

# Fall Protection **For the Construction Industry**



FROM THE WORLDWIDE



















# This industry specific catalog is dedicated to keeping construction 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 construction industry, falls are the number one cause of worker death.

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USA 651.388.8282

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Canada 905.795.9333



### **DBI-SALA & PROTECTA**

# Leaders in Construction Industry Fall Protection

#### Meeting construction challenges

We understand that there is no more complex work environment than a construction site. Not only is the construction environment constantly changing as the work progresses, but the industry itself is always innovating, with new procedures and materials that present new challenges for your fall protection plan.

Construction demands a full range of fall protection solutions to meet the needs of a dynamic workplace. That's why contractors turn to Capital Safety, manufacturer 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 with access to two great brands 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 company that has always been dedicated entirely to fall protection and rescue.

Our ISO 9001-2000 certification drives superior engineering, quality manufacture 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 construction industry and your specialized 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 construction industry places on you are met head-on with safety leading the way.

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

DBI-SALA & PROTECTA offer 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.

# A

#### **ANCHORAGE**

Anchorage means a secure point of attachment (structure) for the fall arrest system. The type of anchorage varies with the industry, 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).



# B

#### **BODY SUPPORT**

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.



#### **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.



#### DESCENT/RESCUE

Rescue and retrieval of a fallen worker is a required component of any Fall Protection Program.



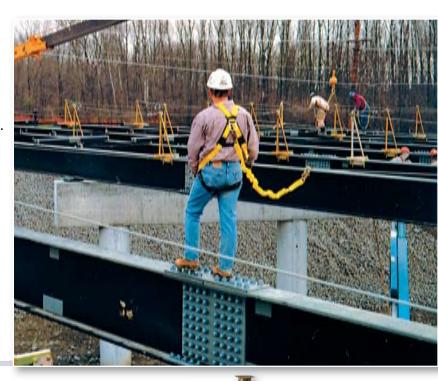
DBI-SALA & PROTECTA—your one-stop for the most comprehensive collection of innovative fall protection products for construction!



# **Construction Industry Applications** RIDGE WORK

#### Fall protection challenges

- When constructing a new bridge, no overhead anchor points are available for the crew to connect a lanyard or self retracting lifeline. The anchorage must be provided through the installation of a horizontal system or fall protection equipment must be specially designed to use the beam itself as an anchorage.
- Most bridge work requires a great deal of horizontal mobility to enable workers to move along the structure and to do decking work in between. If the worker is connected to one fixed point, mobility is limited.
- Workers must move along narrow walks. The proper horizontal installation will provide handholds to enhance safety.
- Some horizontal systems are designed to be connected to steel I-beams. Concrete bridge work requires a horizontal system that clamps around rebar or is permanently secured into the concrete itself.





I-beam

Is the construction on steel I-beams or concrete?

Does the work require horizontal mobility or is it fixed connection work?

Concrete

For horizontal mobility on a steel I-beam bridge: SecuraSpan® Portable Horizontal Lifeline System The lightweight and economical SecuraSpan®

systems are designed for single or multiple spans and can accommodate many beam sizes.

7400160 (Pg 45)

Glyder2™ Sliding Beam Anchor

For complete horizontal mobility, the Glyder2™ effortlessl slides across the beam following you as you work.

2104700 (Pg 35)

For fixed connector work on a steel I-beam bridge:

**Fixed Beam Anchor** 

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. 2108406 (Pg 35)

For horizontal mobility on a concrete bridge:

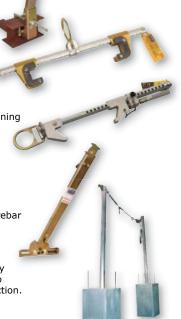
Iron Wing™ Concrete Horizontal Lifeline

The Concrete Horizontal Lifeline System allows complete freedom of movement and protection for two workers per span and up to up to 6 workers per system. Connects to rebar for use on concrete. **7003560 (Pg 46)** 

SecuraSpan® Concrete Pour-in-Place **Horizontal Lifeline** 

60' (18m) system includes two stanchions, cable assembly and Zorbit™ energy absorber. Stanchions are mounted into sleeves that are poured into place during column construction.





# **Body Support**

What level of quality and durability do you require in a full body harness?

**High Performance** 

Utility

**Fundamental** 

For ultimate comfort, performance and durability

#### ExoFit™ XP Construction Vest Style Harness

Removable and washable shoulder, back and leg padding with breath able 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 & side D-rings, sewn in hip pad, tongue buckle belt, quick connect buckles. **1110152 (1110152C in Canada) Pg 23** 

#### **ExoFit™ Construction Vest Style Harness**

ExoFit™ 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 and side D-rings, sewn-in hip pad, tongue buckle belt, quick connect buckles. 1108502 (1108502C in Canada) Pg 23

For reliable, workhorse performance:

#### Delta" II Construction Vest Style Harness

Unique Delta 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 & side D-rings, sewn-in hip pad, tongue buckle belt, tongue buckle leg straps. 1101655 (1101655C in Canada) Pg 24

For compliance and value:

#### **PRO**™ Construction Style Harness

For economical reliability, PRO™ harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and lanyard keepers in one harness model aid in maintaining compliance. Features back & side D-rings, hip pad, tongue buckle belt & leg straps. 1191209 (1191209C in Canada) Pg 59





#### Adiust-A-Net™ Personnel/Debris Net System

#### Netting for new bridges: In new bridge construction nets are required for the safety of the workers and to keep debris out of the water or off railroad tracks or roadways below. Nets for new bridges are usually hung underneath the bridge on cables. In addition to the nets underneath, federal and state regulations require that nets extend beyond the edge of the work area. This is done with cantilevered arms that extend from the bridge to support a cable that runs parallel to the bridge at least

#### **Bridge redecking** operations: It may not be necessary to use outriggers as long as the railings are left intact. However debris nets should be installed to prevent debris from being kicked, thrown or blown over the side. Also personnel nets with debris liners should be hung underneath the deck to prevent personnel and debris from falling onto traffic or structures below.

eight feet out from each side.

Adjust-A-Net™ is a one-ofa-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. (Pg 50)



## More than 6' mobility Ultra-Lok® Self Retracting Lifeline

Stainless steel working components, 11' (3.3m) nylon web with reserve lifeline, self-locking swivel hook, swiveling anchorage loop and impact indicator. 3103108 (3103108C in Canada) Pg 40 Variation: For hot work such as welding, cable connectors are

Talon® Self Retracting Lifeline

Compact and lightweight design features 8' (2.4m) nylon webbing lifeline. The brake system incorporates all metal components for durability. A unique quick-connect handle for direct attachment to the anchorage or harness sets this unit apart. It also includes an impact indicator for added safety.

3101001 (3101001C in Canada) Pg 41

Does the worker require less than 6' of mobility?

Does the worker

require more

than 6' of

mobility?

Less than 6' mobility required ShockWave2™ Shock Absorbing Lanyard

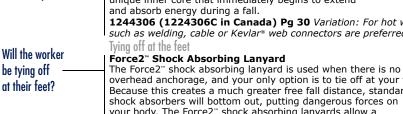
ShockWave2™ shock absorbing lanyards are stretchable for complete freedom of movement. They expand to 6' (1.8m) & contract to 4-1/2' (1.4m) in reaction to your movements, reducing trip hazards. The ShockWave2" incorporates a unique inner core that immediately begins to extend

1244306 (1224306C in Canada) Pg 30 Variation: For hot work such as welding, cable or Kevlar® web connectors are preferred.

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 out, putting dangerous forces on your body. The Force2™ shock absorbing lanyards allow a 12' (3.7m) free fall and still keep forces below OSHA's limits when tying off at your feet. 1245006 (Not CSA approved) Pg 31

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.









### **Construction Industry Applications**

# **COMMERCIAL ROOFING**

#### Fall protection challenges

- When working on a roof, nothing is overhead but birds, and they don't make very good fall protection anchorages! Establishing safe anchorages without damaging the roof itself is essential for safe commercial roofing work.
- Two kinds of fall protection are specified for commercial roofing. If the workers are exposed to a fall, they should be using properly rated personal fall arrest equipment. When working at the safer center of a flat surface roof, passive restraint equipment should be used to ensure that a worker does not inadvertently move too close to the edge.
- For larger jobs and when workers are going to be working within 6' (1.8m) of the perimeter, a horizontal lifeline installation will provide mobility and enhance productivity.
- Fall protection installations may be temporary to last until the end of the job, or permanent providing added safety and productivity for personnel doing future repair and maintenance.





Horizontal

Does the work require horizontal mobility or is it fixed work?

Does the building owner want a permanent horizontal installation?

Fixed

For permanent installation:

evolution™ 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. Specially designed computer program simulates the necessary clearances and possible heights of fall.

(Pg 43 and Photo Above)

For temporary installation:

Sayfline Horizontal Lifeline Systems Lightweight and easy to install, they are extremely portable with kernmantle rope assembly and tensioning device.

7600506 (Pg 47)

Sayfline™ Cable Horizontal Lifeline Systems

For use where welding, sparks or harsh environment are present or minimal clearance exists.

7602060 (Pg 47)

For permanent installation:

Permanent Roof Top Anchor

Permanent roof anchor post that installs to corrugated steel or wood sheathing structures. 2100075 (Pg 36)

For temporary installation:

Swiveling Roof Anchor\*

Reusable, removable roof anchor that swivels 360° can be mounted to corrugated metal or wood sheathing structures. **2105683** (**Pg 36**)

Standing Seam Roof Anchor\*

360° swivel. No special tools required for installation. Portable and reusable on slightly sloped or flat standing seam roofs. Telescoping adjustment legs. **2190001** (**Pg 36**)

\*SRL sold separately



# **Body Support**

What level of quality and durability do you require in a full body harness?

**High Performance** 

Utility

**Fundamental** 

For ultimate comfort, performance and durability

#### **ExoFit™ XP Vest Style Harness**

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. Features back D-ring and quick connect buckles.

#### 1110102 (1110102C in Canada) Pg 23

#### **ExoFit™ Vest Style Harness**

ExoFit™ 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" II Vest Style Harness

Unique Delta™ 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, tongue buckle leg straps.

#### 1102000 (1102000C in Canada) Pg 24

For compliance and value:

#### PRO™ Vest Style Harness

For economical reliability, PRO™ harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and lanyard keepers in one harness model aid in maintaining compliance. Features back D-ring, pass thru buckle leg straps. 1191201 (1191201C





#### Portable Guard Rail™ System

OSHA and ANSI permit the use of free standing guard rails to keep workers away from the edge of a flat surface. The DBI-SALA free standing Portable Guard Rail™ meets OSHA and ANSI requirements and requires no surface attachment. Versatile and affordable, the rails are available in lengths of 6', 8' & 10' (1.8m, 2.4m & 3m).

7900000 Series (Pg 45)



Less than 6'

More than 6'

**Positioning Only** 

How much mobility does the worker require?

What kind of anchorage will the worker be connecting to?

Does the worker require fall arrest or positioning?

Anchoring to Evolution™ Horizontal System:

#### 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

#### PRO™ Shock Absorbing Lanyard

Pack style shock absorbing lanyard with 1" (25mm) webbing and easy to use snap hooks for economical performance.

#### AE542AW1 (AE542CW1-6 in Canada) Pg 61

Anchoring to Sayfline™ System or fixed anchor:

#### Ultra-Lok® Self Retracting Lifeline

Stainless steel working components, 50' (15m) of galvanized cable with reserve lifeline, self-locking swivel hook, swiveling anchorage loop and impact indicator. 3504450 (3504450C in Canada) Pg 40

For connection to horizontal lifelines or when a shorter, lighter SRL is needed, we offer an 11' (3.3m) web Ultra-Lok®. 3103108 (3103108C in Canada) Pg 40

Positioning application only: **DBI-SALA Positioning Lanyard** 

Used to maintain a working position at height or restrict movement to avoid a hazardous position.

1231106 (1201106C in Canada) Pg 31

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.





### **Construction Industry Applications**

# RESIDENTIAL ROOFING

#### Fall protection challenges

- Residential roofing is particularly precarious due to the sloped work surface. Proper connection to a secure anchorage is essential for safety.
- Productivity is a major concern in the competitive world of residential roofing.
   This means that equipment must be easy to use, anchorages must be easy to place, or workers may be tempted to risk injury and do without.
- Anchorages must not only be easy to place for productivity, they must also be placed without damage to the roof structure, which is generally made of more fragile material than a commercial roof.
- Fall clearance on many areas of a residential roof may not be sufficient for fall arrest with a standard 6' (1.8m) lanyard, i.e. the worker may hit the ground before the arrest. This means that shorter rope grabs or self retracting lifelines that can stop a fall within 2' (0.6m) are often better choices for this application.





Temporary

Do you want temporary or permanent anchorage? For temporary anchorage, do you want disposable or reusable?

Permanent

#### For disposable:

Roof Anchor
Disposable roof anchor nails to sheathing and rafter.
Once job is completed, remove or knock down the anchor and shingle over. Packs of 12. 2103680 (Pg 62)

#### For reusable:

#### Swiveling Roof Anchor\*

Removable, reusable roof anchor that swivels 360° can be mounted to corrugated metal or wood sheathing structures. **2105683 (Pg 36)** 

#### Removable/Reusable Roof Anchor

1/4" (6mm) thick steel roof anchor, complete with zinc plated forged alloy steel O-ring. Nail or bolt into the sheathing and joist, rafter, etc. Designed to be removable, it may be used again after an inspection. 2103673 (Pg 36)

#### Permanent anchorage (stays on the roof):

#### **Permanent Roof Anchor**

Easily clamps on the roof for permanent placement. Flashing and roof cap prevents leakage.

2103670 (Pg 36)

#### **Permanent Roof Anchor**

Permanent roof anchor is shingled-over leaving only the D-ring exposed. Provides a fall protection anchor point during initial construction, as well as for the future homeowner for general roof maintenance.

2103678 (2103678C in Canada) Pg 62

\*SRL sold separately



# **Body Support**

What level of auglity and durability do you require in a full body harness?

**High Performance** 

Utility

**Fundamental** 

For ultimate comfort, performance and durability

**Delta™ II Vest Style Harness** 

Unique Delta™ 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, tongue buckle leg straps. 1102000 (1102000C in Canada) with 9501207 Delta™ Comfort Pad **Pg 24** 

For reliable, workhorse performance: PRO" Vest Style Harness

For economical reliability, PRO™ harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and lanyard keepers in one harness model aid in maintaining compliance. Features back D-ring, pass thru buckle leg straps. 1191201 (1191201C in Canada) Pg 59

For compliance at the lowest possible price:

FIRST<sup>™</sup> Full Body Harness

With back D-ring, pass thru buckle leg straps and 5-point adjustment for economical performance.

AB17530 (AB17530C in Canada) Pg 60



Compliance-in-a-Can" delivers a fundamental fall protection system complete with anchorage, body harness and connector with performance, safety and exceptional value! A variety of Compliance in a Can<sup>®</sup> kits are available for different applications. The standard residential roofing kit includes a full body harness with five adjustable points for better fit, a combination 5/8" (16mm) rope grab with attached 2' (0.6m) shock absorber, a 50' 5/8" (15m) blend rope lifeline with attached snap hook, and a reusable roof anchor.

AA7041A (COMPKITS2 in Canada) Pg 60

Also available with an even more economical 3-point adjustable harness.

AA7040A (Not available in Canada) Pg 60



How much mobility does the worker require?

More Mobility

**Less Mobility** 

For more mobility on the roof, fewer reconnects to anchorage point:

JRG™ 30' (9m) Steel Cable Self Retracting Lifeline The JRG™ line provides an economical self retracting

lifeline without compromising performance or safety. Lightweight with 3/16" (5mm) galvanized cable and zinc coated internal components. Begins fall arrest within 2' (0.6m).

AD212AG (AD212CS in Canada) Pg 63

More economical than SRL, less mobility, reconnect more frequently:

Rope Adjuster Lanyard

Rope adjuster with an attached 3' (0.9m) shock absorbing lanyard is designed to be a static rope grab that is the connecting lanyard between your harness and the lifeline. The worker can slide the device along the lifeline until he or she has reached their work position, then lock into place.

1224005 (Not available in Canada) Pg 37

Lifeline & Counterweight

5/8" (16mm) polyester or polyester/polypropylene blend rope lifeline with a self-locking snap hook. Counterweight keeps the lifeline taut to optimize performance of the rope grab system.

1203000 (1203000C in Canada) Pg 37

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.





# Construction Industry Applications STEEL ERECTION

#### Fall protection challenges

- Steel erection work usually involves building a grid sideways or upward which means mobility is essential, and there is often no overhead anchorage point to connect to.
- Working with steel is rugged work and requires tough, durable equipment.
- Descending to ground level to pick up necessary equipment is not practical, so often workers may have up to 20 lbs. (9kg) of tools in their harness toolbelts and be carrying heavy bolt bags or other tools.
- For added protection while welding, workers should have hot work kits with Kevlar® equipment.
- A reinforced seat on ironworker harnesses helps equipment last longer when sliding on beams.
- For this kind of all-day-long, demanding work, fall protection equipment should be comfortable and not binding.





Does the work require horizontal mobility or is it fixed connection work?

Fixed

#### For horizontal mobility in steel erection:

SecuraSpan® Portable Horizontal Lifeline
The lightweight and economical SecuraSpan® systems
are designed for single or multiple spans and can
accommodate many beam sizes. 7400160 (Pg 45)

#### Glyder2™ Sliding Beam Anchor

For complete horizontal mobility, the Glyder2" effortlessly slides across the beam following you as you work.

#### 2104700 (Pg 35)

Sayfline™ Cable Horizontal Lifeline Systems
Durable and lightweight horizontal system that utilizes
easy to adjust wedge grip termination for easy

installation. 7602060 (Pg 47)

For fixed connector work in steel erection:

#### **Fixed Beam Anchor**

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.

2108406 (Pg 35)

#### WrapBax<sup>™</sup>2 Tie-Back Shock Absorbing Lanyard

The WrapBax"2 is specifically designed for tie-back use—eliminates the need for a separate anchorage connector, reduces inventory and cost, simplifies inspections and worker training and improves compliance.

1241906 (1221906C in Canada) Pg 30









Regular

**Hot Work** 

Will the worker be

performing regular

duties or welding?

Durable, reinforced ironworker harnesses:

#### **ExoFit**<sup>™</sup> Iron Worker Harness

Constructed from high performance materials, Exofit™ is the most comfortable harness on the market. Exofit™ incorporates a breathable lining that immediately draws moisture away from the body keeping the worker dry and comfortable. Reinforced seat prevents wear when sliding along beams.

1100530 (1100530C in Canada) Pg 23

#### Delta™ II Iron Worker Harness

With the addition of a body belt and pad with support straps and side D-rings, this harness is ideal for general construction and iron worker applications where fall protection and positioning is needed. It provides added versatility for carrying tools and pouches. Reinforced seat prevents wear when sliding along beams. 1106450 (1106450C in Canada) Pg 24

Welding harnesses for hot work: ExoFit" XP Construction Style Nomex®/Kevlar® Harness

Maximum security, comfort and performance. Nomex®/Kevlar® web, Nomex®/Kevlar® back, shoulder, leg padding, hip pad with Kevlar® belt and side D-rings, PVC coated back D-ring, quick connect buckle legs. 1111300 (Not CSA approved) Pg 23

Delta™ II Nomex®/Kevlar® Harness

This lightweight and easy to don harness is constructed with flame-resistant Nomex®/Kevlar® web with PVC coated hardware for the ultimate protection from the heat. 1105475 (1105475C in Canada) Pg 24





What will the worker be connecting to?

Lifeline

For connection to a horizontal lifeline system: ShockWave2" Shock

Absorbing Lanyard ShockWave2™ shock absorbing lanyards are stretchable for complete freedom of movement. They expand to 6' (1.8m) and contract to 4-1/2' (1.4m) in reaction to your movements, reducing trip hazards. 100% tie-off twin leg version to remain connected

at all times.1244412 (Not available in Canada) Pg 30

EZ Stop® II Shock Absorbing Lanyard—Cable

7/32" (0.2mm) vinyl covered cable for use in harsh environments and the ultimate durability and longevity

1240706 (1220706C in Canada) Pg 29

Ultra-Lok® Self Retracting Lifeline

Device features a swiveling anchor loop, corrosion resistance stainless steel 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 40** - also available in 20' (6m), 50' (15m) and 85' (26m) lengths.

Talon® Self Retracting Lifeline

Compact, lightweight design, 8' (2.4m) with nylon webbing, quick-connect handle, impact indicator and self-locking swivel hook. 3101001(3101001C in Canada)

To tie off to the beam itself:

WrapBax<sup>™</sup>2 Tie-Back Shock Absorbing Lanyard

The WrapBax™2 is specifically designed for tie-back use-eliminates the need for a separate anchorage connector, reduces inventory and cost simplifies inspections and worker training and improves compliance

1241906 (1221906C in Canada) Pg 30

Force2<sup>™</sup> Shock Absorbing Lanyard

Will the worker be

around sparks?

tying off at the feet?

The Force2™ shock absorbing lanyard is used when there is no 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 out, putting dangerous forces on your body. The Force2 shock absorbing lanyards allow a 12' (3.7m) free fall and still keep forces below OSHA's limit when tying off at your feet. 1245006 (1225006 in Canada)

(Not CSA approved) Pg 31

Will the worker be EZ Stop® II Shock welding or working

Absorbing Lanyard-Kevlar®

EZ Stop® II lanyards in Kevlar® webbing are tough. They feature flame-resistant Kevlar® webbing with a 800°F (426°C) char temperature. If you are welding or in a high temperature environment, you want the protection of Kevlar®. 1240558 (1220558C in

Canada) Pg 29



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.



### **Construction Industry Applications**

# CONCRETE AND LEADING EDGE WORK

#### Fall protection challenges

- Concrete construction in high rise buildings, parking ramps or similar structures is dusty, rugged work that requires tough, durable fall protection equipment.
- Fall protection equipment needs may change depending on whether the worker is building a new structure without a platform beneath or working on an existing structure.
- Comfort and mobility are important considerations for this type of strenuous labor.
- Passive fall protection in the form of perimeter netting is essential for new construction to protect workers and the public below.





For new construction:

Concrete Pour-in-Place SecuraSpan® Lifeline

60' (18m) system includes two stanchions, cable assembly and Zorbit<sup>--</sup> energy absorber. Stanchions are mounted into sleeves that are poured into place during column construction.

7400260 (Pg 45)

Iron Wing™ Concrete Horizontal Lifeline

The Concrete Horizontal Lifeline System allows complete freedom of movement and protection for two workers per span and up to up to 6 workers per system. Connects to rebar for use on concrete. **7003560 (Pg 46)** 

Leading Edge Concrete Anchor\*

The first fall protection system developed for personnel who perform work on pre-cast concrete. Compact and lightweight design makes installation, use and removal quick and easy.

2105500 (Pg 35)

**Concrete Anchor Strap** 

Disposable anchor strap is designed to provide a temporary anchorage on concrete forms. Loop on end of anchor slips over rebar, concrete is then poured on top of loop and wear pad. Once concrete sets, a safe 5,000 lb. (22kN) fall arrest anchorage point exists. When no longer needed, cut strap and discard.

2100050 (Pg 35)

Is the work on new construction or an existing structure?

New

Working on existing structure:

**Concrete D-Ring Anchor** 

This simple, versatile and safe concrete anchor solutions can be used for temporary or permanent applications by drilling a hole and screwing into place. Reusable D-ring assembly. Just install a new bolt, and it's ready for use again. 2104560 (Pg 35)

Sayfline™ Cable Horizontal Lifeline Systems

Durable and lightweight horizontal system that utilizes easy to adjust wedge grip termination for easy installation. **7602060 (Pg 47)** 

Concrete Anchor Strap

(see above) 2100050 (Pg 35)

**Door Jamb Anchor** 

This lightweight and non-penetrating anchor only weighs 14 lbs. (6.4kg). Its adjustable design allows it to be installed in seconds between door or window openings.

2100080 (Pg 34)

\*SRL sold separately





# **Body Support**

What level of quality and durability do you require in a full body harness?

**High Performance** 

Utility

**Fundamental** 

For ultimate comfort, performance and durability:

**ExoFit™ XP Positioning Harness** 

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. Features back & side D-rings and quick connect buckles. 1110227 (1110227C in Canada) Pg 23

**ExoFit™ Positioning Harness** 

ExoFit™ 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 and side D-rings and quick connect buckles. 1108577 (1108577C in Canada) Pg 23

For reliable, workhorse performance: Delta" II Positioning Harness

Unique Delta™ 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 & side D-rings, tongue buckle leg straps.

1102008 (1102008C in Canada) Pg 25

For compliance at the lowest possible price:

PRO™ Positioning Harness

For economical reliability, PRO™ harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and lanyard keepers in one harness model aid in maintaining compliance. Features back & side D-rings, pass thru buckle leg straps. 1191205 (1191205C in

Canada) Pg 59



classified as Active, which require positive action from a worker, or Passive, which protect without worker action. One of the most important types of Passive protection is netting for personnel or debris.

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. They protect workers, property and the general public in the area below. Debris nets can be used alone when there is no chance of a person falling into them.

The DBI-SALA perimeter net debris system is a convenient, economical way to ensure protection, confidence and productivity at your concrete building site. This system is the first lightweight system for rigging nets around the perimeter of new concrete buildings. 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. 4100006 (Pg 51)



What will the worker be connecting to?

Horizontal Lifeline

For connection to a horizontal lifeline:

EZ Stop® II Shock Absorbing Lanyard Pack style shock absorbing lanyard with 1' (25mm) webbing with DBI-SALA patented snap hooks.

1240006 (1220006C in Canada) Pg 29

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 40

For connection to a fixed point anchor:

ShockWave2™ Shock Absorbing Lanyard ShockWave2™ shock absorbing lanyards are stretchable for complete freedom of movement. They expand to 6' (1.8m) and contract to 4-1/2' (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 (1224306C in Canada) Pg 30 Variation: For hot work such as welding, cable or Kevlar® web connectors are preferred.

Leading Edge Ultra-Lok® Self Retracting Lifeline Ultra-Lok® SRL's come with a durable glass-filled polyurethane housing, and this model has a large 7/32" (5.6mm) wire rope lifeline and external energy absorber for

added protection. 3504500 (3504500C in Canada) Pg 40 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.





### **Construction Industry Applications**

# CONCRETE WALL FORM OR REBAR

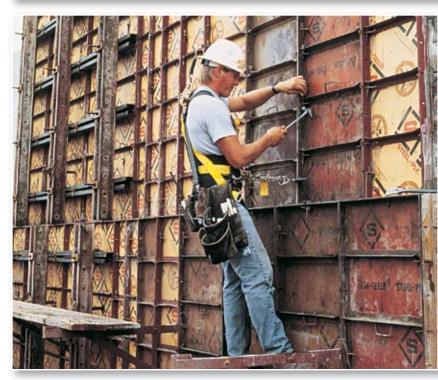
#### Fall protection challenges

- Whether stripping panels down or putting them up, wall form work is a demanding task that requires the worker to stay in precarious positions for long periods.
- Rebar work requires standing on the bar, hanging off the structure, with difficult footing. Generally the worker needs both hands free to tie the rebar.
- Typically wall form and rebar work require work positioning equipment. According to OSHA, back-up fall protection must be in place when higher than 24' (7m).
- Both wall form and rebar work are monotonous, repetitive and fatiguing and require fall protection equipment that is comfortable enough for sustained activity with pads, waist belts and seat supports.





In wall form and rebar work, the anchorage is typically the wall form or rebar itself. With wall form, the connector needs a hook with a point that will fit the form. Different manufacturers require different size hooks. Talk to your consultant to be sure which hook is appropriate for the material being used.



# **Body Support**

What level of quality and durability do vou require in a full body harness?

**High Performance** 

Utility

For ultimate comfort, performance and durability:

#### **ExoFit™ XP Construction Style Harness**

Removable shoulder, back and leg padding with breathable and washable 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 and side D-rings, sewn-in hip pad, belt and quick connect buckles.

#### 1110152 (1110152C in Canada) pg 23

#### **ExoFit™ Construction Style Harness**

ExoFit™ incorporates a breathable lining that immediately 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 and side D-rings, sewn in hip pad, belt and quick connect buckles. 1108500 (1108500C in Canada) Pg 23

For reliable, workhorse performance:

#### **Delta™ II Standard Vest Style Harness**

Unique Delta™ 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 and side D-rings, sewn-in hip pad, belt, and quick connect buckle leg straps.

1110577 (1110577C in Canada) Pg 25

For compliance at the lowest possible price:

#### PRO™ with Comfort Padding Construction Harness

For economical reliability, PRO™ harnesses provide fundamental features in a comfortable fit. Built-in impact indicators and lanyard keepers in one harness model aid in maintaining compliance. Back, shoulder and leg padding add comfort for wearing all day. Features back & side D-rings, hip pad, tongue buckle belt and quick connect buckle leg.

1191270 (1191270C in Canada) Pg 59



**Fundamental** 

**Connectors** 

Is this wall form work or rebar?

**Wall Form** 

For wall form work:

ShockWave2™ Shock Absorbing Lanyard ShockWave2™ shock absorbing lanyards are

stretchable for complete freedom of movement. They expand to 6' (1.8m) and contract to 4-1/2' (1.4m) in reaction to your movements, reducing trip hazards. 100% tie-off twin leg version to remain connected at all times. Large rebar hooks for connection to rebar.

#### 1244412 (Not available in Canada) Pg 30

#### Ultra-Lok® Self Retracting Lifeline

Device features a swiveling anchor loop, corrosion resistant stainless 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. **3103207** (**3103207C** in **Canada**) **Pg 40** - also available in 11′ (3.3m)

length.

#### **Wall-Form Assembly**

Fits most wedge bolt slots or holes on wallforms, 16" (40cm) in length.

5904350 (Not available in Canada) Pg 31

For rebar work:

#### **Chain Rebar Assembly**

The Chain Rebar assemblies are designed for versatility and are available in many variations with unique hooks to provide safe and compatible connection to many types of structures. Use these while performing such tasks as rebar tying or construction of wall forms. Like all positioning and restraint lanyards, they should only be used in applications that limit the free fall to 2' (0.6m) or less. With large rebar hook and swivel.

5920050 (Not available in Canada) Pg 31

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.



Rebar



# **Construction Industry Applications** SCAFFOLDING

#### Fall protection challenges

- Improperly installed scaffolding is one of the most frequently cited OSHA violations on construction sites. Proper installation of scaffolding is essential if the worker is going to tie off to the structure for fall protection. Many scaffolding manufacturers will not recommend using scaffolding as the sole anchor point. However with new construction, there sometimes is no available anchor point other than the scaffolding.
- If the scaffolding is a hanging platform used for applications such as window washing, OSHA specifies that the worker must be hooked to the building independently of the scaffolding.
- Scaffold railings can serve as passive fall protection. If the scaffold has a 42" (106cm) top rail, a 21" (53cm) mid rail and a toe rail, personal fall protection equipment is not required by OSHA.



### **DBI-SALA** products recommended to tie off to scaffolding:

ShockWave2™ Shock Absorbing Lanyard ShockWave2™ shock absorbing lanyards are stretchable for complete freedom of movement. They expand to 6' (1.8m) and contract to 4-1/2' (1.4m) in reaction to your movements, reducing trip hazards. 100% tie-off twin leg version to remain connected at all times. Large Aluminum

rebar hooks for connection. 1244409 (Not available in Canada) Pg 30



#### Scaffold Choker Anchor

Our scaffold choker combines ease of use, light weight and high strength (5,000 lb. (22kN) Min. tensile strength) forming a versatile anchorage connector. It's designed specifically to provide an anchor point for your personal fall protection system on scaffolding or other similar structures such as piping. 1201390 (Pg 34)



#### Handgrip

Our handgrip is a versatile anchor that is designed for scaffolding or other similar structures such as piping. AJ301A (Pg 62)





#### **Retracting Lifeline** Provides 100% tie-off with two independent 6' (1.8m) web lifelines. Offers added mobility and safety when moving along a structure. A unique quick-connect handle, Delta™ Comfort Pad and two Lanyard Keepers for direct attachment to the harness sets this unit apart. Complete with an impact indicator

and multiple hook

options. **3102000** (Pg 41)

Talon® Twin-Leg Self





#### **Aerial Lift**

A personal fall arrest system is required when using an aerial lift to ensure protection in case the worker is propelled out of the lift. A welded ring built into the lift usually provides the anchorage for a shock absorbing lanyard such as the EZ Stop® Retrax. 1241460 (1221460C in Canada) Pg 29





Provides an anchor point on the boom of a lift when one isn't provided inside the bucket. **1001250** 



**Confined Space** 

DBI-SALA offers the most technologically advanced confined space rescue and retrieval systems in the industry. Whether raising, lowering or supporting personnel or materials, our confined space rescue and retrieval systems are designed for versatility and ease of use.

For more details consult the Confined Space section on pages 52-57 of this catalog.

**Vertical and Sloped Applications** 

DBI-SALA offers a variety of solutions for safe climbing and working with inclined structures. The Lad-Saf® Flexible Cable Ladder Safety System provides security when climbing fixed ladders on poles, towers, tanks, etc. The economical, easy to use systems are available for straight or curved ladders and for connection to wood, concrete or steel structures. **6116540** (**Pg 37**)



#### **Rescue After a Fall**

DBI-SALA offers a number of rescue or positioning solutions for workers to quickly and efficiently raise and lower themselves or someone else.



The Rollgliss® System is a versatile and efficient state-of-the-art modular ascending and descending rope rescue system. It takes just a moment to change the hauling ratio, giving you more time to save lives! 8902004 (Pg 57)



For more information on Rescue After a Fall, see pages 52-57 of this catalog.

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.

The **Suspension Trauma Safety Straps** allows
a suspended worker to
stand up in their harness
to relieve pressure until
they can be rescued.

9501403 Pg 22 (9501403C) in Canada





New & Improved...



i-Safe<sup>™</sup> just got better. The new 2.0 version is more intuitive and easier to use than ever..

With a newly redesigned portal and significant improvements in the mobile software, i-Safe™ will help you improve your safety records with more accurate inspection tracking, intuitive mobile screen management and better report writing capabilities. It provides resources like inspection videos and links to safety standards. I-Safe™ 2.0, another bright step forward for the Intelligent Safety System.



# 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™ RFID Tags

i-Safe™ tags are now standard equipment on DBI-SALA products. Each tag is programmed with a unique ID that registers its model type and history.

#### **MPC Readers**

Tags are read by an on-site MPC that scans the piece of equipment and accounts for it by a unique number. One click entry logs inspections, equipment assignments by worker or location, and more.

#### **Web Portal**

Data is then linked from the PDA or laptop to your customized web portal. Your safety program website also provides instant access to related safety and equipment information, training records, product advisories and useful links.

#### **Retrofitting Kits**

Easy do-it-yourself retrofitting kits are available for all types of harnesses, lanyards and SRL's, allowing you to extend the benefits of your i-Safe" system to your entire inventory regardless of brand. Information on model number, make, date of manufacture will need to be entered for each retrofit i-Safe" tag.



Premium MPC & Reader Card (activated)

Universal Hard Retrofit Tag

Soft Choker Retrofit Tag

Cable/SRL Retrofit Tag

**9000038**: i-Safe<sup>™</sup> Premium Handheld Personal Computer

**9503818**: i-Safe<sup>™</sup> Universal Hard Retro-Fit Tag, 6-Pack w/ zip-tie, adhesive pad and key-ring **9503819**: i-Safe<sup>™</sup> 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" 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™ enabled as a standard feature, ready to link up to your i-Safe™ information system. Your representative will help you get the most out of your new i-Safe™ 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™ 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**

The fall arrest point must be located on the back, positioned between the shoulder blades. No matter what additional anchor points are included on a harness, it must always include the dorsal attachment.

#### 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. Kevlar® webbing is used for specialty applications such as welding that require fire resistance.

#### 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 buckle
- Pass 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.

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





#### NO-TANGLE DESIGN

Donning a harness incorrectly can mean the equipment may not work properly. The patented Delta™ Pad and the Exofit™ 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.

#### COLOR CODED SIZING

Color coded sizing allows worker to quickly and easily choose the harness that will work best for their size.

#### ARC FLASH STANDARD

Arc flash harnesses are made from a material such as 7,000 lb. (31kN) nylon or Nomex®/Kevlar® 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.

#### **PADDING**

Cushioned shoulder, leg and hip pads keep the pressure off to provide extra worker comfort for long hours of wear. In a fall, they absorb shock and help distribute your weight. They may be built-in to avoid slipping or removable. Washable, removable padding promotes product longevity.

#### 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 provide 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", 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.



#### **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/ RETRIEVAL HARNESS:

Has one attachment point located on each shoulder strap to facilitate upright retrieval from confined spaces or frontal attachment.



#### LADDER CLIMBING

**HARNESS:** Has frontal attachment point for connection to permanent ladder safety systems.



### 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.

### Quick Connect Buckles



Stand-up Back D-ring



ExoFit<sup>™</sup> XP Harness Features
Removable Shoulder.

Back and Leg Padding

Built-in Impact Indicator



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 & maintenance     Tower climbing     Construction     Oil & gas	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	<b>√</b>	<b>√</b>
ExoFit™	Premium harness for long hours of comfort and durability	Construction     Utility & maintenance     Oil & gas	100% polyester	√ sewn-in padding	√ (also available with Tongue buckle legs)	Wrap around X-design	Fixed back D-ring	Plated forged alloy steel	√		
Delta™ II	The most popular harness in the industry featuring the patented Delta" No-Tangle design for optimum comfort and productivity	Oil & gas Construction Commercial roofing Residential roofing Ladder climbing Rescue & descent Warehousing Order picker	100% polyester	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		

#### HARNESS HYDRATION SYSTEM

1150174

- Incorporates a simple clip-on design that attaches to any harness.
- 50oz capacity allows worker a convenient hydration 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



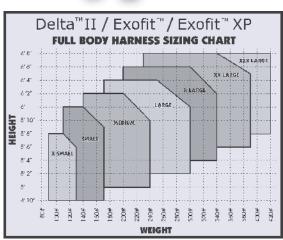


#### SUSPENSION TRAUMA SAFETY STRAP

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)





## The **ExoFit™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
- i-Safe"

Every DBI-SALA harness 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.

The **ExoFit**<sup>TM</sup> 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 guarantees you'll stay dry and comfortable every day. And the quick-release 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™ RFID enabled (See above description)

### **EXOFIT™ XP** FULL BODY HARNESSES



EXOFIT™ XP CONSTRUCTION HARNESS

Hip pad and belt for use with tool pouches and side D-rings for positioning

(1110150 (1110150C in Canada)



EXOFIT™ XP STANDARD HARNESS

Ideal harness for all general purpose applications

1110100 (1110100C in Canada)



EXOFIT™XP CROSS-OVER HARNESS

Cross-over style with front D-ring; also ideal for female workers

1109800 (1109800C in Canada)

EXOFIT™	XP	<b>FULL BODY</b>	HARNESSES

EAGTH AT THE BODT HARRESSES								
Model & Size S M L XL	Style	D-Rings	Buckle Type	Hip Pad/ Belt	Belt Loops			
<b>1110100</b> (01)(02)(03) 1110100C in Canada (01C)(02C)(03C)	Vest	Back	Quick Connect		√			
1110125 (26)(27)(28) 1110125C in Canada (26C)(27C)(28C)	Vest	Back	Tongue Buckle		√			
1110225 (26)(27)(28) 1110225C in Canada (26C)(27C)(28C)	Vest	Back, Side	Quick Connect		√			
<b>1110150</b> (51)(52)(53) 1110150C in Canada (51C)(52C)(53C)	Construction	Back, Side	Quick Connect	√	√			
1110175 (76)(77)(78) 1110175C in Canada (76C)(77C)(78C)	Construction	Back, Side	Tongue Buckle	√	√			
<b>1109800</b> (01)(02)(03) 1109800C in Canada (01C)(02C)(03C)	Cross-over	Back, Front	Quick Connect		√			
<b>1111300</b> (01) (02) (03) Not available in Canada	Nomex®/ Kevlar® Construction	PVC Coated Dorsal D	Quick Connect	Nomex <sup>®</sup> /Kevlar <sup>®</sup> pad, Pass Thru Kevlar belt	√			

### **EXOFIT™** FULL BODY HARNESSES



EXOFIT™ CONSTRUCTION HARNESS

Hip pad & belt for tool pouches; side D-rings for positioning

1108500 (1108500C in Canada)



#### EXOFIT™ STANDARD HARNESS

Ideal harness for all general purpose applications

1107975 (1107975C in Canada)

EXOFIT™
IRON WORKER HARNESS

Reinforced leg and seat area for greater durability 1100530 (1100530C in Canada)

#### **EXOFIT™** FULL BODY HARNESSES

LAGITI TOLL BODT 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		√				
1109356 (55)(57)(58) Not available in Canada	Vest	Back	Tongue Buckle		√				
1108575 (76)(77)(81) 1108575C in Canada (76C)(77C)(81C)	Vest	Back, Side	Quick Connect		√				
<b>1108500</b> (01)(02)(07) 1108500C in Canada (01C)(02C)(07C)	Construction	Back, Side	Quick Connect	√	√				
1110475 (76)(77)(78) Not available in Canada	Construction	Back, Side	Tongue Buckle	√	√				
<b>1100530</b> (31)(32)(33) 1100530C in Canada (31C)(32C)(33C)	Iron Worker	Back, Side	Tongue Buckle	√	√				



# The **Delta™II** 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

Every DBI-SALA harness 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.



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

### **DELTA™ II FULL BODY HARNESSES**



DELTA™ II
CONSTRUCTION HARNESS
Hip pad and belt for use with

Hip pad and belt for use with tool pouches and side D-rings for positioning

1101655 (1101655C in Canada)



DELTA™ II STANDARD HARNESS Ideal harness for

Ideal harness for all general purpose applications

1102000 (1102000C in Canada)



DELTA™ II Iron worker harness

Reinforced leg and seat area for greater durability, lanyard keepers and hip pad/belt support

1106450 (1106450C in Canada)



POSITIONING HARNESS

Side D-rings for positioning and belt loops for separate belt attachment

1103512 (1103512C in Canada)



DELTA™ II RETRIEVAL HARNESS

Shoulder D-rings for retrieval and rescue

1101254 (1101254C in Canada)



DELTA™ II CROSS-OVER HARNESS

Cross-over style with front D-ring; also ideal for female workers

1103270 (1103270C in Canada)



DELTA™ II NOMEX®/ KEVLAR® HARNESS

Flame resistant Nomex\*/Kevlar\* webbing and non-conductive non-sparking PVC coated hardware

1105475 (1105475C in Canada)



#### DELTA™ II HI-VIS Work vest harness

Sleeveless waist length vest with harness built-in for high visibility day and night

1111580 (1111580C in Canada)

	DELTA™ II HARNESSES									
Model & Size	Style	D-rings	Buckle Type	Hip Pad/Belt	Belt Loops	Additional				
<b>1102000</b> (U) 1102000C in Canada	Vest	Back	Tongue Buckle							
1103321 (U) 1103321C in Canada	Vest	Back	Pass Thru							
1110600 (U) 1110600C in Canada	Vest	Back	Quick Connect							
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		√					
1103513 (U) 1103513C in Canada	Vest	Back	Pass Thru		√					
<b>1105475</b> (L) 1105475C in Canada	Nomex®/Kevlar® Vest	Back	Pass Thru		√	Nomex®/Kevlar® Web & PVC Coated Hardware				
1102025 (U) 1102025C in Canada	Positioning Vest	Back, Side	Tongue Buckle		√					
<b>1103512</b> (U) 1103512C in Canada	Positioning Vest	Back, Side	Pass Thru		√					
<b>1107404</b> (U) 1107404C in Canada	Hi Vis WorkVest	Back	Tongue Buckle			Hi-Vis Reflective Orange WorkVest				
<b>1111580</b> (U) 1111580C in Canada	Hi-Vis WorkVest	Back	Quick Connect			Hi-Vis Reflective Orange Workvest				
<b>1101254</b> (U) 1101254C in Canada	Retrieval Vest	Back, Shoulder	Tongue Buckle							
1102950 (U) 1102950C in Canada	Cross-over	Back, Front	Tongue Buckle							
1102010 (U) 1102010C in Canada	Cross-over	Back, Front	Pass Thru							
1103375 (U) 1103375C in Canada	Cross-over	Back, Front, Side	Tongue Buckle							
<b>1103270</b> (U) 1103270C in Canada	Cross-over	Back, Front, Side	Pass Thru							
<b>1101655</b> (L) 1101655C in Canada	Construction	Back, Side	Tongue Buckle	√	√	Shoulder pads				
1110577 (L) 1110577C in Canada	Construction	Back, Side	Quick Connect	√	√	Shoulder pads				
1106405 (L) Not available in Canada	Iron Worker	Back, Side	Tongue Buckle	√	$\checkmark$	Reinforced seat straps				

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















#### **DELTA® II HARNESS ACCESSORIES**

- 1 9501207 Delta" Comfort Back Pad 2 1231117 18" (45cm) D-Ring Extension (1201117C in Canada)
- 9502006 Foam Shoulder Pad
- 4 9504374 Lanyard Keeper
- 5 9504374 Earlyafu Keeper 9 9504066 11 Pocket Tool Bag 9 9504072 15 Pocket Tool Bag 6 9511597 Harness & Lanyard Bag, 7-1/2" x 6-1/2" x 15-1/2" (19cm x 17cm x 40cm)



#### **BODY BELT**

- Side D-rings for connection to restraint lanyard
   "(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)



- 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



# 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® Lanyards**

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



# What to look for in a Shock Absorbing Lanyard

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®/Kevlar® 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.

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

#### SHOCK ABSORBER

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 the arresting forces below 900 lbs.

#### 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.

#### worker to below 1,800 lbs. (8kN) with up to a 6' (1.8m) free fall. Most manufacturers now keep

(4kN). Shock absorbers come in pack or tubular styles depending on user preference.

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%.

#### 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.

#### 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.

One-handed, easy connections even 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	Rated for Tie-off at Feet				
Shock- Wave2™			1" (25mm) polyester webbing	V		V					
EZ STOP® II	Designed for versatility and available in many variations for optimum safety	Construction     Oil & gas     Utility & maintenance	1" (25mm) polyester 1" (25mm) polyurethane coated webbing1-3/4" (44mm) Kevlar® 7/32" (5.5mm) cable	√	AVAILABLE						
EZ STOP® Retrax™	The first shock absorbing lanyard that retracts automatically to fit the working area	Bucket truck     Aerial lift     Bridge construction	1" (25mm) polyester webbing	√		√					
WrapBax™ 2	Unique hook to provide 360°, 5,000 lb. (22nK) protection in any direction for safe tie-back	Construction     Steel tie-back work	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	When no overhead anchorage is available     Use as a standard lanyard for increased capacity for 311-420 lbs. (141-190kg)	1" (25mm) polyester webbing	V	Force2 <sup>™</sup> , WrapBax <sup>™</sup> 2 AVAILABLE		√				
EZ STOP® III	Designed for versatility and available in many variations for optimum safety	Construction     Utility & maintenance	1-3/8" (35mm) tubular webbing	√							
Positioning	Durable, high quality lanyards for non-fall arrest applications	Construction	Nylon or polyester rope, 1" (25mm) polyester webbing Rebar: Twist link chain	√							

#### **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

Heavy, double woven  $1^{\prime\prime}$  (25mm) polyester webbing and box stitching for durability and longevity.

Single-Leg **124006** (1220006C in Canada)



Double-Leg 100% Tie-Off Tie-Back 1241206 (1221206C in Canada)

Single Leg Tie-Back 1241106 (1221106C in Canada)

#### EZ STOP® RETRAX™ SHOCK ABSORBING LANYARDS

EZ Stop® Retrax™ 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)

Retrax™ in Motion

- Smooth retraction without irritating lock-ups
- Adjustable retraction length to allow
- the user to limit retraction





#### **E6** Lanyards for Canada

#### **New Classification Guidelines**

In 2007 CSA updated their standard for lanyards and energy absorbers by referencing all lanyards in one place, Z259.11-05. One of the major updates was splitting energy absorbing lanyards into two classes, E4 and E6. E4 covers existing energy absorbing lanyards and the E6 class is new. Capital Safety offers a shock absorbing lanyard for individuals weighing up to 175kg that keeps maximum arresting forces under 6kN (1300 lbs). Capital Safety has updated all current lanyards to the E4 classification (tested to 140 kg [310 lbs] and labeled to E4 classification of 115 kg [254lbs]), as well as releasing a full line of E6 lanyards.

ENERGY ABSORBER CLASSIFICATION DETAILS								
CSA Class	Maximum Arresting Force	Maximum Elongation	Minimum Mass of Worker	Maximum Mass of Worker				
<b>E4</b>	4.0 kN	1.2 m	45kg	115kg				
	(900 lbf)	(3.9ft)	(100 lbs)	(254 lbs)				
<b>E6</b>	6.0 kN	1.75 m	90kg	175kg				
	(1300 lb)	(5.7ft)	(200 lbs)	(386 lbs)				

	EZ STOP® SHOCK ABSORBING LANYARDS										
		Double Leg	Tie-back	Length	Connectors	Additional					
1240006	EZ Stop® II	√			6' (1.8m)	Standard hooks, 3600 lb. Gates					
1240068	EZ Stop® II	√			6′ (1.8m)	Choker web loop, Standard hook, 3600 lb. Gates					
1240256	EZ Stop® II	√			6' (1.8m) adj.	Standard hooks, 3600 lb. Gates	Adjustable				
1240706	EZ Stop® II	√			6' (1.8m)	Standard hooks, 3600 lb. Gates	7/32" (6mm) vinyl coated cable				
1240558	EZ Stop® II	√			6' (1.8m)	Standard hooks, 3600 lb. Gates	Kevlar® webbing				
1240406	EZ Stop® II		√		6' (1.8m)	Standard hooks, 3600 lb. Gates					
1240416	EZ Stop® II		√		6' (1.8m)	1 Standard/2 Alum. rebar, 3600 lb. Gates					
1241106	EZ Stop® II	√		√, D-ring	6' (1.8m)	Standard hooks, 3600 lb. Gates	Abrasion resistant tubular wear jacket				
1241206	EZ Stop® II		√	√, D-ring	6' (1.8m)	Standard hooks, 3600 lb. Gates	Abrasion resistant tubular wear jacket				
1240860	EZ Stop® II Arc Flash	√			6' (1.8m)	Standard hooks, 3600 lb. Gates	Coated web & Nomex*/Kevlar* shock pack, ASTM F887-05				
1241219	EZ Stop® II		√	√, D-ring	6' (1.8m)	1 Standard/2 Alum. rebar, 3600 lb. Gates	Abrasion resistant tubular wear jacket				
1241220	EZ Stop® II		√	√, D-ring	6' (1.8m)	2 Standard/2 Steel rebar, 3600 lb. Gates	Abrasion resistant tubular wear jacket				
1241460	EZ Stop® Retrax™	√			6' (1.8m)	Standard hooks, 3600 lb. Gates	Retracts automatically				
1241480	EZ Stop® Retrax®		√		6' (1.8m)	3 Standard hooks, 3600 lb. Gates	Retracts automatically				
1240850	EZ Stop® II Resist	√			6' (1.8m)	Standard Hooks, 3600 lb. Gates	Resist Coated Web				
1240526	EZ Stop® II Resist		√		6' (1.8m)	Standard Hooks, 3600 lb. Gates	Resist Coated Web				
1244006 Not available in Canada	EZ Stop® III	√			6′ (1.8m)	Standard Hooks, 3600 lb. Gates					
1242226C	EZ Stop® II	√			6′ (1.8m)	Standard Hooks, 3600 lb. Gates	E6 Lanyard				
1242226C	EZ Stop® II	√			4' (1.2m)	Standard Hooks, 3600 lb. Gates	E6 Lanyard				
1242325C	EZ Stop® II		√		6' (1.8m) Standard Hooks, 3600 lb. Gates E6 Lanyard		E6 Lanyard				
1242326C	EZ Stop® II		√		6′ (1.8m)	2 Standard/2 Steel rebar, 3600 lb. Gates	E6 Lanyard				



#### SHOCKWAVE2™ 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<sup>™</sup> 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 immediately extends and absorbs energy during a fall
- Impact indicator allows user to visually inspect unit
- Available in twin-leg 100% tie-off style
- Standard web is polyester, our flame resistant/arc flash models incorporate Nomex®/Kevlar® web, with a 800°F char temperature and arc tested to 40 cal/cm2 to meet the ASTM F887-05 standard.



SHOCKWAVE2™									
Model #	Single Leg	Double Leg	Nomex®/ Kevlar®Web	Tie-Back	Length	Connectors			
<b>1244306</b> (1224306 in Canada)	√				6′ (1.8m)	Standard hooks, 3600 lb. Gates			
1244311	√				6′ (1.8m)	1 standard/1 aluminum rebar hook, 3600 lb. Gates			
1244321	√				6′ (1.8m)	1 standard/1 flat steel rebar hook, 3600 lb. Gates			
1244406 (1224406C in Canada)		√			6′ (1.8m)	3 standard hooks, 3600 lb. Gates			
1244413		<b>√</b>			6′ (1.8m)	Choker web loop, standard hooks, 3600 lb. Gates			
1244409		√			6′ (1.8m)	1 standard/2 aluminum rebar hooks, 3600 lb. Gates			
1244412		√			6′ (1.8m)	1 standard/2 flat steel rebar hooks, 3600 lb. Gates			
1244456		√			6′ (1.8m)	1 Standard/2 flat steel rebar hooks + D-ring, 3600 lb. Gates			
1244610 (1244610C in Canada)	√		√		6′ (1.8m)	Standard hooks, 3600 lb. Gates			
<b>1244630</b> (1244630C in Canada)		√	√		6′ (1.8m)	Standard hooks, 3600 lb. Gates			
1244633		<b>√</b>	<b>√</b>		6′ (1.8m)	1 standard hook/2 flat steel rebar hooks, 3600 lb. Gates			
1244650	√			√	6' (1.8m)	1 standard hook, 3600 lb. gate, 1 tie-back cara- biner, 5000 lb. gate			
1244675		√		√	6′ (1.8m)	1 standard hook, 3600 lb. gate, 2 tie-back cara- biner, 5000 lb. gate			

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

#### WRAPBAX™2 TIE-BACK SHOCK ABSORBING LANYARDS

WrapBax<sup>\*\*</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<sup>™</sup>2 Tie-Back Single Leg **1241906** 

(1221906C in Canada)

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

NOTE: Available in Canada where specified above.







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.



NOTE: FORCE2™ Lanyards are not CSA approved.

#### POSITIONING & RESTRAINT LANYARDS

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

Wall-Form Assembly
• Twist link chain or 1" (25mm) polyester web, fits most wedge bolt slots or holes on wall-forms.

		P	OSITIONIN	IG & REST	RAINT	
	Model #	Model # Type		Double Leg	Length	Connectors
	<b>1231106</b> (1201106 in Canada)	Positioning web	√		6′ (1.8m)	Standard hook, 3600 lb. Gates
9	1231016 (1201016C in Canada)	Positioning web	√		6' (1.8m) adjustable	Standard hook, 3600 lb. Gates
	1232354	1232354 Positioning 1/2" (12.7mm) twisted rope			6' (1.8m)	Standard hook, 3600 lb. Gates
	1232209	Positioning 1/2" (12.7mm) twisted rope	√		6' (1.8m) adjustable	Standard hook, 3600 lb. Gates
	1232402	Positioning ½" (12.7mm) twisted rope	√		15' (4.5m)	Standard Hook, 3600 lb. Gates
	5920050 Chain rebar assembly			√	20.5" (51cm)	2 standard, 1 flat steel rebar hook, 3600 lb. Gates
	1231380 Web rebar assembly (1201380 in Canada)			√	18" (45cm)	2 standard, 1 aluminum rebar hook , 3600 lb. Gates
	5904350	Chain Wall-Form assembly		√	16" (40cm)	2 standard, 1 wall-form hook, 3600 lb. Gates

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

1245006



#### **Rope Lanyard** ½" (12.7mm) nylon rope 1232354 (Not available in



#### Web Lanyard

1" (25mm) polyester constructed webbing 1231106 (1201106 in





### **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, roof anchors, beam clamps, rail sliders, trolleys, eyebolts and shepherd hooks.





## ANCHORAGE CONNECTORS FOR CONCRETE

These anchors are secured to the concrete decks and columns. They provide the worker safety and mobility when performing leading edge work.



## ANCHORAGE CONNECTORS FOR ROOFS

Roof anchors are available in a variety of designs in order to match the roof being worked on. These anchors must include specialized components to keep the worker safe without causing damage to the structure.

# ANCHORAGE CONNECTORS FOR STFFI

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.

# 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 technicians can provide guidance on which anchorage connector will best fit your applications.

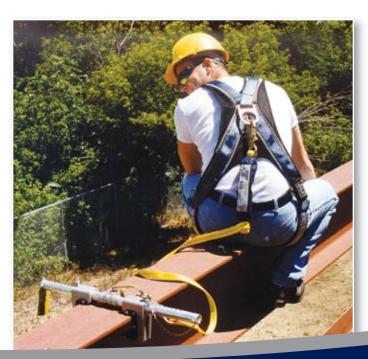
#### **Testing**

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 SEI, an independent, non-profit testing and certification company accredited by ANSI and the Standards Council of Canada (SCC).

#### **VACUUM ANCHORS**

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 work on a tank, vessel or large steel structure, they'll always be able to quickly, easily put themselves where they need to be—without putting themselves in danger.





### 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**

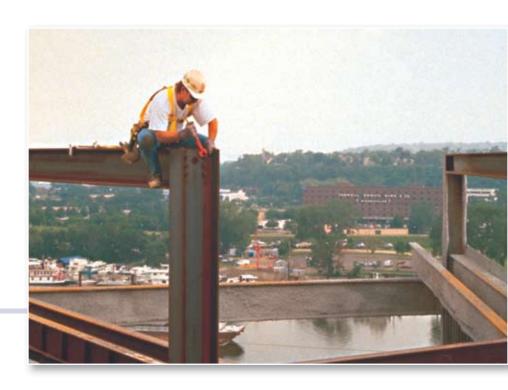
Snap hooks and carabiners used for fall protection must be capable of withstanding a 5,000 lbs. (22kN) load and be proof-tested to at least 3,600 lbs. (16kN). Many connectors manufactured outside the United States will not meet these strict requirements.

Features	Benefits	SAFLOK® CARABINERS	PATENTED SNAP HOOKS
Maximum strength	Safety	√	√
One- handed Operation	Ease of use	√	√
Range of gate openings	Versatility	√	
Self-locking & closing	Safety	√	√
Corrosion resistant	Durability	√	√



# 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.





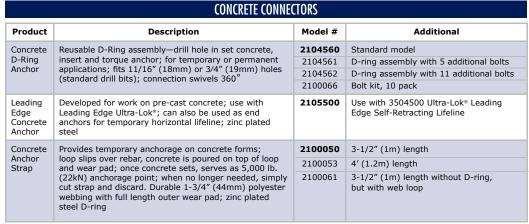
ANCHORAGE CONNECTORS				
Product	Description	Model #	Additional	
Tie-Off Adaptor	Pass thru design provides a safe and easy way to	1003000	3' (.9m) length	
	anchor a fall protection device to an overhead location and beyond normal reach. 1-3/4" (44mm) polyester strap, 3" (76mm) wear quard, zinc plated steel hardware	1002103	3' (.9m) length Adjustable	
	(	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 & 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	Stainless steel plate, zinc plated D-ring	
		2101634	Raw steel	
		2101632	Painted	
		2101636	All stainless steel	
First-Man-Up* System	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	
		2104527	6'-12' (1.8-3.6m), 3600 lbs Hook	
		2104528	8'-16' (2.4-4.8m), 3600 lbs Hook	
		2104530	6'-12' (1.8-3.6m), 3600 lbs & Original Hook	
		2104531	8'-16' (2.4-4.8m), 3600 lbs & Original Hook	
		2104522	Snap Hook Connector Tool, Original	
		2104529	Snap Hook Connector Tool, 3,600 lbs.	
Door Jamb Anchor	Non-penetrating anchor designed to install against door or window jambs. Fits opening sizes 21.5" to 51.5" (54.6 to 130.8cm), weighs 14 lbs. (6.3kg)	2100080	Fits openings from 21.5" to 51.5" (54.6cm-130.8cm)	
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 reduce the fall distances & minimize swing falls.	

### **ANCHORAGES AND ANCHORAGE CONNECTORS**



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" (63 to 304mm) wide, larger models available		
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 Sliding Beam Anchor	2110941	For complete horizontal mobility, designed for use with the Force2" 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		

















2000114

Product	Description	Model #	Additional
Carabiners saf	Tanana janana ja	2000106	1-3/16" (30mm) gate opening
		2000113	1-3/16" (30mm) gate opening, 3,600 lb rated gate
		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

NOTE: All part numbers are the same in Canada.



#### DEPENDABLE ROOF ANCHORS FOR EVERY NEED

When you are on the roof of a residential or commercial structure, flat or sloped, your fall protection system needs specialized components to keep you safe and secure without causing damage to the roof. DBI-SALA's easy to use, economical roof anchorages provide the exact solution you need for reliable safety that meets the latest OSHA and ANSI standards.

		RO	OF ANCHORS	
Product	Model #	Fastener Type	Roof Type	Description
Reusable Roof Anchor	2103676	Nails	Flat or sloped wood	Nail into the sheathing and joist, rafter, etc.; includes twenty 16D nails for single use
Reusable Roof Anchor	2103673	Nails or lag screws	Flat or sloped wood	Removable and reusable after inspection; nail (twelve 16D) or bolt (six 1/4" x 2-1/2" (6 X 54mm) or longer lag screws) into roof member.  This anchor can be used in conjunction with the synthetic horizontal lifeline system, 7000506
Permanent Roof Anchor	2103670	Built-in clamp	Flat or sloped wood	Clamps onto roof member; complete with flashing to prevent leakage; fits up to 2 x 8' roof truss, joist or rafter
	2103671	Built-in clamp	Flat or sloped wood	Fits 2 x 10's and 2 x 12's
Roof Top Anchor for metal, wood, & concrete	2100075	Lag screws, rivets, metal screws, or concrete anchors	Flat wood, metal or concrete	Designed to mount to corrugated steel or wood sheathing structures, or concrete - fasteners not included
Roof Top Anchor for membrane & built-up	2100076	5.5" (140mm) Toggle bolts	Membrane or built-up	Designed to mount to membrane or built-up roofing structures, fasteners included.
	2100077	10.5" (267mm) Toggle bolts	Membrane or built-up	Designed to mount to membrane or built-up roofing structures, fasteners included.
Reusable Swiveling Roof Anchor	2105683	Wood or metal screws	Flat or sloped wood or metal	Portable & reusable on sloped or flat wood and metal decking; 360° mobility, no special tools required for installation; fits 30' or 50' (9m or 15m) Ultra-Lok® SRL (not included); additional D-ring anchor point; fall arrest rated
Standing Seam Roof Anchor	2103675	Built-in clamp	Flat standing seam metal	360° swivel; portable & reusable on minimally sloped or flat standing seam roofs; no special tools required for installation; fits 30 or 50′ (9m or 15m) Ultra-Lok® SRL (not included); telescoping adjustment legs fit 24″, 30″, 32″, and 36″ (60cm, 75cm, 80cm, 90cm) seam spacing
Reusable Roof Anchor Kit	2104169	Nails	Flat or sloped wood	Includes 2103676 anchor, 1224005 rope adjuster/ lanyard, 1103513 harness, 1202794 lifeline x 50' (15m), 5901583 counterweight, 9511597 bag
Reusable Roof Anchor Kit	2104168	Nails or lag screws	Flat or sloped wood	Includes 2103673 anchor, 1224005 rope adjuster/ lanyard, 1103513 harness, 1202794 lifeline x 50' (15m), 5901583 counterweight, 9511597 bag
Freestanding Counterweight Anchor	7255000	Weights	Variety of flat roof surfaces up to 5% grade or slope	Non penetrating design does not attach to working surface, reducing the possibility of damage. Built-in shock absorbing post provides added safety to user and structure. Fall arrest and restraint rated for one worker for jobsite versatility.

 $\label{eq:NOTE:All part numbers are the same in Canada.}$ 

#### **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.

	KUFE LIFELINES						
Model #	Length	Rope Type	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 Adjuster Lanyard 1224005 (Not available in Canada)

Lad-Saf® Static Wire Rope Grab 5000338

# LAD-SAF® FLEXIBLE CABLE LADDER SAFETY SYSTEM

The Lad-Saf® shock absorbing design uses an elastomeric impact attenuator to reduce the forces imposed on the ladder structure. The swiveling Lad-Saf® sleeve prevents falls by locking onto the cable. It is easily attached or removed anywhere along the cable and automatically follow as you climb or descend.

Easily install the Lad-Saf® system with standard wrenches. The unique built-in tension indicator tells you precisely when the system is at the proper tension. System is galvanized for a maintenance free life. For harsh environments, use the complete stainless steel system. Nonmetallic cable guides reduce cable wear, permitting you to ascend or descend unhindered. They also protect both the Lad-Saf® system and the climbing structure.



Typical Lad-Saf® Install Diagram

ROPE GRABS						
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.		



# 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 used in a variety of situations, but are primarily used to provide movement and protection of users in a vertical work area. The SRL should be anchored to a location directly above the user. SRL's can also be used 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®	Rugged, highly engineered devices that can be counted on for user safety, efficiency and comfort	General construction     Commercial roofing     Residential roofing     Warehousing (web)     Order picker	Heavy duty poly- urethane	√	√	√ (cable) OPTIONAL (web)	V	
SALA- Lok™	Stacking the blocks is made possible thanks to circular ribs and grooves on the surface of the housings, which fit together.	General construction     Maintenance	Thermo plastic	V	V	V	√	
Sealed	Patented technology separates com- ponents from grease, moisture and dirt for the most durable, rugged unit available on the market	Oil & gas Construction Utility & maintenance	Heavy gauge stainless steel and aluminum	√	√	√	√	
Heavy Duty Compact	Rugged, highly engineered devices that can be counted on for user safety, efficiency and comfort	General construction     Maintenance	Heavy duty aluminum	√	V	√ (cable) OPTIONAL (web)	√	
Talon™ Web	Compliant and dependable quality SRL's, yet economical	Order pickers     General construction	Nylon	<b>√</b>	<b>V</b>	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
- Stainless steel working components for corrosion resistance
  Durable polyurethane housing and aluminum side plates
- Anti-racheting, twin disc brake system limits arresting forces to 900 lbs. (4kN) or less
- Smooth performance
- Fast, easy connection and greater flexibility

Ultra-Lok® 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). Mounts into DBI-SALA's leading edge concrete anchor to form a complete swivel system that won't twist or tangle.

3504500

#### SALA-LOK™ STACKABLE SRL

Compact & Stackable SRL is the only device on the market designed to meet user's storage needs!

- Innovative housing allows the units to fit together
- Anti-racheting, twin disc brake system limits arresting forces to 900 lbs. (4kN) or less
- Thermoplastic housing
- Pivoting attachment ring

**SALA-Lok™ SRL** 30 ft. of 3/16" galvanized steel cable, swiveling impact indicator hook

**SALA-Lok™ SRL** 30 ft. of 3/16" stainless steel cable, swiveling impact indicator hook **3507002** 



ULTRA-LOK® SELF RETRACTING LIFELINES - WEB						
Model #	Length Line Type Connecto					
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	Swivel hook			

ULTRA-LOK® SELF RETRACTING LIFELINES — CABLE						
Model #	Length	Line Type	Connector			
3504430	30' (9m)	Galvanized 3/16" (5mm)	Swivel hook			
3504431	30' (9m)	Stainless 3/16" (5mm)	Swivel hook			
3504433	20' (6m)	Galvanized 3/16" (5mm)	Swivel hook			
3504434	20' (6m)	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			

SALA-LOK™ STACKABLE SELF RETRACTING LIFELINES - CABLE					
Model # Length Line Type Connector					
3507001	30′ (9m)	Galvanized 3/16" (5mm)	Standard hook		
3507002	30′ (9m)	Stainless 3/16" (5mm)	Swivel hook		

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

#### **SEALED SELF RETRACTING LIFELINES**

DBI-SALA Sealed SRL's incorporate a revolutionary **patented** sealed technology that separates all dynamic components from foreign elements such as grease, moisture and dirt. Unparalleled in the industry, this true-seal equipment ensures efficient, safe operation under all working conditions.

 Most durable, rugged unit available on the market

 Self-adjusting disc brake limits arresting forces to 900 lbs. (4kN) or less

 Aluminum and stainless steel, heavy gauge housing that resists damage from impacts and ensures long lasting, reliable performance

 50' (15m) 3/16" (5mm) galvanized steel wire rope for durability. Available in 85' (25m) and 130' (39m) lengths and 175' (53m) non-sealed version

 Optional 3-way retrieval winch mechanism for efficient and convenient rescue operations Sealed-Blok™ Self Retracting Lifeline 30' (9m) cable 3400800

Sealed Self Retracting Lifeline 50' (15m) cable 3403400

NOTE: In Canada add a 'C' to the end of the Part Numbers shown - ie : 3400800C. 3400610 is NOT CSA approved.

SEALED SELF RETRACTING LIFELINES						
Model #	Length	Line type	Connector			
3400800	30' (9m)	Galvanized 3/16" (5mm)	Swivel hook			
3400825	15' (4.5m)	Galvanized 3/16" (5mm)	Swivel hook			
3403400	50' (15m)	Galvanized 3/16" (5mm)	Swivel hook			
3403401	50' (15m)	Stainless 3/16" (5mm)	Swivel hook			
3403500	85' (26m)	Galvanized 3/16" (5mm)	Swivel hook			
3403501	85' (26m)	Stainless 3/16" (5mm)	Swivel hook			
3403600	130' (39m)	Galvanized 3/16" (5mm)	Swivel hook			
3403601	130' (39m)	Stainless 3/16" (5mm)	Swivel hook			
3400610	175' (53m)	Galvanized 3/16" (5mm)	Swivel hook			
3403402	50' (15m)	Galvanized 3/16" (5mm)	Swivel with retrieval hook			

#### HEAVY DUTY COMPACT SELF RETRACTING LIFELINES

These compact self retracting lifelines are built to last and incorporate a high strength aluminum housing.

- Compact and lightweight design
- Durable aluminum housing
- Web or cable lifeline for versatility
- Anti-ratcheting, self-adjusting disk brake limits arresting forces to 900 lbs. (4kN) or less

Heavy Duty Self Retracting Lifeline 11' (3.3m) cable 3506000



HEATT DOTT COMPACT SEEF RETRACTING EMEETINGS						
Model #	Length	Line type	Connector			
3103020	11' (3.3m)	Web 1" (25mm) nylon	Standard hook			
3103031	11' (3.3m)	Web 1" (25mm) nylon	Swivel hook			
3506000	11' (3.3m)	Galvanized 3/16" (5mm)	Standard hook			

HEAVY DUTY COMPACT SELF RETRACTING LIFELINES

NOTE: In Canada add a 'C' to the end of the Part Numbers shown - ie : 3506000C.

#### 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<sup>™</sup> Twin Leg Self Retracting Lifeline 6′ (1.8m) 3102000

IALON" 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	
3102000	6′ (1.8m)	Twin	1" (25mm) Nylon web	Rebar aluminum hook	
3102003	6′ (1.8m)	Twin	1" (25mm) Nylon web	Rebar steel hook	
3101300	9.5′ (3m)	Single (tie-back)	1" (25mm) Nylon web	5000 lb. tie-back snaphook	
3102100	7.5′ (2.2m)	Twin (tie-back)	1" (25mm) Nylon web	5000 lb. tie-back snaphook	

TALONM CEDIEC CELE DETDACTING LIFELINEC

NOTE: In Canada add a 'C' to the end of the Part Numbers shown - ie : 3101000C - EXCEPT for items 3102000, 3102003, & 3102100 - these part numbers are the same in Canada.



#### **DBI-SALA**

# HORIZONTAL LIFELINE SYSTEMS

### The Most Thoroughly Engineered 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

#### **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.

#### LINE

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.

#### **ADJUSTABLE TERMINATION**

Adjustable Termination construction 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.

#### PRECISION ENGINEERING

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 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.



#### **Evolution™ Permanent Horizontal Lifeline Systems**

Evolution is a permanently installed horizontal lifeline system that is completely customizable—straight or curved systems and unlimited length. The system offers multiple users the ability to be fully protected, working hands-free, bypassing intermediate bracket points without unhooking from the lifeline. The system can be installed in various orientations to suit site requirements including above or at the user's feet. We have a complete network of certified installers to custom design, price and install these systems. Please call us for details or visit www.horizontallifeline.com to locate an installer near you.



#### **Permanent vs. Portable**

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™ 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.

#### STANCHIONS

Stanchions are usually included as part of a complete and portable horizontal system. The style of stanchions affects the distance of the span, the weight and portability of the system, and what the system connects to.





# Superior technology for more confidence in your horizontal fall protection

			SELECTION GUI	DE			
_	Product	Description	Recommended For	Installation	Energy Absorber	Cable	No. of Users Up to:
T termina	SecuraSpan®	<b>Temporary</b> Extremely lightweight and affordable engineered system	Construction     Steel erection     Bridges     Pipe racks	Single clamp anchor on stanchion base	Zorbit™	7x19 - 3/8" (9.5mm) galvanized	6 2 per span
	SecuraSpan® Pour-In-Place	Temporary Simple & versatile system mounts into sleeve that is casted into the concrete during the intial pour	Parking decks     Concrete construction	Stanchion slides into casted in place sleeve	Zorbit <sup></sup>	7x19 - 3/8" (9.5mm) galvanized	6 2 per span
	Iron Wing™	<b>Temporary</b> Strong, versatile system that can accommodate larger beams	Heavy construction     Bridge work     Pipe racks	Easy to install with instructional video	In-line energy absorber	7x19 - 3/8" (9.5mm) galvanized	6 2 per span
	Concrete Iron Wing™	Temporary Simple and versatile system designed for multiple applications— prestressed concrete beams, shear connector studs or steel I-beams	Concrete construction     Bridges	Easily installed with standard torque wrench	Zorbit™	7x19 - 3/8" (9.5mm) galvanized	6 2 per span
	Sayfline™ Horizontal Lifeline System - Synthetic	Temporary The lightest synthetic portable horizontal lifelines available	Plant maintenance Bridge work Construction Manufacturing	Easy with no special tools or equipment	In-line energy absorber	Kernmantle rope	2 users
	Sayfline™ Horizontal Lifeline System - Cable	<b>Temporary</b> The lightest cable portable horizontal lifelines available	Plant maintenance     Bridge work     Construction     Manufacturing	Easy with no special tools or equipment	Zorbit™	7x19 - 3/8" (9.5mm) galvanized	2 users
	Portable Guard Rail™ System	Portable Free-standing, portable fall prevention system that requires no surface attachments	Rooftops     Leading edges     Holes or openings     on roofs or floors	Easy – no tools	None required	N/A	N/A
	FlexiGuard™ Portable Guard Rail™ System	Temporary Free-standing, portable fall prevention system that clamps to wood or concrete	Rooftops     Leading edges     Holes or openings on roofs or floors     Bridge work     Construction	Easy with no special tools or equipment	None required	N/A	N/A
	EZ-Line™ Horizontal Lifeline System - Cable	<b>Temporary</b> The easiest horizontal lifeline to install today	Plant/Facility     Maintenance     Pipe Racks	Very easy – no special tools required	Internal friction brake	7x19 - ¼" (6.25mm) galvanized	2 users







#### FLEXIGUARD™ PORTABLE GUARD RAIL SYSTEM

Traditional fall protection is represented by a worker using a PFAS (Personal Fall Arrest System) - full body harness connected to an anchor point with a lanyard. PFAS are actually one of the later choices in a comprehensive fall protection program. The first step should be an attempt to eliminate fall hazards altogether. This may be accomplished with a modification to the job description, work process and/or work area to eliminate the need to work at height. The next step is to use fall prevention systems such as DBI-SALA's FlexiGuard™ Portable Construction Guardrail system. This system acts as a barrier that prevents personnel from falling to lower levels, thus eliminating the fall hazard. Used properly, systems like this protect the greatest number of employees with little or no training, no special maintenance and no special gear.

- Mounts in both parapet and edge grab configurations
- Clamp expands from 6" to 24" (15.25cm to 61cm)
- Supports both wood or concrete structures
- Durable zinc plated finish
- Supports both top and mid-rail guardrails
- Designed to be used with standard wood 2x4's

**7901000** FlexiGuard™ Portable Construction Guardrail Stanchion



#### PORTABLE GUARD RAIL™ SYSTEM

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

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

#### Portable Guard Rail™ 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

7900012 10' (3m) Guard Rail only

7900005 Splice Kit for Guard Rail



 $\begin{array}{l} \textbf{POUR-IN-PLACE SECURASPAN}^{\texttt{B}} \ \textbf{SYSTEM} \\ \textbf{SecuraSpan}^{\texttt{B}} \ \textbf{is a horizontal system that installs to column tops providing workers an} \end{array}$ overhead tie-off point and fall protection during the decking process. The stanchion (aluminum pole) simply slides into the embedded pour-in-place sleeve and does not require "tie-back" for fast installation. Single span or multi-span configurations are available for complete worksite flexibility. The system can be configured to run indefinitely and handle up to 6 workers (2 workers per span max.). Span between intermediates can be as great as 60' (18m) depending upon your clearance requirements.

7400220	20'	(6m)	system
7400230	30'	(9m)	complete sy

system **7400240** 40′ (12m) complete system **7400250** 50′ (15m) complete system

**7400260** 60′ (18m) complete system

#### **Customize Your System**

7400203: Stanchion, 7' 6" tall 7400204: Pour-in-Place sleeve 7400200: Intermediate bracket

CLLARANCE CHART		
Span ft. (m)	Clearance ft. (m)	
0-10 (0-3.0)	6′ 11″ (2.1)	
10-20 (3.0-6.1)	8′ (2.4)	
20-30 (6.1-9.0)	9′ 1″ (2.8)	
30-40 (9.0-12.3)	10′ 2″ (3.1)	
40-50 (12.3-15.4)	11′ 4″ (3.5)	
50-60 (15.4-18.5)	12′ 5″ (3.8)	

CLEARANCE CHART

#### SECURASPAN® HORIZONTAL LIFELINE SYSTEM

The extremely lightweight stanchions can be configured into a complete engineered fall protection system for steel erectors. 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
- Fast installation with a simple clamp anchor
- Unlimited system length provides 100% protection and flexibility
- Zorbit™ energy absorber with turnbuckle
- Standard size fits 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 lengths available in 10' (3m) increments

#### SECURASPAN® CLEARANCE

(required above lower level or obstruction)

(required above lower level of 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.

#### SecuraSpan® Systems

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

**Customize Your System** 

Stanchion, its flange up to 12" (30cm) wide & 2-1/4" (5.7cm) thick Stanchion, fits 18" (45cm) wide & 2-1/4" (5.7cm) thick Stanchion, fits 24" (60cm) wide & 2-1/4" (5.7cm) thick 7400001: 7400035: 7400031: 7400036: Stanchion, fits 36" (91cm) wide & 2-1/4" (5.7cm) thick

Stanchion, fits flange up to 12" (30cm) wide & 3-3/8" (8.4cm) thick Stanchion fits 18" (45cm) wide & 3-3/8" (8.4cm) thick Stanchion fits 24" (60cm) wide & 3-3/8" (8.4cm) thick Stanchion fits 36" (91cm) wide & 3-3/8" (8.4cm) thick 7400015: 7400032:

7400033: 7400034: 7400008: Intermediate Bypass bracket kit

20' (6m) cable assembly with turnbuckle and Zorbit"
(last 3 digits in Part # detail length) 7403020:

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



#### IRON WING™ PORTABLE HORIZONTAL LIFELINE SYSTEM

The easy to install, fully customizable Iron Wing™ System is ideal for larger beams and multi-span length systems. Strong and robust, it is carefully engineered for continuous fall protection while providing freedom of movement. The 3-point claw/ contact system offers reliability without tie-back, reducing trip fall hazards.

- · All metallic system, designed for durability and safety
- Galvanized cable lifeline offset from the beam by 12" (30cm) for easy passage and elevated 40" (100cm) for use as a handrail
- DBI-SALA 3-point claw/contact system offers reliability without tie-back, reducing trip fall hazards
- Internal in-line energy absorber
- Instructional video

Iron Wing™ Systems

7003020 20' (6m) system 7003030 30' (9m) system 7003040 40' (12m) system 7003050 50' (15m) system 7003060 60' (18m) system



#### IRON WING™ CLEARANCE

(required above lower level or obstruction)

	1-2 Users	
Span Length	6' (1.8m) Lanyard	1-2 Users SRL
0-10' (3m)	17'-6" (5.3m)	9'-6" (2.9m)
10'-20' (3-6m)	18'-4" (5.5m)	10'-4" (3.1m)
20'-30' (6-9m)	19'-2" (5.8m)	11'-2" (3.4m)
30'-40' (9-12m)	19'-9" (5.9m)	11'-9" (3.5m)
40'-50' (12-15m)	20'-7" (6.2m)	12'-7" (3.8m)
50'-60' (15-18m)	21'-5" (6.4m)	13'-5" (4m)

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

#### **Customize Your System**

7006606: Stanchion with energy absorber 7006608: Stanchion - intermediate 7006602: Stanchion - standard

**7000000:** Cable assembly w/turnbuckle, 20-100' (6-30m) lengths available in

10' (3m) increments (last 3 digits in part # detail length)

Cable with swage fitting, 20-100' (6-30m) lengths available in 10'

(3m) increments (last 3 digits in part # detail length)

7006925: Front extension to fit 12"-18" (30-45cm) flange 7006926: Front extension to fit 18"-24" (45-60cm) flange

#### EZ-LINE™ CABLE RETRACTABLE HORIZONTAL LIFELINE SYSTEM

- Retractable lifeline pulls out for installation and retracts with built-in winch
- Customize 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™ Cable Systems**

7605060 60' (18m) long 7605063 40' (12m) long (Canada only)

EZ-LINE™	CLEARANCE
(required above lov	ver level or obst

Span Length	1 User 6' (1.8m) Lanyard	2 Users 6' (1.8m) Lanyard	1 User SRL	2 Users SRL
0-10' (3m)	18'-2" (5.5m)	19' (5.8m)	7′-5″ (2.3m)	8'-2" (2.5m)
10'-20' (3-6m)	18'-10" (5.7m)	20'-3" (6.2m)	8' (2.4m)	9'-0" (2.7m)
20'-30' (6-9m)	19'-6" (5.9m)	21'-6" (6.6m)	8'-7" (2.6m)	9'-10" (3.0m)
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)

#### CONCRETE AND I-BEAM PORTABLE HORIZONTAL LIFELINE SYSTEM

A simple and versatile horizontal system specifically designed for multiple applications!

The system gives you an easy-to-install tie-off point before decking or other fall protection is available. The Portable Horizontal System connects to rebar or prestressed concrete beams, shear connector studs or directly to steel I-beams with an optional adaptor. The stanchions are adjustable from vertical 20° left or right for easy passage or completely horizontal for transportation to the jobsite.

- Complete system includes stanchions, cable assembly and Zorbit™ energy absorber
- · Easily installed with a standard torque wrench
- Provides 100% tie-off for two workers per span, six per system, traverse entire system without disconnecting
- Single span systems up to 60' (18m), multi-span systems for unlimited distances.



#### PORTABLE HLL 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.

#### **Customize Your System**

7006334:	Additional stanchion
7006333:	Additional tie-back assembly (must use with stanchion on each end of system)
7006335:	I-Beam Adaptor Base for stanchion – fits $10^{\prime\prime}$ to $25^{\prime\prime}$ (25 to 63cm) flange width, $1/2^{\prime\prime}$ to $3^{\prime\prime}$ (1.25 to 7.6m) thick
7006340:	I-Beam Tie-Back Assembly

7403020: 20' (6m) cable assembly with turnbuckle and Zorbit" (last 3 digits in Part # detail length)

#### **Concrete HLL Systems**

7003520	20' (6m) system
7003530	30' (9m) complete system
7003540	40' (12m) complete system
7003550	50' (15m) complete system
7003560	60' (18m) complete system

NOTE: All part numbers shown on

#### SAYFLINE™ SYNTHETIC HORIZONTAL LIFELINE SYSTEMS

The Sayfline 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 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



SYNTHETIC SAYFLINE™ CLEARANCE				
	(required ab	oove lower level or obstruction	on)	
Span Length	1 User 6' (1.8m) Lanyard	2 Users 6' (1.8m) Lanyard	1 User SRL	2 Users SRL
0-10' (3m)	19'-1" (5.7m)	19'-5" (5.8m)	7'-11" (2.4m)	8'-11" (2.7m)
10'-20' (3-6m)	19'-5" (5.8m)	21'-5" (6.4m)	8'-5" (2.5m)	10'-3" (3.1m)
20'-30' (6-9m)	19'-9" (5.9m)	23'-4" (7m)	8'-10" (2.7m)	11'-6" (3.5m)
30'-40' (9-12m)	21'-3" (6.4m)	25'-9" (7.7m)	9'-4" (2.8m)	12'-9"(3.8m)
40'-50' (12-15m)	22'-6" (6.8m)	27'-11" (8.4m)	11'-3" (3.4m)	15'-6" (4.7m)
50'-60' (15-18m)	23'-10" (7.2m)	30'-2" (9.1m)	13'-2" (4m)	18'-3" (5.5m)

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

#### SAYFLINE™ CABLE HORIZONTAL LIFELINE SYSTEM

The cable Sayfline" 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" 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™ (	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 CLEAKANCE		
(require	ed above lower level or obstru	iction)
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)

CADLE CAVELINEM CLEADANCE

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 systems is also available to customize your own system with added safety.

7401031	Zorbit™ 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™ 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, silo 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.





#### **SNAP HOOKS**

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



# 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.

# What to look for in a Netting System



#### **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° vs. 300° 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.

#### **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.



#### **ADJUSTABILITY**

The patented DBI-SALA Adjusta-Net™ is the only personnel net on the market that can be adjusted to fit the work area.



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

	SELECTION GUIDE							
Product	Description	Recommended For	Material	Adjustable Size	UV / Fire Retardant Treatment	Used as Guard Rail	Installation	
Pour-In Place Net	<b>Debris</b> Protection around floor openings during con- struction	Construction	Nylon	V			Cable ties	
Adjust- A-Net™	<b>Personnel</b> The only adjustable personnel netting system on the market	Construction Bridges & Towers Chemical plants Cooling towers Power plants Drilling rigs Refineries Silos Dams Ships	Nylon	<b>√</b>	V		Can be installed to steel or concrete using cable with related hardware (not included)	
Vertical Net	<b>Debris</b> The most complete and cost-effective debris containment and guard rail system on the market	Construction     Bridges	Polypro- pylene		V	√	Snap-on cable clips and tie-down plates	
Perimeter Net	<b>Debris</b> The first lightweight system for rigging nets around the perimeter of new concrete buildings	Concrete construction     Steel construction	Nylon	√	√		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	
Floor-to-Ceiling Net	<b>Debris</b> Provides perimeter protection and complete containment of project debris during high rise construction	Construction	Nylon		√	V	Snap-on cable clips and tie-down plates	
Flying Form Net	<b>Debris/Personnel</b> Provides fast, easy, and safe fall protection while placing form decking	Construction	Nylon		V		Attaches to form trusses with snap hooks	



#### POUR-IN-PLACE NETTING SYSTEM

Most construction sites including high-rise structures contain small floor openings such as stairwells or elevator shafts that create fall hazards for workers. A common way to abate the hazard is to cover the openings with planking or plywood which is often improperly fastened or secured creating a false sense of security. DBI-SALA's Pour-In-Place Netting System is the solution, providing safe and secure fall protection as well as debris retention for personnel working on the protected floors.

- Provides passive fall arrest & debris retention
  Innovative netting design
  Net is sized on site for custom fit

- Durable nylon mesh Fast and easy removal
- Extremely economical

4102001: Pour-In-Place Netting System, 8' x 50' (2.44m x

15.25m) strip of 375 nylon mesh, and 25 plastic cable ties. **4102002:** Pour-In-Place Netting System, 8' x 100' (2.44m x 30.5m) strip of 375 nylon mesh, and 25 plastic cable ties.

Custom Sizes are Available, Contact Capital Safety for Information.



#### ADJUST-A-NET™ 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™, 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™ structural integrity.
- Rugged steel snap hooks are placed every 48" (1.2m). Staggered spacing on opposite sides allows any size Adjust-A-Net™ 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.



	ADJUST-A-NET™						
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					
	snan books and webstrans included						

#### FLOOR-TO-CEILING NETTING SYSTEM

During the construction of high rise structures, substantial debris is created on the floors of the building. Standard vertical barriers typically are 42" (105cm) tall. Debris is often knocked or blown over the top of these barriers creating a hazard to workers, public and the surrounding properties below. "Floor-to-Ceiling" panels provide complete containment of project debris and workers. Multiple floors are protected while work is progressing prior to clean up. Once clean up is complete the netting is rotated upward ahead of the cladding or glazing operations as the structure progresses upward. Panels are easily installed to a top and bottom cable and are reusable throughout the life of the project.

- Provides passive fall arrest & debris retention
- · Innovative netting design
- Custom sizing available Durable nylon mesh
- Fast and easy installation

4102000: Floor-To-Ceiling Vertical Net System, 3-layer netting with snap hooks, 9'-6" tall x 30' wide (2.9m x 9.15m)

4195436: Fastener Plates, 16-Pack (optional)

Custom Sized Net Systems Available -Contact Us For Further Details



#### FLYING FORM NETTING SYSTEM

Many of today's multi-story buildings are built using "flying forms" to construct the concrete floors of the structure. These forms typically consist of a series of trusses which support a forming deck. Once a floor is poured the truss supports are lowered from the pour, pulled from the building, and flown, using a crane, to the top of the building to repeat the process for the next floor. While the workers are placing the forming deck they are exposed to falls of greater than 6 ft. (1.8m). It becomes very difficult to protect the workers using standard fall protection equipment as no structure exists above the workers to provide an anchorage for tie-off.

- Provides passive fall arrest & debris retentionOne time installation
- ustom sizing required UV protected nylon mesh

4102003: Flying Form Netting System (specify size)



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				





#### BORDER GUARD™ DEBRIS NET SYSTEM

The DBI-SALA BorderGuard<sup>™</sup> perimeter net debris system is the first lightweight system for rigging nets around the perimeter of new concrete buildings. 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. 10' (3m) arms 2 ea. 1/2" (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

#### 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 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.

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 sewers, tanks or silos, 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.



# 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.

#### 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.

#### **ACCESSORIES**



# 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.



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



#### **PORTABILITY**

The Rollgliss® Self Rescue Kit is probably the simplest rescue system on the market.



# 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!

Model #

8000000

8000010

- 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



#### 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)	1/4" (6.25mm) Galvanized cable	36 lbs. (16.2kg)
8102009	SALALIFT® II Winch	90' (27m)	3/16" (5mm) Galvanized cable	36 lbs. (16.2kg)
8102005	SALALIFT® II Winch	120' (36m)	3/16" (5mm) Galvanized cable	36 lbs. (16.2kg)

Description

Aluminum Tripod

Aluminum Tripod

Heiaht

7' (2.1m)

9' (2.7m)

Weight

47 lbs. (21kg)

56 lbs. (25kg)



#### 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
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.



#### TRIPOD & SALALIFT® II RESCUE SYSTEM

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.

- Complete confined space entry/retrieval system
- Includes tripod, winch and/or self retracting lifeline
   All systems are man-rated
- All mounting hardware and brackets are included

Model #	Tripod	Winch	SRL	Weight
8300030	7′ (2.1m)	60' (18m) 1/4" (6.25mm) Galvanized	N/A	83 lbs. (37.4kg)
8300032	7′ (2.1m)	90′ (27m) 3/16″ (5mm) Galvanized	N/A	82 lbs. (36.9kg)
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)

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

#### 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	Advanced Basic Hoist with Basic Winch	80 lbs. (36kg)
8515900	Adapter for Permanent Mount Bases	15 lbs. (6.75kg)



#### **COUNTERWEIGHT SYSTEM**

This system is composed of a central base unit to accommodate a variety of anchoring options, positioning and adjustment legs, and extension assemblies. Anchoring options include a weight rack for counter balanced applications, a rail clamp assembly for anchorage to railway track rails, and a wheel pad assembly to allow counter balance of the unit with an attendant vehicle.

#### System shown with the following Items:

- 8512894 Counterweight System
- 8518383 Adjustable Upper Davit Arm
- **8518560** Digital 100 Series Winch
- 3400115 3-Way Sealed SRL
- 8516824 Bracket for winch or SRL
- **8510207** Bracket for SRL

Model #	Description	Weight
8512894	Counterweight System	199 lbs. (89.5kg)



#### 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

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)
8512285	Adj. Barrel Mount Sleeve, 24" (60cm) max opening	56 lbs. (25.2kg)
8510140	Vehicle Hitch Mount Sleeve	57 lbs. (25.7kg)
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)

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







#### 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
8518560	Advanced Digital 100 Winch	60' (18m)	3/16" (5mm) Galvanized	31 lbs. (14kg)
8518558	Advanced Digital 100 Winch	60' (18m)	3/16" (5mm) Stainless	31 lbs. (14kg)



#### **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 bolt-on plate
- Comes with load limiter clutch to indicate a fall or misuse

Model #	Description	Length	Lifeline Type	Weight
8518669	Basic Winch	40' (12m)	3/16" (5mm) Galvanized	22 lbs. (9.9kg)
8518670	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® winches and 3-way sealed SRL's to attach to Advance Series Davits					
8516824	Quick release mounting bracket, mounts to Advanced Series Upper and Lower Mast					

NOTE: All part numbers above 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 LADDER

The Rollgliss® Rescue Ladder was designed to provide a means of assisted rescue after a fall has occurred. It can be anchored to a structure and dropped down to the victim's level so he or she can climb either up or down to safety. The ladder can be used by anybody that uses fall protection equipment and has been subjected to a fall, and provides a means of rescue for victims who are not unconscious. Available in 8 ft (2.4m) sections. Extra sections can be added to lengthen for specific site requirements. Ladder comes complete with three connecting carabiners enabling fast and easy anchorage to structure.

8516294 - Rescue ladder, 8 ft. (2.4m) section, synthetic, with 3 connecting carabiners and carrying bag.

8516316 - Accessory plate for mounting rescue ladder to a davit arm or single anchorage point.



 $\begin{tabular}{ll} ROLLGLISS @ SRL RESCUE DEVICE \\ The Rollgliss @ SRL Rescue Device is designed to rescue a person that has fallen while using a \\ \end{tabular}$ cable self retracting lifeline. Utilizing either the anchoring chain or anchoring cable grab that comes with the system, it can be anchored to a separate structure, around the SRL housing, or in-line with the SRL cable. Once anchored, it takes seconds to complete the installation and begin the rescue procedure. Fits self retracting lifeline cable sizes from 5/32" (4mm) to 5/16" (8mm) in diameter for complete versatility. Device has an approximate lifting ratio of 6:1 - victim is raised about 5" (12cm) per stroke for rapid rescue. 3604100





ROLLGLISS® RESCUE SYSTEM
The Rollgliss® 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® device, rope control device, anchor sling and carrying bag.

Model #	odel # Description		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



#### ROLLGLISS® RESCUE KIT

The DBI-SALA Rollgliss® 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	Rollgliss® Rescue Kit	33 ft. (10 m)	7/16" (11mm) Nylon Rope
8900293	Rollgliss® Rescue Kit	66 ft. (20 m)	7/16" (11mm) Nylon Rope
8900294	Rollgliss® 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 of fall protection and rescue equipment 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 the construction 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, and CSA, as well as your local provincial or state codes.





	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	Maintenance     Ladder climbing     Drilling     Servicing     Refineries	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	√
FIRST™	Compliant with dependable quality, yet economical	Maintenance     Shut-Downs     Refineries	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     Shut-Downs     Refineries     Aerial lift work	100% Polyester		Pass Thru	3 point or 5 point	ADJUSTABLE	Stamped forged alloy steel	Vinyl		



 $PR0^{\scriptscriptstyle{\top\!\!\!\!M}}$ CONSTRUCTION HARNESS Construction style with hip pad and removable belt 1191209

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

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

- Built-in impact indicators for easy inspection
- Spring loaded torso buckles for quick and easy adjustment
- · Meets stringent industry standards,
- including ANSI, OSHA, and CSA
   PRO" Harnesses with Comfort Padding features padding on shoulders, back and legs and quick connect buckles
- Lanyard Keepers

#### PRO™ FULL BODY HARNESSES



PRO™ **CLIMBING HARNESS** Vest style with front D-ring ideal for ladder climbing 1191273



**PRO™ STANDARD HARNESS** Vest style with back D-ring and pass thru legs 1191201



**COMFORT PADDING** Comfort Padding on shoulders, back and legs and quick connect buckles

1191253

#### PRO™ FULL BODY HARNESSES

Model & Size	Style	D-rings	Buckle Type	Hip Pad/ Belt	Belt Loops	Additional
<b>1191201</b> (M/L)	Vest	Back	Pass Thru			
1191237 (M/L)	Vest	Back	Tongue Buckle			
1191216 (M/L)	Vest	Back, Shoulder	Pass Thru			
1191273 (M/L)	Vest	Back, Front	Tongue Buckle			
1191205 (M/L)	Vest	Back, Side	Pass Thru			
1191227 (M/L)	Construction	Back, Side	Pass Thru	√	√	Shoulder pads
<b>1191209</b> (M/L)	Construction	Back, Side	Tongue Buckle	√	√	Shoulder pads
<b>1191253</b> (M/L)	Vest Comfort Padding	Back	Quick Connect			Comfort Padding
1191270 (M/L)	Construction Comfort Padding	Back, Side	Quick Connect	√	√	Comfort Padding, tongue bucket belt





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

#### FIRST™ FULL BODY HARNESSES



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

	FIRST™ FULL BODY HARNESSES									
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						

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

#### **COMPLIANCE IN A CAN**

Complete fall protection system in one handy container!

PROTECTA engineered the creation of this economical complete set-up for convenient compliance and safety on the job. Kits include one full body harness, one combined rope grab and shock absorber and rope lifeline with attached double locking snap hook (or one self retracting lifeline) and one anchor.

- Economical solution for short term jobs or stand-by inventory
- Available with different anchorage devices to fit different applications
- Available in 3-point and 5-point adjustment models

#### COMPLIANCE IN A CAN™ 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)



#### COMPLIANCE IN A CAN™ COMPONENTS

All Compliance in a Can™ versions are configured from a combination of the following items. See table.

AB17510 3-Point Harness AB17530 5-Point Harness

**1330096** 5/8" (16mm) Grab and 2' (0.6m) Shock Lanyard

AC27352 5/8" (16mm) Diameter Lifeline 50' (15m) & Snap Hook

AJ47410 Webstrap Anchor Sling AJ47406 Wire Rope Sling

AD111A 11' (3.3m) Web Rebel™ SRL





#### **COMPLIANCE IN A CAN**

Model #	Harness	Anchor Type	Rope & Rope Grab	SRL
AA7044A	3-point	Wire Rope Sling	√	
AA7046A	3-point	Webstrap Sling	√	
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: In Canada order COMPKIT51 (The Compliance In A Can models listed above are not CSA approved). Kit includes AB101C, AC203C-SA2, 50' lifeline, & AJ730A roof anchor. Other CSA approved kits available.

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

SELECTION GUIDE									
Product	Description	Recommended For	Line	Connector	Impact Indicator	Tie-back	Retraction & Expansion		
PRO™	Compliant and dependable quality, yet economical	Maintenance     Ladder climbing     Drilling & Servicing     Refineries	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	Maintenance & Lift Work     Shut-Downs     Refineries	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.



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





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





POSITIONING & RESTRAINT									
Model #	Туре	Single Leg	Double Leg	Length	Connectors				
AL305AW16 AL305CPW6 in Canada	Positioning Nylon web	√		6′ (1.8m)	2 standard hooks				
AL305A6 Not available in Canada	Positioning Twisted rope	√		6′ (1.8m)	2 standard hooks				
AF77710 Not available in Canada	Rebar chain		√	20" (51cm)	2 standard FIRST™, 1 rebar hook				

# Protecta offers the industry's widest 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				
AJ450A 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	Cable Sling	6' 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				



BEAM ANCHORS				
Model #	Product	Description		
AJ201A	Builder's Grip I-Beam Anchor	Drop forged eyebolt, fits holes with diameter of 3/4" to 7/8" (19mm-22mm); accommodates thicknesses of 1-3/8" to 1-9/16" (35mm to 39mm)		



	CARABINERS					
Model # Product Description		Description	Length			
AJ593A AJ593C in Canada			2" (5cm) Diameter opening, carbon steel, zinc plated, captive-eye option, 1.4 lbs. (.63kg)			
AJ514A	Twist Lock Carabiners	5,000 lb. (22kN) Anchor	$3/4^{\prime\prime}$ (19mm) Diameter opening, forged steel, galvanized finish, .4 lbs. (.18kg)			



Model #	Product	Description
AC202D AC202C in Canada	Static/Mobile Rope Grab	Attach or detach anywhere along the lifeline for vertical hands free operation. Fits 5/8" (16mm) diameter rope. Use with 3' (9mm) shock lanyard and can be used as a static rope grab

**ROPE GRABS** 

ROOF ANCHORS					
Model #	Product	Description			
AA7040A Not available in Canada	Compliance in a Can™	Kit includes AB17510 harness, AJ730A roof anchor, 1330096 rope grab with 2' lanyard, AC27352 rope lifeline, 50' (15m) in length			
AJ730A	Reusable Roof Anchor	Nails to sheathing, and once job is completed remove and move to next job			
<b>2103678</b> 2103678C in Canada	Permanent Roof Anchor	Permanent roof anchor is shingled-over leaving only the D-ring exposed. Provides a fall protection anchor point during initial construction as well as for the future homeowner for general roof maintenance			
2103680	Disposable Knockdown Roof Anchor	Designed to nail into sheathing and rafter. This anchor can be knocked down or shingled over when done. Pack of 12. Nails included			
<b>2190001</b> 2190001C in Canada	Swiveling Standing Seam Roof Anchor	Non-penetrating design won't damage roof. Bracket fits both Protecta and DBI-DALA self retracting lifelines as well as most others.			

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

	SELECTION GUIDE							
Product	Description	Recommended For	Housing	Impact Indicator	Connector	Swivel Hook	Housing Carabiner	
JRG™	Compliant and dependable quality SRL's, yet economical	Refinery Turn-Arounds     General Maintenance     Climbing	Extruded aluminum or thermoplastic		Self-locking snap hook	<b>√</b>	√	
Rebel™	New bestseller in lightweight, shorter length SRL's—fits into the tightest project budget!	Maintenance     Inspection     Rig Up and Rig Down	Extruded aluminum or thermoplastic	V	Available with snap hook, swivel hook or rebar hook	OPTIONAL	√	

#### JRG™ SELF RETRACTING LIFELINES

JRG™ 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



	PROTECTA SELF RETRACTING LIFELINES						
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.

#### REBEL™ SELF RETRACTING LIFELINES

The Rebel™ 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)!



KERET. 2FTL KEIKACIING FILEFINE?						
Model #	Length	Line Type	Connector	Housing		
AD111A (Not Avail in Canada)	11' (3.3m)	1" (25mm) Polyester web	Standard hook	Aluminum		
AD111AR (Not Avail in Canada)	11' (3.3m)	1" (25mm) Polyester web	Standard hook	Aluminum w/swivel		
AD111B (AD110BC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Swivel hook	Aluminum		
AD111BR (AD110BRC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Swivel hook	Aluminum w/swivel		
AD111E (AD110EC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Rebar hook	Aluminum		
AD111ER (AD110ERC in Canada)	11' (3.3m)	1" (25mm) Polyester web	Rebar hook	Aluminum w/swivel		
AD115B (Not Avail in Canada)	15' (4.5m)	3/16" (5mm) Galvanized cable	Swivel hook	Aluminum		
AD115BC (Canada Only)	10' (3m)	3/16" (5mm) Galvanized cable	Swivel hook	Aluminum		
AD120A (AD120AC in Canada)	20' (6m)	1" (25mm) Polyester web	Standard hook	Aluminum		
AD120E (AD120EC 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!

Capital Safety 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.



# **Capital Safety Comprehensive Training Programs**

Product	Length	Audience	Benefit	Open Enrollment	Site Specific
Authorized Person	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.		√
Confined Space Access/Egress	2 days	Workers who use a single pre-engineered and pre-installed fall protection system.	Provides the skills and theory necessary for that single system.	√	<b>√</b>
Competent Inspector	4 hours	Workers who will/may be involved in the rescue of a co-worker from within a confined space	Provides the skills necessary for both team development and establishment of peer rescue programs. Competent Person training is a required prerequisite.	V	√
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.	<b>√</b>	<b>√</b>
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.	√	√
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.	√	√
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 comprehensive managed fall protection program.	√	
Qualified Person	5 days	Engineers charged with the design and setup of engineered fall protection systems.	Details the technical requirements to design engineered systems.	V	
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.	√	√
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.	V	

USA 651.388.8282

www.capitalsafety.com

Canada 905.795.9333

#### **Custom Courses**

If standard courses don't fit your needs, Capital Safety 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.

#### Capital Safety 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 Capital Safety 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, Capital Safety consulting services provide early identification of fall protection hazards, solutions to minimize the risks and programs to implement training and inspection.

#### Capital Safety 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 Capital Safety 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!

- Booklet English (9700041)
- Booklet Spanish (9700068)
- Video VHS (9700070)
- Video DVD (9700071)





- Training from top industry professionals and technicians
- 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 Capital Safety training programs, customized site specific training and specialty courses, please contact us!





#### FALL PROTECTION REGULATIONS AND STANDARDS

SELECTED OSHA FALL REGULATIONS Il Protection Requirements for Steel Erecti (OSHA Subpart R1926.760)

(a) General requirements. (1) Except as provided by paragraph (a) (3) of this section, each employee 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 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 systems. All fall protection required by this section shall conform to the criteria set forth in 1926.502 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 guardrail 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 equipment, overhead bricklaying and related work, roofing work on low-slope roofs, steep roofs, precast 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-
- (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 employee 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 the connected member, or shall be a locking type snaphook designed and used to prevent disengage-ment 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.
- (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; (vi) bring an employee to a complete stop and limit maximum deceleration 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 free 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 following 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

(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

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)

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 fall 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, employees shall be trained in accordance with the requirements of paragraph 1910.66(i)(1), in the safe use of the system.

Personal fall 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
- (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 demonstrate 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.

#### SELECTED ANSI STANDARDS

SELECTED ANSI STANDARUS

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

Safety requirements for Personal Fall Arrest Systems, Subsystems and Components (ANSI Z359.1-

- 1.1 Scope This standard establishes requirements for the performance, design, marking, qualification, 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 harnesses. Whenever the term "system" is used in the standard it refers to a personal fall arrest
- 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.

  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 (1,067 mm). In suspension, after the fall is a rrested, the angle at rest which the vertical center 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 (2.2 kN) tensile load without breaking or distortion sufficient to release the gate. When tested in accordance with 4.3.1.1.5 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 shall be capable of withstanding a minimum load 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 deformation greater than 0.125 inches (3.1 mm), or separating from the nose 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 or district 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 district 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 district the snaphook or carabiner shall be capable of withstanding a m
- 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 fall arrest attachment element. The harness, when properly fitted and used, shall prevent fallout. The fall 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 SRL drum.
- 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 (8.0kM) 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 connectors 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 lifelines 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).
- 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 gate mechanism; markings for connectors shall be sufficient to provide traceability; For connectors that are non-integral, include the standard number, "2359.1(07).
- 5.2.3 Lanvards. In addition to the requirements in 5.1, lanvards shall be marked to identify: the material of construction; the length; the need to avoid contact with sharp edges and abrasive surfaces; the need to make only compatible connections. For lanyards with two, integrally connected legs, a warning to attach only the snaphook at the center of the lanyard to the fall arrest attachment element of the harness.
- 5.3.1 Instructions shall be provided to the user printed in English and affixed to the equipment at the time of shipment from the manufacturer.

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, qualification, 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.

- .3.2 Body belts are not addressed by this standard for work positioning or travel restraint unless accorporated 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 requirements 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 following: part number and model designation; year of manufacture; manufacturer's name or logo; capacity; standard number (7359.3); warning to follow manufacturer's instructions included with the equipment at time of shipment from the manufacturer; for products not meeting the requirements of ANSI/ASSE 2359.1, 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 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 2359.4-2007)

- 1.1 This standard establishes 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 capability 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 manufacturer'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 rescue intentionally or unintentionally relinquishes control. The RSRL devise shall have a means to stabilize the device distinction is pregret media. 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.
- 3.2.6.2 Rope tackle blocks shall have a secondary means to prevent uncontrolled lowering of the load. Rope 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,

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 ladder 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 manufactur-er'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 com-plete system which maintains a safety factor of at least two.
- Personal fall arrest systems, when stopping a fall, shall be rigged such that an employee can ree 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

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

- 1.1 Scope The standard specifies requirements for the performance, design, testing, marking and instructions of body belts and saddles 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-Z259.12 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 front-mounted and side-mounted attachment points. The side-mounted attachment points shall not be 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)

- $1~{\rm Scope} -- 1.1~{\rm General}$  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.
- 4.8 Class A Fall arrest Class A full body harnesses are designed to support the body during and after the arrest of a fall. Class A full body harnesses shall (a) have one dorsal Class I connector affixed to both shoulder straps; or (b) be integrally attached to other certified subsystems or elements with a dorsal Class I or II connector affixed directly to both shoulder straps. Where Class II connectors are used in this integral attachment, the connection shall be designed such that if the subsystem or element is removed from the full body harness, there shall be no means remaining on the full body harness for the attachment of a Class I connector. It is recommended that Class A full body harnesses be provided with a sub-pelvic strap and that the dorsal connector be a sliding D-ring. Where such a connector is provided, there shall be a means of limiting the downward creep of the sliding D-ring towards the waist of the user.
- 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 ladder to 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 waist belt, or (b) one or two Class I connectors attached to the shoulder straps or to the chest strap 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 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 harnesses 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  $160\pm1~kg$  ( $352\pm2~lb$ ).
- 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 Z259-10-05"; (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 Figures 1 to 5; (f) size (the words "size" and "grandeur" shall appear on the label); (g) date of manufacture (by year and month): and month); and
  (h) space for personal identification.

Shock Absorbers for Personal Fall Arrest Systems (CSA Z259.11-05 E4 & E6)

- $1.1\,\mbox{Scope}$  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 fall-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 Type 2 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 with retrieval function (RSRL). A RSRL shall have a working length of more than 3.0m 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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