

# GUARDIAN

## FALL PROTECTION



**Product Name: Velocity SRL**

**Part #: 42000; 42001; 42002; 42003; 42004; 42005; 42006;  
42008**

## **Instruction Manual**

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



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# Introduction

Thank you for purchasing a Guardian Fall Protection Velocity 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.

This and any other included instructions must be made available to the user of the equipment. The user must understand how to safely and effectively use the Velocity SRL, and all fall safety equipment used in combination with the Velocity SRL.

User Information	
Date of First Use:	_____
Serial #:	_____
Trainer:	_____
User:	_____

## Applicable Safety Standards

When used according to instruction specifications, this product meets or exceeds all applicable OSHA 1926 Subpart M, OSHA 1910, ANSI Z359.14-2012, and ANSI A10.32-2012 standards for fall protection. Applicable standards and regulations depend on the type of work being done, and also might include state-specific regulations. Consult regulatory agencies for more information on personal fall arrest systems and associated components.

## Worker Classifications



Understand the following definitions of those who work near or who may be exposed to fall hazards.

**Qualified Person:** A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

**Competent Person:** A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards.

**Authorized Person:** A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

**It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.**

## Safety Information



Failure to understand and comply with safety regulations may result in serious injury or death. 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.

Do not alter equipment.

Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to.

Fall protection equipment must be chosen by a Competent Person. Selections must account for all potential hazardous workplace conditions.

All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner.

Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24"; Class B SRLs must arrest falls within 54".

Forces applied to anchors must be calculated by a Competent Person.

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration.

A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue.

Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, 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.

NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

Maintenance of equipment must be done according to manufacturer's instructions. Equipment instructions must be retained for reference.

Prior to EACH use, all equipment in a fall protection system must be inspected for any potential or existing deficiencies that may result in its failure or reduced functionality. IMMEDIATELY remove equipment from service if any deficiencies are found.

Equipment must be inspected by a Competent Person at least every six months. These inspections must be documented in equipment instruction manual and on equipment inspection grid label.

Equipment must be inspected for defects, including, but not limited to, the absence of required labels or markings, improper form/fit/function, evidence of cracks, sharp edges, deformation, corrosion, excessive heating, alteration, excessive wear, fraying, knotting, abrasion, and absence of parts.

Equipment that fails inspection in any way must immediately be removed from use, or repaired by an entity approved by the manufacturer.

No on-site repair of equipment unless explicitly permitted by Guardian Fall Protection.

Equipment subjected to forces of fall arrest must immediately be removed from use.

Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment.

Pregnant women and minors must not use this equipment.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

Allowable individual worker weight limit (including all equipment), unless explicitly stated otherwise, is 130-310 lbs.

## Maintenance, Cleaning, and Storage

Repairs to Velocity SRLs can only be made by a Guardian Fall Protection representative or an entity authorized by Guardian. Contact Guardian for all maintenance and repair needs at: 1-800-466-6385. If a Velocity SRL fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair.

Cleaning after use is important for maintaining the safety and longevity of Velocity SRLs. Remove all dirt, corrosives, and contaminants from Velocity SRLs before and after each use. If Velocity SRL cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean Velocity SRLs with corrosive substances.

When not in use, store equipment where it will not be affected by heat, light, excessive moisture, chemicals, or other degrading elements.

## Inspection

KEEP INSTRUCTIONS AVAILABLE FOR REFERENCE. Record Date of First Use.

Prior to EACH use, inspect Velocity SRL for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, bird-caging, and missing or illegible labels. Inspect full length of lifeline. IMMEDIATELY remove Velocity SRL from service if defects or damage are found.

Prior to EACH use, check lifeline retraction by pulling out a minimum 4' and allowing it to retract under light tension; lifeline must retract completely. Pull lifeline sharply to test braking function; brakes must engage. Check arrest indicator on connector for signs of activation. Indicator will display red if unsafe for use. IMMEDIATELY remove from service if Velocity SRL does not function properly, or if exposed to forces of fall arrest.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected work area will support the application- specific minimum loads set forth in this instruction manual. Work area MUST be stable.

Every 6 months, a Competent Person other than the user must inspect Velocity SRL. **Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.**

During inspection, consider all applications and hazards Velocity SRL has been subjected to.



Example impact indicator:

- Green: Undeployed
- Red: Deployed

## Product Specific Applications



**WARNING** Use of equipment in unintended applications may result in serious injury or death. Maximum 1 attachment per connection point.



**Personal Fall Arrest:** Velocity SRLs may be used in Personal Fall Arrest applications as a component of a MAXIMUM 1 Personal Fall Arrest System (PFAS). Structure must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Applicable D-ring: Dorsal.

- Part #s 42006 and 42008: No free fall is permitted. SRL must always be positioned at or above harness dorsal D-ring.
- Part #s 42000, 42001, 42002, 42003, 42004, and 42005: No free fall is permitted, and SRL must always be positioned at or above harness dorsal D-ring. OR, if used in combination with compatible shock absorber extension, maximum 2' free fall, and SRL may be positioned a maximum 2' below harness dorsal D-ring.



**Restraint:** Velocity SRLs may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of a fall hazard. Always account for fully deployed length of lanyard/SRL. Structure 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). Applicable D-rings: Dorsal, Chest, Side, Shoulder.

**For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs., or up to 420 lbs. if used in combination with equipment explicitly certified for such use.**

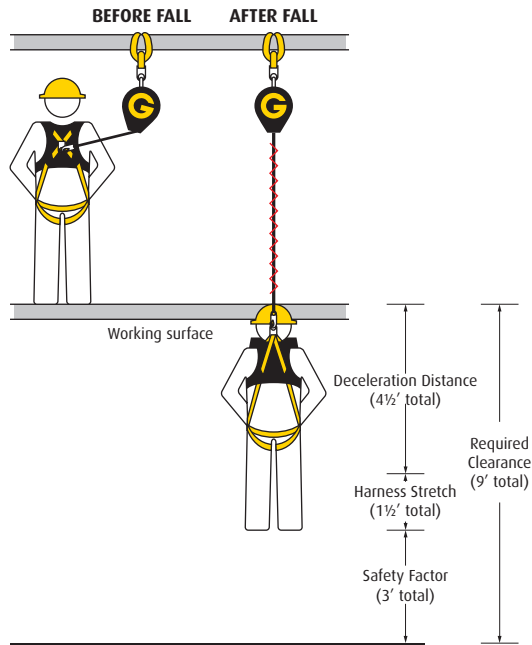




## Limitations

**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 a MINIMUM 3' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors.

Diagram shown is an **EXAMPLE** fall clearance calculation **ONLY**.



**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 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.

**Compatibility:** When making connections with Velocity SRLs, eliminate all possibility of roll-out. Roll-out occurs when interference between a hook and the attachment point causes the hook gate to unintentionally open and release. All connections must be selected and deemed compatible with Velocity SRLs by a Competent Person. All connector gates must be self-closing and self-locking, and withstand minimum loads of 3,600 lbs. See the following for examples of compatible/incompatible connections:

Connector closed and locked to D-ring. **OK.**



Connector to integral lanyard. **NO.**

Two or more snap hooks or carabiners connected to each other. **NO.**



Connector directly to webbing. **NO.**

Two connectors to same D-ring. **NO.**



Application that places load on gate. **NO.**

Incompatible or irregular application, which may increase risk of roll-out. **NO.**



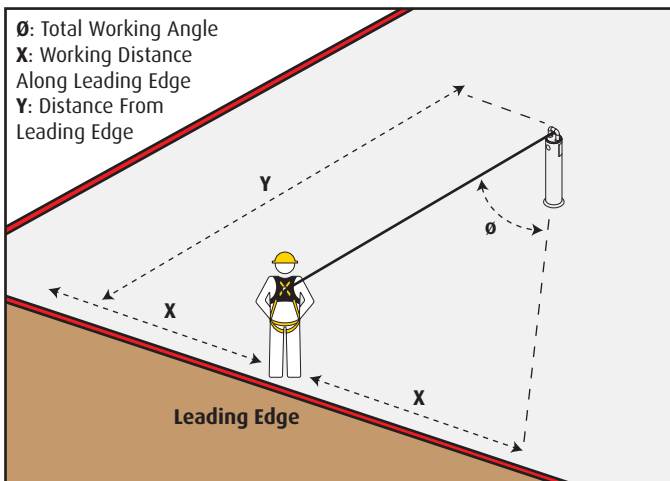
Connector directly to horizontal lifeline. **NO.**

## Correct Anchorage Positioning:

This chart details allowable working zones required to reduce risk of swing falls and improper side loading.  
**ALWAYS** adhere to information specified by chart.

Anchor Distance From Leading Edge (Y)	Working Distance Along Roof Edge (Either Direction) (X)	Working Angle From Perpendicular ( $\theta$ )
6'	8'	53°
10'	9' - 9"	45°
15'	11' - 7"	38°
20'	13' - 3"	33°
25'	14' - 6"	30°
30'	16'	28°
35'	17' - 2"	26°
40'	18' - 3"	24°
45'	19' - 4"	23°
50'	19' - 10"	21°
55'	21' - 4"	21°
60'	22' - 3"	21°

For example, if the anchorage connector is 6' from the leading edge (Y), the working distance (X) is 8' in each direction from the perpendicular, which translates to a 53° working angle.



## Components and Specifications

Materials. Made from some or all of the following: stainless steel, galvanized steel, polyester, and glass-filled nylon.

Class B SRL.

Average arrest force: 900 lbs.

Maximum arrest force: 1,800 lbs.

Maximum deceleration distance: 54".



Part #	Length	Description
42000	16'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42001	20'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42002	30'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42003	50'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42004	80'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42005	100'	3/16" Galvanized Cable SRL w/Carabiner, Swivel Top, & Snap Hook
42006	20'	1" Nylon Webbing w/Carabiner, Swivel Top, & Snap Hook
42008	40'	1" Nylon Webbing w/Carabiner, Swivel Top, & Snap Hook

## Installation and Use

**Velocity SRL part #s: 42006 and 42008 may NEVER be used in LE applications.**

**Velocity SRL part #s: 42000, 42001, 42002, 42003, 42004, and 42005 may be used in LE applications ONLY if used in combination with shock absorber extension deemed compatible with SRL by a Competent Person.**

**If intending to use Velocity SRL in LE applications, refer to additional LE SRL use instructions (pg. 12).**

**ALWAYS avoid lifeline contact with sharp or abrasive edges and surfaces.**

1. All components of the personal fall arrest system must be selected and deemed compatible with Velocity SRL by a Competent Person.
2. Ensure structure to which Velocity SRL is to be attached, and on which work is to be performed, is free of all hazards, including, but not limited to, debris, rot, rust, sharp or abrasive edges and surfaces, and hazardous materials.
3. Use:
  - **In non-LE applications, Velocity SRL may be attached to anchorage connector or harness dorsal D-ring. Velocity SRL must always be positioned at or above harness dorsal D-ring AND at or below anchorage connector.**
  - **In LE applications, Velocity SRL must be attached to anchorage connector, and may be positioned a maximum 2' below harness dorsal D-ring.**
4. Ensure 100% tie-off will be maintained at all times, which may require the use of a back-up or supplementary fall protection system.



**WARNING** ALWAYS adhere to the following warnings and specifications when using LE SRLs.

When used with an integral or compatible attached shock absorber extension, Velocity SRLs with cable lifelines (part #: 42000, 42001, 42002, 42003, 42004, and 42005) are tested and certified for horizontal use over a steel edge without burrs. Velocity SRLs may be used over similar surfaces, such as metal sheeting or other steel formations. Velocity SRLs with web lifelines (part #: 42006 and 42008) must NEVER be used in LE applications.

The allowable angle of redirection of the lifeline portion of Velocity SRLs at the leading edge of a fall hazard MUST be at least  $90^\circ$  (see Image 1).

Anchor point MUST be situated no lower than the leading edge of applicable fall hazard(s).

Prior to use, a Competent Person MUST calculate adequate fall clearance (see pg. 7).

ALWAYS attach to anchorage connector that will allow for required setback distance (see Image 2).

**Setback distance: As determined by product testing, Guardian Fall Protection Velocity SRLs MUST be installed a MINIMUM 6' (1.8m) from the leading edge of applicable fall hazard(s).**

Velocity SRLs may be used in combination with horizontal lifelines. All installation, set-up, and use of horizontal lifelines must be done under the supervision of a Qualified Person.

NEVER work on the far side of an opening that is opposite the Velocity SRL anchorage connector.

In the event of a fall over the edge, special rescue measures may be necessary. Always account for use of Velocity SRLs in job site rescue plan developed by job site Competent Person.

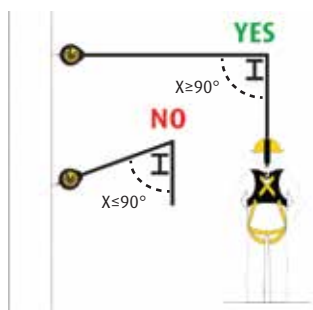


Image 1

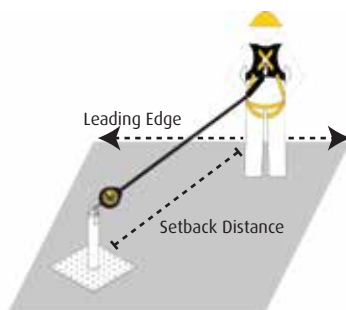
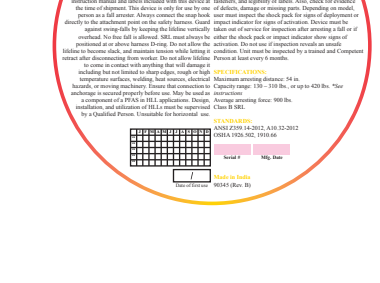
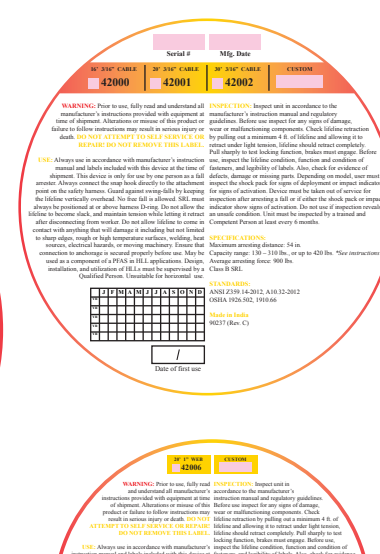
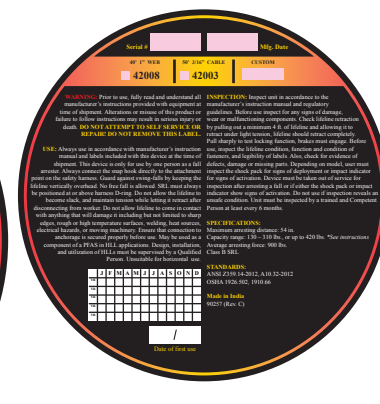


Image 2

## Labels



Inspection Log

User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 6 months. Competent Person to inspect and initial.

Date of First Use: \_\_\_\_\_. For products with synthetic web lifeline, product lifetime is 5 years from Date of First Use, or, if not recorded, from Date of Manufacture. For products with cable lifeline, product lifetime is indefinite. All products must always pass pre-use and Competent Person inspections.

This inspection log must be specific to one Velocity SRL. Separate inspection logs must be used for each Velocity SRL. All inspection records must be made visible and available to all users at all times.

	J	F	M	A	M	J	J	A	S	O	N	D
YR												
YR												
YR												
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If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.

Notes