

MSA Fall Protection

Horizontal Lifelines

Global Leaders in Fall Protection

Because we provide customized fall protection solutions all around the world with our range of Latchways® systems, MSA has a thorough understanding of any given country's safety concerns and needs. We have wide-ranging support, too, as our product leadership is backed by a worldwide network of highly trained registered installers and contractor companies.

And MSA is always thinking ahead— monitoring legislative developments around the world so that we can respond quickly with products and services designed to comply with new regulations without sacrificing productivity.

Simply put: MSA is fluent in the global language of fall protection.

No wonder our trusted systems and award-winning components can be found on structures as far away as Sydney's Harbour Bridge and as close by as Milwaukee's Miller Park Stadium.

Premium fall protection solutions tailored to your project needs

MSA is comprehensive in its care and concern for those working at height. Our versatile fall protection systems— from roof to tower—offer solutions for nearly every work environment. Our experience working with so many different industries, from aerospace to tourism, means we have thorough knowledge of the particular fall protection needs specific to a variety of applications.

So tell us what you're looking for. With our Latchways range of smartly engineered systems and best-quality products, you're in the hands of experts.

Commercial and Public Buildings

Imagine providing safe access without damaging roof integrity. Latchways horizontal and inclined systems, with their Constant Force® Posts, do just that. We created systems like WalkSafe® to help further reduce wear and tear and LadderLatch™ to keep workers safe as they climb new heights.

Transmission Towers, Distribution and Telecommunications

From towers to masts to monopoles, Latchways vertical systems can be seen protecting workers on transmission towers and distribution and telecommunication structures all over the world— even those in the most icy, rainy conditions.

Bridges and Infrastructure

Each bridge and infrastructure project has different fall protection requirements. Latchways inclined, horizontal and vertical systems deliver unprecedented versatility, making it safe for workers to maintain cables, traverse bridge undersides, or safely access towers—no matter how harsh the conditions.

Industrial Manufacturing

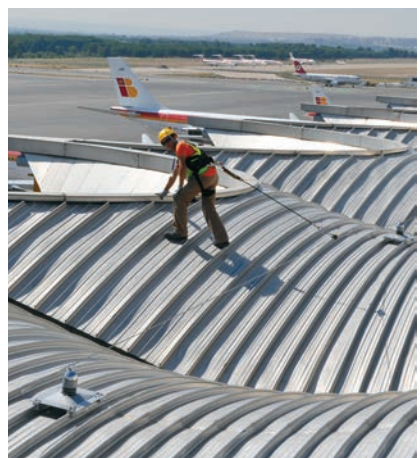
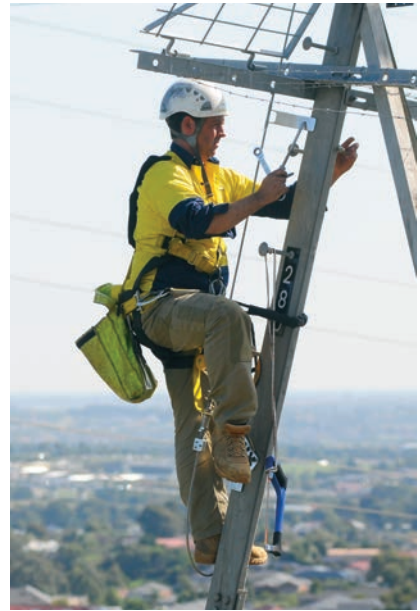
From overhead systems for above machinery operation to permanently installed lifelines, to temporary SRLs for one-off maintenance jobs, Latchways brings safety solutions to virtually any industrial manufacturing project. Our systems can link together horizontally, vertically and up inclines, and can be retrofitted or included as part of a new build.

Oil and Gas

Our range of user-friendly safety solutions, from Latchways Self-Retracting Lifelines to Latchways Personal Rescue Device®, meet the demands of the oil and gas industry—and then some. With vertical, horizontal and inclined cable systems designed to follow complex contours found on rigs, pipe racks, gantries and more, we bring fall protection to the most severe environments.

Wind Energy

From wind farm owners to maintenance contractors to global turbine manufacturers, wind energy professionals rely on innovations like our Latchways Sealed Self-Retracting Lifeline for safety and our TowerLatch™ unit for uninterrupted ladder ascension.



Latchways Horizontal Lifelines (HLL)



Latchways horizontal lifelines are known worldwide for their versatility and ease of use, making them the ideal choice for protecting workers as they go about day-to-day activities like maintenance, cleaning, inspection and more.

Easily customized for virtually any structure or unique requirement, MSA precisely engineered horizontal systems are built to work in all areas of industry, construction and maintenance. Installations include retail outlets, stadiums, transmission towers and industrial complexes—not to mention famous sites like New York's Grand Central Station, the Hong Kong Airport, and the Eden Project in Cornwall, home to the world's largest indoor rainforest.

Committed to bringing you the best in quality, versatility and satisfaction, MSA continues to work closely with major roofing manufacturers to produce a full range of fall protection systems for all designs and types of roofs.

Constant Force® Post Technology

In typical leadership fashion, MSA takes the science of Latchways Constant Force and applies it to the fall protection industry—providing an easy-to-install, reliable and cost-effective solution to rooftop safety.

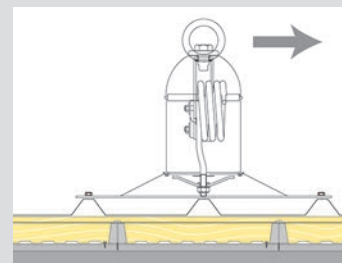
Constant Force Explained

The principles of fall arrest are based on effective load control, meaning that a system must be able to withstand the force of a person's fall while absorbing the energy it generates. In the past, this was achieved by attaching the system to the structure of the building with the anchor point absorbing the load. This inherently caused difficulties for designers and installers, since the system location was determined by the structural elements of the building. System installation, meanwhile, was time consuming because anchors had to be fixed above and below, often creating issues regarding warranties, leakage and cold bridging.

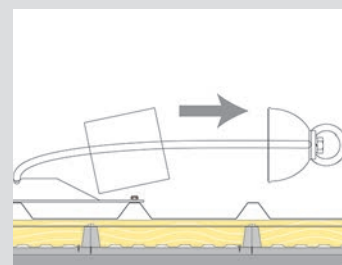


The MSA Solution

Latchways Constant Force Post (CFP) does not need to be fixed to the building structure but instead top-fixes to the roof, therefore simplifying installation, saving time and protecting structures from compromise. With Constant Force technology as its governing principle, the load generated in the event of a fall is absorbed through the Latchways system, minimizing loads placed on the roof structure.



The Constant Force Coil controls the load when a fall occurs, limiting the impact to the roof construction.

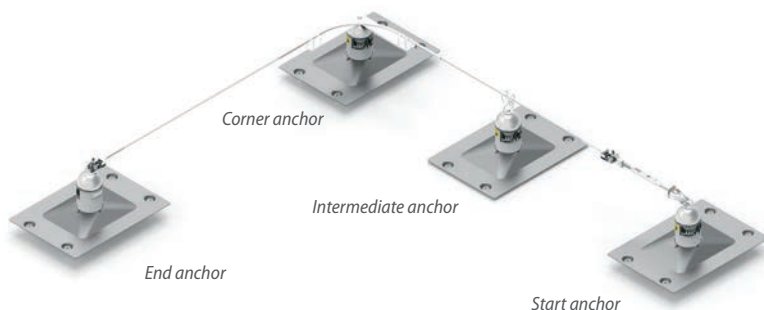


Latchways Horizontal Lifelines (HLL)

Constant Force® Post Components

Recognizing the importance of installing a fully compliant solution to all major roof constructions, manufacturers across the globe were consulted to create a brilliantly compatible anchor: the Latchways Constant Force Post. With just a handful of components, the Constant Force technology can be designed to fit nearly any roof configuration.

					
Turnbuckle Assembly	Swage & Clevis	90° Corner Bracket	Variable Bracket	D-Ring & Hanger	Entry Terminal
The turnbuckle assembly provides a cable termination and method of tensioning the system. The integral indicator disc spins when the correct system tension is reached.	The swage and clevis unit provides the method of terminating the cable at the opposite end of the system to the turnbuckle assembly.	This one-piece corner bracket, attached to an intermediate anchor, provides an angle change of 90° within the system.	This bracket attaches to an intermediate anchor and provides an angle change of between 0° and 80° on either horizontal or vertical planes.	The D-ring and hanger form an intermediate cable support. The cable is threaded through the hanger, allowing the Transfastener to travel the length of the system without disconnecting.	Where a Transfastener is used on a system, the entry terminal is used to enable entry and connection.

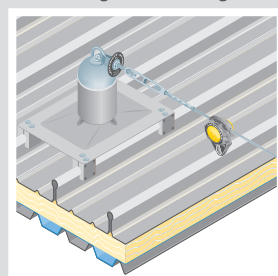
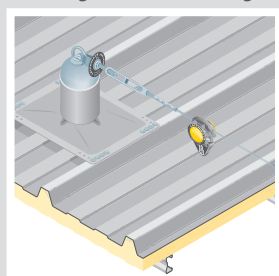
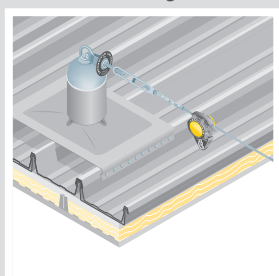
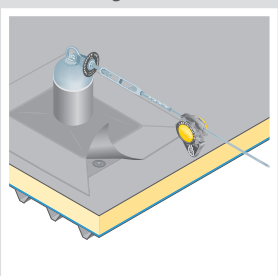


The user, wearing a full-body harness and energy-absorbing lanyard, is continuously attached to the system with a **Latchways Transfastener™**, MSA's innovative device that can rotate its way through the intermediate cable supports. For systems with no entry terminal, a Removable Transfastener can be used. See p. 123 for more information.

Roof-Type Fixing Options

Latchways Constant Force Systems bring complete fall protection solutions to both fall restraint and fall arrest. The simplicity of our fixings allows for quick and easy installation, providing safe solutions to workers at height.

Latchways systems work with all major roof manufacturers. To understand how Latchways Constant Force Posts fix to manufacturers' individual roofing systems, please contact spec@latchways.com.

Constant Force Post on standing-seam roofing  Fixing Method: 4 split clamps	Constant Force Post on corrugated metal decking  Fixing Method: 16 stitching screws/bulb tite rivets	Constant Force Post on secret-fix roofing  Fixing Method: 20 bulb tite water seal rivets	Constant Force Post on flat roofing  Fixing Method: 4 toggle bolts
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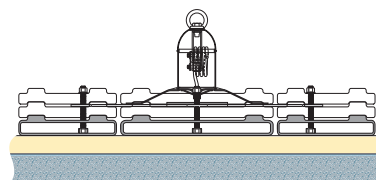
Latchways Horizontal Lifelines (HLL)



Freestanding Constant Force® Post

Typically, a cable-based system is installed top-fixed to the roof structure. However, this isn't always practical or desired—for example, when a permanent roof edge or gutter maintenance system is in place but a “one-off” repair is required in the center or another location accessible from this system. Another example is when the facility is being leased and alterations to the roof are not allowed.

For these situations and more, you need the Latchways freestanding Constant Force Post (CFP). To be used on a single-ply roof only, this expertly engineered self-weighted anchor incorporates CFP technology but does not require fixing through the roof sheet. When required, a number of CFPs can be combined to create a full system.



Overhead Systems—Single- and Multi-Span Systems Components

With Latchways overhead systems, all you have to do is look up and you'll find a greater sense of security and confidence.

Combining MSA's unique knowledge of fall protection with innovative Constant Force technology, our overhead systems deliver maximum accessibility and hands-free mobility—not to mention ease of use and simple installation.

The Latchways range of overhead systems house Constant Force technology in an in-line energy absorber, so if a worker connected to the system should fall, the Constant Force energy absorber controls the load back to the structure. Simply put, it's a smartly designed system precisely engineered to react lightning quick.

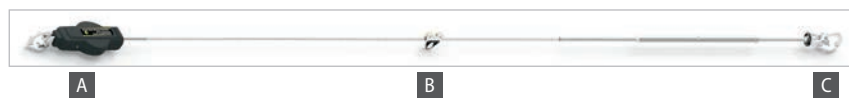
Ideal for industrial environments and in applications such as warehouses, loading bays and airplane hangars, Latchways overhead system is heads above when it comes to fall protection safety.

Did you know that, for systems up to 200 ft (61 m), intermediate brackets are not necessary? Latchways overhead systems remove the need for structural elements and intermediate bracket fittings to be installed.

Latchways is the only product to achieve this.



Single-Span System Components—distances up to 200 ft (61 m)

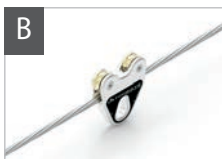


Multi-Span System Components—all distances and those greater than 200 ft (61 m)



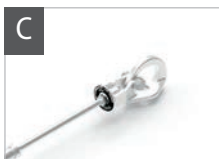
Constant Force Energy Absorber

Located at one end of the system, the energy absorber ensures that, in the event of a fall, the maximum load transferred to the structure does not exceed 4047 lbs (18 kN).



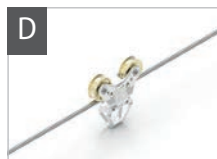
Overhead System Mobile Anchorage

Allows an SRL to be connected to the overhead system.



Line Tensioning Device

Allows the system to be correctly tensioned for use. The indicator disc will spin freely when the correct tension is reached at 1124 lbs (5 kN).



Mobile Anchorage

Allows an SRL to be connected to the overhead system. Anchorage can travel over intermediate brackets without disconnection.



Intermediate Brackets

Support the cable on multi-span systems and also accommodate change in direction.

MSA – The Safety Company

Our business is safety. We've been the world's leading manufacturer of high-quality safety products since 1914. MSA products may be simple to use and maintain, but they're also highly-sophisticated devices and protective gear – the result of countless R&D hours, relentless testing and an unwavering commitment to quality that saves lives and protects thousands of men and women each and every day. Many of our most popular products integrate multiple combinations of electronics, mechanical systems and advanced materials to help ensure that users around the world remain protected in even the most hazardous of situations.

Our Mission

MSA's mission is to see to it that men and women may work in safety and that they, their families and their communities may live in health throughout the world.

MSA: Because every life has a purpose.

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