

## For the Transportation Industry



# FROM THE WORLDWIDE **EXPERTS** IN FALL PROTECTION & RESCUE















# **TRANSPORTATION**





This industry specific catalog is dedicated to keeping transportation workers safe while on the job!

Fall protection is a complicated issue and one of the most important faced by an employer or worksite supervisor. With over 100,000 reported incidents per year, falls from heights almost always result in serious injury. In the transportation industry, lack of proper fall protection can have serious consequences, even death.

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## DBI-SALA & PROTECTA Leaders in Transportation Industry Fall Protection

#### Meeting transportation challenges

We understand that there is no more diversified work environment than in the Transportation Industry. Not only is it constantly changing as the work progresses and technology evolves, but the industry itself is always innovating with new procedures and materials that present new challenges for your fall protection plan.

Transportation employees work in multiple scenarios where safety is always foremost on the job. These environments are specialized and multi-disciplined, demanding a full range of fall protection solutions to meet the needs of a variety of workplaces. That is why employers turn to Capital Safety, the makers of the two leading industry brands DBI-SALA & PROTECTA for industry expertise, superior quality products and continual systems innovation.

While both brands operate with a similar commitment to safety and quality, each brand has its own brand promise. DBI-SALA, which represents the ultimate in fall protection for any work environment, is supported by a commitment to Excellence, Innovation and Broad Range. PROTECTA represents fundamental fall protection at an exceptional value and is supported by a commitment to Reliability, Quality and Economy. The combination of the two brands provides our customers access to two great lines that serve the fullest range of product and value requirements.

#### A reputation for innovation

Many companies are generalists in safety, but Capital Safety is the only global company that has always been dedicated entirely to fall protection and rescue.

Our ISO 9001-2000 certification drives superior engineering, quality manufacturing and unparalleled customer services. Our design and engineering teams excel at finding the best way to keep workers totally safe and comfortable.

We have the industry's:

- Highest number of engineers
- · Largest patent portfolio with over 180 patents
- Greatest number of industry firsts

Combining experience and knowledge with state-of-the-art outdoor and indoor testing procedures, we produce the most technologically advanced safety equipment in the world. This equipment exceeds both national and international standards, including OSHA, ANSI, CSA and CE. We call it "creating a higher standard of safety."

#### Your partner in safety

Our service doesn't end with the sale. We understand the transportation industry and your precise fall protection needs. The highly trained professionals at Capital Safety educate, train and provide extensive long term support to ensure that all aspects of your fall protection program are successful. Whether you choose DBI-SALA or PROTECTA you can be assured that all the demands the transportation industry places on you are met head on with safety leading the way.

DBI-SALA & PROTECTA—your one-stop for the most comprehensive collection of innovative fall protection products for the transportation industry!

## The A, B, C's of Personal Fall Protection

DBI-SALA & PROTECTA offers a complete array of passive and active fall arrest systems. The basics of every personal fall arrest system can be described as the ABC's of fall arrest.

#### ANCHORAGE

Anchorage means a secure point of attachment (structure) for the fall arrest system. The type of anchorage varies with the application, the job being performed, the type of installation and the structure available. The anchorage connector provides a means of attaching the system to the anchorage (structure).



#### BODY SUPPORT

В

Full body harnesses provide a connection point on the worker for the personal fall arrest system.] Depending on the application, they can be used as part of a system to protect the worker from falling and to limit the extent of potential injury in case of a fall.



**DESCENT/RESCUE** Rescue and retrieval of a fallen worker is a required component of any Fall Protection Program.



## CONNECTORS

Connectors are devices used to connect the worker's full body harness to the anchorage system. Connectors include lanyards, snap hooks, carabiners, deceleration devices and specialty systems such as self retracting lifelines, ladder climbing systems, vertical lifelines and rope grabs.

## worker is a require of any Fall Protecti



## **Transportation Industry Applications RAILCAR LOADING/UNLOADING AND INSPECTION**

## Fall protection challenges

- The unique tasks associated with railcar loading, unloading, maintenance or inspection, in addition to whether the work is performed indoors or outdoors presents many challenges and there is often no single solution for a fall protection system.
- · Fall hazards present while working on railcars are magnified by the slippery surfaces during rain, sleet and snow. In addition, the inability to install permanent fall protection systems onto the railcar is a major challenge.
- Overhead permanent Horizontal Lifeline or I-Beam and Trolley Systems are ideal when work is done in the same location and on multiple railcars at the same time. These types of systems can be custom engineered for either indoor or outdoor applications
- In some cases due to time, space, support structure limitations or even random work locations, portable systems are the only consideration. These systems must be lightweight, easy-to-use and completely portable.
- Fall clearance can also be a major concern when working on railcars. Because of the limited height of a railcar, specialized fall protection systems are required to avoid hitting the ground in the event of a fall.





Portable Tanker Access Ladder System

Provides safe access and fall protection for personnel working on top of railcars. Completely portable and adjustable, the system is also constructed from lightweight aluminum for corrosion resistance.

#### Free-Standing Ladder Access Platform with Fall Protection Provides easy access to elevated work areas with fall protection from the

ground up. The system is completely portable and collapsable for storage. Lightweight aluminum construction for corrosion resistance.

#### evolution<sup>™</sup> Horizontal Lifeline System

This is a permanent low tension, multi-span lifeline that will allow up to 5 users to traverse from one extremity to another in a "hands-free" environment. A specially designed computer program simulates the necessary clearances and possible heights of fall. (Pg 48 and Photo Above)

#### Mobi-Lok<sup>™</sup> Self Contained Vacuum Anchor

Lightweight and extremely portable self contained vacuum anchor system for industry provides a non-penetrating fall arrest rated anchor point for your

Man Rated I-Beam Trolley

Designed for use on I-Beam Flanges ranging from 3" to 8" (7.6cm to 20.3cm) wide, up to 11/16" (17.5mm) thick. This anchorage connector rolls along an I-Beam providing horizontal mobility.

Installs in seconds to the beam structure, with final tightening using a built-in adjustment handle. Attach it to the beam structure in any orientation or direction for added versatility.

#### **D-ring Anchorage Plate**

Bolted or weld on, two 1/2" (12mm) attachment holes, 1/4" x 2" x 4-1/4" (6mm x 50mm x 108mm) 2101630 (Pg 36) Also available in stainless steel.

## RAILCAR LOADING/ UNLOADING AND INSPECTION





# Transportation Industry Applications TRUCK LOADING/UNLOADING AND SERVICING

## Fall protection challenges

- Truck drivers are always on the go. They service a number of different locations and the majority of the work is done on the side of a road where they could not only fall and potentially hurt themselves, they could fall into traffic.
- Many crews often take unnecessary risks by climbing on top of a truck without proper fall protection equipment. In order to be stored in a vehicle that has limited storage room, equipment must be lightweight, easy to use, portable and compact.
- Fall clearance can also be a major concern when working on top of flatbed, tanker, bulk or semi-trucks. Because of the limited height of these trucks, specialized fall protection systems are required to avoid hitting the ground in the event of a fall.
- All fall protection equipment used by the truckers must be mobile and cannot be permanently attached to the vehicle. Depending on what product is hauled, truck owners would have to obtain DOT re-certification, which could be very expensive. Re-certification would be required to make sure that the new attachment does not affect the integrity of the vehicle, does not cause a leak and it is still clean and safe for transport.





## TRUCK LOADING/UNLOADING AND SERVICING



Note: All part numbers are the same in US-Canada unless otherwise noted. Recommendations in this section are for general application guidance. Product choices may vary depending on specific performance requirements. Please see the catalog product pages or consult your Capital Safety representative for more detail.



# Transportation Industry Applications AVIATION MAINTENANCE

## Fall protection challenges

- Fall protection presents many challenges for aviation maintenance personnel because of the unique tasks, types of aircraft and different locations in which the work must be performed.
- Fall hazards present while working on an aircraft are magnified by the slippery surface on the wings, tail and fuselage. For aircraft inspections, horizontal mobility along the wing and/or fuselage is essential.
- Unless an aircraft is parked directly under a permanent fall protection system in a hangar, which is often times not possible, a mobile system or powered lift outfitted with fall protection equipment is needed.
- Time is of the essence in the competitive field of commercial aviation. For quick, unscheduled repairs, a portable system that a mechanic can carry to a plane's location is a necessity.
- Clearance can be a concern for smaller aircraft. A worker performing maintenance on a smaller airplane needs to be tied off to a rigid overhead anchorage to avoid hitting the ground in the event of a fall.
- Certain hardware elements of fall protection systems could scratch or scuff the surface of an aircraft. When attaching something to the fuselage or wing, workers need to be careful that the materials won't scratch, scuff or damage the airplane. Workers should also use harnesses and lanyards with covered hardware elements and a web loop in place of the back D-ring.





## **AVIATION MAINTENANCE**

#### **Body Support** For Ultimate comfort, performance and durability: ExoFit<sup>™</sup> XP Vest Style Harness Removable shoulder, back and leg padding with breathable What level of auality and durability 3-D mesh lining makes this harness the ultimate in comfort do you require in a full body harand safety. The padding is constructed in the shape of an ness? "X" that wraps around you for no-tangle donning. Stand-Up back D-ring enables connections to be made without straining. Features back D-ring and quick connect buckles. 1110102 (1110102C in Canada) (Pg 23) **High Performance** ExoFit<sup>™</sup> Vest Style Harness ExoFit<sup>™</sup> incorporates built-in shoulder, back and leg padding with a breathable lining that draws moisture away from the body keeping the worker dry and comfortable. The padding is constructed in the shape of an "X" that wraps around you for no-tangle donning. Features back D-ring and quick connect buckles. 1107977 (1107977C in Canada) (Pg 23) For Reliable, workhorse performance: Delta<sup>™</sup>II Dorsal Web Loop Harness Vest style with dorsal web loop and non-conductive/non-Standard sparking PVC coated hardware for reduced weight and potential damage to aircraft. Pass thru buckle leg straps. 1104730 (1104730C in Canada) (Pg 24) For compliance and value: PRO<sup>™</sup> Vest Style Harness For economical reliability, PRO<sup>™</sup> harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and global stan-Fundamental dards in one harness model aid in maintaining compliance. Features back D-ring, pass thru buckle leg straps. AB10113 (Pg 63) Connectors More than 6' mobility: Ultra-Lok<sup>®</sup> Self Retracting Lifeline Stainless steel working components, 11' (3.3m) nylon web with Does the worker require more than 6' of reserve lifeline, self-locking swivel hook, swiveling anchorage mobility or less? Will the worker be tying loop and impact indicator. 3103108 (3103108C in Canada) (Pg 44) Variation: For hot work such as welding, cable connectors are off at their feet? preferred to web Ultra-Lok<sup>®</sup> Self Retracting Lifeline More Mobility Device features a swiveling anchor loop, corrosion resistance stainless stee working components and a 30' (9m) galvanized cable lifeline. For added safety, it includes a swiveling hook with impact indicator and a reserve lifeline. **3504430** (3504430C in Canada) (Pg 44) - also available in 20' (6m), 50' (15m) and 85' (26m) lengths. Ultra-Lok® Synthetic Self Retracting Lifeline Features 50 ft. of Vectran synthetic line to reduce electrical conductivity and potential for sparking. Incorporates a durable and lightweight plastic housing and anti ratcheting brake design. Also available - 3504450 Ultra-Lok® with 50 ft. of galvanized lifeline. 3504480 (3504480C in Canada) (Pg 44) Less than 6' mobility: ShockWave2<sup>™</sup> Shock Absorbing Lanyard ShockWave2<sup>™</sup> shock absorbing lanyards are stretchable for complete freedom Less Mobility of movement. They expand to 6 ft. (1.8m) and contract to 4-1/2 ft. (1.4m) in reaction to your movements, reducing trip hazards. The ShockWave2™ incorporates a unique inner core that immediately begins to extend and absorb energy during a fall. 1244306 (Pg 30) EZ Stop® III Shock Absorbing Lanyard Tubular web jacket and polyester core for durability and longevity. Easy to use 🌈 self-locking snap hooks at both ends. Soft cover shock absorber. 1244006 (Not available in Canada) (Pg 29) Tying Off at Feet Tying off at the feet Force2<sup>™</sup> Shock Absorbing Lanyard The Force2<sup>™</sup> shock absorbing lanyard is used when there is no Note: All part numbers are the same overhead anchorage, and your only option is to tie off at your feet. Because this creates a much greater free fall distance, standard shock absorbers will bottom

when tying off at your feet.

1245006 (Not CSA approved) (Pg 31)

out, putting dangerous forces on your body. The Force2<sup>™</sup> shock absorbing lanyards allow a 12′ (3.7m) free fall and still keep forces below OSHA's limits



## Solutions for Small Aircraft & Helicopters

Fall distance is one of the main challenges with smaller aircraft. Because they sit much lower to the ground, it is necessary to use a system that provides a rigid overhead anchorage point minimizing deflection during a fall. These types of aircraft are often maintenanced outdoors where there is no overhead anchorage. When indoors, they have to share hanger space with multiple aircraft making it difficult to install fixed overhead systems because the work location constantly changes. DBI-SALA's solution is a Free-Standing Horizontal Rail Fall Arrest System that combines the simplicity of a horizontal rail and trolley with a portable support structure to provide reliable fall protection where it's needed, when it's needed. See Page 38 for details.

in US-Canada unless otherwise noted. Recommendations in this section are for general application guidance. Product choices may vary depending on specific performance requirements. Please see the catalog product pages or consult your Capital Safety representative for more detail.



# Transportation Industry Applications MARINE TRANSIT OPERATIONS/MAINTENANCE

## Fall protection challenges

- OSHA is increasingly scrutinizing fall protection systems on boats and barges. Systems must provide for continuous, convenient fall protection whenever a fall hazard is present.
- While in operation, there's often no overhead anchorage point to tie off to on a boat or barge. Anchors generally need to be temporary and portable to accommodate work at different locations on the boat.
- Boat docks and barge terminals allow for the installation of permanent, overhead anchorage systems, but they must accommodate fluctuating water levels as well as large loading equipment.
- The United States Coast Guard requires the use of an approved personal flotation device whenever there's a potential to fall into the water.
- Surfaces on boats and barges can be narrow, made all the more dangerous by slippery surfaces as a result of rain, snow, ice and/or the contents of the barge hold.
- While mooring boats and barges or during locking procedures, workers need horizontal mobility and often don't have time to switch between different fall protection anchorages.
- Confined space entry issues are a concern on barges. Additionally, walking on barge covers is especially hazardous, as covers that have not been properly latched can move.
- Rescue can be a challenge as space limitations may restrict the type of equipment that can be used. Aerial lifts cannot be used on the water and a worker cannot be lowered, so the system must be able to raise the fallen worker.





## MARINE TRANSIT OPERATIONS/MAINTENANCE





# Transportation Industry Applications **MASS TRANSIT VEHICLE MAINTENANCE**

## Fall protection challenges

- The unique tasks associated with mass transit vehicle maintenance, combined with the varying characteristics and types of vehicles presents many challenges and there is often no single solution for a fall protection system.
- Clearance can be a concern for small vehicles. A worker performing maintenance on smaller vehicles needs to be tied off to a rigid overhead anchorage to avoid hitting the ground in the event of a fall.
- Mass transit vehicle maintenance usually occurs inside a garage. In some instances permanent Horizontal Lifeline or I-Beam and Trolley Systems can be outfitted overhead that maintenance workers can connect their lanyards to and perform necessary tasks on top of the vehicle.
- Whether maintenance work is completed inside or outside, vehicles are not always parked in the same place and do not always have convenient access to a permanent fall protection system overhead, necessitating portable fall protection systems. These anchors should be lightweight, easy to use, and portable.



## A Anchorage



Do you require a temporary or permanent anchorage solution?

Permanent

Anchorage solutions that can be moved from one location to another: Free-Standing Ladder Access Platform with Fall Protection Provides easy access to elevated work areas with fall protection from the ground up. The system is completely portable and collapsable for storage. Lightweight aluminum construction for corrosion resistance. 8517715 (Pg 39)

## Free-Standing Horizontal Rail Fall Arrest Systems

System combines horizontal rail with a portable support structure to provide reliable fall protection where and when it's needed. Lightweight aluminum construction for corrosion resistance. **8517701 (Pg 38)** 

## EZ-Line<sup>™</sup> Horizontal Lifeline System

Retractable 60 ft. (18m) horizontal system is the fastest and easiest to install system on the market. The cable lifeline is neatly stored in an easy to carry case. It is compact and lightweight, and can attach to any 5,000 lb. rated anchorage point. **7605060** (7605062 in Canada) **(Pg 50)** 

Anchorage solution permanently installed in one location: evolution<sup>™</sup> Horizontal Lifeline System

This is a permanent low tension, multi-span lifeline that will allow up to 5 users to traverse from one extremity to another in a "hands-free" environment. A specially designed computer program simulates the necessary clearances and possible heights of fall. (Pg 48)

#### **D-ring Anchorage Plate**

Bolted or weld on, two 1/2" (12mm) attachment holes, 1/4" x 2" x 4-1/4" (6mm x 50mm x 108mm) 2101630 (Pg 36) Also available in stainless steel.

#### Man Rated I-Beam Trolley

Designed for use on I-Beam Flanges ranging from 3" to 8" (7.6cm to 20.3cm) wide, up to 11/16" (17.5mm) thick. This anchorage connector rolls along an I-Beam providing horizontal mobility **2103143 (Pg 36)** 

## MASS TRANSIT VEHICLE MAINTENANCE

B Body Suppo What level of quality and durability d you require in a full body harness? High Performance	<ul> <li>For ultimate comfort, performance and durability:</li> <li>ExoFit" XP Construction Vest Style Harness</li> <li>Removable and washable shoulder, back and leg padding with breathable 3-D mesh lining makes this harness the ultimate in comfort and safety. The padding is constructed in the shape of an "X" that wraps around you for no-tangle donning. Stand-Up back D-ring with impact indicator enables connections to be made without straining. Features back &amp; side D-rings, sewn in hip pad, tongue buckle belt, quick connect buckles.</li> <li>1110152 (1110152C in Canada) (Pg 23)</li> </ul>
	Delta <sup>™</sup> II Vest Style Harness Unique Delta <sup>™</sup> pad design provides comfort and holds the shape of the harness for fast no-tangle donning. Stand-up back D-ring enables connections to be made without straining. Features back D-ring, pass-thru buckle legs straps. 1103321 (1103321C in Canada) (Pg 24)
Standard —	Delta™ II Hi-Vis Work Vest Harness Sleeveless waist length vest with harness built-in for high visibility day and night. 1107404 (1107404C in Canada) (Pg 24)
Fundamental	For compliance and value: PRO" Vest Style Harness For economical reliability, PRO" harnesses provide fundamen- tal features in a comfortable fit. Built-in impact indicators and global standards in one harness model aid in maintaining compliance. Features back D-ring, pass thru buckle leg straps. AB10113 (Pg 63)
C Connectors	More than 6' mobility: <b>Talon* Self Retracting Lifeline</b> Compact and lightweight design features 16' (4.8m) nylon webbing lifeline. The brake system incorporates all metal components for dura- bility. A unique swiveling anchorage loop for direct attachment to the anchorage or harness sets this unit apart. It also includes an impact indicator for added safety. <b>3101051</b> (3101051C in Canada) (Pg 45)
More Mobility	Ultra-Lok* Self Retracting Lifeline Device features a swiveling anchor loop, corrosion resistant stain- less steel working components and a 20' (6m) nylon webbing lifeline. For added safety, it includes a self-locking hook, impact indicator and a reserve lifeline. <b>3103208</b> (3103208C in Canada) (Pg 44) - also available in 11' (3.3m) length.
How much mobility will the worker require?	Ultra-Lok® Self Retracting Lifeline Stainless steel working components, 30' (9m) galvanized wire with reserve lifeline, self-locking swivel hook, swiveling anchorage loop and impact indicator. 3504430 (3504430C in Canada) (Pg 44)
Less Mobility	Less than 6' mobility required: EZ Stop® Retrax <sup>™</sup> Shock Absorbing Lanyard This is the first shock absorbing lanyard that retracts automatically to fit the working area. It is a unique alternative to elasticized lanyards. 1241460 (1221460C in Canada) (Pg 29) PRO™ Shock Absorbing 100% Rebar Lanyard Twin log 100% tig off style below your remain connected at all
	times. Complete with large steel rebar hooks with a 2" gate

PRO<sup>™</sup> Shock Absorbing 100% Rebar Lanyard Twin-leg 100% tie-off style helps you remain connected at all times. Complete with large steel rebar hooks with a 2" gate opening. Variety of hook options to meet your worksite needs. AE549AW2 (AE549CW1-6 in Canada) (Pg 65)

Note: All part numbers are the same in US-Canada unless otherwise noted. Recommendations in this section are for general application guidance. Product choices may vary depending on specific performance requirements. Please see the catalog product pages or consult your Capital Safety representative for more detail.



Ultimate Protection We've added Resist Technology to two of our most popular lines of products, Delta<sup>™</sup> II harnesses and EZ-STOP®II shock absorbing lanyards. These products incorporate webbing with an extruded polyurethane coating providing protection against the elements, easy care and added durability. The specialized coating provides superior protection against grease, oil, dirt and grime, simply wiping clean in seconds. It also deflects debris that causes abrasion and makes the webbing cut and tear resistant for extended service life and lower overall cost of ownership. 1110930 Delta<sup>™</sup>II Harness (1110930C in Canada) Pg 24, and 1240850 EZ-Stop®II Shock Absorbing Lanyard (1220850C in Canada) Pg 29



# Transportation Industry Applications BRIDGE MAINTENANCE AND INSPECTION

## Fall protection challenges

- Underneath a bridge, there's not always something to stand on, so workers need to reach the work area either with an aerial lift or a suspended platform.
- Workers confined to articulating aerial lifts require the use of a fall restraint or fall arrest system to prevent ejection and falls from the bucket.
- Suspended platforms need to be anchored to the bridge, but the workers also require a secondary personal fall arrest system anchored separately in case the primary platform fails.
- Workers in aerial lifts and suspended platforms face a lack of mobility, so the work can take a while. Fall protection must be light, comfortable, mobile and compact so it does not get in the way while working in tight spaces for lengthy periods of time.
- Bridge inspection and maintenance work may also require free climbing, which necessitates a comfortable harness and 100 percent tie-off lanyard.
- When climbing ladders built into bridge columns, workers should be protected with a ladder safety system to prevent a fall in the event of slipping from the ladder rung.



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## **BRIDGE MAINTENANCE AND INSPECTION**





# Transportation Industry Applications RAISING OPERATIONS, RESCUE AND ESCAPE

## Fall protection challenges

- For raising operations, such as aerial lift work, a rescue, escape and self-evacuation plan should be in place in case the lift malfunctions or catches fire. The worker should have access to a self-evacuation unit, a manual or automatic descent control device in such situations.
- OSHA requires a prompt rescue in the event of a fall, usually defined as the provision of medical aid within four minutes. The easiest way to provide medical assistance to a conscious employee post fall arrest is through the use of a suspension trauma strap.
- Rescues may be needed in remote locations that require lightweight, portable equipment.
- All employees should be prepared and trained to utilize self-rescue equipment in the event of a fall. If an employee is unconscious and needs to be rescued, assisted rescue mechanisms should be utilized. The new ANSI Z359.4 standard addresses safety requirements for these systems. The standard addresses training and pre-planning requirements and establishes criteria for equipment marking, testing, care and use.





## **RAISING OPERATIONS, RESCUE AND ESCAPE**



length. 1231460 (1201460 in Canada) (Pg 57)

mendations in this section are for general application guidance. Product choices may vary depending on specific performance requirements. Please see the catalog product pages or consult your Capital Safety representative for more detail.



Introducing the ...



The revolutionary i-Safe<sup>™</sup> Intelligent Safety System from DBI-SALA maximizes the effectiveness and minimizes the total cost of your safety program through web-enabled intelligent technology.

The system allows you to easily record and access information on inspections, inventory and purchase information. Track equipment assignments by worker or location. View or download safety and equipment instructions, regulations and more!



## Inspection Tracking

- Up-to-date inspection logs for product reliability and safety
- Verification system to promote compliance
- Electronic record for traceability and audit

## Inventory Control

- Tracks inventory on the site or around the globe
- Paperless and accurate asset management
- Easy retrieval of information for inventory control
- Theft and diversion prevention

## Information Management

- Real time website support for consultative safety solutions
- Instant access to key information to streamline logistics and safety management
- Accountability by logging product and inspection status by job

## An information highway for your safety program

The i-Safe<sup>™</sup> system is enabled by RFID (radio frequency identification), a wireless data collection technology. i-Safe<sup>™</sup> consists of passive RFID tags (transponders), scanned by PDA readers (receivers) that synchronize data with a web-enabled information portal.

#### i-Safe<sup>™</sup> RFID Tags **PDA Readers** Web Portal **Retrofitting Kits** i-Safe<sup>™</sup> tags are now Tags are read by an on-site Data is then linked from Easy do-it-yourself standard equipment on PDA that scans the piece of the PDA or laptop to your retrofitting kits are available DBI-SALA products. Each equipment and accounts for customized web portal. Your for all types of harnesses, tag is programmed with a it by a unique number. One safety program website also lanyards and SRL's, allowing unique ID that registers its provides instant access click entry logs inspections, you to extend the benefits of model type and history. equipment assignments by to related safety and your i-Safe<sup>™</sup> system to your worker or location, equipment information, entire inventory regardless training records, product of brand. Information on and more. advisories and useful links. model number, make, date of manufacture will need to be entered for each retrofit i-Safe<sup>™</sup> tag.











PDA & Reader Card (activated)

Universal Hard Retrofit Tag

Soft Choker Retrofit Tag

Cable/SRI Retrofit Tag

9000026: i-Safe<sup>™</sup> Enabled PDA Ready for use with i-Safe<sup>™</sup> Mobile 9503818: i-Safe<sup>™</sup> Universal Hard Retro-Fit Tag, 6-Pack w/ zip-tie, adhesive pad and key-ring 9503819: i-Safe" Universal Hard Retro-Fit Tag, 25-Pack w/ zip-tie, adhesive pad and key ring 9502059: i-Safe<sup>™</sup> Soft Choker Retro-Fit Tag, attach to most fall protection equipment, 6-Pack 9502553: i-Safe<sup>™</sup> Soft Choker Retro-Fit Tag, attach to most fall protection equipment, 25-Pack 9502425: i-Safe<sup>™</sup> Cable/SRL Retro-Fit Tag, fits 3/16" (5mm) to 1/4" (6.25mm) wire or synthetic rope, 4-Pack

Much of DBI-SALA's fall protection equipment is now i-Safe<sup>™</sup> enabled as a standard feature, ready to link up to your i-Safe<sup>™</sup> information system. Your representative will help you get the most out of your new i-Safe<sup>™</sup> program!



## DBI-SALA FULL BODY HARNESSES

## Engineered for Quality

The DBI-SALA reputation for quality provides peace of mind in selecting a full body harness. Quality in a harness means maximum comfort, freedom of movement and ease of use. Industry innovations such as the spring-loaded stand-up back D-ring and the No-Tangle Delta<sup>™</sup> Pad demonstrate DBI-SALA engineering and ingenuity.

A full body harness is designed with straps to fasten around the user in order to distribute fall arrest forces over at least the upper thighs, pelvis, chest and shoulders. This moves the impact of a fall from the internal organs to the major bone and muscle groups around the pelvis. The full body harness includes a means for attaching to the other components of a fall arrest system. Harnesses must meet strict OSHA, ANSI and CSA standards that include 5,000 lbs. (22kN) of minimum breaking strength at all attachment points and load bearing straps.

## What to look for in a Full Body Harness

## BACK D-RING/WEB LOOP

Every harness must have a fall arrest point located on the back, positioned between the shoulder blades. Dorsal web loop designs and PVC coated hardware offer additional resistance to conductivity and sparking.

## WEBBING

Webbing is an important factor in the durability and safety of the harness. You want to ensure that the webbing is strong enough to endure rough use and exposure to sunlight and other elements without tearing or fraying, yet at the same time stay soft and not feel stiff or coarse. Speciality webbing such as Nylon or Nomex\*/Kevlar\* provide extra protection in arc flash applications

## **ADJUSTING POINTS**

Whether you wear a harness four hours a day or fourteen hours, it needs to fit right for safety and comfort. Harnesses with adjusting points on the legs, waist, chest and shoulders allow for a better fit.

## LEG STRAPS

Depending on worker preference, leg straps fasteners may be available in different styles, including:

- Tongue bucklePass thru buckle
- Parachute buckle
- Quick connect buckle

## PELVIC SUPPORT

An added sub-pelvic strap provides additional support, security and comfort for the user. Properly positioned, it better distributes forces during a fall.

## **BOOK STYLE LABELS**

DBI-SALA harnesses feature book-style labels that put product and inspection information at the workers' fingertips. Pages may include sizing, operating instructions, inspection log, warning labels and compliance information. Promotes safe inspection, compliance and safety.

#### STITCHING

Double box stitching provides maximum strength and durability. Sewn-in quality you can trust.





## ARC FLASH STANDARD

Arc flash harnesses are made from a material such as 7,000 lb. (31kN) nylon or Nomex<sup>®</sup>/Kevlar<sup>®</sup> to meet the requirements of applications such as utility work that require protection against static build-up. Options include non-conductive, non-sparking PVC coated hardware, rescue loops and back web loops. Leather insulators behind metal hardware reduce static energy transfer. Meets ASTM F887-05 40 cal/cm2 arc flash standard.

## **NO-TANGLE DESIGN**

Donning a harness incorrectly can mean the equipment may not work properly. The patented Delta<sup>®</sup> Pad and the Exofit<sup>®</sup> exclusive wrap-around X-design make these harnesses easy to don and comfortable to wear with a wide spread over the shoulders to prevent irritating abrasion.

## COMPONENTS FOR TOUGH ENVIRONMENTS

DBI-SALA offers various options for the harshest environments including resist technology webbing and stainless steel hardware.

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## FULL BODY HARNESSES

## PADDING

Cushioned shoulder, leg and hip pads keep the pressure off to provide extra worker comfort for long hours of wear. They may be built-in to avoid slipping or removable. Washable, removable padding promotes product longevity. Optional Nomex\*/Kevlar\* padding provides extra protection against arc flash.

### LINING

The Exofit and Exofit" XP harnesses feature breathable lining that wicks moisture away from your body so you're always dry and comfortable in heat or cold. First designed for sport, recreation and work shoe linings, breathable 3-D mesh lining is rugged and resistant to odor and mildew.

## IMPACT INDICATOR

Some harnesses include impact indicators to give immediate notice that the harness has been in a fall. Promotes safety and proper inspection.

### **STAND-UP BACK D-RING**

The unique DBI-SALA patented spring-loaded D-ring makes connection easy for increased worker comfort and productivity.

## INTEGRAL LANYARD KEEPER

A lanyard keeper provides a place to hook up excess line when not in use. Prevents tripping and entanglement for enhanced productivity.

## QUICK CONNECT BUCKLE

The patented DBI-SALA quick connect buckle is color-coded and provides one-handed operation for fast and easy donning.

## SEAT SLING

A removable seat sling provides job versatility and added comfort for long hours of use.

## i-Safe™

Every DBI-SALA harness now comes with i-Safe<sup>®</sup>, the Intelligent Safety System that incorporates RFID and web-enabled communications technologies, providing you with the ability to centrally track inspections, control field inventory and manage critical safety information.

Stand-up

**Back D-ring** 

Quick

**Connect Buckles** 



## FULL BODY HARNESS MODELS

DBI-SALA harnesses are available in many models with various options depending on their intended use:



DESCENT CONTROL HARNESS: Has frontal attachment points for use with descent

control devices.

**CONFINED ENTRY**/

frontal attachment.

LADDER CLIMBING HARNESS: Has frontal

attachment point for

connection to permanent

ladder safety systems.

**RETRIEVAL HARNESS:** 

Has one attachment point

located on each shoulder strap to facilitate upright retrieval from confined spaces or









#### WORK POSITIONING HARNESS:

Positioning D-rings are located on the hips for use with pole straps or work positioning lanyards to allow hands-free operation. (These may include integral waist belts attached to the harness.)

## MULTI-PURPOSE HARNESS:

This may include extra attachment points to allow work in a variety of situations. The dorsal D-ring must always be used for fall arrest. The belt and pad provide additional back support, positioning rings and tool carrying options.

## ExoFit<sup>™</sup> XP Harness Features

Removable Shoulder, Back and Leg Padding





Lanyard Keeper



# DBI-SALA Full Body Harnesses are engineered with the quality you need for dependable fall protection

	SELECTION GUIDE												
Product	Description	Recommended For	Webbing	X-Design with Padding and Breathable Lining	Quick Connect Buckle	No- Tangle Design	Back D-Ring	Hardware	Book Style Labels	Integral Lanyard keeper	Impact Indicator		
ExoFit™ XP	ExoFit" XP and ExoFit" are the premier harnesses in the industry, surpassing all other models in comfort and durability	Utility & Construction Station & Vehicle Maintenance Bridge Work Loading & Unloading, Rescue and Descent	100% polyester (Arc Flash available in Nylon or Nomex®/ Kevlar®)	√ Removable 3-D mesh breathable shoulder, back & leg padding	√ (also available with Tongue buckle legs)	Wrap around X-design	Adjustable patented spring loaded stand-up D-ring	Plated forged alloy steel	V	V	V		
ExoFit™	Premium harness for long hours of comfort and durability	Utility & Construction     Aviation Maintenance     Bridge Work     Marine Transit     Loading & Unloading	100% polyester	√ sewn-in padding	√ (also available with Tongue buckle legs)	Wrap around X-design	Fixed back D-ring	Plated forged alloy steel	V		CSA models only		
Delta™ II	The most popular harness in the industry featuring the patented Delta" No-Tangle design for optimum comfort and productivity	Utility & Construction     Avaition Maintenance     Loading & Unloading     Station & Vehicle Maintenance     Bridge Work     Rescue and Descent	100% polyester (Arc Flash available in Nylon or Nomex*/ Kevlar*)	Optional back and shoulder padding available — part #9501207	Optional	Delta <sup>**</sup> No- Tangle Pad	Adjustable patented spring loaded stand-up D-ring	Plated forged alloy steel	V		CSA models only		

1150174

## HARNESS HYDRATION SYSTEM

SAL

• Incorporates a simple clip-on design that attaches to any harness.

- 50oz capacity allows worker a convenient hydration source for added safety and productivity
- Zip-up nylon carrier protects the system and provides easy access for filling.
- Compact design keeps water source close to the body without getting in the worker's way.
- Anti-microbial, taste free tubing and reservoir-dual hose ports provide access over shoulder.
- Drink tube clip and quick release hose prevent entanglements.
- No-leak bite valve delivers liquid easily hands free and the bite valve cover keeps dirt away
  50oz (1.5L) capacity, 38" drink tube, 0.75lbs when empty



## SUSPENSION TRAUMA SAFETY STRAP

Allows suspended worker to stand up in their harness to relieve pressure. Continuous loop design allows for either one or two foot suspension relief without pinching. Can be quickly attached to most harness brands right in the field-just choke off to strap and it's ready to go.

- Extremely compact and lightweight design stays out of the worker's way.
- Foolproof deployment and operation-unzip and hook straps together.

9501403 (9501403C in Canada)



## **FULL BODY HARNESSES**



ЕХОГІТ™ХР STANDARD HARNESS: Ideal harness for all general purpose applications 1110100 (1110100C Canada)

#### The **ExoFit<sup>™</sup>XP** is the most comfortable, user-friendly harness ever built from the ground up.

Removable shoulder, back and leg padding with breathable 3-D mesh lining makes this harness the ultimate in comfort and safety. The padding is constructed in the shape of an "X" that wraps around you for no-tangle donning. Stand-up back D-ring enables connections to be made without straining.

- Industry's first truly washable harness with removable padding
- Breathable 3-D mesh lining with soft edging for comfort
- Unique spring-loaded stand-up back D-ring with impact indicator
- Integral lanyard keeper to prevent trip-fall hazards

## The **ExoFit**™ Full Body Harness features a wrap around, No-Tangle design that slips on like a vest, making it quicker and easier to put on while providing ventilation, comfort, padding and security.

The materials are soft and lightweight, yet extremely durable. The shoulder, hip and leg padding is built-in so it can't slip. The breathable lining helps ensure you'll stay dry and comfortable every day. And the quick-connect buckles are fast, efficient and totally secure!

- Incorporates a breathable lining that immediately draws moisture away from the body keeping the worker dry and comfortable all day long
- Ergonomic design incorporates built-in shoulder, hip and leg padding that always stays in place enhancing comfort and worker satisfaction
- Soft edging moves with you preventing uncomfortable rubbing or chafing, enhancing comfort and mobility

#### i-Safe™

Every DBI-SALA harness now comes with i-Safe<sup>™</sup>, the Intelligent Safety System that incorporates RFID and web-enabled communications technologies, providing you with the ability to centrally track inspections, control field inventory and manage critical safety information



Hip pad and belt for use with tool pouches and side D-rings for positioning **1110150** (1110150C in Canada)



EXOFIT™ XP ARC FLASH Nomex®/Kevlar® Harness Nomex<sup>®</sup>/Kevlar<sup>®</sup> ideal for welding and conductive environments 1100943 (1100943C in Canada) EXOFIT<sup>™</sup> XP FULL BODY HARNESSES



**EXOFIT<sup>™</sup> XP CROSS-OVER HARNESS** Cross-over style with front D-ring; also ideal for female workers 1109800 (1109800C in Canada)

Model & Size S M L XL	Style	D-Rings	Buckle Type	Hip Pad/ Belt	Belt Loops
1110100 (01)(02)(03) 1110100C in Canada (01C)(02C)(03C)	Vest	Back	Quick Connect		$\checkmark$
1110225 (26) (27) (28) 1110225C in Canada (26C)(27C)(28C)	Positioning	Back, Side	Quick Connect		$\checkmark$
<b>1109800 (01) (02) (03)</b> 1109800C in Canada (01C)(02C)(03C)	Cross-Over	Back, Front	Quick Connect		$\checkmark$
<b>1110150</b> (51)(52)(53) 1110150C in Canada (51C)(52C)(53C)	Construction	Back, Side	Quick Connect	$\checkmark$	$\checkmark$
1109725 (26) (27) (28) 1109725C in Canada (26C)(27C)(28C)	Vest	Back, Front	Quick Connect		$\checkmark$
<b>1100943</b> (40) (41) (42) Not available in Canada	Nomex <sup>®</sup> / Kevlar <sup>®</sup> Vest	Back	Quick Connect		
1111550 (51) (52) (53) Not available in Canada	Rescue Harness	Back, Side, Front, Waist	Quick Connect	$\checkmark$	$\checkmark$

## **EXOFIT<sup>™</sup>** FULL BODY HARNESSES



CONSTRUCTION HARNESS Hip pad & belt for tool pouches; side D-rings for positioning 1108500 (1108500C in Canada)

**EXOFIT**<sup>™</sup> **STANDARD HARNESS** Ideal harness for all general purpose applications 1107975 (1107975C in Canada)



**CONSTRUCTION HARNESS** Side d-rings allow convenient positioning 1108575 (1108575C in Canada)

#### **EXOFIT<sup>™</sup>** FULL BODY HARNESSES

Model & Size S M L XL	Style	D-Rings	Buckle Type	Hip Pad/ Belt	Belt Loops
<b>1107975</b> (76)(77)(81) 1107975C in Canada (76C)(77C)(81C)	Vest	Back	Quick Connect		$\checkmark$
1109356 (55)(57)(58) Not available in Canada	Vest	Back	Tongue Buckle		$\checkmark$
1108525 (26) (27) (32) 1108525C in Canada (26C)(27C)(32C)	Climbing	Back, Front	Quick Connect		$\checkmark$
1111425 (26) (27) (28) Not Available in Canada	w/Stainless Steel Hardware	Back, Stain- less Steel	Quick Connect		$\checkmark$
<b>1108575 (76) (77) (81)</b> 1108575C in Canada (76C)(77C)(81C)	Positioning	Back, Side	Quick Connect		$\checkmark$
<b>1108500 (01) (02) (03)</b> 1108500C in Canada (01C)(02C)(03C)	Construction	Back, Side	Quick Connect	$\checkmark$	$\checkmark$
1108650 (51) (52) (58) 1108650C in Canada (51C)(52C)(58C)	Tower Climbing	Back, Front, Side & Seat Sling	Quick Connect	$\checkmark$	$\checkmark$





The **Delta™IN** full body harnesses feature the patented Delta™ No-Tangle Pad for extra comfort throughout the neck, shoulders and back.

This design holds the shape of the harness, making it easier to put on. This added comfort and ease of donning has greatly improved worker acceptance and reduced the probability of improper usage. Our patented spring-loaded "stand-up" back D-ring ensures quick and easy connection to your fall arrest device. A wide variety of models and options lets you find just the right harness for almost any work application.

- Patented spring-loaded stand-up back D-ring for quick and easy connection
- Book-style labels keep information and . inspection logs readily available
- Forged alloy steel hardware for maximum strength and durability
- i-Safe<sup>™</sup>

Every DBI-SALA harness now comes with i-Safe<sup>™</sup>, the Intelligent Safety System that incorporates RFID and web-enabled communications technologies, providing you with the ability to centrally track inspections, control field inventory and manage critical safety information.



Spring-loaded stand-up back D-ring for quick and easy connection.

## **DELTA<sup>™</sup> II** FULL BODY HARNESSES



DELTA <sup>™</sup> II **STANDARD HARNESS** Ideal harness for all general purpose applications 1102000 (1102000C in Canada)



DELTA " II QUICK-CONNECT HARNESS General purpose harness with fast and easy donning 1110600 (1110600C in Canada)



DELTA " II REDUCED SCRATCH HARNESS PVC coated hardware and dorsal web loop reduces weight, conductivity and damage to sufaces

**1104730 (U)** (1104730C in Canada)



DELTA<sup>™</sup> II **CONSTRUCTION HARNESS** Hip pad and belt for use with tool pouches and side D-rings for positioning 1101655 (1101655C in Canada)



DELTA™ II NOMEX <sup>®</sup>/ Kevlar <sup>®</sup> harness Arc flash and flame resistant Nomex\*/Kevlar\* webbing and non-conductive non-sparking PVC coated hardware 1110830 (1110830C in Canada)

DELTA™ II **CROSS-OVER HARNESS** Cross-over style with front and side D-ring; also ideal for female workers

1103270 (1103270C in Canada)



**RESIST HARNESS** RESIST technology for protection against grease, oil, dirt and grime with front and side D-rings **1110930** (1110930C in Canada)



DELTA™ II **RETRIEVAL HARNESS** Shoulder D-rings for retrieval and rescue 1101254 (1101254C in Canada)



DELTA™ II HI-VIS WORK VEST HARNESS High visibility/reflective workvest and harness combination 1107404

(1107404C in Canada)



## **FULL BODY HARNESSES**

DELTA <sup>™</sup> II HARNESSES											
Model & Size	Style	D-rings	Buckle Type	Hip Pad/Belt	Belt Loops	Additional					
1102000 (U)	Vest	Back	Tongue Buckle								
1110600 (U)	Vest	Back	Quick Connect								
1103321 (U) 1103321C in Canada	Vest	Back	Pass Thru								
1102008 (U) 1102008C in Canada	Positioning Vest	Back, Side	Tongue Buckle								
1103875 (U) 1103875C in Canada	Positioning Vest	Back, Side	Pass Thru								
1102526 (U) 1102526C in Canada	Vest	Back	Tongue Buckle								
1107800 (L)	Vest Climbing	Back, Front	Tongue Buckle		$\checkmark$						
<b>1104730 (U)</b> 1104730 in Canada	Web Loop	Back Web Loop	Pass Thru		$\checkmark$	PVC Coated Hardware					
<b>1101254 (U)</b> 1101254C in Canada	Retrieval	Back, Shoulders	Tongue Buckle								
1102950 (U) 1102950C in Canada	Cross-Over	Back, Front	Tongue Buckle								
1102010 (U) 1102010C in Canada	Cross-Over	Back, Front	Pass Thru			Hi-Vis Web & Hi-Vis Vest					
<b>1103270 (U)</b> 1103270C in Canada	Cross-Over	Back, Front, Sides	Pass Thru								
<b>1110830 (U)</b> 1110830C in Canada	Nomex®/Kevlar® Arc Flash	PVC Coated Back D-ring	PVC Coated Pass Thru		$\checkmark$	PVC Coated Hardware, No- mex <sup>®</sup> /Kevlar <sup>®</sup> Web					
1110801 (L) 1110801C in Canada	Nomex <sup>®</sup> /Kevlar <sup>®</sup> Arc Flash	Back Web Loop, Side D-rings	Quick Connect	$\checkmark$	$\checkmark$	Nomex <sup>®</sup> /Kevlar <sup>®</sup> Hip Pad and pass thru belt					
<b>1110930 (U)</b> 1110930C in Canada	Cross-Over RESIST	Back, Front, Sides	Tongue Buckle			RESIST Technology Webbing					
1101655 (L)	Construction	Back, Side	Tongue Buckle	$\checkmark$	$\checkmark$	Shoulder Pads					
<b>1107404 (L)</b> 1107404C in Canada	Hi-Vis Workvest	Back	Tongue Buckle			Hi-Vis Reflective Orange Workvest					
1111580 (U) Not available in Canada	Hi-Vis Workvest	Back	Quick Connect			Hi-Vis Reflective Orange Workvest					
1111584 (U) Not available in Canada	Hi-Vis Workvest	Back	Quick Connect			Hi-Vis Reflective Lime Green Workvest					
1111576 (U) Not available in Canada	Workvest	Back	Quick Connect			Blue Workvest					

\*\* U size = Universal Size - one size fits most; Medium & Large range



## **DELTA® II HARNESS ACCESSORIES**

- 1 9501207 Delta<sup>™</sup> Comfort Back Pad 2 1231117 18" (45cm) D-Ring Extension (1201117C in Canada)
- 3 9504374 Lanyard Keeper
- 4 5
- 6
- 9504374 Lanyard Keeper 9504066 11 Pocket Tool Bag 9504072 15 Pocket Tool Bag 9511597 Harness & Lanyard Bag, 7-1/2" x 6-1/2" x 15-1/2" (19cm x 17cm x 40cm) 9500468 Off-Shore Life Jacket, USCG
- 7 approved with back D-ring opening Universal size



#### **BODY BELT**

- Side D-rings for connection to restraint lanyard
  3" (8cm) body pad for added comfort
  Tongue buckle belt adjustment for fast & easy donning
  Sturdy polyester webbing construction for added durability

Size Large
Also available with back D-ring only (#1000004 size Large) 1000024 (1000024C in Canada)

## ....

## **BODY BELT**

- Basic belt with NO D-ring or body pad
  Tongue buckle belt adjustment for fast & easy donning
  Sturdy polyester webbing construction for added durability
  Size Large
- 1000054

## SALA

## DBI-SALA SHOCK ABSORBING LANYARDS

## Innovation for Ease-of-use and Durability

DBI-SALA is known as an innovator who can design and build the products you need for all your fall protection challenges. The patented DBI-SALA snap hook with easy one-hand operation is the most popular in the industry. It's just one of the lanyard features that have enhanced worker productivity and safety. Available with over 20 different connectors to fit the application, DBI-SALA lanyards promote safety and enhance productivity. Lanyards are flexible lines with a connector at each end used to connect the anchorage to the body support of a fall protection system. Lanyards should be connected to the back D-ring for fall arrest, located between the shoulder blades and ideally should be anchored above the worker to minimize fall distance. The worker should not walk too far from the overhead anchorage or a swing fall may occur.

## SHOCK ABSORBING LANYARDS

Lanyards used for fall protection must include a shock absorber to dissipate the energy of the fall, limiting the forces on the body of the falling worker.

## SHOCK ABSORBING STRETCH LANYARDS

For added flexibility and safety, the DBI-SALA ShockWave" and EZ-Stop\* Retrax" lanyards are available with an expansion and contraction feature that allows them to be extended when length is needed and then contracted with the movement of the worker to avoid trips, falls and snags.

## **POSITIONING LANYARDS**

Rope or web lanyards without shock absorbers may be used for applications that require positioning or restraint of a worker or if the fall possibility is less than 2' (0.6m).

## DOUBLE LEG LANYARDS OR

**100% TIE-OFF LANYARDS** (Two lanyards that are connected at one end.) This style of lanyard is used to provide 100% tie-off. It allows you to stay protected while you move from one location to another.



## SPECIALTY SHOCK ABSORBING LANYARDS:

#### Tie-back Lanyards

When a qualified anchorage connector is not available, a tie-back lanyard acts as both a connecting means and an anchorage connector. There are two styles one incorporates a movable D-ring on the lanyard for attaching the snap hook, and the other is designed for the hook to go around the webbing itself. This requires a specialty hook with a gate strength capacity of 5,000 lbs. (22kN).

#### Lanyards for Tying Off at the Feet

The DBI-SALA Force2" shock absorbing lanyard allows for a 12' (3.7m) free fall and keeps the forces below the 1,800 lb. (8kN) OSHA limit.

#### Kevlar<sup>®</sup> Lanyards

Kevlar<sup>®</sup> is a special material that is safe for high temperature environments. Also available is a Nomex<sup>®</sup>/Kevlar<sup>®</sup> shock pack cover option for extra durability.



**Resist Technology Lanyards** Resist technology allows the user to easily wipe away grease and dirt while providing additional resistance against abrasion and tears.



Arc Flash Lanyards Arc flash lanyards are made from specialized materials and arc tested to 40 cal/cm2 to meet the ASTM F887-05 standard.



## SHOCK ABSORBING LANYARDS

## What to look for in a Shock Absorbing Lanyard

## WEBBING

Webbing is an important factor in the durability and safety of the lanyard. You want to ensure that the webbing is strong enough to endure rough use and exposure to sunlight and other elements without tearing or fraying. Nomex<sup>®</sup>/Kevlar<sup>®</sup> webbing is used for specialty applications such as welding that require fire resistance or when extra protection is need against arc flash hazards. Webbing may also be coated with polyurethane to provide protection against grease, oil, dirt and grime.

## CABLE

Some lanyards are made of vinyl-covered cable for extra durability or when working in high heat environments.

### IMPACT INDICATOR

If the lanyard has been used to arrest a fall or if the energy absorber has been deployed, the lanyard must be retired immediately. An impact indicator gives easy visual reference of a blown shock.

## LENGTH

Standard lanyard length is 6'. A lanyard should be long enough to be user-friendly, but kept as short as possible to minimize the free fall distance. Knots should never be tied in lanyards to reduce their length as this can reduce the strength by 50%.

## SHOCK ABSORBER

**CONNECTOR/HOOK** 

Most lanyards are available with traditional auto-locking snap hooks.

The popular patented DBI-SALA snap hook allows one-handed use with no pinching of thumbs or fingers. Lanyards can also be fitted with larger snap hooks or carabiners for connection to larger anchorages.

Lanyards designed for use as part of a personal fall arrest system must contain an energy absorbing unit that will limit the force on the worker to below 1,800 lbs. (8kN) with up to a 6' (1.8m) free fall. Most manufacturers now keep the arresting forces below 900 lbs. (4kN). Shock absorbers come in pack or tubular styles depending on user preference.

#### i-Safe"

Every DBI-SALA lanyard now comes with i-Safe™ the Intelligent Safety System that incorporates RFID and web-enabled communications technologies, providing you with the ability to centrally track inspections, control field inventory and manage critical safety information.

> One-handed, easy connectionseven with your gloves on! Open and close without getting your fingers in the way!

## **DBI-SALA** patented snap hooks

are preferred in the industry!

Every DBI-SALA lanyard combines super strength and ease of use. All hardware is proof tested to industry standards, and our patented, user-friendly self-locking snap hooks are standard on all DBI-SALA lanyards. They allow you to open and close the hook even with gloves on without getting your thumb or fingers in the way. All lanyards exceed industry standards, including OSHA and ANSI Z359.1, CSA and CE approved models also available.

#### **NEW ANSI Z359 STANDARD**

Under the new standard, snap hook and carabiner gates must withstand a 3,600 lb. load. Both DBI-SALA and PROTECTA branded products are available to meet the new standard. We've made ordering the 3,600 lb. hook gate option easy; 120 series lanyards will change to 123 and 122 series changes to 124 (ex. 1224306 with 3,600 lb. gate hooks would be 1244306)



Shock absorbing lanyards are available in multiple configurations with a variety of anchorage hooks:

- A. Standard DBI-SALA patented snap hook with 3/4" (19mm) gate opening
- B. Aluminum rebar hook with 2-1/4" (57mm) gate opening C. Flat steel rebar hook with 2-1/2" (62.5mm) gate opening





Every DBI-SALA Lanyard delivers quality in design, materials and manufacture

SELECTION GUIDE											
Product	Description	Recommended For	Line	Patented DBI-SALA Snap Hook	Tie-back	Retraction & Expansion	Resist Technology				
Shock- Wave2™	Stretchable to provide freedom of movement with unique inner core that limits arresting forces to no more than 900 lbs. (4kN)	<ul> <li>Utility &amp; Construction</li> <li>Loading &amp; Unloading</li> <li>Station &amp; Vehicle Maintenance</li> <li>Aviation Maintenance</li> <li>Bridge Work</li> </ul>	1" (25mm) polyester webbing	V	AVAILABLE, 5,000lb (22kN) gated carabiner	V					
EZ STOP® II	Designed for versatility and available in many variations for optimum safety	<ul> <li>Utility &amp; Construction</li> <li>Loading &amp; Unloading</li> <li>Station &amp; Vehicle Maintenance</li> <li>Marine Transit</li> <li>Bridge Work</li> </ul>	1" (25mm) polyester, 1" (25mm) polyurethane coated webbing,1-3/4" (44mm) Kevlar®, 7/32" (5.5mm) cable	$\checkmark$	AVAILABLE		AVAILABLE				
EZ STOP® Retrax™	The first shock absorbing lanyard that retracts automatically to fit the working area	<ul> <li>Bucket Truck/Aerial lifts</li> <li>Vehicle Maintenance</li> </ul>	1" (25mm) polyester webbing	$\checkmark$		$\checkmark$					
WrapBax™ 2	Unique hook to provide 360°, 5,000 lb. (22nK) protection in any direction for safe tie-back	<ul> <li>Utility &amp; Construction</li> <li>Station &amp; Vehicle Maintenance</li> <li>When no separate anchorage is available</li> </ul>	Heavy duty 13,000 lb. (57kN) webbing	V	√ 5,000 lb. (22kN) hook capacity						
Force 2™	Only shock absorbing lanyard rated for 12' (3.7m) free fall on the market	<ul> <li>Bucket Truck/Aerial lifts</li> <li>Aviation Maintenance</li> </ul>	1" (25mm) polyester webbing	$\checkmark$	AVAILABLE						
EZ STOP® III	Designed for versatility and available in many variations for optimum safety	<ul> <li>Utility &amp; Construction</li> <li>Bridge Work</li> <li>Station &amp; Vehicle Maintenance</li> </ul>	1-3/8″ (35mm) tubular webbing	V							
Positioning	Durable, high quality lanyards for non-fall arrest applications	<ul> <li>Station &amp; Vehicle Maintenance</li> <li>Marine Transit</li> <li>Bridge Work</li> </ul>	Various Lengths available	$\checkmark$			AVAILABLE				

## SHOCK ABSORBING LANYARDS

## EZ STOP® SHOCK ABSORBING LANYARDS

The EZ Stop® Shock Absorbing Lanyards are manufactured with the highest quality to ensure safety and meet the strictest standards. EZ Stop® II lanyards utilize a controlled tearing action when subjected to fall arrest forces that limits arresting forces to 900 lbs. (4 kN) or less.

- DBI-SALA patented double locking snap hooks
- Soft cover shock absorber for comfort
- Many lengths & hook options available to fit your job site needs

## **EZ STOP® II SHOCK ABSORBING LANYARDS**

Various web options including polyester, Kevlar<sup>®</sup>, and coated webbing provide options for various applications

Single-Leg 1240006 (1220006C in Canada

Kevlar<sup>®</sup> Web 1240558 (1220558C in Canada

Resist Technology 1240850

(1220850C in Canada)

## EZ STOP<sup>®</sup> RETRAX<sup>™</sup> SHOCK ABSORBING LANYARDS

EZ Stop<sup>®</sup> Retrax<sup>™</sup> is the first shock absorbing lanyard that retracts automatically to fit the working area. It is a unique alternative to elasticized lanyards.

- Unique spring technology retracts and expands from 2-1/2' to 6' (0.6 to 1.8m)
- Smooth retraction without irritating lock-ups
- Adjustable retraction length to allow the user to limit retraction

Single-Leg 1241460 (1221460C in Canada)

Retrax<sup>™</sup> Double Leg 1241480 (1221480C in Canada)

Retrax<sup>™</sup> in Motion *A* 

EZ STOP® II TIE BACK SHOCK **ABSORBING LANAYARDS** 

Many situations leave worker's without an additional anchorage device. DBI-SALA tie-back lanyards give users the versatility to tie-back around various structures. These tie-back lanyards are now available with 3600lb gated aluminum and steel rebar hooks.

Single-Leg Tieback 1241106 (1221106C in Canada)

Double-Leg Tieback with Steel Rebar 1241220 (Not Available in Canada)

Double-Leg Tieback with Alum Rebar 1241219 (Not Available in Canada)

Model #	Туре	Single Leg	Double Leg	Tie-back	Length	Connectors	Additional			
1240006	EZ Stop® II	$\checkmark$			6′ (1.8m)	Standard hooks, 3600 lb. Gates				
1240068	EZ Stop® II	$\checkmark$			6′ (1.8m)	Choker web loop, Standard hook, 3600 lb. Gates				
1240256	EZ Stop <sup>®</sup> II	$\checkmark$			6' (1.8m) adj.	Standard hooks, 3600 lb. Gates	Adjustable			
1240706	EZ Stop® II	$\checkmark$			6′ (1.8m)	Standard hooks, 3600 lb. Gates	7/32" (6mm) vinyl coated cable			
1240558	EZ Stop <sup>®</sup> II	$\checkmark$			6′ (1.8m)	Standard hooks, 3600 lb. Gates	Kevlar <sup>®</sup> webbing			
1240406	EZ Stop® II		$\checkmark$		6′ (1.8m)	Standard hooks, 3600 lb. Gates				
1240416	EZ Stop® II		$\checkmark$		6′ (1.8m)	1 Standard/2 Alum. rebar, 3600 lb. Gates				
1240427	EZ Stop <sup>®</sup> II Arc Flash		$\checkmark$		6′ (1.8m)	1 Standard/2 Steel rebar, 3600 lb. Gates				
1241106	EZ Stop® II	$\checkmark$		√, D-ring	6′ (1.8m)	Standard hooks, 3600 lb. Gates	Abrasion resistant tubular wear jacket			
1241206	EZ Stop <sup>®</sup> II		$\checkmark$	√, D-ring	6′ (1.8m)	Standard hooks, 3600 lb. Gates	Abrasion resistant tubular wear jacket			
1241219	EZ Stop® II		$\checkmark$	√, D-ring	6′ (1.8m)	1 Standard/2 Alum. rebar, 3600 lb. Gates				
1241220	EZ Stop® II		$\checkmark$	√, D-ring	6′ (1.8m)	2 Standard/2 Steel rebar, 3600 lb. Gates				
1240860	EZ Stop® II Arc Flash	V			6′ (1.8m)	Standard hooks, 3600 lb. Gates	Coated web & Nomex*/Kevlar* shock pack, ASTM F887-05			
1241460	EZ Stop® Retrax <sup>™</sup>	V			6′ (1.8m)	Standard hooks, 3600 lb. Gates	Retracts automatically			
1241480	EZ Stop® Retrax®		$\checkmark$		6′ (1.8m)	3 Standard hooks, 3600 lb. Gates	Retracts automatically			
1240850	EZ Stop® II Resist	$\checkmark$			6′ (1.8m)	Standard Hooks, 3600 lb. Gates	Resist Coated Web			
1240526	EZ Stop® II Resist		$\checkmark$		6′ (1.8m)	Standard Hooks, 3600 lb. Gates	Resist Coated Web			

NOTE: All part numbers above are available in Canada (except 1240427, 1241219 and 1241220) with standard gated hooks. To order, change (124) to (122) and add a "C" at end of part number. e.g. 1220006C



## SHOCKWAVE2<sup>™</sup> SHOCK ABSORBING LANYARDS

The ShockWave<sup>™</sup> is uniquely designed to expand and contract with use in reaction to the worker's movements. It stays out of the worker's way when not in use, avoiding trips and snags. The ShockWave2" impact indicator provides easy visual evidence if the shock has been blown through a fall or improper use. Limits arresting forces to 900 lbs. (4kN) or less.

- Expands to 6' (1.8m) and contracts to 4.5'(1.4m)
- Unique inner core that immedia absorbs energy during a fall
- Impact indicator allows user to
- Available in twin-leg 100% tie-
- Standard web is polyester, our resistant/arc flash models inco Nomex<sup>®</sup>/Kevlar<sup>®</sup> web, with a 8 temperature and arc tested to to meet the ASTM F887-05 sta

Single-leg with Standard Hook Ends 1244306 (1224306C in Canada)

Tieback Single-leg with Standard hook and 5000lb gated Tie-back carabiner ends 1244650

Tieback Double-leg with Standard hook and 5000lb gated Tie-back carabiner ends 1244675

Arc Flash, Double-Leg with Standard Hook Ends 1244630

Double-Leg with Aluminum Rebar Hook Ends 1244409

ately extends and	SHOCKWAVE2 <sup>™</sup>									
inspect unit off style	Model #	Single Leg	Double Leg	Nomex®/ Kevlar®Web	Tie-back	Length	Connectors			
rporate	<b>1244306</b> (1224306C in Canada)	$\checkmark$				6' (1.8m)	Standard hooks, 3600 lb. Gates			
40 cal/cm2 ndard.	1244310	$\checkmark$				6′ (1.8m)	Choker web loop, standard hook, 3600 lb. Gates			
	1244311	$\checkmark$				6′ (1.8m)	1 standard/1 alumi- num rebar hook, 3600 lb. Gates			
~	1244321	$\checkmark$				6′ (1.8m)	1 standard/1 flat steel rebar hook, 3600 lb. Gates			
5 50	1244406 (1224406C in Canada)		$\checkmark$			6′ (1.8m)	3 standard hooks, 3600 lb. Gates			
CRO	1244413		$\checkmark$			6′ (1.8m)	Choker web loop, standard hooks, 3600 lb. Gates			
and and a second second	1244409		$\checkmark$			6′ (1.8m)	1 standard/2 alumi- num rebar hooks, 3600 lb. Gates			
and to see of	1244412		$\checkmark$			6′ (1.8m)	1 standard/2 flat steel rebar hooks, 3600 lb. Gates			
-	1244650	$\checkmark$			$\checkmark$	6′ (1.8m)	1 standard (3600lb gate) / 1 tieback cara- biner (5000lb gate)			
	1244675		$\checkmark$		$\checkmark$	6′ (1.8m)	1 standard (3600lb gate) / 2 tieback cara- biners (5000lb gate)			
	1244610	$\checkmark$		$\checkmark$		6′ (1.8m)	Standard hooks, 3600 lb. Gates			
	1244630		$\checkmark$	$\checkmark$		6' (1.8m)	Standard hooks, 3600 lb. Gates			
10	1244633		$\checkmark$	$\checkmark$		6′ (1.8m)	1 standard hook/2 flat steel rebar hooks, 3600 lb. Gates			

NOTE: Available in Canada with standard gated hooks where specified above.

## WRAPBAX<sup>™</sup>2 TIE-BACK SHOCK ABSORBING LANYARDS

WrapBax<sup>2</sup>2 provides the worker with a tool they will use safely, eliminating the need for a separate anchorage connector, reducing inventory and cost, simplifying inspections, training and improving compliance. The WrapBax<sup>™</sup>2 hook offers a unique look to easily differentiate from standard hooks and provides true 5,000 lbs. (22kN) strength-even on the gate. Limits arresting forces to 900 lbs. (4kN) or less; Force2<sup>™</sup> style limits forces to 1,800 lbs. (7kN) or less.

- 5,000 lb. (22kN) hook capacity from every direction, including the gate
- Heavy duty webbing provides five times more abrasion resistance, making it ideal for tying off on rough surfaces
- Industry preferred easy-to-use, one-handed operation found on DBI-SALA patented snap hooks
- Unique hook design makes it easily differentiated from standard snap hooks to eliminate confusion on the jobsite for added safety





WRAPBAX™2											
Model #	Single Leg	Double Leg	Tie-back	Length	Connectors						
<b>1241906</b> (1221906C in Canada)	$\checkmark$		$\checkmark$	6′ (1.8m)	WrapBax <sup>™</sup> 2 hook						
1221907	$\checkmark$		$\checkmark$	6′ (1.8m)	Choker web loop, WrapBax <sup>™</sup> 2 hook						
<b>1242003</b> (1222003C in Canada)		$\checkmark$	$\checkmark$	6′ (1.8m)	WrapBax <sup>™</sup> 2 hook						
1222004		$\checkmark$	$\checkmark$	6′ (1.8m)	Choker web loop, WrapBax <sup>™</sup> 2 hook						
1242102	$\checkmark$		$\checkmark$	6′ (1.8m)	Force2 <sup>™</sup> , WrapBax <sup>™</sup> 2 hook						
1242128		$\checkmark$	$\checkmark$	6′ (1.8m)	Force2 <sup>™</sup> , WrapBax <sup>™</sup> 2 hook						

NOTE: Available in Canada where specified above.



## EZ STOP® III SHOCK ABSORBING LANYARDS

EZ Stop<sup>®</sup> III shock absorbing lanyards are lightweight and compact; their simple design integrates the shock absorber for reduced weight and bulk. They utilize a stretching action (instead of tearing action) when subjected to fall arrest forces, limiting arresting forces to no more than 900 lbs. (4kN). 1-3/8" (35mm) tubular webbing for durability and strength.



EZ STOP® III									
Model #	Single Leg	Length	Connectors						
1244006	$\checkmark$	6′ (1.8m)	Standard hook, 3600 lb. Gates						
1244103	$\checkmark$	6′ (1.8m)	Choker web loop, standard hook, 3600 lb. Gates						

NOTE: EZ STOP® III lanyards not available in Canada.

## FORCE2™ SHOCK ABSORBING LANYARD

Force2<sup>™</sup> shock absorbing lanyard is used when there is no overhead anchorage and your only option is to tie-off at your feet. It can be used for up to a 12′ (3.7m) free fall and limits the arresting forces below OSHA's limits. It can also be used as a standard lanyard for workers that require a capacity of 311 lbs. to 420 lbs. (141kg to 190kg).

- OSHA approved for tying off at the feet
- Soft shock absorber cover for comfort
- Dual Capacity Rating:
- Up to 310 lbs. (140kg) capacity—can be used for a 12' (3.7m) fall
- 311 lbs. to 420 lbs. (141kg to 190kg) capacity—can be used as a standard lanyard for a 6' (1.8m) free fall.
- Limits arresting forces to 1.800 lbs. (7kN) or less.

1,800 lbs.	(7kN)	or	less.	

	FORCE2™					
0	Model #	Single Leg	Double Leg	Tie-off at Feet	Length	Connectors
	<b>1245006</b> (1225006C in Canada)	$\checkmark$		$\checkmark$	6′ (1.8m)	Standard hook, 3600 lb. Gates
	1245013	$\checkmark$		$\checkmark$	6′ (1.8m)	Choker web loop, aluminum carabiner, 3600 lb. Gates
1245006	1245176 (1225176C in Canada)		V	$\checkmark$	6′ (1.8m)	3 Standard hooks, 3600 lb. Gates

NOTE: FORCE2<sup>™</sup> Lanyards are not CSA approved.

POSITIONING	&	RESTRAINT	LANYARDS
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These lanyards provide the ultimate in durability and safety for non-fall arrest applications.

#### **Rope Lanyards**

Nylon or polyester rope with five-tuck splice and exclusive seizing method to hold the connection and prevent unweaving.
Various lengths Available

#### Web Lanyards

- Built-in wear indicator in the webbing alerts when there is excess abrasion.
- Various lengths Available

#### **Rebar Hook Assemblies**

 Made of twist link chain for strength and durability. Variety of hooks provide safe and compatible connections to many types of structures. Web option also available

Model #	Туре	Single Leg	Double Leg	Length	Connectors
<b>1231106</b> (1201106C in Canada)	Positioning web	V		6′ (1.8m)	Standard hook, 3600 lb. Gates
1231016 (1201016C in Canada)	Positioning web	$\checkmark$		6' (1.8m) adjustable	Standard hook, 3600 lb. Gates
1232354	Positioning 1/2" (12.7mm) twisted rope	$\checkmark$		6′ (1.8m)	Standard hook, 3600 lb. Gates
1232209	Positioning 1/2" (12.7mm) twisted rope	$\checkmark$		6' (1.8m) adjustable	Standard hook, 3600 lb. Gates
5920050	Chain rebar assembly		$\checkmark$	20.5″ (51cm)	2 standard, 1 flat steel rebar hook, 3600 lb. Gates
<b>1231380</b> (1201380 in Canada)	Web rebar assembly		V	18" (45cm)	2 standard, 1 aluminum rebar hook , 3600 lb. Gates

**POSITIONING & RESTRAINT** 

NOTE: Available in Canada with standard gated hooks where specified above.

Chain Rebar Assembly Flat steel rebar hook at center 5920050 (Not available in Canada)



#### Web Rebar Assembly 1" (25mm) polyester webbing 1231380 (1201380 in Canada)



Rope Lanyard 1/2" (12.7mm) nylon rope 1232354 (Not available in Canada)

State O

Web Lanyard 1" (25mm) polyester constructed webbing 1231106 (1201106C in Canada)



## DBI-SALA ANCHORAGES AND ANCHORAGE CONNECTORS Security to Match the Task

Anchorage connectors are greatly dependent on the specific requirements of the purchaser, including the type of attachment, the environment and the connecting system. DBI-SALA offers the most complete line of anchorage connectors available, rigorously tested to ensure the strength you need. This means you can always find the best product to fit your requirements.

## Anchorages

An anchorage is a secure point of attachment for the fall arrest system. The anchorage must be capable of supporting a load of 5,000 lb. (22kN) per worker attached to the anchorage or shall be designed, installed and used as part of a complete personal fall arrest system which maintains a safety factor of at least 2.

Anchorages may be certified (designed or engineered on site for fall protection) or non-certified (beams, trusses or other suitably strong structures). Certified anchorages should be identified with paint or special markings and kept on a site location list.

Anchorage Connectors Anchorage connectors provide a means of attaching the system to the anchorage. These vary widely depending on application. Some of the common types are anchor slings, beam clamps, rail sliders, trolleys and eyebolts.





## ANCHORAGE CONNECTORS WELD-ON OR BOLT-ON

These anchors are secured to metal structures and columns. They provide the worker with a fixed anchor point when performing a variety of tasks.



## ANCHORAGE CONNECTORS FOR I-BEAMS

These anchors are mounted to I-Beam type structures and offer high mobility and ease of use as permanent, semi-permanent, or temporary installations.

## ANCHORAGE CONNECTORS FOR STEEL

These anchors can be mounted on flanges horizontally or vertically. Models can be permanently attached or temporarily clamped, offering both a fixed and mobile anchorage connector.

## TIE-OFF ADAPTORS/ SCAFFOLD CHOKERS

Tie-off adaptors and scaffold chokers are alternative anchorage connectors for a fall arrest system. They may be made of different materials, including cable, web and chain. Kevlar® tie-off adaptors should be used when working with high temperatures.

## ANCHORAGES AND ANCHORAGE CONNECTORS

## What to look for in an Anchorage Connector

## Anchorage Connectors are Sold by:

- What they connect to (steel, concrete, roofs)
- Whether they are fixed or mobile
- Whether they are permanent or portable

Experienced DBI-SALA customer service agents can provide guidance on which anchorage connector will best fit your applications.

## Testing

Anchorage connectors are a critical part of a fall protection system. They must be tested to ensure that they have the strength to withstand the tremendous forces that can be generated by a fall. DBI-SALA anchorage connectors are rigorously tested both in-house and by 3rd party independent, non-profit testing and certification companies.

## DBI-SALA offers the industry's widest range of anchorage devices

DBI-SALA offers the industry's widest range of anchorage connectors combining ease of use, lightweight and 5,000 lb. (22kN) minimum tensile strength to meet or exceed OSHA and ANSI Z359.1 requirements. CE and CSA compliant models are also available.

2000106

## WHAT TO LOOK FOR IN A SNAP HOOK AND CARABINER

### Self-locking

Snap hooks and carabiners used in fall protection or rescue operations must be self-locking. Non-locking hooks must not be used for fall protection because of the danger of rollout—the accidental disengagement of a connector from whatever it is attached to. The unique DBI-SALA snap hook is an industry favorite.

### **One-handed Operation**

Snap hooks should be simple to operate in order to ensure that they are used properly, even when wearing gloves.

### Materials

DBI-SALA snap hooks and carabiners are made of high tensile alloy steel or aluminum.

### Standards

Snap hooks and carabiners used for fall protection must be capable of withstanding a 5,000 lbs. (22kN) load and be proof-tested to at least 3,600 lbs. (16kN). Many connectors manufactured outside the United States will not meet these strict requirements.

Features	Benefits	Saflok® Carabiners	Patented Snap Hooks
Maximum Strength	Safety	$\checkmark$	$\checkmark$
One-Handed Operation	Ease of use	$\checkmark$	$\checkmark$
Range of Gate Openings	Versatility	$\checkmark$	
Self-Locking & Closing	Safety	$\checkmark$	$\checkmark$
Corrosion Resistant	Durability	$\checkmark$	$\checkmark$

2000301



2000112

2000113

Product Description Model # Additional Self-closing/self-locking gate for increased Saflok® 2000106 1-3/16" (30mm) gate opening Carabiners safety and security, steel construction, 2000113 1-3/16" (30mm) gate opening, 3,600 lb rated gate user friendly even with gloves. Compatible with most connecting rings 2000108 2-3/16" (55mm) gate opening 2000114 2-3/16" (55mm) gate opening, 3,600 lb rated gate 2000523 11/16" (17mm) gate opening 2000112 11/16" (17mm) gate opening, 3,600 lb rated gate 2000200 11/16" (17mm) gate opening, stainless steel 2000300 2" (50mm) gate opening 2000301 2" (50mm) gate opening, stainless steel

2000200

2000300

2000523

2000114

2000108



## **MOBI-LOK™ SELF CONTAINED VACUUM ANCHOR SYSTEMS**

## So Much Versatility. So Little Effort.

With a Vacuum Anchor System at your workers' side, they can anchor to virtually any smooth, non-porous surface simply by flipping a switch and waiting for the green light. So whether they need to replace a broken strobe atop a jumbo jetliner or performing routine maintenance on top of a bus or railcar, they'll always be able to quickly, and easily put themselves where they need to be—without putting themselves in danger.

## Less Work. More Productivity.

By eliminating the need to drill or weld, our Vacuum Anchor Systems decrease downtime and effort, and increase productivity. Your crew is never more than a few seconds away from having a secure anchor to hook to so they can work quickly and safely.

## Lightweight Design. Increased Mobility.

The new lightweight design makes the Mobi-Lok<sup>™</sup> SCVA easy to transport and use. The new unit is 36% lighter, weighing in at just 19.9 lbs. (9.0 kg) and can be taken to the tarmac or holding area for routine maintenance and safety checks.

## Fail-Safe and Foolproof.

All our Vacuum Anchors feature fail-safe back-up systems with audio alarms and a vacuum level indicator for absolute safety and security.

## No Scratches. No Dents. No Kidding.

Our Vacuum Anchors feature soft, EPDM rubber seals which enable them to fasten safely and securely without damaging the work surface leaving no residue.

## Approved for Horizontal Lifeline Use.

Create a continuous anchor point for added safety and mobility by simply connecting a horizontal lifeline between two or more Vacuum Anchor Pads. Two person capacity.

## Innovative. Portable. Safe. Countless Applications.



## ANCHORAGES AND ANCHORAGE CONNECTORS











AVIATION RATED SELF CONTAINED VACUUM ANCHOR SYSTEMS				
Product	Description	Model #	Components	
SCVA Shop Air Powered	Our Shop Air-Powered System is compact and lightweight. Its one- piece design makes it quick and easy to set up and use. Can power one additional Secondary Pad. Carrying case included.	2200107	SCVA Assembly	
		2200109	Secondary Pad Assembly (Optional)	
		2200048	Secondary Pad Hose (Optional) 50 ft. (15m)	
		2200123	Horizontal Lifeline Kit (includes Secondary	
			Pad, 40' HLL and 50' Secondary Pad Hose	
SCVA Compressed Gas	Our Compressed Gas Bottle Powered System is completely self-contained. It is powered up with a single, on-board 48-cubic inch compressed gas bottle or a large capacity detached bottle, or shop air. Can power one additional Secondary Pad. Carrying case included.	2200108	SCVA Assembly with Bottle Attachment	
Bottle Powered		2200078	Compressed Gas Cylinder	
		2200122	Aviation Kit (includes SCVA and Bottle)	
		2200109	Secondary Pad Assembly (Optional)	
		2200048	Secondary Pad Hose (Optional) 50 ft. (15m)	
		2200123	Horizontal Lifeline Kit (includes Secondary	
			Pad, 40' HLL and 50' Secondary Pad Hose	
INDUSTRY SELE CONTAINED VACIUUM ANCHOR SYSTEMS				

Product	Description	Model #	Components		
SCVA Shop Air Powered	Our Shop Air-Powered System is compact and lightweight. Its one- piece design makes it quick and easy to set up and use. Can power one additional Secondary Pad. Carrying case included.	2200094	SCVA Assembly		
		2200096	Secondary Pad Assembly (Optional)		
		2200048	Secondary Pad Hose (Optional) 50 ft. (15m)		
		2200124	Horizontal Lifeline Kit (includes Secondary		
			Pad, 40' HLL and 50' Secondary Pad Hose		
SCVA Compressed Gas Bottle Powered	Our Compressed Gas Bottle Powered System is completely self-contained. It is powered up with a single, on-board 48-cubic inch compressed gas bottle or a large capacity detached bottle, or shop air. Can power one additional Secondary Pad. Carrying case	2200095	SCVA Assembly with Bottle Attachment		
		2200078	Compressed Gas Cylinder		
		2200121	Aviation Kit (includes SCVA and Bottle)		
		2200096	Secondary Pad Assembly (Optional)		
		2200048	Secondary Pad Hose (Optional) 50 ft. (15m)		
		2200124	Horizontal Lifeline Kit (includes Secondary		
	included.		Pad, 40' HLL and 50' Secondary Pad Hose		

NOTE: All part numbers are the same in Canada.



	ANCHORAGE CONNECTORS				
Product	Description	Model #	Additional		
Tie-Off Adaptor	Pass thru design provides a safe and easy way to	1003000	3' (.9m) length		
	anchor a fall protection device to an overhead location and beyond normal reach. 1-3/4" (44mm) polyester strap. 3" (76mm) wear quierd zinc plated	1002103	3' (.9m) length Adjustable		
	steel hardware	1003006	6' (1.8m) length		
		1002106	6' (1.8m) length Adjustable		
Scaffold Choker	1" (25mm) polyester strength member, 17" (43 cm) length, fits 3" (76mm) max. dia. structure, zinc plated steel hardware	1201390	17" (43cm) length		
Cable Choker	Pass thru design, 7 x 19-3/8" (9.5mm) stainless	5900550	4' (1.2m) length		
	steel cable, duel O-ring pass thru, zinc plated steel hardware	5900551	6' (1.8m) length		
D-ring & Anchorag	e Plate Bolted or weld on, two 1/2" (12mm) attachment holes, 1/4" x 2" x 4-1/4" (6mm x 50mm x 108mm)	2101630	Stainless steel plate, zinc plated D-ring		
		2101632	Painted		
Sale .		2101634	Raw steel		
		2101636	All 304 stainless steel		
		2101638	All 316 stainless steel		
First-Man-Up <sup>™</sup> Syst	em Provides a complete system to mount a tie-off adapter to an overhead anchorage	2104519	6'-12' (1.8m-3.6m) Adjustable pole		
		2104520	8'-16' (2.4m-4.8m) Adjustable pole		
Concrete D-Ring A	nchor Reusable D-Ring assembly—drill hole in set con-	2104560	Standard model		
	crete, insert and torque anchor; for temporary or	2104561	D-ring assembly with 5 ad-		
	permanent applications; fits 11/16" (18mm) or		ditional bolts		
	swivels 360	2104562	D-ring assembly with 11 additional bolts		
Perimeter Limiter	Provides a non-penetrating anchor or tie-off point for personnel performing work on concrete decking operations or similar type applications.	2100090	Overhead anchorages for 2 users reduces fall distance & swing falls.		
		2100091	9.5' (2.9m) mast (optional)		

NOTE: All part numbers are the same in Canada.



BEAM ANCHORS					
Product	Model #	Description			
Fixed Beam Anchor	2108406	Works horizontally or vertically. Fits 1-1/2" (38mm) thick flange, 2-1/2 to $12^{\prime\prime}$ (63 to 304mm) wide, larger models available			
	2108407	Fits up to 1-1/2" (38mm) thick flange, 2-1/2 to 18" (63 to 450mm) wide			
	2108408	Fits up to 1-1/2" (38mm) thick flange, 2-1/2 to 24" (63 to 600mm) wide			
	2108410	Fits 1/2" (12.5mm) to 2-1/2" (62.5mm) thick flange, 12 to 36" (300 to 900mm) wide			
Glyder2 <sup>~</sup> Sliding Beam Anchor	2104700	For complete horizontal mobility, designed for use with the Force2 <sup>-</sup> shock absorbing lanyard when used at the worker's feet. Easily installed and easily removed and taken to a new site. Integrated ratcheting adjustment system provides quick and easy installation and removal. NO MORE PINS AND CHAINS! Extremely lightweight at only 3.7 lbs. (1.66 kg), with a user capacity of 420 lbs. (189 kg). Fits flange 3-1/2" to 14" (9cm to 35 cm) wide, up to 1-1/4" (3cm) thick			
Glyder <sup>∞</sup> Sliding Beam Anchor	2110941	For complete horizontal mobility, designed for use with the Force2 <sup><math>\circ</math></sup> shock absorbing lanyard when used at the worker's feet. Easily installed and easily removed and taken to a new site. Fits flange 6" to 18" (15cm to 45cm) wide, up to 2-1/2" (6.3cm) thick			
Man Rated I-Beam Trolley	2103143	Designed for use on I-Beam Flanges ranging from 3" to 8" (7.6cm to 20.3cm) wide, up to 11/16" (17.5mm) thick. This anchorage connector rolls along an I-Beam providing horizontal mobility			

NOTE: All part numbers are the same in Canada.
# **VERTICAL SYSTEMS**

### **ROPE LIFELINE ASSEMBLIES**

DBI-SALA's blended lifeline assemblies offer additional abrasion and UV resistance for added durability, longevity and safety. Our patented snap hook allows for one-handed, easy connections—even with your gloves on! Various styles and lengths are available to suit any need.



	ROPE LIFELINES				
Model #	Length	<b>К</b> оре Туре	Connectors		
1202753	30' (9m)	5/8" (16mm) blended polyester/polypropylene	Snap hooks at both ends		
1202754	30' (9m)	5/8" (16mm) blended polyester/polypropylene	Snap hook at one end, taped at other end		
1202790	50′ (15m)	5/8" (16mm) blended polyester/polypropylene	Snap hooks at both ends		
1202794	50' (15m)	5/8" (16mm) blended polyester/polypropylene	Snap hook at one end, taped at other end		
1202823	75' (22m)	5/8" (16mm) blended polyester/polypropylene	Snap hooks at both ends		
1202821	75' (22m)	5/8" (16mm) blended polyester/polypropylene	Snap hook at one end, taped at other end		
1202842	100' (30m)	5/8" (16mm) blended polyester/polypropylene	Snap hooks at both ends		
1202844	100' (30m)	5/8" (16mm) blended polyester/polypropylene	Snap hook at one end, taped at other end		

NOTE: In Canada add a 'C' to the end of the Part Number ie : 1202754C.



Rope Grab 5000335 (5000335C in Canada)



Rope Adjuster Lanyard 1224005 (Not available in Canada)



Lad-Saf® Static Wire Rope Grab 5000338

	KULE GRADS					
Туре	Model #	Lifeline	Lanyard	Description		
Static Rope Adjuster Lanyard	1224005 (not available in Canada)	5/8" (16mm) rope	Attached	Rope Adjuster with permanently attached EZ Stop® III 3' (.9m) shock absorbing lanyard for sloped roof work or leading edge fall restraint. Grab stays locked in place once positioned		
Static Wire Rope Grab	5000338	3/8" (9.5mm) 7x9 galvanized or stain- less steel cable	Use 4' (1.2m) max length shock absorbing cable	Wire Rope Grab with patented wedging action that grips and locks onto cable lifeline; attach/detach anywhere along lifeline, stainless steel construction		
Mobile Rope Grab	<b>5000335</b> (5000335C in Canada)	5/8" (16mm) rope	Use 3' (.9m) max length shock absorbing lanyard	Mobile design with hands-free operation automatically follows the user providing maximum freedom of movement. It utilizes both inertia and cam locking systems for added safety and to prevent "panic-grab" situations. The energy absorbing design reduces the forces generated upon a worker in the event of a fall. For added flexibility, it can be attached or removed anywhere along the lifeline. It is constructed from durable but lightweight stainless steel and thermoplastic to stand up to the harshest environments.		



# ADJUSTABLE FREE-STANDING HORIZONTAL RAIL FALL-ARREST SYSTEM

### Portable, Adjustable and Safe.

The Free-Standing Horizontal Rail Fall-Arrest System combines the simplicity of a horizontal rail and trolley system with a portable support structure to provide reliable fall-protection where it's needed, when it's needed. The Free-Standing Horizontal Rail Fall-Arrest System is ideal for work on or near sensitive equipment, such as aircraft, where physical contact is undesirable. Available in a range of heights, widths and wheel styles, the Free-Standing Horizontal Rail Fall-Arrest System is constructed of lightweight powder coated aluminum and zinc-plated steel and can be ordered to fit your application's custom requirements. Each system comes standard with a single track rail and two individual man-rated rail trolleys for anchorage of a Personal Fall-Arrest System (PFAS). An optional double-track is available for improved worker mobility along the length of the entire rail. The Free-Standing Horizontal Rail Fall-Arrest System



is easily moved by hand and can be precisely placed to provide maximum protection. It can also be moved by a forklift or towed by a maintenance vehicle when equipped with the proper accessories.







### ADJUSTABLE FREE-STANDING HORIZONTAL RAIL FALL-ARREST SYSTEM Model # Description Adjustable Height System Width Wheel Type 8517700 Adjustable Free-Standing Horizontal Rail Fall Arrest System 12' to 18' (3.6m-5.5m) 10' (3m) 8" (20cm) Urethane 8517701 Adjustable Free-Standing Horizontal Rail Fall Arrest System 12' to 18' (3.6m-5.5m) 10' (3m) 18" (45cm) Pneumatic 8517702 Adjustable Free-Standing Horizontal Rail Fall Arrest System 12' to 18' (3.6m-5.5m) 15' (4.6m) 8" (20cm) Urethane 8517703 Adjustable Free-Standing Horizontal Rail Fall Arrest System 12' to 18' (3.6m-5.5m) 15' (4.6m) 18" (45cm) Pneumatic 8517704 Adjustable Free-Standing Horizontal Rail Fall Arrest System 12' to 18' (3.6m-5.5m) 20' (6.1m) 8" (20cm) Urethane 8517705 12' to 18' (3.6m-5.5m) 20' (6.1m) 18" (45cm) Pneumatic Adjustable Free-Standing Horizontal Rail Fall Arrest System 8517706 Adjustable Free-Standing Horizontal Rail Fall Arrest System 16' to 26' (4.9m-7.9m) 15' (4.6m) 8" (20cm) Urethane 16' to 26' (4.9m-7.9m) 8517707 Adjustable Free-Standing Horizontal Rail Fall Arrest System 15' (4.6m) 18" (45cm) Pneumatic 8517708 Adjustable Free-Standing Horizontal Rail Fall Arrest System 16' to 26' (4.9m-7.9m) 20' (6.1m) 8" (20cm) Urethane 8517709 Adjustable Free-Standing Horizontal Rail Fall Arrest System 16' to 26' (4.9m-7.9m) 20' (6.1m) 18" (45cm) Pneumatic 8517710 20' to 34' (6.1m-10.4m) 15' (4.6m) 8" (20cm) Urethane Adjustable Free-Standing Horizontal Rail Fall Arrest System 8517711 Adjustable Free-Standing Horizontal Rail Fall Arrest System 20' to 34' (6.1m-10.4m) 15' (4.6m) 18" (45cm) Pneumatic 8517712 Adjustable Free-Standing Horizontal Rail Fall Arrest System 20' to 34' (6.1m-10.4m) 20' (6.1m) 8" (20cm) Urethane 8517713 Adjustable Free-Standing Horizontal Rail Fall Arrest System 20' to 34' (6.1m-10.4m) 20' (6.1m) 18" (45cm) Pneumatic

NOTE: All part numbers are the same in Canada.

# ADJUSTABLE FREE-STANDING LADDER ACCESS SYSTEM WITH FALL PROTECTION

### Portable, Adjustable and Safe.

The Adjustable Free-Standing Ladder Access System with Fall-Protection combines easy access to elevated work areas with Fall-Protection from the ground up for the duration of the work being performed. Constructed of lightweight powder coated aluminum and zinc-plated steel, the Adjustable Free-Standing Ladder Access System with Fall-Protection is easily assembled, positioned and collapsed for storage or transportation. Each unit comes standard with adjustable handrails, foam-protected platform, two anchor davits and a fall-arrest ladder anchor which provide a total of three attachment points for the anchorage of a Personal Fall-Arrest System (PFAS). Available in a range of heights and wheel styles, the system can be ordered to meet your application's custom requirements. The Adjustable Free-Standing Ladder Access System can be easily moved by hand. It can also be moved by a forklift or towed by a maintenance vehicle when equipped with the proper accessories.





	ADJUSTABLE FREE-STANDING LADDER ACCESS SYSTEM WITH FALL PROTECTION					
Model #	Description	Anchor Height	Wheel Type			
8517714	Adjustable Free-Standing Ladder Access System with Fall Protection	19.5' to 23.5' (5.9m-7.2m)	8" (20cm) Urethane			
8517715	Adjustable Free-Standing Ladder Access System with Fall Protection	20' to 24' (6.1m-7.3m)	18" (45cm) Pneumatic			
8517716	Adjustable Free-Standing Ladder Access System with Fall Protection	23' to 31.5' (7m-9.6m)	8" (20cm) Urethane			
8517717	Adjustable Free-Standing Ladder Access System with Fall Protection	23.5' to 32' (7.1m-9.8m)	18" (45cm) Pneumatic			
8517718	Adjustable Free-Standing Ladder Access System with Fall Protection	26.5' to 39' (8.1m-11.9m)	8" (20cm) Urethane			
8517719	Adjustable Free-Standing Ladder Access System with Fall Protection	27' to 39.5' (8.2m-12m)	18" (45cm) Pneumatic			

NOTE: All part numbers are the same in Canada.



# **PORTABLE TANKER ACCESS LADDER SYSTEM (PTALS)**

### Portable, Adjustable and Safe.

The Portable Tanker Access Ladder System (PTALS) is designed to provide safe access and fall-protection for workers to elevated work areas such as rail cars, tankers and large platforms. The system features lightweight aircraft aluminum construction, a rugged basic winch and zinc-plated steel hardware for maximum corrosion resistance. The Portable Tanker Access Ladder adjusts with 5ft (1.5 m) of travel. Customize the unit for your purposes by choosing system height, platform size, wheel kit and other fall arrest safety options.

### How to Order a System

- Choose the base option and ladder height suitable for your application
- Accessorize your base with available options and add a counterweight bar
- Choose the platform option suitable for your application.
- Accessorize your platform with available options.
- 5) For custom applications please contact Capital Safety.

### PORTABLE TANKER ACCESS LADDER SYSTEM (PTALS)

Model #	Description	Adjustable Height	Wheel Type
8521940	Portable Tanker Access Ladder System (8517286) with Platform (8515126) and Rails (8516044)	105.5" to 155.5" (263.8cm-388.8cm)	18" (45cm) Pneumatic
8517286	Portable Tanker Access Ladder System	105.5" to 155.5" (263.8cm-388.8cm)	18" (45cm) Pneumatic
8517288	Portable Tanker Access Ladder System w/ 1' (.3m) Ladder Extension	117.12" to 167.12" (292.8cm-417.8cm)	18" (45cm) Pneumatic
8517290	Portable Tanker Access Ladder System w/ 2' (.61m) Ladder Extension	128.75" to 178.75" (321.9cm-446.9cm)	18" (45cm) Pneumatic
8517292	Portable Tanker Access Ladder System w/ 4' (1.2m) Ladder Extension	152" to 202" (380cm-505cm)	18" (45cm) Pneumatic
8517294	Portable Tanker Access Ladder System w/ 6' (1.83m) Ladder Extension	175.25" to 225.25" (438.1cm-563.1cm)	18" (45cm) Pneumatic
8517296	Portable Tanker Access Ladder System w/ 8' (2.44m) Ladder Extension	198.5" to 248.5" (496.2cm-621.2cm)	18" (45cm) Pneumatic

NOTE: All part numbers are the same in Canada.

FLAMMARTE

# FREE-STANDING LADDER/RAIL SYSTEMS

# **ACCESSORIES FOR PTALS - SEE CHART BELOW FOR DETAILS**



8515084



8515126



8515551



8516138





8516269



8515086

8516082





8519536



8517070



### Fold-Up Hoist Confined Space System:

The Fold-up Hoist is ideal for general confined space entry/retrieval applications. The mast fits into the optional Sleeve Assembly (model# 8515086). Order a winch or SRL separately.

8511851: Fold-Up Hoist

PORTABLE TANKER ACCESS LADDER ACCESSORIES				
Model #	Description	Weight		
8515349	Pair of Side Moving Urethane Wheels for PTALS - Allows system to pushed sideways for added mobility	45 lbs. (20.25kg)		
8517070	Base Mounted Counterweight for PTALS - Balances system with various platforms, each bar weighs 30 lbs. (13.5kg)	33 lbs. (14.85kg)		
8515084	Working Platform for PTALS System	45 lbs. (20.25kg)		
8515086	Sleeve Assembly for PTALS - Bolts on to 8515084 Platform for use with 8511851 Fold-Up Hoist System	10 lbs. (4.5kg)		
8515551	Fall Arrest Tie-Off Post for PTALS - Use with 8515084 Platform to work outside guardrail cage	31 lbs. (13.95kg)		
8516138	Upper Platform Handrails (Pair) for PTALS - Provides added safety to system	6 lbs. (2.7kg)		
8516269	Fall-Out Bar Assembly for PTALS - 16" Assembly designed to fill the large gaps under the guardrails for added safety	3 lbs. (1.35kg)		
8516044	Guardrail Cage 5-1/2' (1.7m) Diameter for PTALS - With non-adjustable legs	40 lbs. (18kg)		
8517944	Guardrail Cage 5-1/2' (1.7m) Diameter for PTALS - With adjustable legs	45 lbs. (20.25kg)		
8515126	Step-Out Platform for PTALS - 26" to 42" (65-105cm) extension provides safe transition from the ladder to the surface	28 lbs. (12.6kg)		
8519536	Top-Wind Implement Jack for PTALS - For extra stability, add another pair of jacks, 5,000 lbs. (2250kg) capacity	37.5 lbs. (16.87kg)		
8516082	Trailer Hitch Adaptor for PTALS - Transport unit around facility behind low speed service vehicle (specify hitch type or ball size)	37 lbs. (16.65kg)		

NOTE: All part numbers are the same in Canada.



# DBI-SALA SELF RETRACTING LIFELINES

# Industry Leaders

DBI-SALA has been the industry leader in the development of reliable, versatile self retracting lifelines (SRL's). DBI-SALA SRL innovations include the patented Sealed SRL and the impact indicator, an important safety innovation which has now been widely adopted across the industry.

An SRL is a flexible lifeline attached to a mechanism that allows it to extend and retract under slight tension when the user moves away from and toward the device. This enables a user to work safely while moving within a recommended area at normal speeds.





SRL's can be implemented in a variety of situations, but are primarily used to provide movement and protection of personnel in a vertical work area. The SRL should be anchored to a location directly above the worker. SRL's can also be utilized with a horizontal lifeline to improve the overall mobility of the system.

# What to look for in an SRL

### HOUSING

The SRL casing protects the inner parts of the SRL and holds the excess line when not in use. Durable, impact-resistant housings offer longer wear and greater protection of the brakes and retraction springs. DBI-SALA developed the industry's only fully Sealed SRL that isolates the critical working components, protecting them from the dirt, oil or grease that the retracted cable can bring inside.

### i-Safe™

Every DBI-SALA SRL now comes with i-Safe", the Intelligent Safety System that incorporates RFID and web-enabled communications technologies, providing you with the ability to centrally track inspections, control field inventory and manage critical safety information.

### LINE

SRL lines can be made from cable, webbing or synthetic rope. Cable is considered for rugged, outdoor applications or where the line may be in touch with sharp objects. Web is a more lightweight, compact choice, often preferred indoors for less industrial applications and for warehousing. Stainless steel offers the ultimate in corrosion resistance, reliability and longevity.

### **IMPACT INDICATOR**

SRL's should be inspected before each use and monthly by the customers' designated competent person. Inspections are made easier with an impact indicator that immediately shows an orange or red band if the SRL has been loaded or has arrested a fall. All SRL's should be removed from service following the arrest of a fall and if the impact indicator is visible. In most cases the unit will have to be returned to an authorized service center for servicing or replacement.

### **SNAP HOOK**

The snap hook affects ease and speed of connection. A swivel snap hook provides versatility to allow the SRL to be easily connected to a wide variety of anchorages, making it adaptable to different work structures. The patented DBI-SALA self-locking snap hook opens and connects without thumbs or fingers getting in the way.

### **RESERVE LIFELINE**

Some SRL's have an emergency reserve lifeline feature which means that if a worker has nearly all the line extended and experiences a fall, the unit will still be capable of absorbing energy and keeping the arresting forces to a minimum.

### **3-WAY RETRIEVAL OPTION**

Some SRL's incorporate a built-in winch retrieval mechanism. These units not only provide fall protection as a worker enters a confined space such as a sewer or tank, but also allow activation of a retrieval mechanism for fast, convenient rescue. Raising and/or lowering is fast and convenient.

### QUICK ACTIVATING BRAKING SYSTEM

Many industry SRL's use a seat-belt type extension and retraction mechanism which can malfunction and lock-up when you don't want them to. DBI-SALA SRL's feature an anti-racheting, twin disc brake mechanism that provides smooth operation and locks only when you are ready. Once the mechanism engages, it stays locked, ensuring that the worker is not racheted down to the ground. The system limits arresting forces to 900 lbs. (4kN) or less. Because fall arrest begins within 2' (.6m), the required clearance distance is reduced when using DBI-SALA SRL's.





	SRL SELECTION GUIDE						
Product	Description	Recommended For	Housing	Impact Indicator	Anti- Racheting	Swivel Hook	Reserve Lifeline
Ultra- Lok® SRL's	Rugged, highly engineered devices that can be counted on for user safety, efficiency and comfort	<ul> <li>Railcar loading and unloading</li> <li>Truck loading and unload- ing</li> <li>Airplane hangers</li> <li>Mass transit</li> <li>Maintenance</li> </ul>	Heavy duty poly- urethane	V	V	√ (cable) OPTIONAL (web)	$\checkmark$
Sealed SRL's	Patented technology separates components from grease, moisture and dirt for the most durable, rugged unit available on the market	Marine transit     Maintenance	Heavy gauge stainless steel and aluminum	V	V	V	V
Talon™ Web SRL's	Compliant and dependable quality SRL's, yet economical	<ul> <li>Railcar loading and unloading</li> <li>Truck loading and unloading</li> <li>Airplane hangers</li> <li>Mass transit</li> <li>Maintenance</li> </ul>	Nylon	√	V	OPTIONAL	

ULTRA-LOK® SELF RETRACTING LIFELINE The Ultra-Lok® web and cable SRL's are rugged, highly engineered devices that can be counted on for user safety, efficiency and comfort.

- Maximum durability with minimal weight
- ٠
- Stainless steel working components for corrosion resistance Durable polyurethane housing and aluminum side plates Anti-ratcheting, twin disc brake system limits arresting forces to 900 lbs. (4kN) or less ٠ ٠
- Smooth performance
- · Fast, easy connection and greater flexibility

Ultra-Lok<sup>®</sup> Self Retracting Lifeline 11' (3.3m) 1" (25mm) nylon web lifelines for reduced weight. Also available in 20' (6m). 3103108



Ultra-Lok\* Self Retracting Lifeline 30' (9mm) 3/16" (5 mm) galvanized wire rope. Also available in 20' (6m), 50' (15 m) and 85' (25m) lengths. 3504430

Leading Edge Ultra-Lok® Self Retracting Lifeline 30' (9m) 7/32" (5.5mm) galvanized steel wire rope-35% stronger than standard SRL cables. Also available in 55' (16m). Ideal for situations where you are working around leading edges. 3504500

Ultra-Lok® Synthetic Rope Self Retracting Lifeline 50' (15m) 1/4" (6.5 mm) Vectran synthetic rope. 3504480

NOTE: In Canada add a 'C' to the end of the Part Numbers shown - ie : 3103108C.

ULTRA-LOK <sup>®</sup> SELF RETRACTING LIFELINES - WEB						
Model #	Length	Line Type	Connector			
3103107	11' (3.3m)	Web 1" (25mm) nylon	Standard hook			
3103108	11' (3.3m)	Web 1" (25mm) nylon	Swivel hook			
3103207	20′ (6m)	Web 1" (25mm) nylon	Standard hook			
3103208	20' (6m)	Web 1" (25mm) nylon	Swivel hook			

ULI	ULTRA-LOK <sup>®</sup> SELF RETRACTING LIFELINES — CABLE					
Model #	Length	Line Type	Connector			
3504433	20' (6m)	Galvanized 3/16" (5mm)	Swivel hook			
3504434	20' (6m)	Stainless 3/16" (5mm)	Swivel hook			
3504430	30′ (9m)	Galvanized 3/16" (5mm)	Swivel hook			
3504431	30′ (9m)	Stainless 3/16" (5mm)	Swivel hook			
3504450	50' (15m)	Galvanized 3/16" (5mm)	Swivel hook			
3504451	50' (15m)	Stainless 3/16" (5mm)	Swivel hook			
3504485	85' (26m)	Galvanized 3/16" (5mm)	Swivel hook			
3504486	85′ (26m)	Stainless 3/16" (5mm)	Swivel hook			
3504500	30′ (9m)	Galvanized 7/32" (5.5mm)	Energy absorber with swivel hook			
3504600 Not available in Canada	55' (16m)	Galvanized 7/32" (5.5mm)	Energy absorber with swivel hook			

### **ULTRA-LOK® SELF RETRACTING LIFELINES – SYNTHETIC ROPE**

Model #	Length	Line Type	Connector
3504438	20′ (6m)	Synthetic Rope, ¼″ (6.3mm) Spectra™	Swivel hook
3504453	35′ (10.5m)	Synthetic Rope, ¼″ (6.3mm) Spectra™	Swivel hook
3504480	50 ft. (15m)	Synthetic Rope, ¼″ (6.3mm) Vectran™	Swivel hook
3504488	55 ft. (16.5m)	Synthetic Rope, ¼″ (6.3mm) Spectra™	Swivel hook

# SELF RETRACTING LIFELINES

		SI	ALED SELF RE	TRACTING LIFE	LINES
DBL-SALA Sealed SPL's incorporate a revolutionary pate	anted	Model #	Length	Line type	Connector
sealed technology that separates all dynamic componen from foreign elements such as grease, moisture and dirt	ts t.	3400800	30' (9m)	Galvanized 3/16" (5mm)	Swivel hook
Unparalleled in the industry, this true-seal equipment ensures efficient, safe operation under		3400801	30 ft (9m)	Stainless 3/16" (5mm)	Swivel hook
Most durable, rugged unit available	Sealed-Blok™ Self Retracting	3403400	50′ (15m)	Galvanized 3/16" (5mm)	Swivel hook
on the market • Self-adjusting disc brake limits arresting	Lifeline 30' (9m) cable	3403401	50' (15m)	Stainless 3/16" (5mm)	Swivel hook
<ul> <li>Aluminum and stainless steel, heavy</li> <li>Audit and the stainless steel and the stainless</li></ul>	3400800	3403500	85′ (26m)	Galvanized 3/16" (5mm)	Swivel hook
impacts and ensures long lasting, reliable performance		3403501	85' (26m)	Stainless 3/16″ (5mm)	Swivel hook
• 50' (15m) 3/16" (5mm) galvanized steel wire rope for durability. Available in	Sealed Self Retracting Lifeline	3403600	130' (39m)	Galvanized 3/16" (5mm)	Swivel hook
85' (25m) and 130' (39m) lengths and 175' (53m) non-sealed version	<b>3403400</b>	3403601	130' (39m)	Stainless 3/16" (5mm)	Swivel hook
for efficient and convenient rescue operations		3400610	175' (53m)	Galvanized 3/16" (5mm)	Swivel hook
NOTE: In Canada add a 'C' to the end of the Part Numbers	s shown - ie :	3403402	50' (15m) with retrieval	Galvanized 3/16" (5mm)	Swivel hook

### TALON™ WEB SELF RETRACTING LIFELINES

Talon<sup>™</sup> Self Retracting Lifelines are engineered for reliable protection that locks when it should, won't lock when it shouldn't. Dependable quality in an economical model. Anti-ratcheting brake system limits arresting forces to 900 lbs. (kN) or less.

- Extremely lightweight design—under 3 lbs.!
- Direct harness attachment option
- Built in anchorage connector
- Greater freedom of movement without compromising safety
- Maintains compact size and weight for comfort and convenience



Talon<sup>™</sup> Self Retracting Lifeline 8′ (2.4m) 3101001

	TALON™ SERIES SELF RETRACTING LIFELINES						
Model #	Length	Single/ Twin leg	Line type	Connector			
3101000	8′ (2.4m)	Single	3/4" (19mm) Nylon web	Standard hook			
3101001	8′ (2.4m)	Single	3/4" (19mm) Nylon web	Swivel hook			
3101006	8′ (2.4m)	Single	3/4" (19mm) Nylon web	Rebar steel hook			
3101050	16' (4.8m)	Single	3/4" (19mm) Nylon web	Standard hook			
3101051	16' (4.8m)	Single	3/4" (19mm) Nylon web	Swivel hook			

NOTE: In Canada add a 'C' to the end of the Part Numbers shown - ie : 3101000C

### **REMOTE POWER TAGLINE SYSTEM**

The Remote Power Tagline System is ideal for use in applications where bridge cranes or other temporary overhead obstructions exist and fall protection is needed. The system provides easy, remote access to an overhead self retracting lifeline. The Power Tagline system and Self Retracting Lifeline (SRL) is mounted overhead and above moving obstruction(s). It is used to lower the SRL's lifeline allowing for attachment to the worker. Upon completion of work the system is used to raise the lifeline up and out of the way. Cranes and other overhead machinery are then free to pass.

- Allows remote access to overhead mounted SRL's with the push of button the weight is lowered & SRL connecting hook is accessible.
- 75 ft. per minute travel speed faster then most electric winches. Rapid travel winch means less waiting for the fall arrest system.
- 100 ft. length long enough to handle the tallest ceiling to floor application.
- · System will accommodate up to three SRL's for added jobsite versatility
- · Includes both wireless remote and corded controls for added flexibility
- Operates on standard 110 volt power for ease of installation.
- Mounting brackets included. No drilling or welding required. Attaches to beam flanges and trusses up to 18 inches wide.
- \* Shown with 3504430 Ultra-Lok® SRL & 2103143 I-Beam Trolley - Sold Separately

REMOTE POWER TAGLINE SYSTEM					
Model #	Length	Accessories	Power		
8102101	100 ft.	Mounting brackets and controls	110 volt		
8102102	100 ft.	Mounting brackets and controls	220 volt		



# DBI-SALA HORIZONTAL LIFELINE SYSTEMS

## The Most Thoroughly Engineered Systems On The Market

For years safety engineers and site directors have put their trust in the highly engineered DBI-SALA horizontal lifeline systems for superior technology and service. With the largest range of systems to fit the variety of applications, DBI-SALA horizontal lifelines offer significant benefits to enhance safety and productivity.

A horizontal lifeline is a complex system comprised of a flexible line with connectors at both ends for securing it horizontally between two anchorages or anchorage connectors. These systems are used to protect workers operating in the horizontal plane who may not have continuous access to suitable anchorage points. Horizontal lifeline systems include the lifeline component, necessary connectors and anchorages, and may include an energy absorbing component.



# What to look for in a Horizontal Lifeline

### LINES

Most horizontal lifelines are made from galvanized metal or stainless steel to prevent the system from wearing out through constant use or environmental factors. Synthetic lines are often used in temporary and indoor applications because they are lightweight and easy to install.

SWAGED ENDS

Swaging or welding guarantees a faultless link between the cable and the anchorage points, preserving the strength of the cable at its connection.

### **ENERGY ABSORBER**

Some systems have in-line energy absorbers to reduce the overall forces on the system. The DBI-SALA Zorbit™ energy absorber begins to pay out at a higher force than other industry models. This means in case of a fall, there will be less slack on the line for less fall distance. One energy absorber is used for units under 60' (18m). If over 60' (18m), a unit is used at each end.

### ADJUSTABLE TERMINATION

Installation practices are fast moving so your equipment needs to be as well. The wedge grip termination allows the user to easily adjust and install cable type horizontal lifeline systems.

# Superior technology for more confidence in your horizontal fall protection

A horizontal lifeline system may appear to be a basic line strung between two anchors. It is not! Proper engineering is critical to ensure a safe lifeline. Typical failures involve improper calculation of clearance, no account for sag in the lifeline, misunderstanding of anchorage strength requirements and location. When a fall is experienced on a horizontal lifeline, the load is magnified back to the anchorage point generating tremendous force. The amount of sag amplifies the forces on the end anchors. Other factors include the number of workers using the system, overall length and the material used. Precision engineered systems that have endured rigorous testing and meet OSHA and ANSI requirements take the guesswork out of putting together a horizontal fall protection system.

### Permanent vs. Portable Horizontal Lifeline Systems

Horizontal lifelines systems are classified as permanent or portable. Portable systems must be easy to install and remove. DBI-SALA portable lifeline systems are affordable and lightweight for quick installation and versatile use. evolution<sup>™</sup> is a particularly flexible system for companies seeking a permanent solution. It provides protection of their workplaces without any damage to the buildings or the structures into which the lifeline has to be incorporated.

	SELECTION GUIDE						
a secu	Product	Description	Recommended For	Installation	Energy Absorber	Cable	No. of Users Up to:
	SecuraSpan® Horizontal Lifeline System - Cable	Temporary Extremely lightweight and affordable engineered system	<ul> <li>Plant Maintenance</li> <li>Bridges Work</li> </ul>	Single clamp anchor on stanchion base installed by user	Zorbit™	7x19 - 3/8" (9.5mm) galvanized	6 2 per span
	evolution™ Horizontal Lifeline System - Cable	Permanent Completely customizable— straight or curved systems and unlim- ited length	<ul> <li>Aircraft Hangers</li> <li>Railcar Terminals</li> <li>Semi-Truck Terminals</li> <li>Mass-Transit Terminals</li> <li>Ship Yards</li> </ul>	Installation completed by Certified Installers	LEAP™ System	5/16" (8mm) stainless steel	5 2 per span (Capacity to be determined during design)
	evolution200™ Horizontal Lifeline System - Cable	Permanent Single span system with up to 200 ft. (61m) length	<ul> <li>Railcar loading and unloading</li> </ul>	Installed by user or Certified Installers	LEAP™ System	5/16" (8mm) stainless steel	1 User (2 Users if second HLL system installed)
	Sayfline™ Horizontal Lifeline System - Synthetic	Temporary The lightest synthetic portable horizontal lifelines available	<ul> <li>Plant maintenance</li> <li>Bridge work</li> <li>Vehicle Maintenance</li> </ul>	Easy with no special tools or equip- ment. User installed	In-line energy absorber	Kernmantle rope	2 users
the second sect	Sayfline™ Horizontal Lifeline System - Cable	Temporary The lightest cable portable horizontal lifelines available	<ul> <li>Plant maintenance</li> <li>Bridge work</li> <li>Vehicle Maintenance</li> </ul>	Easy with no special tools or equip- ment. User installed	Zorbit <sup>™</sup>	7x19 - 3/8" (9.5mm) galvanized	2 users
	Portable Guard Rail™ System	Portable Free-standing, portable fall prevention system requires no surface attachments	<ul> <li>Rooftops</li> <li>Leading edges</li> <li>Holes or openings on roofs or floors</li> </ul>	Easy, no tools. User installed	None required	N/A	N/A
	EZ-Line™ Horizontal Lifeline System - Cable	Temporary The easiest horizontal lifeline to install today	<ul> <li>Plant/Facility Maintenance</li> <li>Bridge Work</li> <li>Vehicle Maintenance</li> </ul>	Very easy, no special tools required. User installed	Internal friction brake	7x19 - ¼" (6.25mm) galvanized	2 users



# evolution<sup>™</sup> HORIZONTAL LIFELINE SYSTEMS

### Complete Mobility and Hands-Free Operation

The evolution<sup>™</sup> System has been designed to combine remarkable ease of use with superior fall arrest safety performance. The patented shuttle, which is attached to the user's self retracting lifeline, follows the user as he/she moves along the evolution<sup>™</sup> System and automatically bypasses each Intermediate Bracket. The simplicity of the shuttle design ensures that each Intermediate Bracket is bypassed without any manual assistance by the user. As a result, the evolution<sup>™</sup> System is the world's most innovative multi-span lifeline system which provides continuous "hands-free" fall protection.

Many diverse activities including loading, sampling, cleaning and repair and maintenance duties require workers to walk on top of rail cars, tanker trucks or airplanes. Although not an obvious fall hazard, the top of these vehicles can be an extremely dangerous work place. Rain or ice can create a slippery walking surface while obstacles such as raised walkways and hatch covers present numerous trip hazards.

These dangers are reflected by the many workers who have suffered serious or fatal injuries after falling from the tops of these vehicles. Of course, each of these accidents should have been prevented since current U.S. and Canadian regulations require the provision of some form of fall protection system when working at such heights.

In many cases, the most obvious solution is the installation of a horizontal lifeline. However, the frequent absence of any suitable overhead anchoring structure combined with the design complexities associated with horizontal lifelines have often discouraged companies from pursuing this solution.

DBI-SALA has overcome these design difficulties by partnering with Certified Installers who are able to offer a complete solution including design, fabrication and supervised installation of either pre-engineered or custom designed fall protection systems featuring StrongArm<sup>™</sup> Anchoring Frames & the Evolution<sup>™</sup> Horizontal Lifeline System.

# Innovative. Countless Applications. Inside or Out.



# **UNIQUE evolution<sup>™</sup> FEATURES**

### evolution<sup>™</sup> Shuttle

Its spherical shape, unique slot and two pairs of rollers allows the device to follow the user along the lifeline, smoothly passing intermediate brackets hands-free. Double safety opening activated by two distinct actions allows user to install or remove anywhere along the lifeline.

### Intermediate Bracket

It can be installed in many different configurations and at regular intervals to ensure optimum distribution of forces along the lifeline. It is shaped specifically to allow the automatic passage of the shuttle without the user ever having to disconnect from the lifeline.

### **Curved Intermediate Bracket**

A wide range of curved components are available to fulfill the needs of almost any site. This allows the system to follow as closely as possible the movements of the users and shape of the structure. Solutions for every type of installation including wall, post or overhead.



### LEAP<sup>™</sup> Energy Absorber

This device protects the structure, absorbs the foces at the anchorage points and improves safety of the workers. It is specifically set-up for each system and each site to dissipate the fall arrest forces and maintain safety.

### **Anchorage Devices**

An articulated anchorage with three attachment points aligns accurately with the cable whatever the direction or angle, to allows consistant distribution ( forces at each attaching point for added safety.

### **Computer Simulation Program**

Design software has been developed specifically for evolution<sup>™</sup>. By simulating the necessary clearances and possible heights of fall, this design software validates the compatibility of the structures with the lifelines no matter how complex. It verifies that the overall system is dimensioned according to the number of users and that the forces at the ends can be supported by the structure.



# evolution<sup>™</sup>200 AND I-BEAM TROLLEY SOLUTIONS

### evolution<sup>™</sup>200 Single Span Systems

DBI-SALA is also able to supply a high-tension systems capable of spanning up to 200 ft. when anchored to our StrongArm<sup>™</sup> Frames. The evolution<sup>™</sup>200 system can be used on those occasions where the presence of StrongArm<sup>™</sup> Frames at more frequent intervals would interfere with production activities.

### I-Beam and Trolley Systems

DBI-SALA is also able to offer a range of man-rated trollies which can run along overhead I-beams to provide continuous fall protection. The I-beam and

trolley systems typically will be used in conjunction with a self retracting lifeline which provides horizontal and vertical mobility. These I-beam Systems are particularly suitable if an existing beam is already positioned above the railcar, ship or plane. In addition, since an I-beam System does not generate any lateral forces at the two system extremities, it can sometimes be used where it is not possible to accomodate the loads generated by a cable type multi-span horizontal lifeline system.





### EZ-LINE<sup>™</sup> RETRACTABLE HORIZONTAL LIFELINE

- Retractable lifeline pulls out for installation and retracts with built-in winch
- Customize your system length in any increment up to 60 ft
   Attaches to any 5,000 lb. rated anchorage connector or stanchion
- Built-in pretension and impact indicators
- 33% lighter than conventional systems



### **EZ-LINE<sup>™</sup> CLEARANCE** (required above lower level or obstruction) 2 Users SRL Span Length 1 User 6' 2 Users 6' 1 User SRL (1.8m) Lanyard (1.8m) Lanyard 0-10' (3m) 18'-2" (5.5m) 19' (5.8m) 7'-5" (2.3m) 8'-2" (2.5m) 18'-10" (5.7m) 10'-20' (3-6m) 20'-3" (6.2m) 8' (2.4m) 9'-0" (2.7m) 21'-6" (6.6m) 9'-10" (3.0m) 20'-30' (6-9m) 19'-6" (5.9m) 8'-7" (2.6m) 30'-40' (9-12m) 20'-2" (6.1m) 22'-10" (7m) 9'-2" (2.8m) 10'-8" (3.3m) 40'-50' (12-15m) 20'-10" (64m) 24'-1" (7.3m) 9'-10" (3m) 11'-6" (3.5m) 50'-60' (15-18m) 21'-6" (6.6m) 25'-4" (7.7m) 10'-4" (3.1m) 12'-4" (3.8m)

### **EZ-Line™ Cable Systems 7605060** 60′ (18m) long

7605063 40' (12.2m) long (Canada)

### SECURASPAN® HORIZONTAL LIFELINE SYSTEM

The SecuraSpan® horizontal lifeline system was developed to provide an economical and safe solution to non-engineered homemade systems. The system and all components have been rigorously tested to exceed the unique dynamic, performance and strength requirements involved with horizontal systems. The extremely lightweight stanchions can be configured into a complete engineered fall protection system for use on steel I-Beams. With optional "bypass" bracket, the system can be configured to run indefinitely for ultimate jobsite flexibility. Spans between intermediates can be as great as 60' (18m) depending on your clearance requirements.

- Temporary system can be moved from one location to another for added productivity
- Simple, fast installation with a simple clamp anchor on the stanchion base
- Unlimited system length provides 100% protection and flexibility
- Zorbit<sup>™</sup> energy absorber with turnbuckle
- Standard size fits I-Beam flanges up to 12" (30cm) wide and 2-1/4" (5.7cm) thick. Optional base clamps available to fit 18", 24" or 36" (45, 60 or 91cm) beams, up to 3-3/8" thick
- Custom length requirements available in 10' (3m) increments

### **SECURASPAN® CLEARANCE**

### (required above lower level or obstruction)

Span Length	1-2 Users 6' (1.8m) Lanyard	1-2 Users SRL
0-10' (3m)	14'-2" (4.3m)	10'-9" (3.2m)
10'-20' (3-6m)	15'-5" (4.6m)	11'-11" (3.6m)
20'-30' (6-9m)	16′ (4.8m)	13'-2" (3.9m)
30'-40' (9-12m)	17'-10" (5.4m)	14'-6" (4.4m)
40'-50' (12-15m)	19' (5.7m)	15'-7" (4.7m)
50'-60' (15-18m)	20'-2" (6.1m)	16'-8" (5m)

Please note: See product instruction manuals for complete clearance information or different user scenarios.

### PORTABLE GUARD RAIL<sup>™</sup> SYSTEM

This is a totally free-standing, portable fall protection prevention system that requires no surface attachments. Versatile and affordable, it meets OSHA and ANSI requirements.

- Skid resistant bases are light
- enough for one worker to moveBases incorporate built-in directional changes for rail,
- offering continuous protection
  Easy installation insert
- railing into base and tightenUV resistant finish



### SecuraSpan® Systems

7400120	20' (6m) system
7400130	30' (9m) system
7400140	40' (12m) system
7400150	50' (15m) system
7400160	60' (18m) system

### **Customize Your System**

	ie i europeien
7400001:	Stanchion, its flange up to $12''$ (30cm) wide
	& 2-1/4" (5.7cm) thick
7400035:	Stanchion, fits 18" (45cm) wide & 2-1/4" (5.7cm) thick
7400031:	Stanchion, fits 24" (60cm) wide & 2-1/4" (5.7cm) thick
7400036:	Stanchion, fits 36" (91cm) wide & 2-1/4" (5.7cm) thick
7400015:	Stanchion, fits flange up to 12" (30cm) wide
	& 3-3/8" (8.4cm) thick
7400032:	Stanchion fits 18" (45cm) wide & 3-3/8" (8.4cm) thick
7400033:	Stanchion fits 24" (60cm) wide & 3-3/8" (8.4cm) thick
7400034:	Stanchion fits 36" (91cm) wide & 3-3/8" (8.4cm) thick
7400008:	Intermediate Bypass bracket kit
7400009:	Clamp assembly up to 18" (45cm) wide flange,
	2-1/4" (5.7cm) thick
7400010:	Clamp assembly up to 24" (60cm), 2-1/4" (5.6cm) thick
7400011:	Clamp assembly up to 36" (91cm), 2-1/4" (5.6cm) thick
7400017:	Clamp assembly up to 12" (30cm) wide flange,
	3-3/8" (5.7cm) thick
7400018:	Clamp assembly up to 18" (45cm) wide flange,
	3-3/8" (8.4cm) thick
7400019:	Clamp assembly up to 24" (60cm) 3-3/8" (8.4cm) thick
7400021:	Clamp assembly up to 36" (91cm) wide flange,
	3-3/8" (8.4cm) thick
7403020:	20' (6m) cable assembly with turnbuckle and Zorbit <sup>™</sup>
	(last 3 digits in Part # detail length)

NOTE: All part numbers shown are the same in Canada.

### Portable Guard Rail<sup>™</sup> Components and Systems

7900000	6' (1.8m) Guard Rail Section,
	42" (106cm) high, one base
7900001	8' (2.4m) Guard Rail Section,
	42" (106cm) high, one base
7900002	10' (3m) Guard Rail Section,
	42" (106cm) high, one base
7900004	Base assembly with guard rail fittings
7900010	6' (1.8m) Guard Rail only
7900011	8' (2.4m) Guard Rail only
7900011 7900012	8' (2.4m) Guard Rail only 10' (3m) Guard Rail only
7900011 7900012 7900005	8' (2.4m) Guard Rail only 10' (3m) Guard Rail only Splice Kit for Guard Rail
7900011 7900012 7900005 NOTE: All par	8' (2.4m) Guard Rail only 10' (3m) Guard Rail only Splice Kit for Guard Rail t numbers shown are the same in Canada.

# HORIZONTAL LIFELINE SYSTEMS

### SAYFLINE<sup>™</sup> SYNTHETIC HORIZONTAL LIFELINE SYSTEMS

The Sayfline<sup>®</sup> horizontal lifeline systems are not only lightweight and easy to install, they are also extremely portable. Just disassemble and take to the next job. Engineered with DBI-SALA attention to quality and detail, the Sayfline<sup>®</sup> system is a complete kit in its own carrying bag that is easily installed with no special tools or equipment.

- Complete with kernmantle rope lifeline assembly
- with a tensioning device for ease-of-use
- Two 6' (1.8m) tie-off adaptors are included to anchor the system to a structure



Please note: See product instruction manuals for complete clearance information or different user scenarios.

### SAYFLINE<sup>™</sup> CABLE HORIZONTAL LIFELINE SYSTEM

The cable Sayfline<sup>®</sup> system is highly portable and ideal for use in situations where welding, sparks or harsh environments are present or where minimal clearance exists. This all-metal system is durable enough to be left in place for long periods of time and light enough to be moved easily from one job to another. Engineered with DBI-SALA attention to quality and detail, the Sayfline<sup>®</sup> system is a complete kit that is easily installed with no special tools or equipment.

- Lightweight and extremely portable allowing you to move it and reuse it over and over again
- Cable lifeline assembly and wedgegrip termination for easy adjustability and installation
- Zorbit" shock absorber for added safety, it allows you to use a standard 5,000 lb. rated anchorage connector such as our tie-off adaptor, fixed beam anchor, D-ring anchorage plate, etc.

### Sayfline<sup>™</sup> Cable Systems

7602020	20' (6m) long
7602030	30' (9m) long
7602040	40' (12m) long
7602050	50' (15m) long
7602060	60' (18m) long
7602070	70' (21m) long
7602080	80' (24m) long
7602090	90' (27m) long
7602100	100' (30m) long

CABLE SAYFLINE™ CLEARANCE				
(required above lower level or obstruction)				
Span Length	1-2 Users 6' (1.8m) Lanyard	1-2 Users SRL		
0-10' (3m)	17'-11" (5.4m)	6'-11" (2.1m)		
10'-20' (3-6m)	19'-2" (5.8m)	8'-0" (2.4m)		
20'-30' (6-9m)	20'-6" (6.2m)	9'-1" (2.7m)		
30'-40' (9-12m)	21'-10" (6.6m)	10'-2" (3.1m)		
40'-50' (12-15m)	23'-1" (6.9m)	11'-4" (3.4m)		
50'-60' (15-18m)	24'-5" (7.3m)	12'-5" (3.7m)		

Please note: See product instruction manuals for complete clearance information or different user scenarios.

### HORIZONTAL LIFELINE COMPONENTS

The revolutionary new energy absorber and wedge grip termination featured on the cable Sayfline<sup>®</sup> systems is also available to customize your own system with added safety.

7401031	Zorbit <sup>™</sup> Energy Absorber complete with two shackles, bolts and nuts for easy installation
7401032	The 7401031 kit with a turnbuckle for tensioning of system
7401033	The 7401031 kit turnbuckle for tensioning, thimble and cable clips for attaching cable (just add your own cable)
7401013	Zorbit <sup>™</sup> only
7608008	Wedge grip easily adjusted termination for 3/8" (9.5mm) wire rope cable, requires no tools to install and is 5,000 lb. (22Kn) rated



NOTE: All part numbers shown on this page are the same in Canada.



# DBI-SALA **NETTING SYSTEMS** Strength and Durability

# for Reliable Protection

Industry-leading features include the patented adjustable personnel net and the guardrail-rated debris net. Strong and impact-resistant, DBI-SALA netting systems offer the confidence of reliable protection for your worksite.

Netting systems provide passive fall protection, which means protection that does not require the active involvement of a worker. They consist primarily of two types: personnel nets and debris nets. Strict OSHA and ANSI regulations apply regarding strength, structural integrity and installation of netting systems.

### **Personnel Nets**

Personnel nets are designed to catch personnel who fall from a bridge, building, tower, dam or other structure or to catch workers in areas left undecked during construction, across atriums, shafts, stairwells and skylights. They must be erected so that the exposed worker can never fall more than 25' (7.5m). This is both to maintain the net strength and to reduce the risk of injury to the worker from the impact into the net. To minimize the injury due to a fall, nets should be positioned as close as possible below the work level.

### **Debris Nets**

Debris nets are designed to catch lightweight construction debris, tools, building materials, etc., that can be dropped, kicked, pushed or blown from a high place. Debris nets can prevent falling debris from hurting workers, passersby or from damaging traffic or material below. Debris nets offer protection from falling objects for the whole person—hard hats protect only the head. A perimeter debris net can meet OSHA and ANSI standards to provide fall protection from the working surface of the floor to which it is mounted.

### **Debris Net Liners**

Personnel nets are often lined with debris nets so that they can catch debris as well as personnel. Debris net liners should be cleaned daily because a person falling on residual debris can be seriously hurt.

### **Advantages of Netting Systems**

- Nets save lives and reduce lost time.
- Workers feel more secure with nets. Secure workers are more productive.
- *Nets provide protection without hampering worker performance.*
- Nets save equipment from loss, destruction or damage.
- Nets provide visibility and ventilation to get the job done more quickly than planking.
- Nets are more economical than alternatives such as scaffolding, stay-in-place forms, planking, etc.
- Nets are reusable, easily re-rigged and can be factory repaired.





### **NETTING SYSTEMS**



### **SNAP HOOKS**

DBI-SALA netting systems feature a staggered system of lashed-in snap hooks allowing the net to be easily connected.

# What to look for in a Netting System



### ANCHORING POINTS AND INSTALLATION

DBI-SALA netting systems are available with the related cable and hardware for installation to steel or concrete. DBI-SALA netting systems are lightweight and easy to handle for fast, safe installation and shifting from floor to floor.

### **NETTING MATERIAL**

Typical netting materials are manila, polypropylene and nylon. Nets made of nylon are 50% stronger than manila and 47% stronger than polypropylene. Nylon nets provide a softer catch for personnel netting systems and resist chafing and abrasion. Nylon has a higher melting point of 480°F vs. 300°F for polypropylene. (Manila chars.) It also absorbs eight times the energy of manila and 5.3 times that of polypropylene. DBI-SALA netting is rot proof, mildew proof and features UV protection for longer lasting service. Special flame retardant protection treatments can be applied at the factory for added safety and long wear.

### ADJUSTABILITY

The patented DBI-SALA Adjust-a-Net<sup>™</sup> is the only personnel net on the market that can be adjusted to fit the work area.

### **MESH SIZE**

Meshes are available in many sizes and strengths depending on the job and the weight and size of the debris to be contained. The most common debris net mesh size is 1/8" (3mm). A typical personnel net mesh size is 3-1/2" (87.5mm). Diamond-shaped mesh dissipates impact strain throughout the net.







# **DBI-SALA Netting Systems** — Reliable Protection for Your Site and Your Personnel

			SELECTION G	UIDE			
Product	Description	Recommended For	Material	Adjustable Size	UV and Fire Retardant Treatment	Used as Guard Rail	Installation
Adjust- A-Net™	Personnel The only adjustable personnel netting system on the market	<ul> <li>Construction</li> <li>Bridges</li> <li>Towers</li> <li>Dams</li> <li>Ships</li> </ul>	Nylon	$\checkmark$	$\checkmark$		Can be installed to steel or concrete using cable with related hardware (not included)
Vertical Net	Debris The most complete and cost-effective debris containment and guard rail system on the market	<ul> <li>Construction</li> <li>Bridges</li> </ul>	Polypro- pylene		V	V	Snap-on cable clips and tie-down plates
Border Guard™	Debris The first lightweight system for rigging nets around the perimeter of new concrete buildings	<ul> <li>Concrete construction</li> <li>Steel construction</li> <li>Bridges</li> </ul>	Nylon	$\checkmark$	V		For concrete: Floor clamps installed on concrete slabs – arm extends off clamp to support cable and net For steel: Arms are mounted to each column with adapter assembly

### ADJUST-A-NET<sup>™</sup> PERSONNEL/DEBRIS NET SYSTEM

Adjust-A-Net<sup>™</sup> is a one-of-a-kind patented personnel net system that is specially designed to be easily adjustable, thereby fitting any and all workspaces where personal fall protection or debris capturing is required. Four net sizes adjust to fit any size or shaped environment. Shrink Adjust-A-Net<sup>™</sup> down for compact areas or expand to full size. Snap together for the largest areas. Reduce one side or the other for long, narrow applications. With Adjust-A-Net<sup>™</sup>, custom or multiple single sized nets are no longer necessary.

- Easily adjustable straps allow you to adjust any size net down to 50% of its original size, 15' x 30' (4.5m x 9m) maximum size.
- Reduce sag with quick-adjust buckle releases.
- 3-1/2" (8.75cm) mesh which is the smallest in the industry for better protection.
- A specially developed coating protects from UV light, resists abrasion and securely bonds all convergent points.
- Inspection-ready test cords serve as a built in indicator and allow for the evaluation of Adjust-A-Net's<sup>™</sup> structural integrity.
- Rugged steel snap hooks are placed every 48" (1.2m). Staggered spacing on opposite sides allows any size Adjust-A-Net<sup>™</sup> to be easily connected together.
- Available with an attached debris liner for added workplace safety.
- Made of long wearing, high-tenacity nylon, tested to withstand a force greater than 17,500 lbs. (70kN).

Please note: It is the user's responsibility to furnish and install cable according to federal, state and local regulations.



ADJUSI-A-NEI <sup>™</sup>				
Model #	Description	Color		
4100400	15' x 30' (4.5 x 9m) with 1/8" (3.2mm) liner	Black		
4100401	20' x 40' (6 x 12m) with 1/8" (3.2mm) liner	Black		
4100402	25' x 50' (7.5 x 15m) with 1/8" (3.2mm) liner	Black		
4100403	30' x 60' (9 x 18m) with 1/8" (3.2mm) liner	Black		
4100100	15' x 30' (4.5 x 9m) without liner	Black		
4100101	20' x 40' (6 x 12m) without liner	Black		
4100102	25' x 50' (7.5 x 15m) without liner	Black		
4100103	30' x 60' (9 x 18m) without liner	Black		
snap hooks and webstraps included				

NOTE: All part numbers shown on this page are the same in Canada.

### VERTICAL NET DEBRIS CONTAINMENT SYSTEM

The Vertical Net is the most complete and cost-effective debris containment and guardrail system on the market. Its highly visible bright orange mesh protects workers near building edges. Vertical Net not only protects from falling debris but also protects workers near building edges by serving as a guardrail. Cheaper and easier to install than a guardrail, when installed properly it eliminates need for mid-rail and toe boards. Designed for use with traditional cable set-ups, the nets are easy to remove, relocate, handle and store. They attach to the cable with supplied DBI-SALA snap-on clips. The bottom edge of the net is quickly secured using a power actuated tool to fire the nail into the Tie-Down Plate.

- Made of performance-proven polyethylene mesh which is UV resistant and fire retardant. Exceeds OSHA's 200 lb. (90.kg) lateral strength requirements and the New York City Construction Code requirements
- High visibility so you know it is in place even from the ground level
- Also useful as temporary partitions for crowd control or demolition
- 48" (1.2m) high x 100' (30m) long with 55 snap-on cable clips and 22 Tie-Down Plates (other sizes available). System comes complete with everything needed, vertical netting, snap-on cable clips for easy and secure net installation and Tie-Down Plates to replace toe-boards and firmly set the net into place
- 1/8" (3.2mm) hole construction meeting most large city requirements

### Easy installation—

### easy to remove and relocate!

- Works with traditional safety cable (not included) at top and fastened to floor at bottom
- Top of net is attached with snap-on cable clips 2' (60cm) on center
- Bottom of net is secured with Tie-Down Plates 5' (1.5m) on center using Power Actuated Fasteners



### VERTICAL NET SYSTEM

Model #	Description	Color
4100200	48" (1.2m) H x 100' (30m) L - no hardware	Orange
4100201	66" (1.7m) H x 100' (30m) L - no hardware	Orange
4100300	48" (1.2m) H x 100' (30m) L - with hardware	Orange
4100301	66" (1.7m) H x 100' (30m) L - with hardware	Orange
4100003	Hardware Kit - 55 Snap-on Cable Clips, 22 Tie-Down Plates	

Please note: It is the user's responsibility to furnish and install cable according to federal, state and local regulations.

### **BORDER GUARD™ NET SYSTEM**

The DBI-SALA Border Guard<sup>™</sup> net system is the first lightweight system for rigging nets around the perimeter of new concrete buildings or bridges. It is a convenient, economical way to ensure protection, confidence and productivity at your building site. Unlike old perimeter systems, the netting is purchased in convenient 25' (7.5m) units and installed with sturdy hardware that is half the weight of old style nets. The system allows single floor attachment for closer protection at the pour level.

- Meets ANSI and OSHA standards by providing fall protection from the working surface of the floor to which the system is mounted
- The entire system can be moved up to the next floor level as construction progresses
- Easily installed from one level without the use of a crane or specialized equipment
- Non-destructive floor clamps are easily attached to concrete slabs
- Nets extend 10' (3m) out from floor edge on arms that are attached securely to the floor clamps, meeting standards for fall distance of up to 5' (1.5m) (a fall from the working surface of the floor to which it is mounted)



PERIMETER DEBRIS NETTING SYSTEM				
Starter Kit 4100006	Add-On Kit 4100007	Corner Kit 4100005		
1 ea. net 10' x 25' (3 x 7.5m), 4" (10cm) black mesh with 1/8" (3.2mm) debris liner & snap hooks 2 ea. floor clamps 2 ea. 10or clamps 2 ea. 10' (3m) arms 2 ea. 10' (12.7mm) shackles 8 ea. bolts 6 ea. cable assemblies 2 ea. straps with cam buckles	1 ea. net 10' x 25' (3 x 7.5m), 4" (10cm) black mesh with 1/8" (3.2mm) debris liner & snap hooks 2 ea. floor clamps 1 ea. 10' (3m) arm 1 ea. 1/2" (12.7mm) shackle 4 ea. bolts 3 ea. cable assemblies 1 ea. strap with cam buckle	1 ea. net 10' x 10' x 15' (3 x 3 x 4.5m), 4" (10cm) black mesh with 1/8" (3.2mm) debris liner & snap hooks 1 ea. cable assembly		

Please note: System is not designed for steel beam construction or when shape and design of building do not allow for standard installation of a net system.



# DBI-SALA CONFINED SPACE ENTRY, RESCUE & DESCENT EQUIPMENT

Rescue and retrieval are critical components of any fall protection program. The fast and effective performance of these tasks often means the difference between a non-injury fall and one resulting in serious worker harm. Often the longer a fallen employee remains suspended or trapped, the worse his injuries.

### Reliability When You Need It the Most

When it comes to rescue, it is essential that equipment operates perfectly...and fast. DBI-SALA has developed a complete line of rescue and retrieval systems that are more effective than any other in the industry. Safety engineers and site directors trust DBI-SALA for the type of high quality, rugged systems that will ensure top performance when it is needed.

Rescue and descent equipment choices depend on the job site, the tasks being performed and the available manpower. Rescue and descent equipment includes tripods, davit arms, winches, comprehensive rescue systems and descent devices.

### **Rescue Basics**

- If a fallen worker can be accessed using a lift, bucket or ladder, one of these should be used. In some cases industrial sites may rely on local fire departments to assist in rescue, but in-house rescue response times are usually much shorter.
- Rescuers should always be backed up with a secondary redundant system such as a belay system or SRL that is totally independent of the primary means of rescue.
- All rescue team members should receive training and practice on a regular basis.

### Confined Space Rescue

Confined spaces, such as vaults, tanks, or manholes, are one of the most challenging of rescue situations. Cramped space and narrow openings can make access by rescuers difficult. At the same time, these situations often present problems such as inadequate ventilation or noxious air that make immediate rescue imperative. Generally a person without oxygen for four minutes will die or suffer brain damage.

The critical nature of these rescues sometimes leads to poorly planned attempts. Two-thirds of deaths in confined space rescue occur to people trying to rescue someone else. Proper equipment to perform quick, safe rescue is essential in any operation where confined spaces must be entered. DBI-SALA confined space and rescue equipment is engineered for perfect performance in critical emergency situations.

# **CONFINED SPACE ENTRY, RESCUE & DESCENT SYSTEMS**



# What to look for in a Confined Space Entry & Rescue System

### EASE-OF-USE

During an emergency, speed and safety is your primary concern and decisions must be made quickly. There is no room for error! DBI-SALA Rescue Systems provide you with the confidence to handle crisis in a confined space.

### **MECHANICAL SYSTEMS**

The mechanical device is one of the most critical parts of the rescue system. It provides the means to retrieve an incapacitated worker to safety. Lifeline type and length are just a few of the options. In some situations, a secondary or back-up system is required.

### DURABILITY

Confined space systems have to be built to stand up to the harshest environments. Components must be designed from quality materials strong enough to endure rough use and exposure to the elements.

### ACCESSORIES

### Boatswain's Chair is ideal for confined space entry. 1001140

Y-Lanyard connects to shoulder D-ring harness. 1231460 (1201460 in Canada)



What to look for in a Rescue/Descent System

The DBI-SALA product line includes a number of high angle rescue and positioning systems, as well as descent and escape systems that are safe, easy to use and allow maximum control during use.



VERSATILITY

Systems like the Rollgliss R350 series provide ultimate versatility. You can change hauling ratios on the fly with a variety of pulleys. Often used by fully trained rescue teams.

### EASE-OF-USE

The RPD provides a simple rescue system and incorporates general raising/lowering and positioning functions. PORTABILITY The Rollgliss® Self Rescue Kit is probably the simplest rescue system on the market.

### VERSATILITY

The confined space system should be adjustable, readily adapting to extreme environment and uneven terrain. A modular design is also helpful, allowing you to add-on to the system over time.

### STRENGTH

The system you choose must be rated for the application you plan on using it for, such as fall arrest, rescue, man-riding or material handling. Choose a system that has been designed to maximize strength and minimizes weight.

### PORTABILITY

The portability of a rescue system is an important factor. It must be lightweight, easy to transport, set-up and store. Remember, in an emergency situation, every second counts.

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# **DBI-SALA** is the name to trust for Confined Space Rescue Equipment

Whether raising, lowering or supporting personnel or materials, our confined space rescue and retrieval systems are designed for versatility and ease of use. They serve as true workhorses, providing routine work support and fall protection, and perform as perfectly engineered rescue and retrieval systems during emergencies in areas such as manholes, tanks, bins, vaults, etc



### **ALUMINUM TRIPOD**

The lightweight and portable DBI-SALA aluminum tripod is ideal for manhole entry and retrieval applications. It is easily set-up by one worker and can be transported from one location to another. Attach one or two mechanical devices and you're ready to go!

- UL Classified aluminum tripod
- Quick-mount bracket for attachment of mechanical device
- Rated working load is 350 lbs. (157kg) for work support or rescue
- Adjustable locking legs with safety chains
- Rubber safety shoes containing spiked edges for uneven surfaces
- Top pulley assembly for routing of lifeline and eyebolt anchor points

Model # Description		Height	Weight
8000000	Aluminum Tripod	7′ (2.1m)	47 lbs. (21kg)
8000010	Aluminum Tripod	9′ (2.7m)	56 lbs. (25kg)

### SALALIFT® II WINCH

This man-rated work support and rescue winch is lightweight and easy to use. It is manually operated by simply rotating the handle to raise or lower personnel or materials. Galvanized cable is standard, stainless and rope available.

- Gear ratio is 6:1 with an average lifting speed of 12.75'/min
- Quick-mount bracket for attachment to tripod and safety
- hook with impact indicator
  Free-wheel mode for operator maneuverability and overload clutch for added safety
- Polyethylene housing for reduced weight and superior corrosion resistance

Model #	Description	Length	Lifeline Type	Weight
8102001	SALALIFT® II Winch	60′ (18m)	60' (18m) 1/4" (6.25mm) Galvanized cable	
8102009	SALALIFT® II Winch	90′ (27m)	3/16" (5mm) Galvanized cable	35 lbs. (15.75kg)
8102005	SALALIFT® II Winch	120' (36m)	3/16" (5mm) Galvanized cable	37 lbs. (16.65kg)

### **3-WAY SEALED SELF RETRACTING LIFELINE (SRL)**

This man-rated personal fall arrest component incorporates a retrieval winch suitable for raising and lowering personnel in emergency rescue/retrieval situations. In the event of a fall, the brake will stop the fall and limit arresting forces to 900 lbs. (4kN) or less.

- Quick-mount bracket for attachment to tripod and carrying bag
- Sealed design for the ultimate in durability and corrosion resistance
- Aluminum and stainless steel construction for added corrosion resistance
- Safety hook with impact indicator

Model #	Description	Length	Lifeline Type	Weight		
3400107	Sealed SRL with bracket	30 ft. (9m)	30 ft. (9m) 1/4" (6.3mm) Spectra™			
3400307	Sealed SRL with bracket	55 ft. (16.5m)	1/4″ (6.3mm) Spectra™	52 lbs. (23.4kg)		
3400115	Sealed SRL with bracket	50′ (15m)	3/16" (5mm) Galvanized cable	41 lbs. (18.5kg)		
3400311	Sealed SRL with bracket	85' (26m) 3/16" (5mm) Galvanized cable		59 lbs. (26.5kg)		
3400509	Sealed SRL with bracket	130' (39m)	3/16" (5mm) Galvanized cable	83 lbs. (37.4kg)		
NOTE: In Canada add a 'C' to the end of the Part Numbers show - ie : 3400115C.						

is lightweight and easy to use. It is manually operated by

### IRIPUD & SALA This DBI-SALA sys with the SALALIFT to another. • Complete confir entry/retrieval s • Includes tripod, and/or self retra • All systems are • All mounting ha and brackets ar

<b>TRIPOD</b> 8	& SALALIFT®	<b>II RESCUE</b>	SYSTEM
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This DBI-SALA system is ideal for typical manholes and combines our lightweight and portable aluminum tripod with the SALALIFT®II Winch. The system is easily set-up by one worker and can be transported from one location to another.

ned space	Model #	Tripod	Winch	SRL	Weight
system , winch	8300030	7′ (2.1m)	60' (18m) 1/4" (6.25mm) Galvanized	N/A	83 lbs. (37.4kg)
man-rated ardware	8300032	7′ (2.1m)	90' (27m) 3/16" (5mm) Galvanized	N/A	82 lbs. (36.9kg)
re included	8300034	7′ (2.1m)	120' (36m) 3/16" (5mm) Galvanized	N/A	84 lbs. (37.8g)
	8301000	7′ (2.1m)	N/A	50' (15m) 3/16" (5mm) Galvanized	94 lbs. (42.4g)
	8304010	7′ (2.1m)	60' (18m) 1/4" (6.25mm) Galvanized	50' (15m) 3/16" (5mm) Galvanized	133 lbs. (59.9kg)
	8304012	9′ (2.7m)	60' (18m) 1/4" (6.25mm) Galvanized	50' (15m) 3/16" (5mm) Galvanized	146 lbs. (65.7kg)

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8518000

### **ADVANCED BASIC HOIST SYSTEMS**

These systems are the most efficient and economical confined space entry and retrieval alternative to a tripod. The Advanced Basic Hoist has all the features and benefits of the standard red Basic Hoist system. In addition, the high-visibility fluorescent green Advanced Basic Hoist features a collapsible base to reduce storage and transport space.

- Lightweight aluminum construction
- Includes 5,000 lbs. (22kN) anchor point for fall-arrest devices
- All hardware is zinc plated for corrosion resistance
- Top pulley assembly for routing of lifeline

Model # Description		Weight
8517069	Advanced Basic Hoist (order winch separately)	58 lbs. (26.1kg)
8525001	8525001 Advanced Basic Hoist with Basic Winch	
8515900	Adapter for Permanent Mount Bases	15 lbs. (6.75kg)

### **ADVANCED 5-PIECE HOIST SYSTEMS**

These units are constructed of lightweight materials including high strength aluminum. The davit pivots for ease of rescue and the base adjusts to fit most standard entries. Other bases available.

- System comes complete with: • 12"- 29" (30-72mm)
- Adjustable Offset Mast 8518001
- 33" (82.5cm) Lightweight Lower Mast 8518002
- Three-Piece Lightweight Base
   **8518005**
- Winch and SRL's sold separately

### **Optional Portable & Fixed Bases**

Model #	Description	Weight
8518000	Advanced 5-Piece Hoist System	100 lbs. (45kg)
8518001	Adjustable Upper Davit Arm, 12"-29" (30-72mm)	22 lbs. (9.9kg)
8518002	Lower Mast Extension, 33" (82.5cm)	18 lbs. (8.1kg)
8519378	Internal Tank Collar	61 lbs. (27.5kg)
8512285	Adj. Barrel Mount Sleeve, 24" (60cm) max opening	56 lbs. (25.2kg)
8510140	Vehicle Hitch Mount Sleeve	57 lbs. (25.7kg)
8510520	Manhole Collar 20"-22" diameter	34 lbs. (15.3 kg)
8510457	Manhole Collar 22"-24" diameter	37.5 lbs. (16.9 kg)
8510163	Manhole Collar 24"-26" diameter	39.5 lbs. (17.8 kg)
8510109	Core Mount Sleeve Fixed Base	8 lbs. (3.6kg)
8516190	Floor Mount Sleeve Fixed Base	13 lbs. (5.9kg)
8516191	Wall Mount Sleeve Fixed Base	12 lbs. (5.4kg)
8511892	Rail/Bridge Rescue Base	92 lbs. (41.4kg)







ADVANCED DIGITAL SERIES WINCHES These winches are rated for 450 lbs. (204kg) with an 11:1 safety factor. It offers 2 cranking speeds capable of retrieval/descent at average speeds from 13'/min up to 30'/min.

- Digital usage indicator counts revolutions of drum for servicing Braking system with 3 independent working pawls and centrifugal back-up system
- Lifeline includes swiveling snap hook with overload indicator

Model #	Description	Length	Lifeline Type	Weight
8518558	Advanced Digital 100 Winch	60' (18m)	3/16" (5mm) Stainless	31 lbs. (14kg)
8518559	Advanced Digital 100 Winch	90' (27m)	3/16" (5mm) Stainless	33 lbs. (14.9kg)

### **BASIC SERIES WINCHES**

Basic winch includes a permanently mounted handle to the 5.1:1 hub drive with an average speed of 30'/min (9m/min). The handle is simple to use and features a foldaway crank.

- Zinc plated winch with quick plate adaptor use with 8510222 quick mount bracket
- Comes with load limiter clutch to indicate a fall or misuse



Model #	Description	Length	Lifeline Type	Weight
8518666	Basic Winch	40′ (12m)	3/16" (5mm) Galvanized	22 lbs. (9.9kg)
8518667	Basic Winch	40' (12m)	3/16" (5mm) Stainless	22 lbs. (9.9kg)

### WINCH MOUNTING BRACKETS

Model #	Description		
8510207	Winch/SRL adapter bracket, used with 8516824, allows DBI-SALA SALALIFT <sup>®</sup> winch and 3-way sealed SRL's to attach to Advance Series Davits		
8510222	Quick mount bracket, use with 8516824, allows Digital Series winches to quickly attach to Advance Series Davits		
8516824	Quick release mounting bracket, mounts to Advanced Series Upper and Lower Mast		









8510222

8516824

NOTE: All part numbers shown on this page are the same in Canada.

# DBI-SALA is the name to trust for Rescue/Descent Equipment

The DBI-SALA product line includes a number of high angle rescue and positioning systems that are easy to use, safe and allow for maximum control during use. Our descent control systems are safe, reliable and built to perform when you really need them.



### **ROLLGLISS® RESCUE SYSTEM**

The Rollgliss<sup>®</sup> system includes the patented one way top shive (only turns when raising) providing efficient hauling, but more inportantly very controlled lowering (a finger and thumb are all that is required to hold a load). This system also allows you to change the hauling ratios on the fly with a quick release double locking button on the top and auto locking carabiners on the bottom. This allows for rigging the system for a roof top rescue, tower rescue, or two person rescue. Standard system comes complete with the Rollgliss<sup>®</sup> device, rope control device, anchor sling and carrying bag.

Model #	Description	Travel Length	Lifeline Type
8902004	Rollgliss® Rescue System, 3:1 Ratio	50′ (15m)	200' of 3/8" Rope
8902006	Rollgliss® Rescue System, 3:1 Ratio	100' (30m)	400' of 3/8" Rope
8900249	Rope Control Device Only		

NOTE: Rope sold in increments of 10', many other accessories, including pulleys for ratios of 2:1, 4:1 and 5:1 and winch handles available — call for details.



### **RPD - RESCUE POSITIONING DEVICE**

The RPD system was designed to provide a safe and simple rescue system and incorporates features for general raising/lowering and positioning during normal work activities. The RPD unit includes a speed sensing lock for added safety, as well as to allow the worker to manually lock off the device once you reach a work level. It is ideal for servicing buildings, bridges, dams as well as within confined spaces. The device may be operated by the user or a second standby worker. Comes complete with unit, rescue and anchor slings, two carabiners and storage bag.

Model #	Description	Travel Length	Lifeline Type
3600050	RPD System, 3:1 Ratio	50′ (15m)	200' of 3/8" Rope
3600100	RPD System, 3:1 Ratio	100' (30m)	400' of 3/8" Rope
3602050	RPD System, 4:1 Ratio	50′ (15m)	250' of 3/8" Rope
3602100	RPD System, 4:1 Ratio	100' (30m)	500' of 3/8" Rope

NOTE: Last three digits in part number indicates length of travel

### **RESCUMATIC® AUTOMATIC DESCENT CONTROL DEVICE**

The Rescumatic<sup>®</sup> descender is designed to lower workers in an emergency at a controlled rate of 3 ft per second by automatically adjusting to the user's body weight of up to 300 lbs. It also includes web loop slings on both ends of the line so that multiple workers can escape, one after another. Also included in the standard model is a large carabiner for connection to a suitable anchorage, a rope spool and vinyl dust cover bag.

Model #	Description	Travel Length	Lifeline Type
3300050	Rescumatic <sup>®</sup> Descent Control Device	50′ (15m)	5/16" (7.8mm) Wire/Nylon Rope
3300100	Rescumatic <sup>®</sup> Descent Control Device	100' (30m)	5/16" (7.8mm) Wire/Nylon Rope
3300150	Rescumatic <sup>®</sup> Descent Control Device	150' (45m)	5/16" (7.8mm) Wire/Nylon Rope
3300200	Rescumatic <sup>®</sup> Descent Control Device	200' (60m)	5/16" (7.8mm) Wire/Nylon Rope

NOTE: Last three digits in part number indicates length of travel



### **ROLLGLISS® RESCUE KIT**

The DBI-SALA Rollgliss<sup>®</sup> rescue kit is ideal for use as a peer rescue system in industrial environments. The system is specifically designed for workers who don't perform rescue as part of their normal job functions. The system is extremely simple, yet completely safe and efficient. It will enable the rescuer to remove a person from danger without putting themselves at risk by descending to them. The kit comes complete with descender with carabiner, rope and safety hook, extension pole, mini-haul system anchorage strap, and two carrying bags.

Model #	Description	Travel Length	Lifeline Type
8900292	8900292 Rollgliss® Rescue Kit		7/16" (11mm) Nylon Rope
8900293	Rollgliss <sup>®</sup> Rescue Kit	66 ft. (20 m)	7/16" (11mm) Nylon Rope
8900294	Rollgliss <sup>®</sup> Rescue Kit	99 ft. (30 m)	7/16" (11mm) Nylon Rope



# PROTECTA

Safe, practical, user friendly equipment at a great price.

For over 50 years the PROTECTA brand has represented fall protection equipment of superior quality and at a great price. We've pioneered many of the concepts that are standard practice in today's workplace.

The PROTECTA line has a broad portfolio of fall protection equipment from basic harnesses and lanyards to complex industry specific anchorage connectors.

We understand that it's important to meet the bottom line and show cost efficiency, without compromising your workers safety at height. That's why the PROTECTA line of fall protection provides many of the additional features and benefits only found in high quality equipment, such as impact indicators, serial numbers on all harnesses, steel hardware, ergonomic designs and a myriad of accessories and options to meet many specialized needs and budgets.

Quality is guaranteed by our choice of materials, meticulous assembly and thorough inspections. The PROTECTA brand focuses on complete fall protection solutions designed for any industry.

Like all of our brands at Capital Safety, the PROTECTA brand is engineered and manufactured to the highest quality to meet and exceed the toughest standards and codes in the world, such as OSHA, ANSI CSA, CE, AUZ, as well as your local provincial or state codes.



# **FULL BODY HARNESSES**

	SELECTION GUIDE										
Product	Description	Recommended For	Webbing	X-Design with Padding	Buckle	Adjustment Points	Back D-Ring	Hardware	Labels	Integral Lanyard Keeper	Impact Indicator
PRO™	Dependable, comfortable fall protection at an economical price	<ul> <li>Maintenance</li> <li>Ladder climbing</li> <li>Bridge Work</li> <li>Aviation</li> <li>Truck Loading</li> </ul>	100% Polyester	√ PRO <sup>~</sup> with Comfort Padding	Quick Connect, Pass Thru, Tongue Buckle	5 point	ADJUSTABLE	Plated forged alloy steel	Book style covered	√ some models	V
FIRST™	Compliant with dependable quality, yet economical	Maintenance     Bridge Work	100% Polyester		Pass Thru, Tongue Buckle	3 point or 5 point	ADJUSTABLE	Stamped forged alloy steel	Vinyl		
FIRST™ Compliance in a Can™	Easy, convenient, economical personal fall protection package for compliance and reliability	Maintenance     Aerial lift work	100% Polyester		Pass Thru	3 point or 5 point	ADJUSTABLE	Stamped forged alloy steel	Vinyl		



**PRO**<sup>™</sup> CONSTRUCTION HARNESS Construction style with hip pad and removable belt AB140131

PRO™ Line Harnesses provide greater comfort and added safety — which translates to reduced worker fatigue and increased productivity.

The great fit and lightweight hardware provides added safety, value and design without compromise. Protected labels, global certification and a variety of styles and sizes are some of the features that make the PRO<sup>™</sup> Harness an easy choice.

- Built-in impact indicators for easy inspection
- Spring loaded torso buckles • for quick and easy adjustment
- Globally accepted standards including ٠ ANSI, OSHA, CSA & CE with one harness
- PRO<sup>™</sup> Harnesses with Comfort Padding •
- features padding on shoulders, back and legs and quick connect buckles



# PRO™ 2

Positioning Belt tongue buckle with 2 D-rings and hip pad AB021221 (S), AB021231 (L), AB021241 (XL)

# **PRO<sup>™</sup> FULL BODY HARNESSES**

**PRO**<sup>™</sup> **CLIMBING HARNESS** Vest style with front D-ring ideal for ladder climbing AB13313



**PRO™ STANDARD** HARNESS Vest style with back Dring and pass thru legs AB10113



**PRO<sup>™</sup> HARNESS WITH COMFORT PADDING** Comfort Padding on shoulders, back and legs and quick connect buckles AB21013

### PRO<sup>™</sup> FULL BODY HARNESSES

Model & Size	Style	D-rings	Buckle Type	Hip Pad/ Belt	Belt Loops	Additional
AB10113 (M/L)	Vest	Back	Pass Thru			
AB13013 (M/L)	Vest	Back	Tongue Buckle			
AB15013 (M/L)	Vest	Back, Shoulder	Pass Thru			
AB13313 (M/L)	Vest	Back, Front	Tongue Buckle			
AB11123 (M/L)	Vest	Back, Side	Pass Thru			
AB104131 (M/L)	Construction	Back, Side	Pass Thru	V	V	Shoulder pads, Lanyard keeper
AB140131 (M/L)	Construction	Back, Side	Tongue Buckle	$\checkmark$	$\checkmark$	Shoulder pads, Lanyard keeper
AB21013 (M/L)	Vest Comfort Padding	Back	Quick Connect			Comfort Padding
AB240131 (M/L)	Construction Comfort Padding	Back, Side	Quick Connect	$\checkmark$	V	Comfort Padding, tongue bucket belt

NOTE: All part numbers shown are the same in Canada.





FIRST<sup>™</sup> full body harnesses provide fundamental fall protection with exceptional value.

A variety of features allows the user to choose the right model for personal preference and job constraints.

- Economically priced yet meets ANSI & OSHA performance standards
- Polyester webbing for durability

**COMPLIANCE IN A CAN** 

protection system

in one handy container!

retracting lifeline) and one anchor.

Available in 3-point and 5-point adjustment models

PROTECTA engineered the creation of this

economical complete set-up for convenient

one full body harness, one combined rope grab and shock absorber and rope lifeline with

• Economical solution for short term jobs or stand-by inventory Available with different anchorage devices to fit different applications

compliance and safety on the job. Kits include

attached double locking snap hook (or one self

Complete fall

- Adjustable dorsal D-ring for proper fit
- Available in 3-point or 5-point adjustment



FIRST<sup>®</sup> VEST STYLE HARNESS Pass thru leg straps and back D-ring AB17530 (AB17530C in Canada)

VEST STYLE HARNESS Tongue buckle leg straps and back & side D-rings AB17560 (AB17560C in Canada)

FIRST<sup>™</sup> FULL BODY HARNESSES



FIRST **VEST STYLE HARNESS** 3-point adjustment, pass thru leg straps & back D-ring **AB17510** (AB17510C in Canada)

Model & Size	Style	D-rings	Buckle Type	Adjustment				
<b>AB17530</b> (U)	Vest	Back	Pass Thru	5-Point				
AB17540 (U)	Vest	Back & Side	Pass Thru	5-Point				
AB17550 (U)	Vest	Back	Tongue Buckle	5-Point				
<b>AB17560</b> (U)	Vest	Back & Side	Tongue Buckle	5-Point				
<b>AB17510</b> (U)	Vest	Back	Pass Thru	3-Point				
AB17520 (U)	Vest	Back & Side	Pass Thru	3-Point				

FIRST

NOTE: In Canada, add a "C" at end of part number (e.g. AB17530C)

### COMPLIANCE IN A CAN<sup>™</sup> COMPONENTS

All Compliance in a Can<sup>™</sup> versions are configured from a combination of the following items. See table. AB17510 3-Point Harness

AB	17530	5-Point Harness	

- 1330096 5/8" (16mm) Grab and 2' (0.6m) Shock Lanyard AC27352 5/8" (16mm) Diameter Lifeline
  - 50' (15m) & Snap Hook

### COMPLIANCE IN A CAN<sup>™</sup> LIGHT

- One AB17530 harness (5-point)
- One AE57610 shock absorbing lanyard

### AA7010AS

AA7010BS comes in a bag, not a bucket

(COMPKIT11 in Canada AB10113 harness and AE542CPW2-6 lanyard)



PLIANCE

### AJ47410 Webstrap Anchor Sling

- AJ47406 Wire Rope Sling
- AD111A 11' (3.3m) Web Rebel<sup>™</sup> SRL

### **COMPLIANCE IN A CAN**

Model #	Harness	Anchor Type	Rope & Rope Grab	SRL
AA7044A	3-point	Wire Rope Sling	$\checkmark$	
AA7046A	3-point	Webstrap Sling	$\checkmark$	
AA7057A	5-point	Webstrap Sling		11' (3.4m) Web
AA7061A	3-point	Temporary HLL/Wire Rope Sling		
AA7062A	3-point	Temporary HLL/Wire Rope Sling		

NOTE: The Compliance In A Can models listed above are not CSA approved.

# Every Protecta Lanyard delivers quality in design, materials and manufacture

SELECTION GUIDE									
Product Description Recommended For Line Connector Indicator Tie-back Retraction & Expansion									
PRO™	Compliant and dependable quality, yet economical	<ul> <li>Maintenance</li> <li>Ladder climbing</li> <li>Bridge Work</li> <li>Aviation work</li> </ul>	1" (25mm) Nylon web 1-3/4" (44mm) Polyester web	Self-locking hook	Clear plastic cover over shock	AVAILABLE			
FIRST™	Compliant and dependable quality, yet economical	<ul><li>Maintenance &amp; Lift Work</li><li>Bridge Work</li></ul>	1-3/4" (44mm) Polyester web	Self-locking hook	Clear plastic cover over shock		AVAILABLE		

### PROTECTA SHOCK ABSORBING LANYARDS

The Protecta shock absorbing lanyards provide high quality at an economical price. They feature a clear cover over the shock pack to enable easy inspection of stitching. Available in a variety of different hook options and configurations to meet your job site needs. Standard snap hooks have a gate opening of 3/4" (19mm), rebar hooks are 2-1/4" (57mm) and tie-back hooks have a 5,000 lb. (22kN) strength.



Absorbing Lanyard AE560A6

PRO<sup>™</sup> Stop Shock

(AE542CW1-6 in Canada)

(AE560C-6 in Canada)

PRU <sup></sup> SHUCK ABSORBING LANYARDS								
Model # Canada #		Material	Single Leg	Double Leg	Tie-back	Length	Connectors	
AE542AW1	AE542AW1 AE542CW1-6 1" (25mm) Nylon web		$\checkmark$			6′ (1.8m)	2 Standard hooks	
AE550AW1	AE550CW1-6	1" (25mm) Nylon web		$\checkmark$		6′ (1.8m)	3 Standard hooks	
AE549AW1	AE549CW1-6	1" (25mm) Nylon web		$\checkmark$		6′ (1.8m)	1 Standard, 2 rebar hooks	
AE542AW2 AE542CPW2-6 1-3/4" (44mm) Polyester web		1-3/4" (44mm) Polyester web	$\checkmark$			6′ (1.8m)	2 Standard hooks	
AE542AW2T AE542CPW2TD-6 1-3/4" (44mm) Poly		1-3/4" (44mm) Polyester web	$\checkmark$		√, D-ring	6′ (1.8m)	2 Standard hooks	
AE550AW2	AE550CW1-6	1-3/4" (44mm) Polyester web		$\checkmark$		6′ (1.8m)	3 Standard hooks	
AE549AW2	AE549CW1-6	1-3/4" (44mm) Polyester web		$\checkmark$		6′ (1.8m)	1 Standard, 2 rebar hooks	
AE550AW2T	AE550CW2TD-6	1-3/4" (44mm) Polyester web		$\checkmark$	√, D-ring	6′ (1.8m)	3 Standard hooks	
CE542AW1-518 AE542CPW2T-6 1" (25mm) Heavy Duty Nyl		1" (25mm) Heavy Duty Nylon web	$\checkmark$		, Carabiner	6′ (1.8m)	1 Standard, 1 tie-back	
CE550AW1-SN AE550CW2T-6 1" (25mm) Heavy Duty Nylon web		1" (25mm) Heavy Duty Nylon web		$\checkmark$	, Carabiner	6′ (1.8m)	1 Standard, 2 tie-back	
AE560A6	AE560C-6	1" (25mm) Tubular Nylon web	$\checkmark$			6′ (1.8m)	2 Standard hooks	

NOTE: In Canada, the AE542CPW2T-6 and AE550CW2T-6 are constructed from 1-3/4" (44mm) polyester web.

### FIRST<sup>™</sup> SHOCK ABSORBING LANYARDS

The FIRST<sup>™</sup> line of shock absorbing lanyards provide basic options at an economical price. A stretch model is available to prevent trips and snags. They feature a clear cover over the shock pack to enable easy inspection of stitching. Standard snap hooks have a gate opening of 3/4" (19mm), rebar hooks are 2-1/4" (57mm).



(AE57610C in Canada)

FIRST<sup>™</sup> Shock Absorbing Lanyard with Rebar Hook AE57620

(AE57620C in Canada)

	FIRST SHUCK ABSURBING LANYARDS									
Model #	Туре	Material	Single Leg	Double Leg	Length	Connectors				
AE57610	Pack	1-3/4" (44mm) Polyester web	$\checkmark$		6' (1.8m)	2 Standard FIRST <sup>™</sup> hooks				
AE57620	Pack	1-3/4" (44mm) Polyester web		$\checkmark$	6' (1.8m)	1 Standard FIRST <sup>™</sup> hook, 2 rebars				
AE57630	Pack	1-3/4" (44mm) Polyester web		$\checkmark$	6′ (1.8m)	3 Standard FIRST <sup>™</sup> hooks				
AE57640	Pack	1-3/4" (44mm) Polyester web	$\checkmark$		6' (1.8m)	1 Standard FIRST <sup>™</sup> hook, 1 rebar				
AE57700	Tubular jacket	1-3/8" (34mm) Tubular jacket	$\checkmark$		6′ (1.8m)	2 Standard FIRST <sup>™</sup> hooks				
AE57701	Tubular jacket	1-3/8" (34mm) Tubular jacket	$\checkmark$		6′ (1.8m)	1 Standard FIRST <sup>™</sup> hook, 1 flat steel rebar				
AE57800	Stretch	2" (50mm) Tubular jacket	$\checkmark$		6' (1.8m)	2 Standard FIRST <sup>™</sup> hooks				
AE57801	Stretch	2" (50mm) Tubular jacket	$\checkmark$		6' (1.8m)	1 Standard FIRST <sup>™</sup> hook, 1 flat steel rebar				
AE57830	Stretch	2" (50mm) Tubular jacket		$\checkmark$	6′ (1.8m)	3 Standard FIRST <sup>™</sup> hooks				
AE57831	Stretch	2" (50mm) Tubular jacket		$\checkmark$	6' (1.8m)	1 Standard FIRST™ hook, 2 flat steel rebars				

NOTE: In Canada, add a "C" at end of part number (ex. AE57610C). The AE57800, 801, 830 and 831 are not available in Canada.



Postioning Web Lanyard AL305AW16 (AL305CPW-6 in Canada)						
Con and		POSITIONI	NG & REST	RAINT		
Postioning Rope Lanyard	Model #	Туре	Single Leg	Double Leg	Length	Connectors
(Not Available in Canada)	AL305AW16 (AL305CPW-6 in Canada)	Nylon web (Polyester in Canada)	$\checkmark$		6' (1.8m)	2 standard hooks
o o o	AL305A6 (Not Available in Canada)	Twisted rope	$\checkmark$		6′ (1.8m)	2 standard hooks
Rebar Assembly	AF77710 (Not Available in Canada)	Rebar chain		V	20" (51cm)	2 standard FIRST <sup>™</sup> , 1 rebar hook

# Protecta offers a wide range of anchorage devices

Protecta offers the industry's widest range of anchorage connectors combining ease of use, lightweight and 5,000 lb. (22kN) minimum tensile strength to meet or exceed OSHA and ANSI Z359.1 requirements. CE and CSA compliant models are also available.



ANCHORAGE CONNECTORS									
Model #	Product	Description	Length						
<b>AJ450A</b> (AJ450C-3 in Canada) AJ450A6 (AJ450C-6 in Canada)	Web Sling	1-3/4" (4.4cm) Wide nylon webstrap, 3" (7.5 cm) scuff guard, 2" & 3" (5cm & 7.6cm) pass thru D-rings	3' (.9m) length 6' (1.8m) length						
AJ408AG (AJ408CG-6 in Canada)	Cable Sling	$6^\prime$ X 1/4" (1.8m X 6.4mm) Diameter coated wire rope, galvanized finish, one standard snap hook, one 3" (7.6cm) dia. pass thru ring	6' (1.8m) length						
AJ301A	Handgrip	Attaches around piping up to 2" (5cm) in diameter	N/A						
AN112A (AN112C in Canada)	Eyebolt Anchor	D-ring anchor with threaded bolt, nut and lockwasher	N/A						



CARABINERS											
Model #	Product	Descripti	on	Length							
AJ593A (AJ593C in Canada)	Twist Lock Carabiners	5,000 lb. (22kN)	Anchor	$2^{\prime\prime}$ (5cm) Diameter opening, carbon steel, zinc plated, captive-eye option, 1.4 lbs. (.63kg)							
AJ514A	Twist Lock Carabiners	5,000 lb. (22kN)	Anchor	3/4" (19mm) Diameter opening, forged steel, galvanized finish, .4 lbs. (.18kg)							
			ROI	PE GRABS							
Model #	Pr	oduct		Description							
AC2O2D (AC202C in Canada)	Static/Mobile	e Rope Grab	Attach or operation lanyard a	ttach or detach anywhere along the lifeline for vertical hands free operation. Fits 5/8" (16mm) diameter rope. Use with 3' (9mm) shock anyard and can be used as a static rope grab							

# Protecta SRL's...smooth, safe operation and built to last!

	SELECTION GUIDE											
Product	Description	Recommended For	Housing	I mpact I ndicator	Connector	Swivel Hook	Housing Carabiner					
JRG™	Compliant and dependable quality SRL's, yet economical	<ul> <li>Loading and Unloading</li> <li>Station and Vehicle Maintenance</li> <li>Bridge Work</li> <li>Rescue Activities</li> </ul>	Extruded aluminum or thermoplastic		Self-locking snap hook	$\checkmark$	$\checkmark$					
Rebel™	New bestseller in lightweight, shorter length SRL's—fits into the tightest project budget!	<ul> <li>General Maintenance</li> <li>Inspection</li> <li>Bucket Truck/Lift</li> </ul>	Extruded aluminum or thermoplastic	$\checkmark$	Available with snap hook, swivel hook or rebar hook	OPTIONAL	$\checkmark$					

JRG<sup>™</sup> SELF RETRACTING LIFELINES JRG<sup>™</sup> Self Retracting Lifelines provide fall protection dependability in an economical unit.

- Energy absorption system to arrest
- a fall in less than 2' (.6m)
- Smooth deceleration
- Lighter weight housing

Protecta Self **Retracting Lifeline** 100' (30m) Web AD230AG

Protecta Self **Retracting Lifeline** 30' (9m) Cable AD212AG

Protecta Self **Retracting Lifeline** 50' (15m) Cable Rescue Winch AD515AG

	PROT	ECTA SELF RETRACTING L	IFELINES	
Model #	Length	Line Type	Connector	Housing
AD212AG (AD212CS in Canada)	30′ (9m)	3/16" (5mm) Galvanized cable	Standard hook	Thermoplastic
AD215AG (AD216CG in Canada)	50' (15m)	3/16" (5mm) Galvanized cable	Standard hook	Thermoplastic
AD222AG (AD222CG in Canada)	66' (20m)	3/16" (5mm) Galvanized cable	Standard hook	Thermoplastic
AD230AG	100′ (33m)	3/16" (5mm) Galvanized cable	Standard hook	Thermoplastic
AD515AG (AD515CG in Canada)	50′ (15m)	3/16" (5mm) Galvanized cable	Twist-lock hook	Aluminum w/retrieval

NOTE: In Canada, the AD212CS has stainless steel cable and the AD230AG is not CSA Approved.

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The Rebel<sup>™</sup> Self Retracting Lifeline is low priced and lightweight, yet rugged enough to withstand rough use. The unique thin webbing enables a compact size that is easy to wear.

- Moderately priced to give great value with superior features
- Compact and lightweight-• under 3 lbs. (1.4kg) best length
- to weight ratio in the industry
- Durable aluminum housing
- Web model weighs only 2.7 lbs. (1.2kg)



		KEE	SEL SELF KETKACTING LI	ELINES	
	Model #	Length	Line Type	Connector	Housing
(N	AD111A lot Avail in Canada)	11' (3.3m)	1" (25mm) Polyester web	Standard hook	Aluminum
(N	AD111AR lot Avail in Canada)	11' (3.3m)	1" (25mm) Polyester web	Standard hook	Aluminum w/swivel
(A	AD111B D110BC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Swivel hook	Aluminum
(AD	AD111BR D110BRC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Swivel hook	Aluminum w/swivel
(A	AD111E D110EC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Rebar hook	Aluminum
(AE	AD111ER D110ERC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Rebar hook	Aluminum w/swivel
(A	AD211B D210BC in Canada)	11' (3.3m)	3/16" (5mm) Galvanized cable	Swivel hook	Aluminum
(A	AD120A D120AC in Canada)	20′ (6m)	1" (25mm) Polyester web	Standard hook	Aluminum
(A	AD120E D120EC in Canada)	20′ (6m)	1" (25mm) Polylester web	Rebar hook	Aluminum

NOTE: All 11' (3.3m) models are 10' (3m) in Canada.



# **TRAINING & CONSULTING** Anytime, Anywhere... Our Site or Yours!

DBI-SALA recognizes that our commitment to the life-and-death field of fall protection means that every product we produce must meet or exceed the toughest standards. But we also know that even the best equipment must be used correctly. This is why we have established our training division with the same care and attention that is critical in our manufacturing process.

### Effective training means hands-on experience

The key to effective fall protection training is practical, hands-on experience. We offer a full range of fall protection and industrial rescue courses on-site or at one of our four state-of-the-art training centers located throughout North America.

Courses on-site apply professional training to your specific daily work activities. Courses at our institutes provide controlled environments uniquely designed to offer practical experience with scaffolding, fixed ladders, towers, sloped roofs, rebar and climbing walls, elevated catwalks, I-beams and confined spaces.



### **DBI-SALA Comprehensive Training Programs**

Product	Length	Audience	Benefit	Open Enrollment	Site Specific
Authorized User	4 hours	Workers that work at heights and are trained on specific products supplied by the employers.	Complies with OSHA and ANSI regulations for an authorized user.		$\checkmark$
System Specific	4 hours	Workers who use a single pre-engineered and pre-installed fall protection system.	Provides the skills and theory necessary for that single system.		$\checkmark$
Competent Inspector	4 hours	Safety personnel, tool crib operators or anyone who is required to complete formal equipment inspections.	Provides the skills and knowledge necessary to complete a formal inspection.	$\checkmark$	$\checkmark$
Competent Person Refresher	1 day	Has a pre-requisite of being a previous competent person who needs refresher training under ANSI.	Meets requirements of ANSI for refresher training as a competent person.	$\checkmark$	$\checkmark$
Competent Person	2.5 days	Supervisors of authorized users who implement and monitor a managed fall protection program.	Develop the necessary skills and knowledge base to meet the require- ments for a competent person as defined by OSHA and ANSI.	$\checkmark$	$\checkmark$
Competent Climber/ Competent Rescuer	2 days	Workers who are required to climb and work on towers or specific site and individuals responsible for rescue methods.	Skills to properly protect oneself when working on the tower and while performing a rescue on the tower or specific site.	$\checkmark$	$\checkmark$
Program Administrator	4 days	Person responsible for the develop- ment and assignment of duties and responsibilities of individuals qualified to meet the needs of their program.	Learn the skill set necessary to implement and develop a compre- hensive managed fall protection program.	$\checkmark$	
Qualified Person	5 days	Engineers charged with the design and setup of engineered fall protection systems.	Details the technical requirements to design engineered systems.	$\checkmark$	
Competent Person Trainer	5 days	Responsible for the training of all authorized users and competent persons at a specific site or location.	Advanced training in fall protection regulations, standards, equipment and systems.	$\checkmark$	$\checkmark$
Competent Rescuer Trainer	5 days	Individual interested in training competent rescuers shall have the ability to evaluate the rescue and fall protection knowledge of a competent rescuer.	Advanced training in fall protection rescue standards, equipment and techniques.	$\checkmark$	

USA 651.388.8282

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# **TRAINING & CONSULTING**

### **Custom Courses**

If standard courses don't fit your needs, DBI-SALA will customize courses for your organization and your specific site requirements.

### **Specialty Courses**

In addition to the basic courses, our fall protection experts have developed specialty courses designed for a particular trade or industry's work requirements.

These include: Confined Space Entry and Retrieval, Oilfield Rig Workers Awareness, Rig Rescue, Tower Climbing/Rescue and more.

### **DBI-SALA** Demonstration Vehicles Bring Vital Training to Your Workforce

DBI-SALA & Protecta helps protect your workers by bringing its expertise and training right to your site. Workers from all over the world enjoy the experience of our hands-on demonstrations of DBI-SALA fall arrest, restraint and rescue equipment. Our Mobile Demonstration Vehicles show drop-tests and force measuring instruments to demonstrate arresting forces workers would experience during a fall. The presentation provides an excellent introduction to fall protection.

### Expert Consulting to Minimize Risk and Maximize Protection

When preparing for a new project site or an existing one, DBI-SALA consulting services provide early identification of fall protection hazards, solutions to minimize the risks and programs to implement training and inspection.

### DBI-SALA expert consulting services include:

- Site Surveys
   Manual and Training Development
- Equipment Inspection Fall Protection Program Development

# Training Tools Provide Fall Protection Basics

As part of the ongoing DBI-SALA commitment to improving on-the-job safety, our experts have developed a booklet and video giving a fall protection overview that serves as the foundation of an effective fall protection program. Available in English or Spanish.

### **Thinking About Fall Protection**

The 20-page full cover booklet Thinking About Fall Protection includes:

- Fall Protection Terminology
- Fall Prevention and Types
- Fall Arrest Systems
- Calculating Fall Clearance
- Swing Fall Hazards
- Equipment Inspection and Maintenance
- 8-Step Fall Protection Plan
- Understanding Fall Protection Applications
- Harness Sizing and Donning
- Compatibility of Connectors
- Training, Regulations and Standards

### In video or DVD!

The 20-minute video presentation includes many of the same topics and an in-depth review of the ABCD's of fall protection.

Order Thinking About Fall Protection today!

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- Backed by decades of company experience
- State-of-the-art training facilities
- Sample and experience the broadest fall protection equipment line in the industry
- Easy-to-understand training manuals
- Bilingual or all-Spanish instruction available

For more details on DBI-SALA training programs, customized site specific training and specialty courses, please contact us!







### SELECTED OSHA FALL REGULATIONS Fall Protection Requirements for Steel Erection ection Requirements for Stee (OSHA Subpart R1926.760)

(a) General requirements. (1) Except as provided by paragraph (a) (3) of this section, each employ-ee engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 15 feet (4.6m) above a lower level shall be protected from fall hazards by guardrall systems, safety net systems, personal fall arrest systems, positioning device systems or guardrail systems, sc. fall restraint systems.

Safety Standards for Fall Protection in the Construction Industry (OSHA 1926.501 - Duty to have fall protection)

(a) General. (1) This section sets forth requirements for employers to provide fall protection sys-tems. All fall protection required by this section shall conform to the criteria set forth in 1926.502 tems. All fall pr of this subpart.

(b)(1) Unprotected sides and edges. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8m) or more above a lower level shall be protected from falling by the use of guardrall systems, safety net systems, or personal fall arrest systems

Editors Note: The requirements stated in (b)(1) are similar for: leading edges, hoist area, holes, formwork and reinforcing steel, ramps, runways and other walkways, excavations, dangerous equi ment, overhead bricklaying and related work, roofing work on low-slope roofs, steep roofs, precas concrete erection, residential construction and wall openings.

### (OSHA 1926.502 - Fall protection system criteria and practices)

(a) General. (1) Fall protection systems required by this part shall comply with the applicable provi-sions of this section.

(2) Employers shall provide and install all fall protection systems required by this support for an employee, and shall comply with all other pertinent requirements of this subpart before that employ-ee begins the work that necessitates the fall protection.

(d) Personal fall arrest systems. Personal fall arrest systems and their use shall comply with the provisions set forth below. Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. Note: The use of a body belt in a positioning device system is acceptable and is regulated under paragraph (e) of this section.

(5) Snaphooks shall be sized to be compatible with the member to which they are connected to prevent unintentional disengagement of the snaphook by depression of the snaphook keeper by th connected member, or shall be a locking type snaphook designed and used to prevent disengagement of the snaphook by the contact of the snaphook keeper by the connected member. Effective January 1, 1998, only locking type snaphooks shall be used. by the

(15) Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) per employee attached, or shall be designed, installed, and used as follows: (i) as part of a complete personal fall arrest system which maintains a safety factor of at least two; and (ii) under the supervision of a qualified person.

(16) Personal fall arrest systems, when stopping a fall, shall: (i) limit maximum arresting force on an employee to 900 pounds (4 kN) when used with a body belt; (ii) limit maximum arresting force on an employee to 1,800 pounds (8 kN) when used with a body harness; (iii) be rigged such that an employee can neither free fall more than 6 feet (1.8m), nor contact any lower level; (iv) bring an employee to a complete stop and limit maximum decelera-tion distance an employee travels to 3.5 feet (1.07m); and, (v) have sufficient strength to withstand twice the potential impact energy of an employee fee falling a distance of 6 feet (1.8m), or the free fall distance permitted by the system, whichever is less.

(e) Positioning device system. Positioning device systems and their use shall conform to the follow-ing provisions: (1) Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet (.9m). (2) Positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds (13.3 kN), whichever is greater.

### (OSHA 1926.503 - Training requirements)

(a) Training Program. (1) The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazarde

### Fixed Ladders (OSHA 1910.27)

(d.5) Ladder safety devices may be used on tower, water tank and chimney ladders over 20 feet in unbroken length in place of cage protection. No landing platform is required. All ladder safety devic-es, such as those that incorporate life belts, friction brakes, and sliding attachments, must meet the design requirements of the ladders they serve.

### Powered Platforms For Building Maintenance (OSHA 1910.66)

(j) Personal Fall Protection. Employers must provide personal fall arrest systems meeting the requirements outlined. Requirements include the following:

Anchorages to which personal fall arrest equipment is attached shall be capable of supporting at least 5,000 pounds (22.2 kN) per employee attached, or shall be designed, installed and used as part of a complete personal fall arrest system which maintains a safety factor of at least two, under the supervision of a qualified person. Personal fall arrest systems shall, when stopping a fall: 1) limit maximum arresting force on an employee to 900 pounds (4 kN) when used with a body belt; and 2) limit maximum arresting force on an employee to 1,800 pounds (8 kN) when used with a body harness.

Personal fall arrest systems shall be rigged such that an employee can neither free fall more than 6 feet (1.8m), nor contact any lower level.

Personal fail arrest systems or components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection unless inspected and determined by a competent person to be undamaged and suitable for reuse.

Before using a personal fall arrest system, and after any component or system is changed, employ-ees shall be trained in accordance with the requirements of paragraph 1910.66(i)(1), in the safe use of the system.

Personal fail arrest systems shall be inspected prior to each use for mildew, wear, damage and other deterioration. Defective components shall be removed from service if their strength or function may be adversely affected.

### Permit-Required Confined Spaces (OSHA 1910.146)

(a) Scope and application. This section contains requirements for practices and procedures to protect employees in general industry from the hazards of entry into permit-required confined spaces.

(k)(3) To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements:

(i) Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which the employer can establish presents a profile small enough for the successful removal of the entrant. Wristlets may be used in lieu of the chest or full body harness if the employer can demon-strate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.

(ii) The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

### (OSHA 1918.85 - Containerized cargo operations)

(j)(1)(iii) The employer shall ensure that each employee on top of a container is protected from fall

hazards by a fall protection system meeting the requirements of paragraph (k) of this sect

(j)(3) Other exposure to fall hazards. The employer shall ensure that each employee exposed to a fall hazard is protected by a fall protection system meeting the requirements of paragraph (k) of

(k)(3) Each fall protection system shall be rigged so that a falling employee cannot contact any lower level stowage or vessel structure.

(k)(4) Each fall protection system adopted for use shall have an energy absorbing mechanism that will produce an arresting force on an employee of not greater than 1800 pounds (8 kN).

(k)(6) Each fall protection system's fixed anchorages shall be capable of sustaining a force of 5,000 pounds (22.2 kN) or be certified as capable of sustaining at least twice the potential impact load of an employee's fall. Such certification must be made by a qualified person.(7) When more than one employee is attached to an anchorage, these limits shall be multiplied by the number of employees attached

(k)(9) Each fall protection system shall incorporate the use of a full body harn

(I) Working along unguarded edges. The employer shall provide, and ensure that the employee use, fall protection meeting the requirements of paragraph (k) of this section whenever the employee works along an unguarded edge where a fall hazard exists (see 1918.2).

SELECTED ANSI STANDARDS Definitions and Nomenclature Used for Fall Protection and Fall Arrest (ANSI 2359.0-2007) 1.1 Scope - This standard establishes the definitions and nomenclature used for fall arrest and fall protection.

1.1 Scope - This standard establishes requirements for the performance, design, marking, qualifica-tion, instruction, training, inspection, use, maintenance and removal from service of connectors, full body harnesses, lanyards, energy absorbers, anchorage connectors, fall arresters, vertical lifelines, and self-retracting lanyards comprising personnel fall arrest systems for users within the capacity range of 130 to 310 lbs (59 to 140 kg).

1.2.1 This standard addresses only personal fall arrest systems(PFAS) incorporating full body har-nesses. Whenever the term "system" is used in the standard it refers to a personal fall arrest system.

3.1.4 A PFAS which incorporates a horizontal lifeline (outside the scope of this standard) shall be evaluated in accordance with acceptable engineering practice to determine that such system will perform as intended.

perform as intended. 3.1.2 When subjected to tests contained in 4.2, a personal fall arrest system in which a full body harness is used shall produce a maximum arrest force (MAF) of no more than 1,800 pounds (8.0 kN) and shall bring the fall to a complete stop with a deceleration distance of not more than 42 inches (1,065 mm). In suspension, after the fall is arrested, the angle at rest which the vertical cen-ter line of the test torso makes with the vertical shall not exceed 30 degrees. 3.2.1.4 Snaphooks and carabiners shall be self-closing and self-locking and shall be capable of being opened only by at least two consecutive deliberate actions. When tested in accordance with 4.3.1.1.1, snaphooks and carabiners shall be capable of withstanding a 5,000 pound (22.2 kN) ten-sile load without breaking or distortion sufficient to release the gate. When tested in accordance with 4.3.1.1.2, the gate of a snaphook or carabiner shall be capable of withstanding a minimum load of 3,600 pound (16 kN) without the gate separating from the nose of the snaphook or carabiner body ym ore than 0.125 inches (3.1 mm), When tested in accordance with 4.3.1.1.3, the gate of the snaphook or carabiner shall be capable of withstanding a minimum side load of 3,600 pounds (16 kN) applied to a point midway between the nose and gate hinge without breaking, permanent defor-mation greater than 0.125 inches (3.1 mm), or separating from the nose of the snaphook or cara-biner body by more than 0.125 inches (3.1 mm), when tested in accordance with 4.3.1.1.4 the gate of the snaphook or carabiner shall be capable of withstanding a minor axis load of 3,600 pounds (16 kN) applied to a point midway between the nose and gate hinge without breaking or distor tion sufficient to release the gate. Testing in the minor axis is not required for carabiners or sna-phooks which are designed with a permanent, captive eye. 3.2.2.4. The harness shall provide support for the body harness across the lower chest, over the

3.2.2.4 The harness shall provide support for the body harness across the lower chest, over the shoulders and around the thighs when a tensile load is applied to the fail arrest attachment element. The harness, when properly fitted and used, shall prevent failout. The fail arrest attachment shall be located at the back (dorsal) location.

3.2.2.5 When more than one attachment element exists on a harness, the purpose and limitations of each element shall be designated by the manufacturer.

3.2.2.5a Harnesses equipped with a front-mounted attachment element for fall arrest shall be used only as part of a personal fall arrest system that limits the maximum free fall distance to two feet (0.6m) and limits the maximum arrest force to 900 pounds (4 kN).

3.2.4.7 When energy absorbers are dynamically tested in accordance with 4.3.5.2, the maximum arrest force shall not exceed 900 lbs (4kN).

3.2.8.7 Static Strength. When tested in accordance with 4.3.7.3, the SRL shall withstand a tensile load of 3,000 pounds (13.3kN) statically applied directly to the point of SRL line connection to the

3.2.8.9 Dynamic Performance. When tested in accordance with 4.3.7.1, the SRL shall lock and remain locked until released. The arrest distance shall not exceed 54 inches (1,372mm). Maximum arrest force shall not exceed 1,800 pounds (8kN).

3.3.4 Lanyard with Integral Energy Absorber (L + EA). The lanyard and Energy absorber constituents of (L + EA) integral systems, when independently evaluated and tested, shall meet the requirements of 3.2.3.2 to 3.2.3.7 and 3.2.4, respectively. When the complete integral system is tested in accordance with 4.2.9, the maximum arrest force (MAF) shall not exceed 1,800 pounds (8.0kN) and the fall shall be brought to a complete stop with a deceleration distance of not more than 42 inches (1.067mm).

3.3.6 Fall Arrester Connecting Subsystem (FACSS). Component comprising a FACSS shall meet the respective requirements for the FACSS component parts set forth in this standard. Subsystem con-nectors shall be geometrically compatible to reduce the possibility of rollout. Integral connections (e.g. splicing) shall be made in accordance with the requirements for lanyards, vertical lifelines, vertical lifeline subsystems or energy absorbers, as applicable, set forth herein. The length of that portion of the FACSS between the fall arrest attachment on the harness shall not exceed 36 inches (914mm). (914mm)

5.1.2 The legibility and attachment of required markings shall endure for the life of the component, subsystem, or system being marked.

5.2.1 Connectors. Connectors shall be marked to identify the following: Year of manufacture; manufacturer's identification; part number; Load rating of the major axis of the connector stamped or otherwise permanently marked on the device; Load rating for gate stamped or otherwise permanently marked on the date mechanism; markings for connectors shall be sufficient to provide traceability; For connectors that are non-integral, include the standard number, "Z359.1(07).

5.2.3 Lanvards. In addition to the requirements in 5.1, lanvards shall be marked to identify: the 5.2.5 caling rots. In addition to the requirements in 5.2, ranged small be to indice to be units of the material of construction; the length; the need to avoid contact with sharp edges and abrasive sur-faces; the need to make only compatible connections. For lanyards with two, integrally connected legs, a warming to attach only the snaphook at the center of the lanyard to the fail arrest attach-ment element of the harness.

 $5.3.1 \ {\rm Instructions} \ {\rm shall} \ {\rm be} \ {\rm provided} \ {\rm to} \ {\rm the} \ {\rm user} \ {\rm printed} \ {\rm in} \ {\rm English} \ {\rm and} \ {\rm affixed} \ {\rm to} \ {\rm the} \ {\rm equipment} \ {\rm at} \ {\rm the} \ {\rm the$ 

Minimum Requirements for a Comprehensive Managed Fall Protection Program (ANSI Z359.2-2007)

1.1.1 This standard establishes guidelines and requirements for a employer's managed fall protection program, including policies, duties and training; fall protection procedures; eliminating and controlling fall hazards; rescue procedures; incident investigations; and evaluating program effectiveness.

3.2.1.4 Employers shall develop and maintain written fall protection and rescue procedures for every location where an active fall protection system is used to control a fall hazard.

3.2.1.6 Employers shall provide authorized persons with continuous fall protection at locations owned or operated by the employer.

Safety Requirements for Positioning and Travel Restraint Systems (ANSI Z359,3-2007)

1.1 Scope. This Standard establishes requirements for the performance, design, marking, qualifica-tion, test methods, and instructions of lanyards and harnesses comprising personal positioning and travel restraint systems

1.2.1 This standard addresses minimum guidelines for the system design, manufacture, and testing of personal work positioning and travel restraint equipment for authorized persons at work weighing between 130 and 310 pounds including tools.

1.2.3 This standard addresses work positioning systems and travel restraint systems. These systems shall not be used as a primary fall arrest system. Positioning systems shall be supplemented with a secondary fall protection system.

1.3.2 Body belts are not addressed by this standard for work positioning or travel restraint unless incorporated into a work positioning harness or full body harness.

3.2.2 The use of a travel restraint system is only permitted on a walking/working surface that has a slope between zero and 18.4 degrees.

3.3.2 Lanyards and positioning lines that incorporate a rope adjuster, shall maintain their adjusted length (disregarding elastic stretch) up to a load of 1,000 pounds (8.8kN) within three inches when tested in accordance with section 4.2.1.2

3.6.3 The positioning harness shall provide support for the body around the abdomen and around the thighs when a tensile load is applied to the work positioning attachment elements.

3.8.4 All snaphooks and carabiners used in load bearing components shall comply with the require-ments as outlined in ANSI/ASSE Z359.1

5.1.2 The legibility and attachment of required markings shall endure for the life of the component, subsystem, or system being marked.

5.1.3 Except for connectors, as set forth in section 5.2.1, equipment shall be marked with the fol-lowing: part number and model designation; year of manufacture; manufacturer's name or logo; capacity; standard number (7259-3); varning to follow manufacturer's instructions included with the equipment at time of shipment from the manufacturer; for products not meeting the requirements of NSI/ASSE 7359.1, a statement similar to: "Use this product for positioning only, not for fall arrest. If possible, the use of fall arrest equipment is highly recommended in addition to this equipment".

5.2.2 Positioning Harness. In addition to the requirements in section 5.1, Positioning Harnesses and 5.2.2 Fostioning final ress. an advantant of the reducements in section 5.7, resoluting in an insesses and belts shall be marked to identify: the fiber used in the material of construction; the size of the har-nesses to suit the range of population; the positioning and/or travel restraint and fall arrest attach-ment elements; the purpose of any other attachment elements.

5.3.1 Instructions shall be provided to the authorized person, printed in English, and affixed to the equipment at the time of shipment from the manufacturer.

Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components (ANSI Z359.4-2007)

1.1 This standard establishes requirements for the performance, design, marking, qualification and must substance sequences requirements for the performance, design, marking, qualification, instruction, training, use, maintenance, and removal from service of connectors, winches/hoists, descent control devices, rope tackle blocks, and self-retracting lanyards with integral rescue capabil-ity comprising rescue systems, utilized in pre-planned self-rescue and assisted-rescue applications for 1-2 persons.

3.2 The capacity of a one person rescue system shall range from 130 to 310 pounds (59 to 140kg). The capacity of a two person rescue system shall range from 130 to 620 pounds (59 to 280kg). The maximum and minimum rated working loads for each system component shall encompass the capacity range of the assembled system.

3.2.5.2 Operation. It shall be possible to engage the RSRL (Self-Retracting Lanyard Component with integral Rescue Capability) into its rescue mode of operation at any time, subject to the manufac-turer's instructions. It shall not be possible to inadvertently change to or from rescue mode. The RSRL shall be capable of raising or lowering the load to effect rescue. The minimum mechanical advantage offered by the RSRL in rescue mode shall be 3:1, neglecting frictional losses. When in rescue mode, the RSRL device shall automatically stop and hold the load if the rescuer intentionally or unintentionally relinquishes control. The RSRL devise shall have a means to stabilize the device during use in rescue mode.

3.2.5.3 Powered Operation Devices that are operational by use of a power source other than manual, shall have means to limit applied lifting force and speed. A manual back-up means of operation shall be provided.

Rope tackle blocks shall have a secondary means to prevent uncontrolled lowering of the ope tackle blocks shall have a minimum theoretical mechanical advantage of 3:1.

3.2.7.1 Descent Energy and Capacity The capacity of decent devices addressed by this standard shall be 310 pounds (140kg), see capacity, one person.

### Ladder Safety Devices (ANSI A14.3-2002)

7.1.3 The ladder safety system shall be designed to absorb the impact of a solid object weighing at least 500 pounds in a free fall of 18 inches.

7.1.4 Design and installation of mountings shall not reduce the strength of the fixed ladder.

7.3.1 The safety sleeve shall be a type which can be operated entirely by the person using the lad-der safety system. It shall permit the person using the ladder safety system to ascend or descend without having to continually manipulate the safety sleeve.

7.3.3 The maximum length of the connection between the centerline of the carrier and the point of attachment to the full body harness shall not exceed 9 inches.

Standard for Personal Fall Protection Used in Construction and Demolition Operations (ANSI A10.32-2004)

1.1 Scope - This standard establishes performance criteria for personal fall protection equipment and systems in construction and demolition and provides guidelines, recommendations for their use and inspection. It includes, but is not limited to; fall arrest, restraint, positioning, climbing, descending, rescue, escape and training activities.

1.4.1 - Only full body harnesses shall be used for fall arrest. The fall arrest attachment point of the body harness shall be at the center of the user's back near shoulder level.

1.4.2 - Maximum arresting force imposed on the user's body shall not exceed 1000 lbs.

3.4 - Fall protection equipment shall be removed from service upon evidence of defects, damage or deterioration; once it has been subjected to impact loading; or upon expiration of the manufacturer's specified service limits, whichever comes first.

4.1 Anchorage - Anchorage shall be capable of supporting at least 5,000 lbs. per user attached, or shall be designed, installed and used under the supervision of a Qualified Person as part of a complete system which maintains a safety factor of at least two.

4.2.1 - Personal fall arrest systems, when stopping a fall, shall be rigged such that an employee can neither free fall more than 6 feet (1.8m), nor contact any lower level or obstruction.

6.1.1 - The employer shall provide a training program for each employee who might be exposed to fall hazards.

6.3.2 - Formal inspections shall be made by either a Competent or Qualified Person on at least a semi-annual basis.

SELECTED CSA FALL PROTECTION STANDARDS Body belts and saddles for work positioning and travel res s for work positioning and travel restraint (CSA Z259.1-05)

Scope – The standard specifies requirements for the performance, design, testing, marking and instructions of body belts and saddles.

1.4 - Body belts and saddles are not intended for use as body support in the arrest of a worker's

fall, due to the possibility of injury or death resulting from a) impact on the body or death when the fall is arrested b) fallout from a body belt; or c) effects of a extended static suspension in a body

4.3.2.1 – Body belt for linemen – Type 1 - The belt shall include the following components: a) a strap with buckle b) at least 2 D-rings that meet the requirements of CAN/CSA-Z259.12 Class I connectors; c) a strap keeper d) a body pad

4.3.2.1 - Body belt for work positioning and travel restraint - Type 2 - The belt shall include the following components: a) a strap with buckle b) at least 2 D-rings that meet the requirements of CAN/ CSA-2259.12 Class I connectors; or a load bearing element for the connection of other components; and c) a strap keeper

4.4.1.1 – General (Saddle Classifications) - Saddles shall be classified as follows: a) Group P – work positioning b) Group D – descent; and c) Group PD – work positioning and descent

4.4.1.2 - Group P - Group P saddles shall have two D-rings mounted at waist level.

4.4.1.3 – Group D - Group D saddles shall have front or side-mounted attachment points. The side-mounted attachment points for Group D shall not be at waist level.

4.4.1.4 - Hybrid saddles designed to be used for both positioning and descent shall have both fr mounted and side-mounted attachment points. The side-mounted attachment points shall not b used for descent.

Fall Arresters, Vertical Lifelines, and Rails (CSA Z259.2. 1-98)

1.1 Scope - This standard provides design and performance requirements for manufactured fall-arresting devices, vertical lifelines, and rigid sections, including mounting components.

3.1 Classifications- Fall arresters shall be classified as follows: Class AD-(automatic-dorsal). Class AS- (automatic- sternal). Class ADP - (automatic - dorsal - panic hardware). Class MDP - (manual - dorsal - panic hardware).

4.2.5 Class AD fall arresters shall have an integral connecting linkage of 0.6m or less.

4.2.6.1 Class AS fall arresters shall be used with a connecting linkage of 0.2m or less.

Full Body Harnesses (CSA Z259.10-06)

1 Scope -- 1.1 General - This Standard specifies requirements for the performance, design, testing, marking, and information for use of full body harnesses. Full body harnesses are intended for use as body supports in personal fall arrest systems and in other work situations that involve the risk of falling.

4.7 Classification - A full body harness can have more than one classification; however, all full body harnesses shall meet the requirements of Class A. Full body harnesses shall be classified as follows: (a) Class A: Fall arrest; (b) Class D: Suspension and controlled descent; (c) Class E: Limited access; (d) Class L: Ladder climbing; and (e) Class P: Work positioning.

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4.9 Class D — Suspension and controlled descent - Class D full body harnesses are designed for suspension or controlled descent from a height. In addition to the connector required for Class A, all Class D full body harnesses shall have (a) one or two frontal Class I connectors; (b) two sidemounted Class I connectors which originate below waist level; or (c) one sternal Class I connector.

4.10 Class E — Limited access - Class E full body harnesses are designed to support a worker in a position that reduces the worker's profile during passage through a limited access area. Hoisting of the worker is usually involved. In addition to the connector required for Class A, all Class E full body harnesses shall have two class I connectors. A connector as required for Class E shall be located on each shoulder strap with a provision for the connector to slide on the shoulder strap.

4.11 Class L — Ladder climbing - Class L full body harnesses are designed for use with fall restrict systems involving the use of a Class AS or FRL fall arrester that travels on a vertical lifeline or rail, as described in CAN/CSA-Z259.2.1. These systems are typically mounted on or adjacent to ladders or towers. In addition to the connector required for Class A, all Class L full body harnesses shall have (a) one Class I connector attached to the waits belt; or (b) one or two Class I connectors attached to the dust belt; or (b) one or two Class I connectors attached to the storap in the sternal or frontal location. When attachment of the connector(S) is to the chest strap, the chest strap shall be attached to the harness in a fixed, non-sliding position.

4.12 Class P — Work positioning - Class P full body harnesses are designed to position the worker during a work operation. In addition to the connector required for Class A, all Class P full body har-nesses shall have two Class I connectors mounted at waist level.

6.1.1 Test mass - The test mass for testing all classes of full body harnesses shall (a) be torso shaped in accordance with parameters given in Figures 6 and 7; (b) be constructed of rigid material; (c) have hard wood surfaces in contact with the full body harness webbing straps; and (d) have a mass of 160  $\pm$  1 kg (352  $\pm$  2 lb).

7 Marking and information -- 7.1 Marking - The following markings shall appear in both English and French on a durable label intended to last the life of the product, and shall be affixed to the full body harness: (a) identification of the manufacturer and/or vendor; (b) model number; (c) proof of certification by the Certification organization, as required; (d) the designation "CSA 2259.10-05"; (e) the applicable class(es) marked in words in accordance with the titles of Clauses 4.8 to 4.12 and in pictograms with a minimum height of 20 mm (0.8 in) in accordance with Equires 1 to 5; (f) size (the words "size" and "grandeur" shall appear on the label); (g) date of manufacture (by year and (h) space for personal identification.

Shock Absorbers for Personal Fall Arrest Systems (CSA Z259.11-M92)

1.1 Scope - This standard outlines the requirements for testing the performance and strength for shock absorbers that absorb and dissipate kinetic energy when used as a component of a personal fall arrest system (FAS).

5.3 Dynamic Drop Test - ....a shock absorber shall limit the maximum arrest force to 4.0kN .

5.4 Final Static Resistance Test - ....a shock absorber must be capable of supporting a load of 22 kN for a period of 5 min.

Self-Retracting Devices for Personal Fall-Arrest Systems (CSA-Z259.2.2-98)

1.1 Scope - This standard specifies the requirements for all self-retracting devices (SRDs) used as connecting components in personal fail-arrest systems. SRDs are further classified in this Standard according to method of use and effective length.

3.1 Classification - Self-retracting devices (SRDs) shall be classified by type as follows: a) Type 1 (SRL) A Type 1 device shall be classified as a self-retracting lanyard (SRL). A SRL shall have a work-ing length of between 1.5 and 3.0m. b) Type 2 (SRL) A Type 2 device shall be classified as a self-retracting lanyard (SRL). A SRL shall generally have a working length of more than 3.0m. c) Type 3 (RSRL) A Type 3 device shall be classified as a self-retracting lanyard (SRL). A SRL shall generally have a working length of more than 3.0m. c) Type 3 (RSRL). A SRL shall be classified as a self-retracting lanyard with retrieval function (SRL). A SRL shall have a working length of more than 4.0m. and be fitted with a retrieval device.

5.2.1 Dynamic Performance - When tested... the Type 1 SRL shall successfully arrest the fall.The arrest distance shall not exceed 1.0m.

5.3.1 Dynamic Performance - When tested...the Type 2 SRL/Type3 RSRL shall remain locked until released.When released the Type 2 SRL/Type 3RSRL shall exhibit normal operation. The arrest distance measured when the test weight comes to reat shall not exceed 1.4m The maximum arrest force (MAF) measured by the load cell shall not exceed 8kN.



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