

# Stelf-Retracting Device — Class 1 SRD

ANSI Z359.14-2021

V8455331130 V8455331170





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### INTRODUCTION

This manual contains the Manufacturer's Instructions as required by ANSI Z359.14. It should be used as part of the fall protection training program required by law. All PeakWorks' products are designed and engineered to meet or exceed applicable ANSI standards along with labour ministry requirements.

WARNING: All persons using this equipment must read and understand all the instructions and warnings contained in this manual. Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

### **FALL PROTECTION**

It is the employer's responsibility to provide fall protection and training for any worker deemed to be working at height. In Canada, any worker that is more than 3 meters from the ground or first obstruction must have fall protection. In the U.S., 6 feet.

### SYSTEM COMPATIBILITY

PeakWorks equipment has been designed and approved for use only with PeakWorks connectors. Any substitution of components may result in compatibility issues. Users should always ensure that the connectors are properly selected and connected so as not to allow a load to be applied to the gate of the connector.

Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

### **TRAINING**

All workers and their employer must be trained in the correct use, care, and maintenance of this and any other fall protection equipment used. It is the employer's responsibility to provide proper fall protection training for all workers using fall protection equipment. Both the worker and the employer must be aware of the correct and incorrect applications and use of this equipment.

Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

### **RESCUE PLAN**

A rescue plan is an integral and critical part of any fall protection plan and system. It is the responsibility of the employer to have a rescue plan prepared by a competent person. All workers using any fall arrest system must have a rescue plan prior to using the system.



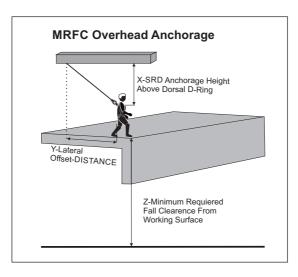
### **INSPECTION**

This equipment and any other fall protection equipment used in conjunction with it should be inspected by the worker every time it is used. This equipment must be inspected annually by a competent person. A competent person is defined by OSHA: "By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation and has the authority to correct them". Details of how to inspect this equipment is discussed later in the manual.

Type Of Use	Application Examples	Conditions of Use	Inspection Frequency Competent Person
Infrequent to Light	Rescue and confined space, factory maintenance	Good storage conditions, indoor or infrequent outdoor use, room temperatures, 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 environments	Quarterly to semi-annually

### **FALL CLEARANCE**

Fall Clearance is the distance required to safely arrest the user's fall. It is the distance from the anchorage to the ground. A Fall Clearance Calculation must be done anytime this or any other fall protection equipment is used.





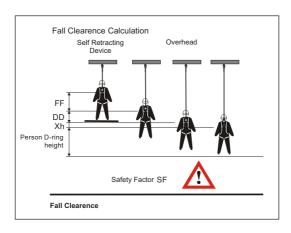
**Step 1:** Calculate Free Fall (FF)

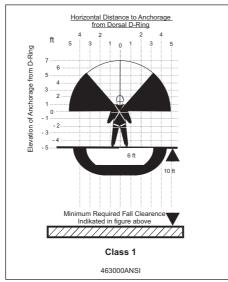
**Step 2:** Determine how much the connecting device deploys (DD)

Step 3: Determine the stretch of the harness (Xh; typically 1 ft)

Step 4: Add a safety factor (typically is 3 ft)

**Step 5:** Fall Clearance C = FF + DD + Xh + Person + SF





**Example:** The user works 2 ft away from the SRD and the SRD is anchored 1 ft below the D-ring. Minimum required fall clearance is 13 ft.



### **REPAIR**

Do not attempt to repair or alter this fall protection equipment. Repairs can only be performed by the manufacturer or its authorized agents.

### **SRD OVERVIEW**

All PeakWorks' SRDs have been designed and engineered to meet or exceed all applicable standards and Ministry of Labour requirements. This PeakWorks Self-Retracting Device is intended for use as a Fall Arrest Block or Fall Recovery Block. It is not intended for use with work positioning, man-riding, goods lifting, or moving/lifting materials.

### SRD CAPACITY

PeakWorks SRDs are designed for use by a single person with a combined weight (clothing, tools, etc.) of no more than 310 lbs. Make sure all of the components in your system are rated to a capacity appropriate to your application.

### SRD COMPATIBILITY

All PeakWorks' SRDs come with a carabiner to connect to an anchor and a snap hook to connect to a full-body harness. PeakWorks equipment has been designed and approved for use only with PeakWorks connectors. Any substitution of components may result in compatibility issues. If you have any questions about component compatibility, please contact PeakWorks.

Warning: Do not connect to this SRD with form hooks or any other large opening.

### SRD PERFORMANCE DATA

Model No.	Lanyard Length	Lanyard Material	Max. Arrest Force	Average Arrest Force	Max. Arrest Distance	Average Arrest Distance	Capacity	Classification
V8455331130	130 ft	Galvanized steel cable 3/16"	1,800 lbs	571 lbF	42 in.	32 in.	130-310 lbs	SRL-R Class 1
V8455331170	170 ft	Galvanized steel cable 3/16"	1,800 lbs	667 lbF	42 in.	32 in.	130-310 lbs	SRL-R Class 1



### **SRL GENERAL OPERATION**

The mechanism in this device is activated by centrifugal force acting on the brakes. This action is produced by the inertia of a fall rapidly spinning the internal drum, which in turn causes the brakes to lock and arrest the fall. Slow reeling of the line will not activate the brake. If the brake locks—due to a fall—the mechanism will reset if the load is removed. In a fall arrest situation, the mechanism will limit the force acting on the body to less than 6 kN. This device is designed to function vertically or at an angle of no more than 30° (see Figure 1).

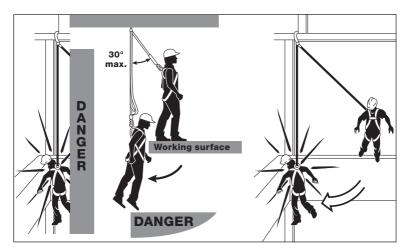


Figure 1

Figure 1

### **ELECTRICAL HAZARD**

Due to the highly conductive nature of the materials used in the construction of this SRD, use extreme caution when working near unprotected high voltage sources. If in doubt, ask!

### **SHARP EDGES, ABRASION & CUTTING**

The wire rope or the webbing of the SRL should never be allowed to come in contact with sharp edges or abrasive surfaces. Such contact could prevent the SRL from arresting a fall.



### PRE-USE INSPECTION

If the Self-Retracting Lifeline is known to have arrested a fall, it must be removed from service immediately and returned for inspection and servicing.

### Before each use, check:

- 1. that the brake operates correctly
- 2. that the SRL is securely anchored level with or above the user (NEVER below)
- 3. that all components to be used in conjunction with this device are compatible and in good condition
- 4. avoid anchoring the device in such a position that could result in a 'pendulum/swing fall' (this may occur if the device is positioned at > 30° from the vertical in relation to the end user).

# Extend the wire rope/webbing fully (wearing suitable protective gloves) and inspect along its length for damage, such as:

- 1. broken or frayed wires/webbing
- 2. soiling and/or corrosion
- 3. kinks and twists in the wire/webbing
- 4. inspect the swage/stitching for damage
- 5. check the connector(s) being used as per the User Instructions supplied with the connector
- 6. check that the Overload/Fall Indicator is not exposed.

Check the device housing for signs of mechanical deformation, cracks, or chemical contamination and/or other defects.

Retract the wire rope/webbing slowly; during retraction, give the wire rope a sharp sudden tug in order to activate the braking mechanism. This check should be carried out along the full length of the rope at approximately 20% increments.

If any of the above criteria fail, then the device must be removed from service. In the event of any doubt, consult a trained and competent person.

Warning: If this SRL or any fall protection device is known to have arrested a fall, it must be removed from service immediately.



### **INSTRUCTIONS FOR USE - SAFETY CONSIDERATIONS**

- Self-Retracting Device in accordance with ANSI/ASSP Z359.14-2021 represent personal safety equipment serving to protect the user in conjunction with a safety harness ANSI/ASSP Z359.1-2007 where falling hazards exist (e.g. on roofs, scaffolding, ladders and in shafts). The device must only be used corresponding to its intended purpose.
- 2. Failure to comply with the instructions for use will result in a danger to life (a). In the event of a fall, the person must not be exposed to a prolonged state of hanging for longer than 20 minutes (danger of shock).
- 3. Safety harnesses according to ANSI/ASSP Z359.1-2007 are permitted for use with the Self-Retracting Device (other harnesses etc. are not permissible) ( a).
- 4. A device can only protect one person at a time during use. However, it may be used by several individuals one after the other. A rescue plan taking into account all possible rescue scenarios during the work must be drawn up.
- 5. A suitable fastening point with sufficient load bearing capacity must be selected for the device (e.g. anchorage point corresponding to 22.2 kN;). The device is fastened using carabiner hooks corresponding to (ANSI/ASSP Z359.12-2009 carabiner hooks) or sling rope, the rope being pulled through the handle of the device and closed with a secured carabiner hook. (3)
- 6. In case of devices with swivel suspension, the snap hook is connected to the attachment point of the swivel. When using the Self-Retracting Device on a anchorage device North America 22.2 kN with a vertically moving guide, the deflection of the stopping device must also be taken into consideration when ascertaining the required clearance height below the user. The information in the instructions for use must be observed for this.
- 7. The device should be positioned as vertically as possible above the head of the person, so as to prevent the person from swinging to and froin the event of a fall. After fastening the device to the anchorage point, the end of the retractable lanyard (lifeline) must be fastened directly to the harness attachment point (D-ring) by using the small connector (a).
- The safety protection for the person working is established after fastening the Self-Retracting Device to a suitable anchorage point (corresponding to North America 22.2 kN or min. 7.5 kN load bearing capacity on existing constructions; BGR 198) and connecting the joining element (hook) to a catching lug of the retaining belt worn (as per ANSI /ASSP Z359.1-2007).
- 9. The legibility of the product labeling must be checked each time before use .
- A functional test is to be carried out before each use by pulling out the rope/ lifeline all of a sudden or by a weight test of at least 33 lbs. The drum brake must catch here
   (5).
- 11. Self-Retracting Device must not be used for the safety of persons above bulk materials or similar substances into which they can sink (6).
- 13. Depending on the strains to which they have been subjected, Self-Retracting Device must be checked by authorized personnel trained by the manufacturer every twelve months. This must be documented in the accompanying test supplied. The effectiveness and durability of the Self-Retracting Device depends on regular testing.



















- 14. If a thread breaks, the cable is kinked, or the cable/webbing becomes roughened, worn or damaged in any way the fall arrestor must be returned to the repair workshop so that the damaged component can be replaced (a).
- 15. In case of an attachment above the user, the clear height below the user must amount to 6 ft.
- 16. The PeakWorks Self-Retracting Device can be used in the temperature range from -30° to +50° Celsius as per ANSI/ASSP Z359.1-2007, Z359.14-2021 (10).
- 17. The working load limit is 130 310 lb (3).
- 18. Self-Retracting Device must be protected against the effects of welding flames and sparks, fire, acids, caustic solutions and similar.
- 19. No changes or modifications should be made to the Self-Retracting Device. Repairs may be performed by the manufacturer or persons trained and authorised by the manufacturer only (n).
- 20. Note: Self-Retracting Device may only be used by persons who have received corresponding training or who have gained expertise in another way. Their health or state of mind must not be impaired in any way (alcohol, drugs, medicines, heart or circulation problems).
- 21. The service life of the fall arrestor must be determined during the annual test. This is approx. 10 years, depending on the use to which it is subjected.
- 22. The SRD devices equipped with a pipe hook swivel suspension must be mounted to the attachment points in a way to avoid any exposure of the pipe hook swivel suspension to transversal or bending loads. This is of particular importance in case of a fall.
- 23. The wire rope or the webbing of the SRD should never be allowed to come in contact with sharp edges or abrasive surfaces. Such contact could prevent the SRD from arresting a fall (a).

### **CARE AND MAINTENANCE**

- 1. The cable/webbing lifeline should only be recoiled under tension. On no account should you fully pull out and release the lifeline, as the jolting impact of the small connector on the device can cause the return spring to break (a).
- For devices with a steel cable which are continuously exposed to the weather, we recommend lightly greasing the wire rope with acid-free oil or Vaseline at regular intervals.
- 3. The retractable belt strap lanyard is made of PES /Dyneema and must only be cleaned with soap sud and never with thinners or similar products.









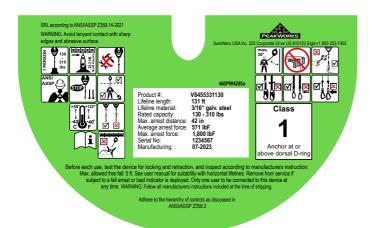






### LABELING OF THE SELF-RETRACTING DEVICE

### V8455331130 / V8455331170





# **INSPECTION LOG**

	Inspection Date	Results	Corrective Action	Maintenance Performed	Inspection Conducted By
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					



# NOTES