR
PASS FAIL

If tear webbing from shock pack is deployed and visible. Immediately remove from service.

SAFEWAZE

INSPECTION LOG
ANNUAL FORM

Inspection Date:	Inspector:	Pass/Fail:	Comments/ Corrective Action:

SAFEWAZE

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Correo electrónico: info@safewaze.com
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