



SAFEWAZE

022-4084

SRL Swivel Roof Anchor Manual



STANDARDS	
ANSI	N/A
OSHA	1910.66, 1910.140, 1926.502

**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 Swivel Roof Anchor and all equipment used in conjunction with the SRL Swivel Roof Anchor.
- 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 the SRL Swivel Roof Anchor 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.
- A preplanned rescue procedure in the event of a fall is required. The rescue plan must be specific to the project. The rescue plan must allow for employees to rescue themselves, or to be promptly rescued by alternative means.
- 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 Swivel Roof Anchor 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 anchor prior to each use.
- Never exceed maximum allowable weight capacity or maximum free fall distance of the fall protection equipment.
- If work is conducted in a Leading Edge environment, a Class 2 SRL or Leading Edge rated EAL must be used.

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► 1.0 INTRODUCTION / INTENDED USE

Thank you for purchasing the Safewaze SRL Swivel Roof Anchor. 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 anchor is designed to swivel 360° when used as a single point anchor with a suitable SRL. The 022-4084 is also suitable for use as an anchor point for Energy Absorbing Lanyards (EAL), Vertical Lifelines (VLL), or Horizontal Lifeline (HLL) systems.

The equipment covered in this manual is intended for use as part of a complete Personal Fall Protection System. This system is not approved for Material Handling. Use of this equipment for any other purpose including, but not limited to, sports or recreational activities, non-approved 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.

► 2.0 APPLICABLE SAFETY STANDARDS

When used according to instructions, this product meets **OSHA 1910.140, 1926.502, and 1910.66** 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).

► 3.0 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.

► 4.0 PRODUCT SPECIFICATIONS / LIMITATIONS

- Minimum Breaking Strength: 5,000 lbs. (22 kn)
- The SRL Swivel Roof Anchor can be used on Z-purlin, metal decking, and wood pitched or flat roof structures. Additionally, the anchor can be installed on flat 3000 psi, or higher, concrete structures.
- 360° swivel base.
- Accommodates most SRL sizes.
- Features an anchor post for SRL quick attachment.
- Temporary and reusable.
- (8) Lag screws for wood and (16) self-tapping screws for metal included.
- For installation on concrete, use (8) ¼" x 1-¾" hex head Tapcon Fasteners (not included).
- Fall Arrest Points: D-ring for energy absorbing lanyards, VLLs, HLLs, and SRL-Ps. Anchor post for SRLs.
- Item weight: 18.2 lbs. (8.3 kg)

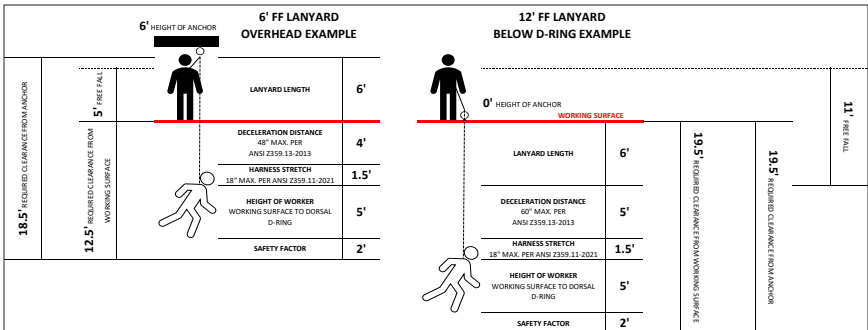
Always select a connector and anchor point location that limits free fall and swing fall as much as possible. A free fall of more than 6 ft. could cause excessive arrest forces that could result in serious injury or death.

Structures for the attachment of the SRL Swivel Roof Anchor shall support a minimum 5,000 lbs. (22 kN) or be designed with a safety factor of two to one by a Qualified Person.

Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for all applicable factors (Figure 1). A Competent Person must reference the entire system's components to calculate Fall Clearance.

FALL CLEARANCE DIAGRAMS

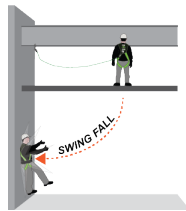
*These diagrams are examples of fall clearance calculations ONLY.



		CLASS 1 OVERHEAD EXAMPLE		CLASS 2 BELOW D-RING EXAMPLE																														
13' REQUIRED CLEARANCE FROM ANCHOR	6' HEIGHT OF ANCHOR	0' FREE FALL			5' FREE FALL	16.5' REQUIRED CLEARANCE FROM WORKING SURFACE	16.5' REQUIRED CLEARANCE FROM ANCHOR																											
	7' REQUIRED CLEARANCE FROM WORKING SURFACE							0' HEIGHT OF ANCHOR																										
			<table border="1"> <tr><td>ARREST DISTANCE</td><td>42" MAX. PER ANSI Z359.14-2021 CLASS 1</td><td>3.5'</td></tr> <tr><td>HARNES STRETCH</td><td>18" MAX. PER ANSI Z359.11-2021</td><td>1.5'</td></tr> <tr><td>SAFETY FACTOR</td><td></td><td>2'</td></tr> <tr><td>SWING FALL DROP DISTANCE</td><td></td><td>TBD</td></tr> </table>	ARREST DISTANCE	42" MAX. PER ANSI Z359.14-2021 CLASS 1	3.5'	HARNES STRETCH	18" MAX. PER ANSI Z359.11-2021	1.5'	SAFETY FACTOR		2'	SWING FALL DROP DISTANCE		TBD	<table border="1"> <tr><td>ARREST DISTANCE</td><td>REFER TO MANUAL FOR PUBLISHED ARREST DISTANCES PER ANSI Z359.14-2021 CLASS 2</td><td>8'</td></tr> <tr><td>HARNES STRETCH</td><td>18" MAX. PER ANSI Z359.11-2021</td><td>1.5'</td></tr> <tr><td>HEIGHT OF WORKER WORKING SURFACE TO DORSAL D-RING</td><td></td><td>5'</td></tr> <tr><td>SAFETY FACTOR</td><td></td><td>2'</td></tr> <tr><td>SWING FALL DROP DISTANCE</td><td></td><td>TBD</td></tr> </table>	ARREST DISTANCE	REFER TO MANUAL FOR PUBLISHED ARREST DISTANCES PER ANSI Z359.14-2021 CLASS 2	8'	HARNES STRETCH	18" MAX. PER ANSI Z359.11-2021	1.5'	HEIGHT OF WORKER WORKING SURFACE TO DORSAL D-RING		5'	SAFETY FACTOR		2'	SWING FALL DROP DISTANCE		TBD			
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SWING FALL DROP DISTANCE		TBD																																

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.

SWING FALL DIAGRAM



▶ 5.0 ALLOWED ANCHORAGE APPLICATIONS

Personal Fall Arrest: Safewaze Anchors are designed as an anchor point to support a maximum of 1 PFAS when utilized for fall protection applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. (22 kN) or be designed with a safety factor of two to one. Maximum allowable free fall is based on the connector used.



Restraint: Safewaze Anchors are authorized for use in Restraint applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. NO free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4/12 (vertical/horizontal). For Restraint applications, the allowable attachment points to the harness are Dorsal, Front/Sternal, Side, and Shoulder D-rings.



Work Positioning: Safewaze Anchors are authorized for use in Work Positioning applications. Work Positioning allows a worker to be supported during suspension while freeing both hands to conduct work operations. The structure to which the Anchor is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. Maximum allowable free fall is 2' ft. For positioning applications, the allowable attachment points to the harness are the Side D-rings.



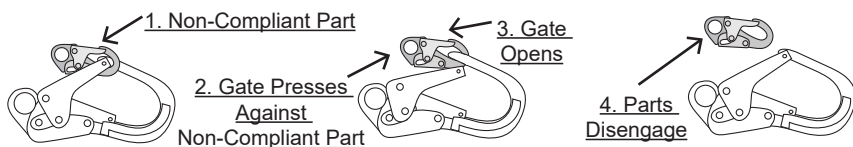
Rescue/Confined Space: Safewaze Anchors are authorized for use in Rescue/Confined Space applications. Rescue systems are utilized to safely recover a worker from a confined location or after exposure to a fall. Composition of rescue systems can vary based upon the type of rescue involved. The structure to which the Anchor is attached must withstand loads applied in the directions permitted by the system of at least 3,100 lbs. NO free fall is permitted. For rescue applications, the allowable attachment points to the harness are Dorsal, Front/Sternal, and Shoulder D-rings.



► 6.0 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 (Figure 1).
- 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.

FIGURE 1: 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.

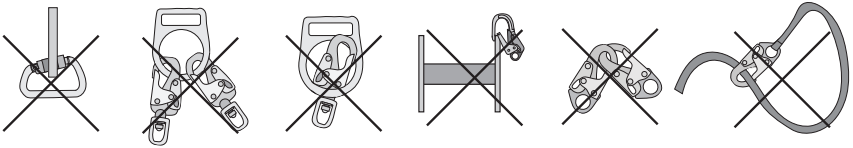
► 7.0 MAKING CONNECTIONS

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 2 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.

FIGURE 2: 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 Z359.12-2019 and is equipped with a 3,600 lb. (16 kN) gate.

► 8.0 INSTALLATION / USE OF THE SRL SWIVEL ROOF ANCHOR

The 022-4084 is **for use in a horizontal orientation** on a roof pitch up to 12:12. It is not designed for use in vertical orientation. Figures 3, 4, 5, and 6 illustrate the proper installation methods for Wood, Z-Purlin, Steel Decking, and Concrete respectively.

***Important:** If work is conducted in a Leading Edge environment, a Class 2 SRL or Leading Edge rated EAL must be used.

FIGURE 3: WOOD ROOF INSTALLATION

Install over secured roof sheathing, use eight each ¼ x 2-½” lag screws. Screws must engage center of truss. To prevent splitting, some wood types may require pre-drilling lag crew holes with a 3/16” diameter drill bit. Ensure installation location is at least 12 inches below Roof Peak.

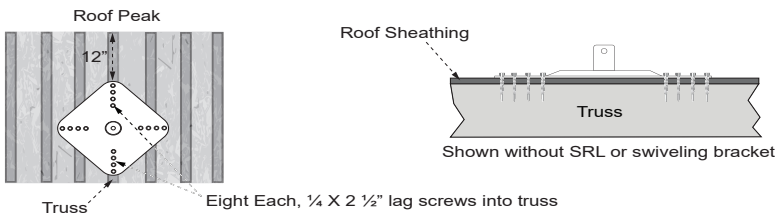
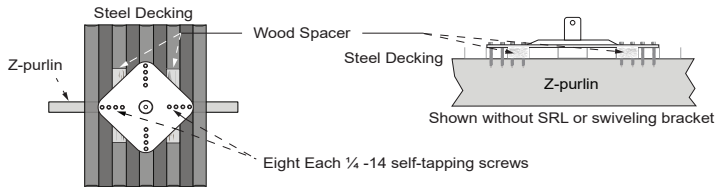
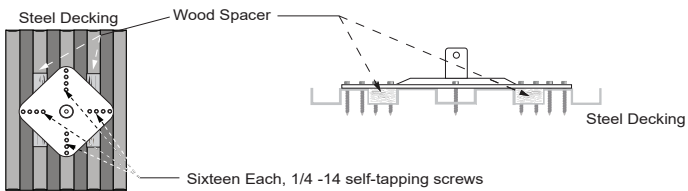


FIGURE 4: Z-PURLIN INSTALLATION



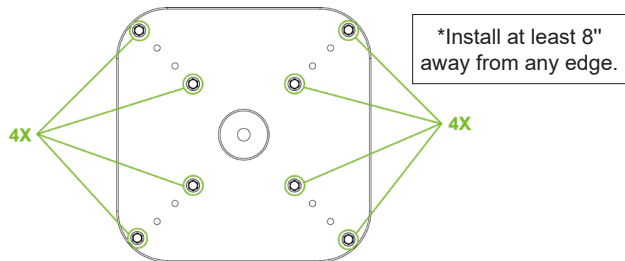
Install over secured roof decking, use eight each 1/4-14 self-tapping screws. All screws must engage center of Z-purlin and be of sufficient length to have a minimum of 5 threads protruding through purlin material. Wood spacers must be used to fill gaps in roof decking material.

FIGURE 5: STEEL DECKING INSTALLATION



Install over secured steel decking. Decking must be 22-gauge minimum material thickness, and must be supported at a maximum interval of 72". Use sixteen 1/4-14 self tapping screws. All screws must be sufficient length to have a minimum of 6 threads protruding through. Decking material wood spacers must be used to fill gaps in decking material.

FIGURE 6: CONCRETE INSTALLATION



A Competent Person must determine the concrete structural member is capable of withstanding anticipated fall loads and meets, or exceeds, OSHA required anchorage strength regulations. The concrete must be uncracked, 3000 psi or higher, and a minimum of 6" thick. The anchor must be installed at least 8" away from any edge. Use (8) 1/4" x 1 1/4" hex head Tapcons fasteners for installation (can have a maximum screw length up to 3"). These fasteners are available in the open market and are not supplied with the product. Pre-drilled holes with 3/16" drill bit are required. See Figure 6 for correct installation placement.

After proper installation, the 022-4084 can be used as a 360° anchor point for use with any SRL, including a Leading Edge Rated SRL (Class 2), or can function as an

attachment point for an Energy Absorbing Lanyard (EAL), VLL, or HLL system.

To install an SRL, simply connect the SRL to the SRL connection point via an ANSI Z359.12 compliant carabiner (See Image 1). To attach a SRL-P / EAL / VLL / HLL, use the attachment D-ring (See Image 2).

IMAGE 1: SRL ATTACHMENT

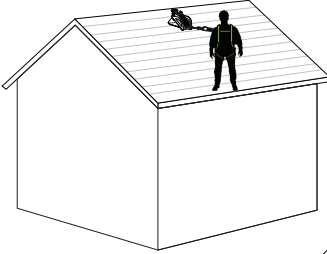


IMAGE 2: SRL-P, EAL, VLL, HLL ATTACHMENT

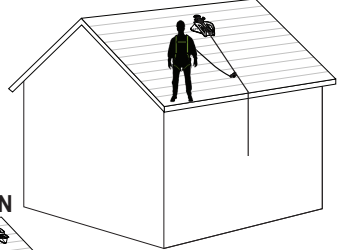


SUITABLE APPLICATIONS:

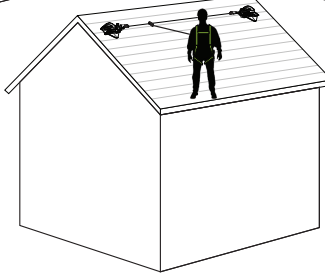
SRL APPLICATION



VLL APPLICATION



HLL APPLICATION



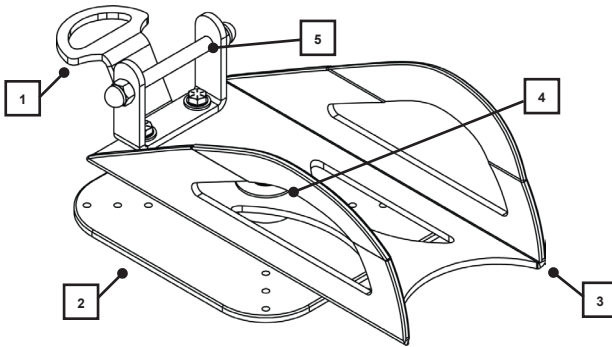
► 9.0 INSPECTION / MAINTENANCE

Prior to each use, inspect the anchor 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 anchor, fasteners, and labels. Refer to Figure 7 for each individual component.

- **Repairs:** Only Safewaze, or entities authorized in writing by Safewaze, may make repairs to Safewaze fall protection equipment.
- **Lifespan:** The working life of the SRL Swivel Roof Anchor is determined by work conditions, care, and inspection provided. So long as the system and all components pass inspection, it may remain in service.

- **Cleaning:** The anchor 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 Swivel Roof Anchor in a cool, dry area where it will not be exposed to extreme light, extreme heat, excessive moisture, or possibly corrosive chemicals or materials.
- **Disposal:** Dispose of the SRL Swivel Roof Anchor 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.

FIGURE 7: COMPONENTS INSPECTION



Anchor Components	
1	SRL-P / EAL / VLL / HLL Attachment D-ring
2	Baseplate
3	Swivel Cradle Assembly
4	Cradle to Baseplate Attachment Point
5	SRL Attachment Post

▶ 10.0 LABELS

⚠ WARNING

USER MUST READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS INCLUDED WITH THIS EQUIPMENT. Failure to do so can result in serious injury or death. The anchorage connector is intended to couple a personal fall arrest system to an anchorage. If wear or damage is present, don't not use. See user manual for details. Items subject to fall arrest or impact forces must be immediately removed from service and destroyed. Only make compatible connections. **DO NOT REMOVE LABEL!**

⚠ INSPECTION Anchor must be inspected prior to each use in accordance with the manufacturer's instructions. Immediately remove from service if any damage or defects are present. Not repairable.

INSPECTION LOG

Initial	Date									

Specifications:
 Material: Steel, Stainless Steel
 Minimum Breaking Strength: 5,000 lbs.
 Capacity: Single User Only
 ANSI: 1,35-310 lbs. (54-95-140.6 kg)
 OSHA: up to 420 lbs. (190.5 kg)
 Meets: OSHA 1926.502, 1910.140, 1910.66

Description:

SRL Swivel Roof Anchor

Part #:

022-4084

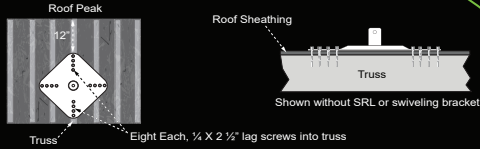
Serial #:

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Date of MFG:

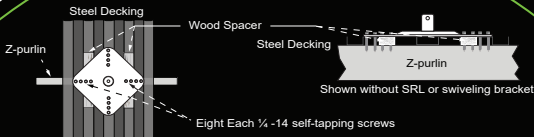
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WOOD ROOF INSTALLATION



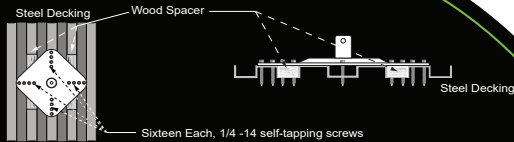
Install over secured roof sheathing, use eight each $\frac{1}{4} \times 2 \frac{1}{2}$ " lag screws. Screws must engage center of truss. To prevent splitting, some wood types may require pre-drilling lag screw holes with a $\frac{3}{16}$ " drill. See user manual for additional details.

STEEL Z-PURLIN INSTALLATION

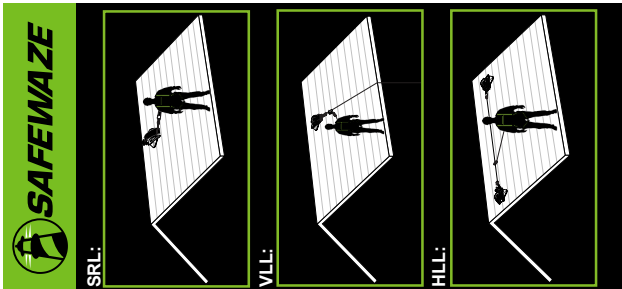


Install over secured roof decking, use eight each $\frac{1}{4}$ -14 self-tapping screws. All screws must engage center of Z-purlin and be of sufficient length to have a minimum of 5 threads protruding through purlin material. Wood spacers must be used to fill gaps in roof decking material. See user manual for additional details.



































STEEL DECKING INSTALLATION



Install over secured steel decking, decking must be 22-gauge minimum material thickness, and must be supported at a maximum interval of 72". Use sixteen $\frac{1}{4}$ -14 self-tapping screws. All screws must be sufficient length to have a minimum of 6 threads protruding through. Decking material wood spacers must be used to fill gaps in decking material. See user manual for additional details.





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



SAFEWAZE

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Email: info@safewaze.com

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