

# **FALLPROTEC**

Height Safety Products



Basics for work at heights

Safe Access Equipment

A. Horizontal Fall Arrest EN 795:2012 Type C   Type D   Type A CEN/TS 16415:2013	
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EN 353-1:2014

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### **→** C. Anchor Points

N 795:2012 Type A | CEN/TS 16514:2013

Abseiling, fall arrest and restraint	2
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### → D. Personal Protective Equipment

EN 362:2005 | EN 358:2003 | EN 361:2003 | EN 355:2003 EN 365:2005 | EN 813:2009 | EN 354:2011 | EN 360:2003

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### → Work at height European regulations and standards

### EN 795:2012

This European standard specifies the requirements for performance and associated test method for single user anchor devices. The standard distinguishes 5 types of anchor devices.

- Type A Anchor device, with the need of a fixing element(s) to fix to the structure (e.g. bolted anchor eye).
- Type B Anchor device, without the need for fixing element(s) to fix to the structure (e.g. tripod, sling around a beam...).
- Type C Anchor device employing a flexible anchor line which deviates from the horizontal by not more than 15°.
- Type D Anchor device employing a rigid anchor line which deviates from the horizontal by not more than 15°.
- Type E Anchor device for use on a surface up to 5° from horizontal where the performance relies solely on mass and friction between itself and the surface.

### CEN/TS 16415:2013

This technical specification certifies anchor devices that allow more than one user to be attached at the same time. Since work at height requires at least two workers, Fallprotec tests all systems for several people.

### EN 353-1:2014

This European standard defines the technical requirements for vertical rigid anchor line (rail or wire rope under tension). The forwardleaning angle and/or sideways leaning angle lies between 85° and 95°.

### 2006/EC/42:2006

This European directive specifies the safety features for machinery. The Annex IV concerns in particular lifting equipments for people. All height access products of Fallprotec are certified according to the directive 2006/ EC/42.

### EN 1808:2015

It is a European standard which specifies the safety requirements for Suspended Access Equipment (SAE). It is applicable to both permanent and temporary equipment which may be powered or hand operated. The Fallprotec monorails and cradles are designed according to EN 1808:2015.

### EN 60204-1:2006

This standard gives safety guidance and recommendations on electrical equipment for machinery. This includes safety requirements for electrical, electronic and computer-controlled equipment – but excludes power circuits where electricity is used directly as a working tool.

### → Application Icons

EN 1808:2015

SafeAccess Rail

SafeAccess C Rail

Climbing SafeAccess Rail

→ E. Works in suspension

EN 795:2012 Type D | CEN/TS 16415:2013

EN 60204-1 | Directive 2006 / 42 / EC

SecuRail Pro for abseiling works







Case Study: Complete access solution in an urban complex









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Fall

Arrest



Rope

Access





Ground configuration



Ceiling configuration



Potentially explosive atmosphere



Housing

Buildings

Over Trucks

Work in restraint

configuration







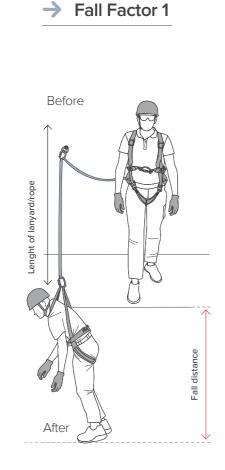


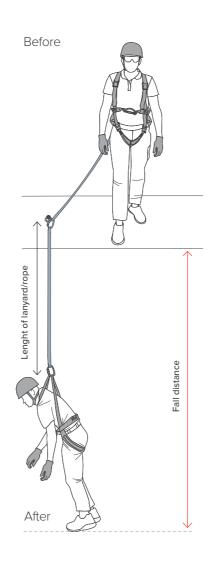
# Fall Factor

The fall factor is the distance fallen, divided by the length of the lanyard or rope available to absorb that fall. The fall factor ranges from 0 to 2. Independently on a fall being long or short, the lower the fall factor, the safer the fall.

Fall Factor = Fall distance
Lenght of lanyard/Rope

# Before After





→ Fall Factor 2

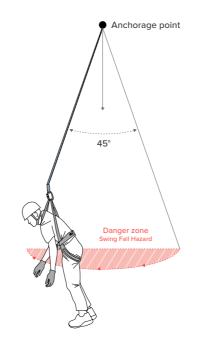
# Fall Clearance

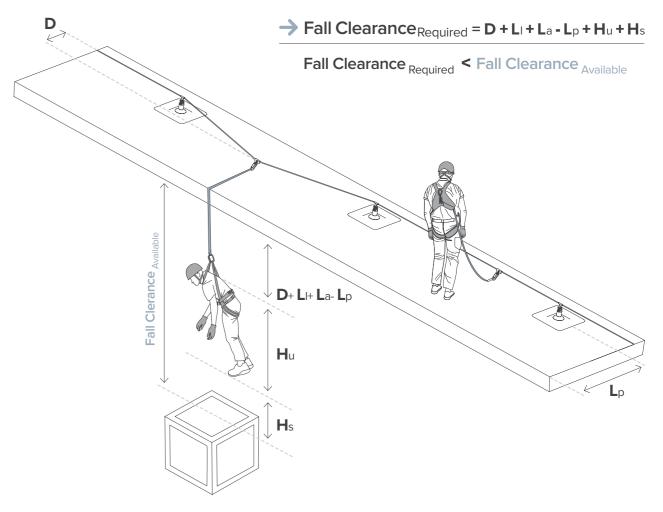
The height of fall must be less than the available clearance so that the person falling does not hit an obstacle during the fall.

The height of fall is the sum of the terms given below:

- D Deflection: the deflection of the rigid anchor line.
- L Lanyard: the length of the lanyard (<2m).
- L Absorber: the braking distance of the energy absorber.
- L Path: distance between the lifeline and the edge from which the user can fall
- H Huser: the user height
- H Safety: the safety distance = 1m

Some types of work at heights may include a risk of pendulum effect, causing the fallen worker to swing into obstacles. A maximum angle of 30° with respect to the anchorage system or anchor point is recommended to minimize that pendulum effect.







# → Fall Restraint



Fall restraint system prevents a person from reaching the fall risk and a fall arrest system minimises injury in the event of a fall.

No need to

approach to pass the intermediates.

Surpassable lifeline

# Advantages

- For 4 users
- 12m max. between fixations
- Freehand system
- Undeformable
- Energy absorbing on orientable intermediate anchors
- Wide range of brackets for all structures
- Possibility of custom-made solutions with the Fallprotec's engineering department

### Compliant with

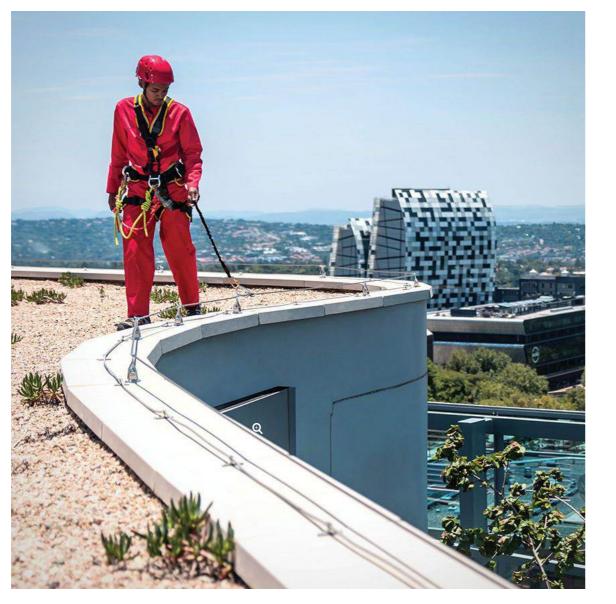
EN795:2012 Type C CEN/TS 16415:2013

### **Applications**





Click on the picture to see all case studies related to SecuRope cable lifeline system on ground.



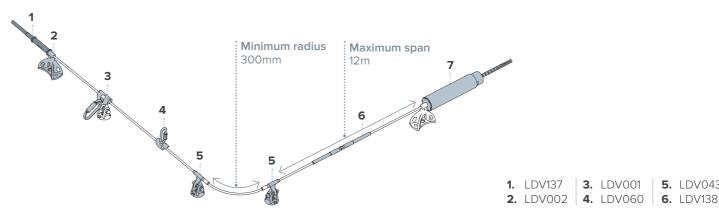
# Videos



# YouTube

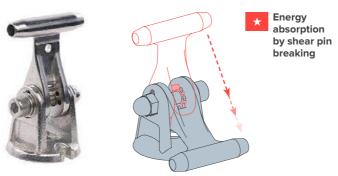
Click on the picture to watch the full video and others related to this system in our YouTube channel

# Horizontal SecuRope lifeline directly on concrete



**1.** LDV137 | **3.** LDV001 | **5.** LDV043 (NEO) | **7.** LDV032

# Intermediate anchors for horizontal lifelines



	LDV043 (NEO)	LDV083 (EVO)
Energy absorbing	•	
Undeformable	•	•
Stainless steel components	•	•
Suitable for fragile structures	•	
Available in copper alloy for ATEX environments	•	



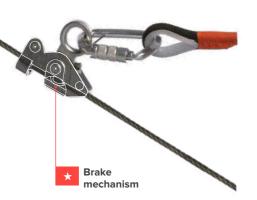
The EVO anchor, a competitive solution, has been specifically designed for concrete grounds and rigid structures.

LDV083 (EVO)

# Glider with steel carabiner

Fallprotec offers a wide range of gliders adapted to each type of situation. Delivered with steel carabiners, the glider passes smoothly over the intermediate anchors, letting the user move freely along the lifeline.

1. LDV001 / 2. LDV043 (NEO)



Fallprotec provides captive gliders (LDV111) and opening gliders (LDV001), gliders for lifelines in every configuration. It also offers a glider for inclined lifelines blocking instantly in case of a fall

Smooth gliding through the anchors.

LDV075

- Up to 4 users
- Undeformable
- Can be used with retractable fall arresters
- Also for curved sections (minimum radius: 300mm)
- The glider passes smoothly over NEO anchor with a retractable fall arrester
- Often used in the industry for works above machines, recommended for a distance between the lifeline and the walkway up to 7m
- Can be installed in corrosive environments

### Compliant with

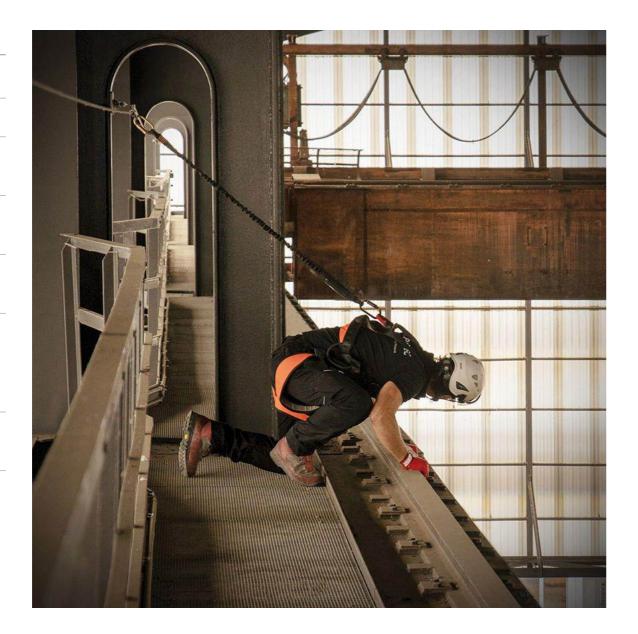
EN795:2012 Type C CEN/TS 16415:2013

### **Applications**

Case Studies



Click on the picture to see all case studies related to SecuRope cable lifeline system overhead.



Videos

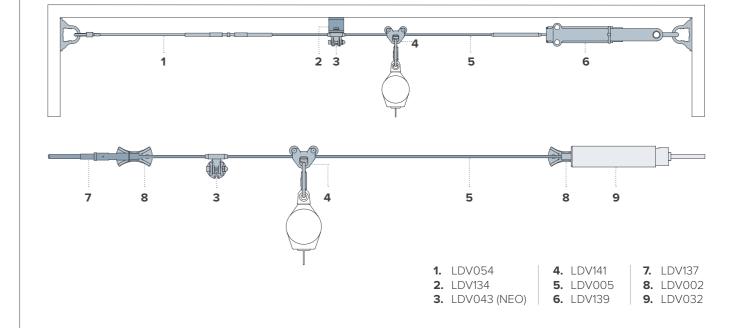


**►** YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

Securope
overhead
lifeline.
Most used
configuration
for industrial
halls and
applications
as train
maintenance
as the
overhead
lifeline
reduces the
falldistance.

NEO SecuRope Lifeline between two walls and NEO SecuRope Lifeline on wall configuration



★ Super smooth gliding



Gliders and intermediate anchor NEO with fixing assembly

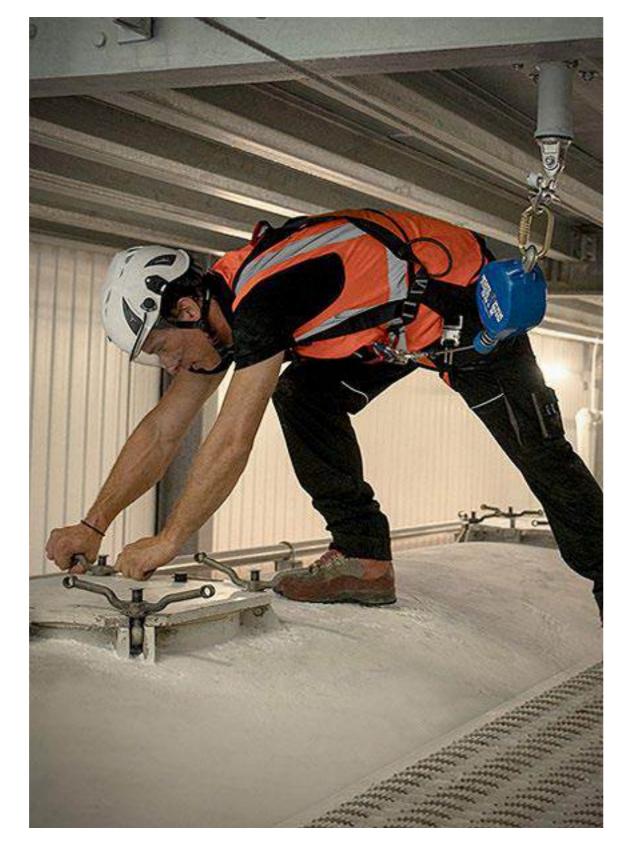
The fixing assembly enables a gap between the ceiling and the wire rope large enough to let the glider pass easily. The glider equipped with rollers enables a smooth gliding even with a retractable block is suspended to it.

LDV141, LDV060, LDV043 and LDV134



# → The Brief

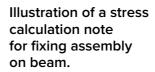
In order to secure the DCDIS work lines, Fallprotec's engineering department adapted the SecuRope system to the particular requirements of the factory.

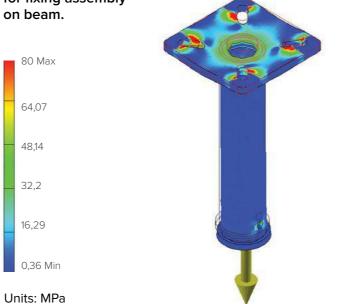


# → The Result

- 50m of SecuRope lifeline.
- 6 types of bespoke fixing assemblies, adapted to various beam sizes.







# Bespoke fixing brackets

CAD modelling of fixing brackets using clamps to maintain a steady distance between lifelines and walkways.







- Up to 2 users
- Undeformable
- Compatible with Securope EVO, Securope 2012, Securail and Securail Pro
- Galvanized steel 500 or 750mm high
- Stainless steel on demand
- Supplied with standard roofing systems ensuring the integrity of the waterproofing membrane
- Possibility of custom-made solutions with the Fallprotec's engineering department

### Compliant with

EN 795:2012 Type C and D CEN/TS 16415:2013

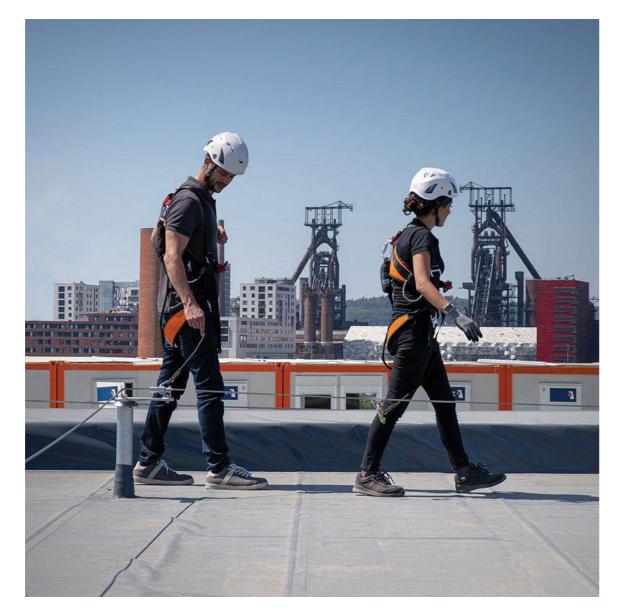
### **Applications**



Case Studies



Click on the picture to see all case studies related to SecuRope cable lifeline system on post.





### Videos



# **YouTube**

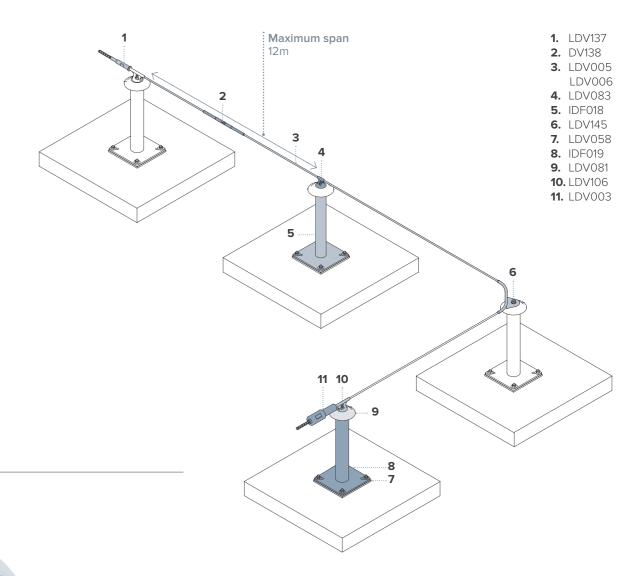
Click on the picture to watch the full video and others related to this system in our YouTube channel

# → The posts can be waterproofed using various techniques:

- LDV081 Waterproofing collar. This collar is set between the post and the lifeline anchor during the mounting of the lifeline. The water drips around the post as the collar deflects it.
- IDF011 IDF012 flashing. This solution requires a pre-installation of the EPDM flashing on the post. Waterproofing is managed by flamesealing the flashing to the membrane.
- The waterproofing can be ensured with flashing pipes or a rubber collar.

(Picture on the left)

# SecuRope EVO lifeline on posts



# End anchor on post

LDV137, LDV106, LDV006, LDV081, IDF019 and LDV058 The user stays connected while moving along the lifeline and passing the intermediate anchors, having an excellent freedom of movement and reaching safely any point of the structure.

For rigid structures such as concrete or steel beams, the undeformable Fallprotec post is a safe choice.

# On Unipost > Type of fixation

# Advantages

- Up to 2 users
- Compatible with Securope EVO, Securope and Secura
- Usable on various roof types (concrete, hollow concrete, cold deck, hot deck and wooden roof)
- Energy absorbing
- Can be mounted before the isolation to secure the construction site
- Easy to mount on trapezoidal metal sheet thanks to toggle bolts

# Compliant with

EN795:2012 Type C CEN/TS 16415:2013

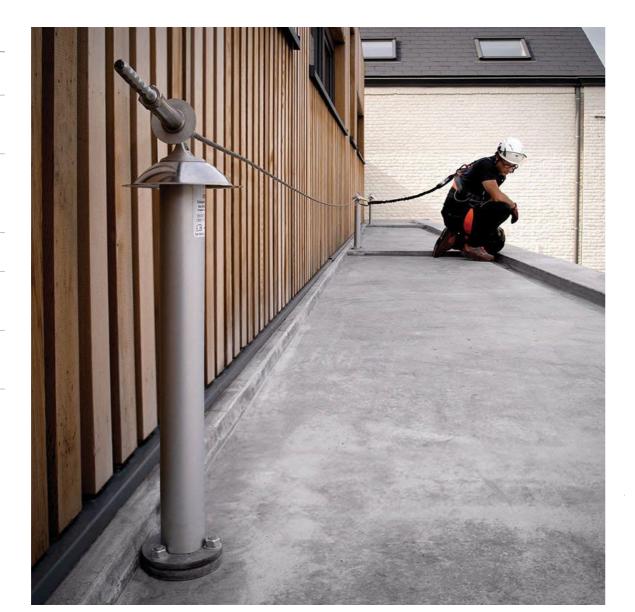
### **Applications**



### Case Studies



Click on the picture to see all case studies related to SecuRope cable



# **Videos**

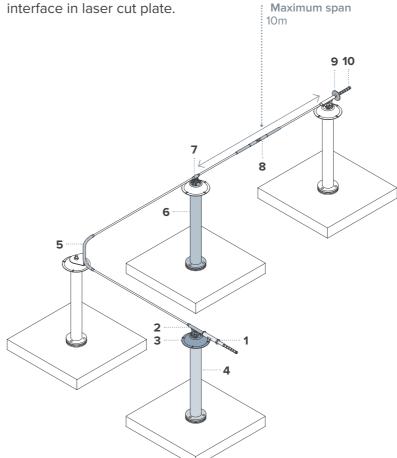


YouTube

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# SecuRope lifeline on Unipost

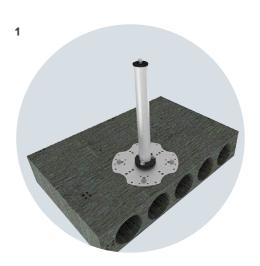
Unipost means « Universal post ». It may be installed on several types of roofing, hot deck, cold deck, wood deck, prefabricated slab and concrete slab, thanks to the universal fixing



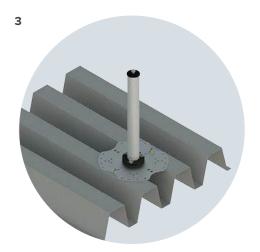
The Unipost protects the roofing from possible damages, when stopping a fall, thanks to an energy absorbing device located at the foot of the post, only the post tube deforms and not the host structure.

- **1.** LDV137 **2.** LDV106
- **3.** LDV081
- **4.** IDF031
- **5.** LDV145
- **6.** IDF033
- **7.** LDV083
- 8. LDV138
- **9.** LDV108 **10.** LDV008

→ A post suitable for most roofings. This reduces the components in stock and simplifies rigging on site. The Unipost can also be used as fixing assembly for an anchor point.







- 1. PRECAST **HOLLOW ROOF**
- 2. WOODEN ROOF
- 3. METAL SHEET

**7.** LDV137

# Advantages

- Up to 4 users
- Energy absorbing
- Absorbs dilatation and contraction of roof sheets
- Supplied with EPDM roofing tape to ensure watertightness
- Compatible with Securope, Securail and Securail Pro



### Compliant with EN795:2012 Type C CEN/TS 16415:2013

# Applications





Case Studies



Click on the picture to see all case studies related to SecuRope cable lifeline system on cold deck brackets.

# Videos



**₽** YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

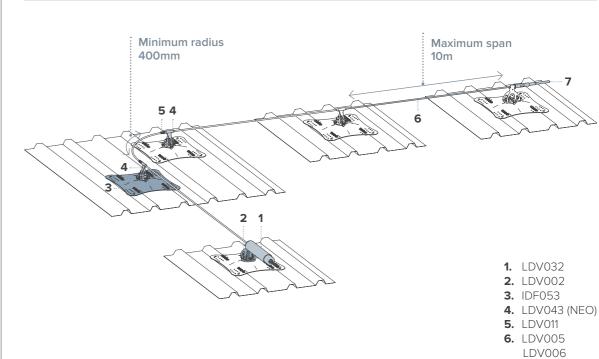
The fixing assembly for cold deck roofs has a unique design that distributes the load evenly.

Combined with the energy absorbing mechanism of the SecuRope NEO lifeline, it is the best system for fragile roofs.

Supplied with self drilling screws specially designed for their high pull out strength.

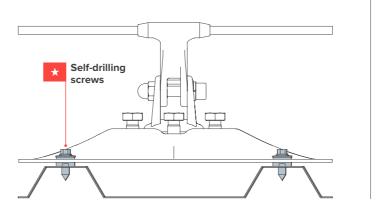
Ideal for the maintenance and repair of any industrial facility, safe access to solar panels, ventilation outlets, roof skylights and gutters.

# SecuRope NEO on cold deck brackets



Fixing detail

The fixing assembly is fixed on the corrugated metal sheet with self-drilling screws. The sealing tape in EPDM ensures the watertightness.



# NEO Anchor on fixing assembly

The bracket ensures a homogeneous distribution of the pull-out force on the cold deck roof. Also available in stainless steel.

LDV043 (NEO) / IDF053



**1.** LDV032

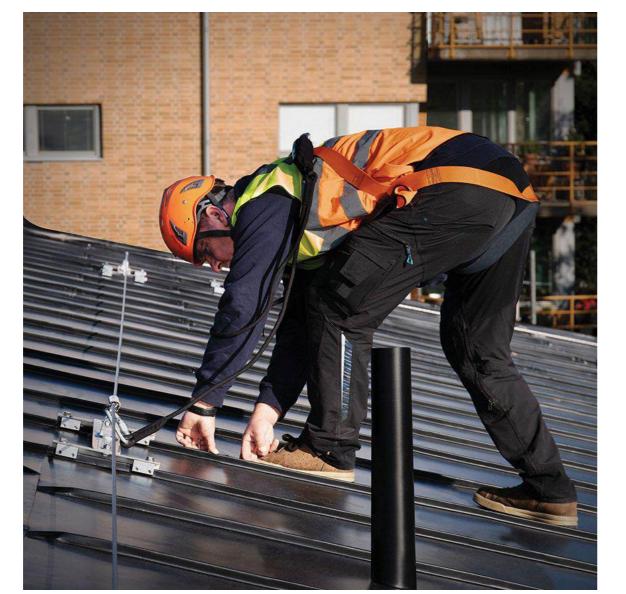
**2.** IDF060

**3.** LDV043

4. IDF0605. LDV005 LDV0066. LDV0027. LDV137

# Advantages

- Up to 4 users
- Energy and dilatation absorbing
- No drilling needed
- Wide range of clamps for seams
- Aluminium and stainless steel components
- Also for copper
- Compatible with Securope, Securail and Securail Pro



# Compliant with

EN795:2012 Type C CEN/TS 16415:2013

### **Applications**

Case Studies



Click on the picture to see all case studies related to SecuRope cable lifeline system on standing seam roof.

# Videos



**YouTube** 

Click on the picture to watch the full video and others related to this system in our YouTube channel

The fixing assembly for standing seam roof is clamped on the seam and doesn't require any perforation.

The clamps combine high pull out and shear strength.

Combined with the SecuRope NEO lifeline, the system completely absorbs the dilatation and contraction of the standing seam roof.

Easy to install on new constructions or existing buildings.

# SecuRope NEO on standing seam roof Minimum radius 400mm 12m 5 6 7

# Fixing clamps

Fallprotec provides different clamp types to match the corresponding standing seam roof:

### IDF042 S5-E clamp

for standing seam roof with double folds

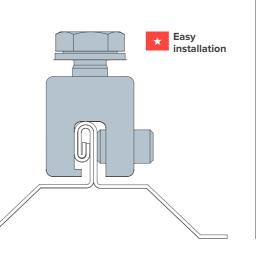
IDF045 S5-Z clamp for standing seam shaped bulb

### IDF043 S5-S clamp

for standing seam with double folds

# IDF041 Copper S5-B

clamp for standing seam with double folds



# NEO Anchor on fixing assembly

The bracket ensures a proper fixing on the standing seam and load distribution.

LDV043 (NEO) IDF060



- Up to 4 users
- Undeformable
- Energy absorbing
- Can be retrofitted
- Reinforced toggle bolt
- Compatible with all bituminous membranes
- Compatible with TPO, FPO, EPDM after verification by engineer
- Compatible with PVC-P membranes
- Compatible with Securope 2012, Securail and Securail Pro

### Compliant with

EN795:2012 Type C CEN/TS 16415:2013

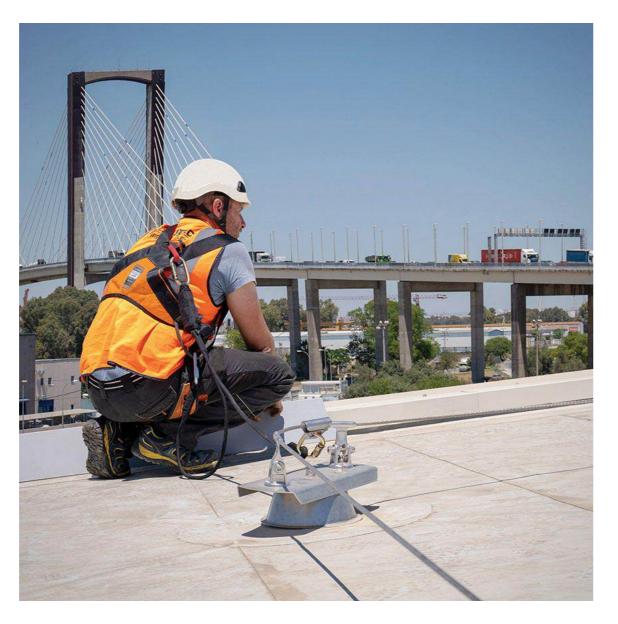
### **Applications**



Case Studies



Click on the picture to see all case studies related to SecuRope cable lifeline system on hot deck brackets.



Videos



VouTube

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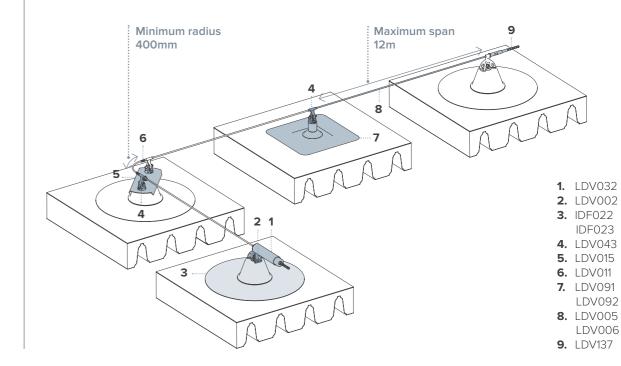
The Multipost and SpotAnchor are designed for hot deck roofs.

> High resistance toggle bolts enable the fixation on corrugated metal sheets, wooden panels or precast concrete.

Only the toggle bolts passes through the isolation, then thermal bridges are minimized. The roofing collar, in bitumen or PVC-P, is prefitted in the factory to guarantee the waterproofness.

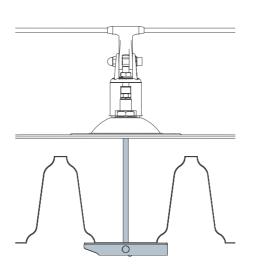
Easier to retrofit on existing buildings.

# SecuRope NEO on hot deck brackets



# Fixing detail of SpotAnchor

The SpotAnchor is fixed by a reinforced toggle bolt FAS005. This allows a distribution of forces on a large surface.



# NEO Anchor on SpotAnchor fixing assembly

For modern constructions with wooden panels, the SecuRope lifeline is installed on SpotAnchor.

LDV043 (NEO) / LDV092



- Up to 2 users
- Compatible with Securope
- Easy installation
- Preserves the roof's isolating and waterproofing properties
- Stainless steel anchor point
- No perforation of roofing membrane
- Possibility of custom-made solutions with the Fallprotec's engineering department

# Compliant with

EN 795:2012 Type C & Type A CEN/TS 16415:2013

### **Applications**









Click on the picture to see all case studies related to SecuRope cable lifeline for green roofs.



Videos



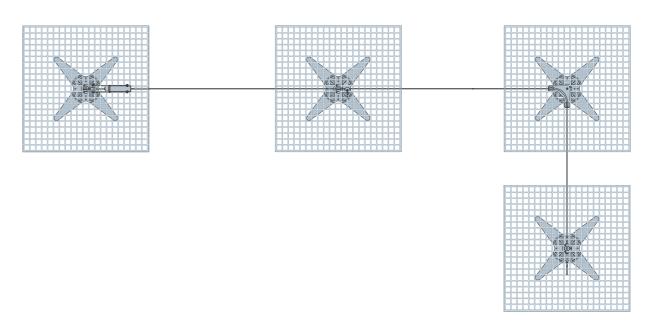
YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

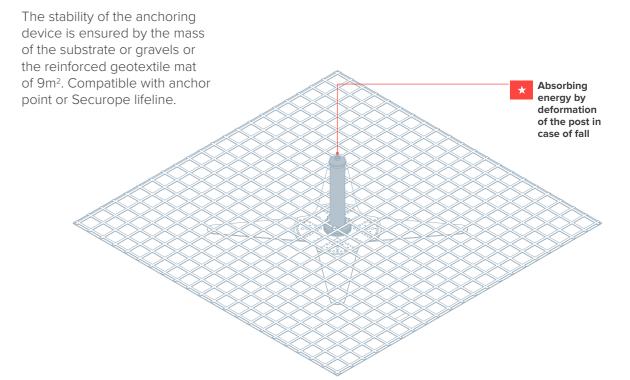
→ The Unipost for green roof can be used as bracket for lifelines or as anchor point for one or two persons. It can be used on horizontal roofs up to a slope of 5°. The ballasted Unipost is installed without penetrating the roofing membrane. Therefore the waterproofing, roof insulation and roof structure remain intact and the risk of thermal bridges are eliminated. In case of a fall, the post will

deform permanently.

# Horizontal Unipost lifeline for green roofs



# Unipost on fall arrest mat



- Up to 4 users
- Easy and quick installation
- Undeformable
- Smooth movements along the lifeline
- Stainless steel
- Harmonized design for standard beams with a flange from 50 to 300mm
- Clamped fixing assembly, the force exerted perpendicular or parallel to the axis of the lifeline
- Compatible with SecuRope, SecuRope EVO, Secura, SecuRail, SecuRail Pro and SafeAccess

### Compliant with

EN795:2012 Type C CEN/TS 16415:2013

### **Applications**

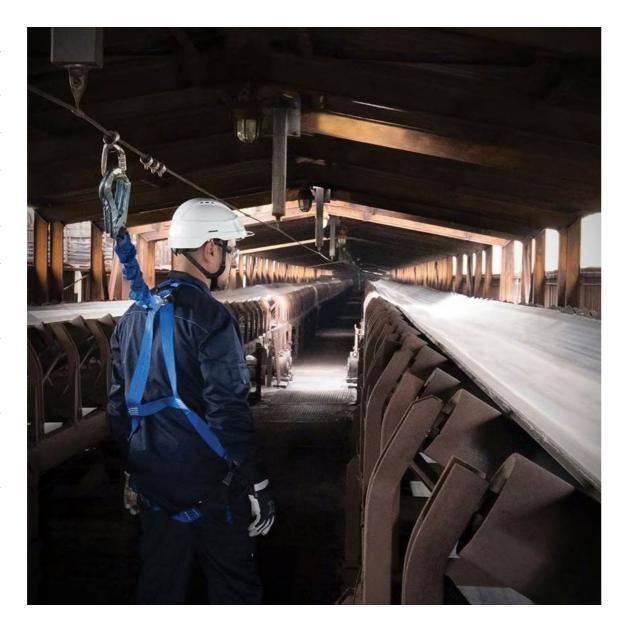






Click on the picture to see all case studies related to SecuRope cable lifeline system

Videos

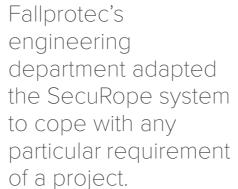


YouTube

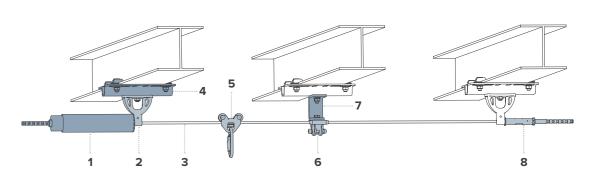
Click on the picture to watch the full

video and others related to this

system in our YouTube channel

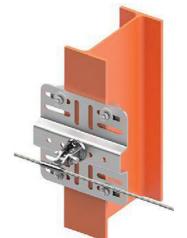


# SecuRope horizontal overhead on steel beams



→ The NEO SecuRope lifeline can be attached to beams or columns through a system of clamps. Using this type of fastening enables a solid fixation of the lifeline without drilling. Particularly useful for industrial configurations, the SecuRope NEO lifeline with crimping rings can stop a fall with very low cable deflection.

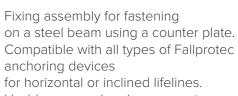
- **1.** LDV003
- **2.** LDV002 **3.** LDV005
- **4.** IDF050
- **5.** LDV141
- **6.** LDV043
- **7.** LDV134
- **8.** LDV137



Fixing assembly for a vertical fastening on a steel beam using

Compatible with all types of Fallprotec anchoring devices for horizontal or inclined lifelines.

IDF051



IDF055



Usable on wood and on concrete.



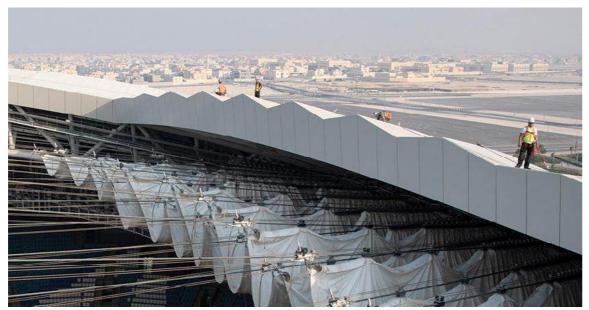
# → The Brief

The Al-Janoub Stadium in Al-Wakrah has been designed by Zaha Hadid Architects in the perspective of the 2022 Football World Cup. Imitating the shape of the typical Qatari fishing boats – called dhows – that can be seen in the city's harbour, its roof is fully retractable, allowing the interior to be cooled

Fallprotec provided a full system to allow the cleaning and maintenance of its immaculate roof. Special mounting plates were developped in order to match the shape of the roof the most precisely possible.

The walkways were designed using the 3D model of the stadium as BIM and Virtual Reality, delivering the components custom tailored, from different shapes to different slopes.

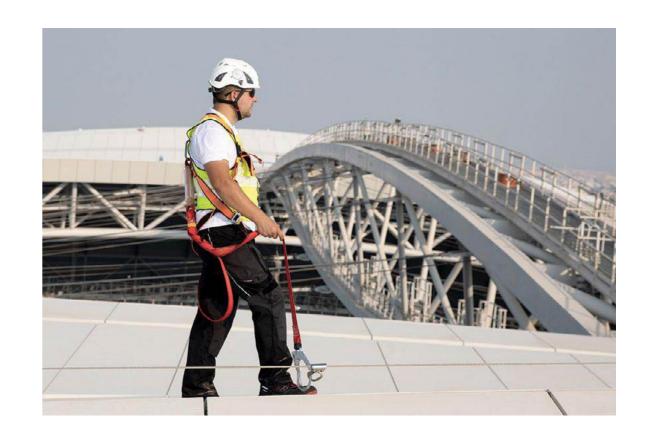






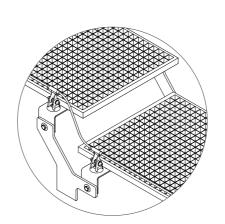
- 1600m of Self standing walkways with cable lifeline attached directly reducing the weight and the risk of water leakage.
- 3700m of lifeline on bespoke fixing plates
- 4 SafeLadders
- 150 anchor points

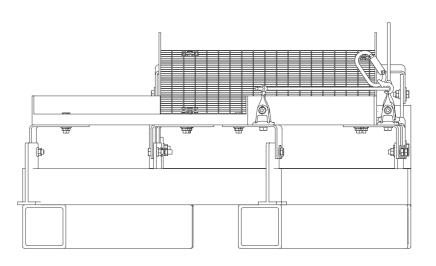
All powder coated in customer's custom RAL code



The glider passes smoothly over the intermediate anchors without disconnecting.

Can be removed anywhere along the lifeline.







Al-Wakrah, Qatar

- Up to 2 users
- Span of 3m to 5m with reinforcement
- Anodized Aluminium
- 1,4 kg/m
- Low deflection
- Absorbs dilatation and contraction of roof sheets
- Possibility of custom-made solutions with the Fallprotec's engineering department

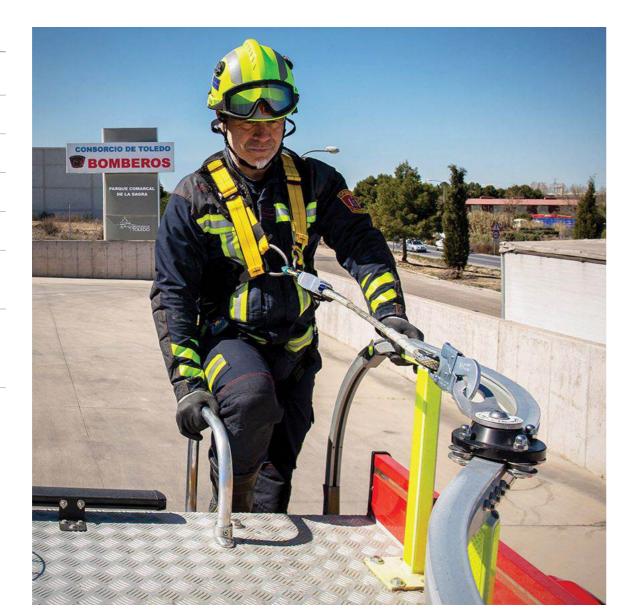


### CEN/TS 16415:2013 **Applications**

Case Studies



Click on the picture to see all case studies related to SecuRail Classic rail system.



Videos



**YouTube** 

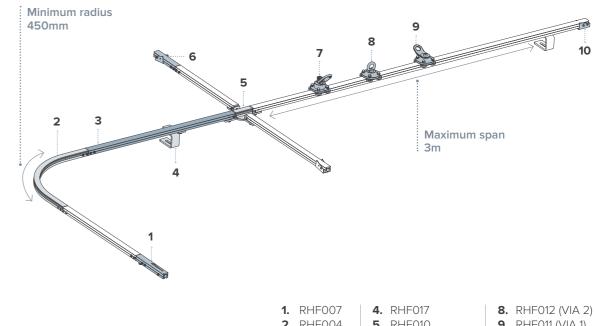
Click on the picture to watch the full video and others related to this system in our YouTube channel

→ The SecuRail is a rigid fall arrest rail that can be installed on ground, wall and ceiling configuration. Its rectangular shape integrates well in the aesthetics of buildings. The cross shaped junction absorbs the dilatation as a result of temperature variation.

> A variety of 6 fall arrest trolleys makes this rail highly versatile. The openable trolley VIA 6 enables the end user to connect and disconnect the trolley at any point of the rail.

The Multivia trolley or the VIA 4 trolley are recommended for sloped roofs.

# Horizontal SecuRail lifeline on ground



**3.** RHF052

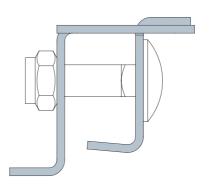
RHF053

- **6.** RHF021
- **9.** RHF011 (VIA 1)
- **7.** RHF028 (VIA 6)

**10.** RHF018

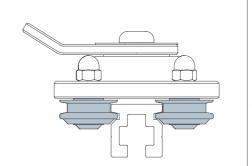
### SFU010 Anchoring device for standing seam roof

The SAFE U product range is specifically designed for common roofs such as tile, slate, cold deck and standing seam roofs. This fixing assembly is designed to guarantee waterproofness.



# Trolley VIA 1

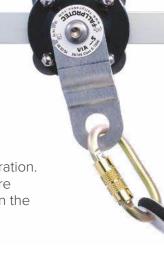
The rollers are in stainless steel with bashings to improve their movement along the rail.



# Trolley VIA 5

Trolley for wall configuration. Different VIA trolleys are available depending on the system configuration.

RHF015



- Up to 2 users between brackets
- Span up to 6m
- 1,7 kg/m
- Low deflection
- Anodized aluminium
- Absorbs dilatation / contraction
- Possibility of custom-made solutions with the Fallprotec's engineering department

# Compliant with

EN795:2012 Type D CEN/TS 16415:2013

### **Applications**



Case Studies



Click on the picture to see all case studies related to SecuRail Pro rail system.

**Videos** 



YouTube

Click on the picture to watch the full

video and others related to this

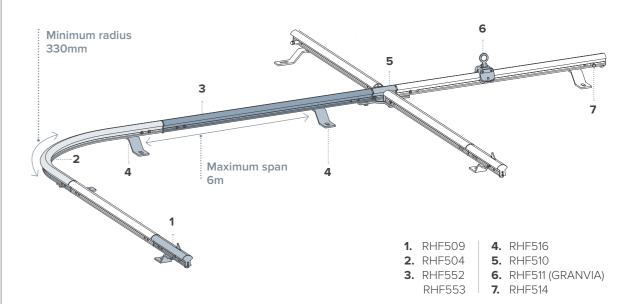
system in our YouTube channel

rigid and versatile fall arrest rail. This unique profile has a high inertia that enables a 6 meter span between supports.

→ The SecuRail 2016 is a

It is ideal for work sites with low fall clearance.

# Horizontal SecuRail lifeline on ground



# Trolley GRANVIA

The GRANVIA fall arrest trolley equipped with rollers glides smoothly along the track following the user's movement. Anti-derailment claws mounted between the rollers keep the trolley firmly on the track. The same trolley is used for ground, wall and ceiling configuration.

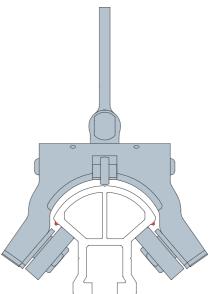
RHF511 (GRANVIA)

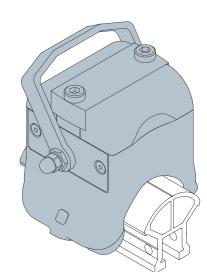


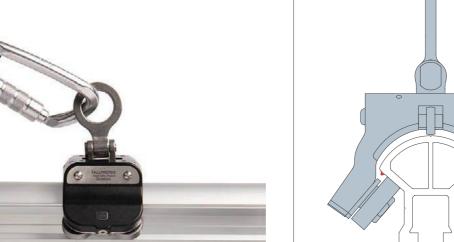
# Trolley GRANVIA

The rollers fitted with ball bearings enable a smooth gliding of the trolley. The new trolley works either for inclined and horizontal lifelines. This allows the assembly of horizontal lifelines with inclined span, all in one, avoiding the user's disconnection.

Overspeed trolley







# → The Brief

The Limoge train station was build in 1929 and is a landmark of the city. Built with stones, steel and precious copper roof, the historical building has been brought up to code.

To ensure the safe maintenance of the central dome and roof, Fallprotec designed and supplied fall arrest rails and anchor points.

Thanks to this customized solution, workers can now evolve safely even on strong sloped surfaces.

# → The Result

- 14 powder coated bended rails on demand of 6m each
- 25 standard fixing assemblies
- 10 anchor points LDV029



Limoges, France





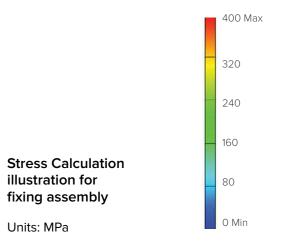




# Bespoke fixing bracket









- Up to 4 users
- Upt to 2 users when combined with Flexbow system
- 5kg/m
- Span of 6m
- Undeformable
- ATEX certified
- Aluminium 6060T6
- Possibility to fold away the Flexbow and SafeAccess system when not in use
- Possibility of custom-made solutions with the Fallprotec's engineering department

### Compliant with

EN795:2012 Type D CEN/TS 16415:2013

### **Applications**

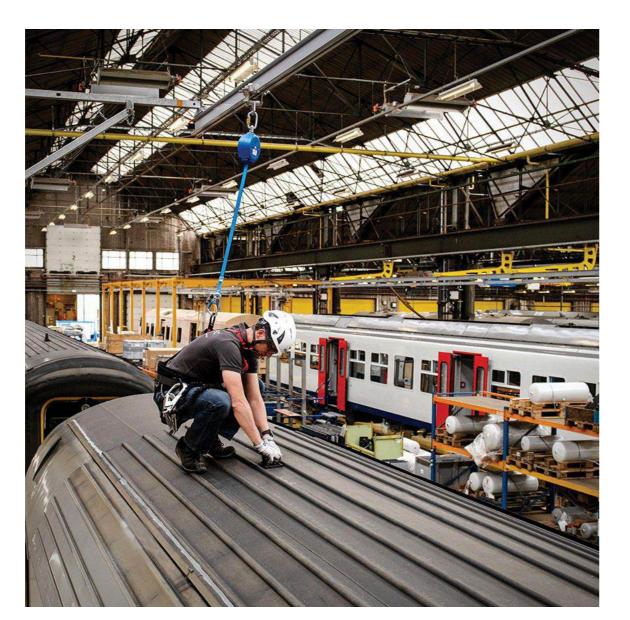




Case Studies



Click on the picture to see all case studies related to related to SafeAccess rail fall arrest.



Videos



**₽** YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

The SafeAccess is an undeformable fall arrest rail for industrial applications. Installed in overhead configuration, it is the most suitable system when the fall clearance is low.

ATEX certified for potentially explosive atmospheres, this rail is also ideal for petrochemical industries.

The aluminium rail is protected by a high-quality powder coated surface treatment that resists to marine environment.

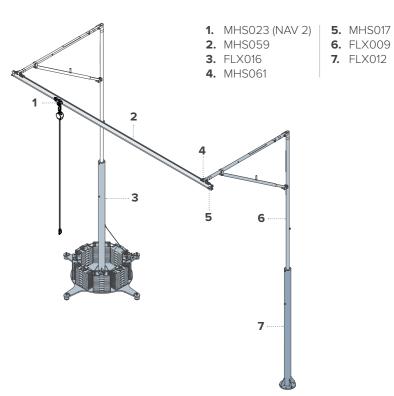
The NAV 2 trolley equipped with rollers follows smoothly without any action from the end user.

SafeAccess on Flexbow with counterweights or posts fixed on slab

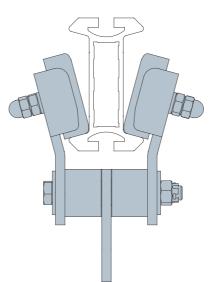
The Flexbow is a standardized outrigger beam to secure loading bays and machinery. Equipped with an integrated energy absorber, it is a lightweight and yet robust design for industrial applications with a minimum fall clearance of 4m.

Combined with the SafeAccess fall arrest rail for access on top of vehicles.

Several configurations (mobile, fixed on ground, fixed on wall...) are available.



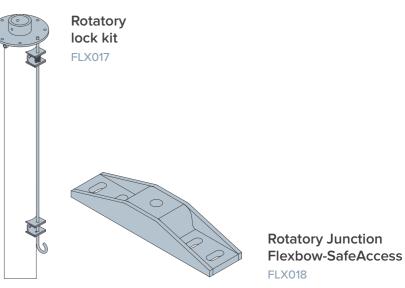
# 3 Trolley NAV 2



The SafeAccess rail combined with a safety block enables the safest possible fall arrest.

MHS023

# Products for foldable system



# → The Brief

The loading of trucks with cement is a delicate task.

In order to carry it out safely and effectively, Fallprotec provided systems of SafeAcess on Flexbow.

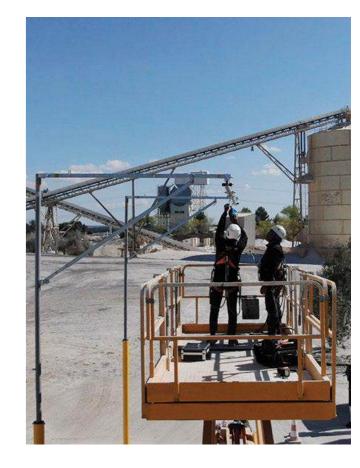
Located at 6m height, the SafeAccess track is fixed to the ground using Flexbow jibs on 3m posts. The user walks along the rail, connected through a retractable type fall arrester.











# → Fixing brackets on steel beams

The metal column clamp made in steel is a lightweight accessory, easy and quick to assemble.

The Flexbow & SafeAccess system is a durable choice even in tough, dusty environments:

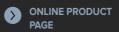
- Easy installation
- Lightweight service
- Safe and free movements of the user, as the fall arrester only blocks in case of a fall





# SecuRope® QuickSet











# Advantages

- Opening glider with safety lock
- Easy mounting
- Overpassing anchors
- Stainless steel elements
- Swageless system
- Cost-efficient solution
- Undeformable
- Two options: Absorber integrated in the glider or on top of the lifeline
- Cable vibration absorption system
- An alternative to secure cat fixed ladders

### Compliant with $\epsilon$

EN 353-1:2014

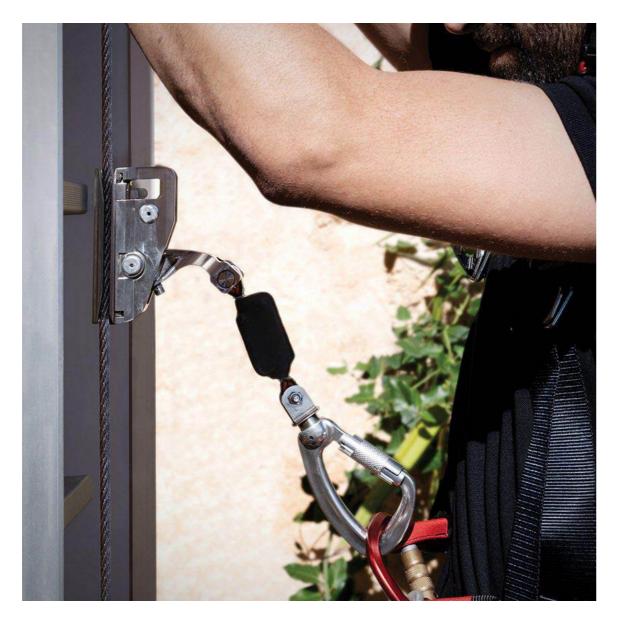
### **Applications**



Case Studies



Click on the picture to see all case studies related to QuickSet cable vertical lifeline system.



**Videos** 



YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

→ The SecuRope QuickSet is designed for wind turbines, pylones, masts or industrial sites. This flexible system is used with stainless steel or galvanized steel cables. The glider is openable and can be inserted or removed at any point of the cable.

> Two types of fall arrest systems are possible with this lifeline.

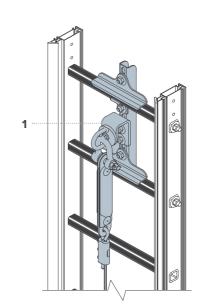
Type 1: Energy absorber fixed on the top anchor. It is permanently fixed on the lifeline. Type 2: Energy absorber fixed on the opening glider. The glider locks instantly in case of a fall, triggering the energy

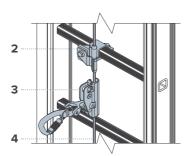
absorption device.

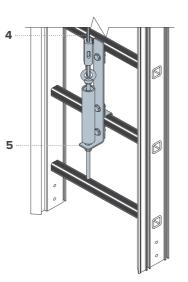
# Ladder lifeline

- **1.** LDV230
- **2.** LDV240
- **3.** LDV250 **4.** LDV006
- **5.** LDV266

SecuRope QuickSet Vertical lifeline type 1 with absorber on line



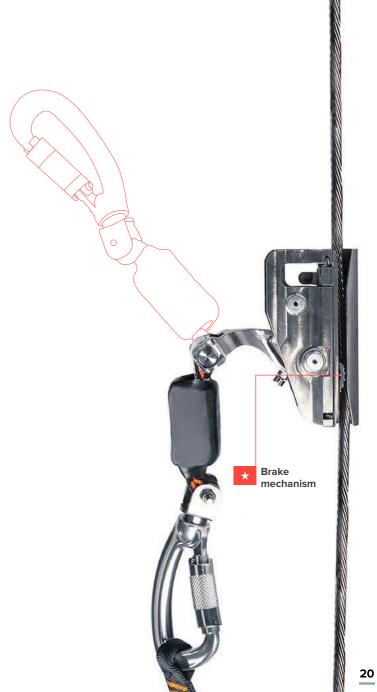




# New ZIP! fall arrest opening glider fitted with energy absorber

Passing smoothly through the anchors, the glider locks in case of a fall.

LDV255



- Light aluminium rail
- Freehand system & Undeformable
- Fixed on ladder or part if the MastLadder
- Easy use, ergonomic
- Compatible with safe roof access extensions
- Trolley equipped with an energy absorber
- Easy to retrofit on existing ladders (Securail Pro)
- Possibility of custom-made solutions by the Fallprotec's engineering department

### Compliant with $\epsilon$

EN 353-1:2014

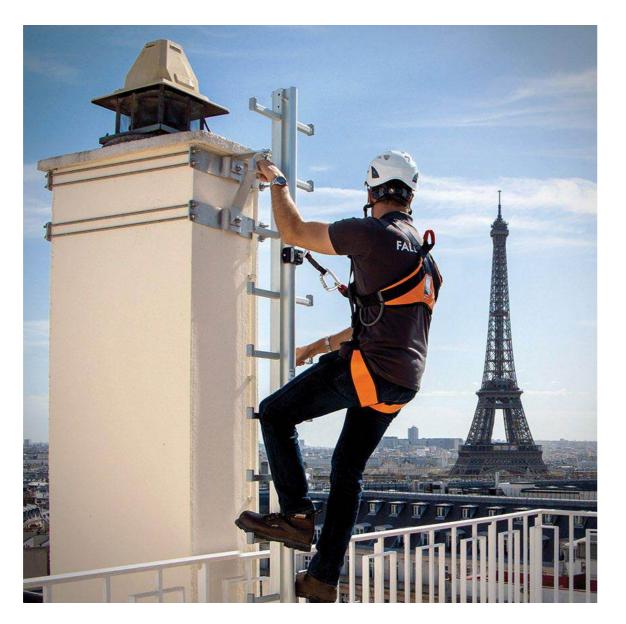
### **Applications**



Case Studies



Click on the picture to see all case studies related to SecuRail Vertical MastLadder.



Videos



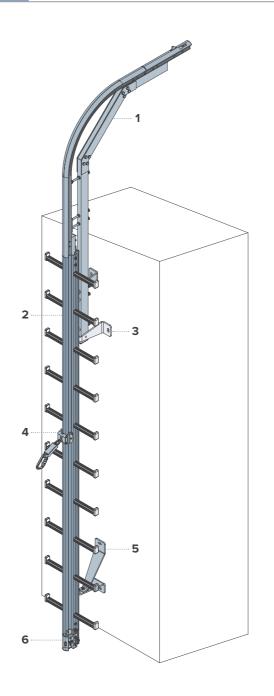
YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

→ The SecuRail Pro Vertical is a rigid lifeline to secure access on any structure. When clamped on an existing ladder it secures the end user much better than the regular safety hoops.

> A MastLadder fitted with fixed rungs is designed for confined spaces, for industrial halls or for telecommunication towers. Undeformable stainless steel brackets connect the MastLadder to the structure.

# SecuRail MastLadder and SecuRail Pro Vertical 2016 lifeline clamped on a ladder





- 4. RHF518 (GRANVIA 4) **5.** RHF710
- **2.** RHF700
  - **6.** RHF708

- 2. RHF518 (GRANVIA 4)

SecuRail Pro

- **3.** RHF552 / RHF553
- **4.** RHF521





- Easy use
- Ergonomic
- Integrated rigid fall arrest
- Compatible with safe roof access extensions
- Rigid and stable ladder
- Standard brackets in various lengths
- Anodized aluminium
- Possibility of custom-made solutions with the Fallprotec's engineering department

# Compliant with **(€**

EN 353-1:2014

### **Applications**



Case Studies



Click on the picture to see all case studies related to SafeLadder access system.



Videos



**YouTube** 

Click on the picture to watch the full video and others related to this system in our YouTube channel



→ The SafeLadder works with the same rail system as the MastLadder.

A Securail Pro is integrated to the frame of a ladder. A GRANVIA 4 trolley is inserted on the rail, which means that the user can comfortably climb the ladder up while being secured at all times.

Various SafeLadder types and accessories are available to fit any situation: temporary SafeLadder, platform to cross the parapet, fold-up section for confined spaces, telescopic SafeLadder and traversing SafeLadder along a SafeAccess rail.

This ladder type is much safer than traditional safety hoop ladders. A foot rest is installed every 10m.





- Anchor points for every application
- 1 or 2 users depending of model
- Undeformable
- Compatible with Fallprotec fixing brackets
- Stainless steel
- Abseiling solutions
- Possibility of custom-made solutions with the Fallprotec's engineering department



EN795:2012 Type A CEN/TS 16415:2013

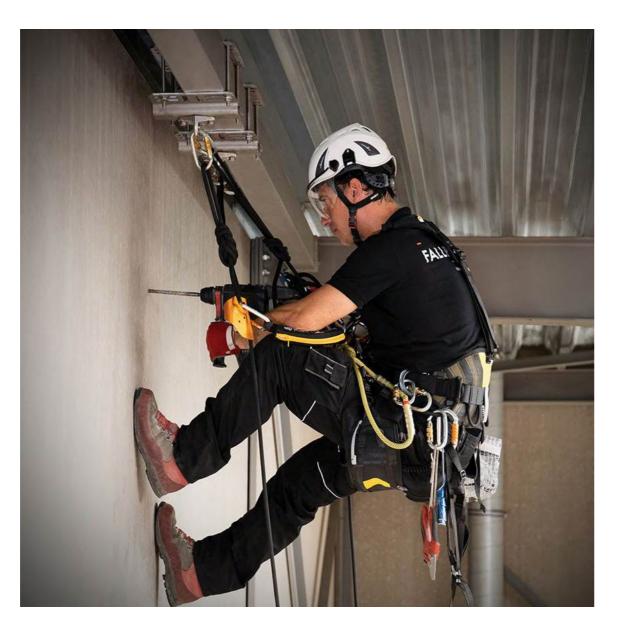
### **Applications**



Case Studies



Click on the picture to see all case studies related to Anchor points.





# Twinfix anchor point for 2 users

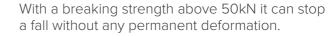
With a breaking strength above 25kN it can stop a fall without any permanent deformation.

Reliable model for rope access. Can be installed on ground, wall or ceiling configuration.

LDV057



# Twinfix XL anchor point for 2 users



Reliable model for rope access. The large opening of the anchor point facilitates the connection of big carabiners. Can be installed on ground, wall or ceiling configuration.

The Twinfix XL is used as anchoring device for temporary lifeline during construction phase. Can be mounted on concrete anchor post.

PTA016







# **Videos**



YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel



# Secura anchor point for 2 users

The Secura anchor point is permanently installed on a building or other structure to protect people that are at risk of falling when carrying out maintenance work. Certified for 2 users, this solution in robust stainless steel can be used on ground, wall and ceiling. Reliable model for rope access.

LDV140

- Anchor points for every application
- 1 or 2 users depending of model
- Undeformable
- Compatible with Fallprotec fixing brackets
- Stainless steel
- Possibility to retrofit on installation
- Possibility of custom-made solutions with the Fallprotec's engineering department

### Compliant with

EN795:2012 Type A CEN/TS 16415:2013

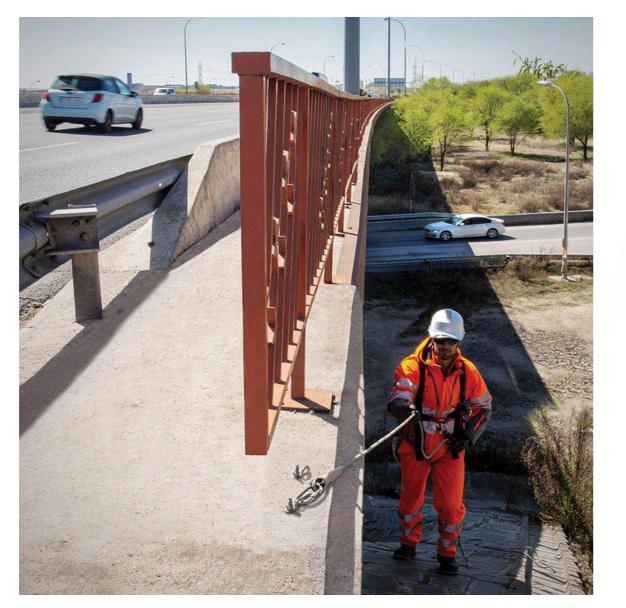
### **Applications**







Click on the picture to see all case studies related to Anchor points



Videos



**►** YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel

# SafeAnchor



The SafeAnchor is a spring loaded and discreet anchoring point to be fitted in aesthetic facilities.

The anchor is embedded in concrete and the anchoring eye appears by a simple pressure on the device.

Can be installed on ground and wall configuration.

Neat system to secure openable windows.

LDV055











# Rotating high visibility anchor point

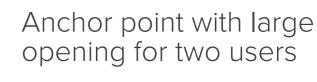
Yellow anchor point for 2 users in stainless steel and powder coated to increase visibility. Fixed by one M12 bolt the anchor point is rotative to follow the end user. It can be installed on ground and wall configuration. . It can also be combined with temporary textile lifelines. Suitable for for industrial fall protection.











The XL eyeplate enables the connection of scaffolding hooks thank to its large opening. Usable on ground and wall.











# SpotAnchor

The SpotAnchor is installed on hot deck roofs to secure specific areas such as access zones, building corners or smaller roofs.

The high resistance toggle bolt ensures longlasting fixing to the corrugated metal sheet and minimises potential thermal bridges. The roofing collar, in bitumen or PVC-P, is prefitted in the factory to guarantee the waterproofness. The rotating anchor point follows the movement of the user.

LDV052





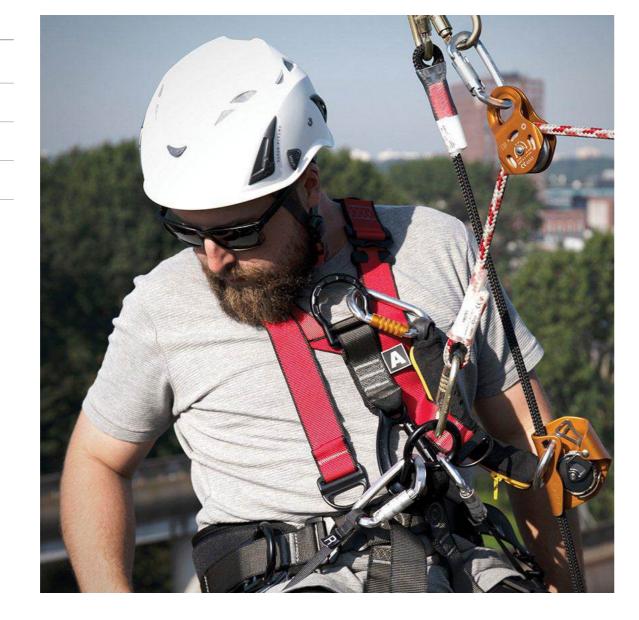




# Harnesses and Lanyards

# Advantages

- Easy and quick to put on
- Two type "A" anchoring points
- Energy absorbing
- Made in EU



### Compliant with

**((** 

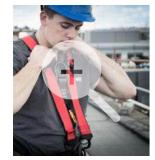
EN 362:2005 | EN 358:2003 EN 361:2003 | EN 355:2003 EN 365:2005 | EN 813:2009

### **Applications**









Click on the picture to see all case studies related to Personal Protective Equipment.

# **=**(

Videos



**YouTube** 

Click on the picture to watch the full video and others related to this system in our YouTube channel



# Multifunctional full body harness and single elastic lanyard with energy absorber

This assembly enables a safe and comfortable work at height for rope access specialists.

The harness and seat are ergonomic, maintaining the position of the user without straining the muscles. The harness follows the movements of the user, giving him/her more freedom. The fall arrest equipped with an energy absorber blocks automatically in case of a fall. The descender gives full freedom of movement in the vertical axis.

HAR014 / HAR023 / HAR095



# Prolight Harness

The emblematic harness of Fallprotec is lightweight and equipped with pads for the highest level of comfort. The operator can work all day without feeling any pressure point.

HAR001 / HAR002 / HAR003

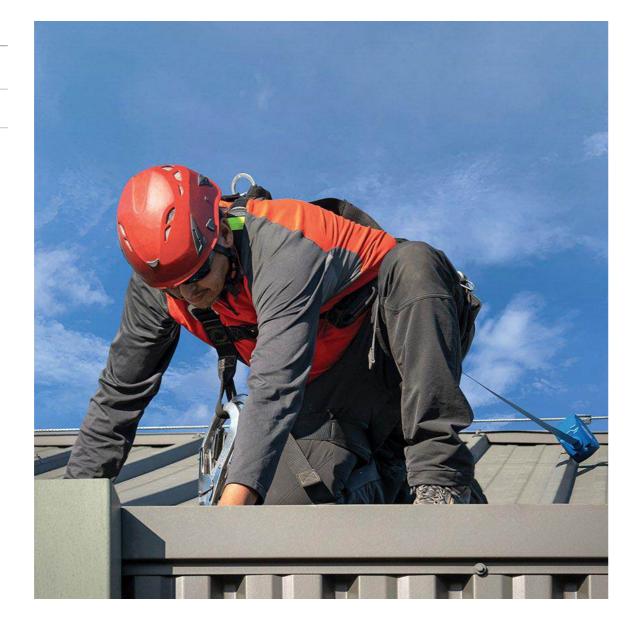


# Working seat, automatic braking descender and secondary fall arrest device

5 anchor points, suited for rope access and rescue, it is the typical companion of many industrial climbers and service technicians. The single elastic lanyard of 2m with energy absorber connects safely the user to any Fallprotec fall arrest system. The integrated energy absorber reduces the forces transmitted to the user to max. 6kN. Since it is elastic, the lanyard adapts to the movements of the user, letting him/her evolve freely along the lifeline or in the vicinity of an anchor point.

HAR066 / HAR067 HAR068 / HAR010

- Energy absorbing
- Made in EU



→ These sturdy blocks are certified for ceiling, wall and ground configuration. The overspeed system stops a fall in a very short distance. The integrated energy absorption mechanism ensures that the maximal force transmitted to the end user is 6kN.

> The ultra-compact block is a user-friendly device. In areas with limited fall clearance the retractable is installed in overhead configuration. When installed on the ground it also enables the user to reach areas further away from the Fallprotec lifeline.



# Ultracompact blocks

Complete range of retractable fall arresters from 2 to 60 meters. Available with webbing strap or galvanised steel cable. The spring mechanism keeps a constant tension on the lanyard, thus facilitating the movement of the end user.

IHWB2 / IHWS9 / IHRA

### Compliant with

 $\epsilon$ 

EN 354:2011 I EN 355:2003 EN 360:2003 | EN 362:2005

### **Applications**







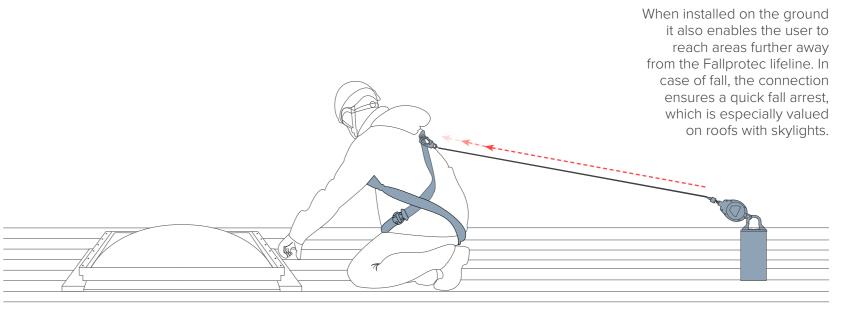
Click on the picture to see all case studies related to Personal Protective Equipment.

Videos



**►** YouTube

Click on the picture to watch the full video and others related to this system in our YouTube channel



# → The Brief

The industrial wasteland at Belval is the former site of the Arbed, Luxembourg's steel group which was founded in 1911 and merged with Mittal Steel in 2006 to form ArcelorMittal, one of the most important industrial steel companies globally.

When Luxembourg's last operational blast furnace was shut down in 1997, part of the site remained as an exhibition area about the history of the Steel industry.

Fallprotec has been commissioned to design

# → The Result

- 100m of SafeAccess rail for rope access
- 40m of SecuRope lifeline on undeformable posts
- 200m of SecuRope overhead lifeline
- 100m of SecuRope on cold deck lifeline
- 60 Twinfix anchor points for rope access

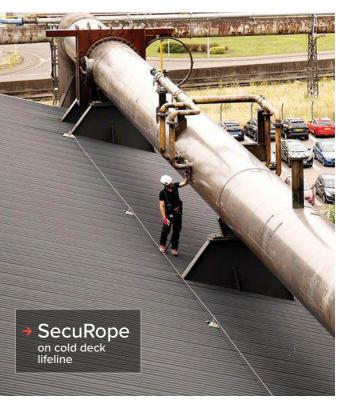


• Esch-Sur-Alzette, Luxembourg



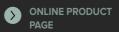






# SecuRail® Pro for abseiling works











# Advantages

- Up to 2 users
- Distance between brackets 1,5m for abseiling
- **1,7kg/m**
- Low deflection
- Anodized aluminium
- Absorbs dilatation / contraction
- Can be powder-coated in customchosen RAL colours
- Possibility of custom-made solutions with the Fallprotec's engineering department

# Compliant with

EN795:2012 Type D CEN/TS 16415:2013

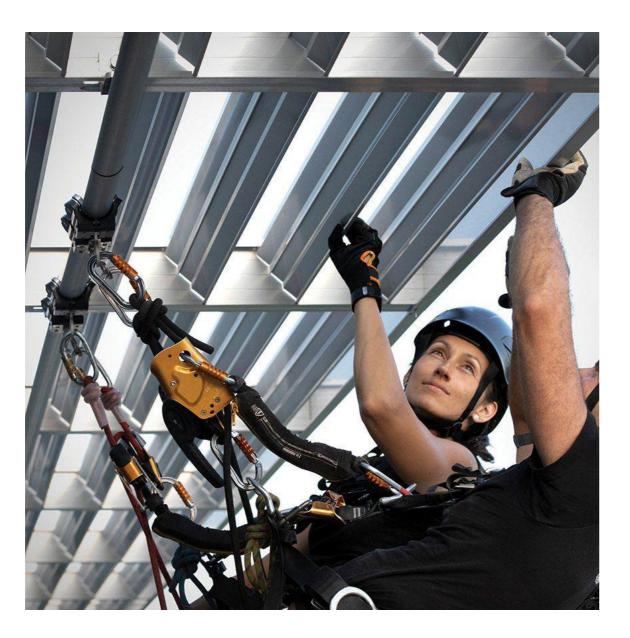
### **Applications**



Case Studies



Click on the picture to see all case studies related to SecuRail Pro for abseiling works.



Videos

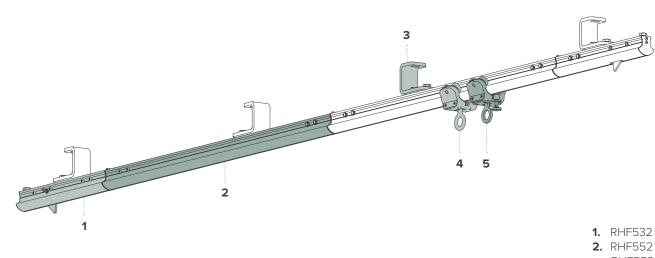


YouTube

Click on the video to go to our You-Tube channel to watch this video and others related to our product range.

→ The SecuRail Pro is a rigid and versatile suspension rail. A light-weight solution that keeps the aesthetic of the building.

Horizontal SecuRail Pro for abseiling



- RHF553
- **3.** RHF531
- **4.** RHF511
- **5.** RHF530



- Aluminium rail (5 kg/m)
- Powder coated or anodized
- Custom-made brackets
- The rail can be curved to match building facades or internal structures
- Manual, motorized or battery operated trolleys
- Compatible with traversing ladders, rope access technicians, RopeClimber and suspended platforms
- Powder coated special RAL colours on request
- Distance between brackets 3m for a total suspended load of 500kg
- Possibility of custom-made solutions with the Fallprotec's engineering department

### Compliant with EN 1808:2015

### **Applications**









Click on the picture to see all case studies related to SafeAccess Rail for suspended



Videos



**►** YouTube

Click on the video to go to our You-Tube channel to watch this video and others related to our product range.

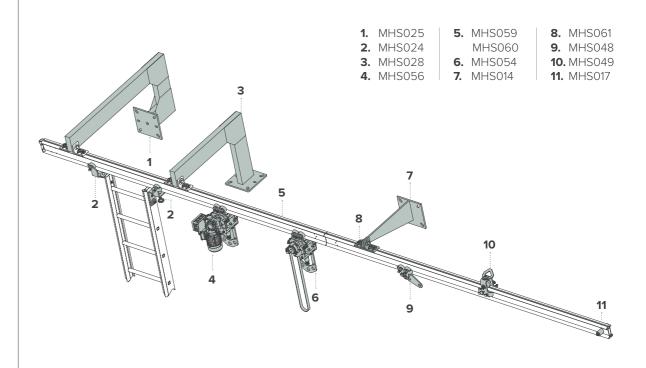
→ The SafeAccess for suspension work is an efficient height access system for facade maintenance and cleaning.

> Highly versatile, it can be installed in building entrances, atriums, courtyards and on the building main facades. Suspended access on structures of 5 to 300m height.

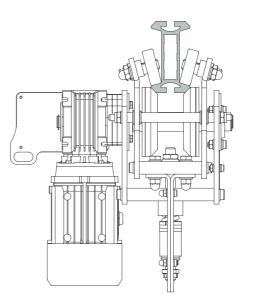
The track can be curved and powder coated in any RAL colour.

The trolleys roll on the flange of the rail. Manually, motorized or battery operated trolleys are used for horizontal movements.

# SafeAccess Horizontal and trolleys

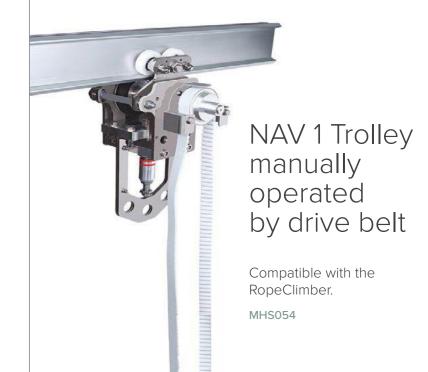


Trolley NAV 4



Motorised trolley for the suspension of cradles and RopeClimber hoist. The trolley is controlled from the suspended equipment.

MHS056



# → The Brief

This architectural building is harboring coworking spaces, offices, shops and hotels. Located in the capital of Sweden, it reflects the concern of the country for sustainable development and the preservation of nature by including trees inside open atriums and shared spaces.

Fallprotec designed and provided bespoke systems to service its inside glass walls, facades and trees.

# → The Result

- 8 Bespoke Safeaccess gantry with a removable basket
- 375m of Safeaccess casted in the ceiling

RopeClimber compatible system

Overhead gantry consisting of 2 pairs of SafeAccess rails and a basket to cover the surface of the canopy ceiling.

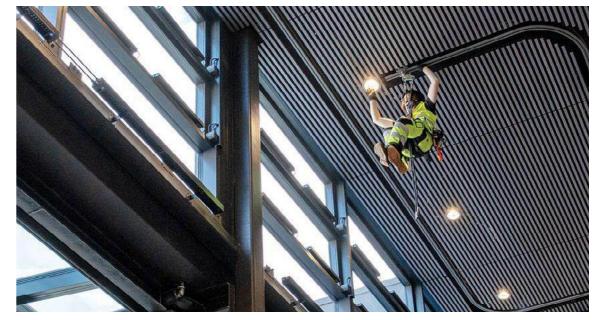


Stockholm, Sweden











- Aluminium rail (5kg /m)
- Discreet solution hidden in the ceiling, well suited for architectural buildings
- Compatible with rope access technician, RopeClimber and suspended platforms
- Aluminium mill finished or powder coated on demand
- Manual, motorized or battery operated trolleys are available for different economy offers
- Possibility of custom-made solutions with the Fallprotec's engineering department

# Compliant with EN 1808:2015

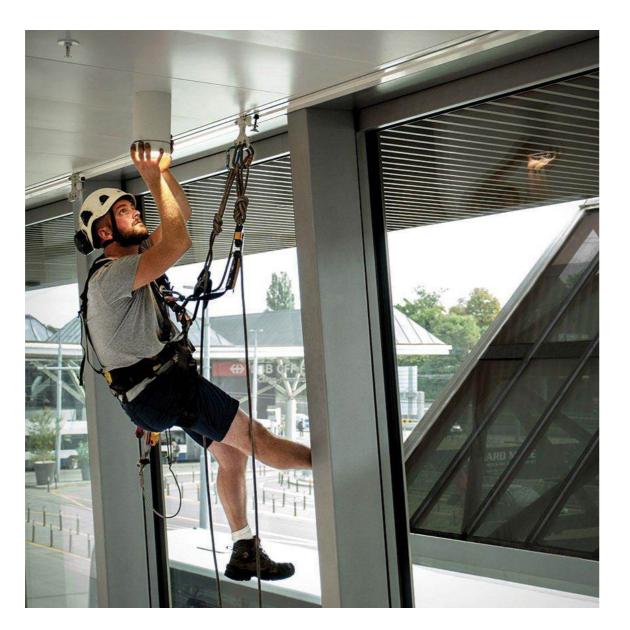
### **Applications**



### © Case Studies



Click on the picture to see all case studies related to SafeAccess C Rail for suspended work



Videos

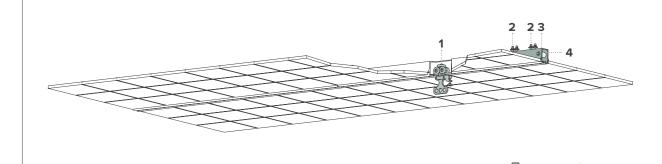


**►** YouTube

Click on the video to go to our You-Tube channel to watch this video and others related to our product range. → The SafeAccess C is a discreet access system that is concealed in a technical ceiling or a soffit. The rail integrates harmoniously the aesthetics of the building. The track can be bent and powder coated in any RAL colour. Custom-made brackets enable to align the rail and the ceiling. The trolleys roll in the inner channel of the rail.

Manually, motorized or battery operated trolleys are used for horizontal movements. Compatible with rope access technicians, the RopeClimber and suspended platforms.

SafeAccess C Horizontal concealed in ceiling with abseiling trolley



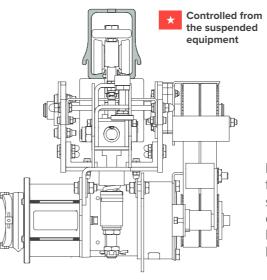
System for the cleaning and maintenance of facades.

**1.** MHS509

MHS511
 MHS500
 MHS508

1

# Pilot 2 attached to SafeAccess C rail profile



Motorised trolley for the suspension of cradles and RopeClimber lifting machine.

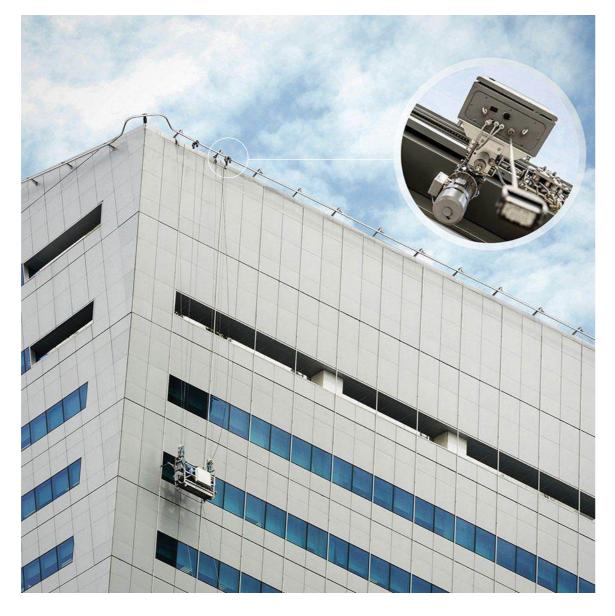


# Pilot 1 Trolley manually operated by drive belt

Compatible with the RopeClimber.

MHS503

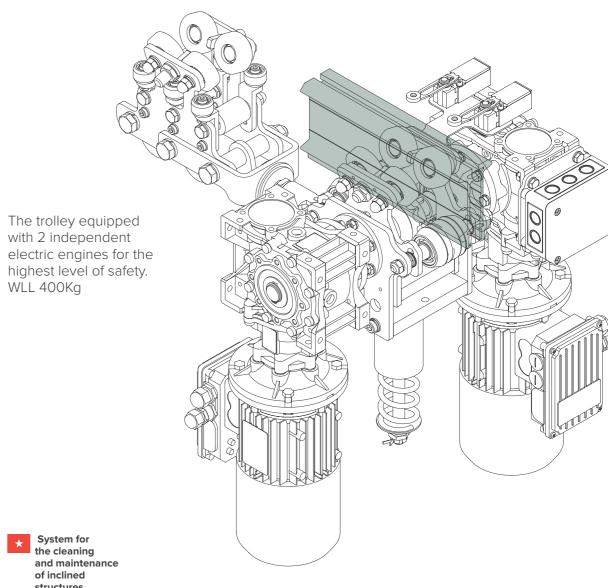
- Active drive system
- Slopes up to 70°
- Span of 3m between supports
- Compatible with rope access technician, RopeClimber and cradles
- Bespoke solutions by Fallprotec engineering department



→ The Climbing SafeAccess is installed on sloped facades or atriums for the maintenance and cleaning of the building. A high resistance stainless steel chain is inserted through the bottom channel of the rail.

> The climbing trolley with pinion can climb slopes up to 70°. A chain based design is the most reliable system for installations with an important slope.

Trolley NAV 6



Compliant with EN 1808:2015

### **Applications**



Case Studies



Click on the picture to see all case studies related to SafeAccess Climbing Rail for suspended works.

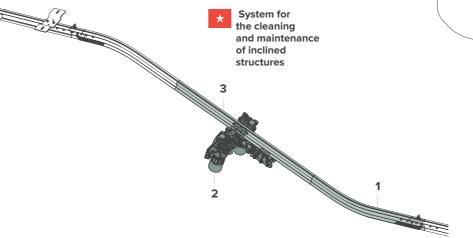


Videos



YouTube

Click on the video to go to our You-Tube channel to watch this video and others related to our product range.



Climbing SafeAccess and trolleys

**1.** MHS065 | **2.** MHS047

**3.** MHS040

# RopeClimber® > Lifting Equipment



ONLINE PRODUCT





# Advantages

- ø12mm textile cable 79kN breaking strength
- Weight of textile wire: 112 gr/m
- Lifting speed up to 8m/min with a working load of 240kg
- Lifting speed up to 12m/min with a working load of 160kg
- Can be used jointly with any system with a minimum WLL of 240kg, like the SafeAccess suspension rail or a davit system
- Autonomy up to 8 hours depending on use
- Usable by anyone with half-day training

### Compliant with

EN 1808:2015 | EN60204-1 Directive 2006 / 42 / EC

### **Applications**









Click on the picture to see all case studies related to RopeClimber Lifting Equipment



### Videos



# **►** YouTube

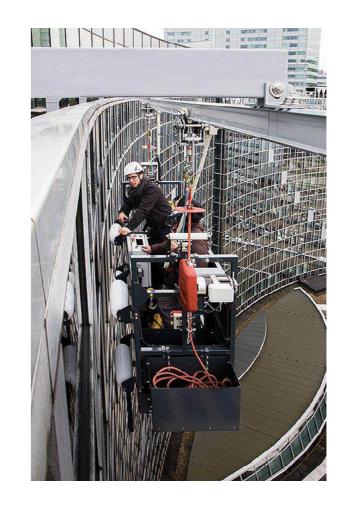
Click on the video to go to our You-Tube channel to watch this video and others related to our product range.

# → RopeClimber Standing chair

(picture on the left)

The standing chair is a hybrid system allowing the user to work seated as well as standing, so the worker has a wide range of motion and of reach, including over his head. The position of the RopeClimber hoist, below the centre of gravity of the person, increases their "in air" stability. A set of wheels makes it easy to transport. Can be used also with a SafeAccess C rail.

- Safety features: fall arrest device on the secondary rope, overload and top limit switch
- Control box with emergency stop
- Easy use, training as professional climber is not required
- LED that informs about the state of charge of the battery as well as safety features
- Versatile equipment
- Cost-efficient solution
- Battery powered
- Lightweight and compact
- Optimized time of installation
- Ergonomic and comfortable for people working at height
- All accessories are according to EN1808:2015



# Cradle

It is one of the lightest cradles available on the market (deadweight 188kg). Battery driven, the RopeClimber hoist solves the hassle linked to control cables and electric cables. This system also works on textile cables, which are easier to handle than wire rope. The RopeClimber cradle is available for one or two persons (rated load of 120 kg or 240 kg).



# Hoist

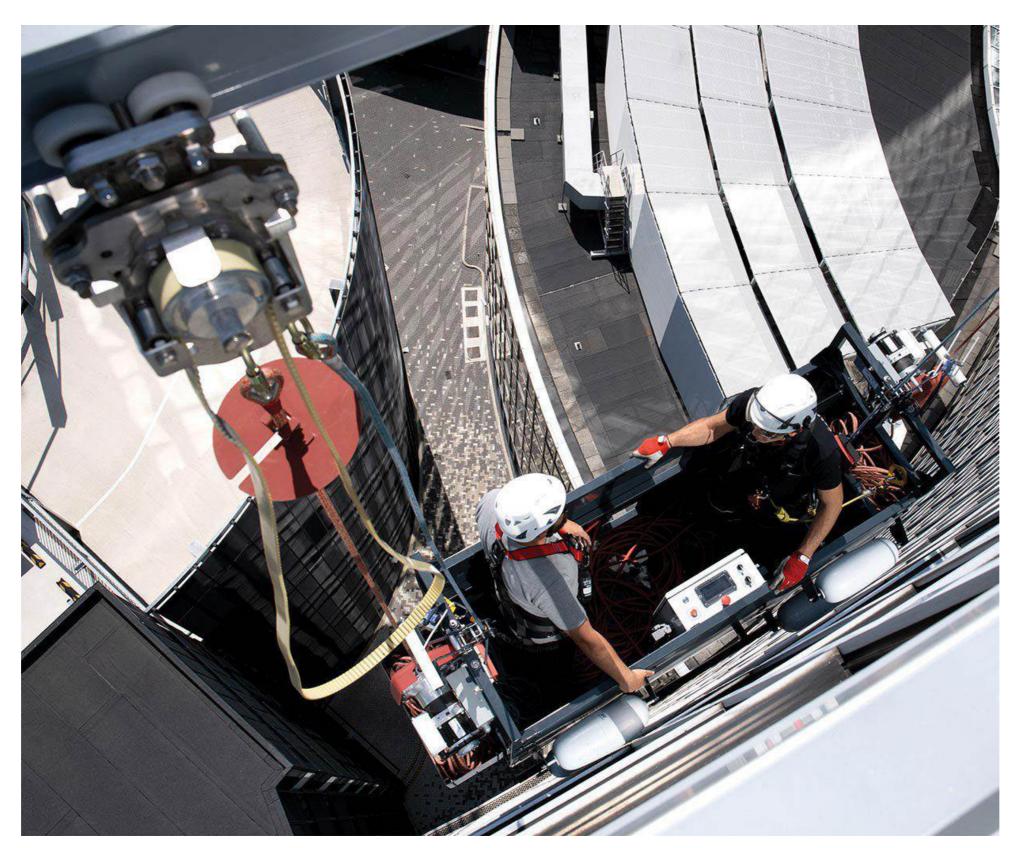
The hoist can be mounted on any Fallprotec suspension point designed according to EN1808. The suspension cable will then go up and down. Combined with radio control, it's a great tool for facade or industrial maintenance.



# → The Brief

The Ven Amsterdam is designed as a conceptual building with workspaces, hotels, appartments and restaurants under the same roof.

For the cleaning of the windows of this complex construction, Fallprotec provided a RopeClimber 2 person cradle. Installed permanently, this cradle allows the cleaning team to move upwards and downwards using RopeClimber hoists.







# → The Result

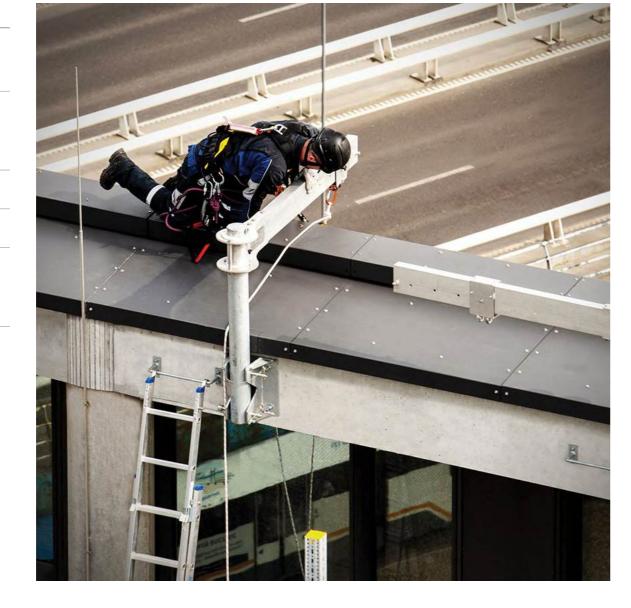
The RopeClimber was chosen for this application because of its advantages compared to standard cradles with steel wires:

- BMU certified lightweight cradle weighting only 188kg
- Battery powered hoists don't require cumbersome power supply cables
- High resistance textile cable





- Discrete solution, easily hidden Lightweight solution
- Usable by rope access specialists, RopeClimber hoists and cradles alike
- Bespoke designs upon request
- Total suspended load 300kg
- Possibility of custom-made solutions with the Fallprotec's engineering department



Compliant with EN 1808:2015

### **Applications**





Case Studies



Click on the picture to see all case studies related to Davit arms for suspended equipment.

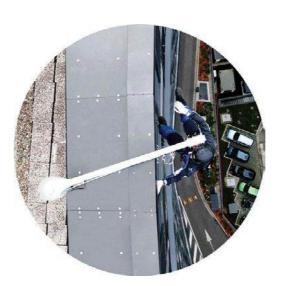
# \*\*

Videos



# YouTube

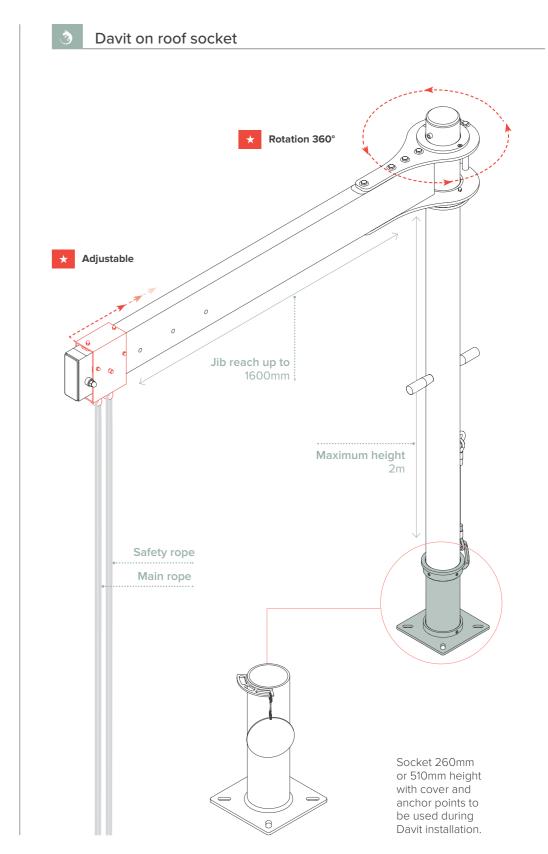
Click on the video to go to our You-Tube channel to watch this video and others related to our product range.



Removable davit designed to suspend a worker to carry out maintenance or cleaning work on a facade. The davit can be used by a rope access specialist, by a RopeClimber chair or by a single Ropeclimber cradle. The davit is fixed to the roof with sockets installed permanently on the perimeter of the building. At the end of the work, the davit is dismantled and stored.

### The davit is made of:

- An aluminum rotating jib, two anchor points, the main rope and the safety rope
- Adjustable anchor points
- An aluminum mast
- Stainless steel sockets fixed on the roof slab, a cover closes the socket when not in use.
- Stainless or galvanized steel sockets fixed on the wall or on parapet



- The BMU can be equipped with an auxiliary hoist for glass changing, and other heavy-duty maintenance works
- Made of standardized components in a customized way to ensure that all unique facades of the building can be reached and maintained/cleaned
- The solution for tower building maintenance
- Easily operated. A Rope Access Technician Certification is not required
- Tailored design to all complex facade geometries

EN 1808:2015 | EN60204-1

### **Applications**



### Case Studies



Click on the picture to see all case studies related to Building



- Modular system, which allows augmentation or exclusion of elements

### Compliant with

Directive 2006 / 42 / EC



Videos

Click on the video to go to our You-Tube channel to watch this video and others related to our product range.

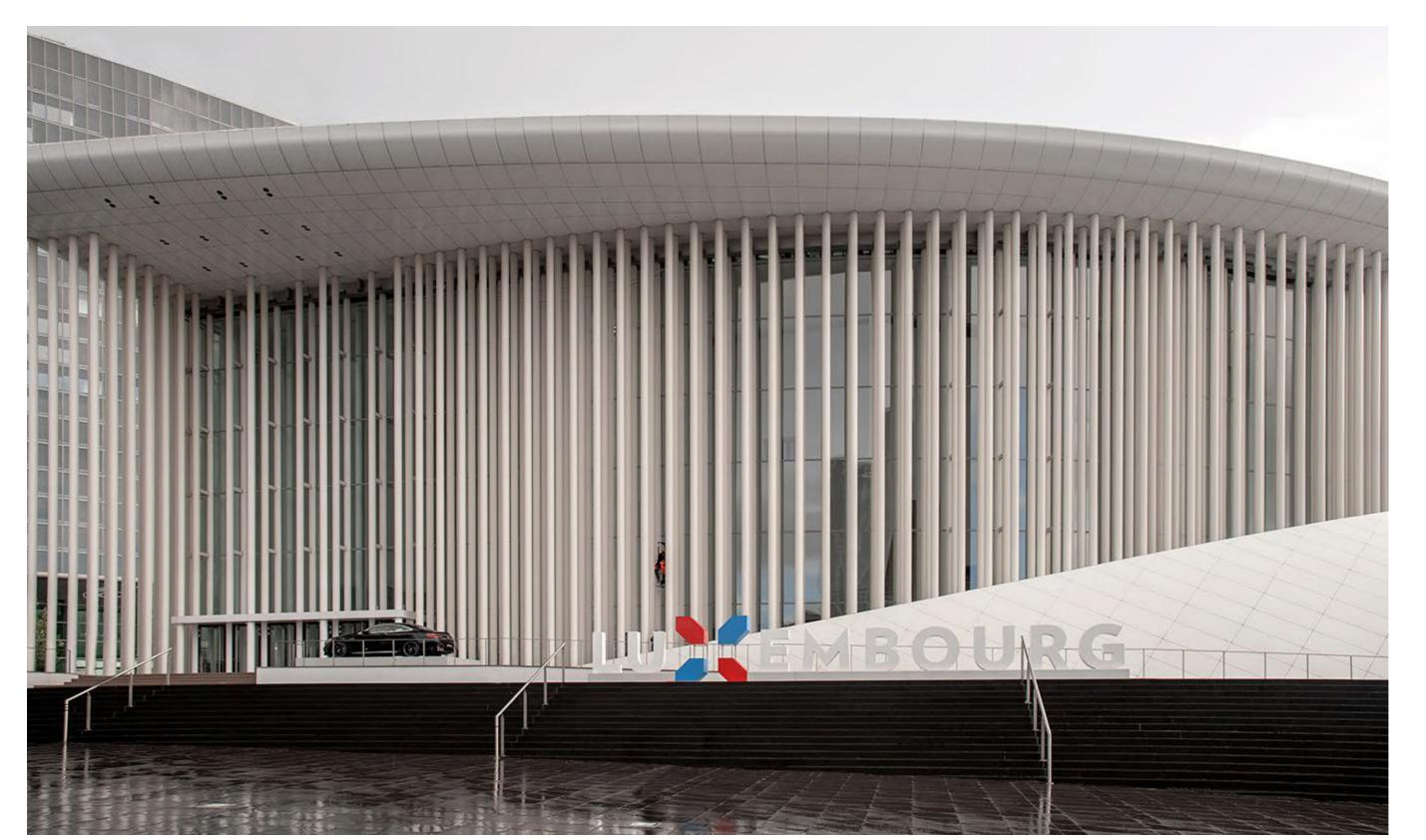
**►** YouTube

→ A Building Maintenance Unit – BMU – is a mechanical and electronic crane suspended from the roof with a safety platform, which moves systematically over a structure while carrying human window washers or any other specialist for the maintenance of the facade. Architects, constructors, and consultants are often faced with facade challenges and trust Fallprotec & FBA Gomyl since it provides a broad range of BMUs; from machines with standard features to elaborate modular structures which respond to the functional requirements and any building facade design and the growing sustainable architecture building.

The design of the machine and its components are calculated with the latest generation software and tested according to both European and North American standards.







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