



**PEAKWORKS®**

# Know Your ABCs

**FALL PROTECTION GUIDE**

# ABCs of Fall Arrest

Fall arrest systems are the collection of equipment components that are configured to arrest a fall. There are several key components to these systems and it is important to know the basics for proper and compatible component selection.

**A** **NCHORAGE CONNECTORS** — The anchorage connector is the component which connects to the structure. The combination of the structure and the anchorage connector must be capable of withstanding the forces incurred during a fall. These components must be capable of withstanding a minimum 5,000 lb (22 kN) force.

Common examples: anchor slings, fixed D-rings, beam anchors, concrete hole anchors, and roof brackets.

**B** **ODY SUPPORT** — The body support is the component that is worn on or around the torso.

**Full Body Harness:** A full body harness is a body support device that is installed on the entire body and is designed to distribute the forces of a fall to the shoulders, thighs and pelvis. All full body harnesses have a back D-ring designed for the fall arrest connection point. Other styles of full body harnesses are available with other attachment points such as side D-rings for work positioning (Class AP), a frontal D-ring for ladder climbing (Class AL), and shoulder D-rings for confined space work (Class AE). Some styles of harnesses can also have a combination of all or some of these attachment points, for example our Class APLE has the following connection points: (1) back D-ring, (2) side D-rings, (1) frontal D-ring and (2) shoulder D-rings.

Full body harnesses are the only accepted body support to be used for a fall arrest application. The dorsal D-Ring is the only D-Ring used for a fall arrest connection.

**NEVER** use a restraint belt in a fall arrest application.

**C** **ONNECTORS** — Connectors are the engineered components that connect the body harness to the appropriate anchorage.

Common examples: shock absorbing lanyards and self-retracting lifelines (SRL's).





# A

## = ANCHORAGE CONNECTORS

- Anchor Slings
- Fixed D-Rings
- Beam Anchors
- Concrete Hole Anchors
- Roof Brackets

### DID YOU KNOW?

Our team of fall protection experts are members of the committees which develop the standards designed to keep you safe.

# B

## = BODY SUPPORT

- Compliance Series
- Contractor Series
- PeakPro Series

# C

## = CONNECTORS

- Fall Arrest Lanyard
- Self-Retracting Lifelines
- Rope Grabs
- Vertical Lifelines

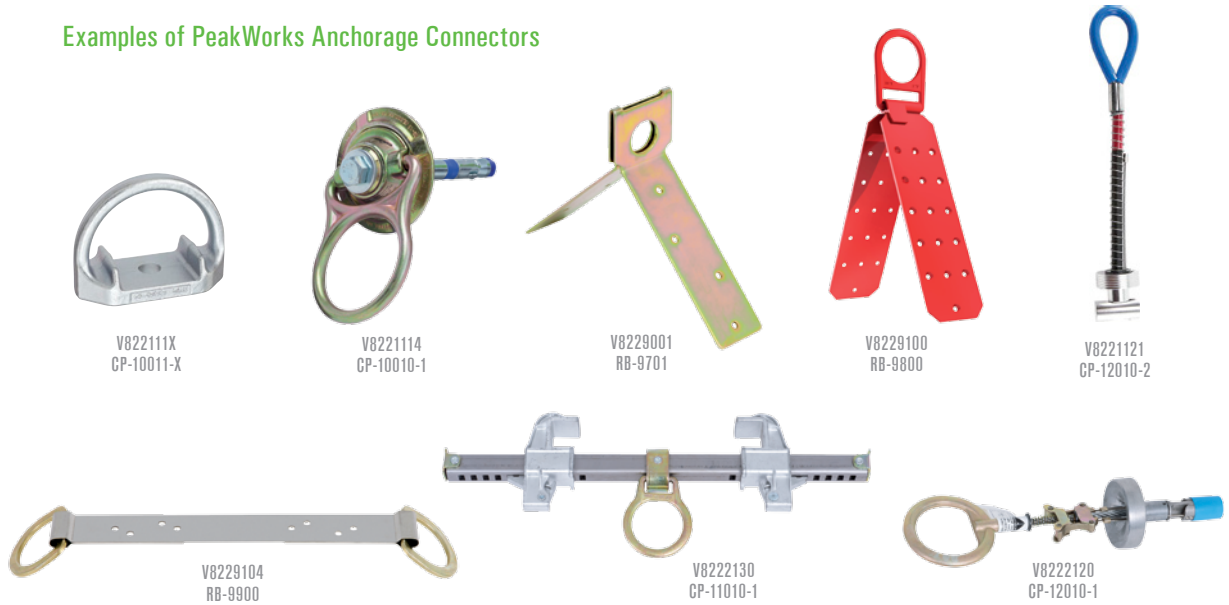


# A ANCHORAGE CONNECTORS

## Anchors and Roof Brackets

- A complete fall arrest system requires three primary components: approved anchorage connector, full body harness and connector
- Anchorage connectors can be connected to a variety of materials such as steel, wood and concrete
- PeakWorks offers a wide range of anchorage connectors including: single-use/reusable roof anchors, sliding beam anchors, concrete hole anchors and permanent anchors
- The anchorage connectors should be located directly above the worker to prevent swing falls
- The height of an anchor is a key variable when determining fall clearance
- As with all fall protection products, anchors must be inspected by a competent person at a minimum annually
- All PeakWorks anchorage connectors are built with a minimum tensile strength of 5,000 lb (22 kN)
- Capacity of each anchorage connector is 310 lb (141 kg) for 1 worker (combined weight of person, tools, clothing, etc.)

### Examples of PeakWorks Anchorage Connectors



## Anchor Slings

- Anchor slings provide peace of mind when a temporary anchor is required
- PeakWorks offers anchor slings using two basic material styles: abrasion-resistant webbing or galvanized cable
- All PeakWorks anchor slings are built to a minimum tensile strength of 5,000 lb (22 kN)
- All PeakWorks anchor slings meet or exceed **CSA** and **ANSI** standards

### Examples of PeakWorks Anchor Slings



**Please note:**

- PeakWorks carries a full range of anchorage connectors for a variety of applications
- For complete product listings, please visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks) or contact your local PeakWorks distributor for further details



# B

## BODY SUPPORT

### About Full Body Harnesses

- Full body harnesses are designed to arrest a fall while simultaneously distributing the tremendous shock or load to the worker's body away from the vital organs
- There are many applications and conditions in which full body harnesses must be worn. In order to maximize effectiveness and minimize injury, it is critical that an appropriate body harness be selected based on the job for which it is intended. PeakWorks offers a full range of body harnesses for almost every application
- Full body harnesses must be fitted and adjusted properly to ensure maximum protection and to minimize injury
- Waist or restraint belts are not replacements for full body harnesses
- All PeakWorks full body harnesses are built to meet or exceed the highest standards while providing maximum fit and comfort

### Harness Classes

- Full body harnesses come in many styles with a variety of attachment points (D-rings). The placement of these rings is critical to the type of application for the task being performed
- The CSA standards have standardized the category of these attachment points into Harness Classes A, D, E, L, P
- Depending on the working at height application, full body harnesses may require more than one D-Ring location in order to carry out the task at hand safely i.e. AE, AL, AP
- All full body harnesses come with a standard single dorsal D-ring (located at the back between the shoulder blades, this is a Class A harness)

**STANDARDS**

Our products meet or exceed CSA, ANSI and other industry standards to ensure your safety on the job.



Class A - Fall Arrest



Class D - Descent



Class E - Limited Access



Class L - Ladder



Class P - Work Positioning

### Examples of PeakWorks Harnesses



V8001000  
(FBH-10002A)

Compliance



V8002000  
(FBH-10000A)

Contractor



V8006100  
(FBH-60110A)

PeakPro



#### Please note:

- All body harnesses must meet or exceed **CSA Z259.10** (Canada) or **ANSI Z359.11** (U.S.) standards when applicable
- PeakWorks carries a full range of body harnesses certified to both standards
- For complete product listings, please visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks) or contact your local PeakWorks distributor for further details



# C CONNECTORS – LANYARDS



## Fall Arrest Lanyards

- Lanyards for fall arrest applications are designed using two types of shock absorbing technology: **POY** (Partially Oriented Yarn) and **SP** (Shock Pack)
- The shock absorbing action of these lanyards limits and reduces the force of a fall on the worker, significantly reducing injury to the body
- PeakWorks offers both styles of lanyards, **POY** (Partially Oriented Yarn) and **SP** (Shock Pack)

**POY (Partially Oriented Yarn)** lanyards are woven in a manner that allows the yarn to stretch out when it has a load applied to it. The POY is encased in tubular webbing for maximum strength.

**SP (Shock Pack)** lanyards are comprised of “tear webbing” which is woven in a manner that allows the webbing to tear when it has a load applied to it. This tearing absorbs a significant amount of force under load, reducing injury.

This tear webbing is folded and shrink-wrapped into a compact 1 x 2 x 6" (2.5 x 5 x 15 cm) pack that is sewn into the lanyard next to the body connector.

In Canada, PeakWorks SP lanyards are available in two categories: E4 (worker weight of 100 to 254 lb [45 to 115 kg]) and E6 (worker weight of 200 to 386 lb [90 to 175 kg]).

In the U.S., PeakWorks SP lanyards are available for 6 feet (1.83 m) free falls for worker weights of 130 to 310 lb (59 to 140 kg).



### Examples of PeakWorks Connector Lanyards

**Partially Oriented Yarn (POY) Type (Canada only):**



V810112X  
SA-1002-X



V810122X  
SA-20022-X



V810110X  
SA-1000-X

**Shock Pack (SP) Type (Canada only):**



V8104106A  
SA-3400-6A

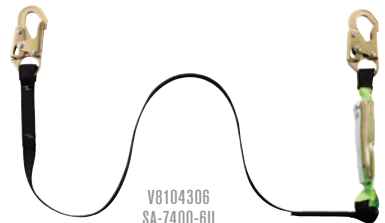


V8104406  
SA-84000-6



V810412X  
SA-3402-X

**Shock Pack (SP) Type (USA only):**



V8104306  
SA-7400-6U



V8104326  
SA-7402-6U



V8104426  
SA-84022-6U

**Please note:**

- All lanyard connectors must meet or exceed **CSA Z259.11-05** (Canada) or **ANSI Z359.13** (U.S.) standards when applicable
- PeakWorks carries a full range of lanyard connectors certified to both standards
- For complete product listings, please visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks) or contact your local PeakWorks distributor for further details

## CONNECTORS – SELF-RETRACTING LIFELINES (SRL'S)

### About Self-Retracting Lifelines

- Self-Retracting Lifelines (SRL's) are connectors that extend and retract as the worker moves around
- SRL's use a locking mechanism similar to that of a seatbelt
- Under normal use, the worker can move about while the SRL keeps them connected between the harness and anchor point
- If the worker slips or falls, the mechanism locks the SRL, preventing the worker from falling
- SRL's offer the worker the greatest amount of mobility and work distance from the anchor point
- SRL's offer shorter stopping distances than traditional shock absorbing lanyards

### SRL'S WITH LEADING EDGE (LE)

#### What is a Leading Edge?

- A leading edge can be described as any sharp edge commonly found on a worksite, with which a cable or webbing connection could come into direct contact during a fall
- There is considerable force at play during a fall, and a non Leading Edge SRL (cable or webbing) may cut or snap at a sharp edge during the fall; Leading Edge (LE) self-retracting lifelines are designed to protect the worker when operating near an edge and where a fall hazard exists that could cause the lifeline to come into contact with the edge, for example when working over structural steel or in high-rise concrete buildings under construction with open flooring
- An SRL Leading Edge (LE) device is an SRL that has enhanced design features for use in leading edge applications; it provides additional protection against the sharp or abrasive surfaces found on many construction sites and is capable of withstanding a fall over a leading edge
- Unlike standard SRL's, SRL LE units are designed for use in both vertical and horizontal applications; the ability to work in a horizontal position vastly increases the versatility of an LE unit

### WHY CHOOSE A PEAKWORKS SRL LE DEVICE?

- SRL makers have designed several methods to ensure there is no breakage when a fall happens and, more recently, to conform to the new ANSI LE standard; PeakWorks SRL LE's are certified to the new **ANSI Standard Z359.14** for Leading Edge applications as well as for non-Leading Edge applications
- While the most common method of converting an SRL to an SRL LE is to add a shock absorbing lanyard to the end of a standard SRL, which then absorbs enough of the dynamic force exerted at the edge to eliminate the webbing/cable from cutting, the downfall to this system is that an extra 48" must be added to the total fall distance formula to allow for the shock absorber extension – PeakWorks offers LE certified units which can be used without external shock absorbers
- All PeakWorks SRL LE units are clearly marked with "LE labels" to ensure that the correct SRL is used for a Leading Edge application
- Units are lightweight and some can be mounted on a worker's harness for better mobility and range of motion; they can also be mounted below a worker's fall arrest D-ring (please refer to instruction manual for details)

#### Examples of PeakWorks SRL's & SRL LE's



V845523006LE  
SRL-50302-6LE



V845525006LE  
SRL-50502-6LE



V845526006LE  
SRL-50602-6LE



V8454230XX  
SRL-40302-XX



V8455330XXLE  
SRL-53302-XXLE



V8455340XX  
SRL-53303-XX

#### Please note:

- All SRL's must meet or exceed **CSA Z259.2.2** (Canada) or **ANSI Z359.14** (U.S.) standards when applicable
- PeakWorks carries a full range of lanyard connectors certified to both standards
- PeakWorks SRL LE products are further tested and certified to **ANSI Z359.14** standards for Leading Edge
- For complete product listings, please visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks) or contact your local PeakWorks distributor for further details

# C



### QUALITY

From heavy duty polyester webbing to high grade steel hooks, only the best materials are used in our products.

NOW AVAILABLE  
Leading Edge  
SRL'S  
Certified to ANSI  
Z359.14-2012

## PEAKWORKS TOOL TETHERING SYSTEM



- PeakWorks offers an exclusive and patented tool tethering system
- The most secure tool anchor clamping mechanism in the market



PeakWorks Round Clamps



PeakWorks Flat Clamps



PeakWorks Press Blocks



PeakWorks Tool Tethering Lanyards



- For detailed information, please visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks)

## WANT TO KNOW MORE?

Visit our website at [surewerx.com/peakworks](http://surewerx.com/peakworks) for information regarding:

- Listing of CSA Standards & Regulations for Fall Protection
- Listing of ANSI Standards & Regulations for Fall Protection
- OSHA Regulations Governing Construction (29 CFR Part 1926)
- OSHA Regulations Governing General Industry (29 CFR Part 1910)
- ANSI Standards for Personal Fall Protection Used in Construction and Operations
- Canadian Fall Protection Legislated Requirements by Province
- Fall Protection Definitions
- Harness Fit Instructions
- Understanding & Calculating Fall Clearance
- Special Testing Requirements for an SRL LE
- The Fall Clearance Advantages of PeakWorks SRL LE Technology
- Product Inspection Requirements
- Fall Protection Audit Requirements
- Inspection & Cleaning Requirements