

ENGINEERED
HORIZONTAL SYSTEMS



VERSATILE FALL PROTECTION SOLUTIONS



GLOBAL LEADER IN FALL PROTECTION

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CAPITAL SAFETY IS THE GLOBAL LEADER IN FALL PROTECTION EQUIPMENT, SYSTEMS AND ANCHORS.





Capital Safety comprises two global brands for height safety; DBI-SALA® and PROTECTA® representing over 65 years experience within the fall protection industry. We continue to combine technical expertise and a passion for developing products of the best quality – reducing risk and increasing safety when working at height.

Our products have been proven in a wide range of applications, including roofing systems, transport, industrial maintenance, building and façade maintenance, construction, telecommunications, electricity, utilities and public sector buildings for inspection work. We also undertake a wide range of special project work in areas such as leisure and tourist attractions, military infrastructure and heritage sites.

One of the main causes of deaths and injuries at work is falling from height. When working at height is unavoidable and other means of protection are not possible, many rely on horizontal fall arrest systems.

Horizontal lifeline (HLL) systems are directly fixed or clamped to the roof sheet or surrounding structures. The user attaches to the HLL system via Personal Protection Equipment such as a harness and an energy absorbing lanyard. Horizontal Lifelines are ideal for protecting operatives over large areas as they provide continuous protection whilst the operatives are able to carry out their work uninterrupted.

A risk assessment should be conducted based round the task to be completed to establish the type of HLL and the use of the HLL system. The HLL system can be used either as fall restraint (recommended) or for fall arrest depending of the nature of the task.

It is advised that, where possible, the HLL system should be used for fall restraint as this stops the user being exposed to the fall hazard therefore reducing the risk.

Horizontal lifeline systems sold in Europe are certified under the European standard BS EN 795 class C and D by independent notified bodies. Traditional horizontal systems are either flexible anchor lines made from stainless steel cable or rope, or rigid lines made from extruded rail.

HLL systems are typically installed by competent personnel who have been fully trained and authorised, with inspections every 12 months to ensure system integrity.

DBI-SALA® offer a wide range of Engineered Horizontal Systems, developed to provide a choice of solutions that allow our customers to most effectively resolve the risks associated with work at height in a broad range of applications.



OUR PRODUCT RANGE

Our Engineered and Horizontal Systems range provide many excellent benefits for building designers and workers including a neat and unobtrusive style, which complements modern building designs whilst providing high levels of safety. A range of fixing options enables integration in a variety of structural building situations, and offers the opportunity for multi-user attachments for maintenance tasks requiring a number of personnel, thus increasing worker efficiency.





ROOFSAFE™ SYSTEMS

RoofSafe™ Anchors [Page 06](#)

RoofSafe™ Cable [Page 08](#)

RoofSafe™ Rail [Page 14](#)

The DBI-SALA® RoofSafe™ range provides unparalleled safety for roof access during maintenance and inspection tasks. Combined with Capital Safety's unrivalled expertise and knowledge of the roofing sector, you can rest assured of the best advice and most appropriate solution for your working environment, leading to compliance with Work at Height regulation. Our extensive range of products includes roof anchors and a cable system, (which is supported by calculation software to ensure user safety) and our rail system for suspended work positioning for external façade access, inspection and maintenance. Both systems offer comprehensive protection for workers on all types of roofing applications.

Our comprehensive and dedicated testing facilities in the Americas and the UK has earned endorsements and approval from roofing manufacturers, as well as providing extra reassurance and confidence for our customers when special roofing applications arise.

HORIZONTAL SYSTEMS

UNI-8™ [Page 10](#)

UNI-8™ O/H [Page 12](#)

UniRail™ [Page 16](#)

The DBI-SALA® Horizontal range provides unparalleled safety and versatility for working at height for maintenance, inspection and suspended access tasks. The range has been developed to provide a choice of solutions that allow our customers to most effectively resolve the risks associated with work at height in a wide range of applications to comply with workplace safety regulations.



roofsafe  **anchors**

ROOFSAFE™ ANCHORS FOR SINGLE POINT ROOF ACCESS

Roofs are changing to accommodate more insulation materials and being designed to utilise lighter weight materials and take advantage of new technologies.

At Capital Safety we are constantly improving DBI-SALA® roof anchor products to ensure the highest levels of safety in modern building design. Our customers can benefit from these modern roofing designs and ensure safety and structural integrity by choosing our new and technologically advanced RoofSafe™ Anchor products.

The DBI-SALA® RoofSafe™ Anchor has been designed to substantially reduce the risk of injury or death to users working at height, while ensuring the integrity of the structure to which it is attached.

Additionally, as the desire to comply with health and safety regulations increases, the need for safety solutions on older buildings and structures increases. The new RoofSafe™ Anchor makes incorporating horizontal lifelines into older buildings more economical, allowing safety obligations to be met for realistic costs.





SPIRATECH™ FORCE MANAGEMENT ANCHORS

In the event of a fall, the RoofSafe™ Anchor deploys the unique and patented SpiraTech™ Force Management Technology absorbing system, which reduces the forces generated on the roof structure to less than 6kN (1350lbs), the lowest of any of its kind on the market. This enables the anchor to be installed on a wide variety of old and new roof types without risk to structural integrity.

FEATURES AND BENEFITS

- The RoofSafe™ Anchor can be used for either work restraint or fall arrest and can be installed on standing seam, composite and built up roofing systems as well as multiple flat roofing and membrane roofing systems – bituminous, PVC and Built Up.
- The Anchor conforms to EN 795, OSHA, ANSI, AUS/NZ, standards and has been tested to both EN795 Class A and C Standards.
- The RoofSafe™ Anchor is modular in design, allowing for versatility and improved inventory management.
- The base plate designs incorporate multiple fastener options to reduce the complexity of specification and in turn maximise inventory through multi-purpose designs.
- The RoofSafe™ Anchor is multi-directional and can activate and absorb energy no matter which orientation the load is applied, providing total freedom and flexibility in system design.
- The unique energy absorbing system inside the RoofSafe™ Anchor has reduced the overturning moment on the fasteners by half compared to our previous anchor and those of our competitors, enabling us to utilise fewer fasteners in many circumstances. This reduces the number of roof penetrations and saves time and money during installations.
- For flat roofing systems we have designed a new toggle fixing method that speeds up installation time and reduces thermal bridging, reducing heat loss from a building. Both of these features save time and money for the customer.
- The RoofSafe™ Anchor utilises marine grade alloys to ensure high performance for years to come.
- The RoofSafe™ Anchor for flat roofing systems has been designed to be easy to weather proof, ensuring the integrity of the building envelope, and works perfectly in conjunction with 'Green' roofing systems.
- The RoofSafe™ Anchor has been designed so that a vertical pull test to 5kN (1125lbs) can be applied without affecting the anchor's integrity. This enables annual test and verification of its structural integrity, ensuring compliance and peace of mind.

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roofsafe  **cable**





ROOFSAFE™ CABLE SYSTEM FOR CONTINUOUS ROOF ACCESS

The RoofSafe™ Cable System has been designed to complement the RoofSafe™ Anchor product range for roof top fall protection, taking advantage of the low system loads generated in the event of a fall.

Through innovative engineering and design we are able to deliver the same high standard of quality and functionality that is found in all of our roof fall protection products, but for a much more competitive price. This makes comprehensive roof fall protection safety very affordable and allows companies to more effectively mitigate workplace risk and height safety.

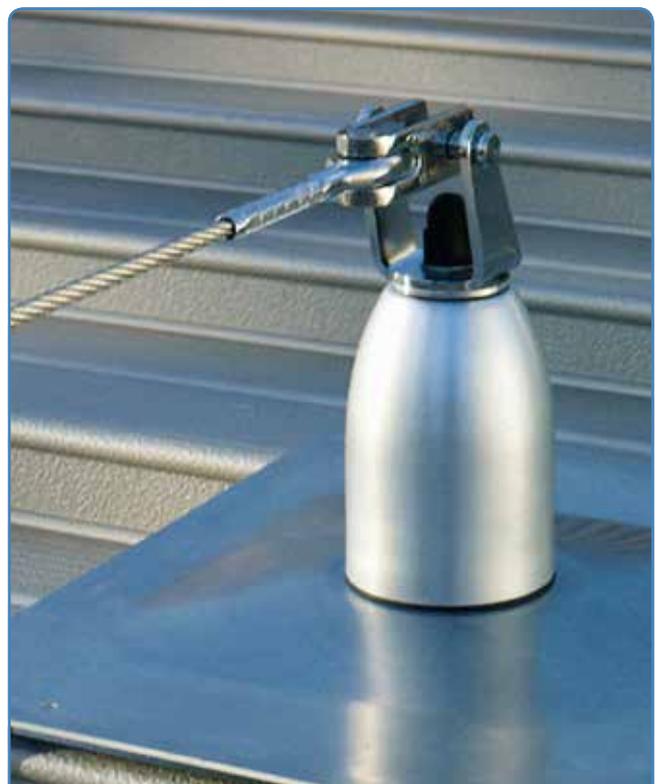
The RoofSafe™ Cable Systems can span up to 12m between anchors and provides continuous hands free access for users of the fall protection system.

RoofSafe™ Cable System components include end anchors, intermediate cable supports, variable cable supports and corner cable supports to allow maximum flexibility in roof fall protection system designs and ensure workers have uncompromised access for all aspects of roof inspection and maintenance. Components, including the 8mm wire rope, are made from quality 316 stainless steel. Fabricated parts are further enhanced by electro-polishing to provide strong resistance to corrosion and a long service life.

FEATURES & BENEFITS

- Incorporates the SpiraTech™ force management technology.
- High quality 316 stainless steel cable system offering excellent freedom of movement which allows the user to safely navigate corners and building contours.
- The system spans up to 12m (40ft) between intermediate supports, minimising roof penetrations.
- Electro polished components provide long-term corrosion resistance.*
- System performance can be calculated using custom design software providing assured levels of safety. The system maintains a minimum safety factor of two for multiple users.

*some aggressive environments can cause corrosion and discoloration of stainless steel



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uni 8





UNI 8™ FOR INDUSTRIAL AND BUILDING ACCESS

The Uni 8™ Horizontal Lifeline System combined with good management controls provides simple, yet comprehensive solutions that ensure compliance with current regulations in multiple applications.

The Uni 8™ product is well suited to modern building projects, refurbishments and can also be used for a wide range of industrial safety applications.

Uni 8™ offers excellent functionality through its free flowing bypass capability and easily allows users to navigate corners and contours in building designs. Minimal moving parts and high grade materials ensure long life expectancy, low cost of ownership which add up to a sound investment. The system can be fitted to many types of structure and can also support multiple workers for both fall arrest and work restraint applications.

FEATURES AND BENEFITS

- The Uni 8™ system can be used for either work restraint or fall arrest. Its versatile design allows the system to be installed to a wide variety of structures.
- Conforms to EN795 Class C, OSHA 1915.159 & 1926.502M, ANSI Z359.1 2007 and AS/NZS 1891.2.
- Broad range of mounting bracket options allows navigation of corners and building contours.
- Windows calculation software, calculates system performance to ensure all system designs meet customer needs and are safe.
- Spans of up to 12m (40ft) between intermediate supports.
- Electropolished components provide long-term corrosion resistance*.
- High quality 316 stainless steel cable fall protection system offering excellent freedom of movement and corrosion resistance*.
- In line energy absorbers protect buildings and structures.
- A discreet and unobtrusive solution.
- CE Marked.

*some aggressive environments can cause corrosion and discoloration of stainless steel



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uni 8 overhead

UNI 8™ FOR OVERHEAD INDUSTRIAL TRANSPORT ACCESS

The Uni 8™ Overhead fall protection system was primarily developed to meet the needs of transport and industrial customers including trucks, trains and aircraft, crane walkways and loading bays.

The system has also solved access and safety problems in the entertainment and arena industry. This quality safety solution can support heavy fall arrest and controlled rate descent devices, and ensures free and unhindered movement for the worker when carrying out work at height.

Uni 8™ Overhead resolves functionality issues that would be experienced by using a standard horizontal lifeline for such applications and mitigates the difficulties associated with solving fall protection problems in conditions that can often be challenging.

FEATURES AND BENEFITS

- Tested to EN795 class C and meets the requirements of AS/NZS 1891.2, is OSHA compliant, ANSI Z359.1 2007.
- Free running attachment carriage ensures complete freedom of travel and therefore movement for the user.
- The system can span up to 30m (98ft) between supporting bracket.
- Windows calculation software, calculates system performance to ensure all system designs meet customer needs and are safe.
- Supports multiple workers up to 140kg (310 lbs).
- Can be used in conjunction with a fall arrest retractable lifeline.
- Mechanical hex swage termination at both end of the system which can be tested to ensure system integrity.
- High tensioned stainless steel cable supports heavy fall arrest devices when required and reduces cable deflections.
- Electro-polished components provide long-term corrosion resistance*.
- Sealed bearings in the carriage wheels reduce the need for maintenance.
- Strong intermediate cable supports allow the system to span greater distances for long bay work areas and permit free passage of the attachment carriage.
- Available as a single or multi-span system.
- In line energy absorbers reduces load transfer to the structure in the event of a fall.
- Capital Safety Systems Installers can provide design and installation of supporting steel structure.

*some aggressive environments can cause corrosion and discoloration of stainless steel

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roofsafe  **rail**

ROOFSAFE™ RAIL FOR CONTINUOUS ROOF ACCESS

The RoofSafe™ Rail System offers the very latest in fall protection development. The extruded aluminium rail system can be fitted to built up and composite metal pitched roof systems and a variety of standing seam roof systems, providing an extremely aesthetically pleasing and practical safety system.

RoofSafe™ can be used to facilitate roof inspections, routine maintenance, gutter cleaning, façade access, access to roof plants and any number of other roof top work procedures.

The system also allows for work positioning tasks to be conducted such as window cleaning.

FEATURES AND BENEFITS

- RoofSafe™ Rail is a direct to roof rail system that can facilitate changes in direction and roof slopes, ensuring continuous safe roof access where it is needed.
- RoofSafe™ Rail's discrete low profile design provides an unobtrusive safety anchorage solution, ensuring a building's appearance is not spoilt by highly visible anchor points and cables.
- RoofSafe™ Rail provides a safety anchorage system for multiple users, allowing more complex maintenance tasks to be undertaken in an efficient manner, including suspended rope access work.
- Even load distribution through the fixing system ensures complete safety in the event of a single user fall without damaging the integrity of the roof system.
- The solid nature of the anchorage ensures no deflection or unnecessary loading of anchor points during use and makes the system especially beneficial on roofs with a pitch of more than 15 degrees. This gives the user a high level of confidence.
- A four wheel attachment carriage runs effortlessly along the extruded aluminium rail, making the system extremely user friendly. An important factor when promoting the use of a roof safety anchorage.
- The light weight modular rail system comes in 3m (9.84ft) sections, making it easy to transport and handle on site.
- The RoofSafe™ Rail System eliminates many common hazards associated with cable based fall protection systems including cable fretting, cable tension, cable deflections, accidental roof anchor deployment, passing of intermediate cable supports, roof sheet abrasion and roof traversing.
- The extrusions used in RoofSafe™ Rail are manufactured from 60% recycled aluminium which helps meet many companies targets to increase the amount of recycled material in building construction.

ROOFSAFE™ RAIL FOR STANDING SEAM ROOF SYSTEMS

A range of non-penetrative clamps enables the system to be fitted to a variety of standing seam roof systems. The low profile, aesthetic benefits of the product lends itself especially well to this type of roofing system, which is often used on high profile and distinctive buildings.



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uni  **rail**





UNIRAIL™ FOR CONTINUOUS FALL PROTECTION

UniRail™ is a quality extruded aluminium rail system combining a simple, continuous and functional anchorage system with very high levels of user safety and great aesthetics.

In addition to fall protection applications, it has also been used extensively as the primary anchor point for suspended rope access tasks, where it is very cost effective when compared to using building maintenance machines.

With UniRail™, you can be assured of the most effective protection against many of the risks associated with working at height, combined with great aesthetics that perfectly complement any building or structure.

FEATURES AND BENEFITS

- Rigorously tested product backed up with custom system design capabilities: your system will work to protect your employees when required, ensuring worker confidence and satisfaction.
- Meets current international product standards: tested in accordance with EN795 and compliant with OSHA and AS/ NZS standards, ensuring customers meet their legal obligations.
- All supporting documentation available, including technical manual, installation manual and user instruction manual in various languages helping with specification and training obligations.
- 6000 Series Aluminium Alloy components ensure a quality safety system that will withstand harsh environments and deliver uncompromising levels of safety when needed.
- Anodising of all parts and use of 316 stainless steel provides greater longevity, adding value to your investment and saving future maintenance and replacement costs.
- Product design and fixing centres reduce structural loading and increase UniRail™'s ability to adapt to the building or structures tolerances, especially in weaker structures.
- A discrete design and range of fixing brackets ensure design flexibility and offer concealed fixing solutions to complement building aesthetics.
- The main rail floats in its fixings to mitigate the effects of thermal expansion and contraction which would otherwise cause the rail to buckle.
- The system offers workers continuous hands free movement and navigates corners and building contours, thereby providing maximum design and integration flexibility.
- Continuous/enclosed systems available. Ideal for water treatment tanks and abseil access.
- Proven track record of over 10 years use in buildings and 20 years use in commercial marine applications, reducing risk in specification and purchasing for employers and building owners.



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ENGINEERED HORIZONTAL SYSTEMS TRAINING & TECHNICAL SUPPORT

Capital Safety's technical support team provide a range of services to support our engineered system installer from training through to system design.

- An extensive range of courses for all Capital Safety's Horizontal Engineered Systems products, from horizontal cable to rail based systems. These cover installation methods and system design and calculations.
- Custom training programs, to suit a specific industry sector or application.
- Courses can be provided at our purpose-designed training facilities or at a customer's own site, dependent on the facilities and number of people being trained.
- We have a professional and highly skilled team of instructors, all possessing extensive experience in both training and practical application of Capital Safety's Engineered Systems products.
- A system design service including CAD drawings and system calculations to aid the tendering process for large projects.
- Advice on risk assessments, best working practices and the choice of appropriate PPE for an application.

Capital Safety's aim is to provide a complete service to our customers to aid them in providing the best and safest solution for their working at height applications.



FULL RANGE OF INDIVIDUAL PRODUCT BROCHURES AVAILABLE



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capital
SAFETY

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Capital Safety is one of the world's leading manufacturers of fall protection and rescue equipment, with decades of experience and a legacy of innovation.

We understand the industries we serve and listen to the workers in the field. We employ the best engineers to create innovative solutions and patent the products that keep workers safe at heights around the world. Capital Safety has the best quality and largest range of fall protection products in the industry. But we're more than a product company.

We take an innovative approach in bringing our products to the field. We have created international partnerships and a vast network of authorized distributors, certified installers and service centres. We offer on-site and in-house training.

Look for complete solutions in our extensive line of DBI-SALA® and Protecta® products.

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