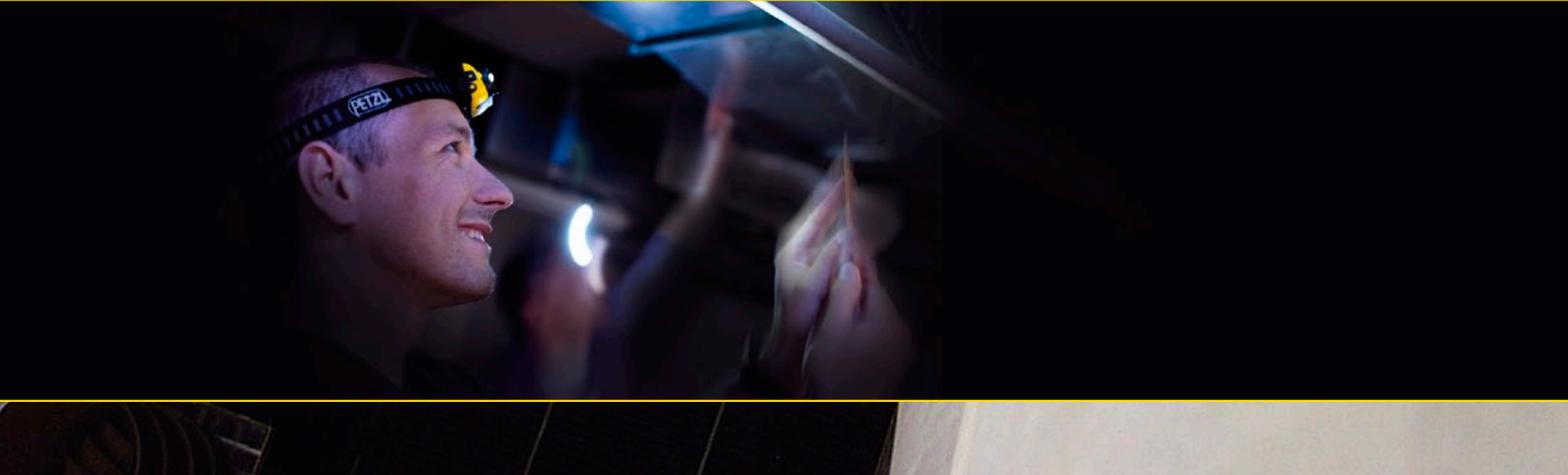


**PETZL®**

2009





© A. Childeric / Kalice



### V.axess, The Petzl Institute

The Petzl Institute was created to be a place for discussion and experimentation. Its goal is to unite experiences and knowledge under one roof in order to invent and develop the techniques of tomorrow. To reach these objectives, it is necessary to increase our understanding of the different components of verticality. This modeling phase is essential. It must integrate human dimensions, both physiological and psychological, as well as technical dimensions, which may involve equipment or progression. Taking form in a new 500 m<sup>2</sup> multi-use building, V.axess owns sophisticated modular units which can be used to simulate most situations encountered in the vertical world: a 20 m tower, inclined outdoor climbing walls designed to reproduce unique climbing conditions, like seeping water or ice, or 100 km/h + winds (created by 50 kW fans)... This new tool is totally adaptable to our needs and allows us to - in complete safety - analyze and better understand different phenomena observed in the field. This new information will allow us to invent and experiment with techniques for the 21st century.

### Solutions for progression in dark or vertical environments

Petzl's professional range revolves around two product groups:

- products for "verticality", designed for work at height or rescue
- headlamps for working hands-free in the dark

Our commitment remains the same: to contribute to the evolution of techniques through continuous research regarding safety, comfort and simplicity.

In order to succeed, Petzl has invested in innovative projects, notably in new Personal Protective Equipment...

- After being approached by New York City's fire department, Petzl invented the EXO emergency evacuation device. To remain true to our search for simplicity and comfort, we had to carry out many tests in the field and follow a specific process of development.

- The new I'D self-braking descenders are now easier to manipulate, thanks to the button on the new handle which facilitates moving on an incline

- All our rope clamps with cams have evolved technically to increase the efficiency of rope ascents

- And finally, the 2009 line dedicated to professionals expands with the addition of the new SEQUOIA and FALCON harnesses for tree care and rescue, the ASCENTREE double-handled rope clamp, as well as the many semi-static ropes now available in different lengths, with or without sewn terminations

In Petzl's 2009 professional catalogue, you will find:

- a first part presenting multi-product solutions adapted for different applications and work scenarios

- a second part presenting the complete selection of Petzl products for "verticality" and hands-free lighting

The Petzl team

Vertical work

pages 02 to 107

Hands-free lighting

pages 108 to 133



## Mastering the techniques

To optimize safety and efficiency in work at height, great precision and excellent technique are required. These skills should be acquired through specific training and regular practice appropriate for each stage of the operation.

Petzl recommends using a specialized training organization for all training activities.

The examples on the following pages illustrate some of the practices used in the vertical world.

## Means of protection

In most cases, collective protection should be the first choice. The use of Personal Protective Equipment (PPE) is authorized for certain specific cases:

- when external access is not possible (platforms, cherry pickers, etc.)
- when installing collective protection systems is technically impossible
- when using PPE can reduce risks
- the job operations are infrequent and short-term

## Providing safety during operations

Using PPE for work at height and rescue systems must always follow certain basic rules:

- careful selection and safe placement of anchor points: the quality of the anchors is crucial for safety. Distributing loads and installing devices is essential. Double or triple redundant anchors for each system provide an optimal level of safety, particularly for rescue operations and Tyrolean traverses
- appropriate work post organization: installations built for working at height or for rescue must be simple and well organized. Simple and organized systems will make the inspection process quicker and more efficient
- a back-up belay system: whenever possible, rescue systems must have an independent back-up system that simultaneously ensures the safety of the victims and rescuers (except in the case of self-rescue)
- an evacuation plan: at a worksite, there must be an evacuation plan that allows the teams to get themselves out or be rescued, in the case of an accident. PPE was originally designed to only be used by one person at a time. When this equipment is used to evacuate two people at the same time, it is only authorized for a few specific scenarios, such as accompanied descent, lowering or raising a litter, etc. In these cases:
  - their usage is neither certified nor covered by the Directive on personal fall arrest protection
  - the equipment is being used at the upper limits of its capacity: carefully read the instructions for use

## Techniques

### Work techniques

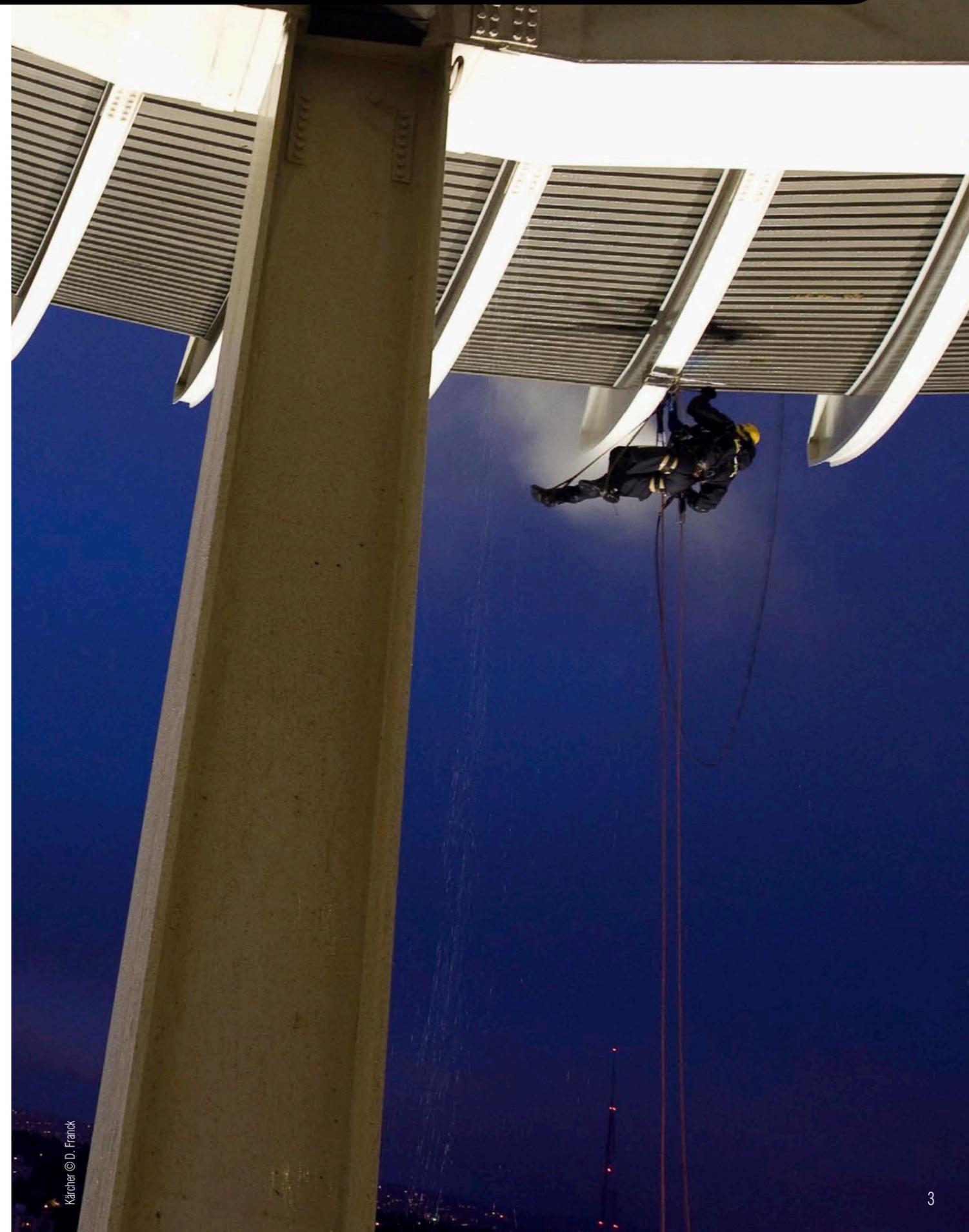
|   |        |
|---|--------|
| General principles of working at height | page 4 |
| Difficult access                        | 6      |
| Tree care                               | 12     |
| Energy and networks                     | 16     |
| Framing and roofing                     | 20     |

### Rescue techniques

|                     |         |
|---------------------|---------|
| Self-rescue         | page 24 |
| On-site rescue      | 26      |
| Technical rescue    | 30      |
| Ski lift evacuation | 34      |

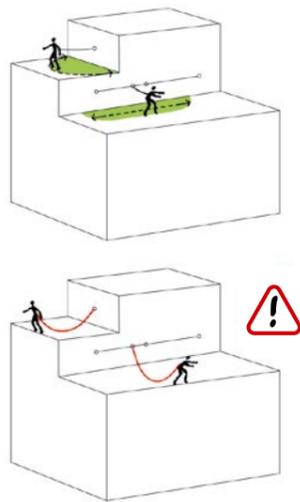
## Products

|                                    |         |
|------------------------------------|---------|
| Traceability                       | page 39 |
| Harnesses                          | 40      |
| Helmets                            | 56      |
| Lanyards and energy absorbers      | 60      |
| Mobile fall arrest device for rope | 66      |
| Connectors                         | 68      |
| Descenders                         | 74      |
| Rope clamps                        | 80      |
| Pulleys                            | 86      |
| Anchors                            | 92      |
| Ropes                              | 98      |
| Packs                              | 104     |
| Accessories                        | 106     |
| Standards                          | 107     |
| Index                              | 134     |



## Restraint

This technique aims to keep the worker from entering a zone where there is a risk of falling (leash principle): lanyard + work positioning harness (the length of the lanyard is chosen to keep the worker away from the fall hazard area).



## Fall arrest

### Preventing the risks associated with a fall

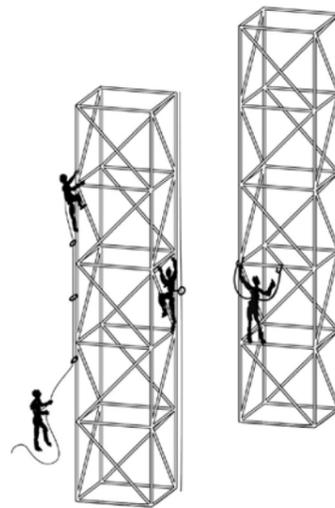
The fall arrest system is designed to:

- reduce the distance required to arrest the fall
- absorb the energy of the fall in order to limit the impact transferred to the human body
- maintain the victim in a position that limits the effects of inert suspension

### 1 - Striking an obstacle or the ground

You must anticipate the required clearance.

This clearance is the space required under the user so that he doesn't hit any obstacles in a fall (see diagram).



Notes:

- lanyards or energy absorbers should be no longer than two meters
- the length of the fall should always be minimized
- the clearance required depends on the system you are using: lanyard, energy absorber, mobile fall arrest device, reel...

### 2 - Excessive impact force

During a fall, the worker should never be subjected to a force greater than 6 kN.

Two means are possible:

- be sure that the lanyards always remain attached to the anchor points, above the head, so that the length of the fall and the force generated by the fall are minimized
- if it is not possible to limit the fall, a shock absorber should be used. The most common PPE (personal protective equipment) with shock absorption are energy absorbers and dynamic rope systems

### 3 - Inert suspension: aggravates the person's condition

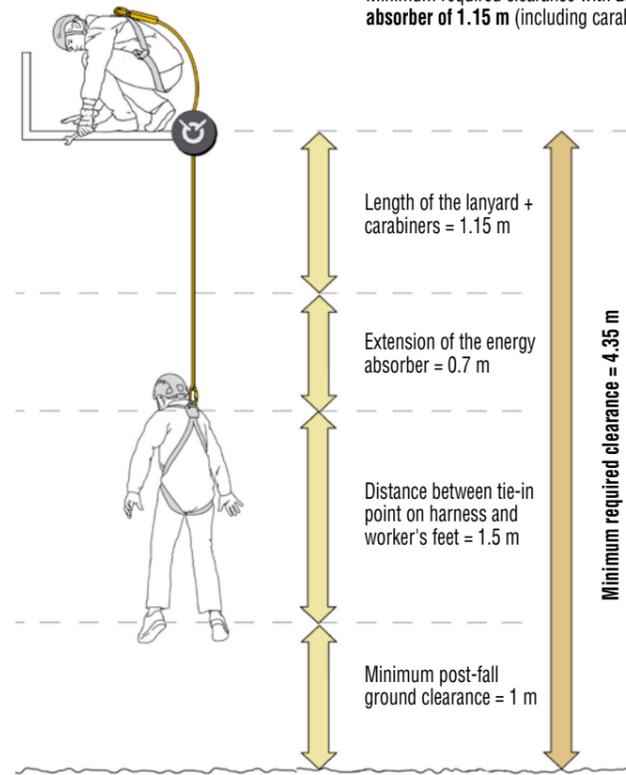
The fall arrest system is designed to minimize the effects of gravity on the human body during a fall (reduces the force of impact, avoids or reduces impact against an obstacle). Despite this, the consequences of a fall are often serious.

Hanging immobile in a harness, regardless of the model used, can cause serious physiological harm.

This is not the case when the hanging victim is conscious, as he is able to continually modify the pressure points of his harness by himself. In conclusion: teams must be knowledgeable, trained and independent enough to rescue an unconscious worker or a worker incapable of self-rescue.

### Clearance

Minimum required clearance with an **ABSORBICA-I** energy absorber of 1.15 m (including carabiners): **4.35 m**.

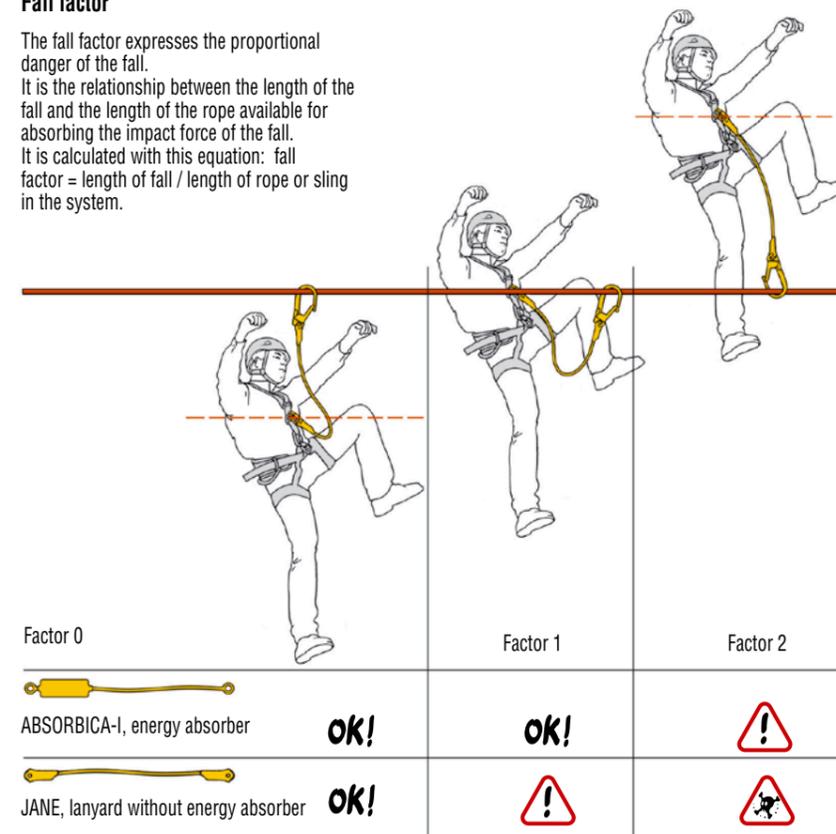


### Fall factor

The fall factor expresses the proportional danger of the fall.

It is the relationship between the length of the fall and the length of the rope available for absorbing the impact force of the fall.

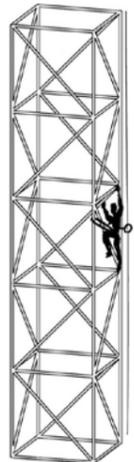
It is calculated with this equation: fall factor = length of fall / length of rope or sling in the system.



## Work positioning

This technique allows the worker to work while hanging in his equipment, hands free:

- where there is no risk of falling into space (low-angle roof): work positioning harness and lanyard
- where there is a risk of falling (unfinished roof, roof unprotected by collective protection, steep slope, etc.): work positioning and fall arrest harness, work positioning lanyard, fall arrest system



## Rope access

This progression technique is often used when there is no collective protection (railing, protective nets, etc.) or when overhanging structures or worksites do not allow for mobile platforms, outdoor scaffolding, etc. to be used. This is also the case for temporary access situations where it is not practical to set up collective protection. The worksite is accessed with ropes, using techniques that originated with caving or mountaineering. A site can be accessed from the top (safer and simpler to set up, this is the technique of choice), or from below (a leader sends a rope up and around a fixed point, and then climbs up the rope using mountaineering progression techniques. Once the leader has installed all the progression and safety ropes, the other workers can safely climb up these ropes.

## Confined spaces

Work done in confined spaces carries specific additional difficulties related primarily to the lack of space and to the absence of any means of autonomous progression. Besides, the worker may face numerous additional constraints: length of the intervention, air quality, temperature, etc. Since he cannot move about or ensure his own safety, someone working in this type of environment must have assistance. Confined spaces are generally accessed from the top, using a hauling system. The worker's safety is ensured by a reversible hauling system, which is independent and reliable and works without an external energy source, allowing a quick evacuation in case of an accident or power failure.

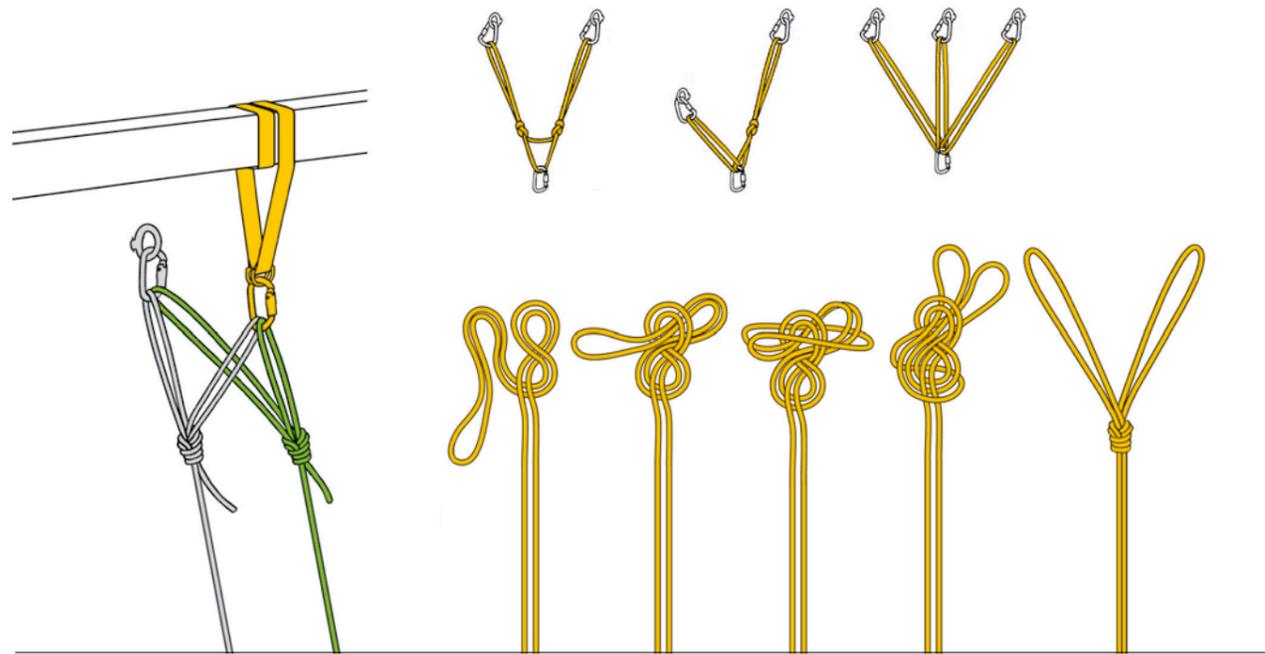


**A VERTEX BEST:** comfortable helmet for work at height with strong chin strap to limit risk of the helmet coming off during a fall.  
**B NAVAHO BOD CROLL FAST:** work positioning and fall-arrest harness adapted to working in suspension, with integrated ventral CROLL rope clamp for ascending the rope.  
**C ASCENSION:** ergonomic handled rope clamp for rope ascents, in right or left hand versions.  
**D I'D S:** self-braking, versatile descender/belay device designed to easily control the speed of a descent, to position the worker at his post, and to make short rope ascents.  
**E ASAP:** mobile fall-arrester for installation on a safety rope - works without any intervention by the user.  
**F PODIUM:** seat designed for prolonged suspension.  
**G PARALLEL:** 10.5 mm diameter rope for difficult access.

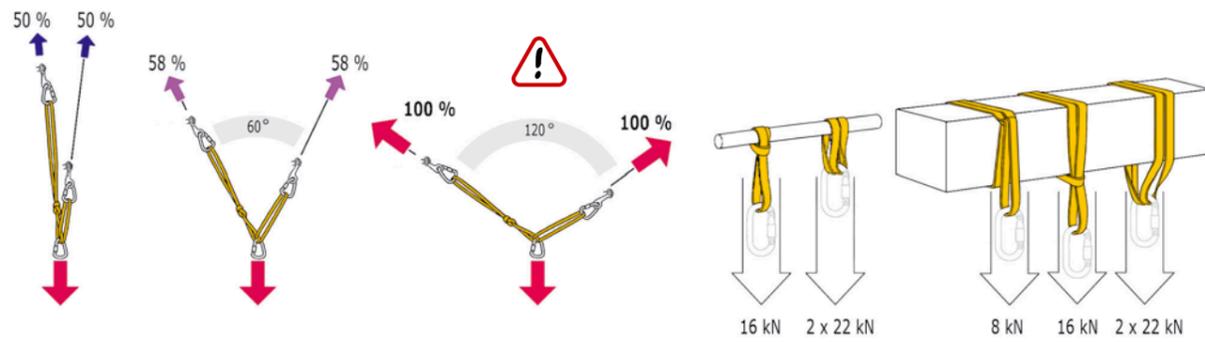
All equipment pages 38 to 135.

## Installing ropes and anchors

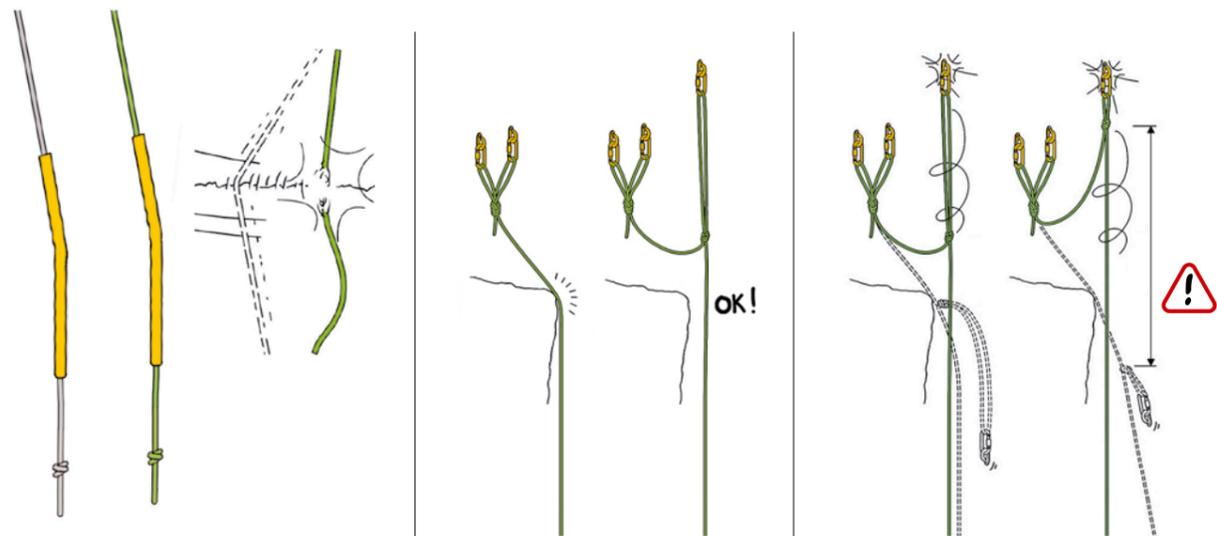
Equalizing the anchors



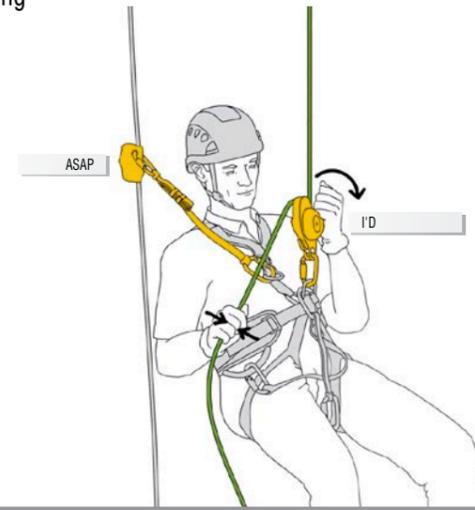
## Installing the anchors



## Protecting and redirecting ropes

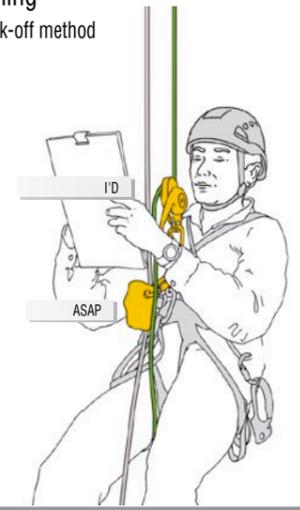


## Descending



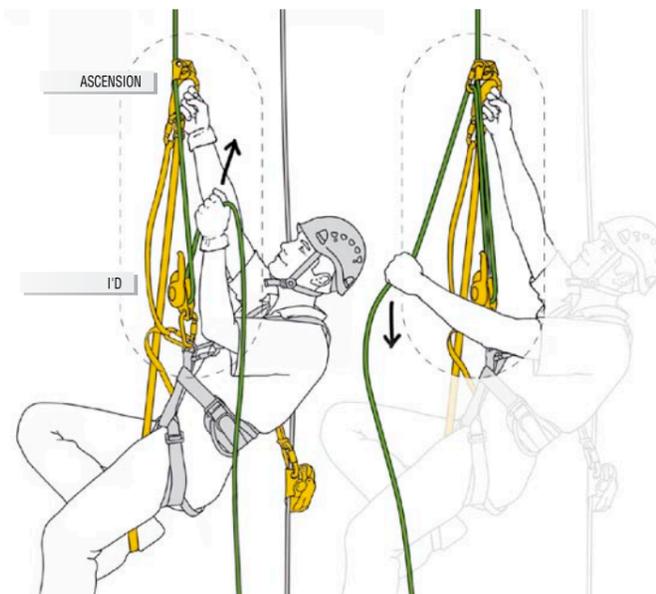
## Vertical work positioning

Attention: remember the lock-off method (or locking the I'D)

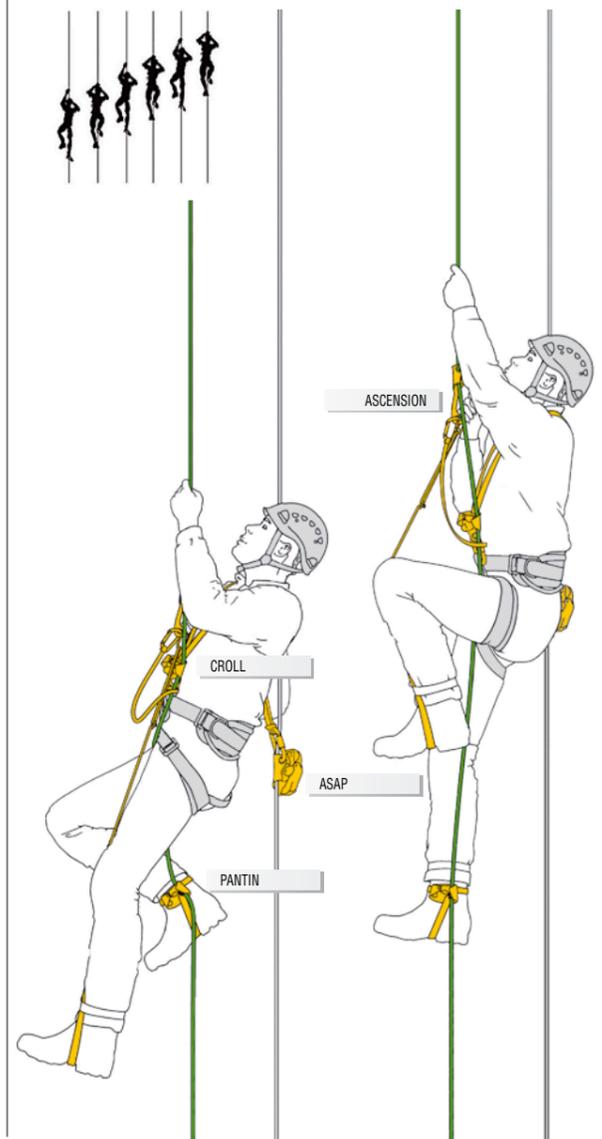


## Ascending

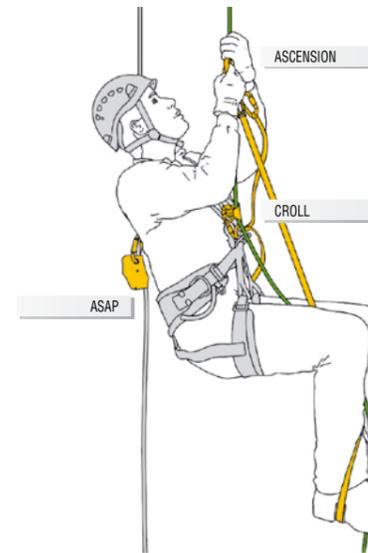
Ascending a short distance of rope



Ascending a long distance of rope with the PANTIN foot-mounted rope clamp (alternative technique)

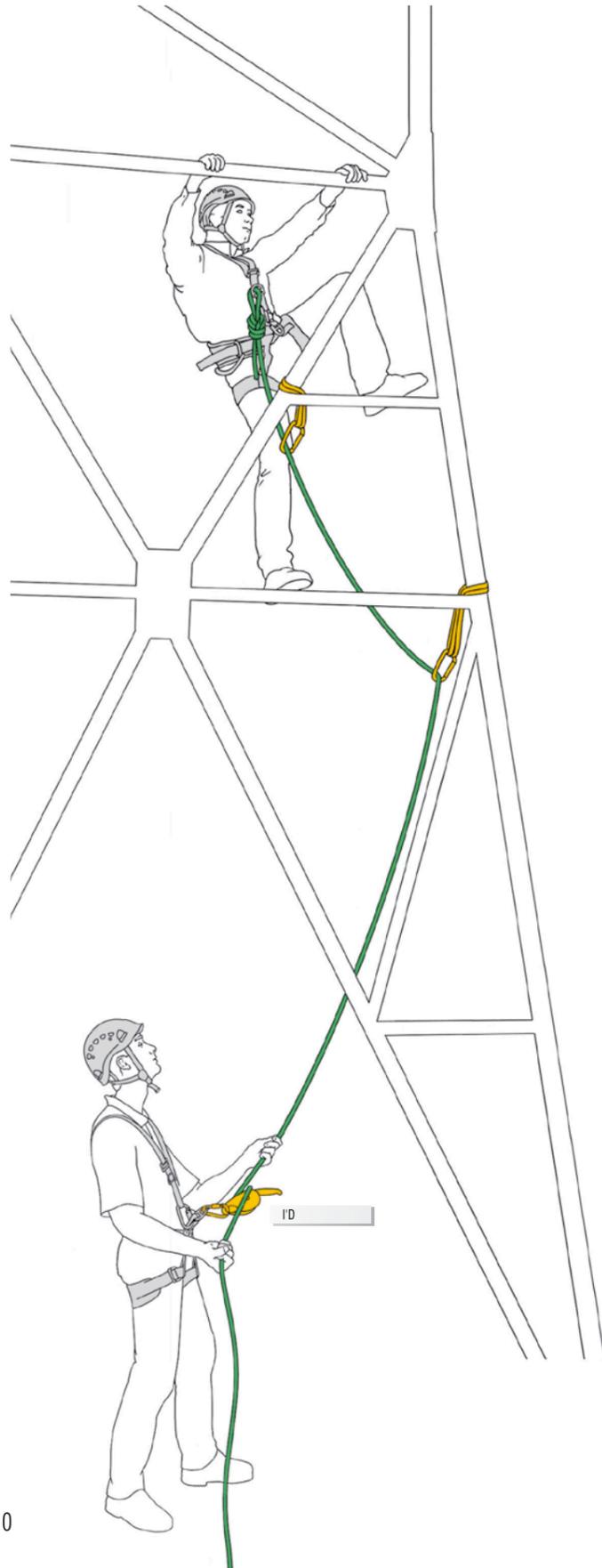


Ascending a long distance of rope (handled ascender - chest rope clamp)

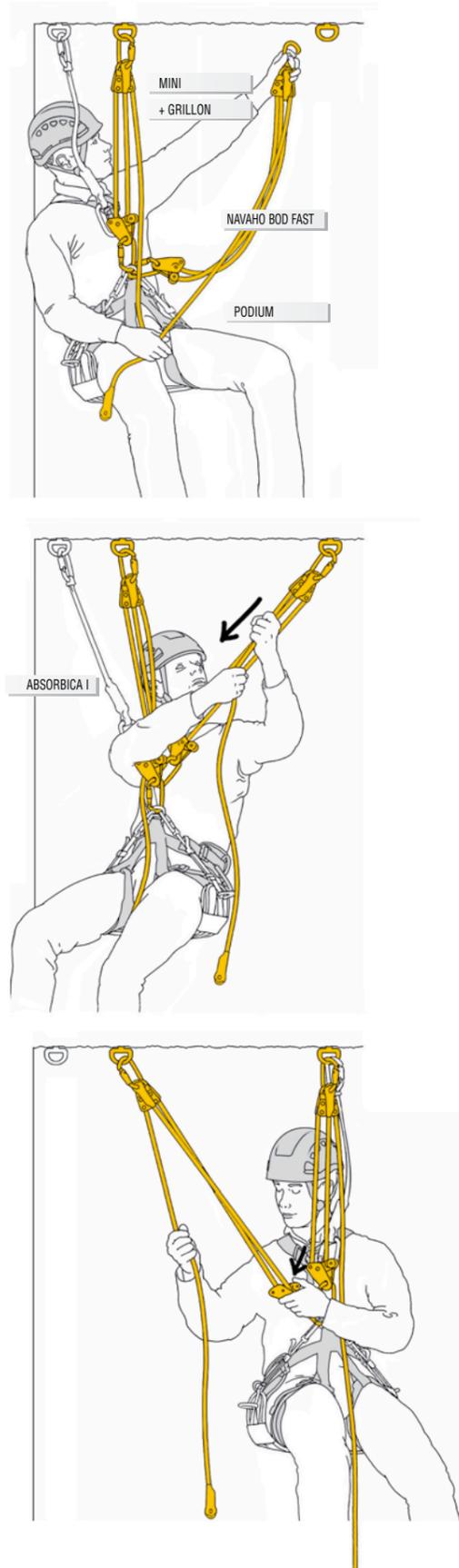


## Ascending (continued)

Accessing from below when installing the rope from above isn't possible

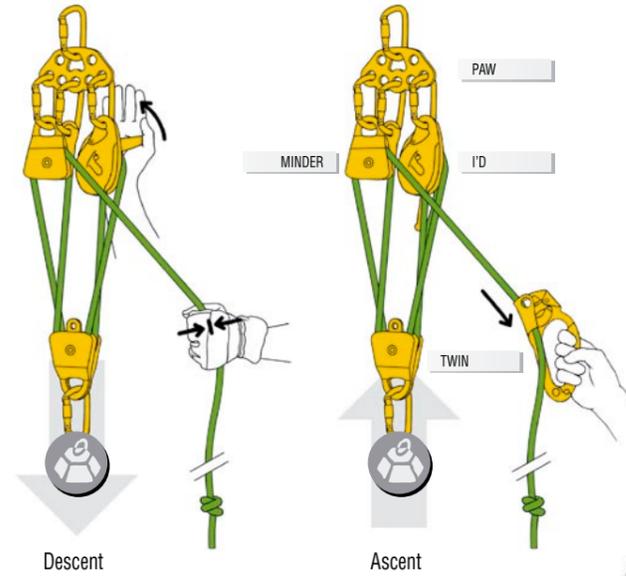


## Moving horizontally under an overhang



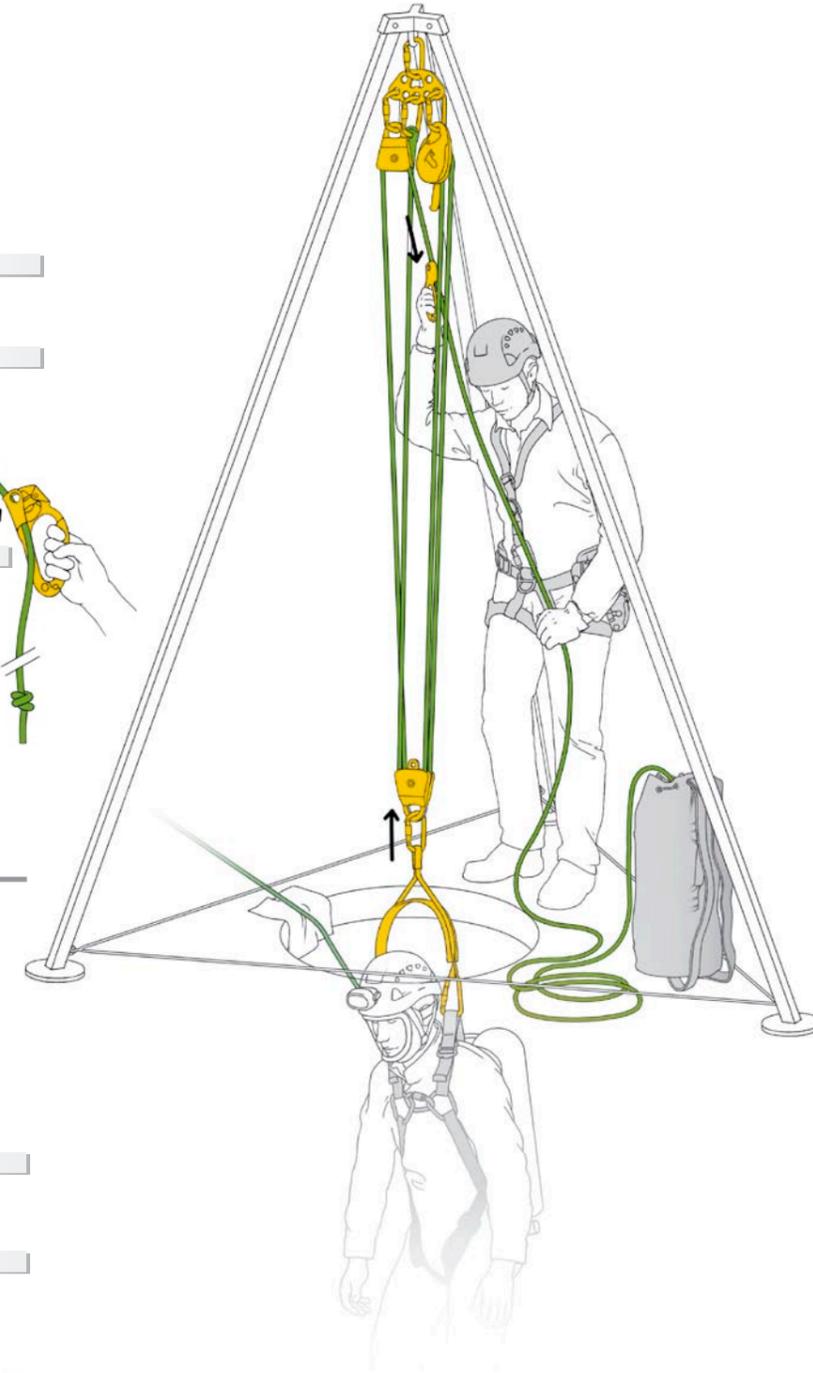
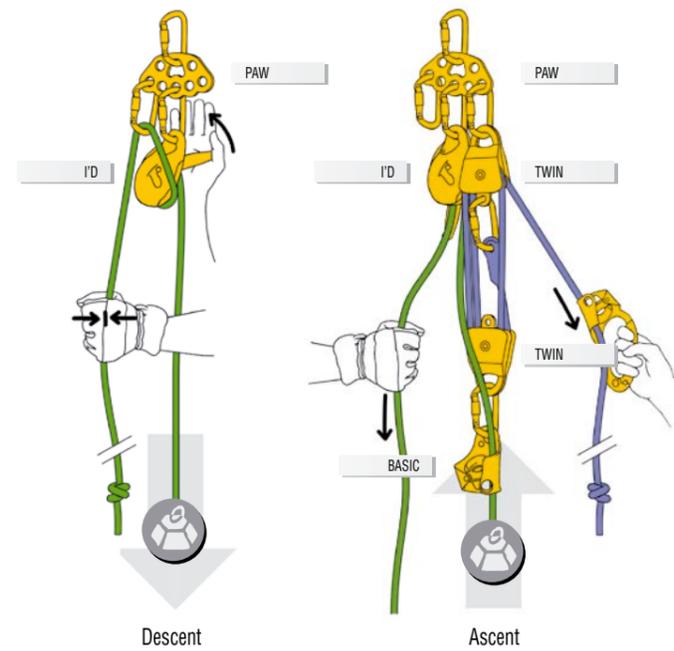
## Combined lowering/raising system

- advantage: quick transitions (lowering/raising)
- disadvantage: the length of the rope is 4 times the travel distance

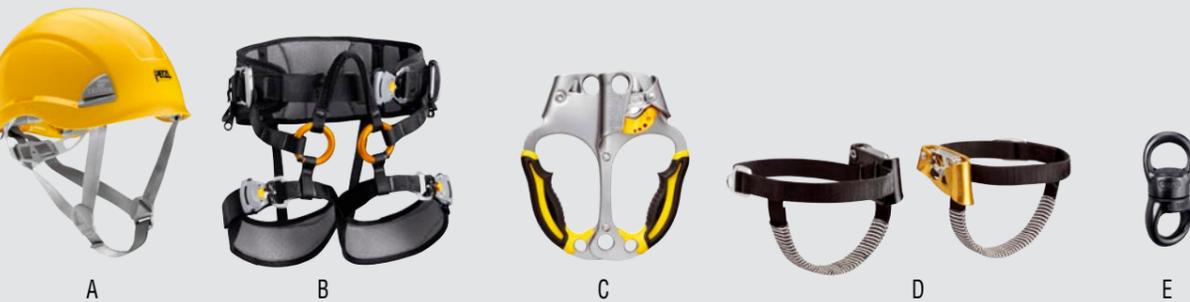


## Independent lowering/raising systems

- advantage: the length of the rope equals the travel distance
- disadvantage: transitions are more complex (lowering/raising)



When it is not possible or appropriate to use an exterior means (elevating platform, ladder, etc.), the arborist uses a rope progression technique. To do this, he sets up a rope from the ground and installs an ascending system which is determined by the configuration and height of the tree. Once the arborist is in position, he needs to remain balanced and comfortable (adjustable lanyards). The work positioning system should always be backed up while cutting.

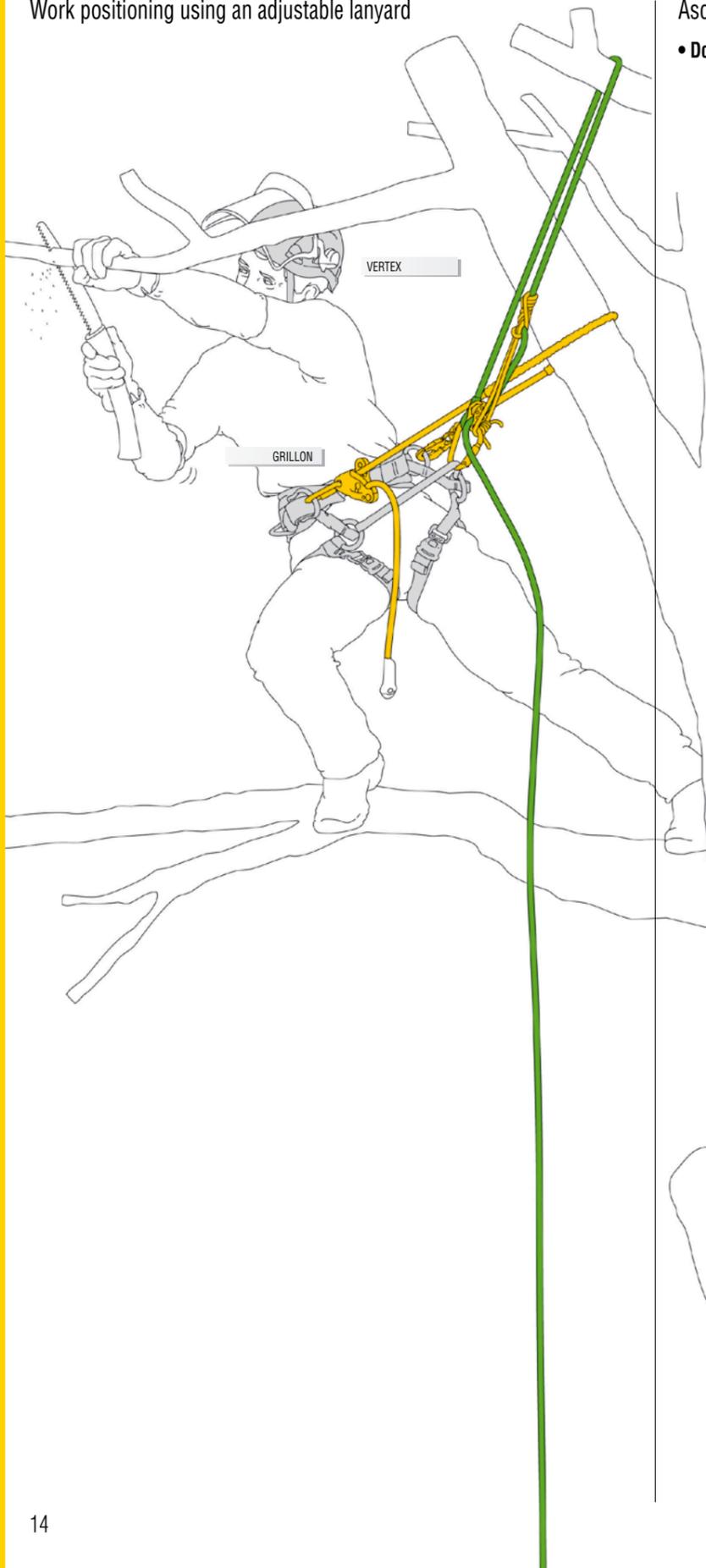


**A VERTEX BEST:** comfortable helmet for work at height with system for mounting hearing protection and face shield. **B SEQUOIA:** arborist seat harness, allowing great mobility and comfort. **C ASCENTREE:** double-handled ergonomic rope clamp for tree access. **D PANTIN:** right- or left-foot-mounted rope clamp for increasing efficiency during rope ascents. **E SWIVEL:** prevents the rope from twisting on the ventral attachment point of the harness.

All equipment pages 38 to 135.

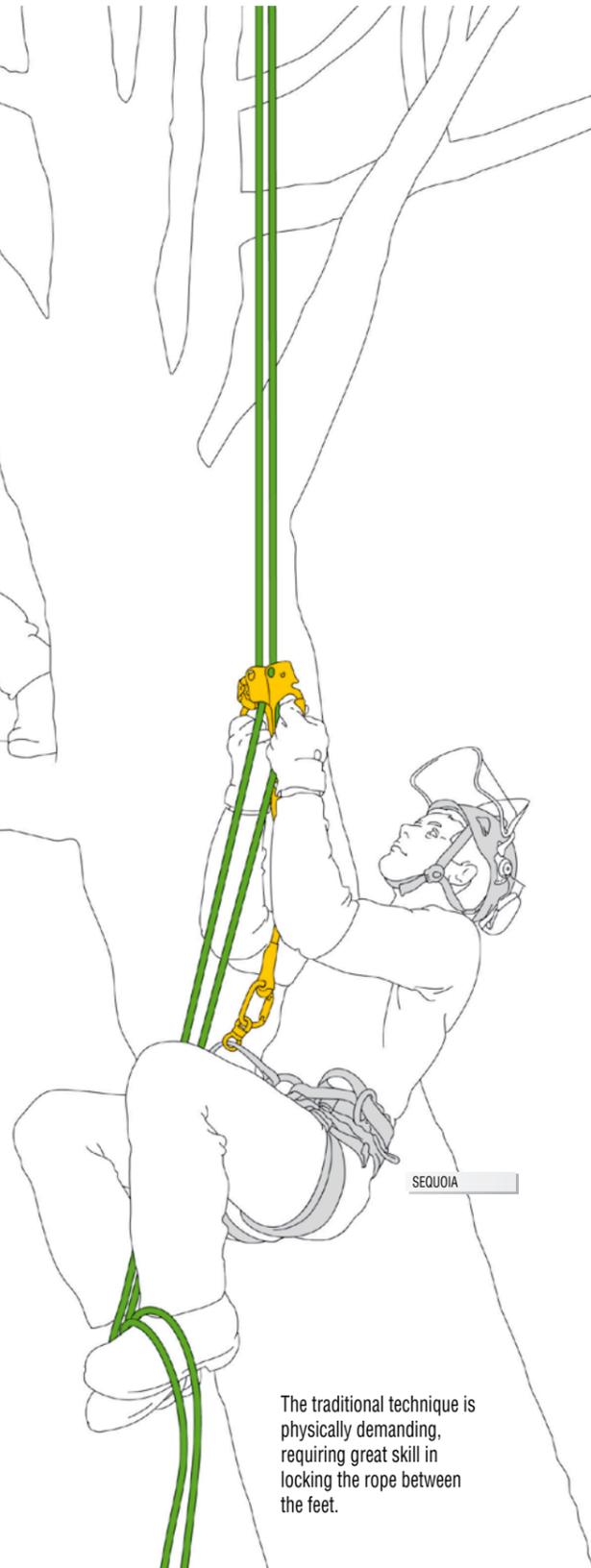


Work positioning using an adjustable lanyard

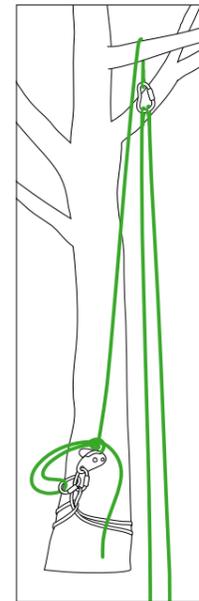


Ascending

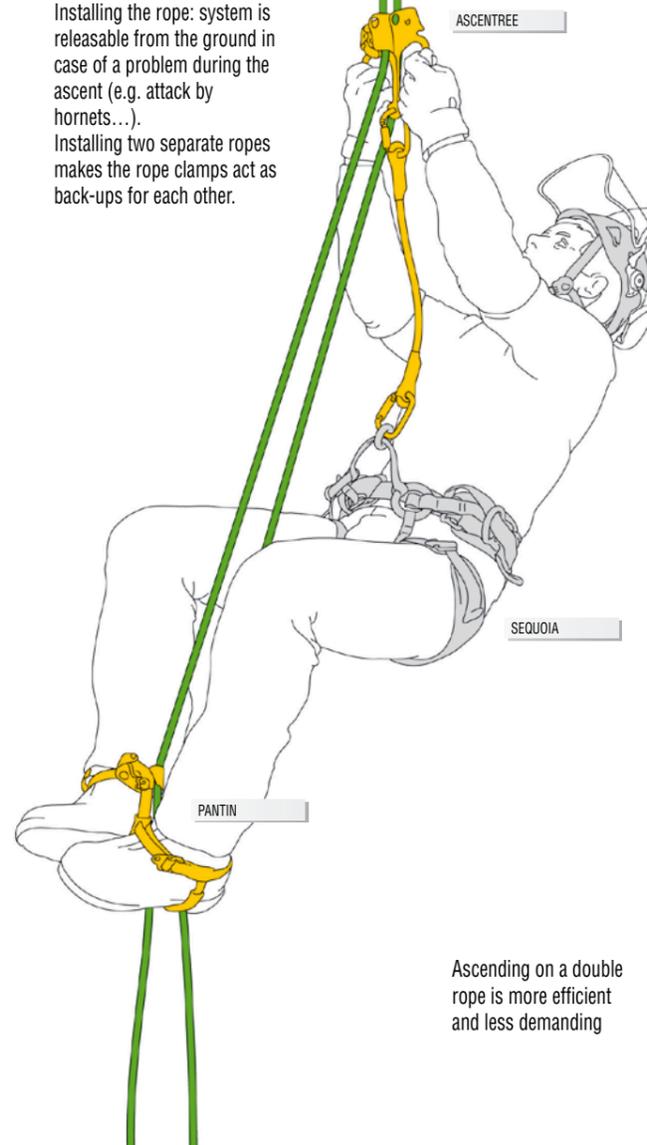
• Double-rope access technique



The traditional technique is physically demanding, requiring great skill in locking the rope between the feet.

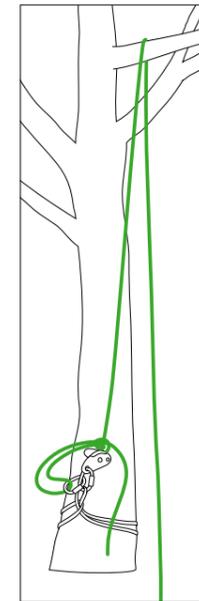


Installing the rope: system is releasable from the ground in case of a problem during the ascent (e.g. attack by hornets...). Installing two separate ropes makes the rope clamps act as back-ups for each other.

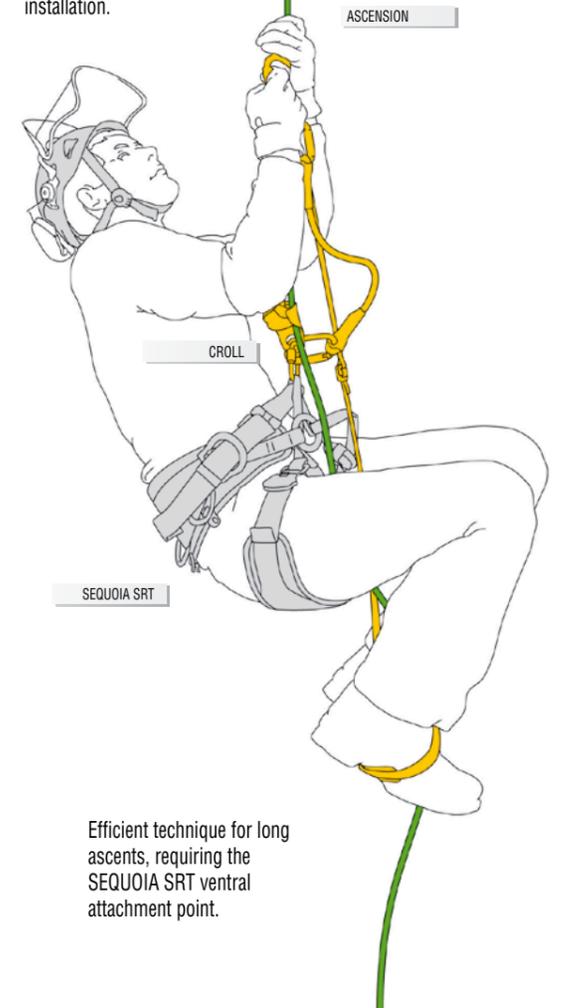


Ascending on a double rope is more efficient and less demanding

• Single rope access technique

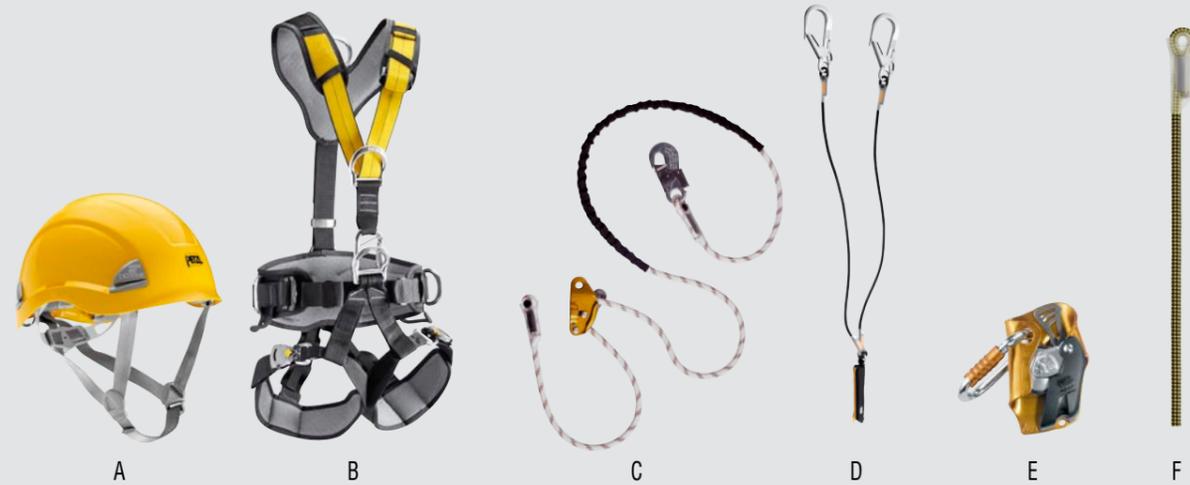
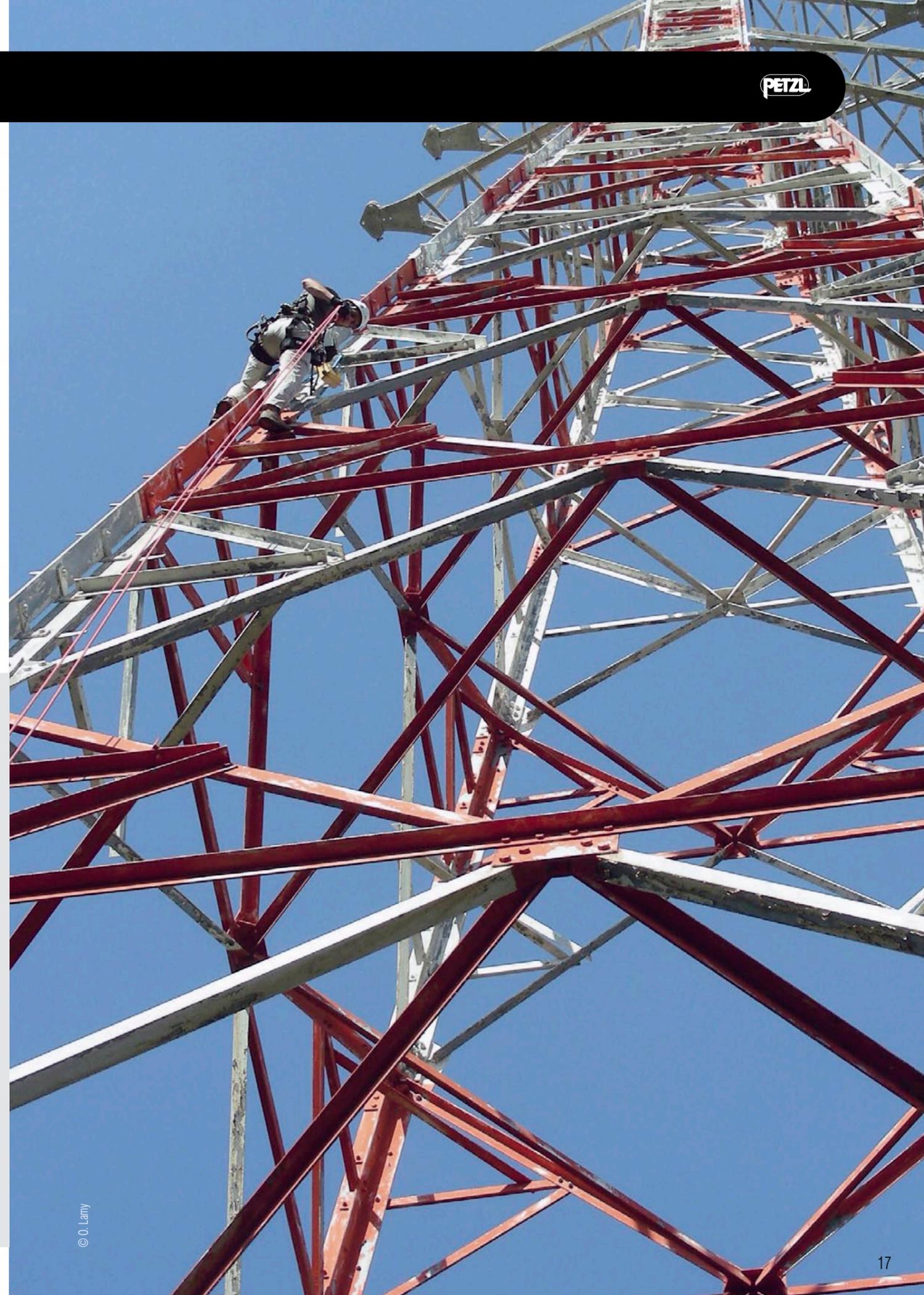


Installing the rope: system is releasable from the ground in case of a problem during the ascent (e.g. attack by hornets...). Quick and easy installation.



Efficient technique for long ascents, requiring the SEQUOIA SRT ventral attachment point.

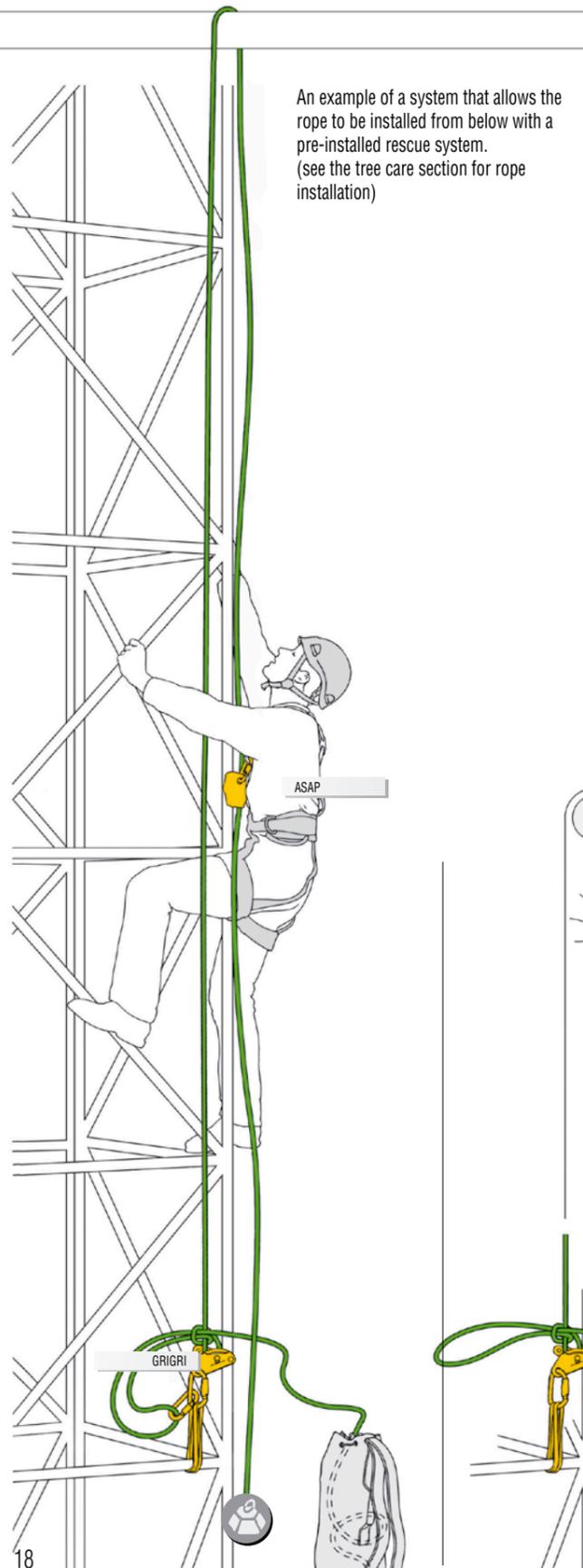
The techniques used for moving around depend directly on the specifics of each structure and the presence/absence of collective protection. If it is absent, each member of the team is responsible for ensuring his own safety. This is the case, for example, when working on an antenna or when setting up or taking down structures for events. To protect himself in the case of a fall, each worker must use a fall arrest system (self-belay on the structure with an energy-absorbing lanyard or on a lifeline with a mobile fall arrester). If necessary, a positioning system is used to enable hands-free work. If the structure does have collective protection, a work positioning system (adjustable lanyard) may be sufficient. In special cases, workers may also need to use advanced techniques for progression (alpine technique for lifeline installation when it has not been pre-installed on the structure, hauling system for lifting loads, descending on a rope, etc.).



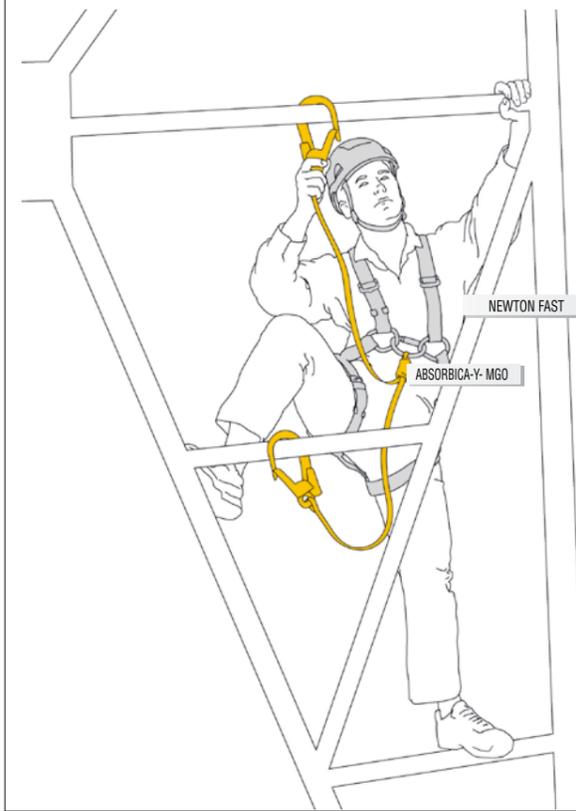
**A VERTEX BEST:** comfortable helmet for work at height with system for mounting hearing protection and face shield. **B NAVAHO BOD FAST:** work positioning and fall arrest harness designed for work in suspension. **C GRILLON HOOK:** work positioning lanyard that can be adjusted while loaded with HOOK connectors, allowing hands-free work. **D ABSORBICA-Y MGO 150:** energy-absorbing lanyard with MGO connectors for mobility when progressing on a structure. **E ASAP:** mobile fall-arrest system for installation on a rope functions without any intervention by the user. **F AXIS:** versatile 11 mm diameter rope with sewn end.

All equipment pages 38 to 135.

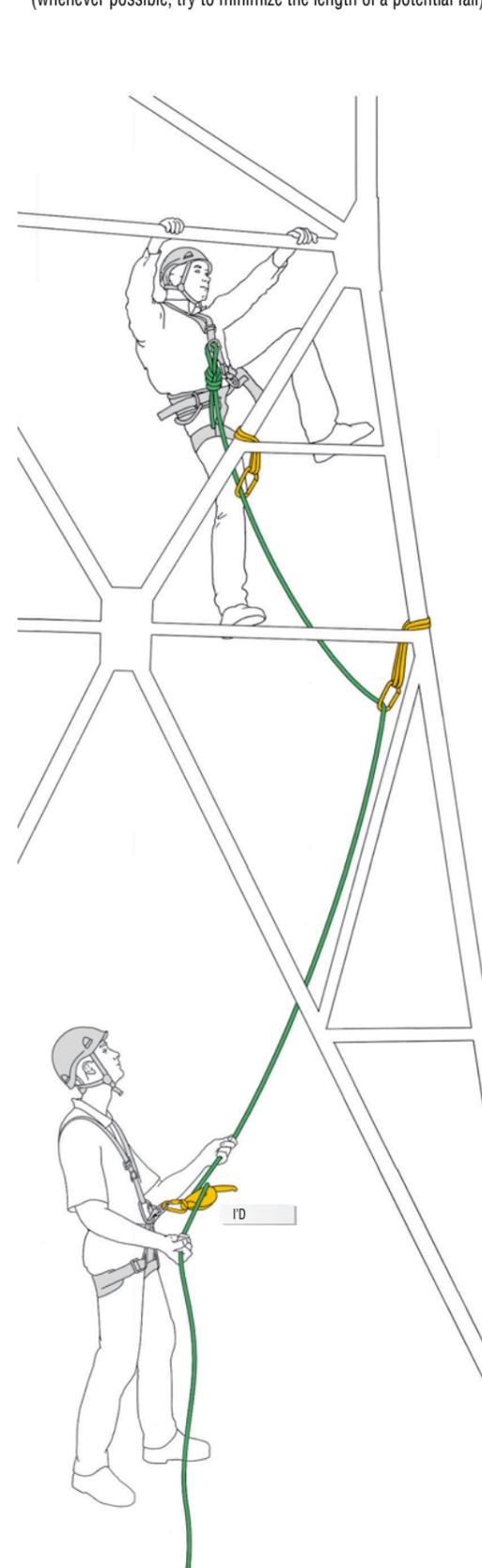
Ascending: ascent is backed-up using a fall arrest device on the rope



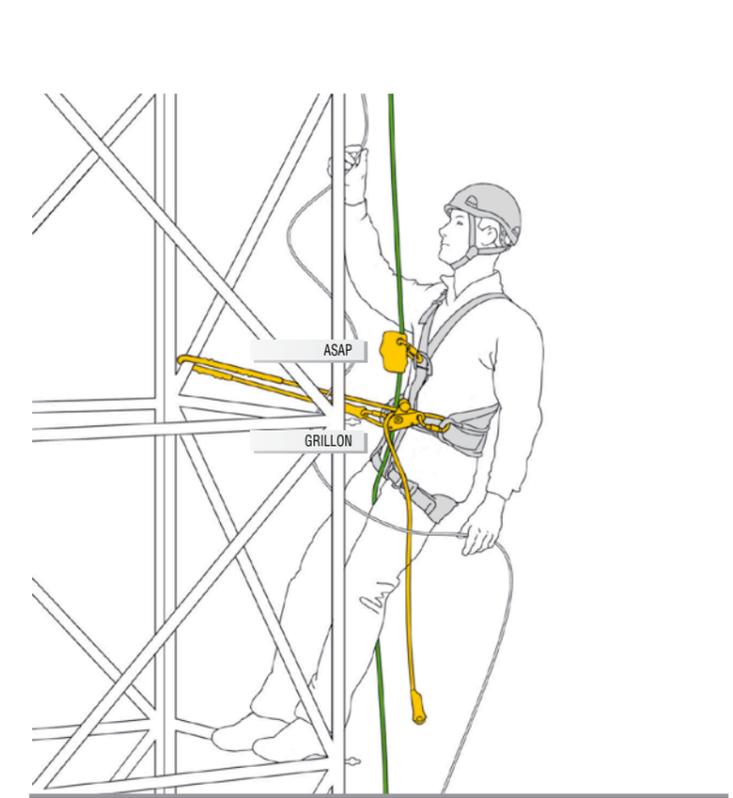
Ascending: backed-up ascent using a Y-shaped energy absorbing lanyard



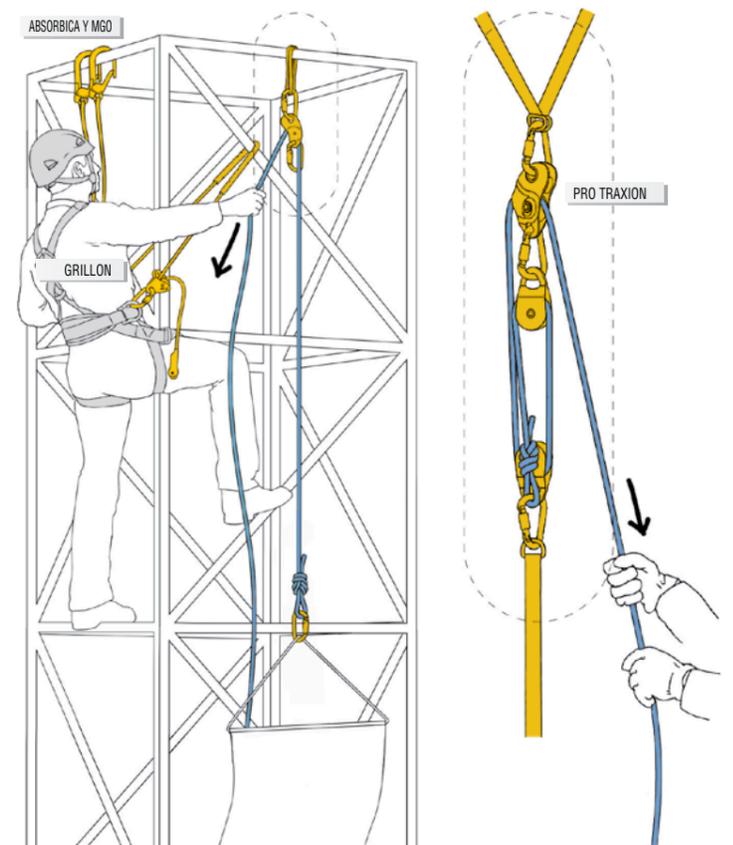
Ascending: backed-up ascent using climbing techniques  
(whenever possible, try to minimize the length of a potential fall)



Work positioning using an adjustable lanyard

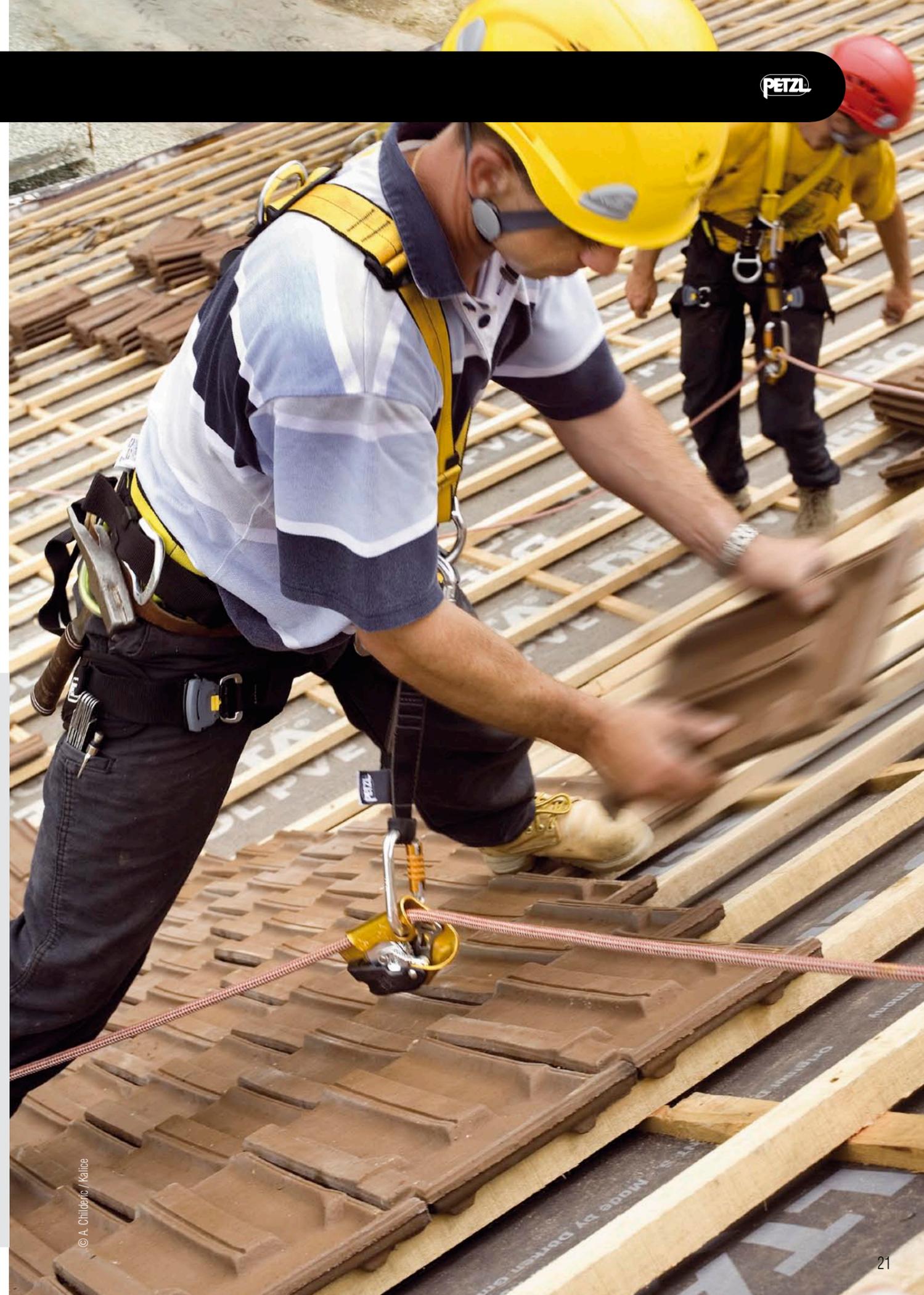


Hauling



A safety device must be put in place before working on a roof for protection in case of slips or falls. The type of system is determined by the length of the intervention. If the operation is long, it should be protected by collective protection in order to eliminate any risk of falling. If it is a short-term, temporary operation, individual protection is used. (PPE is necessary in either case for installing the collective protection if the building is not already equipped with it). In this situation, there is a great risk of falling. Each person must use a fall arrest system (energy absorber with mobile fall arrester and safety rope).

If collective protection is present, a work positioning system with adjustable lanyard is the perfect solution.

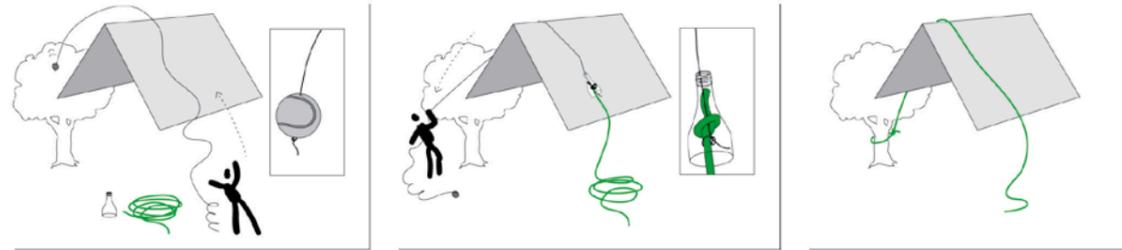


**A VERTEX VENT:** comfortable and ventilated helmet for work at height with strong chin strap to limit the risk of the helmet coming off during a fall. **B NEWTON FAST JAK:** fall arrest harness with integrated vest, easy and quick to put on. **C GRILLON:** work positioning lanyard allows easy set-up of a temporary mobile horizontal lifeline. **D ASAP'SORBER:** energy absorber with integrated lanyard allows some distancing from the safety rope. **E ASAP:** mobile fall-arrester for installation on a safety rope - works without any intervention by the user. **F AXIS:** versatile 11 mm diameter rope with sewn end.

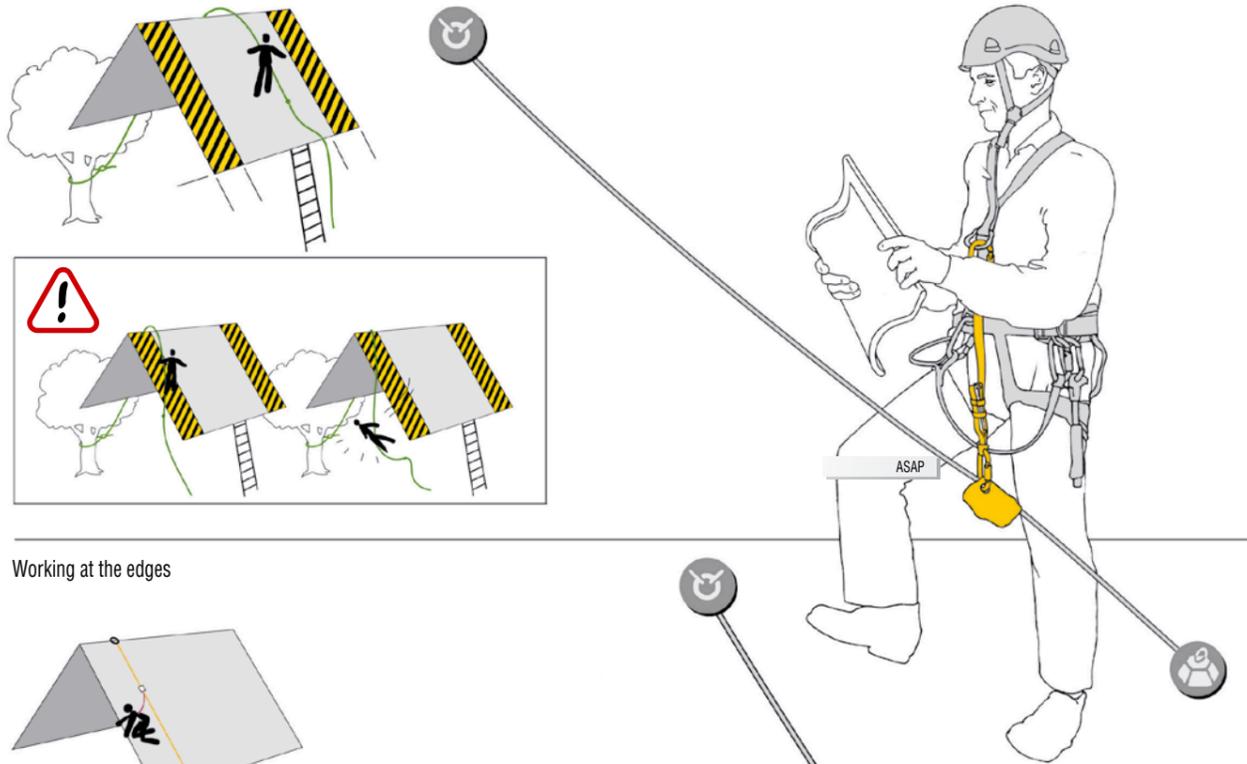
All equipment pages 38 to 135.

## Occasional use

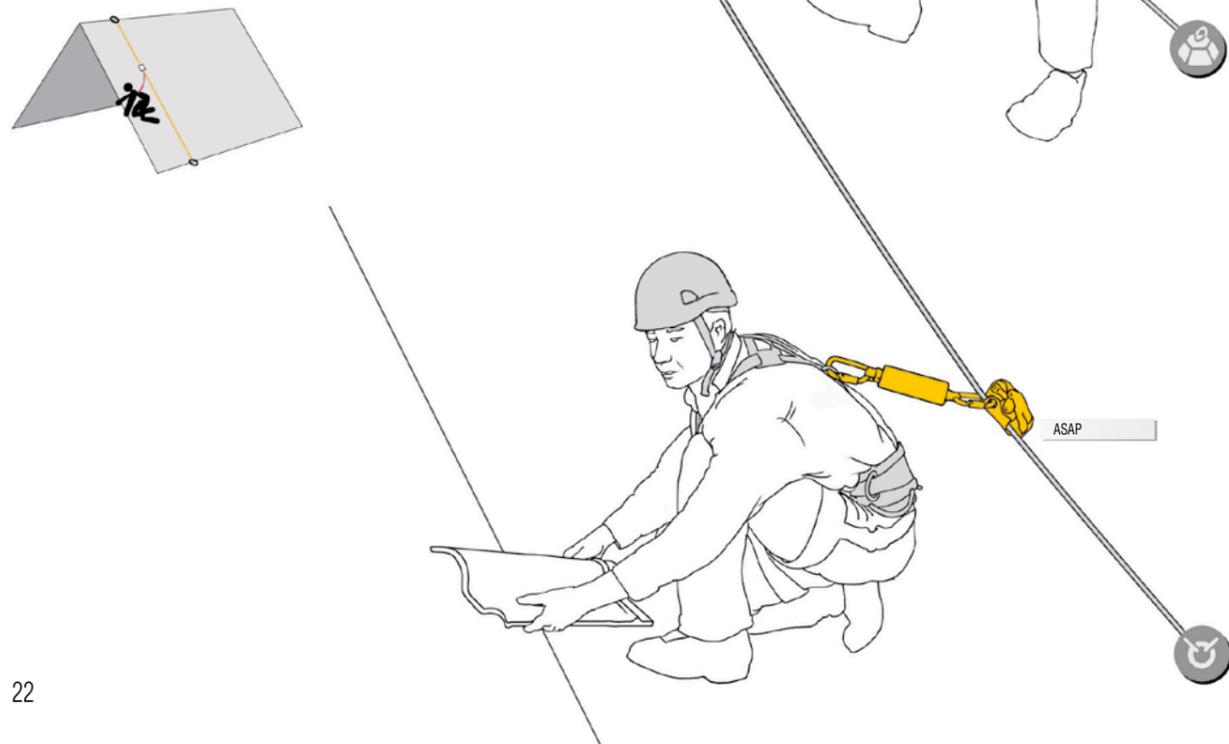
Installing the safety rope from the ground.



Working in the center of the roof (with limited area of access).

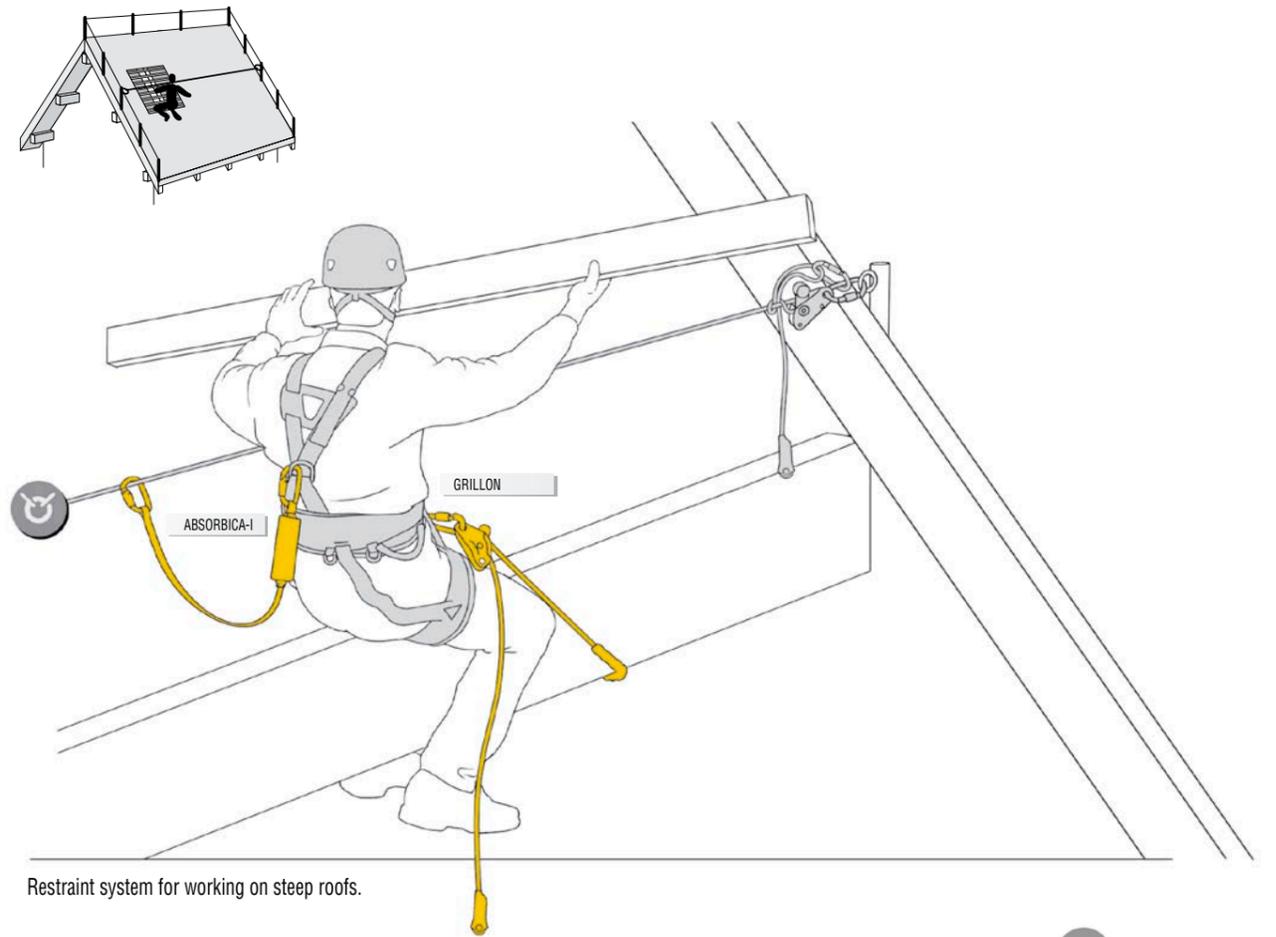


Working at the edges

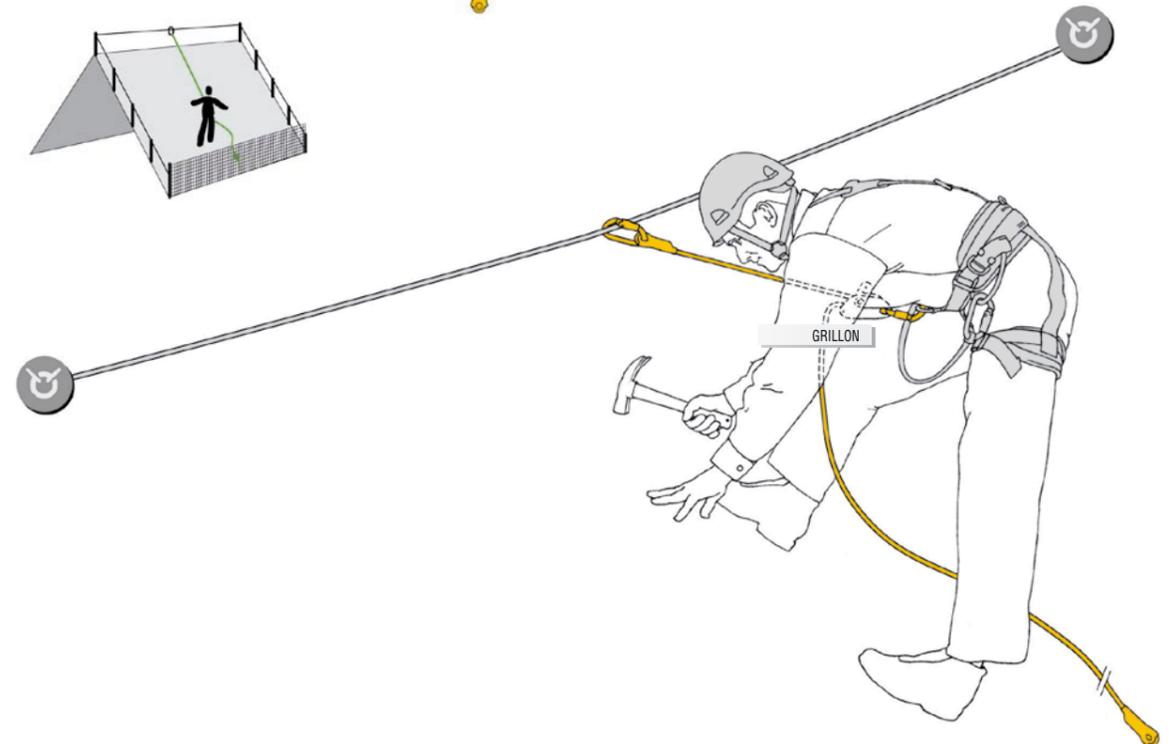


## Long-term use

Repairing a roof with individual and collective protection.



Restraint system for working on steep roofs.



Following a tragic accident in 2004, the Fire Department of New York (FDNY) wanted to equip each firefighter with an individual system of protection, allowing emergency self-evacuation from a burning building. To do this, the FDNY conducted a very specific study of their needs. Over forty technical solutions were proposed and more than 5000 tests were carried out in their training centers. During this study, the FDNY approached Petzl to request the development of a device based on the GRIGRI (descender/belayer) and to fine-tune a new emergency evacuation technique. The EXO was the result of this association of experts and is now carried by all of New York's firefighters. This system allows each firefighter to quickly escape a burning building, with a high level of safety.



The EXO evacuation system comes in two versions:

**A EXO:** version with anchor hook adapted to spaces where the possibility of finding an anchor point is uncertain. This solution applies particularly to firefighter operations in a burning building (e.g. attachment to a window ledge as a last resort). **B EXO EASHOOK:** version with a carabiner which is used during an evacuation where attachment points have been identified.

All equipment pages 38 to 135.

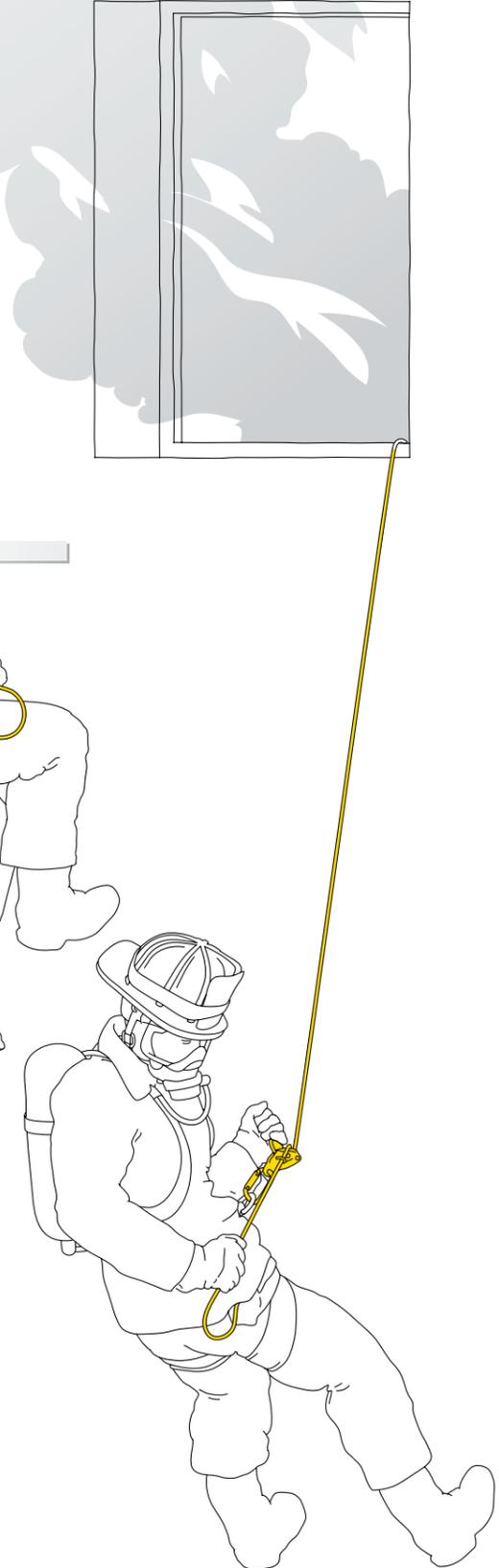
Going through a window while maintaining the anchor hook on the window sill. Locking the left leg against the interior wall to go with the movement.



Re-establishment below the window while holding the free end of the rope.



Descending, one hand uses the handle to start the descent, and the other holds the rope to control it.



Information is non-exhaustive. Refer to the other pages as well as to the user instructions and technical manuals. Technical training is essential.

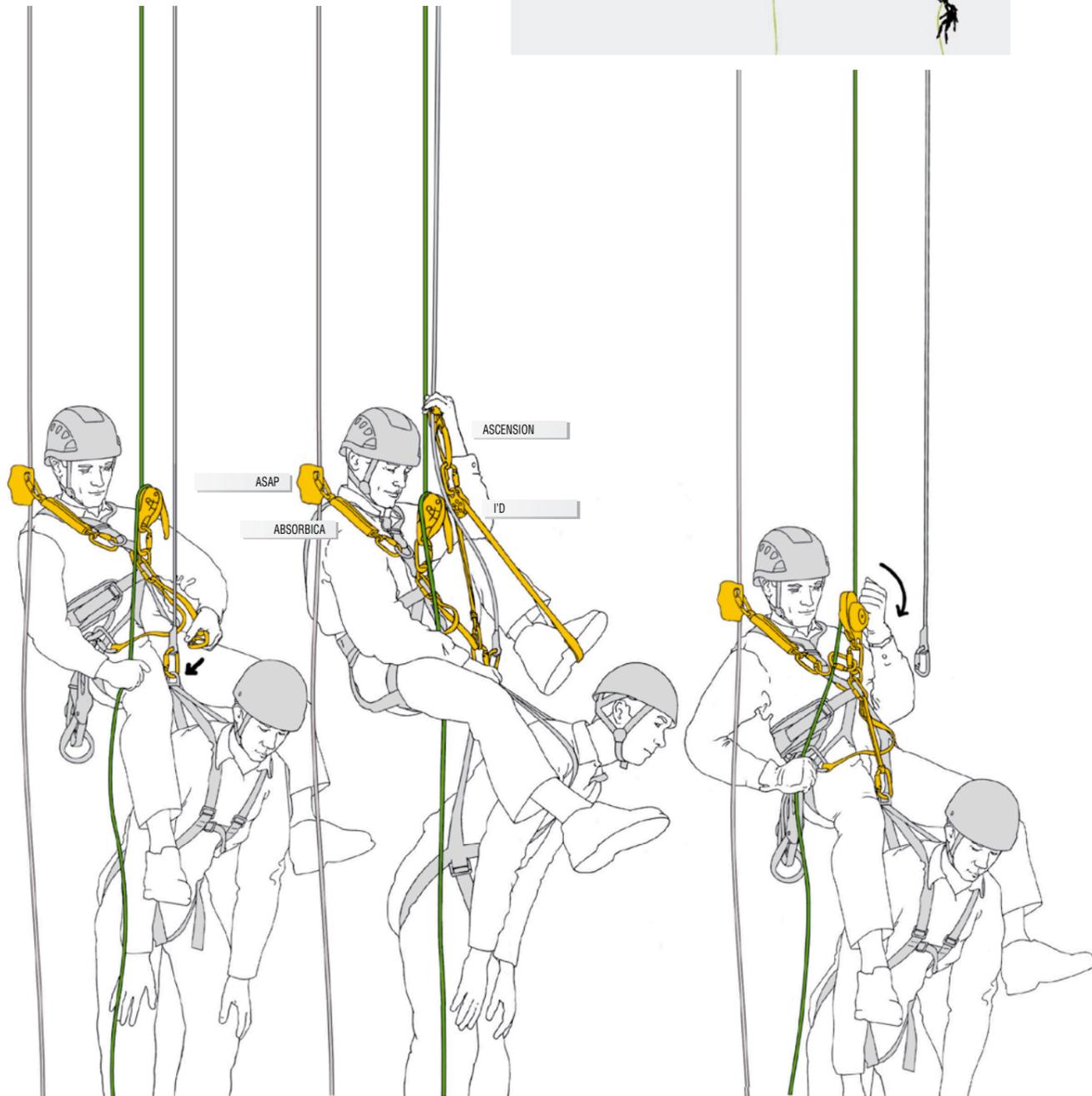
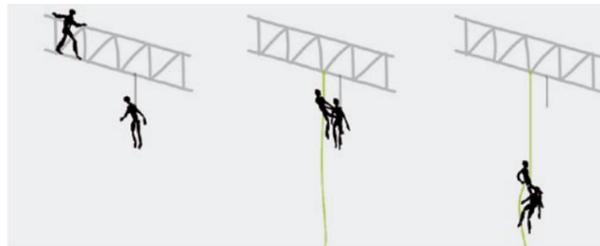
If a victim is not able to rescue himself, the on-site work team has to immediately intervene and move him to safety to wait for the outside rescue team to arrive. To be able to do this, the personnel should take a specialized course and train regularly. A rescuer will intervene with his own equipment or use a specific rescue kit, following the worksite's rescue plan.



**A I'D S:** versatile self-braking belay device/descender with integrated anti-panic function allows the speed of the descent to be easily controlled. **B MINI TRAXION:** compact progress capture pulley makes it easy to install hauling systems with progress capture capability. **C GEMINI:** double Prusik pulley with aluminum side plates and sheaves mounted on sealed ball-bearings, for hauling systems. **D AXIS:** versatile 11 mm diameter rope with sewn end.

All equipment pages 38 to 135.

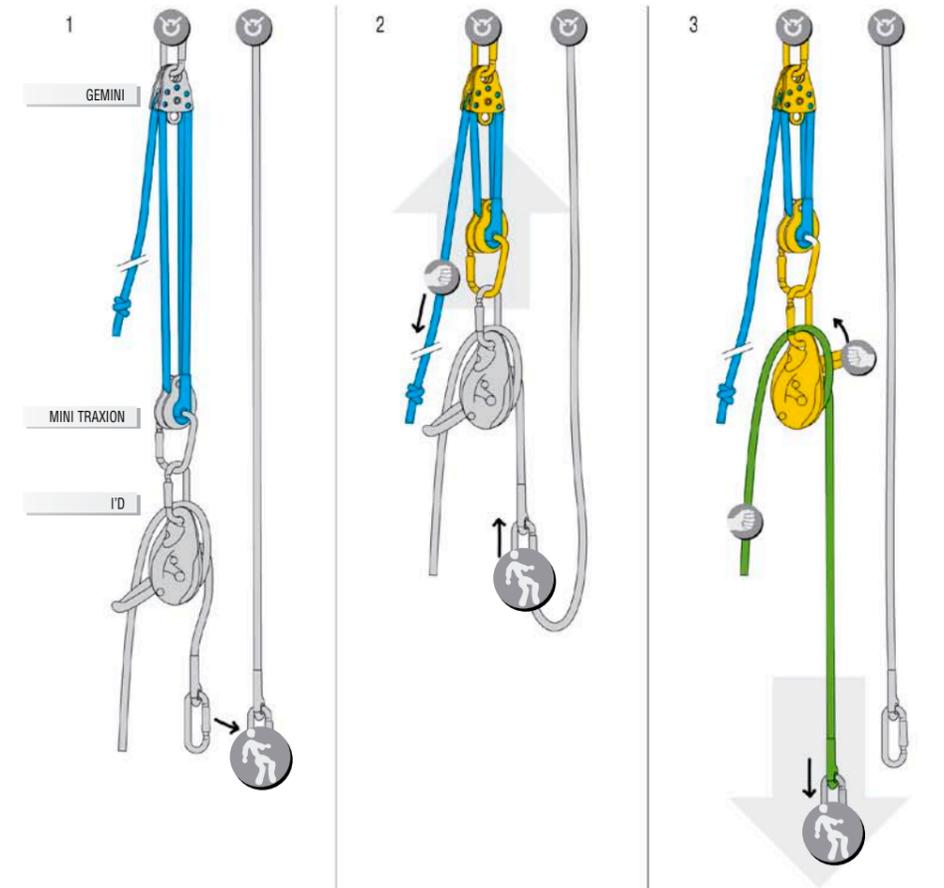
## Co-worker rescue Pick-off using personal equipment



## Rescue using reversible rescue kit

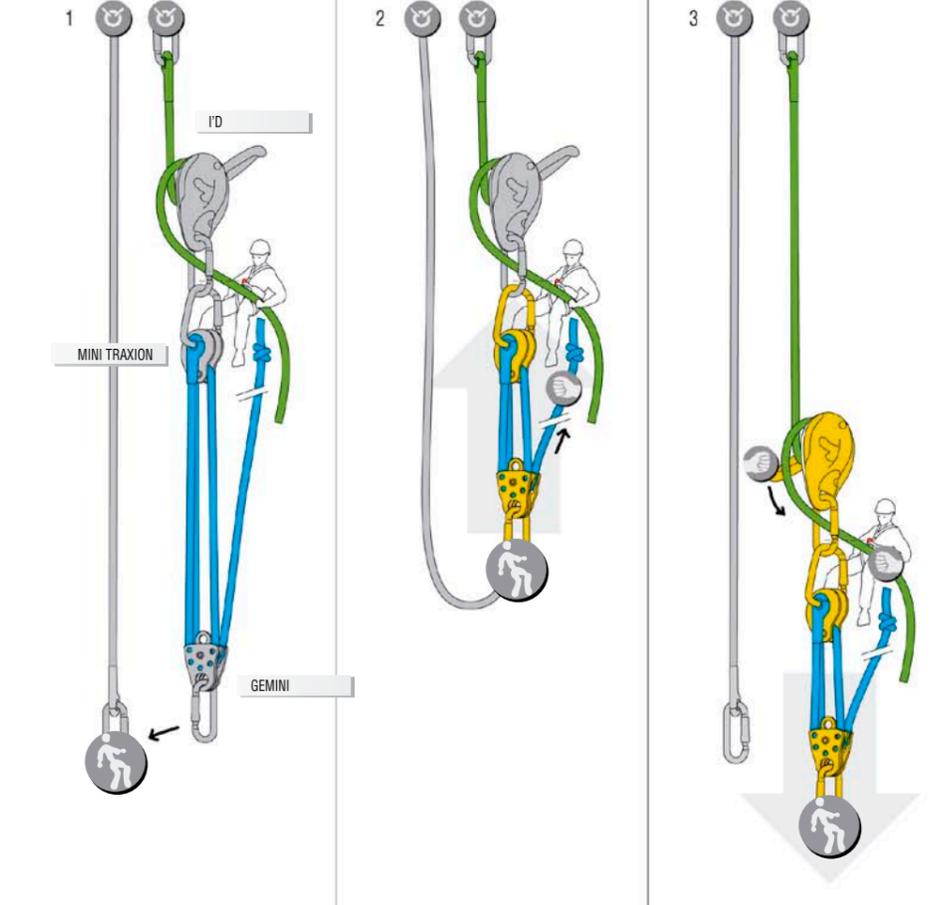
Non-accompanied evacuation  
(victim doesn't require monitoring or for a free-hanging evacuation)

- 1- Attaching the rescue kit to the victim
- 2- Raising (the pulley system allows the victim's lanyards to be removed)
- 3- Lowering to the ground



Accompanied evacuation  
(protecting and distancing the victim from the structure)

- 1- Attaching the rescue kit to the victim
- 2- Raising (the pulley system allows the victim's lanyards to be removed)
- 3- Lowering to the ground



Technical rescue teams intervene in particularly difficult or dangerous situations. Intensively trained and taught, they operate in any environment where conventional rescue teams cannot intervene safely. These specialists master all the techniques for progression and belaying on ropes, including the more complex ones: evacuation downward, upward, or by Tyrolean traverse, etc.

**Downward evacuation**  
Easier to install, this is the preferred type of evacuation, when possible. Downward evacuation takes place using gravity, applying different techniques determined for specific types of terrain.

**Upward evacuation**  
Upward evacuation requires techniques which are sometimes particularly complex (hauling with a mechanical winch, creating a hauling system built from lightweight pulleys, using counterweight techniques, etc.). Upward evacuation is a team effort and requires perfect coordination by everyone involved.

**Evacuation by Tyrolean traverse**  
When progression is difficult (urban sites, industrial sites, confined spaces, canyons, etc.) or impossible due to the presence of an obstacle, victims can be evacuated via Tyrolean traverse. These complex systems can only be installed by rescue workers who have been specially trained to make suitable decisions about the choice of techniques (Tyrolean traverse set up with transport rope and back-up safety rope, "cable-car" system, special Tyrolean traverse for moving the victim in all directions while adapting to the terrain, etc.).

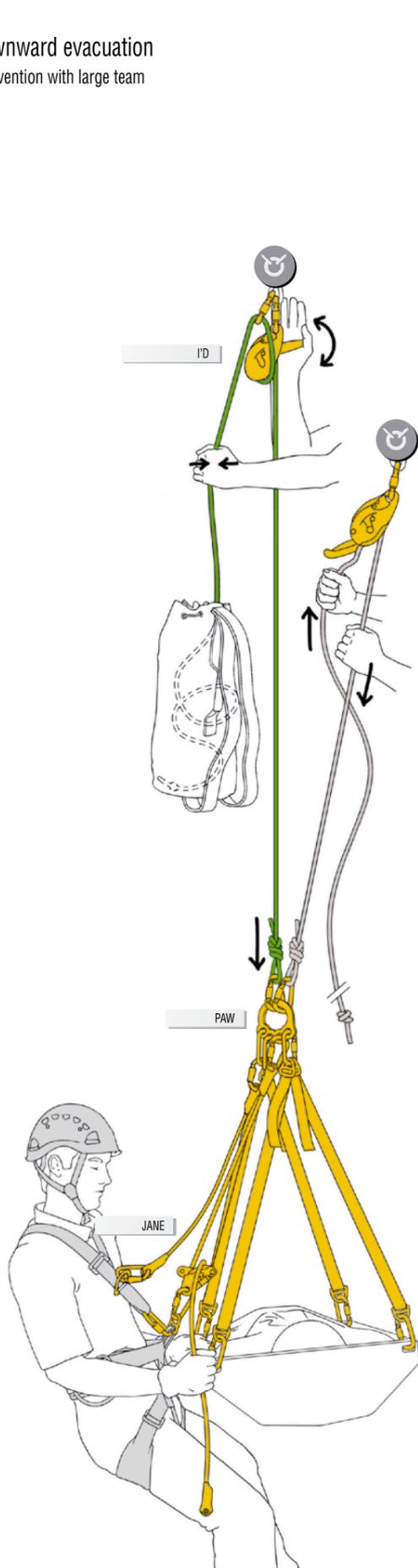


**A VERTEX VENT:** comfortable and ventilated helmet for rescue with strong chin strap to limit risk of the helmet coming off during a fall. **B FALCON:** lightweight seat harness for rescue. **C I'D S:** versatile self-braking belay device/descender with integrated anti-panic function allows the speed of the descent to be easily controlled. Can also be used to make a reversible haul system. **D ASCENSION:** ergonomic handled rope clamp (right- and left-handed versions) for rope ascents and hauling (pulling aid). **E PAW L:** rigging plate.

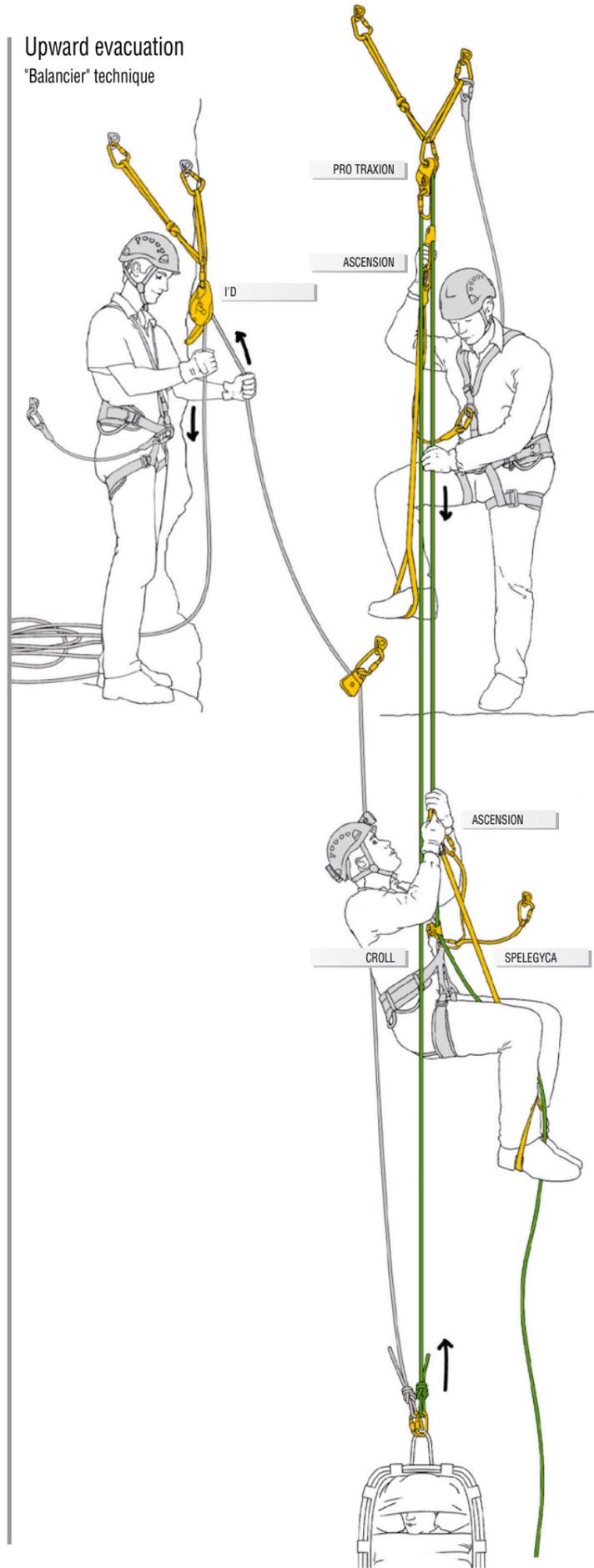
All equipment pages 38 to 135.



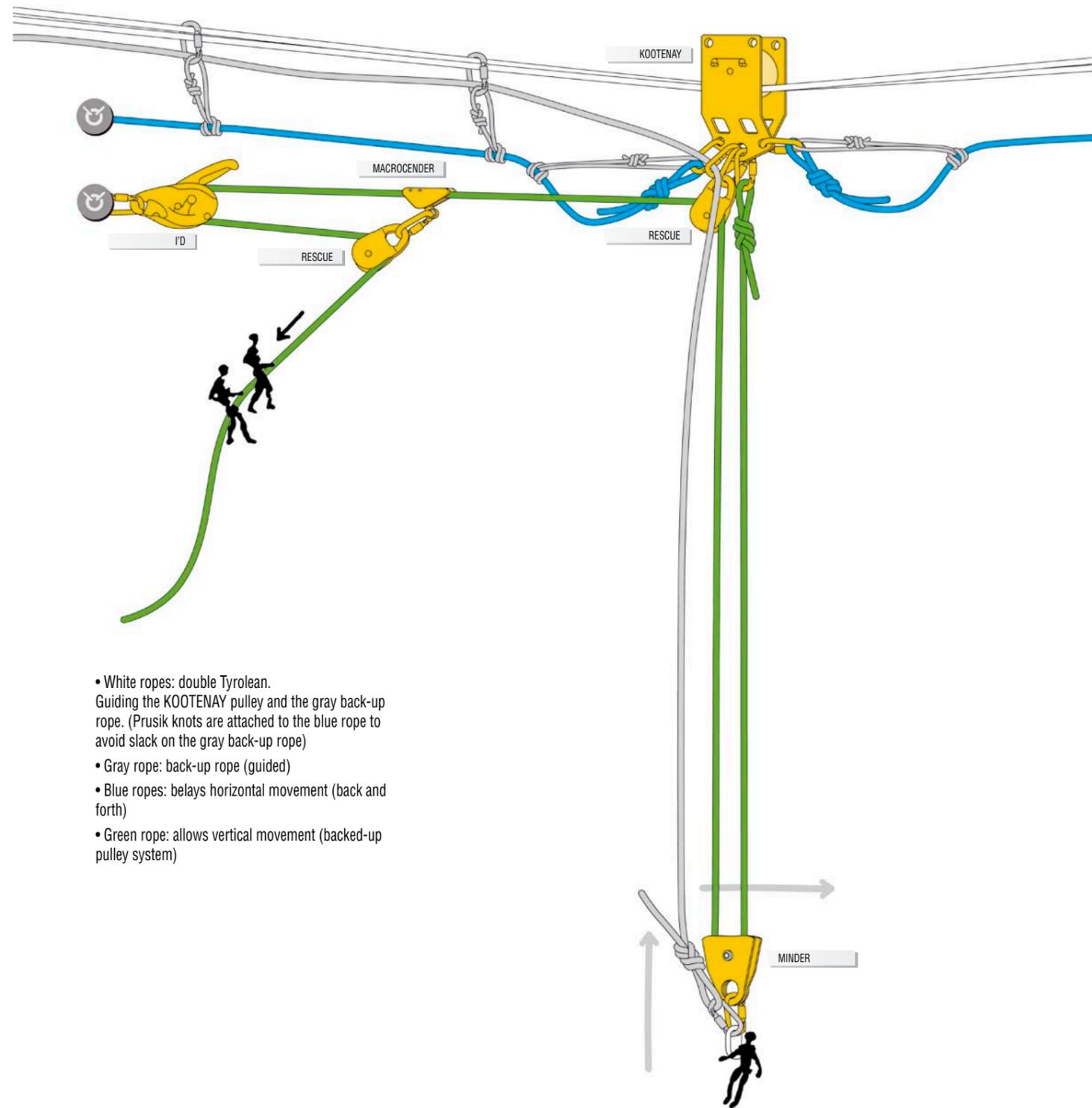
## Downward evacuation Intervention with large team



## Upward evacuation "Balancier" technique

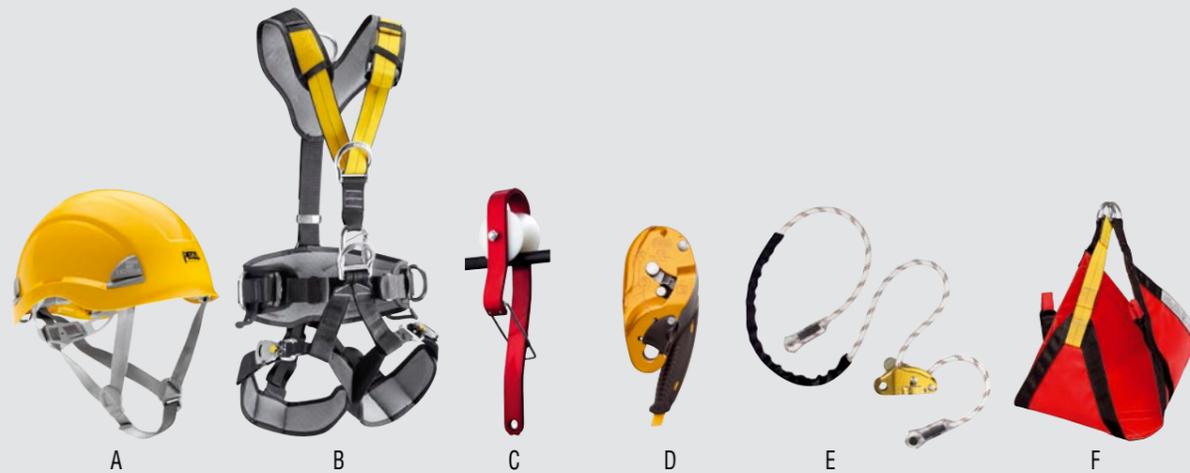


## Tyrolean evacuation Backed up rescue system (vertical and horizontal)



- White ropes: double Tyrolean. Guiding the KOOTENAY pulley and the gray back-up rope. (Prusik knots are attached to the blue rope to avoid slack on the gray back-up rope)
- Gray rope: back-up rope (guided)
- Blue ropes: belays horizontal movement (back and forth)
- Green rope: allows vertical movement (backed-up pulley system)

If ski lift equipment fails, the person in charge must evacuate passengers according to the evacuation plan. This document explains precisely how all the operations should be carried out and what human and material means must be employed. In most cases, these operations are carried out by the operating personnel. The maximum projected time allowed for evacuating all passengers is 3.5 hours (from breakdown to evacuation of the last passenger). This time can be reduced and adapted to the situation according to the weather, the type of installation, etc. In case of difficulty, the operator may call in organized rescue squads (mountain rescue, civil emergency services, etc.). Evacuation of a ski lift requires specific techniques for movement along a cable. For maximum efficiency, these operations are led simultaneously by several independent teams, generally composed of two people (one suspended on the cable for evacuation, the other on the ground to receive the passengers and to guide the movements of his colleague). The success of these operations hinges largely on the instruction, training and practice of the operating personnel (at least once a year).



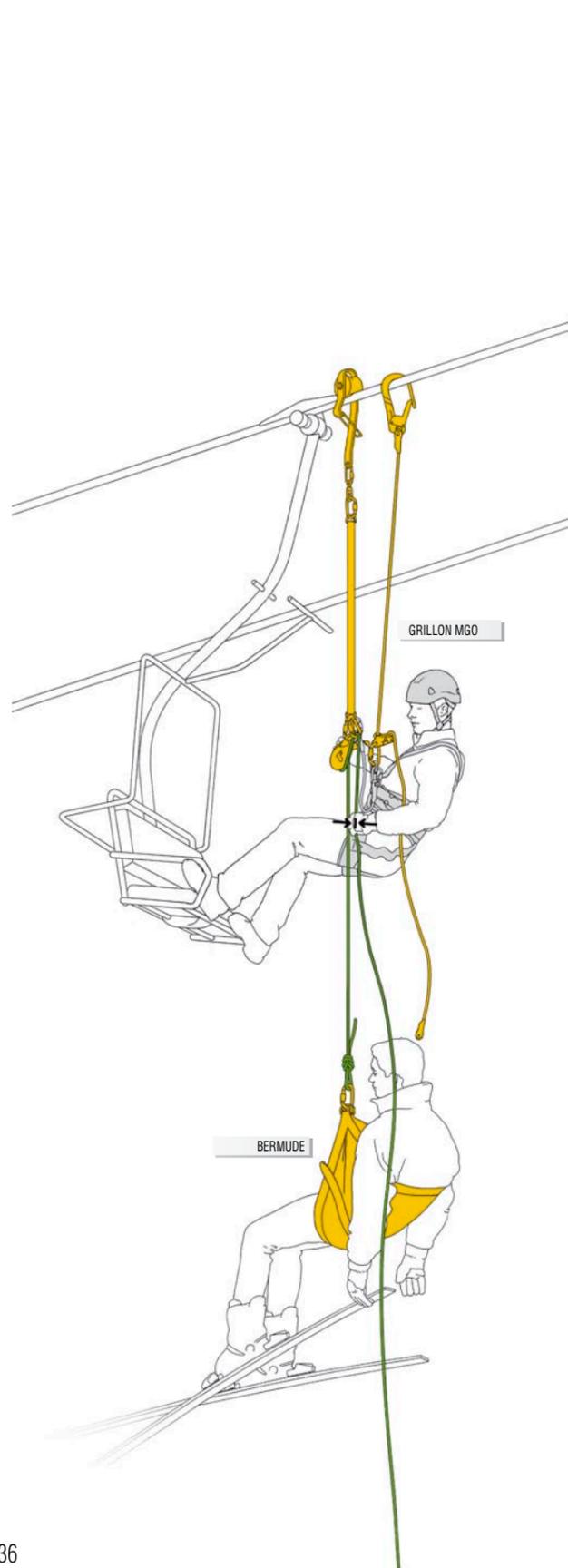
**A VERTEX BEST:** comfortable helmet for rescue with strong chin strap to limit risk of the helmet coming off during a fall. **B NAVAHO BOD FAST:** work positioning and fall arrest harness designed for work in suspension. **C ROLLCAB:** rescue roller for ski lift cables. **D I'D S:** versatile self-braking belay device/descender with integrated anti-panic function. **E GRILLON:** adjustable lanyard with handle to facilitate descents. **F BERMUDE:** rescue triangle with shoulder straps is easy and quick to put in place.

All equipment pages 38 to 135.

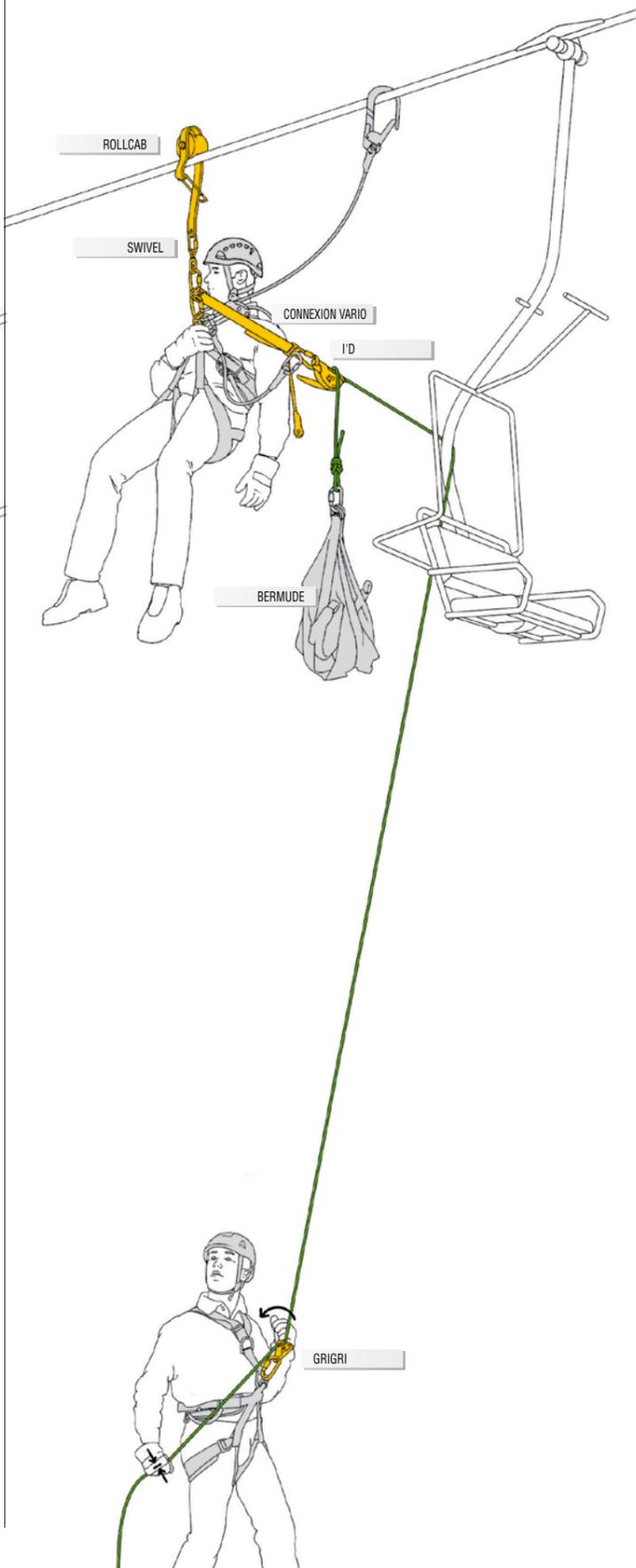


## Ski lift evacuation with rescuer on cable

Evacuating the victim

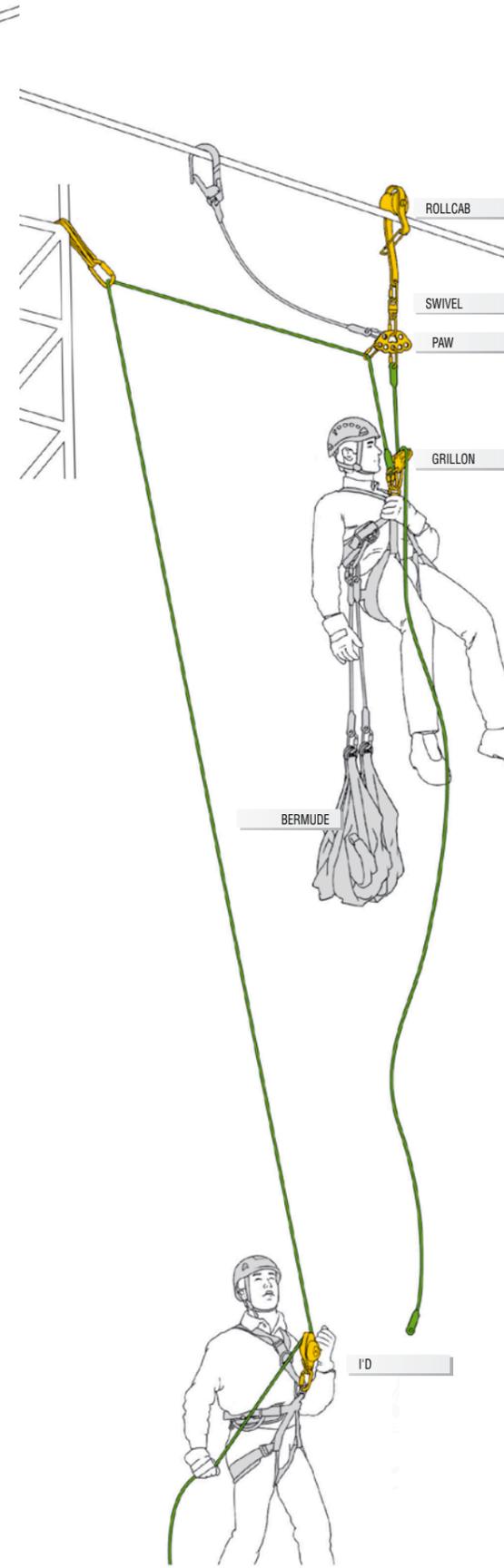


## Rescuer accessing the ski lift

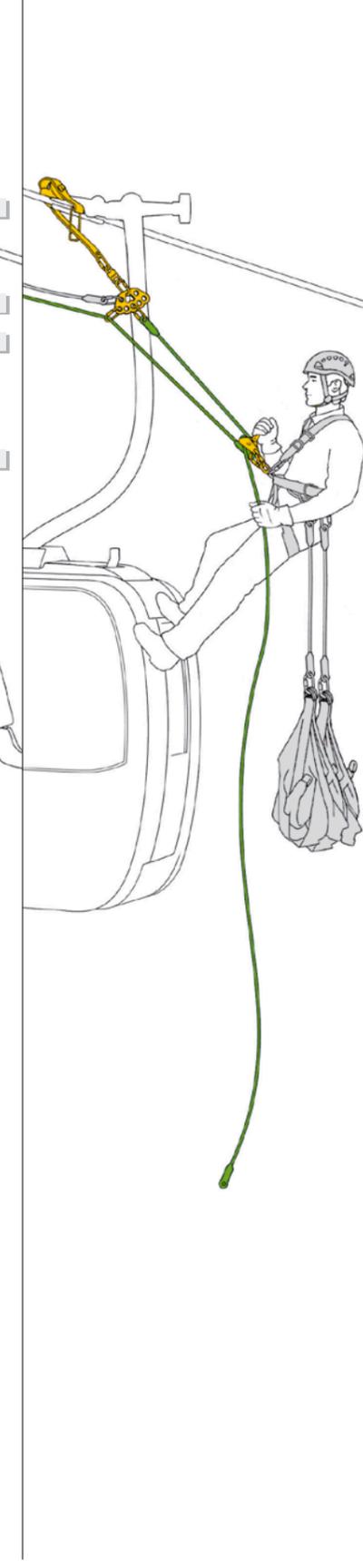


## Evacuating a tramcar from the ground

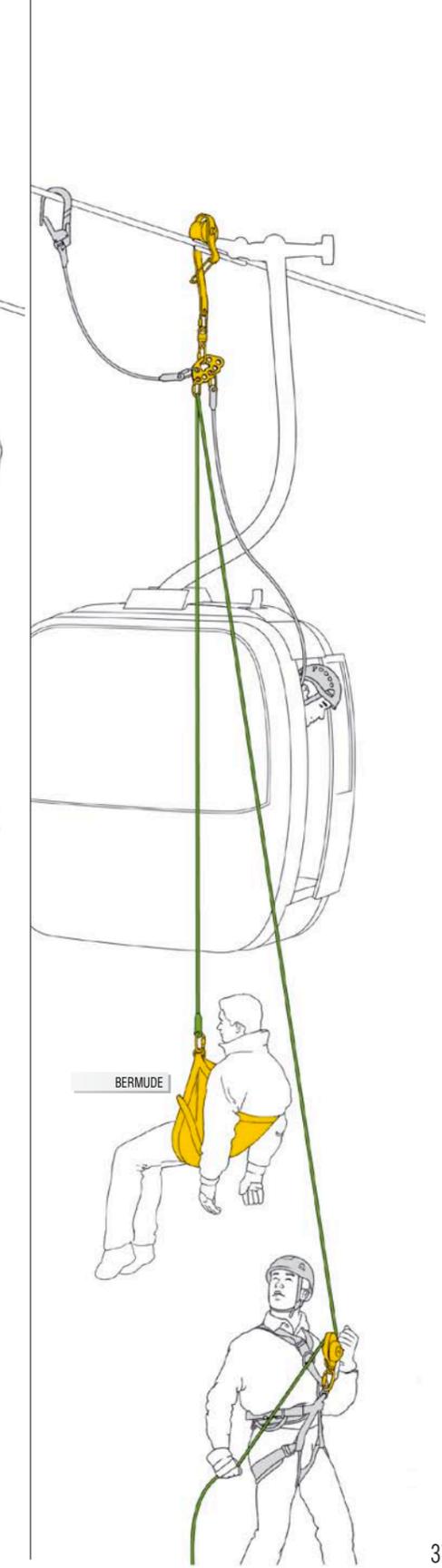
Accessing along the cable



## Descending into the tramcar



## Evacuating the victim





## Product marking and tracking

Since 1992, all Petzl personal protective equipment (PPE) items have been marked with a tracking number. This number consists of 5 digits and a letter. The first 2 digits indicate the year the product was manufactured, the following 3 digits indicate the production date (from 1 to 366) and the letter represents the person who performed the final inspection.

Textile products, helmets and most metallic items also have an additional individual identifier. The system makes it easier to track PPE effectively.

1. Individual number
2. tracking number
3. individual identifier



### CD ROM EPI Z29 C

#### PPE verification

- Informative videos and photographs
- Details on standards
- Inspection procedures and check sheets
- Easy Inspect: planning and record keeping software for equipment inspection



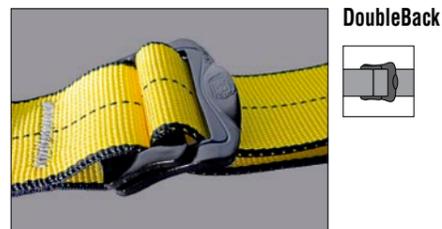


Petzl makes several types of harnesses to respond specifically to the different needs of workers at height:

- **work positioning and fall arrest harnesses** are the most versatile, and adapt to most work at height situations with optimum comfort
  - **fall arrest harnesses** position the user correctly in case of a fall and are comfortable and easy to put on
  - **harnesses for difficult access** have an integrated CROLL ventral rope clamp for rope ascents
  - **arborist harnesses** combine a wide waistbelt for excellent support with an attachment bridge which allows great freedom of movement in the trees
  - **the new family of rescue harnesses** is lightweight and versatile and designed for rescue professionals
  - **evacuation triangles and litter** are specially designed for rescue and can be used in a variety of situations, such as rescue in confined spaces, in the mountains, or on chairlifts, etc.
- Different accessories can be added to Petzl harnesses to specifically adapt them for the needs of the work environment.

### DoubleBack and FAST buckles

The shoulder straps, waistbelt and leg loops on all Petzl harnesses are adjustable. All adjustment buckles use the DoubleBack self-locking system. With this system, the webbing does not have to be rethreaded to secure the buckles - they can be adjusted with a single motion. Certain harnesses are equipped with FAST quick-attach buckles on the leg loops. Once adjusted, these buckles open and close easily and quickly - the harness can be put on without undoing all the buckles.



DoubleBack



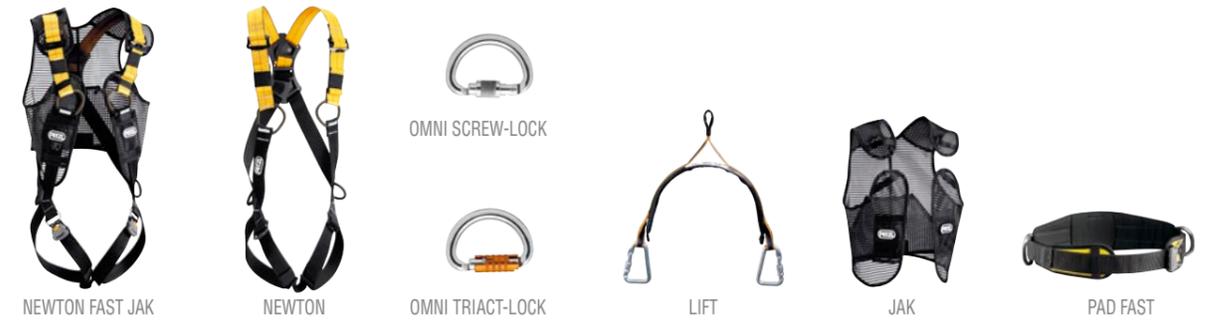
FAST

### • Work positioning and fall arrest harness



NAVAHO BOD FAST    NAVAHO SIT FAST    TOP    CHESTER

### • Fall arrest harnesses



NEWTON FAST JAK    NEWTON    OMNI SCREW-LOCK    OMNI TRIACT-LOCK    LIFT    JAK    PAD FAST

### • Harnesses for difficult access



NAVAHO BOD CROLL FAST    NAVAHO SIT FAST    TOP CROLL    PODIUM

### • Arborist harness



SEQUOIA SRT    SEQUOIA    SEQUOIA SWING

### • Rescue harnesses



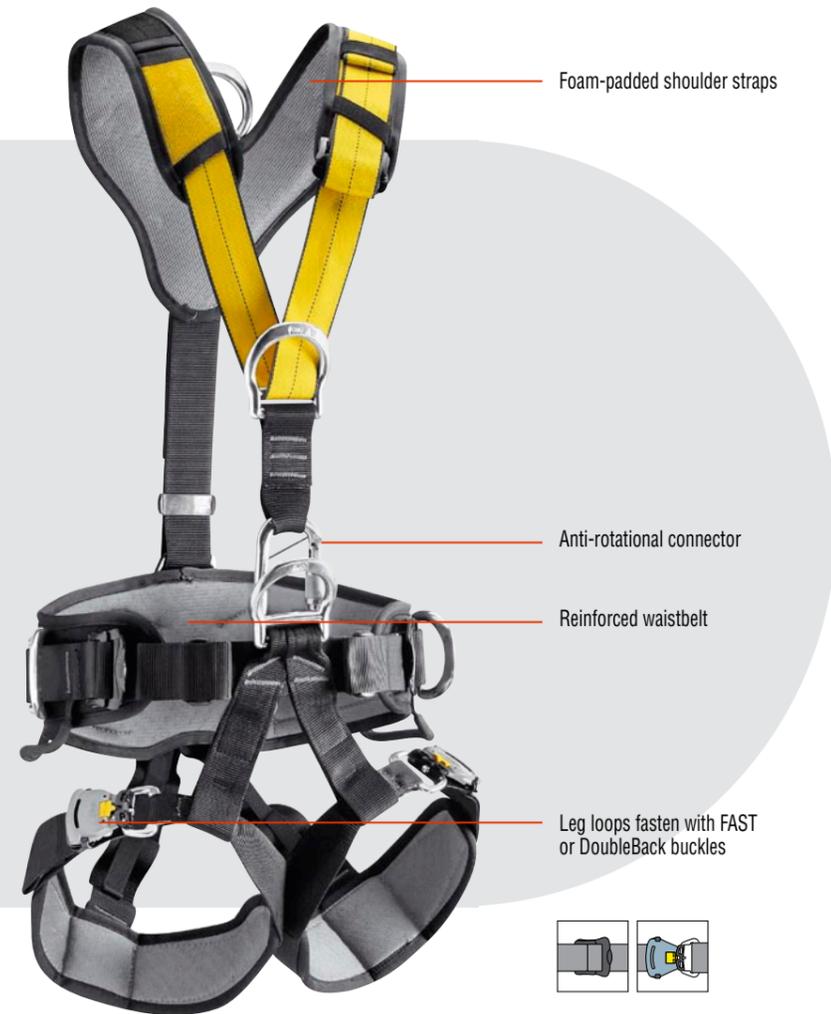
FALCON    FALCON MOUNTAIN    FALCON ASCENT

Find the spare parts for the products on [www.petzl.com](http://www.petzl.com)

Work positioning and fall arrest harnesses are the most versatile, and are suitable for most work at height situations while providing optimum comfort.

## NAVAHO® BOD

Versatile work positioning and fall arrest harness

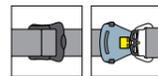


Foam-padded shoulder straps

Anti-rotational connector

Reinforced waistbelt

Leg loops fasten with FAST or DoubleBack buckles



- Wide, semi-rigid waistbelt for excellent support
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- Foam shoulder straps are widely spaced to reduce neck chafing and are linked to the directional ventral connector for easy donning
- If the waistbelt is weighted, the load is transferred to the shoulder straps, which distribute it over the shoulders
- The ventral attachment point distributes the weight more evenly between the waistbelt and the leg loops during suspended work
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- A sternal and a dorsal attachment point for connecting a fall arrest system
- A rear attachment point on the waistbelt for connecting a restraint lanyard
- Three equipment loops with protective sheath
- Slots for CARITOOL tool holder
- Waistbelt and shoulder straps equipped with self-

- locking DoubleBack buckles
- Available in three versions:
  - NAVAHO BOD (C71000): leg loops equipped with self-locking DoubleBack buckles
  - NAVAHO BOD FAST (C710F0): leg loops equipped with FAST automatic buckles for quick and easy opening and closing without the need to readjust them
  - NAVAHO BOD FAST black (C710FN): color: black, leg loops equipped with FAST automatic buckles

The NAVAHO BOD and NAVAHO BOD FAST are available in specific versions that meet European and North American work standards (see summary table).



Foam-padded shoulder straps improve comfort by reducing neck chafing. The harness is also easier to put on.



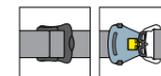
Thermally molded reinforcement panel at back of waistbelt gives excellent positioning for comfort while suspended. A restraint lanyard can be clipped to the rear buckle.



Three equipment loops: one on each side and one at the rear. Thin, rigid gear loops facilitate attaching carabiners.



There are many slots for tool holders on the waistbelt. CARITOOL tool holders can be attached as needed.



## NAVAHO® SIT

Work positioning seat harnesses

- Wide, semi-rigid waistbelt for excellent support
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- The ventral attachment point distributes the weight more evenly between the waistbelt and the leg loops during suspended work
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- The rear attachment point on the waistbelt allows connection of a restraint lanyard or a TOP chest harness, transforming the harness into a fall arrest harness
- Three equipment loops with protective sheath
- Slots for CARITOOL tool holder
- Waistbelt equipped with self-locking DoubleBack buckles
- Available in three versions:
  - NAVAHO SIT (C79000): leg loops equipped with self-locking DoubleBack buckles
  - NAVAHO SIT FAST (C790F0): leg loops equipped with FAST automatic buckles FAST buckles open and close easily and quickly: the harness can be put on without having to readjust the buckles.
  - NAVAHO SIT FAST black (C790FN): color: black, leg loops equipped with FAST automatic buckles

The NAVAHO SIT and NAVAHO SIT FAST harnesses are available in specific versions that meet European and North American work standards (see summary table).



## TOP C81000

Chest harness for seat harness

- Transforms the NAVAHO SIT or FALCON seat harness into a fall arrest harness
- Joins at the rear buckle and connects to the ventral attachment point
- Foam shoulder straps are widely spaced to reduce neck chafing and are linked to the directional ventral connector for easy donning
- If the waistbelt is weighted, the load is transferred to the shoulder straps, which distribute it over the shoulders
- Sternal attachment point for connecting a fall arrest system
- No dorsal attachment point to get in the way of a bag or load on the back
- Shoulder straps equipped with self-locking DoubleBack buckles

The TOP chest harness is available in specific versions that meet European and North American work standards (see summary table).



## CHESTER C64

Chest harness for seat harness

- Transforms the NAVAHO SIT into a fall arrest harness when connected to the ventral attachment point of the seat harness
- Sternal attachment point for connecting a fall arrest system
- Shoulder straps and chest strap equipped with self-locking DoubleBack buckles

Fall arrest harnesses position the user correctly in case of a fall and are comfortable and easy to put on.

## NEWTON FAST JAK C73 JFO

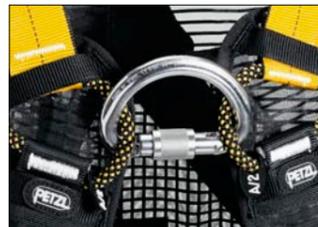
Basic fall arrest harness is compatible with JAK vest



- JAK vest facilitates proper donning of the harness
  - Quick-attach FAST buckles on leg loops allow the harness to be put on easily with both feet on the ground
  - A sternal and a dorsal attachment point for connecting a fall arrest system
  - Shoulder straps equipped with self-locking DoubleBack buckles
  - Two equipment loops with protective sheath
  - Work positioning on the lateral attachment points is possible with the PAD FAST waistbelt
  - Upright descent with the help of the LIFT spreader
- The NEWTON FAST JAK harness is also available in black, with no dorsal attachment point.



The JAK vest and the automatic FAST buckles make the harness easy to put on.



The two-part sternal attachment point is used with the semi-circular OMNI carabiner.



## NEWTON C73000

Basic modular fall arrest harness

- Upper and lower straps are different colors to facilitate donning the harness correctly
- A sternal and a dorsal attachment point for connecting a fall arrest system
- Shoulder straps equipped with self-locking DoubleBack buckles
- Two equipment loops with protective sheath
- Work positioning on the lateral attachment points is possible with the PAD FAST waistbelt
- Upright descent with the help of the LIFT spreader



OMNI SCREW-LOCK



OMNI TRIACT-LOCK

## OMNI M37 SL - M37 TL

Locking semi-circle carabiner

- Multi-directional carabiner allows the user to:
  - fasten the NEWTON and FALCON ASCENT harnesses by joining the two attachment points
  - connect a fall arrest system (NEWTON) or a CROLL ventral rope clamp (FALCON ASCENT)
- Strength: 15 kN (in all directions)
- Available in two versions:
  - OMNI SCREW-LOCK (M37 SL): manual screw lock for dirty environments (weight: 86 g), certification: CE EN 362
  - OMNI TRIACT-LOCK (M37 TL): automatic locking (weight: 92 g), certification: CE EN 362



LIFT



PAD FAST



JAK

## LIFT L54

Spreader for NEWTON harness allows upright descent (for confined spaces)

- Triangular carabiners for easier insertion into harness slots
- Rigid structure keeps its shape around the head
- Weight: 520 g
- Certification: CE

## PAD FAST C89 F

Work positioning waistbelt for NEWTON harness

- Transforms the basic fall arrest harness into a work positioning and fall arrest harness
- Comfortable for work positioning with the feet supported against a surface
- Two lateral attachment points
- FAST automatic buckle for easy and quick opening and closing without the need to readjust
- Certification: CE EN 358

## JAK C73101

Pre-shaped vest makes it easier to don the NEWTON harness

- Keeps the shape of the harness, ready to don
- Attaches with loops and Velcro patches
- Breathable mesh fabric
- Available in two sizes:
  - size 1 (250 g)
  - size 2 (290 g)

Harnesses for difficult access are designed for rope ascents. They allow movement in narrow work spaces.

## NAVAHO® BOD CROLL FAST C71CF0

Rope access harness



Foam-padded shoulder straps improve comfort and are widely spaced to reduce neck chafing. The harness is also easier to put on. Thermally molded reinforcement panel at back of waistbelt gives excellent positioning for comfort while suspended.



A restraint lanyard can be clipped to the rear buckle. The dorsal attachment point is easily and quickly adjustable thanks to the DoubleBack buckle.



Harnesses for rope access integrate a CROLL ventral rope clamp. The shoulder strap adjustment serves to position the CROLL. The shoulder strap-waistbelt connector is equipped with a captive bar to inhibit connector rotation.



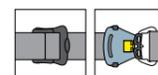
Three equipment loops: one on each side and one at the rear. Thin, rigid gear loops facilitate attaching carabiners. There are many slots for tool holders on the waistbelt. CARITool tool holders can be attached as needed.



- Integrated CROLL ventral rope clamp for ascending ropes
- Wide, semi-rigid waistbelt for excellent support
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- Foam shoulder straps are widely spaced to reduce neck chafing and are linked to the directional ventral connector for easy donning
- If the waistbelt is weighted, the load is transferred to the shoulder straps, which distribute it over the shoulders
- The ventral attachment point distributes the weight more evenly between the waistbelt and the leg loops during suspended work
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- A sternal and a dorsal attachment point for connecting a fall arrest system

- A rear attachment point on the waistbelt for connecting a restraint lanyard
- Three equipment loops with protective sheath
- Slots for CARITool tool holder
- Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles
- Leg loops equipped with FAST automatic buckles for quick and easy opening and closing without the need to readjust them
- Prolonged suspension usage with PODIUM seat

The NAVAHO BOD CROLL FAST harness is available in specific versions that meet European and North American work standards (see summary table).



## NAVAHO® SIT

### Work positioning seat harnesses

- Wide, semi-rigid waistbelt for excellent support
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- The ventral attachment point distributes the weight more evenly between the waistbelt and the leg loops during suspended work
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- The rear attachment point on the waistbelt allows connection of a restraint lanyard or a TOP chest harness, transforming the harness into a fall arrest harness
- Three equipment loops with protective sheath
- Slots for CARITool tool holder
- Waistbelt equipped with self-locking DoubleBack buckles
- Available in three versions:
  - NAVAHO SIT (C79000): leg loops equipped with self-locking DoubleBack buckles
  - NAVAHO SIT FAST (C790F0): leg loops equipped with FAST automatic buckles FAST buckles open and close easily and quickly: the harness can be put on without having to readjust the buckles.
  - NAVAHO SIT FAST black (C790FN): color: black, leg loops equipped with FAST automatic buckles

The NAVAHO SIT and NAVAHO SIT FAST harnesses are available in specific versions that meet European and North American work standards (see summary table).



## TOP CROLL C81C00

### Chest harness for NAVAHO SIT FAST

- Transforms the NAVAHO SIT or FALCON seat harness into a rope access harness
- Integrated CROLL ventral rope clamp for ascending ropes
- Joins at the rear buckle and connects to the ventral attachment point
- Directional ventral connector (DELTA)
- Foam shoulder straps are widely spaced to reduce neck chafing and are linked to the directional ventral connector for easy donning
- If the waistbelt is weighted, the load is transferred to the shoulder straps, which distribute it over the shoulders
- Sternal attachment point for connecting a fall arrest system
- No dorsal attachment point to get in the way of a bag or load on the back
- Shoulder straps equipped with self-locking DoubleBack buckles



## PODIUM S70

### Podium seat designed for prolonged suspension

- Wide, comfortable sitting position offers excellent stability
- Rigid sides to prevent the webbing straps from cutting into the thighs
- Straps are adjustable with self-locking DoubleBack buckles
- Three equipment loops
- Easily positioned on the back when not in use
- Weight: 1170 g

The SEQUOIA is the most comfortable arborist harness Petzl has ever produced. It excels for positioning and progression in all situations.

## SEQUOIA SRT C69AF0

Seat harness for arborists using ascent techniques on single ropes

**NEW**



Attachment buckle for the SECUR shoulder strap

Padded double waistbelt

Ventral attachment bridge available in three sizes (25, 30, 35 cm)

Gated rings

Padded leg loops equipped with FAST buckles



- Extra-wide, semi-rigid waistbelt offers great support and exceptional ventilation
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- Ventral attachment bridge provides lateral mobility
- Ventral attachment bridge is attached to the waistbelt and to the leg loops by two gated rings in order to:
  - distribute the pressure evenly between the waistbelt and leg loops (three positions)
  - adapt the length of the ventral attachment bridge or install two ventral attachment bridges
  - to attach the RING S or the SWIVEL directly to the attachment bridge

- Ventral attachment point and the rear waistbelt buckle, used to attach the CROLL ventral rope clamp for ascending a single rope
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- Five equipment loops with protective sheath
- Two rings for attaching a hand saw
- Slots for CARITOOOL tool holder
- Waistbelt equipped with self-locking DoubleBack buckles
- Leg loops equipped with FAST automatic buckles



The positioning waistbelt is very comfortable and provides exceptional ventilation. The waistbelt is equipped with lateral attachment points for work positioning with a GRILLON-type lanyard.



The two gated rings allow the user to distribute the pressure evenly between the waistbelt and leg loops (three positions), to adapt the height of the attachment bridge for different uses, techniques or body types, or to attach the RING S or the SWIVEL directly onto the attachment bridge.



Seven slots for CARITOOOL tool holder: tools may be accessed and organized with one hand (small hole for attaching a keeper cord, to prevent dropping critical gear).



Equipment loops and saw holder allow a saw or other equipment to be attached.

**NEW**



## SEQUOIA C690F0

Seat harness for arborists using traditional footlock ascent techniques

- Extra-wide, semi-rigid waistbelt offers great support and exceptional ventilation
- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort when suspended
- Easy to slip on with the FAST waistbelt and leg loop buckles
- Ventral attachment bridge provides lateral mobility
- Ventral attachment bridge is attached to the waistbelt and to the leg loops by two gated rings in order to:
  - distribute the pressure evenly between the waistbelt and leg loops (three positions)
  - adapt the length of the ventral attachment bridge
  - attach the RING S or the SWIVEL directly to the attachment bridge
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- Five equipment loops with protective sheath
- Two rings for attaching a hand saw
- Slots for CARITOOOL tool holder

**NEW**



## SEQUOIA SWING C69SFA

Arborist seat harness with integrated seat

- Extra-wide, semi-rigid waistbelt offers great support and exceptional ventilation
- Integrated seat with "bucket" sitting position to prevent compression points on the thighs
- Seat width is adjustable to reduce bulk and facilitate movement in the tree
- Easy to slip on with the FAST waistbelt and leg loop buckles
- Ventral attachment bridge provides lateral mobility
- Ventral attachment bridge is attached to the waistbelt and to the leg loops by two gated rings in order to:
  - distribute the pressure evenly between the waistbelt and leg loops (three positions)
  - adapt the length of the ventral attachment bridge or install two ventral attachment bridges
  - to attach the RING S or the SWIVEL directly to the attachment bridge
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- Five equipment loops with protective sheath
- Two rings for attaching a hand saw
- Slots for CARITOOOL tool holder

**NEW**



RING S



Attachment bridge

## RING S C04620

Connection ring

Installs directly onto the SEQUOIA harness's attachment bridge to improve the climber's lateral mobility.

## Attachment bridges C69200

Attachment bridges for SEQUOIA harness

- Available in three lengths:
  - C69200 25: 25 cm
  - C69200 30: 30 cm
  - C69200 35: 35 cm

The new family of FALCON harnesses is designed for rescue professionals in firefighting, mountain rescue, technical rescue, etc. Petzl has created three harnesses to specifically respond to the requirements of each of these activities. Petzl has designed a particularly light and comfortable waistbelt and leg loops for the FALCON harnesses in order to facilitate mobility when walking, horizontal movements during suspension, etc. This belt is equipped with attachment points for different types of activities: ventral attachment point, attachment bridge, low attachment point. All FALCON harnesses have a rear buckle which allows a chest harness to be attached when winching a load up to a helicopter or for ascending a rope, for example. All FALCON harnesses are equipped to maximize functionality for rescue professionals: multiple attachment points, soft or rigid tool holders, slots for CARITOOL tool holder.

## FALCON C38 AAA Lightweight seat harness for rescue

**NEW**



- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort
- The ventral attachment point distributes the weight more evenly between the waistbelt and the leg loops during suspended work
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- Textile lateral attachment points for occasional use
- Rear attachment buckle for attaching the TOP or TOP CROLL chest harness
- Waistbelt and leg loops equipped with two self-locking DoubleBack buckles
- Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
- Two slots for CARITOOL tool holder
- Available in two versions:
  - FALCON (C38AAA),
  - FALCON black(C38AAN): color black.



The waistbelt and leg loops are thin and lightweight for excellent mobility



Textile lateral attachment points for occasional use. Six gear loops or slots for CARITOOL tool holder keep the necessary tools accessible.



The waistbelt and leg loops can be adjusted quickly and easily with the DoubleBack buckles.



The rear buckle allows a TOP or TOP CROLL chest harness to be attached when winching a load up to a helicopter or for transforming the FALCON into a rope access harness.

**NEW**



## FALCON MOUNTAIN C38 CAA Seat harness for mountain rescue

- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort
- Attachment bridge construction for optimum mobility when progressing with climbing techniques
- The two lateral attachment points transfer the weight evenly around the waistbelt for comfortable surface-supported work
- Textile lateral attachment points for occasional use
- Waistbelt and leg loops equipped with two self-locking DoubleBack buckles
- Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
- Two slots for CARITOOL tool holder

**NEW**



## FALCON ASCENT C38 BAA Seat harness, efficient for rope ascents

- Waistbelt and suspension seat lined with breathable perforated foam for maximum comfort
- Two-part ventral attachment point increases the efficiency of rope ascents when using a CROLL
- Textile lateral attachment points for occasional use
- Rear attachment buckle for connecting a CROLL ventral rope clamp using a SECUR shoulder strap or a TOP CROLL chest harness
- Waistbelt and leg loops equipped with two self-locking DoubleBack buckles
- Four equipment loops: two large rigid ones in front for easy access to gear and two small flexible ones in back that will not interfere with wearing a backpack
- Two slots for CARITOOL tool holder



OMNI SCREW-LOCK



OMNI TRIACT-LOCK

## OMNI M37 SL - M37 TL Locking semi-circle carabiner

- Multi-directional carabiner allows the user to:
  - fasten the NEWTON and FALCON ASCENT harnesses by joining the two attachment points
  - connect a fall arrest system (NEWTON) or a CROLL ventral rope clamp (FALCON ASCENT)
- Strength: 15 kN (in all directions)
- Available in two versions:
  - OMNI SCREW-LOCK (M37 SL): manual screw lock for dirty environments (weight: 86 g), certification: CE EN 362
  - OMNI TRIACT-LOCK (M37 TL): automatic lock (weight: 92 g), certification: CE EN 362

Evacuation triangles are mainly used for rescue, on ski lifts and by firefighters. They are used to evacuate unequipped people as quickly as possible. The NEST litter was developed in partnership with the French National Caving Rescue Association. It is ideal for confined space rescues, but also works for technical rope rescues. It allows the strapped-in victim to be carried at various angles according to the terrain.



## PITAGOR C80 BR

### Evacuation triangle with shoulder straps

- The shoulder straps make it easier to put on
- It adjusts to the victim with self-locking DoubleBack buckles
- Certification: CE EN 1497, CE EN 1498
- Weight: 1290 g



## BERMUDE C80

### Evacuation triangle without shoulder straps

- Easy and quick to install (even on a sitting person)
- Adapts to different builds without adjustment (many position options on attachment points)
- Certification: CE EN 1498
- Weight: 795 g



## NEST S61

### Litter for confined spaces

- Victim can be transported horizontally, vertically or at an angle
- Litter has a complete body harness in it to secure the victim
- Straps are adjustable with self-locking DoubleBack buckles
- Flexible bottom helps ensure good sliding
- Foam padding provides comfort for the victim's back
- Rigid stays can be removed to reduce bulk when accessing accident site
- Dimensions: 190 x 50 x 5 cm
- Weight: 11.50 kg



## CARITool P42 - P42 L

### Tool holder

- Tools accessed and organized with one hand
- Flat top aids in sorting hung gear
- Small hole on top for attaching keeper cord, to prevent dropping critical gear
- Slips through the waistbelt slots or along the harness webbing and stays in place, thanks to its stabilizing clip
- Available in two sizes:
  - CARITool (P42): maximum load: 5 kg, weight: 25 g
  - CARITool L (P42 L): maximum load: 15 kg, weight: 60 g
- This tool holder is not PPE.

|                       |                        | European version  |  | International version   |  | Attachment points |                               |                               |                                | Size                          |                               |                               | Weight                              |                  |
|-----------------------|------------------------|---|--|---|--|-------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------------|------------------|
|                       |                        | Reference   | Certification                                | Reference   | Certification  | dorsal            | sternal                       | ventral                       | lateral                        | Waist belt                    | Leg loops                     | Stature                       |                                     |                  |
|                       | NAVAHO BOD             | C71000 1  | CE EN 361<br>CE EN 358<br>CE EN 813          | C71000 1B   | ANSI Z359.1<br>NFPA 1983 Class III<br>CSA Z259.10<br>CE EN 361<br>CE EN 358<br>CE EN 813 | •                 | •                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | 160... 180 cm<br>5'3" - 5'11" | 1890 g<br>4.2 lbs                   |                  |
|                       |                        | C71000 2  |  | C71000 2B   |  | •                 | •                             | •                             | •                              | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | 175... 200 cm<br>5'9" - 6'7"  | 2000 g<br>4.4 lbs                   |                  |
|                       | NAVAHO BOD FAST / NOIR | C710F0 1 / C710FN 1                                       |  | C710F0 1B / C710FN 1B   |  | •                 | •                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | 160... 180 cm<br>5'3" - 5'11" | 1890 g<br>4.2 lbs                   |                  |
|                       |                        | C710F0 2 / C710FN 2                                       |  | C710F0 2B / C710FN 2B   |  | •                 | •                             | •                             | •                              | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | 175... 200 cm<br>5'9" - 6'7"  | 2000 g<br>4.4 lbs                   |                  |
| NAVAHO BOD CROLL FAST | C71CF0 1               | CE EN 361<br>CE EN 358<br>CE EN 813<br>CE EN 12841 type B | C71CF0 1B                                    | ANSI Z359.1<br>CSA Z259.10<br>CE EN 361, CE EN 358,<br>CE EN 813,<br>CE EN 12841 type B | •  | •                 | •                             | •                             | 70... 120 cm<br>27.6" - 47.2"  | 50... 65 cm<br>19.7" - 25.6"  | 160... 180 cm<br>5'3" - 5'11" | 2045 g<br>4.5 lbs             |                                     |                  |
|                       | C71CF0 2               | C71CF0 2B   | •  | •   | •  | •                 | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | 175... 200 cm<br>5'9" - 6'7"   | 2150 g<br>4.7 lbs             |                               |                               |                                     |                  |
|                       | NAVAHO SIT             | C79000 1  | CE EN 358<br>CE EN 813                       | C79000 1A   | NFPA 1983 Class III  | -                 | -                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 1190 g<br>2.6 lbs                   |                  |
|                       |                        | C79000 2  |  | C79000 2A   |  | -                 | -                             | •                             | •                              | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | -                             | 1300 g<br>2.9 lbs                   |                  |
|                       | NAVAHO SIT FAST / NOIR | C790F0 0  |  | -   |  | -                 | •                             | •                             | 60... 100 cm<br>23.6" - 39.4"  | 45... 57 cm<br>17.7" - 22.4"  | -                             | 1190 g<br>2.6 lbs             |                                     |                  |
|                       |                        | C790F0 1 / C790F0N 1                                      |  | C790F0 1A / C790F0N 1A  |  | -                 | -                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 1190 g<br>2.6 lbs                   |                  |
|                       |                        | C790F0 2 / C790F0N 2                                      |  | C790F0 2A / C790F0N 2A  |  | -                 | -                             | •                             | •                              | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | -                             | 1300 g<br>2.9 lbs                   |                  |
|                       | TOP                    | C81000 1  | CE EN 361<br>(with seat harness)             | C81000 1A   | NFPA 1983 Class III<br>(with seat harness)   | -                 | •                             | -                             | -                              | -                             | -                             | 160... 180 cm<br>5'3" - 5'11" | 585 g<br>1.3 lbs                    |                  |
|                       |                        | C81000 2  | C81000 2A                                    | -   | -  | •                 | -                             | -                             | -                              | -                             | -                             | 175... 200 cm<br>5'9" - 6'7"  | 635 g<br>1.4 lbs                    |                  |
|                       | TOP CROLL              | C81C00 1  | CE EN 361<br>(with seat harness)             | -   | -  | -                 | •                             | -                             | -                              | -                             | -                             | -                             | 160... 180 cm<br>5'3" - 5'11"       | 645 g<br>1.4 lbs |
|                       |                        | C81C00 2  | CE EN 12841 type B                           | -   | -  | -                 | •                             | -                             | -                              | -                             | -                             | -                             | 175... 200 cm<br>5'9" - 6'7"        | 695 g<br>1.5 lbs |
|                       | SEQUOIA SRT            | C69AF0 1  | CE EN 358<br>CE EN 813                       | -   | -  | -                 | -                             | •                             | •                              | 70... 100 cm<br>27.6" - 39.4" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 1 400 g<br>3.1 lbs                  |                  |
|                       |                        | C69AF0 2  |  | -   | -  | •                 | •                             | 85... 120 cm<br>33.5" - 47.2" | 60... 75 cm<br>23.6" - 29.5"   | -                             | 1 460 g<br>3.2 lbs            |                               |                                     |                  |
|                       | SEQUOIA                | C690F0 1  |  | -   | -  | •                 | •                             | 70... 100 cm<br>27.6" - 39.4" | 50... 65 cm<br>19.7" - 25.6"   | -                             | 1 320 g<br>2.9 lbs            |                               |                                     |                  |
|                       |                        | C690F0 2  |  | -   | -  | •                 | •                             | 85... 120 cm<br>33.5" - 47.2" | 60... 75 cm<br>23.6" - 29.5"   | -                             | 1 370 g<br>3.0 lbs            |                               |                                     |                  |
|                       | SEQUOIA SWING          | C69SFA 1  |  | -   | -  | •                 | •                             | 70... 100 cm<br>27.6" - 39.4" | 50... 65 cm<br>19.7" - 25.6"   | -                             | 2 380 g<br>5.3 lbs            |                               |                                     |                  |
|                       |                        | C69SFA 2  |  | -   | -  | •                 | •                             | 85... 120 cm<br>33.5" - 47.2" | 60... 75 cm<br>23.6" - 29.5"   | -                             | 2 420 g<br>5.3 lbs            |                               |                                     |                  |
|                       | FALCON                 | C38 AAA 1   | CE EN 813<br>CE EN 358                       | -   | -  | -                 | -                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 810 g<br>1.8 lbs                    |                  |
|                       |                        | C38 AAA 2   | -  | -   | •  | •                 | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | -                              | 880 g<br>2.0 lbs              |                               |                               |                                     |                  |
|                       | FALCON MOUNTAIN        | C38 CAA 1   | CE EN 813<br>CE EN 358<br>CE EN 12277 type C | -   | -  | -                 | -                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 795 g<br>1.8 lbs                    |                  |
|                       |                        | C38 CAA 2   | -  | -   | •  | •                 | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | -                              | 830 g<br>1.9 lbs              |                               |                               |                                     |                  |
|                       | FALCON ASCENT          | C38 BAA 1   | CE EN 813<br>CE EN 358                       | -   | -  | -                 | -                             | •                             | •                              | 70... 120 cm<br>27.6" - 47.2" | 50... 65 cm<br>19.7" - 25.6"  | -                             | 780 g<br>1.7 lbs                    |                  |
|                       |                        | C38 BAA 2   | -  | -   | •  | •                 | 80... 140 cm<br>31.5" - 55.1" | 60... 75 cm<br>23.6" - 29.5"  | -                              | 800 g<br>1.8 lbs              |                               |                               |                                     |                  |
|                       | NEWTON FAST JAK / NOIR | C73JFO 0  | CE EN 361                                    | -   | -  | •                 | •                             | -                             | -                              | 68... 95 cm<br>26.8" - 37.4"  | 45... 60 cm<br>17.7" - 23.6"  | 165... 180 cm<br>5'5" - 5'11" | 960 g<br>2.1 lbs                    |                  |
|                       |                        | C73JFO 1 / C73JFN 1S                                      |  | -   | -  | • / -             | •                             | -                             | -                              | 75... 104 cm<br>29.5" - 40.9" | 53... 66 cm<br>20.9" - 26.0"  | 173... 187 cm<br>5'8" - 5'11" | 1020 g / 890 g<br>2.3 lbs / 2.0 lbs |                  |
|                       |                        | C73JFO 2 / C73JFN 2S                                      |  | -   | -  | • / -             | •                             | -                             | -                              | 97... 125 cm<br>38.2" - 49.2" | 55... 75 cm<br>21.7" - 29.5"  | 180... 194 cm<br>5'11" - 6'4" | 1070 g / 930 g<br>2.4 lbs / 2.1 lbs |                  |
|                       | NEWTON                 | C73000 1  |  | -   | -  | •                 | •                             | -                             | -                              | 75... 104 cm<br>29.5" - 40.9" | 53... 66 cm<br>20.9" - 26.0"  | 173... 187 cm<br>5'8" - 5'11" | 780 g<br>1.7 lbs                    |                  |
| C73000 2              |                        | -   | -  | •   | •  | -                 | -                             | 97... 125 cm<br>38.2" - 49.2" | 55... 75 cm<br>21.7" - 29.5"   | 180... 195 cm<br>5'11" - 6'5" | 810 g<br>1.8 lbs              |                               |                                     |                  |
|                       | PAD FAST               | C89 OF  | CE EN 358                                    | -   | -  | -                 | -                             | -                             | •                              | 60... 95 cm<br>23.6" - 37.4"  | -                             | -                             | 344 g<br>12.1 oz                    |                  |
|                       |                        | C89 1F  |  | -   | -  | -                 | -                             | •                             | 75... 105 cm<br>29.95" - 41.3" | -                             | -                             | 387 g<br>13.7 oz              |                                     |                  |
|                       |                        | C89 2F  |  | -   | -  | -                 | -                             | •                             | 95... 120 cm<br>37.4" - 47.2"  | -                             | -                             | 417 g<br>14.7 oz              |                                     |                  |



## Protection for workers at height

A helmet must protect against impact and falling objects, but it should not get in the way while being worn.

Petzl offers the VERTEX BEST and VERTEX VENT helmets for work at height. Both models are equipped with a strong chin strap that reduces the risk of the helmet coming off in case of a fall. The VERTEX ST helmet, on the other hand, is designed for industrial use.

These helmets are very durable. They meet professional requirements, and come with the option of mounting eye and hearing protection.

Choosing between ventilated and non-ventilated models depends on the risks associated with the work environment (electric, molten metal splash, etc.).

## Work at height



VERTEX® BEST A16



VERTEX® VENT A11

## Industry



VERTEX® ST A12

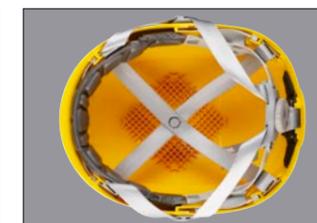
## VERTEX® BEST A16

Helmet for work at height and rescue



- Chinstrap designed to reduce the risk of the helmet coming off as a result of an impact during a fall: it has a breaking strength greater than 50 daN (EN 12492 mountaineering helmet standard)
- Webbing suspension system guarantees optimal comfort
- Optional thick headband for a custom fit
- Headband adjustment wheel is easy to use, even while wearing gloves
- Adjustable headband height
- Shell has side slots that can be used for mounting hearing and/or face protection
- Four clips for mounting a headlamp
- Satisfies all optional requirements of the EN 397 standard: lateral deformation, use in cold temperatures, electric insulation and molten metal splash

- Available in five colors:
  - VERTEX BEST (A16 Y1): yellow
  - VERTEX BEST (A16 W1): white
  - VERTEX BEST (A16 R1): red
  - VERTEX BEST (A16 O1): orange
  - VERTEX BEST (A16 N1): black



The webbing suspension system with its thick foam headband provides superior comfort. For smaller heads, an optional thicker foam can be inserted into the helmet.



The adjustment wheel allows quick and easy tightening of the headband while wearing the helmet, and even while wearing gloves. The headband height can be adjusted to position the helmet correctly for any head shape. It can be stored inside the shell to make it easier to store and to protect it in storage.



The side slots can be used for mounting hearing and/or eye protection.



## VERTEX® BEST DUO LED 14 E66

Helmet with waterproof hybrid headlamp for use in confined spaces, rescue and nighttime work-at-height

- White VERTEX BEST helmet with integrated FIXO DUO LED 14 headlamp
- Hybrid light source
- Halogen bulb light source (x 1): focused beam for long distance lighting
- 14-LED light source:
  - wide beam for proximity lighting
  - three lighting levels (maximum, optimum, economic)
  - regulated lighting for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Locking switch
- Light body can be tilted
- Waterproof down to -5 meters (IPX8)
- Does not meet the optional requirements of the EN 397 standard concerning electric insulation

See "Lighting" section for more information.

|                                |                           |                         |                         |
|--------------------------------|---------------------------|-------------------------|-------------------------|
| <b>Light output:</b>           | 67 lumens (14 LEDs)       |                         |                         |
| <b>Beam pattern:</b>           | wide or focused           |                         |                         |
| <i>14 LEDs (Wide beam)</i>     | maximum                   | optimum                 | economic                |
| <b>Total battery life:</b>     | <b>183 h</b>              | <b>148 h</b>            | <b>110 h</b>            |
| Reserve battery life:          | 179 h 30                  | 138 h                   | 47 h                    |
| <b>Distance t=0:</b>           | <b>34 m --&gt; 3 h 30</b> | <b>26 m --&gt; 10 h</b> | <b>15 m --&gt; 63 h</b> |
| Distance t=0h30:               | 34 m                      | 26 m                    | 15 m                    |
| Distance t=10h:                | 9 m                       | 26 m                    | 15 m                    |
| Distance t=30h:                | -                         | -                       | 15 m                    |
| <i>Halogene (focused beam)</i> |                           |                         |                         |
| <b>Battery life:</b>           | <b>4 h</b>                |                         |                         |
| <b>Distance t=0:</b>           | <b>100 m</b>              |                         |                         |
| Distance t=0h30:               | 70 m                      |                         |                         |



## VERTEX® VENT A11

Ventilated helmet for work-at-height and rescue

- Ventilation holes with adjustable sliding shutters allow air to circulate in the helmet when needed
- Chinstrap designed to reduce the risk of the helmet coming off as a result of an impact during a fall: it has a breaking strength greater than 50 daN (EN 12492 mountaineering helmet standard)
- Webbing suspension system guarantees optimal comfort
- Optional thick headband for a custom fit
- Headband adjustment wheel is easy to use, even while wearing gloves
- Adjustable headband height
- Shell has side slots that can be used for mounting hearing and/or face protection
- Four clips for mounting a headlamp
- Available in five colors:
  - VERTEX VENT (A11 Y1): yellow
  - VERTEX VENT (A11 W1): white
  - VERTEX VENT (A11 R1): red
  - VERTEX VENT (A11 O1): orange
  - VERTEX VENT (A11 N1): black
- Satisfies all optional requirements of the EN 397 standard concerning lateral deformation and use in cold temperatures
- Does not meet the optional requirements of the EN 397 standard concerning electric insulation and molten metal splash



## VERTEX® ST A12

Helmet for industrial use

- Chinstrap designed to come off if it gets snagged: the buckle opens at 25 daN (Industrial helmet standard EN 397)
- Webbing suspension system guarantees optimal comfort
- Optional thick headband for a custom fit
- Headband adjustment wheel is easy to use, even while wearing gloves
- Adjustable headband height
- Shell has side slots that can be used for mounting hearing and/or face protection
- Four clips for mounting a headlamp
- Color: white
- Satisfies all optional requirements of the EN 397 standard: lateral deformation, use in cold temperatures, electric insulation and molten metal splash

### Differences:



**VERTEX BEST:**  
• Protection from electrical risks, but without ventilation.



**VERTEX VENT:**  
• Provides ventilation, but not guaranteed to protect against electrical risks



**VERTEX BEST:**  
• Reduces the risk of the helmet coming off in case of a fall (the buckle has a breaking strength greater than 50 daN)



**VERTEX ST:**  
• The helmet will come off in the case of a fall (the buckle opens at 25 daN)



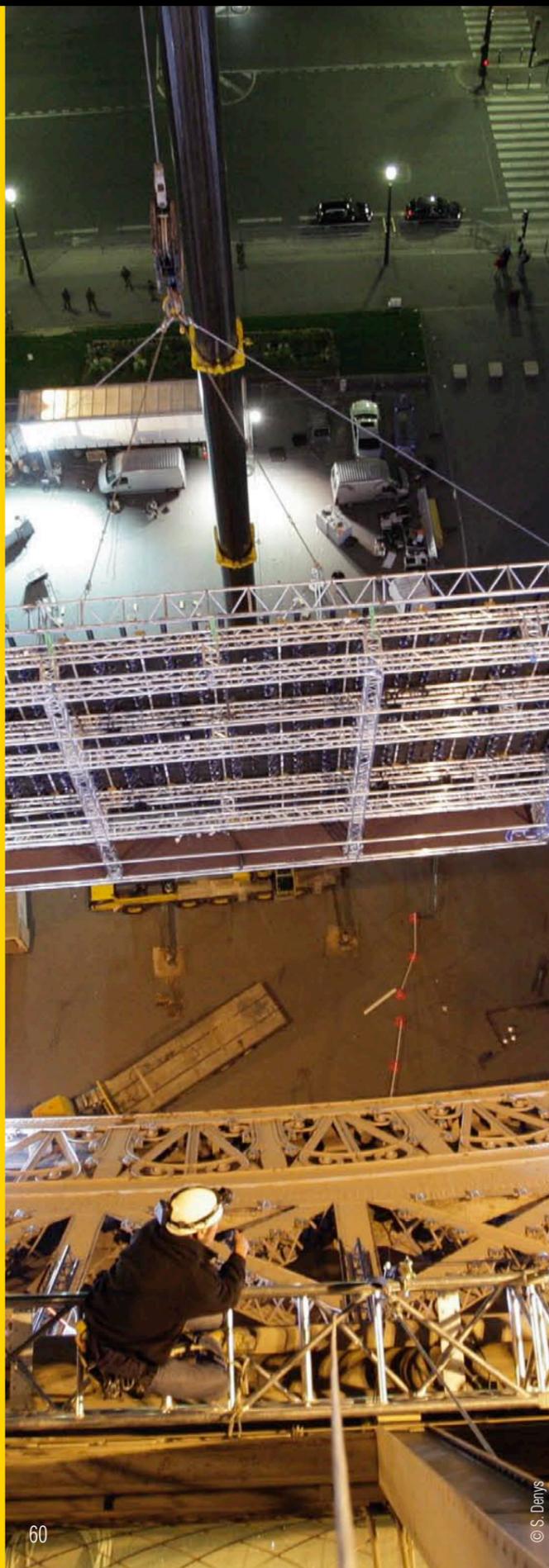
**VERTEX VENT:**  
• Reduces the risk of the helmet coming off in case of a fall (the buckle has a breaking strength greater than 50 daN)  
• Provides ventilation



**VERTEX ST:**  
• The helmet will come off in the case of a fall (the buckle opens at 25 daN)

### Technical data for helmets

|                               | Reference | Head circumference          | Chinstrap strength | Certification                                | Optional EN 397 standard requirements |        |                   |              | Weight           |
|-------------------------------|-----------|-----------------------------|--------------------|--|---------------------------------------|--------|-------------------|--------------|------------------|
|                               |           |                             |                    |  | Lateral deformation                   | - 30°C | Insulation rating | Molten metal |                  |
| <b>VERTEX BEST</b>            | A16       | 53... 63 cm (20,9... 24,8") | > 50 daN           | CE ANSI Z89.1 - 2003 TYPE 1 CLASS E          | •                                     | •      | •                 | •            | 465 g<br>16.4 oz |
| <b>VERTEX BEST DUO LED 14</b> | E66       | 53... 63 cm (20,9... 24,8") | > 50 daN           | CE ANSI Z89.1 - 2003 TYPE 1 CLASS C          | •                                     | •      | -                 | •            | 640 g<br>22.6 oz |
| <b>VERTEX VENT</b>            | A11       | 53... 63 cm (20,9... 24,8") | > 50 daN           | CE EN 12492 ANSI Z89.1 - 2003 TYPE 1 CLASS C | •                                     | •      | -                 | -            | 465 g<br>16.4 oz |
| <b>VERTEX ST</b>              | A12       | 53... 63 cm (20,9... 24,8") | ≤ 25 daN           | CE EN 397 ANSI Z89.1 - 2003 TYPE 1 CLASS E   | •                                     | •      | •                 | •            | 465 g<br>16.4 oz |



## The link between the user and a structure

Lanyards must allow a worker to move about with maximum security and without getting in the way.

There are two types of lanyards:

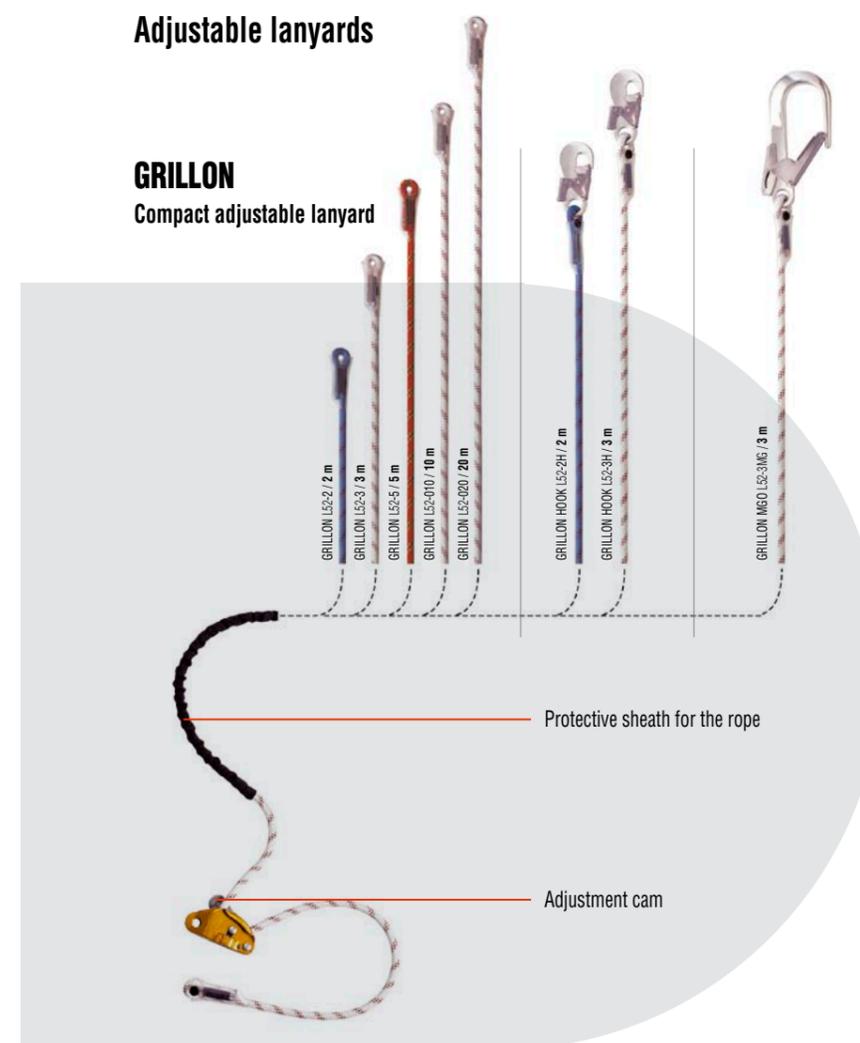
- lanyards for restraint and for work positioning:
  - to prevent the worker from moving around in a zone where there is risk of falling
  - to position the worker in the work area (when there is risk of falling, a fall arrest system must be used)
- energy absorbers: to limit the impact transferred to the user during a fall

Restraint and work positioning lanyards are used with a work positioning harness. They are designed to limit movement or to allow hands-free work while in position. There are adjustable and non-adjustable lanyards. The nylon rope used (semi-static or dynamic) is abrasion and wear resistant. When there is risk of falling, an energy absorber must accompany the restraint and work positioning lanyards.

## Adjustable lanyards

### GRILLON

#### Compact adjustable lanyard



- Mechanical adjustment system with pivoting cam for work positioning
- Connect to a harness' ventral attachment point (suspended user) or to the two lateral attachment points (standing user)
- Sliding protection sheath protects the contact points of the rope from abrasion

Available in different versions:

- **GRILLON L52**
  - Adjustable GRILLON lanyard without connectors
  - Available in five lengths: 2, 3, 5, 10 and 20 meters
  - The 5, 10 and 20 m versions can be used as temporary lifelines
- They have a handle to help release the rope under tension (when attached to the ventral loop of the harness).
- **GRILLON HOOK L52 2H 3H**
  - Adjustable GRILLON lanyard with HOOK connector
  - Designed to clip onto metal structures, cables and small-diameter bars
  - Automatic locking HOOK connector stays permanently in place at the end of the lanyard
  - Available in two lengths: 2 and 3 meters

- **GRILLON MGO L52 3MG**
  - Adjustable GRILLON lanyard with MGO connector
  - Designed to clip onto metal structures, cables and large-diameter bars
  - Automatic locking MGO connector has a large opening and stays permanently in place at the end of the lanyard
  - Equipped with a handle to help release the rope under tension (when attached to the ventral loop of the harness)
  - Length: 3 meters



The GRILLON's pivoting cam allows the lanyard to be adjusted.

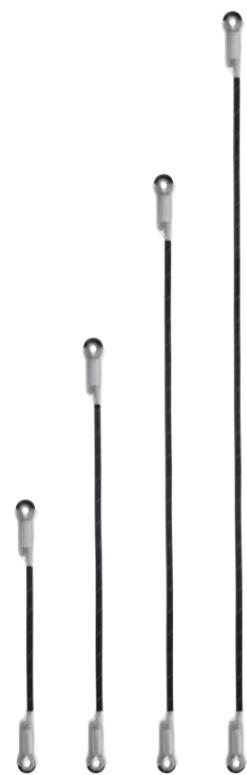


Sewn terminations on rope lanyards are stronger than knotted terminations. They are also less bulky. Plastic sheaths and STRINGS hold the connectors in place. They also protect the ends of the lanyards from abrasion.



The adjustable 5, 10 and 20 meter GRILLON and the 3 m GRILLON MGO are equipped with a handle allowing the user to release the braking system more easily when the system is loaded. NOTE: GRILLON lanyards are also available in 5, 10 and 20 meter lengths for creating lifelines (see ANCHORS section).

## Non-adjustable lanyards



**JANE L50**  
Non-adjustable dynamic rope lanyard

- Can be installed in a fall arrest system
- Available in four lengths: 0.6 - 1 - 1.5 and 2 meters



**JANE MGO L53**  
Non-adjustable dynamic rope lanyard fitted with an MGO connector

- Version of the JANE lanyard with MGO connector
- Designed to clip onto metal structures, cables and large-diameter bars
- Automatic locking connector has a large opening and stays permanently in place at the lanyard's termination
- Available in three lengths: 0.6, 1 and 1.5 meters



**SPELEGYCA C44**  
Asymmetrical Y-shaped sewn lanyard made of flat webbing

- Used with an ASCENSION handled rope clamp for movement along a rope
- Asymmetrical Y-shape for ease of movement:
  - can connect short or long, depending on progression needs
  - the two arms allow the user to remain connected to an anchor when passing intermediate anchor points
- Equipped with a STRING, which allows the connector to be held in the major axis position (the strongest) and protects from wear
- Sewn-flat webbing for more resistance to abrasion and aging

WARNING: The SPELEGYCA is not an energy absorber.

Energy-absorbing lanyards are part of a fall arrest system. They absorb the energy generated by the fall by tearing along specific stitching. To offer better mobility in the work zone, energy-absorbing lanyards are available in different lengths. They should only be used after checking that there is adequate clearance under the user.

## Energy absorbers with integrated lanyard



**ABSORBICA-I / -Y**  
Energy absorbers with integrated lanyard

- Choice of two lengths, depending on use
- Energy absorber end equipped with STRING
- The non-absorber end is equipped with a STRING, sewn terminations with a plastic cover sheath, or connectors, depending on the model
- Mesh pouch with zipper protects the energy absorber from abrasion or projections and allows regular verification of the absorber's condition

Available in different versions:

- **ABSORBICA-I L58 - L70150 I**
  - Energy absorber with integrated lanyard
  - Designed for belaying on a rope or cable lifeline or on a bar
  - Available in two lengths:
    - . ABSORBICA-I (L58): 0.8 m (webbing with STRING at each end)
    - . ABSORBICA-I (L70150I): 1.5 m (rope end sewn and protected by plastic sheath)
- **ABSORBICA-I-MGO L58 MGO - L70150 IM**
  - Energy absorber with integrated lanyard and MGO connector
  - Version of the ABSORBICA-I with an MGO connector to clip onto metal structures, cables or large-diameter bars
  - Automatic locking MGO connector has a large opening and stays permanently in place at the end of the lanyard
  - Available in two lengths:
    - . ABSORBICA-I-MGO (L58 MGO): 0.8 m\* (webbing with STRING at the end plus an MGO connector)
    - . ABSORBICA-I-MGO (L70150 IM): 1.5 m\* (rope ends sewn and protected by plastic sheath plus MGO connector)

- **ABSORBICA-Y L59 - L70150 Y**
  - Energy absorber with integrated Y-shaped lanyard
  - Designed for belaying on a rope or cable lifeline or on a bar when passing intermediate anchor points
  - The two arms allow the user to remain connected to an anchor when passing intermediate anchor points
  - Available in two lengths:
    - . ABSORBICA-Y (L59): 0.8 m (webbing with STRING at each end)
    - . ABSORBICA-Y (L70150 Y): 1.5 m (sewn rope ends protected by a plastic sheath)
- **ABSORBICA-Y MGO L59 MGO - L70150 YM**
  - Energy absorber with integrated Y-shaped lanyard and two MGO connectors
  - Version of the ABSORBICA-Y with MGO connectors to clip onto metal structures, cables or large-diameter bars
  - Automatic locking MGO connector has a large opening and stays permanently in place at the lanyard's terminations
  - Available in two lengths:
    - . ABSORBICA-Y-MGO (L59 MGO): 0.8 m\* (webbing with STRING at each end plus two MGO connectors)
    - . ABSORBICA-Y-MGO (L70150 YM): 1.5 m\* (rope ends sewn and protected by plastic sheath plus two MGO connectors)

\* Length does not include connector

Energy absorbers



**ASAP'SORBER L71**  
Energy absorber with integrated lanyard  
See mobile fall arrest device.



**ABSORBICA L57**  
Sewn-webbing energy absorber

- Component of a complete fall-arrest system
- Often used in combination with a lanyard to build an energy-absorbing lanyard with a maximum length of 2 meters
- Ends equipped with STRING
- Compact and lightweight

|   | Reference | Length  | Length after full tear | Clearance   | Certification         | Weight             |
|---|-----------|---|------------------------|---|-----------------------|--------------------|
| Lanyards for restraint and for work positioning |           |   |                        |   |                       |                    |
| <b>GRILLON</b>                                  | L52 2     | 2 m<br>6.6 ft                                     | -                      | -   | CE EN 358             | 420 g<br>14.8 oz   |
|   | L52 3     | 3 m<br>9.8 ft                                     | -                      | -   |                       | 530 g<br>18.7 oz   |
|   | L52 5     | 5 m<br>16.4 ft                                    | -                      | -   | CE EN 358<br>EN 795 C | 690 g<br>1.52 lbs  |
|   | L52,010   | 10 m<br>32.8 ft                                   | -                      | -   |                       | 1055 g<br>2.33 lbs |
|   | L52,020   | 20 m<br>65.6 ft                                   | -                      | -   |                       | 1900 g<br>4.19 lbs |
| <b>GRILLON HOOK</b>                             | L52 2H    | 2 m<br>6.6 ft                                     | -                      | -   | CE EN 358             | 610 g<br>1.34 lbs  |
|   | L52 3H    | 3 m<br>9.8 ft                                     | -                      | -   |                       | 720 g<br>1.59 lbs  |
| <b>GRILLON MGO</b>                              | L52 3MG   | 3 m<br>9.8 ft                                     | -                      | -   | CE EN 358             | 995 g<br>2.19 oz   |
| <b>JANE</b>                                     | L50 60    | 0.6 m<br>2 ft                                     | -                      | -   | CE EN 354             | 110 g<br>3.9 oz    |
|   | L50,100   | 1 m<br>3.3 ft                                     | -                      | -   |                       | 130 g<br>4.6 oz    |
|   | L50,150   | 1.5 m<br>4.9 ft                                   | -                      | -   |                       | 185 g<br>6.5 oz    |
|   | L50,200   | 2 m<br>6.6 ft                                     | -                      | -   |                       | 225 g<br>7.9 oz    |
| <b>JANE MGO</b>                                 | L53 60    | 0.6 m<br>2 ft                                     | -                      | -   | CE EN 354             | 565 g<br>1.25 lbs  |
|   | L53,100   | 1 m<br>3.3 ft                                     | -                      | -   |                       | 585 g<br>1.29 lbs  |
|   | L53 150   | 1.5 m<br>4.9 ft                                   | -                      | -   |                       | 640 g<br>1.41 lbs  |
| <b>SPELEGYCA</b>                                | C44       | 0.3 / 1 ft (short end)<br>0.6 m / 2 ft (long end) | -                      | -   | CE EN 354             | 90 g<br>3.2 oz     |
| Energy-absorbing lanyards                       |           |   |                        |   |                       |                    |
| <b>ABSORBICA</b>                                | L57       | 0.2 m<br>0.7 ft                                   | 1.6 m<br>5.3 ft        | 3.9 m / 12.8 ft + length of energy absorber, lanyard and connectors | CE EN 355             | 154 g<br>5.4 oz    |
| <b>ABSORBICA-I</b>                              | L58       | 0.8 m<br>2.6 ft                                   | 1.5 m<br>4.9 ft        | 4.35 m<br>14.3 ft   | CE EN 355             | 160 g<br>5.6 oz    |
|   | L70150 I  | 1.5 m<br>4.9 ft                                   | 3.35 m<br>11 ft        | 6.1 m<br>20 ft  |                       | 365 g<br>12.9 oz   |
| <b>ABSORBICA-Y</b>                              | L59       | 0.8 m<br>2.6 ft                                   | 1.5 m<br>4.9 ft        | 4.35 m<br>14.3 ft   | CE EN 355             | 210 g<br>7.4 oz    |
|   | L70150 Y  | 1.5 m<br>4.9 ft                                   | 3.35 m<br>11 ft        | 6.1 m<br>20 ft  |                       | 500 g<br>1.1 lbs   |
| <b>ABSORBICA-I-MGO</b>                          | L58 MGO   | 0.8 m / 2.6 ft<br>(w/o connector)                 | 1.75 m<br>5.7 ft       | 4.35 m<br>14.3 ft   | CE EN 355, CE EN 362  | 655 g<br>1.44 oz   |
|   | L70150 IM | 1.5 m / 4.9 ft<br>(w/o connector)                 | 3.6 m<br>11.8 ft       | 6.1 m<br>20 ft  |                       | 825 g<br>1.81 lbs  |
| <b>ABSORBICA-Y-MGO</b>                          | L59 MGO   | 0.8 m / 2.6 ft<br>(w/o connector)                 | 1.75 m<br>5.7 ft       | 4.35 m<br>14.3 ft   | CE EN 355, CE EN 362  | 1120 g<br>2.47 lbs |
|   | L70150 YM | 1.5 m / 4.9 ft<br>(w/o connector)                 | 3.6 m<br>11.8 ft       | 6.1 m<br>20 ft  |                       | 1420 g<br>3.13 lbs |
| <b>ASAP'SORBER</b>                              | L71 20    | 0.2 m<br>0.7 ft                                   | 0.45 m<br>1.5 ft       | 3.15 m<br>10.3 ft   | CE EN 355             | 60 g<br>2.1 oz     |
|   | L71 40    | 0.4 m<br>1.3 ft                                   | 0.80 m<br>2.6 ft       | 3.50 m<br>11.5 ft   | CE EN 355             | 100 g<br>3.5 oz    |



## ASAP: to stop a fall As Soon As Possible

The ASAP mobile fall arrest device allows the user to set up an extremely simple and efficient fall arrest system. It is used in belay systems for progression on structures or in back-up belay systems on a safety line when working on ropes.

Quick and easy to install, the ASAP follows the user in his movements without any intervention on his part. It works on vertical or angled rope. In case of a fall, slide or uncontrolled descent, the ASAP mobile fall arrester will immediately lock itself onto the rope to stop the fall, even if the user intervenes, for example by grabbing it.

## ASAP® B71

Mobile fall arrest device for rope



- For use on a safety rope
- Stops a fall, a slide or uncontrolled descent
- Locks even if the device is grabbed during a fall
- Works on vertical or angled rope
- Moves up and down along the rope without manual intervention
- Easy to install and remove at any point on the rope
- Can be used with an energy absorbing lanyard
- For 10.5 to 13 mm semi-static ropes (EN 1891 type A) certified with the device\*
- Comes with the OK TRIACT automatic locking carabiner
- Weight: 427 g (350 g for ASAP and 77 g for OK TRIACT)
- Individually tested
- Certification: CE EN 353 2, CE EN 12841 type A

\* for more information, go to [www.petzl.com/ASAP](http://www.petzl.com/ASAP)



## ASAP'SORBER L71

Energy absorber with integrated lanyard for ASAP

- Designed to connect the ASAP mobile fall arrester to a harness
- The energy generated from a fall is absorbed by the tearing of specific stitching
- Available in two lengths, to get the desired distance from the safety rope, to reach the best compromise between distance from the rope and height of the fall:
  - **ASAP'SORBER (L71 20)**: 20 cm (necessary clearance 3.15 m, weight 60 g)
  - **ASAP'SORBER (L71 40)**: 40 cm (necessary clearance 3.50 m, weight 100 g)
- Equipped with a STRING, which allows the connector to be held in the major axis position (the strongest) and protects the connector attachment loop from wear
- Certification: CE EN 355



Under normal use, the ASAP's locking wheel rolls along the rope, whether it is vertical or angled, to follow the user in his movements. In case of a fall or excessive speed (slide, uncontrolled descent), the wheel will lock and stop the fall.



The ASAP is quickly and easily installed anywhere on the rope by using the opening catch to disengage the locking wheel.



## The essential link in any safety system

To meet the many different needs encountered in the field, there is a wide selection of connectors. Based on its shape, size, opening capacity or locking system, each product is destined for a specific use.

Connectors are made of aluminum or steel and are designed for two distinct uses:

- aluminum: Used on harnesses, at the ends of lanyards or for temporary anchors. Their low weight eases progression while their alloy ensures an optimal weight-to-strength ratio.
- steel: Heavier than their aluminum counterparts, they are better adapted to more difficult conditions. These connectors are mainly used for fixed anchors or for connecting to metal structures.

To guarantee optimal efficiency, all aluminum Petzl carabiners use the Keylock system: the body / gate interface does not have a hook that could snag on anchors, ropes, harnesses, etc.



### Keylock system

The body / gate interface has no hook that could snag on anchors, ropes, harnesses, etc. All Petzl aluminum carabiners use the Keylock system.

## Different shapes for different uses

Whether symmetrically shaped, pear-shaped (small or large) or D-shaped, each shape is designed for a specific use: connecting a device to a harness, attaching a pulley, for use at a lanyard's termination, etc.

### • Oval-shape



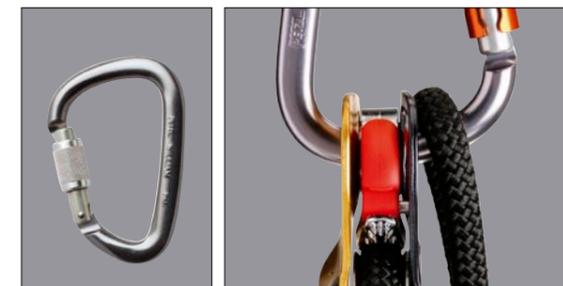
Versatile symmetrical shape specially adapted for devices with wide side plates (FIXE pulley, ASCENSION rope clamps, etc.).

### • D-shape



Asymmetrical shape allows easy connection and good positioning of the device along the length of the axis.

### • Pear-shape



Asymmetrical shape has a wide opening and a large capacity for connection.

## Locking systems adapted for every situation

Locking carabiners can have either manual locking or auto-locking systems:

- automatic: automatically locked, without intervention by the user
- manual: manually locked by the user

### • Automatic (frequent manipulation)



#### BALL-LOCK

#### Auto-locking system with lock indicator

- Green dot indicates when sleeve is locked
- Quick to unlock by pressing on the green dot and turning the sleeve.
- Can be opened and closed with one hand
- Recommended for carabiners that are frequently used



#### TRIACT-LOCK

#### Auto-locking system

- Unlocks quickly by raising and then turning the sleeve
- Recommended for carabiners that are frequently used

### • Manual (occasional manipulation)



#### SCREW-LOCK

#### Manual screw gate locking system

- The red band provides a visual warning when the carabiner is unlocked
- Recommended for harsh environments (mud, ice), where dust and dirt could cause an automatic locking mechanism to malfunction
- Recommended for carabiners that are frequently used



WILLIAM BALL-LOCK



Am'D BALL-LOCK



WILLIAM TRIACT-LOCK



Am'D TRIACT-LOCK



OK TRIACT-LOCK



OMNI TRIACT-LOCK



WILLIAM SCREW-LOCK



Am'D SCREW-LOCK



OK SCREW-LOCK



OMNI SCREW-LOCK



**WILLIAM** M36 SL/SLN - M36 TL/TLN - M36 BL  
Large size locking carabiner

- Large size and opening to allow anchoring of several ropes and slings
- Wide pear shape facilitates belaying with a Munter hitch
- Available in five versions:
  - WILLIAM (M36 SL): SCREW-LOCK
  - WILLIAM (M36 SLN): SCREW-LOCK black
  - WILLIAM (M36 TL): TRIACT-LOCK
  - WILLIAM (M36 TLN): TRIACT-LOCK black
  - WILLIAM (M36 BL): BALL-LOCK
- Individually tested

**Am'D** M34 SL - M34 TL - M34 BL  
Asymmetrical locking carabiner

- Specially adapted for attaching equipment (rope clamps, etc.)
- For use at the end of a lanyard
- Excellent strength-to-weight ratio
- Available in three versions:
  - Am'D (M34 SL): SCREW-LOCK
  - Am'D (M34 TL): TRIACT-LOCK
  - Am'D (M34 BL): BALL-LOCK
- Individually tested

**OK** M33 SL/SLN - M33 TL/TLN  
Symmetrical locking carabiner

- Versatile oval symmetric shape for optimal positioning of equipment (pulleys, rope clamps, etc.)
- Ideal for hoists
- Available in four versions:
  - OK (M33 SL): SCREW-LOCK
  - OK (M33 SLN): SCREW-LOCK black
  - OK (M33 TL): TRIACT-LOCK
  - OK (M33 TLN): TRIACT-LOCK black
- Individually tested

**OMNI** M37 SL - M37 TL  
Locking semi-circle carabiner

- Used to close any harness having two attachment points that must be joined with a connector (e.g. NEWTON harness)
- Designed to be loaded on all three axes
- Available in two versions:
  - OMNI (M37 SL): SCREW-LOCK
  - OMNI (M37 TL): TRIACT-LOCK
- Individually tested

**FREINO** M42

Locking carabiner with friction spur for descenders

- The spur helps increase the friction for improved control of the descent (e.g. two-person rescues)
- Rope is easily inserted into the spur, without opening the carabiner
- Twist Lock automatic locking sleeve, unlocked by a simple rotation
- For use with the I'D, the GRIGRI or the STOP, etc.
- Individually tested

**SPIRIT** M15 A

Asymmetric carabiner

- Should be used only for progression using climbing techniques
- Non-locking, clips easily
- Individually tested



**KADOR** M73  
Large capacity locking carabiner

- Designed for use with heavy loads
- Very high quality steel for difficult work or rescue conditions
- Large size accepts multiple system elements
- Wide opening for connection to thick bars
- Wide pear shape facilitates belaying with a Munter hitch
- TRIACT-LOCK auto-locking system



**MGO** MGO60 - MGO110  
Very large automatic locking directional connector

- Designed for connection to metallic structures, cables and large diameter bars
- Ergonomic unlocking handle
- Available in two versions:
  - MGO (MGO60): opening of 60 mm
  - MGO (MGO110): opening of 110 mm



**DELTA** P11 - P11-8 - P11-8B  
Triangular steel quick link

- High breaking strength for the different axes
- When closed with a wrench, it becomes a semi-permanent anchor ring
- Available in three versions:
  - DELTA (P11): 10 mm diameter
  - DELTA (P11-8): 8 mm diameter
  - DELTA (P11-8B): 8 mm diameter (with bar for positioning the CROLL chest harness)

**GO** P15

Oval steel quick link

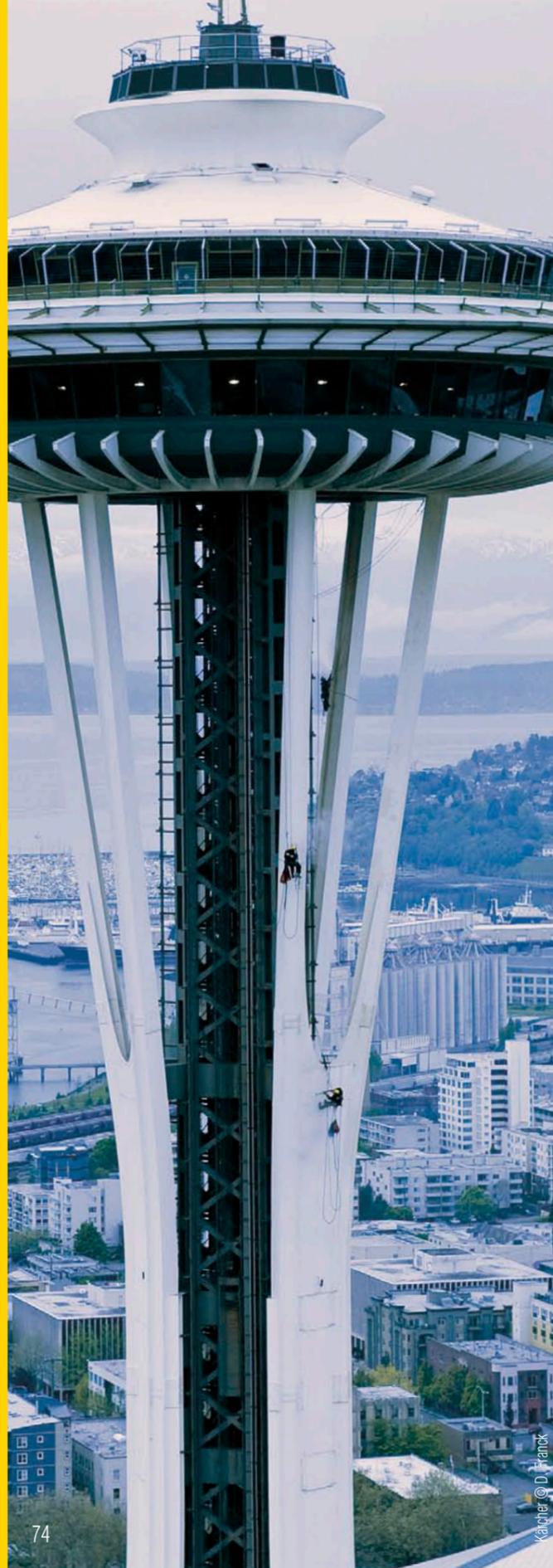
- High breaking strength for the different axes
- When closed with a wrench, it becomes a semi-permanent anchor ring

**DEMI ROND** P18

Semi-circle aluminum alloy quick link

- Used to close any harness having two attachment points that must be joined with a connector
- High breaking strength for the different axes
- When closed with a wrench, it becomes a semi-permanent anchor ring

|   | Locking system | Reference |                  |       |       |        | Certification                     | Weight            |
|---|----------------|-----------|------------------|-------|-------|--------|-----------------------------------|-------------------|
| <b>Aluminum carabiners</b>                                |                |           |                  |       |       |        |                                   |                   |
| <b>WILLIAM</b>  | SCREW-LOCK     | M36 SL    | 25 mm<br>0.98"   | 25 kN | 7 kN  | 7 kN   | CE EN 362                         | 90 g<br>3.17 oz   |
|   | TRIACT-LOCK    | M36 TL    | 24 mm<br>0.94"   |       |       |        |                                   |                   |
|   | BALL-LOCK      | M36 BL    | 24 mm<br>0.94"   |       |       |        |                                   |                   |
| <b>Am'D</b>   | SCREW-LOCK     | M34 SL    | 21 mm<br>0.83"   | 28 kN | 7 kN  | 8 kN   | CE EN 362                         | 75 g<br>2.65 oz   |
|   | TRIACT-LOCK    | M34 TL    | 21 mm<br>0.83"   |       |       |        |                                   |                   |
|   | BALL-LOCK      | M34 BL    | 22 mm<br>0.87"   |       |       |        |                                   |                   |
| <b>OK</b>   | SCREW-LOCK     | M33 SL    | 19 mm<br>0.75"   | 24 kN | 10 kN | 7 kN   | CE EN 362                         | 75 g<br>2.65 oz   |
|   | TRIACT-LOCK    | M33 TL    | 19 mm<br>0.75"   |       | 8 kN  |        |                                   |                   |
| <b>Special carabiners</b>                                 |                |           |                  |       |       |        |                                   |                   |
| <b>OMNI</b>   | SCREW-LOCK     | M37 SL    | 22 mm<br>0.87"   | 20 kN | 15 kN | 7 kN   | CE EN 362                         | 86 g<br>3.03 oz   |
|   | TRIACT-LOCK    | M37 TL    | 22 mm<br>0.87"   |       |       |        |                                   | 92 g<br>3.25 oz   |
| <b>FREINO</b>   | Twist Lock     | M42       | 15 mm<br>0.59"   | 25 kN | 10 kN | 9 kN   | CE EN 362                         | 85 g<br>3.0 oz    |
| <b>SPIRIT</b>   | -              | M15 A     | 20 mm<br>0.79"   | 23 kN | 10 kN | 9.5 kN | CE EN 12275 type B                | 49 g<br>1.73 oz   |
| <b>Steel carabiners, large connectors and quick links</b> |                |           |                  |       |       |        |                                   |                   |
| <b>KADOR</b>  | TRIACT-LOCK    | M73       | 23.5 mm<br>0.93" | 40 kN | 10 kN | 12 kN  | CE EN 362<br>ANSI Z 2359.1 - 1992 | 280 g<br>9.88 oz  |
| <b>MGO</b>  | Automatic      | MGO60     | 60 mm<br>2.36"   | 25 kN | -     | -      | CE EN 362                         | 455 g<br>1.05 lbs |
|   |                | MGO110    | 110 mm<br>4.33"  | 23 kN | 15 kN | 7 kN   | CE EN 362                         | 938 g<br>2.07 lbs |
| <b>DELTA</b>  | Quick link     | P11       | 12 mm<br>0.47"   | 25 kN | 10 kN | -      | CE EN 362 type Q                  | 150 g<br>5.29 oz  |
|   |                | P11-8     | 10 mm<br>0.39"   | 25 kN | 10 kN | -      | CE EN 362 type Q                  | 85 g<br>3.0 oz    |
|   |                | P11-8B    | 10 mm<br>0.39"   | 25 kN | 10 kN | -      | CE EN 362 type Q                  | 96 g<br>3.39 oz   |
| <b>GO</b>   | Quick link     | P15       | 16 mm<br>0.63"   | 25 kN | 10 kN | -      | CE EN 362 type Q                  | 60 g<br>2.12 oz   |
| <b>DEMI ROND</b>  | Quick link     | P18       | 10 mm<br>0.39"   | 25 kN | 10 kN | -      | CE EN 362 type Q                  | 55 g<br>1.94 oz   |



### Controlled descent

For both work at height and rescue, access from above is preferable because it allows one to take advantage of the force of gravity. Descenders are designed to regulate friction and control the descent on a fixed rope. They allow a worker to position himself at any point on the rope. Some descenders can also be used to safely belay a leader using rock climbing techniques. The EXO is a rescue system that allows a person to extricate himself from a building or structure in case of an emergency.

### Ease of use

Self-braking descenders provide ease of use and increased safety when moving on a single rope. The braking mechanism consists of a pivoting cam which pinches the rope and brakes the descent when the handle is released.

### New for 2009

The new versions of the I'D S and I'D L descenders have a new handle which allows easier movement over horizontal or low-angle terrain.

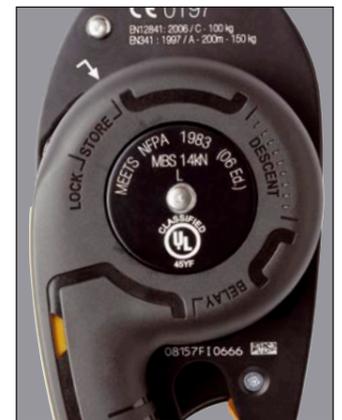
### I'D S D200S0

Self-braking descender with anti-panic function for working on fixed ropes



- Designed for work on a rope: the gate on the swinging side plate helps prevent dropping the device
- Multi-functional handle allows the user to:
  - unblock the rope and control the descent with the hand on the braking side of the rope
  - move more easily on horizontal or low-angle terrain thanks to the button on the handle
  - to position himself while on the rope
- Anti-panic function is engaged if the user pulls too hard on the handle: the pivoting cam is released and automatically brakes to stop the descent
- Anti-error safety cam to reduce the risk of an accident due to incorrect installation of the device on the rope. The shape of the cam is designed to improve rope glide during an ascent.

- Pivoting cam makes it easier to take up the slack in the rope. Can also be used to make a reversible haul system, and for short ascents (in conjunction with a FOOTPRO footloop and an ASCENSION handled rope clamp).
- For ropes between 10 and 11.5 mm in diameter
- Certification: CE EN 341 Class A, CE EN 12841 type C, NFPA 1983 L
- Individually tested
- Weight: 530 g



The multi-functional handle is used to control the descent. It is equipped with a button to facilitate smooth movement along low-angle or horizontal terrain. The anti-panic function stops the descent if the user pulls too hard on the handle.



The handle can be locked to stay in position without having to tie off the device. It is locked in a position which limits the risk of accidentally releasing it.



The pivoting cam allows the user to easily take up the slack in the rope. This mechanism also makes it possible to do short rope ascents or to build hauling systems. The anti-error safety cam reduces the risk of an accident due to incorrect installation of the device onto the rope. A removable screw allows the gate to be locked in order to integrate the device into an evacuation kit.

NEW



**I'D L D200LO**

**Self-braking descender with anti-panic function for rescue**

- Designed for rescue: lacks a gate
- Multi-functional handle allows the user to:
  - unblock the rope and control the descent with the hand on the braking side of the rope
  - move more easily on horizontal or low-angle terrain thanks to the button on the handle
  - to position himself while on the rope
- Anti-panic function is engaged if the user pulls too hard on the handle: the pivoting cam is released and automatically brakes to stop the descent
- Anti-error safety cam to reduce the risk of an accident due to incorrect installation of the device on the rope. The shape of the cam is designed to improve rope glide during an ascent.
- Pivoting cam makes it easier to take up the slack in the rope. Can also be used to make a reversible haul system, and for short ascents (in conjunction with a FOOTPRO footloop and an ASCENSION handled rope clamp).
- For ropes between 11.5 and 13 mm in diameter
- Certification: CE EN 341 Class A, NFPA 1983 G
- Individually tested
- Weight: 530 g



**STOP D09**

**Self-braking descender**

- The speed of the descent is controlled with the hand on the free end of the rope (the rope is released with the handle)
- Swinging side plate with safety clip:
  - reduces the risk of dropping the device
  - practical for quick installation of the rope
  - efficient means for passing intermediate anchors
- For ropes between 10 and 11 mm in diameter
- Certification: CE EN 341 class A
- Individually tested
- Weight: 325 g



**GRIGRI D14**

**Self-braking descender / belay device**

- For belays using rock climbing techniques
- Pivoting cam makes it easier to take up the slack in the rope
- Can also be used to make a reversible haul system, and for short ascents (in conjunction with a footloop and a handled rope grab)
- For ropes between 10 and 11 mm in diameter
- Certification: CE
- Individually tested
- Weight: 225 g

**Simple and efficient**

The friction of the rope in the device determines the braking power. Descent is regulated by varying one's grip on the free end of the rope.



RACK



HUIT

**RACK D11**

**Variable friction descender with braking bars**

- Allows the friction to be adjusted during the descent, according to the weight of the rope: the lower bar is removable and easy to put in place
- Distributes friction and heat to help preserve the rope
- Does not twist the rope
- For single and double ropes between 9 and 13 mm in diameter
- Individually tested
- Weight: 470 g

**HUIT D02**

**Figure 8 descender**

- Square shape to reduce twisting of the ropes and formation of a lark's head knot
- Compact and lightweight
- For single and double ropes between 8 and 13 mm in diameter
- Individually tested
- Weight: 100 g



**TUBA D12**

**Descending brake**

- Allows for lowering loads over long distances
- Shape allows passage of knots joining several ropes
- Friction is adjusted by increasing or decreasing the number of turns of the ropes around the device
- Certification: NFPA 1983 G
- Weight: 1240 g

The EXO is a rescue system that allows a person to extricate himself from a building or structure in case of an emergency. This totally integrated system allows a quick and reliable descent in emergency situations.



EASHOOK carabiner for use on existing anchors

7.5 mm static Technora rope

EXO self-braking descender

OK TRIACT-LOCK carabiner

Nomex transport bag

The EXO evacuation system comes in two versions:  
 - one version has an anchor hook adapted for locations where the possibility of finding an anchor point is uncertain. This solution applies particularly to firefighter operations in a burning building (e.g. attachment to a window ledge as a last resort).  
 - another version has a carabiner which is used during an evacuation where attachment points have been identified



The Technora (aramid fiber) rope is particularly resistant to abrasion and high temperatures. It is very static and allows evacuation from great heights.



The self-braking system allows the user to control and to stop the descent at any moment. It also allows rapid horizontal movement. In case of a fall, the device slides on the rope and limits the force transmitted to the user.



When the system is carried in the bag, it is very compact and can be attached directly to the harness, ready to use.

**NEW**



## EXO D30 15B

### Individual evacuation system with anchor hook

- Usable in locations where the possibility of finding an anchor point is uncertain
- Multi-purpose anchor hook can be used:
  - around a structure, locked with a clove hitch
  - on a window ledge, as a last resort
- Technora (aramid fiber) 7.5 mm static rope, resists abrasion and high temperatures
- Self-braking system for:
  - rapid horizontal movement
  - going through a window
  - controlling and stopping a descent
  - limiting the force transmitted to the user in case of a fall
- Nomex (aramid fiber) bag for transporting and attaching the system directly to the harness
- Training is essential
- Certification: NFPA 1983 E
- Weight: 1700 g (3.75 lbs)
- Comes with 15 m (50 ft) rope (other lengths available on special order)

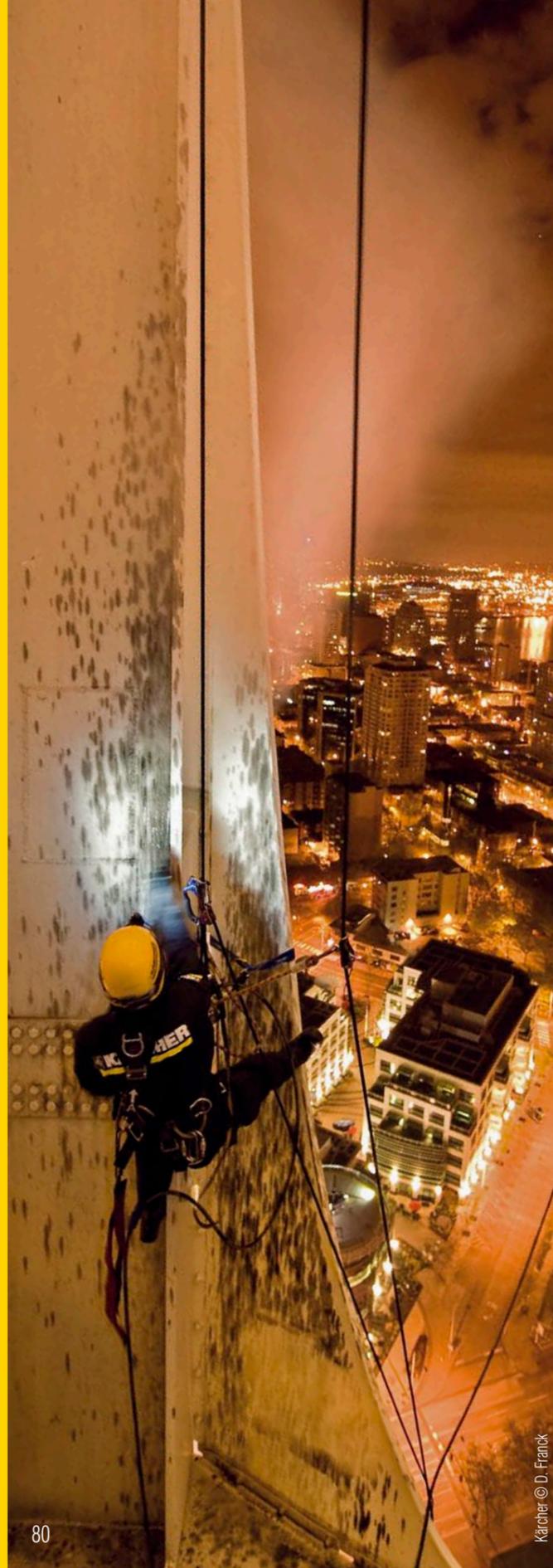
**NEW**



## EXO EASHOOK D30015 CN

### Individual evacuation system with EASHOOK anchor carabiner

- Used during an evacuation where possible anchor points have been identified
- EASHOOK anchor carabiner is easy to manipulate
- Technora (aramid fiber) 7.5 mm static rope, resists abrasion and high temperatures
- Self-braking system allows the user to:
  - easily give slack
  - control and stop a descent
  - limit the force transmitted to the user in case of a fall
- Nomex (aramid fiber) bag for transporting and attaching the system directly to the harness
- Certification: CE EN 341 type D
- Weight: 1300 g
- Comes with 15 m (50 ft) rope (other lengths available on special order)



## Rope ascension and hauling

Rope clamps are primarily used for progression on ropes and for creating haul systems.

### Rope clamps for progression

They are easy and quick to use, for efficiency during progression, for passing intermediate anchors and for transitioning from ascending to descending. The rope is grabbed by a toothed, spring-loaded cam. When the catch is locked in the open position, the rope is freed and easy to install on the clamp. These rope clamps are adapted for use even on dirty or icy ropes.

### Rope clamps for hauling

Used for less intensive work than equipment used for progression, these rope clamps use a removable cam to block the rope. This mechanism ensures a permanent connection between the rope and the clamp, but requires that the cam be removed in order to install the rope. Depending on how often the system is to be used, cam-loaded rope clamps have a bolted axle or a locking pin, which is quicker to manipulate. Versatile and easier to install, the BASIC rope clamp has a toothed cam for quicker use.

### New products for 2009

Petzl's rope clamps for progression have evolved technically to offer many new features, such as a more comfortable handle and smoother rope glide. Another innovation is the ASCENTREE, a new double-handle designed for arborists.

These frame-loaded rope clamps are designed for ascension, but may occasionally be used for hauling (handled ASCENSION rope clamp).

## ASCENSION B17WRA - B17WLA - B17RN - B17LN

Handled rope clamp: right- and left-handed versions



The molded dual-density grips have an area for the index finger and a wide, supportive base to keep the hand from slipping. This shape ensures a comfortable and powerful grip, increasing efficiency when ascending a rope.



The thumb catch on rope clamps with cams allows installation or removal with one hand at any point on the rope. It can be easily manipulated, even with gloves.

- Designed for ascending and occasionally for hauling (back-up)
- Wide, ergonomic molded handle allows a comfortable yet powerful grip
- Lower holes for connecting a SPELEGYCA lanyard and installing a FOOTPRO foot loop with a quick link
- Upper hole through which a carabiner attaches the device to the rope (useful for back-up belays or hauling)
- Comes in left-handed and right-handed versions:
  - ASCENSION (B17 WRA): right-handed, yellow
  - ASCENSION (B17 WLA): left-handed, black
  - ASCENSION (B17 RN): right-handed, black
  - ASCENSION (B17 LN): left-handed, black
- For single ropes between 8 and 13 mm in diameter
- Certification: CE EN 567, NFPA 1983 L, CE EN 12841 type B
- Individually tested
- Weight: 195 g

**NEW**



## ASCENTREE B19 WAA

### Double-handled arborist rope clamp

- Designed for ascending double ropes in trees using the "footlock" technique or with two PANTIN foot ascenders
- Ergonomic molded handle allows a comfortable yet powerful grip
- Cam is totally integrated into the body of the rope clamp to prevent rubbing
- Large handles can be used with thick gloves
- Lower holes for connecting a SPELEGYCA lanyard and installing a FOOTPRO foot loop with a quick link
- Upper holes through which a carabiner attaches the device to the rope (useful for back-up belays or hauling)
- For use on ropes between 8 and 13 mm in diameter
- Certification: CE
- Individually tested
- Weight: 390 g



FOOTPRO

LOOPING

## FOOTPRO C49

### Adjustable webbing foot loop

- Can be clipped on the ASCENSION handle for rope ascents
- Underfoot strap is abrasion-resistant and easy to step into
- Easily adjusted with the DoubleBack buckle
- Comes with SPEEDY P14 maillon with quick gate
- Weight: 135 g

## LOOPING C25

### Four-step etrier

- Can be clipped on the ASCENSION handle for rope ascents or directly onto the anchor for progression in overhangs or roofs
- Underfoot strap is abrasion-resistant and easy to step into
- Weight: 145 g

**NEW**



PANTIN B02ALA

PANTIN B02ARA

## PANTIN B02ARA - B02ALA

### Foot ascender - right and left

- It is used to complement CROLL, ASCENSION and ASCENTREE rope clamps
- New cam facilitates passage of the rope through device, even on the first meters
- Cam is totally integrated into the body of the rope clamp to help prevent rubbing
- Makes ascent faster and less tiring
- Releases from the rope with a simple backwards movement of the foot
- Sole strap reinforced with Dyneema for abrasion resistance
- Easy adjustment with DoubleBack buckle
- Available in right- and left-foot versions:
  - PANTIN (B02ARA): right foot, yellow rope clamp
  - PANTIN (B02ARA): left foot, black rope clamp
- For single ropes between 8 and 13 mm in diameter
- Weight: 120 g

The PANTIN is not an item of PPE.



SECUR

**NEW**



CROLL

## SECUR C74

### Shoulder straps for positioning the CROLL rope clamp

- Attaches with a girth hitch to the rear ring of the harness
- Easy adjustment with DoubleBack buckle
- Weight: 120 g

## CROLL B16 AAA

### Chest rope clamp

- Used with the ASCENSION for ascending rope
- New cam facilitates passage of the rope through device, even on the first meters
- Cam is totally integrated into the body of the rope clamp to help prevent rubbing
- Thumb catch can be pinched for easy manipulation when the clamp is in position
- Angled attachment hole allows the device to lie flat against the abdomen
- Used with the SECUR shoulder strap to keep the ascender in position
- For single ropes between 8 and 13 mm in diameter
- Certification: CE EN 567, CE EN 12841 type B
- Individually tested
- Weight: 130 g

These rope clamps are meant primarily for systems built for hauling and lifting loads. They may also occasionally be used for progression on ropes (BASIC, TIBLOC ascenders).



**BASIC B18AAA**  
Frame-loaded rope clamp

- Versatile: back-up in hauling system, self-belay or rope ascent
- Lower hole for connecting a lanyard
- Upper hole through which a carabiner attaches the device to the rope (useful for back-up belays or hauling)
- Compact and lightweight
- For single ropes between 8 and 13 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 135 g



MICROCENDER

**MICROCENDER B54**  
Cam-loaded rope clamp

- Removable axle can be used to install or remove the clamp at any point on the rope
- Locking pin: reduces the risk of undoing the system accidentally
- The pin and axle cannot be lost, as they are part of the clamp
- Compact and lightweight
- For single ropes between 9 and 13 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 160 g



MICROGRAB

**MICROGRAB B53**  
Cam-loaded rope clamp for permanent installation on a rope

- Bolted axle eliminates risk of accidentally undoing the system; one of the ends of the rope must pass through it
- Compact and lightweight
- For single ropes between 9 and 13 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 175 g



RESCUCENDER

**RESCUCENDER B50**  
Cam-loaded rope clamp

- Removable axle can be used to install or remove the clamp at any point on the rope
- Locking pin: reduces the risk of undoing the system accidentally
- The pin and axle cannot be lost, as they are part of the clamp
- For single ropes between 9 and 13 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 250 g



MACROCENDER

**MACROCENDER B51**  
Cam-loaded rope clamp for large diameter ropes

- Removable axle can be used to install or remove the clamp at any point on the rope
- Locking pin: reduces the risk of undoing the system accidentally
- The pin and axle cannot be lost, as they are part of the clamp
- For single ropes between 12 and 19 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 335 g



**MACROGRAB B52**  
Cam-loaded rope clamp for permanent installation on a large diameter rope

- Bolted axle eliminates risk of accidentally undoing the system; one of the ends of the rope must pass through it
- For single ropes between 12 and 19 mm in diameter
- Certification: CE EN 567
- Individually tested
- Weight: 335 g

**Emergency rope clamp**



**TIBLOC B01**  
Emergency rope clamp

- Extremely lightweight and compact: it is an efficient piece of basic equipment for a worker on a rope or a rescue worker
- Versatile: this rope clamp is easy to use with a locking carabiner for ascending ropes or for hauling systems (back-up)
- Equipped with teeth and cleaning groove, it can be used on dirty or icy ropes.
- Attachment hole for cord
- For use on single ropes 8-11 mm with a locking carabiner having a 10 to 12 mm round or oval cross section, such as the Am'D, WILLIAM, etc)
- Certification: CE EN 567
- Individually tested
- Weight: 40 g



**Tools for access and rigging**

Pulleys are used to haul up equipment or raise a person in a rescue situation. Some pulleys have an integrated rope clamp to make certain tasks easier. Specialized pulleys also allow for movement along a rope or cable: for moving loads or evacuating a person.

- Petzl pulleys are divided into five families:
- **progress capture pulleys** have an integrated progress capture device so a hauling system can be quickly installed
  - **single pulleys** can be used in all systems
  - **Prusik pulleys** are designed for use with a self-jamming Prusik hitch to build a lightweight progress capture system
  - **transport pulleys** are designed for Tyrolean traverses with rope or cable
  - **specialized pulleys** are designated to certain specific applications (moving along mechanical lift cables, passing knots, etc.)

Two factors determine a pulley's efficiency:

- sheave size: the larger the sheave diameter, the higher the efficiency
- bushings and bearings: self-lubricating bushings are efficient, but they must be regularly maintained. Ball bearings are very efficient. Since they are sealed, they do not require any maintenance.

The design of the pulley determines how the pulley is attached to the rope:

- pulleys with fixed side plates must be used with symmetrically shaped carabiners. They are quick and easy to install.
- pulleys with swinging side plates must be opened to load the rope. They work with all carabiner types.

Progress capture pulleys efficiently replace the traditional hauling combination of pulley and rope clamp. They are multi-purpose and can be used for hauling, in pulley systems and as a progress capture device.

**PRO TRAXION P51**  
Very efficient progress capture pulley



- Pulley with integrated progress capture device can be used as a pulley or rope clamp:
  - the trigger cam with teeth and cleaning slot works even on dirty or icy ropes
  - the ergonomic spring-loaded catch is easy to manipulate, even with gloves
  - the spring-loaded catch can be locked in open position for use as a simple pulley
- Large diameter aluminum sheave mounted on sealed ball bearings for excellent efficiency
- One fixed side plate, one lockable swing sided plate; possible to install the rope easily even if the pulley is already attached to the anchor
- Auxiliary attachment point for creating different types of hauling systems
- Individually tested



The lockable moving side plate allows the rope to be installed once the pulley is in place.



The integrated rope clamp with teeth and cleaning slot allows a progress capture system to be installed quickly.



The sealed ball bearings make the pulley efficient and do not require maintenance.



**MINI TRAXION P07**

Compact and lightweight progress capture pulley

- Pulley with integrated progress capture device can be used as a pulley or rope clamp:
  - the trigger cam with teeth and cleaning slot works even on dirty or icy ropes
  - the ergonomic spring-loaded catch is easy to manipulate, even with gloves
  - the spring-loaded catch can be locked in open position for use as a simple pulley
- Lightweight and compact, ideal for work and rescue kits
- Can be used to ascend a rope
- Aluminum sheave mounted on self-lubricating bushing
- Individually tested

**OSCILLANTE P02**

Swing-sided pulley for emergency use

- Designed for occasional use when hauling or in a pulley system
- Good strength-to-weight ratio: nylon sheave and aluminum side plates
- Extremely lightweight and compact
- Individually tested

**FIXE P05**

Pulley with fixed side plate

- Designed for hauling systems and deviations
- Fixed side plates allow quick installation and connection to a rope clamp
- High efficiency due to the sheave mounted on self-lubricating bushings
- Compact, lightweight
- Individually tested

**RESCUE P50**

Pulley with moving side plates

- Designed for heavy loads or intensive use
- Large diameter sheave mounted on sealed ball bearings for excellent efficiency
- Accepts up to three carabiners to facilitate use
- Swinging side plates
- Individually tested

Prusik pulleys are designed for use with a self-jamming Prusik hitch to build a lightweight progress capture system. Their shape helps prevent the Prusik from jamming against the pulley. They therefore help create a lightweight progress capture system with an excellent weight-to-function ratio.



MINI

**MINI P59**

Lightweight Prusik pulley

- Aluminum side plates and sheaves: compact and lightweight
- Efficient sheave mounted on sealed ball bearings
- Individually tested

**GEMINI P66**

Double Prusik pulley

- Aluminum side plates and sheaves: compact and lightweight
- Efficient sheaves mounted on sealed ball bearings
- Parallel mounted sheaves and auxiliary attachment point for creating different types of hauling systems
- Individually tested



MINDER

**MINDER P60**

Highly efficient Prusik pulley

- Large diameter aluminum sheave mounted on sealed ball bearings for excellent efficiency
- Accepts up to three carabiners to facilitate use
- Individually tested

**TWIN P65**

Highly efficient double Prusik pulley

- Large diameter aluminum sheaves mounted on sealed ball bearings for excellent efficiency
- Parallel mounted sheaves and auxiliary attachment point for creating different types of hauling systems
- Accepts up to three carabiners to facilitate use
- Individually tested



FIXE



RESCUE



GEMINI



TWIN

TANDEM pulleys are designed for progression on a rope or cable. They can also be used in complex hauling systems. These pulleys are extremely simple and quick to install because of their fixed side plates, and they ensure perfect stability with their two aligned sheaves.

Specialized pulleys are designed for particular applications requiring passage of knots (KOOTENAY) or movement along a mechanical lift cable (ROLLCAB).



TANDEM



TANDEM SPEED



### TANDEM P21

Double pulley for Tyrolean traverses on rope

- Aluminum sheaves mounted on self-lubricating bushings for good efficiency
- Accepts up to three carabiners to facilitate use

### TANDEM SPEED P21 SPE

Double pulley for Tyrolean traverses on cable or rope

- Stainless steel sheaves for excellent durability
- Mounted on sealed ball bearings for excellent efficiency
- Accepts up to three carabiners to facilitate use

### KOOTENAY P67

Knot-passing pulley

- Large space between the head of the side plate and the sheave allows the passage of joining knots (lifting large loads over great heights or moving along a Tyrolean traverse with two ropes)
- Large diameter sheave ensures excellent efficiency
- Locking pins on the sheave allow use of the pulley as an anchor
- Height: 260 mm

### ROLLCAB P47

Roller for moving along cable

- Designed for progression and evacuation along mechanical lift cables
- Large opening and large diameter sheave for use on cables up to 55 mm in diameter
- When progressing, use a back-up lanyard
- Height: 470 mm

|                          | Reference | Certification              | Rope diameter                                    | Sheave                                       | Efficiency | Working load                                    | Weight             |
|--------------------------|-----------|----------------------------|--|--|------------|---|--------------------|
| Progress capture pulleys |           |                            |  |  |            |   |                    |
| <b>PRO TRAXION</b>       | P51       | CE EN 567, EN 12278        | 8 to 13 mm<br>5/16" to 1/2"                      | 38 mm<br>1.5"<br>(sealed ball bearings)      | 95 %       | pulley: 3 kN x 2 = 6 kN<br>rope clamp: 2.5 kN   | 265 g<br>9.35 oz   |
| <b>MINI TRAXION</b>      | P07       | CE EN 567, EN 12278        | 8 to 13 mm<br>5/16" to 1/2"                      | 19 mm<br>0.75"<br>(self-lubricating bushing) | 71 %       | pulley: 2.5 kN x 2 = 5 kN<br>rope clamp: 2.5 kN | 165 g<br>5.82 oz   |
| Prusik pulleys           |           |                            |  |  |            |   |                    |
| <b>MINI</b>              | P59       | CE EN 12278                | ≤ 11 mm<br>≤ 7/16"                               | 25 mm<br>1.0"<br>(sealed ball bearings)      | 91 %       | 2 kN x 2 = 4 kN                                 | 80 g<br>2.82 oz    |
| <b>GEMINI</b>            | P66       | CE EN 12278<br>NFPA 1983 L | ≤ 11 mm<br>≤ 7/16"                               | 25 mm<br>1.0"<br>(sealed ball bearings)      | 91 %       | 2 x 1.5 kN x 2 = 6 kN                           | 130 g<br>4.59 oz   |
| <b>MINDER</b>            | P60       | CE EN 12278<br>NFPA 1983 G | ≤ 13 mm<br>≤ 1/2"                                | 51 mm<br>2.0"<br>(sealed ball bearings)      | 97 %       | 4 kN x 2 = 8 kN                                 | 310 g<br>10.93 oz  |
| <b>TWIN</b>              | P65       | CE EN 12278<br>NFPA 1983 G | ≤ 13 mm<br>≤ 1/2"                                | 51 mm<br>2.0"<br>(sealed ball bearings)      | 97 %       | 2 x 3 kN x 2 = 12 kN                            | 580 g<br>20.46 oz  |
| Single pulleys           |           |                            |  |  |            |   |                    |
| <b>OSCILLANTE</b>        | P02       | CE EN 12278                | ≤ 13 mm<br>≤ 1/2"                                | 25 mm<br>1.0"                                | 71 %       | 2 kN x 2 = 4 kN                                 | 55 g<br>1.94 oz    |
| <b>FIXE</b>              | P05       | CE EN 12278                | ≤ 13 mm<br>≤ 1/2"                                | 21 mm<br>0.83"<br>(self-lubricating bushing) | 71 %       | 2.5 kN x 2 = 5 kN                               | 90 g<br>3.17 oz    |
| <b>RESCUE</b>            | P50       | CE EN 12278<br>NFPA 1983 L | ≤ 13 mm<br>≤ 1/2"                                | 38 mm<br>1.5"<br>(sealed ball bearings)      | 95 %       | 4 kN x 2 = 8 kN                                 | 186 g<br>6.53 oz   |
| Transport pulleys        |           |                            |  |  |            |   |                    |
| <b>TANDEM</b>            | P21       | CE EN 12278                | rope ≤ 13 mm (1/2")                              | 21 mm<br>0.83"<br>(self-lubricating bushing) | 71 %       | 10 kN   | 195 g<br>6.88 oz   |
| <b>TANDEM SPEED</b>      | P21 SPE   | CE EN 12278                | rope ≤ 13 mm (1/2")<br>cable ≤ 12 mm<br>(15/32") | 26 mm<br>1.0"<br>(sealed ball bearings)      | 95 %       | 10 kN   | 270 g<br>9.52 oz   |
| Specialized pulleys      |           |                            |  |  |            |   |                    |
| <b>KOOTENAY</b>          | P67       | CE EN 12278                | 8 to 19 mm<br>5/16" - 3/4"                       | 76 mm<br>3.0"<br>(sealed ball bearings)      | -          | 5 kN x 2 = 10 kN                                | 1390 g<br>3.06 lbs |
| <b>ROLLCAB</b>           | P47       | CE EN 1909                 | cable ≤ 55 mm<br>(2.17")                         | 55 mm<br>2.17"                               | -          | 5 kN  | 1470 g<br>3.24 lbs |



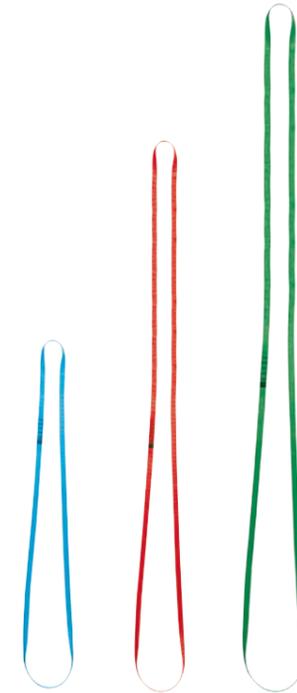
### Anchors are the link between the safety system and the structure or the terrain.

The type of anchor must be determined by the type of terrain.

- rock and concrete: permanent anchors (bolt hangers, glue-in bolts)
- metal structures, trees, flexible anchors (straps)

Anchor straps are designed to facilitate the installation of temporary or portable anchoring devices. If the anchoring device is to be permanently installed or heavily used, use a bolt hanger or glue-in anchor.

To complement the standard anchor gear, Petzl offers a lifeline device specific to horizontal progression and a set of accessories designed for ergonomics, function or permanence.



#### ANNEAU C40 Sewn webbing sling

- Available in four color-coded lengths:
  - ANNEAU (C40 60): 60 cm (weight: 60 g)
  - ANNEAU (C40 80): 80 cm (weight: 80 g)
  - ANNEAU (C40 120): 120 cm (weight: 100 g)
  - ANNEAU (C40 150): 150 cm (weight: 135 g)
- Breaking strength: 22 kN
- Certification: CE EN 566, CE EN 795 B



#### CONNEXION FIXE C42 Anchor strap

- Forged steel D-rings on the ends
- Available in three lengths:
  - CONNEXION FIXE (C42,100): 100 cm (weight: 335 g)
  - CONNEXION FIXE (C42,150): 150 cm (weight: 390 g)
  - CONNEXION FIXE (C42 200): 200 cm (weight: 440 g)
- Breaking strength: 35 kN
- Certification: CE EN 795 B, CE EN 354

#### CONNEXION VARIO C42 V Adjustable anchor strap

- Adjustment buckle allows strap to be adjusted between 80 and 130 cm
- Forged steel D-rings on the ends
- Length: 80 to 130 cm
- Weight: 475 g
- Breaking strength: 22 kN
- Certification: CE EN 795 B, CE EN 354

#### CONNEXION FAST C42 F Rapid adjust anchor strap

- Rapid adjustment buckle on end allows strap to be adjusted between 20 and 150 cm
- Forged steel D-rings on the ends
- Length: 20 to 150 cm
- Weight: 390 g
- Breaking strength: 18 kN
- Certification: CE EN 795 B



#### TREESBEE C04 False crotch

- Recoverable anchor strap (arborist technique)
- Length: 110 cm
- Weight: 325 g
- Breaking strength: 15 kN
- Certification: CE EN 795 B



CŒUR



CŒUR GOUJON

**CŒUR** P34050-P38150

**Stainless steel bolt hanger**

- Available in two versions:
  - CŒUR (P34050): hanger for 10 mm bolts
  - CŒUR (P38150): hanger for 12 mm bolts
- Weight: 40 g
- Certification: EN 795 A1

**CŒUR GOUJON** P32-P33

**Complete stainless steel anchor**

- Comprised of a CŒUR hanger, expansion bolt and nut
- Hanger can be removed
- Available in two versions:
  - CŒUR GOUJON (P32): CŒUR hanger mounted on a 10 mm bolt
  - CŒUR GOUJON (P33): CŒUR hanger mounted on a 12 mm bolt



**LONG LIFE** P38

**Stainless steel expansion anchor**

- Bolt and hanger cannot be taken apart
- No wrench needed (the bolt is expanded when placed)



COLLINOX



BAT'INOX

**COLLINOX** P55

**Forged stainless steel glue-in bolt**

- 10 x 70 mm

**AMPOULE COLLINOX** P56

**Resin glue for COLLINOX**

**BAT'INOX** P57

**Forged stainless steel glue-in bolt**

- 14 x 70 mm

**AMPOULE BAT'INOX** P41

**Resin glue for BAT'INOX**

|                      | CŒUR GOUJON       |                   | LONG LIFE         | COLLINOX          | BAT'INOX          |
|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Reference</b>     | P32               | P33               | P38               | P55               | P57               |
| <b>Weight</b>        | 85 g / 3.0 oz     | 120 g / 4.23 oz   | 100 g / 3.53 oz   | 95 g / 3.35 oz    | 250 g / 8.82 oz   |
| <b>Certification</b> | EN 795 A1, EN 959 |

| Type            |   |    |    |    |    |
|-----------------|---|----|----|----|----|
| <b>Rock</b>     | Granite, gneiss > 80 MPa                        | •• | •• | •• | •• |
|                 | Hard limestone > 80 MPa                         | •• | •• | •• | •• |
|                 | Limestone and medium sandstone 80 MPa to 45 MPa | •  | •• | •  | •• |
|                 | Soft rock (soft sandstone, limestone) < 45 MPa  | No | No | No | •  |
| <b>Concrete</b> | Very high quality > 50 MPa                      | •  | •• | •• | •• |
|                 | Medium quality 25 < x < 50 MPa                  | No | •  | •• | •• |

| Installation                 |           |           |           |                  |                  |
|------------------------------|-----------|-----------|-----------|------------------|------------------|
| <b>Length</b>                | 55 mm     | 67 mm     | 47 mm     | 70 mm            | 100 mm           |
| <b>Hole depth</b>            | ≥ 55 mm   | ≥ 67 mm   | ≥ 47 mm   | 70-75 mm         | 100-105 mm       |
| <b>Diameter</b>              | 10 mm     | 12 mm     | 12 mm     | 10 mm            | 14 mm            |
| <b>Hole diameter</b>         | 10 mm     | 12 mm     | 12 mm     | 12 mm            | 16 mm            |
| <b>Type of installation</b>  | Expansion | Expansion | Expansion | P56* glue        | P41* glue        |
| <b>Suggested drying time</b> | -         | -         | -         | 40 min -> 10 h** | 40 min -> 10 h** |

| Performances                                |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|
| <b>Shear strength in 50 MPa concrete</b>    | 25 kN | 25 kN | 25 kN | 25 kN | 50 kN |
| <b>Pull-out strength in 50 MPa concrete</b> | 18 kN | 18 kN | 18 kN | 25 kN | 50 kN |

\* Or other glues approved by Petzl.

\*\* Times are given for P41 and P56 glue (times may vary depending on the glue used and the external environment).



SWIVEL S SWIVEL L

**SWIVEL P58**  
Swivel

- Prevents the rope from twisting when the load is turning
- Excellent performance and reliability due to maintenance-free sealed ball-bearings
- SWIVEL S (P58 S):
  - designed for one-person loads
  - compact
  - breaking strength: 23 kN
  - weight: 95 g
  - certification: CE
- SWIVEL L (P58 L):
  - designed for two-person loads, up to 3 connectors can be attached to the ends
  - breaking strength: 36 kN
  - weight: 150 g
  - certification: CE, NFPA 1983 G



PAW S

PAW M

PAW L

**PAW P63**  
Rigging plate

- For easy organization of the work area and for creating multiple anchor systems
- 19 mm holes allow the locking sleeves of most carabiners to pass through
- Made of aluminum: excellent strength-to-weight ratio
- Breaking strength: 36 kN
- Available in three sizes:
  - PAW S (P63 S): small (weight: 55 g)
  - PAW M (P63 M): medium (weight: 210 g)
  - PAW L (P63 L): large (weight: 350 g)
- Also available in black
- Certification: CE, NFPA 1983 G



**GRILLON L52**  
Temporary horizontal lifeline

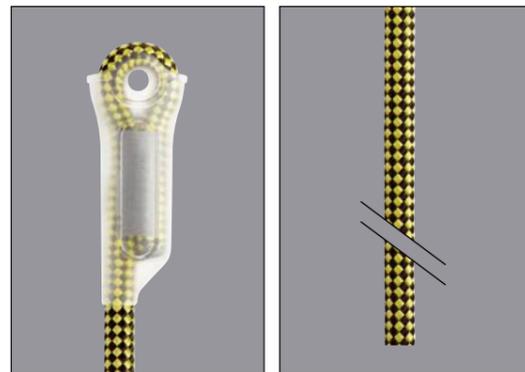
- The self-locking device allows easy adjustment of length and tension between two anchor points
- Semi-static rope, resistant to aging and abrasion
- Sewn end with plastic sheath: holds the connector in position and protects from abrasion
- Available in three lengths:
  - GRILLON (L52 5): 5 m (weight: 680 g)
  - GRILLON (L52 010): 10 m (weight: 1045 g)
  - GRILLON (L52 020): 20 m (weight: 1890 g)
- Certification: CE EN 358, EN 795 C



© A. Chidderic / Kalice



The line of Petzl ropes is designed for professionals in the vertical world. They offer efficient solutions for the inherent challenges of these activities: difficult access, technical rescue, industry... To provide solutions to clients around the world, Petzl offers ropes that correspond to both European and North American standards.



 **Custom length ropes**  
(available only for European standard ropes)

To more precisely respond to the specific needs of some professionals, Petzl offers a personalized service. It is therefore possible to order a rope at a specified length, with high-quality manufactured terminations having a protective sheath on one or both ends. This means that these products are ready for use without adding any knots. The sewn terminations have a protective sheath that keeps the connector in position and facilitates manipulations.

The manufactured terminations are also stronger than a figure-eight knot and meet certain standards, specifically the EN 353-2 standard (mobile fall arrest system including a flexible anchor line, ASAP + rope).

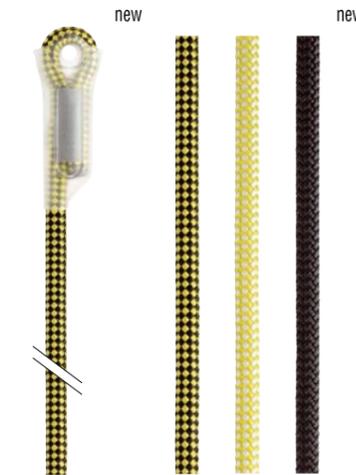
• Ropes - european standards

Ropes for difficult access



PARALLEL 10,5 mm

Ropes for industry



AXIS 11 mm

AXIS 11 mm

Ropes for fire rescue team



GRIP 12,5 mm

LINK 7 mm

• Ropes - american standards



VECTOR 11



VECTOR 12,5



8 MM RESCUE CORD

• Rope protectors



PROTEC

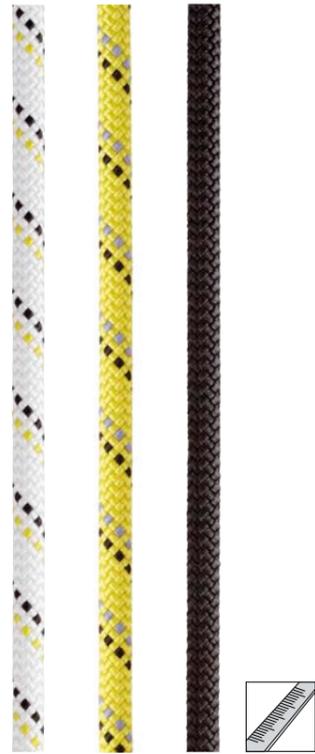


SET CATERPILLAR



ROLL MODULE

**NEW**



## PARALLEL 10,5 mm R77

Rope for difficult access and intensive use

- "Thin" diameter minimizes weight and bulk, requires expertise in controlling a descent
- Flexible, for excellent handling
- Available in three colors for easy differentiation of working rope and lifeline
- Standard lengths:
  - 50 m: white (R77W 050)
  - 50 m: black (R77N 050)
  - 100 m: white (R77W 100)
  - 100 m: yellow (R77Y 100)
  - 100 m: black (R77N 100)
  - 200 m: white (R77W 200)
  - 200 m: yellow (R77Y 200)
  - 200 m: black (R77N 200)
  - 400 m: available on special order
- **Personalization by request:**
  - choice of lengths
  - choice of sewn terminations on the ends
- CE, EN 1891 Type A
- Strength tied with a figure eight knot: 19.5 kN
- Strength with sewn termination: 24 kN
- Shock load (factor 0.3): 5.1 kN
- Weight: 65 g/m

**NEW**



## AXIS 11 mm R74YT

Versatile rope with sewn termination is very wear-resistant

- "Standard" diameter designed for users who are not necessarily expert in rope techniques
- Available in 10 to 60 m lengths with sewn termination, for use with an ASAP mobile fall arrester, or in a rescue kit with an I'D S descender
- Sewn termination with protective sheath keeps the connector in the right position and facilitates manipulation
- Standard lengths (sewn termination on the end):
  - 10 m: yellow/black (R74YT 010)
  - 20 m: yellow/black (R74YT 020)
  - 30 m: yellow/black (R74YT 030)
  - 40 m: yellow/black (R74YT 040)
  - 50 m: yellow/black (R74YT 050)
  - 60 m: yellow/black (R74YT 060)
- CE, EN 1891 Type A
- Strength with sewn termination: 24 kN
- Shock load (factor 0.3): 5.1 kN
- Weight: 73 g/m

**NEW**



## AXIS 11 mm R74

Versatile rope is very wear-resistant

- "Standard" diameter designed for users who are not necessarily expert in rope techniques
- Available in three colors for easier identification of different kits
- Standard lengths:
  - 50 m: yellow/black (R74Y 050)
  - 50 m: black (R74N 050)
  - 100 m: yellow/black (R74Y 100)
  - 100 m: yellow/white (R74W 100)
  - 100 m: black (R74N 100)
  - 200 m: yellow/black (R74Y 200)
  - 200 m: black (R74N 200)
- **Personalization by request:**
  - choice of lengths
  - choice of sewn terminations on the ends
- E CE, N 1891 Type A
- Strength tied with a figure eight knot: 21 kN
- Strength with sewn termination: 24 kN
- Shock load (factor 0.3): 5.1 kN
- Weight: 73 g/m

**NEW**



## GRIP 12,5 mm R78

Very strong rope for rescue, has excellent grip

- Color: white
- Standard lengths:
  - 30 m (R78W 030)
  - 60 m (R78W 060)
- **Personalization by request:**
  - choice of lengths
  - choice of sewn terminations on the ends
- CE, EN 1891 Type A
- Strength tied with a figure eight knot: 27 kN
- Shock load (factor 0.3): 5.2 kN
- Weight: 101 g/m

**NEW**



## LINK 7 mm R75

Control cordelette for guiding a victim during rescue or for hauling gear

- Color: white
- Standard lengths:
  - 30 m (R75W 030)
  - 60 m (R75W 060)
  - 120 m (R75W 120)
- **Personalization by request:**
  - choice of lengths
  - choice of sewn terminations on the ends
- CE, EN 564
- Weight: 32.2 g/m



**VECTOR 11 mm** R11

Versatile rope designed for difficult to access environments and for fall protection

- Fusion Process™ allows the rope to keep its shape and makes it excellent to handle
- Available in four colors for easier identification of different kits
- Standard lengths:
  - 46 m / 150 ft: white (R1146 W)
  - 46 m / 150 ft: red (R1146 R)
  - 46 m / 150 ft: blue (R1146 B)
  - 46 m / 150 ft: black (R1146 N)
- 61 m / 200 ft: white (R1161 W)
- 61 m / 200 ft: red (R1161 R)
- 61 m / 200 ft: blue (R1161 B)
- 61 m / 200 ft: black (R1161 N)
- 183 m / 600 ft: white (R11183 W)
- 183 m / 600 ft: red (R11183 R)
- 183 m / 600 ft: blue (R11183 B)
- 183 m / 600 ft: black (R11183 N)
- 200 m / 656 ft: white (R11200 W)
- 200 m / 656 ft: black (R11200 N)
- 366 m / 1200 ft: white (R11366 W)
- 366 m / 1200 ft: black (R11366 N)
- NFPA 1983 "L"
- Weight: 6 lb/100'



**VECTOR 12.5 mm** R12

Rope designed specially for fire rescue teams

- Fusion Process™ allows the rope to keep its shape and makes it excellent to handle
- Available in six colors for easier identification of different kits
- Standard lengths:
  - 46 m / 150 ft: white (R1246 W)
  - 46 m / 150 ft: red (R1246 R)
  - 46 m / 150 ft: blue (R1246 B)
  - 46 m / 150 ft: yellow (R1246 Y)
  - 46 m / 150 ft: orange (R1246 O)
- 61 m / 200 ft: white (R1261 W)
- 61 m / 200 ft: red (R1261 R)
- 61 m / 200 ft: blue (R1261 B)
- 61 m / 200 ft: yellow (R1261 Y)
- 61 m / 200 ft: orange (R1261 O)
- 183 m / 600 ft: white (R12183 W)
- 183 m / 600 ft: red (R12183 R)
- 183 m / 600 ft: blue (R12183 B)
- 183 m / 600 ft: yellow (R12183 Y)
- 183 m / 600 ft: orange (R12183 O)
- 183 m / 600 ft: black (R12183 N)
- 366 m / 1200 ft: white (R12366 W)
- 366 m / 1200 ft: black (R12366 N)
- NFPA 1983 "G"
- Weight: 7.7 lb/100'



**8 mm RESCUE CORD** R846/R892

Rope designed primarily for tying Prusik knots on VECTOR 11 mm and VECTOR 12.5 mm ropes

- Excellent performance when belaying with the Tandem Prusik technique
- Available in four colors for easier identification of different kits
- Standard lengths:
  - 46 m / 150 ft: red (R846 R)
  - 46 m / 150 ft: orange (R846 O)
  - 46 m / 150 ft: green (R846 G)
  - 46 m / 150 ft: black (R846 N)
- 92 m / 300 ft: red (R892 R)
- 92 m / 300 ft: orange (R892 O)
- 92 m / 300 ft: green (R892 G)
- 92 m / 300 ft: black (R892 N)
- NFPA 1983 "E"
- Weight: 3.3 lb/100'



**PROTEC** C45

Flexible protection

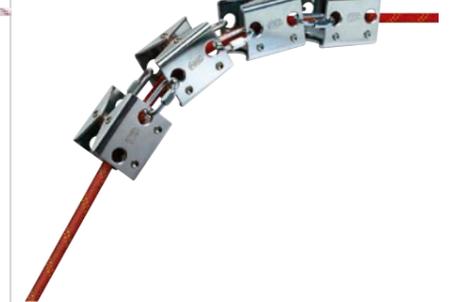
- To help protect a fixed rope from abrasion
- Lightweight, durable PVC sheath
- Velcro® closure and clip for easy and quick installation
- Weight: 95 g



**SET CATERPILLAR** P68

Articulated protector

- To help protect a moving rope from abrasion
- Modules are connected with quick links: the number of modules can be varied according to the terrain
- Each module can be positioned independently to adapt to the terrain
- Sold as a kit: 4 modules + 6 quick links
- Weight: 1055 g



**ROLL MODULE** P49

Articulated protector with rollers

- To guide a moving rope and protect it from abrasion
- Vertical and horizontal rollers guide the moving rope with a minimum of rubbing
- Each module can be positioned independently to adapt to the terrain
- Modules are connected with quick links: the number of modules can be varied according to the terrain
- Sold as a kit: 4 modules + 8 quick links + carry bag
- Weight: 1330 g



### A know-how gained from caving

As a practical accessory, packs allow one to organize and carry equipment in a vertical environment. These packs build on Petzl's experience in caving: the PVC fabric and the welded seams are abrasion resistant, waterproof and easy to clean. They come equipped with adjustable shoulder straps, so they can be carried on the back.



TRANSPORT



CLASSIQUE



PORTO



PORTAGE



PERSONNEL



BOLT BAG

#### TRANSPORT C02

##### Large capacity backpack

- Shape makes it easy to pack and access contents
- Waist belt, shoulder straps and back panel are padded for added comfort
- Lid flap, elastic lip and quick closing buckle securely contain the contents
- Zippered identification pocket under the lid flap
- Capacity: 45 l
- Height: 67 cm
- Weight: 1050 g

#### PORTAGE S32

##### Large capacity pack

- Shape makes it easy to pack and access contents
- Inside flap protects contents
- Side handle and top loop for carrying and hauling
- Capacity: 35 l
- Height: 60 cm
- Weight: 750 g

#### CLASSIQUE C03

##### Medium capacity multi-purpose pack

- Zippered identification pocket under the lid flap
- Side handle and top loop for carrying and hauling
- Capacity: 22 l
- Height: 60 cm
- Weight: 600 g

#### PERSONNEL C14

##### Small capacity bag

- Small volume, but lightweight, easily accessed and compact
- Side handle and top loop for carrying and hauling
- Capacity: 15 l
- Height: 45 cm
- Weight: 470 g

#### PORTO C33

##### Webbing gear organizer

- Attaches easily to the pack's internal loop for organizing gear
- Weight: 18 g

#### BOLT BAG C11

##### Gear pouch

- To organize a hammer, bolting gear and other equipment
- Large pocket closes with a flap and quick buckle
- Small internal pocket, external holster for a hammer and compartment for bits
- Can be worn on a belt
- Weight: 170 g



**CORDEX** K52  
Lightweight belay/rappel gloves

- Natural, high-quality leather
- Durable double layer of leather at high wear areas (fingertips, palm, between thumb and index finger)
- Back made of breathable stretch nylon
- Low profile neoprene cuffs with Velcro® closure
- Carabiner hole to attach gloves to harness
- Available in different sizes:
- black color:
  - . S (K52 SN)
  - . M (K52 MN)
  - . L (K52 LN)
  - . XL (K52 XLN)
- beige color:
  - . XS (K52 XST)
  - . S (K52 ST)
  - . M (K52 MT)
  - . L (K52 LT)
  - . XL (K52 XLT)
- CE



**CORDEX PLUS** K53  
Lightweight belay/rappel gloves

- Natural, high-quality leather with reinforced palm
- Durable double layer of leather at high wear areas (fingertips, palm, between thumb and index finger)
- The back is made of leather with abrasion-resistant stretch nylon at key flex areas
- Low profile neoprene cuffs with Velcro® closure
- Carabiner hole to attach gloves to harness
- Available in different sizes:
- black color:
  - . S (K53 SN)
  - . M (K53 MN)
  - . L (K53 LN)
  - . XL (K53 XLN)
- beige color:
  - . XS (K53 XST)
  - . S (K53 ST)
  - . M (K53 MT)
  - . L (K53 LT)
  - . XL (K53 XLT)
- CE



CRAB 6



SKIPIY PLUS



SPATHA

- CRAB 6** 64160  
6 point crampons
- For moving on talus and snow- or ice-covered slopes
  - Double lateral adjustment adapts to all shoe sizes
  - Secure strap fastening system
  - Weight: 2 x 200 g

- SPIKY PLUS 1** 79510  
**SPIKY PLUS 2** 79520  
**SPIKY PLUS 3** 79530

- Anti-slip soles**
- For walking on snowy, icy or slippery surfaces
  - Rubber soles with six carbon steel points
  - Compatible with all types of footwear: street shoes, sport shoes, boots
  - Available in three sizes:
    - SPIKY PLUS 1 (79510): fits boots sizes to 41
    - SPIKY PLUS 2 (79520): fits boots sizes 42 to 45
    - SPIKY PLUS 3 (79530): fits boot size 46 and over

- SPATHA** S92  
Multi-purpose knife
- Easily clips onto the harness with a CARITool or with a carabiner
  - Available in two sizes:
    - SPATHA S (S92 S): 98 mm (closed)
    - SPATHA L (S92 L): 120 mm (closed)



EN

European Standards against falls from a height

|   |          |
|---|----------|
| Energy absorbers  | EN 355   |
| Slings  | EN 566   |
| Guided type fall arresters on a flexible anchorage line | EN 353-2 |
| Rope clamps   | EN 567   |
| Industrial safety helmets                               | EN 397   |
| Climbers safety helmets                                 | EN12492  |
| Connectors  | EN 362   |
| Dynamic mountaineering ropes                            | EN 892   |
| Low stretch kernmantle ropes (semi-static ropes)        | EN 1891  |
| Descender devices                                       | EN 341   |
| Anchor devices TYPE A                                   | EN 795   |
| Anchor devices TYPE B                                   | EN 795   |
| Fall arrest harnesses                                   | EN 361   |
| Sit harnesses   | EN 813   |
| Lanyards  | EN 354   |
| Pulleys   | EN 12278 |
| Fall arrest systems                                     | EN 363   |
| Work positioning belt                                   | EN 358   |
| Rope access systems                                     | EN 12841 |
| Cordelette  | EN 564   |

ANSI

American National Standards Institute

|  |             |
|--|-------------|
| American National Standard for industrial head protection                        | ANSI Z89.1  |
| Class C  | Class C     |
| Electric   | Class E     |
| Safety requirements for personal fall arrest systems, sub systems and components | ANSI Z359.1 |

NFPA

National Fire Protection Association

|   |           |
|---|-----------|
| Fire Service Life Safety Rope and system Components | NFPA 1983 |
|---|-----------|

CSA

Canadian Standards Associations

|                   |         |
|-------------------|---------|
| Full body harness | Z259.10 |
|-------------------|---------|

## Petzl headlamps: 28 years of adventure

In 1981, the ZOOM headlamp was introduced and revolutionized vertical sports. The performance and reliability of the ZOOM initially met the needs of outdoor enthusiasts and quickly found a place in the professional world. Ever since, the headlamp has been constantly evolving. The explosive improvements in lighting performance levels that came with the new generation of batteries and high output LEDs has allowed Petzl to invent and design more powerful and lightweight headlamps that are adapted to the specific needs of end users. Some milestones:

- in the 90s, introduction of the DUO line: all-terrain, durable and powerful
- in 2000, research for more compact and lightweight lighting solutions resulted in the TIKKA and ZIPKA, the first LED-powered headlamps
- the use of high output LEDs allowed the user to see even farther (MYO series)
- recently launched, the e+LITE became the reference for dependable emergency lighting: it can be stored for 10 years
- in 2009, our newest product, the ULTRA, will represent a major advance in lighting power

Due to their ATEX and Hazloc certifications, many of our models are designed for use in explosive areas.

Petzl designs lights for professionals so that they can see comfortably both near and far while working hands-free.

### Techniques

|                                      |          |
|--------------------------------------|----------|
| Lighting performance                 | page 110 |
| LED lighting                         | 112      |
| Protection...                        | 113      |
| Explosive environments and headlamps | 114      |

### Headlamps

|                               |     |
|-------------------------------|-----|
| Compact headlamps             | 118 |
| Hybrid headlamps              | 122 |
| Ultra-powerful headlamps      | 128 |
| Emergency and signal lighting | 130 |
| Technical data for headlamps  | 132 |
| Index                         | 134 |

Kärcher © D. Franck



## Measuring lighting performance

Petzl uses a rigorous and clearly defined protocol to evaluate the performance of our headlamps. The measurements are taken in the lab and are reliable, precise performance indicators. Results obtained in this way allow us to compare the lighting performance of many different headlamps. Consequently, it is much simpler for users to choose a product for their specific needs based on their own criteria. The tests are carried out with five headlamps and two sets of standard or rechargeable batteries identical to the ones sold with the headlamp (for headlamps sold without batteries, quality alkaline batteries are used). The published results represent the average of 10 measurements.

### • Minimal lighting

Before measuring lighting distance and burn time, it's useful to have a definition of minimum lighting, below which a headlamp is no longer effective, i.e., when the light no longer provides satisfactory visibility. Petzl has evaluated this illumination level to be equivalent to the light emitted from a full moon on a clear night, or 0.25 lux. This minimum lighting level is used as a reference for measuring lighting distance and duration.



### • Influence of temperature on measurements

The ambient temperature influences the performance of both standard and rechargeable batteries. In order to maintain a stable testing environment and comparable results, all measurements are performed at 20 °C.

### • Lumens

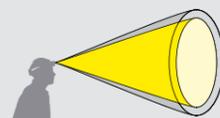
A lumen (lm) is a unit of measurement for the total quantity of light emitted (luminous flux). The luminous flux is the total quantity of light emitted in every direction from a source of light. Luminous flux is measured in the lab, with the help of an integrated sphere device. This measurement is complementary to the lighting distance. Two light sources positioned at the same distance can in fact shine with different intensities. As with lighting distance, luminous flux diminishes as the energy source drains. Petzl indicates the total luminous flux, thus providing the user with the maximum possible output of each light.

## Beam types

The shape of a headlamp's light beam depends on the light source and on the lenses. There are two types of beams:  
- wide-angle beams  
- narrow, focused beams  
Each beam also has a residual component, which is much wider than the main beam. This peripheral light makes the headlamp more versatile and comfortable to use.

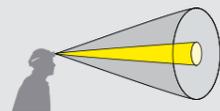
### • Wide beam

The wide-angle beam emits close-range light for slower movement activities.



### • Focused beam

This beam concentrates the light to shine long distances and can be precisely aimed.



### • Adapting the light beam

#### Headlamps with Wide Angle lenses

The XP headlamps use new generation LEDs that produce a light that is both powerful and economical. Exclusive to Petzl, the Wide Angle lens flips or slides over the LED to widen the beam. With one quick movement, the headlamp can switch from a long-range, focused beam to a Wide Angle proximity beam.



#### Hybrid headlamps

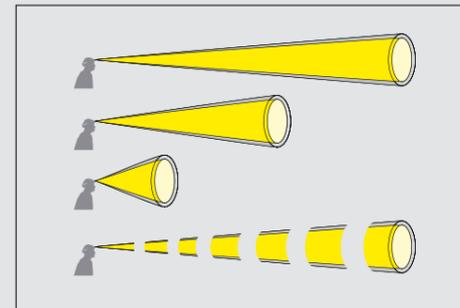
Headlamps that have two types of lighting allow the user to switch between light sources:  
- halogen or xenon halogen for long-range lighting,  
- LEDs for proximity lighting with long burn times  
The Petzl advantage: the two light sources are separated to preserve the shape of the halogen reflector and the sharpness of the long-range beam.



## Lighting levels

### • Adapt the lighting level

Some of our LED headlamps allow you to choose between three different brightness levels: maximum, optimum and economic. By choosing the power of the beam, the user can adapt the light to the activity at hand. In addition to these three lighting levels, there is a strobe mode that is useful for signaling (rescue, beacon, etc.) with an exceptional burn time.



### • Boost mode for even more power

With a high-output LED, the XP headlamps also have a Boost mode: by simply pressing on the button, the LED shines 50 % more light than the maximum level for 20 seconds. Boost may be activated anytime: when the headlamp is off or in strobe mode.

### • Constant lighting level

The light produced by most headlamps decreases as the batteries weaken. On some of its headlamps, Petzl chose to maintain a constant lighting level regulated with the use of an electronic regulation system. This allows the light to stay at the same brightness until the batteries are almost discharged. The light output then decreases automatically to a minimum amount of light. The burn time of the headlamp is therefore prolonged with a low output light, giving the user time to change the batteries.

## Duration/burn time

Light duration defined as the length of time that a headlamp illuminates at 0.25 lux or more from a distance of 2 meters.

When the light produced is lower than this level, we consider that the headlamp is no longer usable, whether for walking, reading, or any other activity.

To measure this, the lamp is equipped with a set of new or fully charged batteries. The lamp is switched on, and we measure the time it takes for the light to diminish to below 0.25 lux.

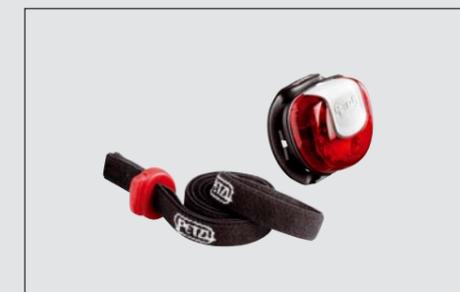
### • Special case: regulated LED headlamps

The light duration measurement equals the regulated lighting duration + the length of time that the light remains above 0.25 lux at 2 m (survival lighting). This figure is consistently associated with the corresponding lighting distance.



### • Special case: signal lighting

According to the reference scale for being seen with a signal light, Petzl considers that visibility less than 100 m is insufficient for being seen and ensuring safety. The SIGNAL is no longer considered visible after 40 hours of use in constant lighting mode or after 120 hours of use in flashing mode.

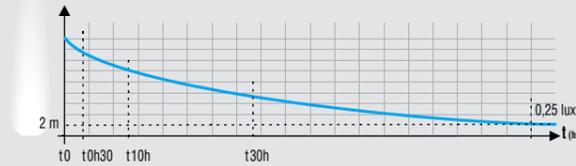


## Lighting distance

This is the distance at which a headlamp illuminates greater than 0.25 lux. For headlamps equipped with standard batteries, lighting distance decreases progressively as the energy source is drained.

To accurately represent this decrease, lighting distance is measured beginning with new batteries (maximum capacity for the headlamp):

- after 30 minutes of use (normal use)
- after 10 hours of use (continuous use through one night)
- after 30 hours of use

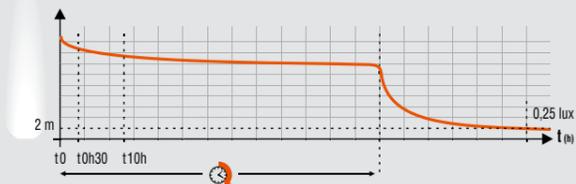


Petzl has also created a reference scale for being seen. For a signaling light, the limit for being seen has been established at 0.00001 lux at 100 m away.

## • Regulated headlamps

Some headlamps are equipped with an electronic regulating mechanism that maintains a relatively stable lighting distance during most of the life cycle with both regular and rechargeable batteries. Once the available electric energy is no longer sufficient, the regulation automatically stops. The light level automatically decreases to a minimum survival level of light. Leaving the user with enough time to change the batteries.

For this type of headlamp, Petzl states the lighting distance obtained during the regulated lighting phase.



## LED lighting



LEDs (Light Emitting Diodes), or electroluminescent diodes, are the optoelectronic components designed to emit light.

- Some characteristics of LEDs:
- as opposed to a standard incandescent bulb, they don't use a filament
  - they consume less electricity and have a longer life than incandescent bulbs
  - LED technology allows for a multitude of shapes and colors
- Petzl headlamps equipped with LEDs first appeared in 2000 (TIKKA headlamp). Petzl headlamps use two types of LEDs:
- cylindrical 5 mm and 3 mm diameter LEDs (ex: TIKKA, ZIPKA headlamps)
  - high-output LEDs (ex: MYO XP, TIKKA XP headlamps)

## Characteristics:

### • Energy consumption

As opposed to standard incandescent bulbs, LEDs used in Petzl headlamps consume less electricity, from 0.2 to 3 W. This increases the burn time of our headlamps.

Using the different lighting levels can help optimize electrical energy consumption. By choosing the strength of the beam, the quantity of light can be adapted to the activity and to lighting duration needs.

### • Color

LEDs emit a smooth, white light. A light blue halo can be seen. For certain activities, a colored light can be useful for discreet lighting or for helping to maintain night vision. This can be achieved with filters or a color specific LED.

### • Lens characteristics

LEDs don't all have the same optic characteristics:

- Cylindrical, 5 mm diameter LEDs have an integrated lens. They don't require accessories.
- High output LEDs require an additional lens to concentrate the light.

LEDs emit a much more uniform light than incandescent bulbs. This is partly due to the absence of a filament in LEDs.

## • Electric power

Because of the way they function, LEDs are polarized (cathode and anode). Therefore, it is important to insert the batteries in the right direction. If they are inverted, the LEDs will not work.

Lighting performance will vary considerably according to the source of energy used.

## • Light output

When LEDs are powered at the levels defined by the manufacturer, they generally have greater output than incandescent headlamps.

## • Lifetime

The lifetime of an LED has been defined as the time up to which its flux remains above 50 % of its original. For quality LEDs, this lifetime is close to 100000 hours at standard voltage and current values. Under these conditions, the light output then becomes very weak (for signal lighting, etc.).

With Petzl headlamps, the electric current is controlled, to provide a stronger lighting level. This allows an average lifetime of approximately 5000 continuous hours for LEDs.

## • Durability

With their molded, single capsule and their lack of a filament, 5 mm diameter LEDs are resistant to impacts and vibrations.

Because of their design, high-output LEDs require additional protection from direct impacts. The lens can provide this function.

## Ingress protection...

The IP rating indicates the level of protection a product has against the entry of solids and liquids. It is expressed as IP XX. The first number indicates protection against solid objects. The second number indicates protection against liquids.

### - Protection against solid objects

- X = Not measured
- 0 = Not protected
- 1 = Protected against solids  $\geq 50$  mm in diameter
- 2 = Protected against solids  $\geq 12.5$  mm in diameter
- 3 = Protected against solids  $\geq 2.5$  mm in diameter
- 4 = Protected against solids  $\geq 1$  mm in diameter
- 5 = Protected against dust (limited ingress, no harmful deposits)
- 6 = Completely protected against dust

### - Protection against liquids

- X = Not measured
- 0 = Not protected
- 1 = Protected against vertically falling water drops
- 2 = Protected against water drops (15° from vertical)
- 3 = Protected against rain (60° from vertical)
- 4 = Protected against sprayed water
- 5 = Protected against jets of water
- 6 = Protected against forceful hose-projected water
- 7 = temporary immersion (-1 meter for 30 minutes)
- 8 = prolonged immersion (deeper than 1 meter for period defined by manufacturer)

Petzl headlamps fall into two categories:

## • Water resistant = IPX4 or IPX6

These Petzl headlamps withstand the worst weather conditions: high humidity, snow, torrential rain, sudden immersion, etc. They work even when water enters the lamp body. Thanks to stainless steel contacts and waterproof parts that protect sensitive parts. If water enters the headlamp, it should be dried and the batteries changed. The contacts should be inspected. This applies to all headlamps, except for the e+LITE, the SIGNAL and the DUO line.

## • Waterproof -1 m and -5 m = IPX8

Some Petzl headlamps are waterproof. They can withstand an immersion of more than 30 minutes at -1 m to -5 m. If water does enter the headlamp, while changing the batteries in a damp environment, it should be dried. This applies to the e+LITE, the SIGNAL and the DUO line. Please note: to maintain the waterproof properties of a headlamp, certain care and storage guidelines must be followed.

Note: If sea-water gets inside, rinse the lamp thoroughly in fresh water and dry it.

## Electromagnetic compatibility

All Petzl headlamps conform to the requirements of the 89/366/CEE directive concerning electromagnetic compatibility: they will not interfere with any other CE-marked devices.



© A. Childeric / Kalitec

Certain environments can present a risk of explosion when particular conditions come together. This is the case, for example, when certain chemical substances are used (refineries, metallurgical and pharmaceutical industries, painting workshops, boiler rooms etc.), and also when natural products are used (grain silos, fruit processing plants, carpentry shops, etc.).  
To move around and work in this type of environment, personnel must be equipped with specific equipment which conforms to precise standards (for example, electrical equipment).

## Explosive environments

An environment can become explosive when the concentration of gases or suspended dust particles reaches critical proportions. This type of environment may already exist during operations, or an incident may occur in an enclosed or poorly ventilated area where flammable liquids, particles, etc., are suspended in the air.  
This can occur, for example, when cleaning a dust filter or when loading or unloading a grain silo. There are certain moments when the concentration of dust becomes too great (for example, when filling the silo). In this situation, the environment becomes extremely dangerous: a rise in temperature or even a small spark produced mechanically or electrically, can lead to an explosion.  
To work in this type of environment, the equipment must be specifically designed so as to avoid its being a potential source of combustion.

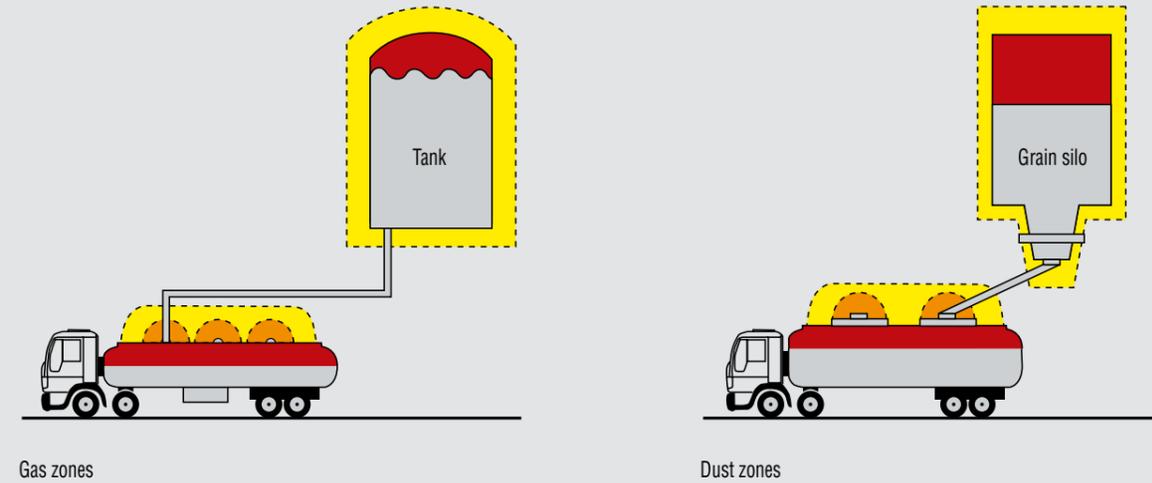
## Regulation

Regulations define environments at risk and the technical means to employ for avoiding explosions. Depending on the country, ATEX standards apply for Europe and HAZLOC standards apply for North America.  
The different equipment used in explosive environments must be ATEX or HAZLOC certified, depending on the country. These two regulations are aimed at manufacturers and also at users of equipment for hazardous locations. They define precisely how the equipment must be designed and manufactured, and also how it must be used.



## Different environments

The level of explosion risk is defined individually for each environment. It depends on the type of atmosphere (gas, dust), the location of the hazard, and also on the level of the risk (long-term, frequent or sporadic). Each environment has a specific safety requirement (see table).



|   | ATEX                         |                               | HAZLOC                            |                 |             |
|---|------------------------------|-------------------------------|-----------------------------------|-----------------|-------------|
|   | Gas                          | Dust                          | Gas (class I)                     | Dust (class II) |             |
| Continuous or long-term explosive environment | zone 0                       | zone 20                       | Division 1                        | zone 0          |             |
| Frequent or repeated explosive environment    | zone 1<br><br>DUO ATEX LED 5 | zone 21<br><br>DUO ATEX LED 5 |                                   | zone 1          | Division 1: |
| Sporadic or short-term explosive environment  | zone 2<br><br>e+LITE         | zone 22<br><br>e+LITE         | Division 2<br><br>TIKKA XP HAZLOC | zone 2          |             |
|   | <br>TIKKA XP ATEX            | <br>DUO ATEX LED 5            |                                   |                 | Division 2: |
|   | <br>DUO ATEX LED 5           | <br>DUO ATEX LED 5            |                                   |                 |             |

Warning: Petzl headlamps should never be used in firedamp mines.



© A. Chidreac / Kalice

To respond to the needs of professionals, Petzl proposes three types of headlamps:

- **Compact headlamps:** they are primarily designed for proximity lighting that keeps your hands free for doing work. These lamps are lightweight and compact and are easy to store in a toolbox, a pocket, etc.
- **Hybrid headlamps:** they are designed for both proximity and distance lighting. They are designed for particularly demanding and intensive conditions for use.
- **Ultra-powerful headlamps (350 lumens):** they offer wide, long-range lighting.
- **The e+LITE emergency lamp:** it offers the choice of a white or red light for lighting or signaling your position. Very practical and easy to use, it is equipped with an emergency whistle and can be stored for ten years with its batteries.
- **SIGNAL lighting:** it provides powerful multidirectional red lighting for 180°, guaranteeing maximum visibility for up to 1000 meters. This light attaches easily to just about anything.

### Lighting for explosive environments

The TIKKA XP ATEX/HAZLOC, DUO ATEX LED 5 and e+LITE headlamps allow movement through explosive environments. There are two certification types for hazardous location headlamps: ATEX certification (European directive), and HAZLOC certification (US standard).

### • Compact headlamps



TIKKA XP ATEX / HAZLOC



TIKKA PLUS



TIKKA



TIKKINA



ZIPKA PLUS



ZIPKA



ADAPT famille TIKKA

### • Hybrid headlamps



DUO ATEX LED 5



DUO LED 5  
DUO LED 14  
DUO LED 14 ACCU



DUOBELT LED 5  
DUOBELT LED 14



ZOOM HALOGENE



MYO 3 NOIR



MYO XP

### • Ultra-powerful headlamps



ULTRA



ULTRA BELT



e+LITE



SIGNAL

### • emergency lamp and SIGNAL lighting

## TIKKA® XP ATEX / HAZLOC E81 PEX - E81 PHZ

Powerful headlamp for use in hazardous areas, three lighting levels, Boost mode and Wide Angle lens



Adjustable headband

One-piece light body and battery case

On/off and Boost mode button

Wide Angle lens option

Movable light body



Exclusive to Petzl, the optional Wide Angle lens allows you to instantly switch from focused long-range lighting to wider proximity lighting. A single light source for multiple needs.



The Boost mode gives a short burst of powerful light. It is available any time, from any lighting mode, by pressing on the Boost button.



The TIKKA XP ATEX/HAZLOC headlamp can be equipped with the ADAPT attachment kit for greater versatility. With this kit, the lamp can be attached on a helmet, a jacket, a toolbox, a structure, etc.

- A single light source that addresses multiple lighting needs:
  - three lighting levels (maximum, optimum, economic)
  - two lighting modes (permanent and flashing)
  - optional Wide Angle lens: flood beam with uniform proximity lighting for working comfortably with your hands, and focused long-range beam (up to 35 meters)
  - Boost mode: shines 50 meters for up to 20 seconds
- Compact and lightweight
- Battery charge indicator light:
  - warns when the batteries are 70 % and 90 % discharged
- Practical:
  - beam can be easily aimed where needed
  - elastic headband is adjustable and comfortable for prolonged use
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AAA/LR03 batteries (included)
- Weight: 95 g including batteries
- CE
- 3-year guarantee

Available in two versions:

• ATEX classification:

**TIKKA XP ATEX E81 PEX:** headlamp can be used in the presence of gas (zone 2) where the self-combustion temperature is greater than 135° C at one atmosphere of pressure (135° C is the maximum surface temperature of the lamp).  
Certification ATEX: Ex II 3 G, Eex nL IIB T4, CE EN 50 014 EN 50 021

• HAZLOC classification:

**TIKKA XP HAZLOC E81 PHZ:** headlamp usable in Class I, Division 2, Groups C and D or in an uncontaminated environment only.  
UL certification: UL class 1 Div 2, group C, D



## TIKKA® PLUS E47 PBV

4 LED headlamp with 3 lighting levels

- Lighting level can be adjusted to help conserve battery life:
  - four LEDs produce flood beam lighting with a long burn time
  - three lighting levels (maximum, optimum, economic)
  - two lighting modes (continuous and flashing).
- Compact and lightweight
- Practical:
  - beam can be easily aimed where needed
  - elastic headband is adjustable and comfortable for prolonged use
- Water resistant for all-weather use: IP X4 (Water resistant)
- Weight: 78 g including batteries
- Operates on three AAA/LR03 batteries (included)
- CE
- 3-year guarantee



## TIKKA® E43 PBV

3 LED headlamp with single lighting level

- Long burn time:
  - three LEDs produce flood beam lighting with a long burn time
- Compact and lightweight
- Easy to use and practical:
  - one lighting level
  - beam can be easily aimed where needed
  - elastic headband is adjustable and comfortable for prolonged use
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AAA/LR03 batteries (included)
- Weight: 78 g including batteries
- CE
- 3-year guarantee



## TIKKINA E41 PBV

2 LED headlamp with single lighting level

- Long burn time:
  - two LEDs produce flood beam lighting with a long burn time
- Compact and lightweight
- Easy to use and practical:
  - one lighting level
  - beam can be easily aimed where needed
  - elastic headband is adjustable and comfortable for prolonged use
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AAA/LR03 batteries (included)
- Weight: 78 g including batteries
- CE
- 3-year guarantee

## ZIPKA® PLUS E48 PBV

Ultralight 4 LED headlamp with 3 lighting levels mounted on retractable cord



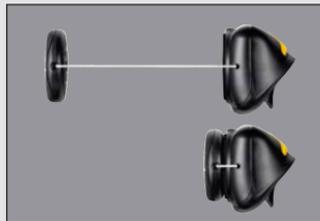
On/off button and power level selection (maximum, optimum and economic)

Cylindrical 5 mm LEDs

Extremely durable retractable cord

Ultra-compact and ultra-lightweight

- Ultra-compact and ultra-lightweight:
  - mounted on a retractable cord, it is ideal for occasional use
- Lighting level can be adjusted to help conserve battery life:
  - four LEDs produce flood beam lighting with a long burn time
  - three lighting levels (maximum, optimum, economic)
  - two lighting modes (continuous and flashing).
- The retractable cord allows the light to be worn on the head, around the wrist or attached to a shoulder strap on a backpack, etc.
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AAA/LR03 batteries (included)
- Weight: 65 g including batteries
- CE
- 3-year guarantee



The retractable reel was invented by Petzl in order to develop ultra-compact one-piece lamps that could be worn on the head, the wrist, etc. This solution is ideal for occasional use. These lamps can be easily stored in a pocket, a toolbox, a glove compartment, etc.



## ZIPKA® E44 PBV

Ultralight 3 LED headlamp with single lighting level mounted on retractable cord

- Ultra-compact and ultra-lightweight:
  - mounted on a retractable cord, it is ideal for occasional use
- Long burn time:
  - one lighting level
  - three LEDs produce flood beam lighting with a long burn time
- The retractable cord allows the light to be worn on the head, around the wrist or attached to a shoulder strap on a backpack, etc.
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AAA/LR03 batteries (included)
- Weight: 65 g including batteries
- CE
- 3-year guarantee

## Accessories



## ADAPT-TIKKA family® E86900

Multi-mount system for the TIKKA or ZIPKA family of headlamps

- Attachment system designed for quickly and easily moving the light source (onto a helmet, the strap of a backpack, a jacket, a belt, etc.)
- Locking with a simple click (to unlock, push on the upper tab on the light body)
- The light beam can be aimed in all directions thanks to the ADAPT system's 360° rotation capacity
- Universal mount with double-sided tape adapts the lamp to a helmet or any other rigid surface
- Specific elastic headband for wearing the lamp on the head
- Belt clip for attaching the light body on the strap of a backpack, onto a pocket, a belt, etc.
- Kit contents: two connection plates for mounting the light body, a universal adhesive mount, a specific elastic band, a belt clip



POCHE TIKKA



POCHE ZIPKA

## POCHE TIKKA E43990

Pouch for compact headlamps

- Protects headlamp during transport and storage
- Can hold spare batteries or lenses, or any other small items
- Compatible with TIKKINA, TIKKA, TIKKA PLUS, TIKKA XP ATEX/HAZLOC headlamps
- Not for headlamps fitted with the ADAPT system

## POCHE ZIPKA E44990

Pouch for compact headlamps mounted on retractable cord

- Protects headlamp during transport and storage
- Perfect for holding other small items too
- Compatible with ZIPKA and ZIPKA PLUS headlamps



Lens kit



TIKKA XP ATEX/HAZLOC TIKKA XP Wide Angle kit



TIKKA XP ATEX/HAZLOC filter holder

## Lens kit E44850

- Produces discreet lighting that helps preserve night vision (or to replace a broken lens)
  - Red, green and transparent filters.
- For TIKKINA, TIKKA, ZIPKA, TIKKA PLUS, ZIPKA PLUS.

## TIKKA XP Wide Angle kit E86870

- Produces discreet lighting that helps preserve night vision
- Three colored Wide Angle lenses: red, blue and green

## TIKKA XP filter holder E86750

- Holds a colored or spare Wide Angle lens on the headband
- Easily attaches to the headlamp's headband.

## DUO® ATEX LED 5 E61L5 3

Hybrid waterproof headlamp for use in hazardous locations: 1 high-output LED / 5 LEDs



Adjustable elastic bands

Waterproof battery case and lamp body (down to -5 m)

On/off switch with integrated locking system

Hybrid light source



Rechargeable battery with intrinsic safety feature



The hybrid light source has five LEDs for wide proximity lighting and one high-output LED for adjustable focused distance lighting



The on/off switch of the headlamp can be manipulated with one hand and can be locked by flipping the yellow lever to avoid accidentally turning on the lamp.

- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two light sources to choose from depending on the activity:
  - one high-output LED for long-range, focused lighting with adjustable zoom
  - five LEDs for flood beam lighting with a long burn time
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Comes with:
  - intrinsically safe battery E61100 2 (NiMH, 2 700 mAh)
  - E65200 2 Europe and USA charger (110/240 V - 50/60 Hz compatible)
- Waterproof down to -5 meters: IP 68
- Weight: 380 g (with battery)

- ATEX certified: headlamp may be used in zone 1 and 2 areas containing gas and in zone 21 and 22 areas containing dust having a self-combustion temperature greater than 200° C at one atmosphere of pressure (200° C = maximum temperature of the lamp's surface)
- Certification:
  - Ex II 2 GD, Eex ia IIC T3, Ex iaD 21 T200°C
  - CE EN 50 014, EN 50 020
  - CEI 61241-0, CEI 61241-11
- Temperature for use: -5°C à +40°C
- CE
- 3-year guarantee



## DUO® LED 5 E69 P

Hybrid waterproof headlamp: halogen / 5 LEDs

- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - five LEDs for flood beam lighting with a long burn time
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2)
- Waterproof down to -5 meters: IP X8
- Weight: 300 g including batteries
- CE
- 3-year guarantee



## DUO® LED 14 E72 P

Hybrid waterproof headlamp: halogen / 14 LEDs with 3 regulated lighting levels

- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two powerful light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - 14 LEDs for flood beam proximity lighting, with three lighting levels (maximum, optimum, economic)
- Constant level of proximity lighting with a long burn time:
  - 14 LED regulated for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2)
- Waterproof down to -5 meters: IP X8
- Weight: 300 g including batteries
- CE
- 3-year guarantee



## DUO® LED 14 ACCU E72 AC

Hybrid waterproof headlamp: halogen / 14 LEDs with 3 regulated lighting levels and rechargeable battery

- Version of the DUO LED 14 with rechargeable battery:
  - large capacity rechargeable battery
  - charges quickly
- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two powerful light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - 14 LEDs for flood beam proximity lighting, with three lighting levels (maximum, optimum, economic)
- Constant level of proximity lighting with a long burn time:
  - 14 LED regulated for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- ACCU DUO rechargeable battery + quick charger (E65 2) included:
  - NiMH 2700 mAh rechargeable battery (four elements)
  - maximum number of charges: approximately 500
  - recharge time: approximately 4 hours (with end-of-charge indicator light)
  - 110/240 V compatible quick charger
- Waterproof down to -5 meters: IP X8
- Weight: 380 g including batteries
- CE
- 3-year guarantee



### DUOBELT LED 5 E73 P

Hybrid waterproof headlamp: halogen / 5 LEDs and remote battery pack

- Remote battery pack allows the user to:
  - reduce the weight worn on the head to only 140 g
  - protect the batteries from cold winter conditions
- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Long burn time:
  - uses large capacity batteries (C/LR14)
- Two light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - five LEDs for flood beam lighting with a long burn time
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four C/LR14 batteries (included)
- Waterproof down to -5 meters: IP X8
- Weight: 550 g including batteries, 140 g on head
- CE
- 3-year guarantee



### DUOBELT LED 14 E76 P

Hybrid waterproof headlamp: halogen / 14 LEDs with three regulated lighting levels with rechargeable battery and remote battery pack

- Remote battery pack allows the user to:
  - reduce the weight worn on the head to only 140 g
  - protect the batteries from cold winter conditions
- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Long burn time:
  - uses four large capacity batteries (C/LR14)
- Two powerful light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - 14 LEDs for flood beam proximity lighting, with three lighting levels (maximum, optimum, economic)
- Constant level of proximity lighting with a long burn time:
  - 14 LED regulated for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four C/LR14 batteries (included)
- Waterproof down to -5 meters: IP X8
- Weight: 550 g including batteries, 140 g on head
- CE
- 3-year guarantee



### VERTEX® BEST DUO® LED 14 E66

Helmet with waterproof hybrid headlamp for use in confined spaces, rescue and nighttime work-at-height

- White VERTEX BEST helmet with waterproof hybrid headlamp: halogen / fourteen integrated LEDs
- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two powerful light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - 14 LEDs for flood beam proximity lighting, with three lighting levels (maximum, optimum, economic)
- Constant level of proximity lighting with a long burn time:
  - 14 LED regulated for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Comfortable and easy to use:
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2)
- Waterproof down to -5 meters: IP X8
- Weight: 640 g including batteries
- CE ANSI Z89.1 - 2003 TYPE 1 CLASS C
- Does not meet the optional requirements of the EN 397 standard concerning electrical insulation.
- 3-year guarantee



### FIXO DUO® LED 14 E63 L14

Waterproof hybrid headlamp for attachment to helmet: halogen / 14 LEDs with three regulated lighting levels

- Rugged headlamp:
  - durable construction
  - waterproof down to -5 meters
- Two powerful light sources to choose from depending on the activity:
  - halogen light for long-range, focused lighting
  - 14 LEDs for flood beam proximity lighting, with three lighting levels (maximum, optimum, economic)
- Constant level of proximity lighting with a long burn time:
  - 14 LED regulated for a constant level of lighting until the batteries are almost discharged
  - automatically switches to reserve power mode when batteries are almost discharged
- Comfortable and easy to use:
  - adjustable and comfortable elastic headband
  - on/off switch can be locked to prevent accidental operation
  - light body can be tilted
- Spare halogen bulb in the light body of the headlamp
- Operates on four AA/ LR6 batteries (included), or with optional ACCU DUO rechargeable battery pack (E65100 2)
- Waterproof down to -5 meters: IP X8
- Weight: 180 g including batteries
- CE
- 3-year guarantee



### MYO® 3 noir E27 PN

Hybrid headlamp: xenon halogen / 3 LEDs

- Hybrid light source to adapt the light to the activity:
  - xenon halogen bulb for long-range focused lighting
  - three LEDs for flood beam lighting with a long burn time
- Comfortable and practical:
  - comfortable and adjustable elastic headband with top strap
  - bezel: turning on the lamp and adjusting the zoom can be done in the same movement
  - xenon halogen beam can be focused
  - bezel is easy to use, even when wearing gloves
  - light body can be tilted
- Water resistant for all-weather use: IP X4 (Water resistant)
- Operates on 4 AA / LR6 batteries (included)
- Weight: 240 g including batteries
- CE
- 3-year guarantee



### MYO® XP E83 P2

Powerful headlamp, 3 lighting levels, Boost mode and Wide Angle lens

- High-output lighting:
  - 85 lumens (maximum level)
  - shines up to 72 meters (maximum level)
- Headlamp can adapt to your lighting needed:
  - ability to adapt the light's brightness to the activity: three lighting levels (maximum, optimum, economic)
  - Wide Angle lens quickly switches from uniform flood beam proximity lighting to focused long-distance lighting in a single movement
  - Boost mode increases power when occasionally needed
  - with flashing mode
  - light body is tiltable to direct the light beam where needed
- Comfortable and stable:
  - very lightweight for its power
  - compact design
  - adjustable elastic headband
  - top strap included (not attached) for increased stability if needed
- Reliable and durable:
  - battery charge indicator light: warns when the batteries are 70 % and 90 % discharged
  - switches are protected from accidental operation when light body is in upright position
  - bulb does not need to be replaced
  - water resistant for all-weather use: IP X4 (Water resistant)
- Operates on three AA / LR6 batteries (included)
- Weight: 175 g including batteries
- CE
- 3-year guarantee



## ZOOM HALOGENE E22 NOI

### Halogen headlamp

- Long-range lighting
- halogen bulb provides focused light up to 90 m
- Comfortable and practical
- comfortable and adjustable elastic headband
- bezel: turning on the lamp and adjusting the zoom can be done in the same movement
- bezel is easy to use, even when wearing gloves
- light beam can be aimed
- Water resistant for all-weather use
- Spare standard bulb included
- Operates with one 3LR12 battery (not included)
- Weight: 170 g without batteries
- CE
- 3-year guarantee

## Accessories



ACCU DUO ATEX

## ACCU DUO® ATEX E61100 2

### Large capacity rechargeable battery for DUO ATEX

- Rechargeable battery for explosive environments minimizes the risk of an electric arc or overheating
- NiMH large capacity rechargeable battery
- 2700 mAh rechargeable battery (four elements)
- maximum number of charges: approximately 500
- Certification:
- Ex II 2 GD, Eex ia IIC T3, Ex ia D21 T200°C
- CE EN 50 014, EN 50 020
- CEI 61241-0, CEI 61241-11
- 3-year guarantee



ACCU DUO® + EUR / US charger



ACCU DUO



12 V car charger for DUO

## DUO® wall charger E65200 2

### Quick charger for ACCU DUO

- 110/240 V compatible quick charger
- recharge time: approximately 4 hours (with end-of-charge indicator light)
- for use in Europe and North America (interchangeable wall plugs)
- 3-year guarantee

## 12 V car charger for DUO® E65300 2

### ACCU DUO car charger

- 3-year guarantee



ACCU DUO + EUR / US charger

## ACCU DUO® E65100 2

### Large capacity rechargeable battery for the DUO LED 5 and DUO LED 14

- NiMH large capacity rechargeable battery
- 2700 mAh rechargeable battery (four elements)
- maximum number of charges: approximately 500
- 3-year guarantee

## ACCU DUO® + EUR / US charger E65 2

### Large capacity rechargeable battery for DUO LED 5 and DUO LED 14 with quick charger

- NiMH large capacity rechargeable battery
- 2700 mAh rechargeable battery (four elements)
- maximum number of charges: approximately 500
- 110/240 V compatible quick charger
- recharge time: approximately 4 hours (with end-of-charge indicator light)
- for use in Europe and North America (interchangeable wall plugs)
- 3-year guarantee



MODU'LED 14 DUO

## MODU'LED 14 DUO® E60970

### Hybrid reflector + 14 LED module with three regulated lighting levels

- Replaces the 2-pin bulb or the MODU'LED on DUO and DUOBELT headlamps
- Regulated fourteen LED lighting with reserve power mode
- Weight: 8 g
- CE
- 3-year guarantee

## Bulbs / LED

### DUO :

#### DUO halogen bulb FR0500 BLI

6 V halogen bulb

### DUO ATEX :

#### DUO ATEX 1 W LED E61700

1 W LED with cap

### MYO 3 noir :

#### FR0231 BLI

6 V Xenon bulb

### FR0241 BLI

6 V Standard bulb



CROCHLAMP S



CROCHLAMP L

## CROCHLAMP S E04350

### Headlamp clips for thin-edged helmets

- For helmets that do not already have headlamp clips
- Four hooks for use with thin-edged helmets.

## CROCHLAMP L E04405

### Headlamp clips for thick-edged helmets

- For helmets that do not already have headlamp clips
- Four hooks for use with thick-edged helmets.

## ULTRA E52 AC

Ultra-powerful headlamp, 3 regulated brightness levels, ACCU 2 ULTRA rechargeable battery

NEW



Stabilizing head mount plate with foam pad

Durable construction and storm resistant (IP 66)

Ultra high-output regulated lighting (350 lumens)

Light level selection dial (maximum, optimum, economic) to adapt the light to the situation

Rechargeable high-performance batteries (Lithium Ion 2000 mAh)

- Ultra high-output regulated lighting:
  - 350 lumens
  - constant lighting level, automatically switches to reserve power mode when battery pack is almost discharged
  - New generation power LEDs
- Comfortable and ergonomic:
  - excellent fit on the head: compact design, flexible stabilization plate and comfort foam, wide elastic headband and adjustable top strap
  - easy to use: choice of lighting level with intuitive dial
- Rechargeable high-performance batteries:
  - rechargeable 2000 mAh Lithium Ion battery offers large capacity and excellent performance at low temperatures, but remains as light as possible
  - test button for rechargeable battery with battery level indicator
- Reliable and durable:
  - lighting duration of 1h30 in maximum mode, plus 30 minutes in reserve power mode
  - durable construction and storm resistant (IP 66)
  - bulb does not need to be replaced
  - lamp and rechargeable batteries are guaranteed for 3 years

- Versatile:
  - three lighting levels: maximum, optimum, economic, to adapt the light to the situation
  - light body can be tilted vertically to change light direction
  - modular design adapts to the situation to maximize burn time or minimize the weight on the head, - attachment system allows quick removal of rechargeable battery pack in order to charge it or to replace it, and to reduce the weight carried on the head from 345 g (ACCU 2 ULTRA lamp + battery pack) to 200 g by disconnecting the battery pack from the headband by using the ULTRA Extension cord (optional E55950)
  - burn time is doubled with the high-output, large capacity ACCU 4 ULTRA rechargeable battery pack (optional E55400)
  - reflective sticker for battery pack.
- Degree of protection: IP 66
- Weight: 345 g (lamp with ACCU 2 ULTRA battery pack)
- CE
- 3-year guarantee



The new generation of power LEDs, combined with the performance of Lithium rechargeable batteries, provide powerful regulated lighting at a lower combined weight. ULTRA BELT and ULTRA headlamps project a wide, long-distance, perfectly uniform beam.



ULTRA series headlamps are designed for moving on any terrain and under any conditions. They are shock-resistant, storm-proof (IP 66) and are guaranteed, along with their rechargeable battery packs, for 3 years. For increased safety, it is now possible to verify the precise power level remaining in the battery pack before use. The ULTRA BELT and ULTRA rechargeable batteries are equipped with a test button and indicator lights.

NEW



## ULTRA BELT E53 AC

Ultra-powerful headlamp, three brightness levels, ACCU 4 ULTRA remote rechargeable battery

- Ultra high-output regulated lighting:
  - 350 lumens
  - constant lighting level, automatically switches to reserve power mode when battery pack is almost discharged
  - New generation power LEDs
- Comfortable and ergonomic:
  - excellent fit on the head: compact design, flexible stabilization plate and comfort foam, wide elastic headband and adjustable top strap
  - battery pack can be moved into a pocket or a backpack to lighten the load worn on the head as much as possible
  - easy to use: choice of lighting level with intuitive dial
- Rechargeable high-performance batteries:
  - rechargeable 4000 mAh Lithium Ion battery offers large capacity and excellent performance at low temperatures, but remains as light as possible
  - test button for rechargeable battery with battery level indicator
- Reliable and durable:
  - lighting duration of 3h15 in maximum mode, plus 45 minutes in reserve power mode
  - durable construction and storm resistant (IP 66)
  - bulb does not need to be replaced
  - lamp and rechargeable batteries are guaranteed for 3 years

- Versatile:
  - three lighting levels: maximum, optimum, economic, to adapt the light to the situation
  - light body can be tilted vertically to change light direction
  - connection system allows the battery to be removed quickly for recharging
  - modular design: total weight of the unit can be reduced to 375 g with the high performance, large capacity ACCU 2 ULTRA rechargeable battery (optional E55450)
  - reflective sticker for battery pack.
- Degree of protection: IP 66
- Weight: 495 g (lamp 230 g on the head + ACCU 4 ULTRA remote battery pack (265 g))
- CE
- 3-year guarantee

NEW



**ACCU 4 ULTRA** E55400

High performance, large capacity rechargeable battery for ULTRA and ULTRA BELT headlamps

- Lithium Ion 4000 mAh battery pack
- Lightweight: 265 g
- Very large capacity and excellent performance at low temperatures, with Lithium Ion technology
- Integrated electronic protection circuit to prevent overcharging or completely depleting the batteries
- Test button with power level indicator
- Weight: 265 g
- CE
- 3-year guarantee

NEW



**ACCU 2 ULTRA** E55450

High performance, large capacity rechargeable battery for ULTRA and ULTRA BELT headlamps

- Lithium Ion 2000 mAh battery pack
- Lightweight: 145 g
- Large capacity and excellent performance at low temperatures, with Lithium Ion technology
- Integrated electronic protection circuit to prevent overcharging or completely depleting the batteries
- Test button with power level indicator
- Weight: 145 g
- CE
- 3-year guarantee

NEW



ULTRA extension cord

NEW



ULTRA quick charger

**ULTRA extension cord** E55950

Extension power cable for ULTRA lamp

- Quick connector
- Length of power cord: 1.1 m
- Weight: 75 g
- CE
- 3-year guarantee

**ULTRA quick charger** E55800

Quick wall charger for ACCU 2 ULTRA and ACCU 4 ULTRA batteries

- 100/240 V EUR/US compatible wall charger
- Recharge time:
  - ACCU 2 ULTRA battery: 3 hours
  - ACCU 4 ULTRA battery: 5 hours
- End-of-charge indicator light
- For use in Europe and North America (interchangeable wall plugs)
- CE
- 3-year guarantee

NEW



**e+LITE**® E02 P

Headlamp for emergency situations for use in hazardous locations

- Long-term dependability, even when kept for years in harsh conditions:
    - works in extreme temperatures: - 30 °C to + 60 °C (-22 °F to +140 °F)
    - always ready for use: can be stored with batteries for up to 10 years and still be operational
    - waterproof down to -1 m
    - can be used in potentially explosive atmospheres (see specifications for certification level)
    - compact and ultra-light (28 grams), so it can always with you
    - designed to prevent accidental operation with locking switch
  - Performance lighting:
    - two white lighting levels (maximum and economic)
    - one red lighting level
    - two flashing modes : white or red (for signaling)
    - shines enough light to allow easy movement in the dark: shines up to 19 m,
    - provides up to 4 consecutive nights of lighting (45 hours)
    - easy to use
  - Long-range whistle for communication or rescue:
    - up to 100 dB can be heard up to 500 m away (in the mountains, at night and without wind)
    - SOS Morse code illustration on the whistle
  - Very practical:
    - Can be worn on the head, around the wrist or neck or attached to thin-edged objects with integrated clip
    - always shines in the direction you want: light source can be directed 360°
    - red light beam helps preserve night vision
  - The headlamp may be used in zone 2 areas containing gas and in zone 22 in the presence of dust having a self-combustion temperature greater than 85° C at one atmosphere of pressure (85° C = maximum temperature of the lamp's surface).
- Certification:
- ATEX: Ex 3 GD Ex ic IIC T6, Ex td A22, IP68 T85°C
  - Hazloc: certification pending
  - Operates with two Lithium CR2032 batteries (included)
  - Waterproof down to -1 meter: IP 68
  - Weight: 28 g including batteries
  - CE
  - 10-year guarantee

**SiGNAL** E05 P

Multi-mount red safety light

- Multidirectional performance safety light ensures you are seen from a distance:
  - two red lighting modes (continuous and flashing)
  - visible for 1000 m
  - 180° visibility
  - lasts 120 h in flashing mode and 40 h in continuous lighting mode.
- Reliable:
  - works in extreme temperatures: - 30 °C to + 60 °C (-22 °F to +140 °F)
  - durable
  - LED technology
  - waterproof down to -1 m.
- Multi-purpose and easy-to-use:
  - compact and lightweight: 22 g including batteries
  - integrated clip and adjustable strap included
  - numerous attachment possibilities: on the head, on a helmet, around the arm, on a pack, etc.
  - simple-to-use switch
  - Stable regardless of attachment method:
    - clip and tabs on the attachment plate
  - Operates with two Lithium CR2032 batteries (included)
  - Waterproof down to -1 meter: IP X8
  - Weight: 22 g including batteries
  - CE
  - 3-year guarantee

# Technical data for headlamps



|   | Reference | Weight              |                | Water resistance       | Batteries                            | Bulbs / LEDs        | Regulated    | Lighting level      | Distance                  |                          |                          |               | Battery life |              | Beam pattern |         | Light quantity (lumens)        |                        |         |         |
|---|-----------|---------------------|----------------|------------------------|--------------------------------------|---------------------|--------------|---------------------|---------------------------|--------------------------|--------------------------|---------------|--------------|--------------|--------------|---------|--------------------------------|------------------------|---------|---------|
|   |           | including batteries | worn on head   |                        |                                      |                     |              |                     | t = 0                     | t = 0 h 30               | t = 10 h                 | t = 30 h      | total        | reserve      | wide         | focused |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     |                           |                          |                          |               |              |              |              |         |                                |                        |         |         |
| <b>Compact headlamps</b>                      |           |                     |                |                        |                                      |                     |              |                     |                           |                          |                          |               |              |              |              |         |                                |                        |         |         |
| <b>TIKKA XP ATEX</b>                          | E81 PEX   | 95 g / 3.4 oz       |                | water resistant IPX4   | LR03 / AAA x 3                       | High-output LED     | -            | maximum             | 35 m / 115 ft             | 30 m / 98 ft             | 20 m / 66 ft             | 7 m / 23 ft   | 60 h         | /            | X            | X       | 40 lm (Boost mode)             | <b>TIKKA XP ATEX</b>   |         |         |
|   |           |                     |                |                        |                                      |                     |              | optimum             | 27 m / 89 ft              | 25 m / 82 ft             | 19 m / 62 ft             | 9 m / 30 ft   | 80 h         | /            |              |         |                                | <b>TIKKA XP HAZLOC</b> |         |         |
| <b>TIKKA XP HAZLOC</b>                        | E81 PHZ   |                     |                |                        |                                      |                     |              | economic            | 18 m / 59 ft              | 17 m / 56 ft             | 15 m / 49 ft             | 13 m / 43 ft  | 120 h        | /            |              |         |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              | Boost               | 50 m / 165 ft             | /                        | /                        | /             | /            | /            |              |         |                                |                        |         |         |
| <b>ZIPKA PLUS</b>                             | E48 PBY   | 65 g / 2.3 oz       |                | water resistant IPX4   | LR03 / AAA x 3                       | Led x 4             | -            | maximum             | 32 m / 105 ft             | 25 m / 82 ft             | 15 m / 49 ft             | 5 m / 16 ft   | 100 h        | /            | X            | -       | 35 lm (maximum level)          | <b>ZIPKA PLUS</b>      |         |         |
| <b>TIKKA PLUS</b>                             | E47 PBY   | 78 g / 2.8 oz       |                |                        |                                      |                     |              | optimum             | 23 m / 75 ft              | 20 m / 66 ft             | 13 m / 43 ft             | 6 m / 20 ft   | 120 h        | /            |              |         |                                | <b>TIKKA PLUS</b>      |         |         |
|   |           |                     |                |                        |                                      |                     |              | economic            | 15 m / 49 ft              | 14 m / 46 ft             | 11 m / 36 ft             | 9 m / 30 ft   | 150 h        | /            |              |         |                                |                        |         |         |
| <b>ZIPKA</b>                                  | E44 PBY   | 65 g / 2.3 oz       |                | water resistant IPX4   | LR03 / AAA x 3                       | Led x 3             | -            | -                   | 27 m / 89 ft              | 22 m / 72 ft             | 14 m / 46 ft             | 6 m / 20 ft   | 120 h        | /            | X            | -       | 26 lm                          | <b>ZIPKA</b>           |         |         |
| <b>TIKKA</b>                                  | E43 PBY   | 78 g / 2.8 oz       |                |                        |                                      |                     |              | -                   | 23 m / 75 ft              | 20 m / 66 ft             | 15 m / 49 ft             | 8 m / 26 ft   | 140 h        | /            |              |         |                                | X                      | -       | 18 lm   |
| <b>TIKINA</b>                                 | E41 PBY   | 78 g / 2.8 oz       |                | water resistant IPX4   | LR03 / AAA x 3                       | Led x 2             | -            | -                   | 23 m / 75 ft              | 20 m / 66 ft             | 15 m / 49 ft             | 8 m / 26 ft   | 140 h        | /            | X            | -       | 18 lm                          | <b>TIKINA</b>          |         |         |
| <b>Headlamps with two light sources</b>       |           |                     |                |                        |                                      |                     |              |                     |                           |                          |                          |               |              |              |              |         |                                |                        |         |         |
| <b>DUO ATEX LED 5</b>                         | E61L5 3   | 380 g / 13.4 oz     |                | waterproof - 5 m IP 68 | rechargeable battery NIMH            | Powerful 1 W LED    | X            | -                   | 50 m / 165 ft --> 10 h 30 | 50 m / 165 ft            | /                        | /             | 10 h 30      | /            | -            | X       | 30 lm (high-output LED)        | <b>DUO ATEX LED 5</b>  |         |         |
|   |           |                     |                |                        |                                      | Led x 5             |              | -                   | 22 m / 72 ft --> 13 h     |                          |                          |               | 31 h         | 18 h         | X            | -       |                                |                        |         |         |
| <b>DUO LED 5</b>                              | E69 P     | 300 g / 10.6 oz     |                | waterproof - 5 m IP X8 | LR6 / AA x 4                         | halogen             | -            | -                   | 100 m / 328 ft            | 70 m / 230 ft            | /                        | /             | 4 h          | /            | -            | X       | 40 lm (5 LEDs)                 | <b>DUO LED 5</b>       |         |         |
|   |           | 380 g / 13.4 oz     |                | waterproof - 5 m IP X8 | rechargeable battery NIMH (optional) | halogen             | -            | -                   | 100 m / 328 ft            | 75 m / 246 ft            | /                        | /             | 5 h 30       | /            | -            | X       |                                |                        |         |         |
|   |           |                     |                |                        |                                      | Led x 5             | -            | -                   | 24 m / 79 ft --> 12 h     |                          |                          |               | 30 h         | 18 h         | X            | -       |                                |                        |         |         |
| <b>DUO LED 14</b>                             | E72 P     | 300 g / 10.6 oz     |                | waterproof - 5 m IP X8 | LR6 / AA x 4                         | halogen             | X            | -                   | 100 m / 328 ft            | 70 m / 230 ft            | /                        | /             | 4 h          | /            | -            | X       | 67 lm (14 LEDs)                | <b>DUO LED 14</b>      |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | optimum                   | 26 m / 85 ft --> 10 h    |                          |               |              | 148 h        | 138 h        | X       |                                |                        | -       |         |
|   |           |                     |                |                        |                                      |                     |              |                     | maximum                   | 34 m / 112 ft --> 3 h 30 | 9 m / 30 ft              | /             | 183 h 30     | 180 h        |              |         |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | economic                  | 15 m / 49 ft --> 63 h    |                          |               |              | 110 h        | 47 h         |         |                                |                        |         |         |
| <b>DUO LED 14 ACCU</b>                        | E72 AC    | 380 g / 13.4 oz     |                | waterproof - 5 m IP X8 | rechargeable battery NIMH            | halogen             | X            | -                   | 100 m / 328 ft            | 75 m / 246 ft            | /                        | /             | 5 h 30       | /            | -            | X       | 67 lm (14 LEDs, maximum level) | <b>DUO LED 14 ACCU</b> |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | optimum                   | 26 m / 85 ft --> 17 h    |                          |               |              | 40 h         | 23 h         | X       |                                |                        | -       |         |
|   |           |                     |                |                        |                                      |                     |              |                     | maximum                   | 34 m / 112 ft --> 5 h    | 9 m / 30 ft              | /             | 33 h         | 28 h         |              |         |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | economic                  | 15 m / 49 ft --> 70 h    |                          |               |              | 96 h         | 26 h         |         |                                |                        |         |         |
| <b>DUOBELT LED 5</b>                          | E73 P     | 550 g / 19.4 oz     | 140 g / 4.9 oz | waterproof - 5 m IP X8 | LR14 / C x 4                         | halogen             | -            | -                   | 100 m / 328 ft            | 80 m / 262 ft            | 35 m / 115 ft            | /             | 11 h 30      | /            | -            | X       | 40 lm (5 LEDs)                 | <b>DUOBELT LED 5</b>   |         |         |
|   |           |                     |                | Led x 5                | -                                    | -                   | 28 m / 92 ft | 24 m / 79 ft        | 22 m / 72 ft              | 19 m / 62 ft             | 350 h                    | /             | X            | -            |              |         |                                |                        |         |         |
| <b>DUOBELT LED 14</b>                         | E76 P     | 550 g / 19.4 oz     | 140 g / 4.9 oz | waterproof - 5 m IP X8 | LR14 / C x 4                         | halogen             | X            | -                   | 100 m / 328 ft            | 80 m / 262 ft            | 35 m / 115 ft            | /             | 11 h 30      | /            | -            | X       | 67 lm (14 LEDs, maximum level) | <b>DUOBELT LED 14</b>  |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | optimum                   | 26 m / 85 ft --> 35 h    |                          |               |              | 305 h        | 270 h        | X       |                                |                        | -       |         |
|   |           |                     |                |                        |                                      |                     |              |                     | maximum                   | 34 m / 112 ft --> 9 h 30 | 9 m / 30 ft              | /             | 294 h 30     | 285 h        |              |         |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | economic                  | 15 m / 49 ft --> 210 h   |                          |               |              | 430 h        | 220 h        |         |                                |                        |         |         |
| <b>MYO XP</b>                                 | E83 P2    | 175 g / 6.2 oz      |                | water resistant IPX4   | LR6 / AA x 3                         | High-output LED     | -            | -                   | 90 m / 295 ft             | 60 m / 197 ft            | /                        | /             | 4 h          | /            | X            | X       | 150 lm (Boost mode)            | <b>MYO XP</b>          |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     | optimum                   | 72 m / 236 ft            | 59 m / 194 ft            | 39 m / 128 ft | 16 m / 52 ft | 80 h         |              |         |                                |                        | /       |         |
|   |           |                     |                |                        |                                      |                     |              |                     | economic                  | 54 m / 177 ft            | 47 m / 154 ft            | 36 m / 118 ft | 21 m / 69 ft | 100 h        |              |         |                                |                        | /       |         |
|   |           |                     |                |                        |                                      |                     |              |                     | Boost                     | 34 m / 112 ft            | 31 m / 102 ft            | 27 m / 89 ft  | 24 m / 79 ft | 180 h        |              |         |                                |                        | /       |         |
| <b>MYO 3 noir</b>                             | E27 PN    | 240 g / 8.5 oz      |                | water resistant IPX4   | LR6 / AA x 4                         | xenon halogen       | -            | -                   | 90 m / 295 ft             | 60 m / 197 ft            | /                        | /             | 4 h          | /            | X            | X       | 40 lm (xenon halogen)          | <b>MYO 3 noir</b>      |         |         |
|   |           |                     |                |                        |                                      |                     |              | standard (optional) | -                         | -                        | 35 m / 115 ft            | 30 m / 98 ft  | 15 m / 49 ft | /            |              |         |                                |                        | 10 h 30 | /       |
|   |           |                     |                |                        |                                      |                     |              | Led x 3             | -                         | -                        | 25 m / 82 ft             | 22 m / 72 ft  | 19 m / 62 ft | 10 m / 33 ft |              |         |                                |                        | 130 h   | /       |
| <b>ZOOM HALOGENE</b>                          | E22 N01   | 170 g / 6.0 oz      |                | water resistant        | 3LR12                                | halogen             | -            | -                   | 90 m / 295                | 60 m / 197 ft            | /                        | /             | 9 h          | /            |              | X       | 35 lm                          | <b>ZOOM HALOGENE</b>   |         |         |
| <b>Ultra-powerful headlamps</b>               |           |                     |                |                        |                                      |                     |              |                     |                           |                          |                          |               |              |              |              |         |                                |                        |         |         |
| <b>ULTRA</b>                                  | E52 AC    | 345 g / 12.2 oz     |                | water resistant IP66   | ACCU 2 ULTRA Li-Ion 2000 mAh         | High-output LED x 6 | X            | maximum             | 120 m / 394 ft --> 1 h 30 |                          |                          |               | 30 min       | 2 h          | X            | X       | 350 lm (maximum level)         | <b>ULTRA</b>           |         |         |
|   |           |                     |                |                        |                                      |                     |              | optimum             | 80 m / 262 ft --> 4 h 45  |                          |                          |               | 20 min       | 5 h          |              |         |                                |                        |         |         |
|   |           |                     |                |                        |                                      |                     |              | economic            | 40 m / 131 ft --> 16 h 45 |                          |                          |               | 10 min       | 16 h 55      |              |         |                                |                        |         |         |
| <b>ULTRA BELT</b>                             | E53 AC    | 495 g / 17.5 oz     | 230 g / 8.1 oz | water resistant IP66   | ACCU 4 ULTRA Li-Ion 4000 mAh         | High-output LED x 6 | X            | maximum             | 120 m / 394 ft --> 3 h 15 |                          |                          |               | 45 min       | 4 h          | X            | X       | 350 lm (maximum level)         | <b>ULTRA BELT</b>      |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     |                           | optimum                  | 80 m / 262 ft --> 9 h 30 |               |              |              |              |         |                                |                        | 30 min  | 10 h    |
|   |           |                     |                |                        |                                      |                     |              |                     |                           | economic                 | 40 m / 131 ft --> 34 h   |               |              |              |              |         |                                |                        | 20 min  | 34 h 20 |
| <b>Emergency lighting and signal lighting</b> |           |                     |                |                        |                                      |                     |              |                     |                           |                          |                          |               |              |              |              |         |                                |                        |         |         |
| <b>e+LITE</b>                                 | E02 P     | 27 g / 0.95 oz      |                | waterproof - 1 m IP 68 | CR2032 x 2                           | Led x 3 Red LED X 1 | -            | maximum             | 19 m / 62 ft              | 12 m / 39 ft             | 5 m / 16 ft              | 3 m / 10 ft   | 35 h         | /            | X            | -       | 16 lm (maximum level)          | <b>e+LITE</b>          |         |         |
|   |           |                     |                |                        |                                      |                     |              | economic            | 11 m / 36 ft              | 10 m / 33 ft             | 5 m / 16 ft              | 3 m / 10ft    | 45 h         | /            |              |         |                                |                        |         |         |
| <b>SIGNAL</b>                                 | E05 P     | 22 g / 0.78 oz      |                | waterproof - 1 m IP 68 | CR2032 x 2                           | Red LED X 3         | -            | constant            | 1000 m 0.62 miles         | /                        | /                        | /             | 40 h         | /            | X            | -       |                                | <b>SIGNAL</b>          |         |         |
|   |           |                     |                |                        |                                      |                     |              |                     |                           | flashing                 | 1000 m 0.62 miles        | /             | /            | /            |              |         |                                |                        | 120 h   | /       |

| PRODUCT Reference                   | Page |
|-------------------------------------|------|
| <b>A</b>                            |      |
| ABSORBICA L57                       | 63   |
| ABSORBICA-I L58 / L70150 I          | 63   |
| ABSORBICA-I MGO L38 MGO / L70150 IM | 63   |
| ABSORBICA-Y L59 / L70150 Y          | 63   |
| ABSORBICA-Y-MGO L59 MGO / L70150 YM | 63   |
| ACCU 2 ULTRA E55450                 | 130  |
| ACCU 4 ULTRA E55400                 | 130  |
| ACCU DUO + chargeur EUR/US E65 2    | 127  |
| ACCU DUO E65100 2                   | 127  |
| ACCU DUO ATEX E61100 2              | 126  |
| ADAPT famille TIKKA E86900          | 121  |
| Am'D BALL-LOCK M34 BL               | 70   |
| Am'D SCREW-LOCK M34 SL              | 70   |
| Am'D TRIACT-LOCK M34 TL             | 70   |
| AMPOULE BAT'INOX P41                | 94   |
| AMPOULE COLLINOX P56                | 94   |
| ANNEAU C40                          | 93   |
| ASAP B71                            | 67   |
| ASAP'SORBER L71                     | 67   |
| ASCENSION B17WRA / B17 WLA          | 81   |
| ASCENTREE B19 WAA                   | 82   |
| AXIS 11 mm R74YT                    | 100  |
| AXIS 11 mm R74                      | 100  |
| <b>B</b>                            |      |
| BASIC B18AAA                        | 84   |
| BAT'INOX P57                        | 94   |
| BERMUDE C80                         | 52   |
| BOLTBAG C11                         | 105  |
| <b>C</b>                            |      |
| CARITOOL P42                        | 53   |
| CARITOOL L P42 L                    | 53   |
| CD rom EPI Z29 C                    | 39   |
| Chargeur DUO secteur E65200 2       | 126  |
| Chargeur DUO voiture 12V E65300 2   | 126  |
| Chargeur rapide ULTRA E55800        | 130  |
| CHESTER C64                         | 43   |
| CLASSIQUE C03                       | 105  |
| CŒUR 10 mm P34050                   | 94   |
| CŒUR 12 mm P38150                   | 94   |
| COLLINOX P55                        | 94   |
| CŒUR GOUJON 10 mm P32               | 94   |
| CŒUR GOUJON 12 mm P33               | 94   |
| CONNEXION FAST C42 F                | 93   |

| PRODUCT Reference             | Page |
|-------------------------------|------|
| CONNEXION FIXE C42            | 93   |
| CONNEXION VARIO C42 V         | 93   |
| CORDEX K52                    | 106  |
| CORDEX PLUS K53               | 106  |
| CRAB 6 64160                  | 106  |
| CROCHLAMP L E04405            | 127  |
| CROCHLAMP S E04350            | 127  |
| CROLL B16 AAA                 | 83   |
| <b>D</b>                      |      |
| DELTA P11 / P11-8 / P11-8B    | 72   |
| DEMI ROND P18                 | 72   |
| DUO ATEX LED 5 E61L5 3        | 122  |
| DUO CHARGER E65200 2          | 126  |
| DUO CAR CHARGER 12 V E65300 2 | 126  |
| DUO LED 5 E69 P               | 123  |
| DUO LED 14 E72 P              | 123  |
| DUO LED 14 ACCU E72 AC        | 123  |
| DUOBELT LED 5 E73 P           | 124  |
| DUOBELT LED 14 E76 P          | 124  |
| <b>E</b>                      |      |
| e+LITE E02 P2                 | 131  |
| EXO D30 15B                   | 79   |
| EXO EASHOOK D30015 CN         | 79   |
| <b>F</b>                      |      |
| FALCON C38 AAA                | 50   |
| FALCON MONTAIN C38 CAA        | 51   |
| FALCON ASCENT C38 BAA         | 51   |
| FIXE P05                      | 88   |
| FIXO DUO LED 14 E63 L14       | 125  |
| FOOTPRO C49                   | 82   |
| FREINO M42                    | 71   |
| <b>G</b>                      |      |
| GEMINI P66                    | 89   |
| GO P15                        | 72   |
| GRIGRI D14                    | 77   |
| GRILLON L52                   | 61   |
| GRILLON HOOK 2 m L52 2H       | 61   |
| GRILLON HOOK 3 m L52 3H       | 61   |
| GRILLON MGO L52 3MG           | 61   |
| GRIP 12,5 mm R78              | 101  |

| PRODUCT Reference               | Page |
|---------------------------------|------|
| <b>H</b>                        |      |
| HUIT D02                        | 77   |
| <b>I</b>                        |      |
| I'D L D200LO                    | 76   |
| I'D S D200SO                    | 75   |
| <b>J</b>                        |      |
| JAK C73101                      | 45   |
| JANE L50                        | 62   |
| JANE MGO L53                    | 62   |
| <b>K</b>                        |      |
| KADOR M73                       | 72   |
| KIT vitres TIKKA E44850         | 121  |
| KIT Grand Angle TIKKA XP E86870 | 121  |
| KOOTENAY P67                    | 90   |
| <b>L</b>                        |      |
| LIFT L54                        | 45   |
| LINK 7 mm R75                   | 101  |
| LONG LIFE P38                   | 94   |
| LOOPING C25                     | 82   |
| <b>M</b>                        |      |
| MACROCENDER B51                 | 84   |
| MACROGRAB B52                   | 84   |
| MGO MGO60                       | 72   |
| MICROCENDER B54                 | 84   |
| MICROGRAB B53                   | 84   |
| MINDER P60                      | 89   |
| MINI P59                        | 89   |
| MINI TRAXION P07                | 87   |
| MODU'LED 14 DUO E60970          | 127  |
| MYO XP E83 P2                   | 125  |
| MYO 3 NOIR E27 PN               | 125  |

| PRODUCT Reference             | Page         |
|-------------------------------|--------------|
| <b>N</b>                      |              |
| NAVAHO BOD C71000             | 42           |
| NAVAHO BOD FAST C710F0        | 42           |
| NAVAHO BOD FAST noir C710FN   | 42           |
| NAVAHO BOD CROLL FAST C71CF0  | 46           |
| NAVAHO SIT C79000             | 43 / 47      |
| NAVAHO SIT FAST C790F0        | 43 / 47      |
| NAVAHO SIT FAST noir C790FN   | 43 / 47      |
| NEST S61                      | 52           |
| NEWTON C73000                 | 45           |
| NEWTON FAST JAK C73 JFO       | 44           |
| <b>O</b>                      |              |
| OK SCREW-LOCK M33 SL          | 70           |
| OK TRIACT-LOCK noir M33 SLN   | 70           |
| OK TRIACT-LOCK M33 TL         | 70           |
| OK TRIACT-LOCK noir M33 TLN   | 70           |
| OMNI SCREW-LOCK M37 SL        | 45 / 51 / 71 |
| OMNI TRIACT-LOCK M37 TL       | 45 / 51 / 71 |
| OSCILLANTE P02                | 88           |
| <b>P</b>                      |              |
| PAD FAST C89 F                | 45           |
| PANTIN B02ALA / B02ARA        | 83           |
| PARALLEL10,5 mm R77           | 100          |
| PAW S P63 S                   | 96           |
| PAW M P63 M                   | 96           |
| PAW L P63 L                   | 96           |
| PERSONNEL C14                 | 105          |
| PITAGOR C80 BR                | 52           |
| POCHE TIKKA E43990            | 121          |
| POCHE ZIPKA E44990            | 121          |
| PODIUM S70                    | 47           |
| PORTAGE S32                   | 105          |
| PORTE FILTRES TIKKA XP E86750 | 121          |
| PORTO C33                     | 105          |
| PRO TRAXION P51               | 87           |
| PROTEC C45                    | 103          |

| PRODUCT Reference            | Page |
|------------------------------|------|
| <b>R</b>                     |      |
| RACK D11                     | 77   |
| RALLONGE ULTRA E55950        | 130  |
| RESCUCENDER B50              | 84   |
| RESCUE P50                   | 88   |
| RESCUE CORD 8 mm R846 - R892 | 102  |
| ROLL MODULE P49              | 103  |
| ROLLCAB P47                  | 90   |
| <b>S</b>                     |      |
| SECUR C74                    | 83   |
| SEQUOIA C690F0               | 49   |
| SEQUOIA SRT C69CF0           | 48   |
| SEQUOIA SWING C69SFA         | 49   |
| SET CATERPILLAR P68          | 103  |
| SPATHA S92 S / S92 L         | 106  |
| SIGNAL E05 P                 | 131  |
| SPELEGYCA C44                | 62   |
| SPIKY PLUS 1 79510           | 106  |
| SPIKY PLUS 2 79520           | 106  |
| SPIKY PLUS 3 79530           | 106  |
| SPIRIT M15 A                 | 71   |
| STOP D09                     | 76   |
| SWIVEL S P58 S               | 96   |
| SWIVEL L P58 L               | 96   |
| <b>T</b>                     |      |
| TANDEM P21                   | 90   |
| TANDEM SPEED P21 SPE         | 90   |
| TIBLOC B01                   | 85   |
| TIKKA E43 PBV                | 119  |
| TIKKA PLUS E47 PBV           | 119  |
| TIKKA XP ATEX E81 PEX        | 118  |
| TIKKA XP HAZLOC E81 PHZ      | 118  |
| TIKKINA E41 PBV              | 119  |
| TOP C81000                   | 43   |
| TOP CROLL C81C00             | 47   |
| TRANSPORT C02                | 105  |
| TREESBEE C04                 | 93   |
| TUBA D12                     | 77   |
| TWIN P65                     | 89   |

| PRODUCT Reference                | Page     |
|----------------------------------|----------|
| <b>U</b>                         |          |
| ULTRA E52 AC                     | 128      |
| ULTRA BELT E53 AC                | 129      |
| <b>V</b>                         |          |
| VECTOR 11 mm R11                 | 102      |
| VECTOR 12,5 mm R12               | 102      |
| VERTEX BEST A16                  | 57       |
| VERTEX BEST DUO LED 14 E66       | 58 / 124 |
| VERTEX VENT A11                  | 58       |
| VERTEX ST A12                    | 59       |
| <b>W</b>                         |          |
| WILLIAM BALL-LOCK M36 BL         | 70       |
| WILLIAM SCREW-LOCK M36 SL        | 70       |
| WILLIAM SCREW-LOCK noir M36 SLN  | 70       |
| WILLIAM TRIACT-LOCK M36 TL       | 70       |
| WILLIAM TRIACT-LOCK noir M36 TLN | 70       |
| <b>Z</b>                         |          |
| ZIPKA E44 PBV                    | 120      |
| ZIPKA PLUS E48 PBV               | 120      |
| ZOOM HALOGENE E22 NOI            | 126      |



## To serve the milieu that has allowed us to exist and grow...

Created in 2006, the Petzl Foundation's mission is to lead projects in all the countries where activities that are directly or indirectly related to Petzl's areas of expertise are practiced.

The Petzl Foundation contributes its support to projects run by not-for-profit organizations working to make a positive impact on our community and beyond. Three areas are specifically targeted:

- prevention and safety awareness
- preserving the environment
- support for research

## A promising start

Three years after its creation, the Petzl Foundation contributes to many national and international projects, including:

- the Phenoclim project, a program studying and observing mountain climates
- free workshops in mountain safety training on the Mont Blanc Massif, organized with the La Chamoniarde association and the Montagna Sicura foundation (Italy)
- the creation of a training center in Kakani, Nepal, with the Nepal Mountaineering Association
- the scientific study of ice floes in collaboration with the Laboratoire de Glaciologie et Géophysique de l'Environnement in Grenoble, and the Centre National de la Recherche Scientifique (CNRS)

Many other projects are being developed and set up around the world. To learn more about the Petzl Foundation and current projects: [www.petzl.com/fondation](http://www.petzl.com/fondation)



## In Peru with Pompiers Sans Frontière (Firefighters Without Borders)

In association with Pompiers Sans Frontière (PoSF), a project is underway that aims to help build the safety and rescue skills of the voluntary firefighters of the Peruvian Volunteer Firefighters Corps (PVFC). The PoSF has been active in Peru for many years in an assisting capacity. Their presence has helped to precisely identify the technical needs, both material and pedagogical, of their Peruvian counterparts. The objective of this project is to train the members of the PVFC in the practices of rescue in dangerous environments. To optimize this process, Pompiers Sans Frontière and the Petzl Foundation, in collaboration with the PVFC, have developed a three-part action plan:

- step 1: set up a training plan
- step 2: produce a technical manual
- step 3: build a training structure

### Training plan

This first step will be in the hands of the PoSF and the Petzl Foundation. It aims to train the PVFC instructors in advanced techniques. This first phase will also allow the Peruvian firefighters to put together a rescue kit that responds to their specific needs. It will also help to precisely define the content of the technical manual.

### Technical manual

This pedagogical document, written in Spanish and French, will be used as a technical reference. It will summarize all the techniques that apply to the PVFC teams.

### Training structure

The project includes the design and building of a tower for practicing maneuvers. This will allow standardization of techniques adapted to conditions that Peruvian firefighters encounter.

- The Peruvian Volunteer Firefighters Corps (PVFC):
  - Founded: 1860
  - 10,000 volunteer firefighters
  - More than 120,000 interventions per year throughout Peru
  - 181 fire halls
  - 50 high-level instructors
- Some numbers about Peru:
  - Population: 25 million
  - Area: 1,285,216 km<sup>2</sup> (2.5 times that of France)
  - Capital: Lima
  - Languages: Spanish, Quechua, Aymara
  - The country is divided into three zones: the "sierra" (mountains), the "selva" (tropical forest) and the "costa" (Pacific Coast, edge of the desert)

## Disclaimer

Take the time to fully understand the information presented in this catalog as well as the instructions for use that accompany the product. It is your responsibility to obtain adequate training in appropriate techniques and safety practices.

We have done everything possible to ensure that the information presented in this catalog is accurate at the time of publication.

However, we do not guarantee that this information is complete, accurate, understandable or up-to-date. PETZL reserves the right to modify the content of this information at any time. Contact PETZL if you have any doubts or difficulty understanding the information.



Interior printed on 100 % recycled paper, made up mostly of post-consumer waste. Using non-chlorine bleach, the production of this catalog respects the environment by reducing energy consumption, as well as air and water pollution.

Conception:  
**Petzl**  
**Laurent Gasmé**

Graphic design:  
**Yves Marchand**  
[m@rhand.net](mailto:m@rhand.net)

Products photos:  
**Kalice**  
[www.kalice.fr](http://www.kalice.fr)

Non contractual photos

Printed in France by **Fot**

© Petzl 2008  
Z13