singing rock®

PROFESSIONAL

Tech-Info **2020** | EN

Work at height
Workers at height are in permanent danger of falling from a height. That is why their safety should always come first. Worker's safety is achieved by using various methods for setting up a personal fall protection system. The structure of the fall protection system should always correspond with the type of activity considering high efficiency of work along with maximal possible safety.

Basic skills and knowledge of workers at height include:

Work restraint:
Technique of using PPE to prevent from motion to areas with the risk of fall: This technique enables workers at height to move freely to areas without the risk of fall, falling-through or collapse. Moving into higher-risk areas is restricted by appropriate PPE used.

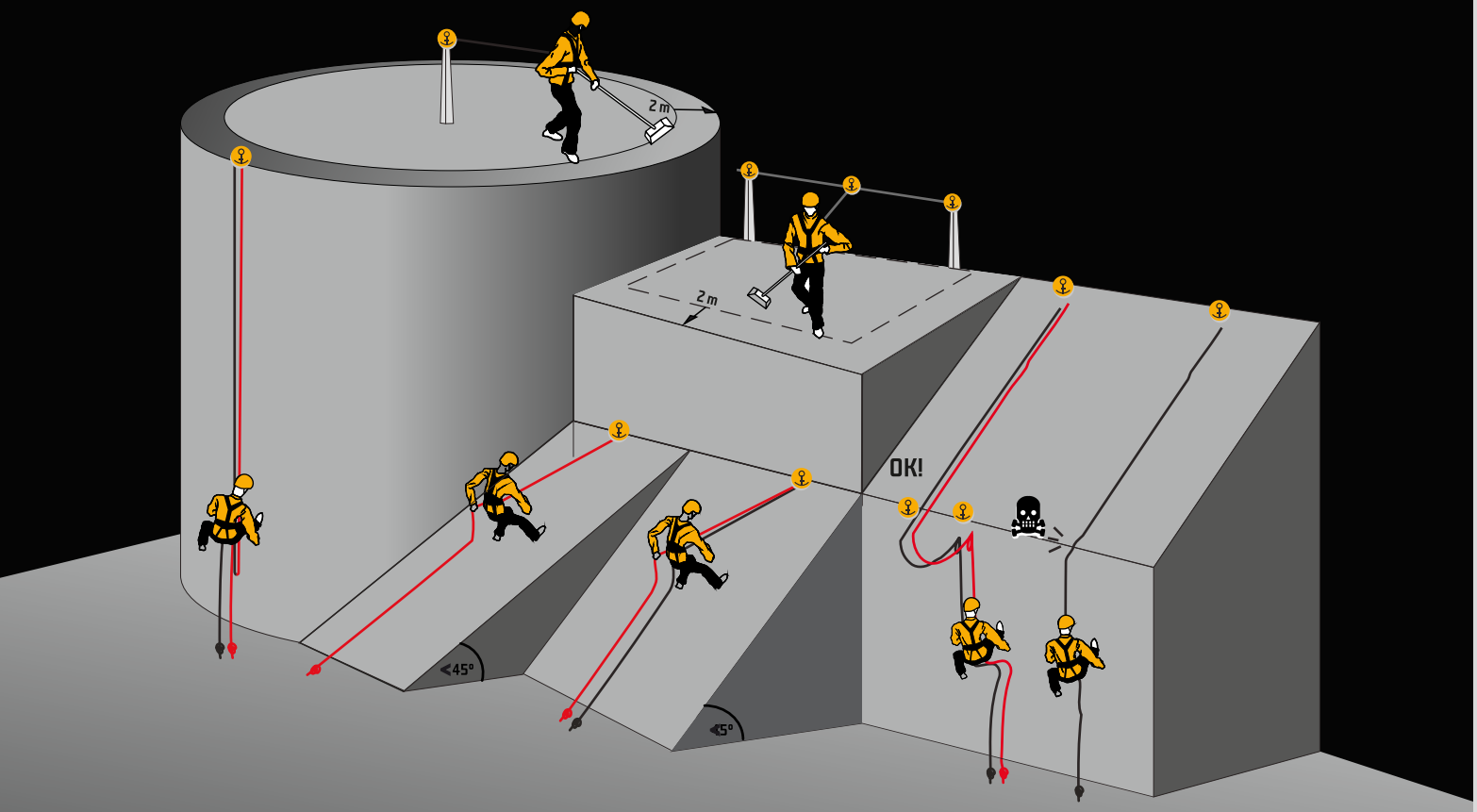
Work positioning:
Technique where the worker will be using the Personal Protective Equipment to access and process the work. This technique is based on the equipment which will protect a worker against any hazard from the workplace (fall from the heights). Choice of appropriate working position is essential for efficient working at height. It shall encourage the worker to concentrate on his job and thus it shall be safe,sure-footed and comfortable.

Fall arrest:
In case of risk of fall, even for a short period of time, it is necessary to take measures to avoid fall. Fall can be prevented or the impact force can be lowered to an acceptable level (6 kN) using a suitable fall absorber. Technique of using PPE to prevent from motion to areas with the risk of fall.

Rope access (part off work positioning)
Rope techniques place high demands on the skills and abilities of worker at height. The basis for safe handle of rope techniques is adequately selected PPE and proper training of worker at height.

SERVICE & ACTIVITIES

POLYGON TRAINING CENTRES
PAPER TRAIL PPE MANAGEMENT
SCAFOLDERS AND INDUSTRIAL HALLS
FRAMING AND ROOFING
FALL ARREST
ROPE ACCESS
LADDERS
TREE CARE
ROPE COURSES AND ADVENTURE PARKS
WIND TURBINES
CHAIR LIFT EVACUATION
MILITARY AND SPECIAL FORCES



POLYGONS

POLYGON
singing rock

SINGING ROCK is certified as IRATA training company.

SINGING ROCK is the first and so far the only company in the Czech Republic to become a member of the globally recognized association IRATA.

IRATA – Industrial Rope Access Trade Association – was founded in the UK in order to ensure a safe working environment for workers at height. In a quarter of century of its existence, IRATA has become a leading expert in the field of security in work at height, and in this field it is the only global association with many member organizations around the world.
Our operated IRATA courses therefore provide, in conjunction with our certificated POLYGON training centers, a unique opportunity to obtain the best possible qualification for work at height and above depth. After successful completion of the training the participant receives an IRATA certificate, which is valid around the world and which is required by some foreign entities as the only possible prerequisite to carry out work at height.

Over more than two decades on international markets, SINGING ROCK has become the world's leading manufacturer of Personal Protective Equipment (the "PPE"). In an effort to provide its customers with comprehensive services and solutions in the area of security of workers at height and above depth, SINGING ROCK was the first in the Czech Republic and former eastern Europe to build a completely unique multifunctional training center POLYGON.
POLYGON facilities create the ideal conditions for providing occupational health and safety (the "OHS") training for work at height and above depth, for testing PPE, for organizing industrial climbing contests and many other events associated with presentation and use of products and techniques related to this area. A number of specific simulations allow visitors to test safely proper techniques of safeguarding when working at height. All this under the direct supervision of experienced trainers while using complete equipment for these activities. With individual approach, high quality equipment and great emphasis on the practical part, our trainings in POLYGON became sought after among individuals and companies not only in the Czech Republic.

FISAT

Professional Organization for Rope-Assisted Work Techniques – FISAT e.V. is the professional organization for everyone involved in trades involving the use of rope for rescue and work. On this site, we provide extensive information on professional rope access and climbing techniques, from safety guidelines and training to certification exams for rope access technicians. Our input in various panels and working groups benefits the continual further development of working techniques as well the constant improvement of safety in this field of work. SINGING ROCK is associated member of this organization a provides full service for everyone involved in work at height training.

FISAT MITGLIED

SINGING ROCK is a member of FISAT organization

Polygon Singing Rock training, Czech republic

LIST OF SINGING ROCK POLYGON TRAINING CENTERS

POLYGON Poniklá, Czech republic

Our first POLYGON is part of the SINGING ROCK headquarter and manufacturing factory in a picturesque valley of the Jizera river. It offers a number of model situations for work at height.
www.singingrock.com/polygon

POLYGON Kladno, Czech republic

located in the former premises of Poldi Kladno – Konev. The former manufacturing building offers a real industrial environment to practice work situation when working at heights.
www.singingrock.com/polygon

Polygon Partner Brno, Czech republic

Located in an industrial area in a former cement plant. Thanks to its height of more than 23m, it gives the opportunity to create a variety of model situations for work at height and rescue training.
www.klajda.cz/skoleni-prace-ve-vyskach-bozp

Polygon Partner Ostrava, Czech Republic

Training centre situated in the unique historical industrial site where for more than 150 years thousands of miners used to mine a black coal.
www.polygonhlubina.cz

Polygon Partner Karlovy Vary, Czech republic

Until recently, the Karlovy Vary region, situated in the west of the Czech Republic, didn´t have a proffesional training centre for work at height. It was changed in May 2019. Now, this new POLYGON parter offers high-quality services to all applicants from that part ouf our country.

Polygon Partner Lisbon, Portugal,

This training center has the perfect conditions to provide all trainings for work at height including rope access, fall arrest, rescue and PPE inspection.
outprowork.com

CZECH REPUBLIC
Polygon:
Poniklá
Kladno
Karlovy Vary

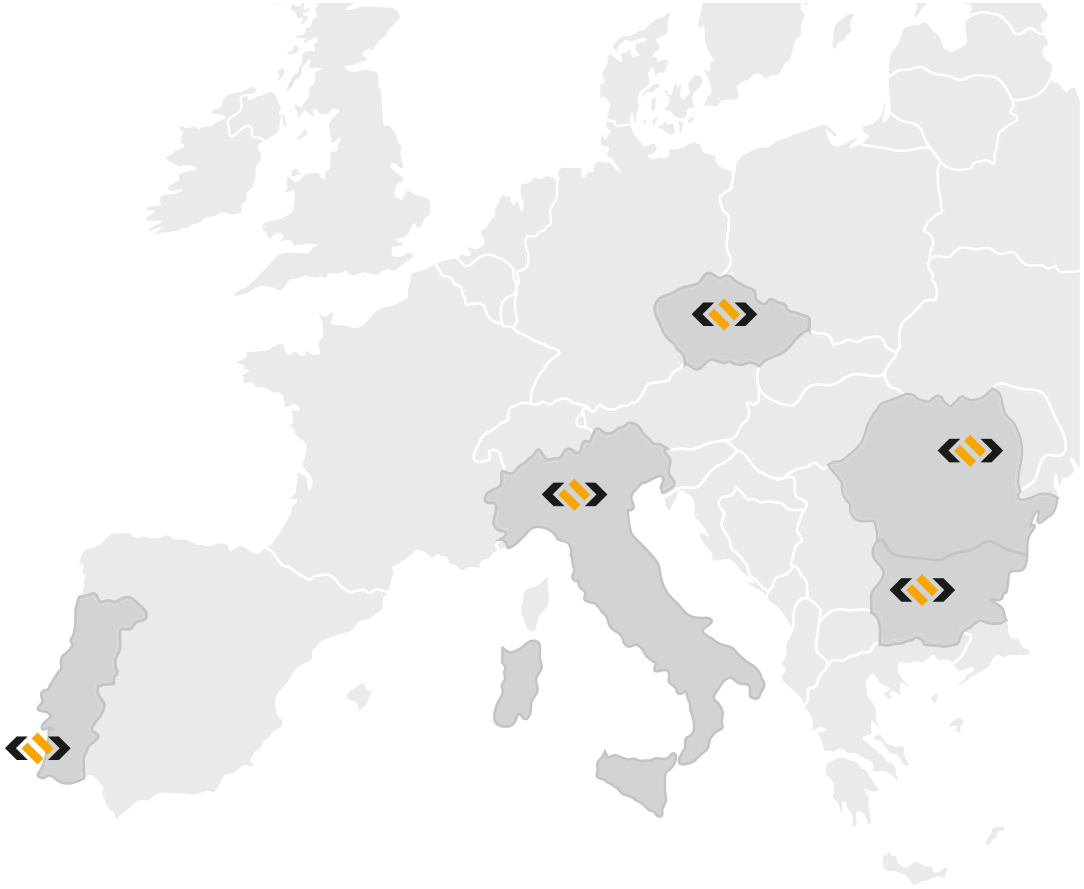
Polygon Partner:
Brno
Ostrava
Ústí nad Labem
Karlovy Vary

ITALY
Polygon Partner: **Milan**

ROMANIA
Polygon Partner: **Brasov**

BULGARIA
Polygon Partner: **Sofia**

PORTUGAL
Polygon Partner: **Lisboa**



Polygon Partner Milan, Italy

Training center dealing with Occupational Safety Prevention, dealing with 360 degree training for all figures identified by the Single Word „Health and Safety at Workplaces", ranging from general training on specific training such as high risk falls, confined spaces, work with rope access and positioning systems, assembly and dismantling scaffolding and use of work equipment.
www.mbtectum.it

Polygon Partner Brasov, Romania

This training centre is the first provider of training courses in work-at-height in the south -east of Europe. The centre is evolved through the volume of it's services, the number of technicians and most importantly through it's techniques in providing rope access services.
www.e-solo.ro

Polygon Partner Sofia, Bulgaria

Training centre situated in Sofia is operated by PROFIXT Ltd, IRATA # 6026/T which has been providing work at heights trainings and IRATA trainings for over 10 years in Bulgaria and has certified more than 400 industrial rope access technicians by the standards of the international system of IRATA.

WHAT IS IT?

Personal Protective Equipment (PPE) must be regularly inspected for safety and compliance purposes, but as the volume of equipment grows this can put a strain on administrative resources. At the same time, there is a growing need to be able to demonstrate Health and Safety (H&S) compliance in the event of an incident. Against this backdrop, large PPE users are finding that traditional, often paper-based methods of record management are insufficient for their needs.

If your job is to keep track of lots of equipment then you face an uphill struggle. And if you have equipment that needs to be tested or inspected on a regular basis, the job is even bigger. Try as you might, records get lost. Inspections are forgotten. Equipment goes missing.

Wouldn't it be easier if you could store all your equipment information in one place? Somewhere easy to get access, such as in the cloud? And easy to search, use and update? Available from desktop, tablet or smart phone. That's Papertrail, an all-in-one system for equipment management and maintenance records.

HOW DOES IT WORK?

Anything with a serial number, barcode or RFID tag can be tracked and the data sits securely in the cloud, where it can be made available to internal teams or customers, as required.

To register any product, you need to create a new record with a unique number and corresponding product information, initiate inspection frequency and instructions for inspections. The system will track all the changes during the lifetime and send automated reminders about upcoming inspections.

Singing Rock has uploaded to the cloud thousands of products with detailed information about:

- Name
- Category
- Description including colour, size and weight
- Photo
- EN conformity
- Product code
- Identifier
- Serial number
- Barcode number
- Date of manufacture
- Lifespan
- Inspection frequency
- User instructions
- Inspection instructions

Simply scan a Data Matrix Code from the label using any camera on your mobile phone, notebook or barcode reader or type a serial number to register, track and inspect our products.

WHAT ARE MY BENEFITS?

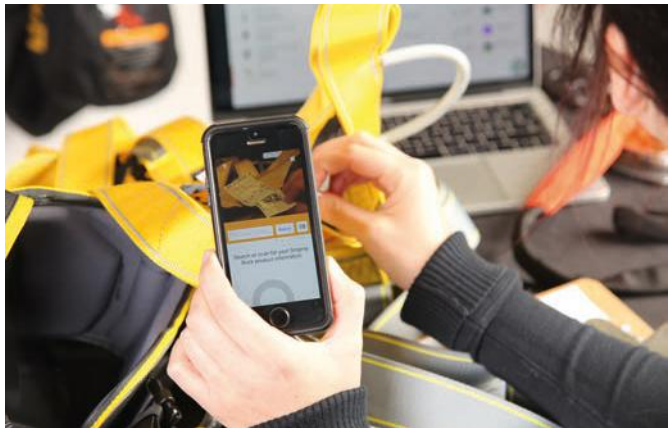
Being proactive is rarely easy with the systems that most companies currently use for PPE management. However., record keeping on commercially available spreadsheet software, such as Microsoft Excel, is still the norm, and in some cases smaller PPE asset holders may even keep their records on paper.

Paper-based records are hard to access and prone to loss and damage, while spreadsheet-based systems entail significant administration effort.

The Papertrail platform enables remote data entry to create a permanent, one-time, cloud-based record of each PPE item, which can then be updated at any time with inspection records posted on site via a mobile device. Each record is time-stamped and can be accessed instantly, from anywhere, allowing asset owners to call up relevant compliance information whenever and wherever needed. Features of a smart PPE management system include:

- Easy compliance with legal requirements for six-month or annual inspections and an up-to-date status of PPE which can be accessed via a dashboard, with records for each item and built-in reporting for major regulations.
- Compatibility with all iOS and Android mobile devices and the ability to set notifications to suit any given asset, making it easy to trigger follow-up actions such as repeat inspections or warranty checks.
- Optional customisable inspection schedules, status reports, certifications, export options, workflows, integrations, task management, check lists and care and maintenance schedules.
- Easy integration with equipment manufacturers and compatibility with any brand or component with a serial number, barcode or RFID tag.
- Implementation that does not require any additional hardware and gives you access to the data you need at any time, from the cloud.
- Customisable configuration and implementation, training, reporting, IT support and additional PPE inspection services.

Papertrail is integrated with Singing Rock inventory database so equipment data can be imported seamlessly and easily.



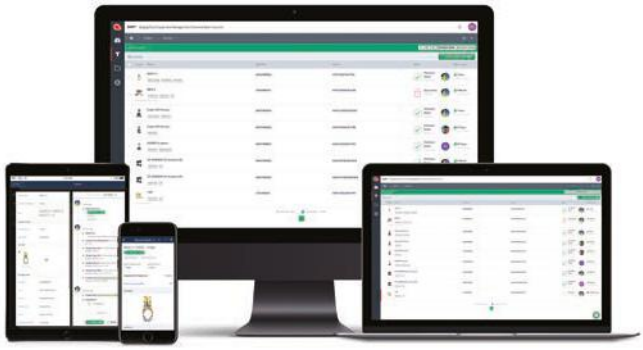
This integration allows equipment owners to create and maintain a 'digital certificate of ownership' that registers every significant point in the lifespan of an item, from purchase through to disposal. Such certificates could be invaluable in quality control, for example in helping prevent the sale of fake items or in giving reassurance to buyers of second-hand material.

- Save time and effort by filing equipment inspection records on the spot, and making them instantly available to your colleagues.
- Wave goodbye to paper records and spreadsheets, and let our software take care of your equipment record filing needs.
- View and update equipment records easily from wherever you are, using mobile devices such as handheld scanners.
- Show compliance at all times with a system that can prove when every single inspection was carried out.
- Never lose an equipment record by storing all updates securely in the cloud.

Companies adopting a smart PPE management system are expected to improve their ability to:

- Comply with the demands of professional bodies such as the Industrial Rope Access Trade Association and the Society of Professional Rope Access Technicians.
- Meet standards for UK Lifting Operations Lifting Equipment Regulations, Provision and Use of Work Equipment Regulations and other legal inspections.
- Cut compliance administration by scheduling automatic reminders for daily, weekly, monthly and annual inspections. Reduce risk for clients and workers by making sure they are not using faulty or out-of-date PPE.
- Prevent equipment supply bottlenecks by having a complete view of the status of all PPE stock.
- Extend the lifetime of PPE equipment by ensuring it is reviewed and repaired periodically.
- Show compliance at any time with a complete service history for each item of PPE.

Companies worldwide use Papertrail and your staff and customers can access the data they need at any time, from the cloud. Users of the Papertrail smart PPE management system have reported more than a 90% reduction in administration workload , along with reduced human error and increased equipment use.
If you are keen to improve your PPE management system the best way is to download Papertrail application, sign in for the account and simply administrate your PPE.



GET IT ON Google Play

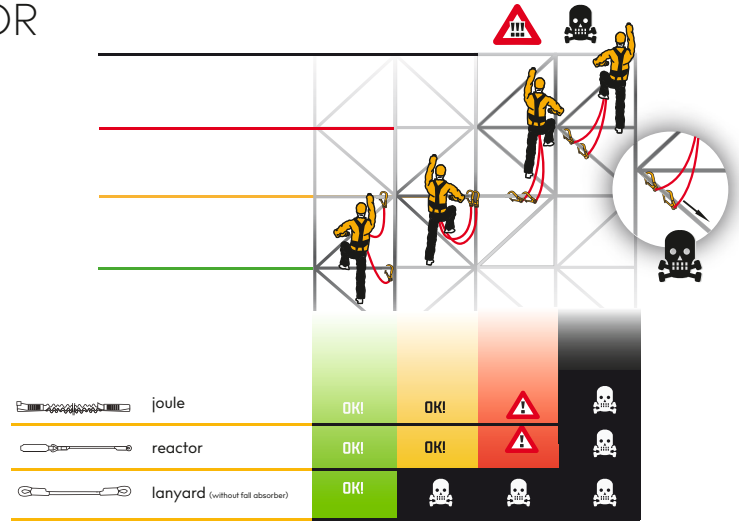
Available on the App Store

papertrail

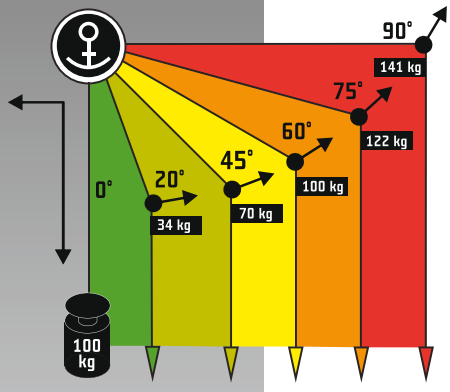
Record keeping made simple

basic skills

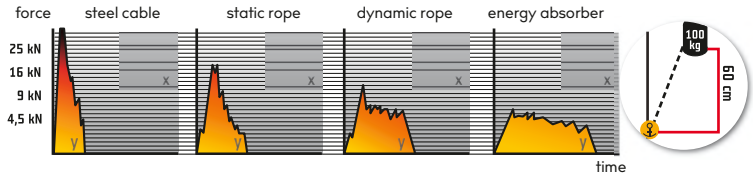
FALL FACTOR



When safeguarding an ascent using a fall arrest type „Y" it is necessary to move at the level FF1 and lower. It means that the connectors (EN362) connected to the fall absorber (EN355) during the ascent do not „fall" below the connection point of the harness (EN361) in which the absorber is connected to the harness.



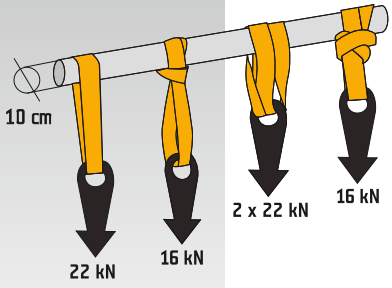
Load of continuous anchoring point. An example is creating a deviation using rope techniques.

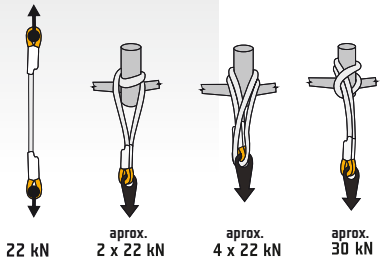


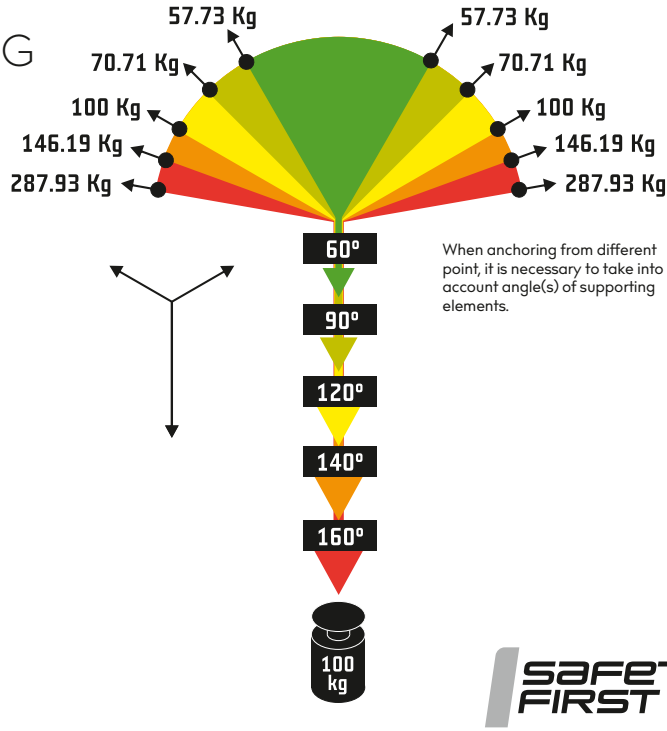
The impact force (IF) determines the maximum value of force generated during fall arrest of the object by the safety chain. The value of IP has a direct impact on the safety of worker at height. Ideally, we avoid IP if we reduce it to the lowest level possible (max 6kN)

Vy=Vx

ANCHORING





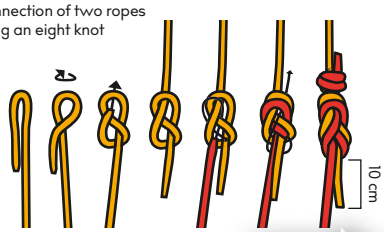


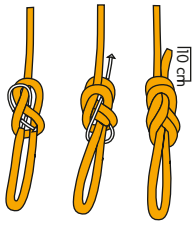
When anchoring from different point, it is necessary to take into account angle(s) of supporting elements.

SAFETY FIRST

Figure-Eight knot
Connection of two ropes using an eight knot
- Reduces the strength of rope in lab. conditions by approx. 46 %
- used to connect two roped of the same type and same diameter; connection of ends of a rope loop

Connection of two ropes using an eight knot



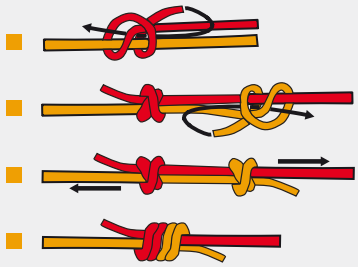


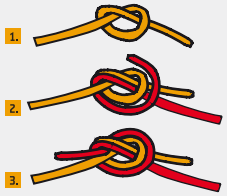
Due to the character of this knot is necessary to leave at least 10 cm long tail of the rope or is essential to tie a backup knot, double fisherman´s knot

Connection of ends of one rope loop

CONNECTING KNOTS

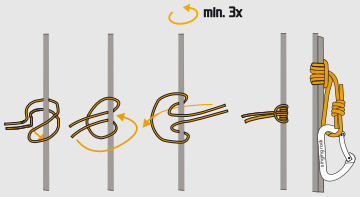
Double fisherman knot
Connection of two ropes using a double fisherman knot
- Reduces the strength of rope in lab. conditions by approx. 32 %
- connection of two ropes (rope loops) of different type or diameter



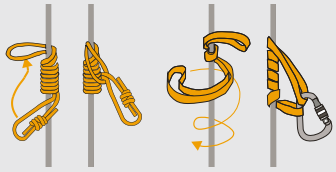


Overhand follow through
Used to join two ropes or slings together. When loaded it is harder to untie it.

FRICTION KNOTS

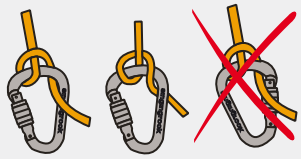


Prusik knot
Simple and the easiest friction knot. It works in both directions. Normally made from accessory cords 5-6 mm diameter. It is possible to make it with one hand only. Note: the joining knot must be kept away from the rope to prevent slippage.



Klemheist (Machard) knot
Works very well, suitable also for flat slings, it´s possible to make it also from thicker diameter slings (up to 9mm).

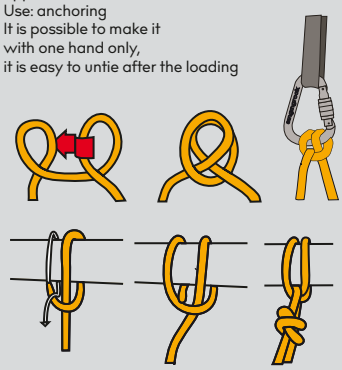
BELAY KNOT



Munter hitch
Knot used for belaying with HMS carabiner. There is no static friction on any part of the rope as it is a continuously moving knot. It is easy to tie even with one hand or with the gloves on the hands. The part of the rope going to belayer must not go through the gate of the carabiner.

ANCHORING KNOTS

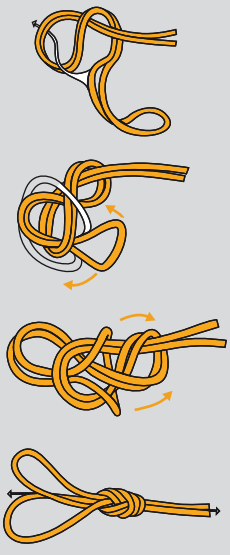
Clove hitch
Reduces the strength of rope in lab. conditions by approx. 12 %
Use: anchoring
It is possible to make it with one hand only, it is easy to untie after the loading



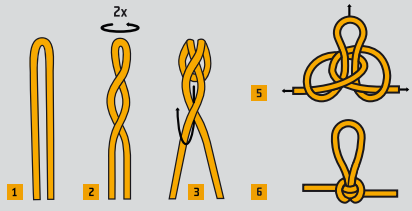
Due to the character of this knot is essential to tie a backup knot, double fisherman's knot.

Double figure eight loop
(Bunny Ears)
Very useful for equalizing the load on two anchor points.

Lanyard with a whipped loop
Using lanyard with a loop is the best possible method of eliminating the possibility of erroneous tying of a knot during anchoring.

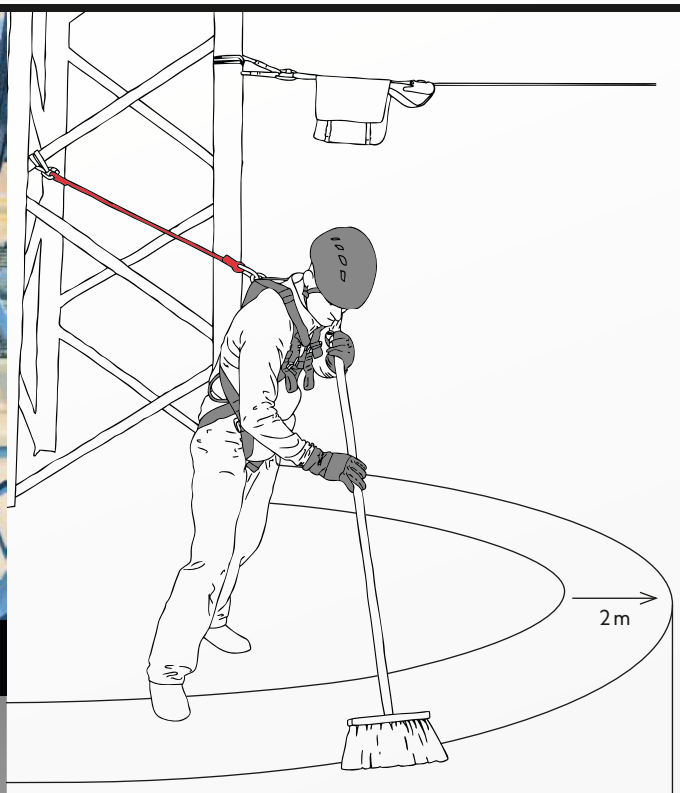


Alpine butterfly
Reduces the strength of rope in lab. conditions by approx. 39 %
Use: anchoring; anchoring from separate points, inter-anchoring.

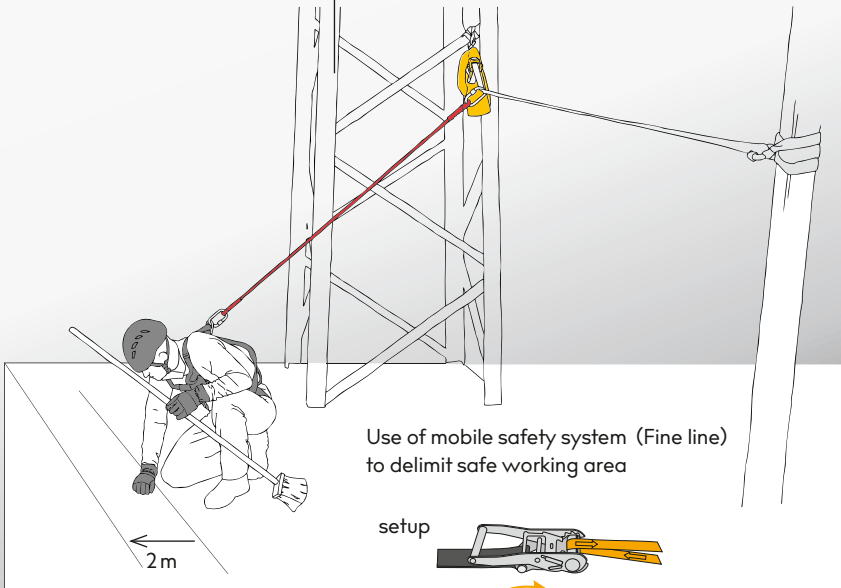


scafolders and industrial halls

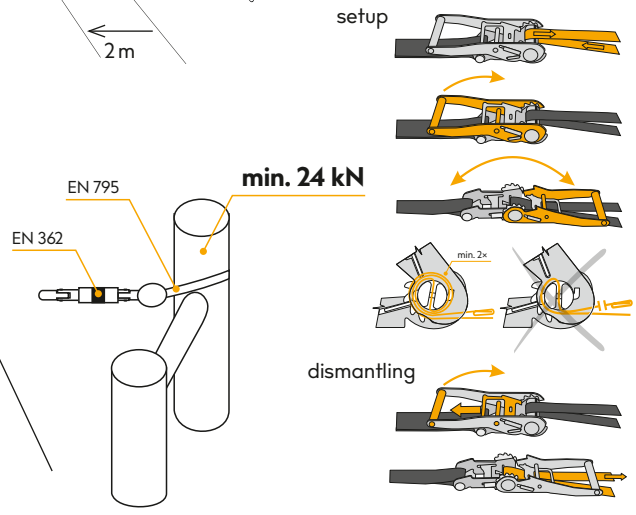
Many people are injured each year when they fall from scaffolders. Scaffolders should be erected by trained and competent people. There are a number of organisations that provide training for the safe use of scaffolders. A scaffolder is one way to prevent a fall when working at height. The type of scaffolder selected must be suitable for the work and erected and dismantled by people who have been trained and are competent to do so. Those using tower scaffolds should also be trained in the potential dangers and precautions required during use. Tower scaffold provision and use must be properly managed and include rigorous scaffold inspection arrangements.

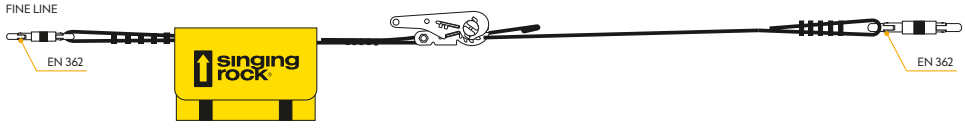


Delimitation of working area by restricting access to dangerous areas.

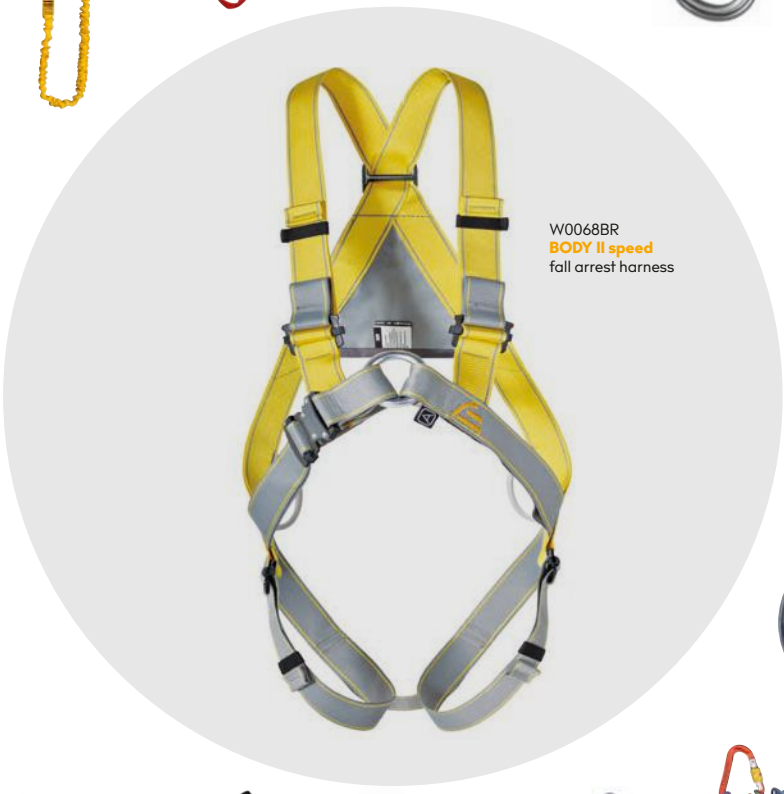


Use of mobile safety system (Fine line) to delimit safe working area





SAFETY FIRST



W2001
OPEN SLING
sewn sling, 120cm

W4100Y120
JOULE 120
the fall absorber
120 cm

W9601
FLASH INDUSTRY
working helmet

K4241Z005
OVAL STEEL CONNECTOR
srew

ADJUST
W1047Y10(
adjustable
lanyard

K0122EE05
OXY screw
light alloy
oval carabiner

W0068BR
BODY II speed
fall arrest harness

W1010BB09
LOCKER
guided type fall
arrester

RK850X100
STEEL LANYARD „I"
130 cm

K82310Z
MAILLON BOG D
steel maillon
carabiner

A4000S
IKAR HWS
Retractable fall
arrest system

L0041 – L0081
ACCESSORY CORD
6 mm, 20m

S9000BB50
GEAR BAG
waterproof bag

X0075XX14
BANTAM BEAMER

W1011WB02
SITE
work positioning
lanyard

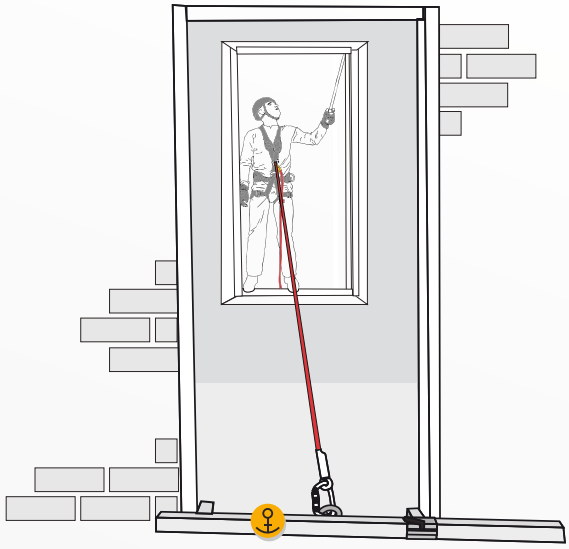
SCAFOLDER SET

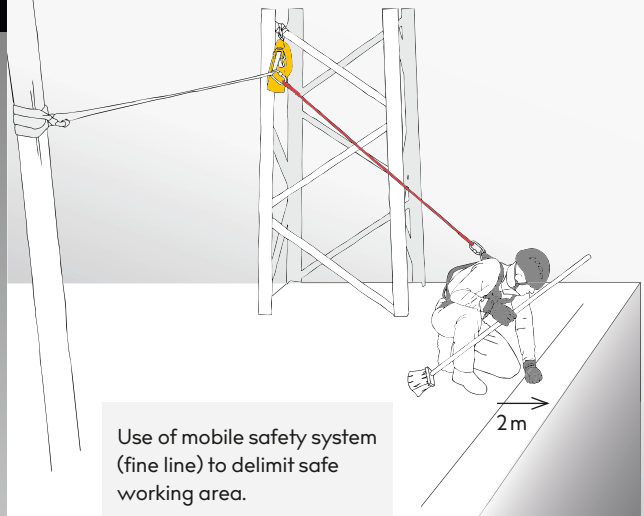
M0021XX
Scaffolder set is intended for those, who install scaffolds or work on tall structures and towers. It allows you to reach safely a place of work and position there for work.

framing and roofing

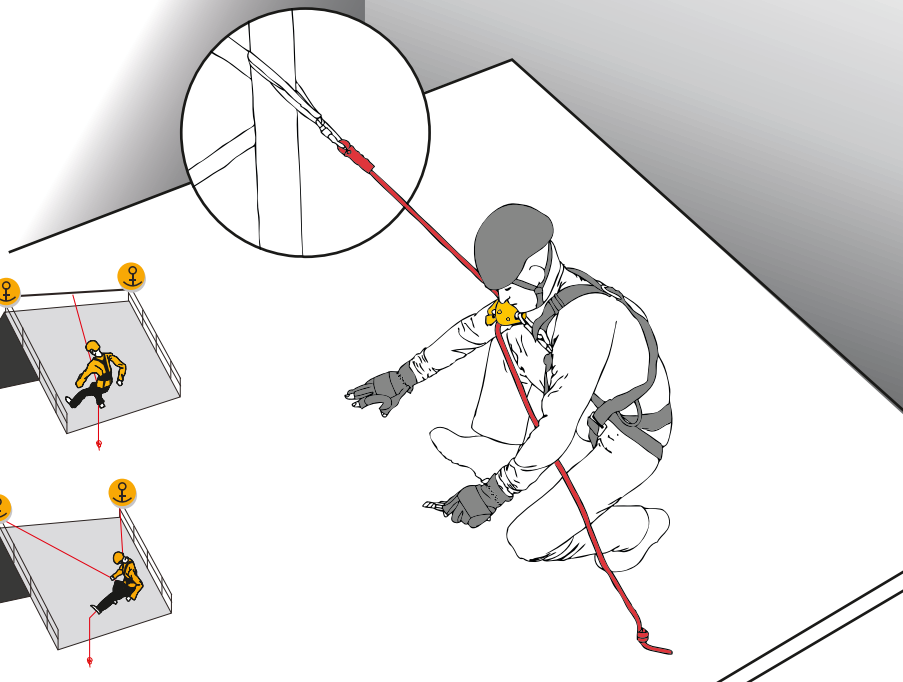
Any fall from a roof inevitably involves at least a serious injury. The risks are substantial, however long or short the work is. Getting on and off the roof is a major risk.
A secure means of entry and exit is essential.
A general access scaffold or tower scaffold (preferably of the stairway design) will provide suitable access.
A properly secured ladder is the minimum requirement.
Roof workers need the appropriate knowledge, skills, training and experience to work safely, or should be under the supervision of someone else who has it.
They need to be able to recognise the risks, understand the appropriate systems of work and be competent in the skills to carry them out.
Workers need training and experience to achieve these competencies. It is not enough to hope that they will 'pick up safety on the job.

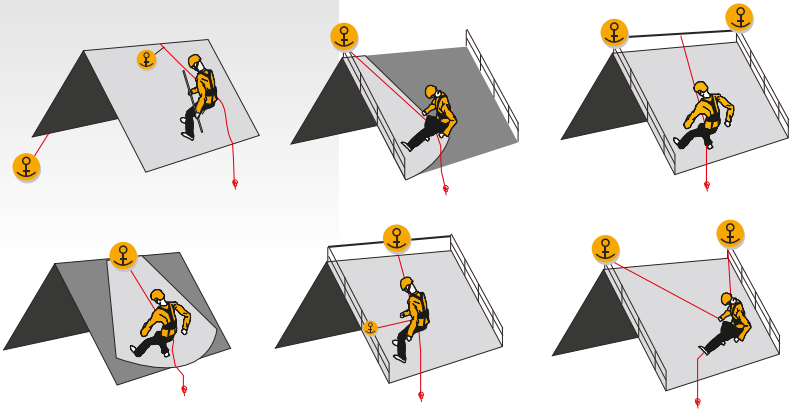
When moving on slopes, there is always the risk of fall-through or slip followed by a fall. To eliminate this risk, it is necessary to set up sufficiently strong anchor point and to use proper PPE. If there is no sufficiently strong anchor point, it is necessary to use more anchor points together. The anchorage must be placed above user to prevent him from fall. In case a fall is probable, it is necessary to incorporate a fall absorber into the safety chain. Pay attention to the horizontal distance from the vertical of the anchor point. The bigger it is the more dangerous possible fall will be.





Use of mobile safety system (fine line) to delimit safe working area.





W9603RX
FLASH ACCESS
working helmet

K4241Z005
OVAL STEEL CONNECTOR
srew

K0122EE07
OXY triplelock
light alloy oval carabiner

W8100B
ROPE PROTECTOR

W2016*080
SLING LANYARD
sewn sling

W0091BY
ROOF MASTER
Lightweight and fully adjustable full body harness

K4241Z007
OVAL STEEL CONNECTOR
triplelock

W1010BB09
LOCKER
guided type fall arrester

W0008BS
TOOL BAG

C0012YB
FALCONER FULL

W1001WW10
FINE LINE
mobile anchoring system

W1001WS10
FINE LINE BAG
mobile anchoring system bag

L0250RR
Static 11.0
red

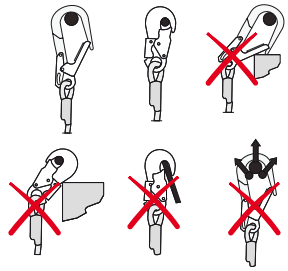
ROOFER SET

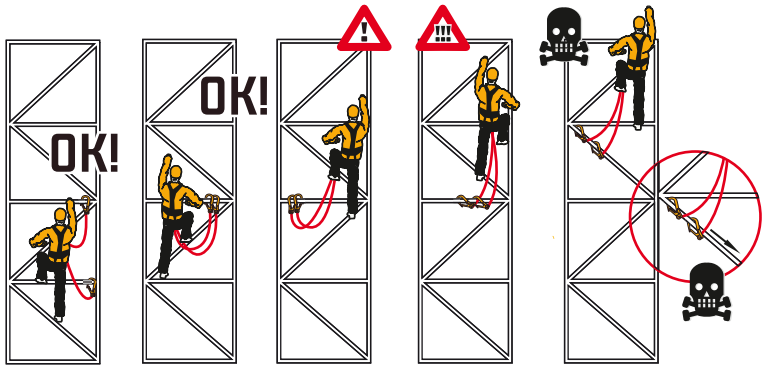
M0020X1 – Roofer set 10 m, M0020X2 – Roofer set 20 m
Roofer set 10 is ideal for those, who are fully devoted to roofing. It allows you to position yourself on a roof with up to 45° angle to prevent a possible fall due to slippage or breaking of a structure.

towers and rigging

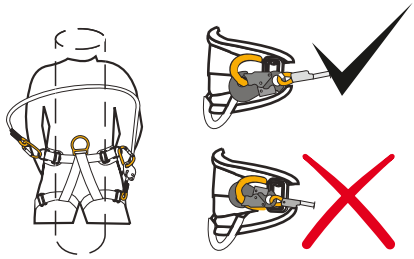
- Working on tall structures may involve fall arrest, work positioning, rope access and possibly evacuation.
- If no stable safety system is present and the structure needs to be climbed repeatedly a flexible fall arrest line may be required
- For climbing on the frame construction of metal towers fall absorber may be essential.
- Construction demands a full range of fall protection solutions to meet the needs of a dynamic workplace. That's why workers turn to SINGING ROCK for expertise, superior quality products and continual systems innovation.

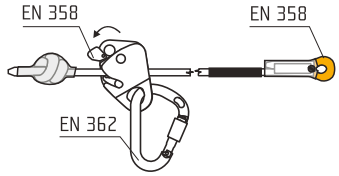
Some basic principles of using ropes and lanyards:
Keep your rope out of any sharp edges, rough surfaces and chemicals. Especially on slopes anticipate potential direction of fall and the strain of your rope. When working on constructions, pay attention to the direction of leading your rope and anticipate its possible strain. When using lanyards either to climb the construction or to positioning, take heed to reduce potential fall to minimum! Therefore always place the anchor point above the worker.



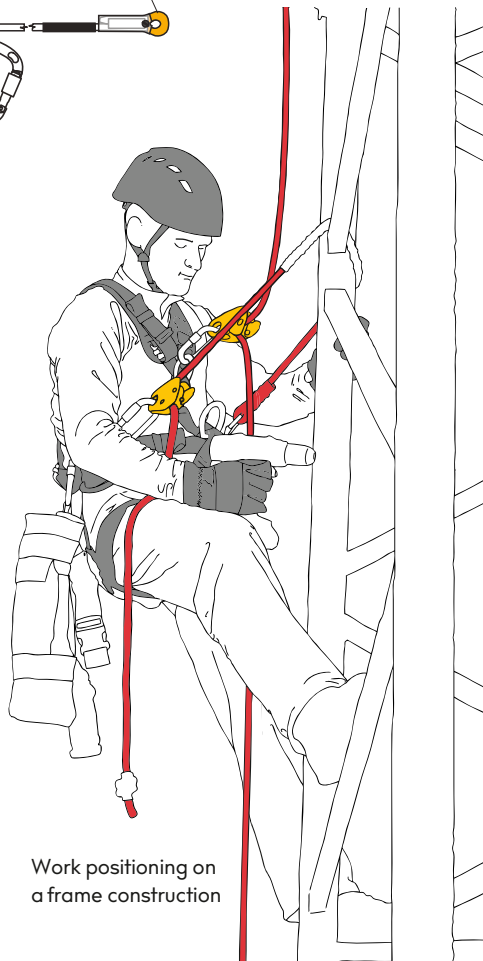


Ff = 0,5 Ff = 1 Ff = 1,5 Ff = 2 Ff > 2

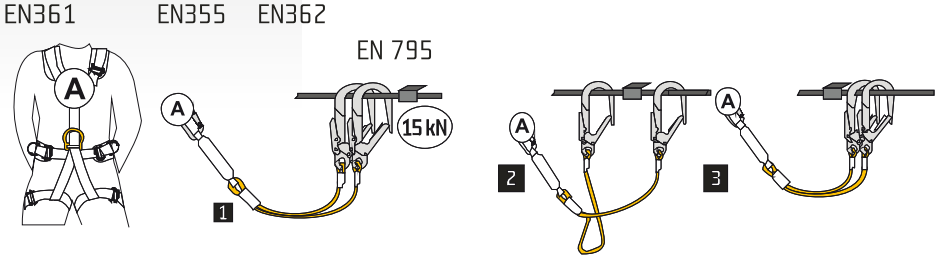




Fall absorbers:
When using a fall absorber, the elongation of the fall absorber during breaking action shall be considered. As there are different types of fall absorbers on the market, safe use of this product requires careful reading and understanding of instructions for use, where the method of calculation maximal possible elongation of fall absorber is stated. For your safety we recommend to add another 0.5 m to the calculated distance.



Work positioning on a frame construction



C006BH
GRIPPY
leather gloves

W1010BB09
LOCKER
guided type fall arrester

W9603RX
FLASH ACCESS
working helmet

K0122EE07
OXY triplelock
light alloy oval carabiner

W0081DR
PROFI WORKER 3D
standard
fully adjustable
fall arrest and
rope access harness

W2001
OPEN SLING
sewn sling

K4241Z005
OVAL STEEL CONNECTOR
triple lock

K9000BB03
PORTER
plastic holder

W2016*080
SLING LANYARD
sewn sling

W4400WW00
REACTOR 140
shock absorber

W1012WB
SITE + K370
work positioning lanyard

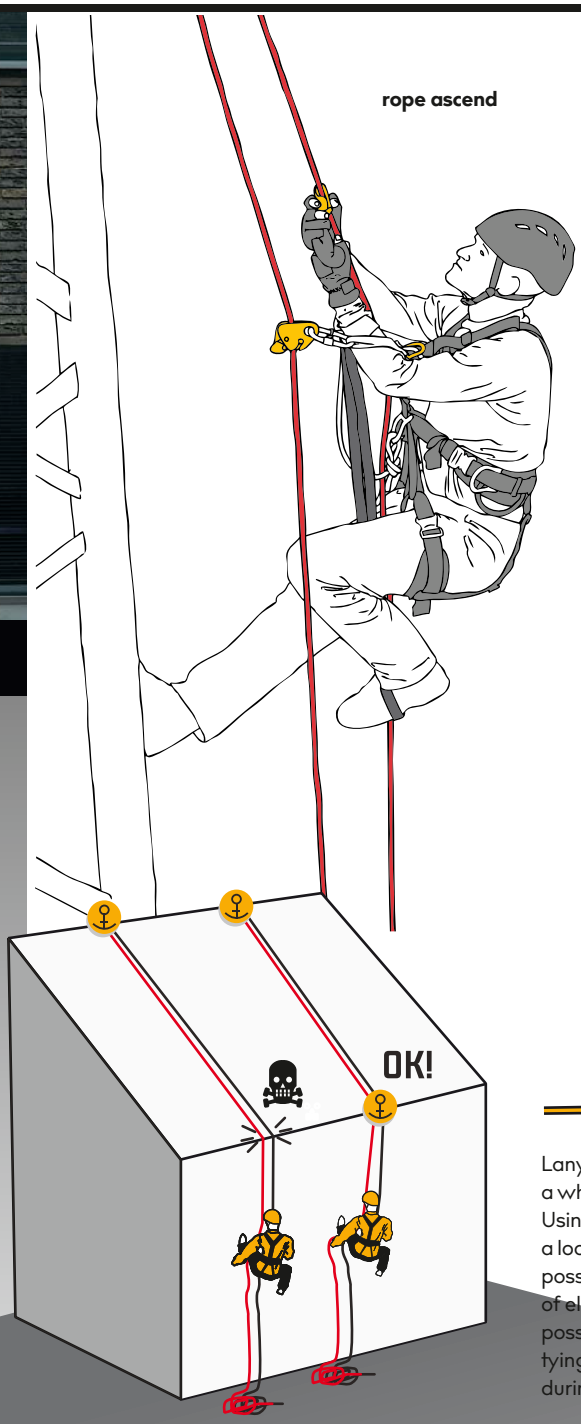
W0052B010
WORKING BAG
transport bag for working harness

rope access

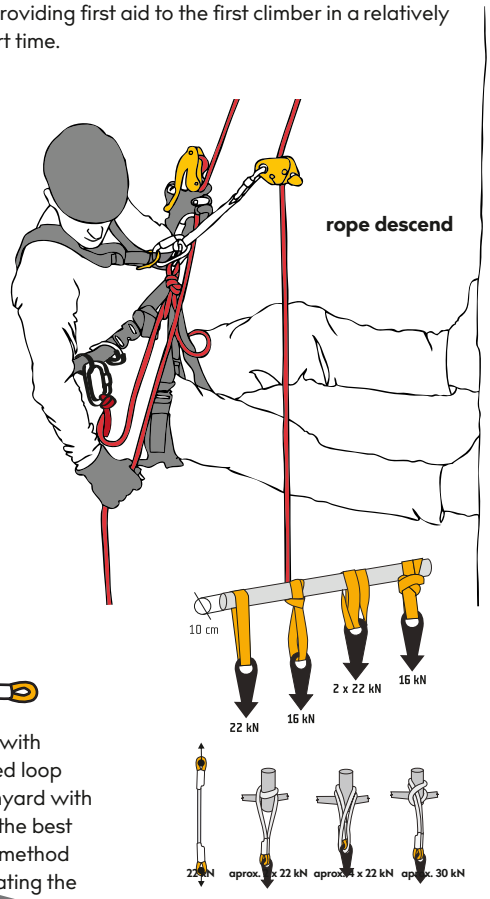
Rope access is called "royal discipline" in working at height activities. This working method is fast, effective, has little effect on the workplace and it is very quick to install nad dismantle. It is used for a wide variety of work: cleaning, painting, inspection and other working situations.

Where is rope access used?
There are five main areas in which rope access companies operate (and examples of the range of work carried out):

- Inspection and Testing Safety surveys
- Maintenance and Repair Sealant installation and reinstatement
- Cleaning and Painting Jet spray, grit blast and three-tool method
- Geotechnical (Civil Engineering) Permanent rock anchorage
- Construction Cladding



Rope-access techniques:
If reaching the working place using the rope from above, the risk of a worker falling is minimal. If it is necessary to ascend to use the working place, then it is necessary to set up sufficiently solid anchor points in proper distance, to make possible worker's fall was as short as possible. Work at height must be practised only by properly trained workers! When using climbing techniques the first climber is safeguarded indirectly. The locking device is incorporated in a sufficiently solid anchor point outside the body of the safe guarder. An advantage is the possibility of providing first aid to the first climber in a relatively short time.



Lanyard with a whipped loop
Using lanyard with a loop is the best possible method of eliminating the possibility of erroneous tying of a knot during anchoring.

Working position with a descender.

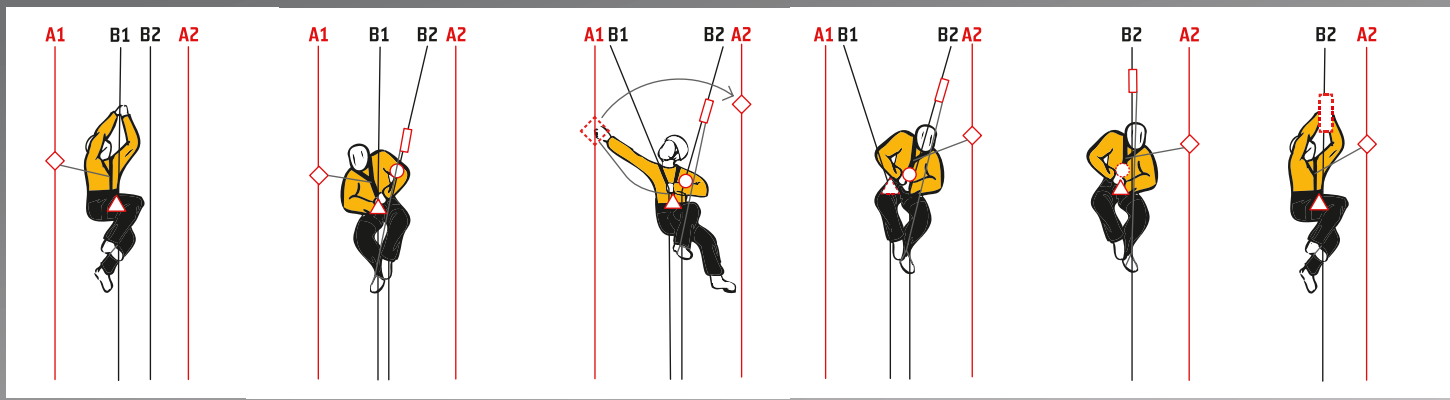
Place hand and chest ascenders.

Position body into the descender and ascenders, re-place the fall arrester.

Take of the descender.

Place descender and take off a chest ascender.

Take off a hand ascender.



Short rope-to-rope transfer:

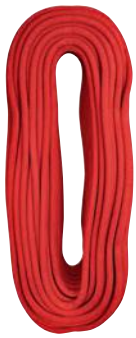
off belay | descender (SIR) | hand ascender (LIFT) | chest ascender (CAM CLEAN) | positioning sling in a knot (COW´S TAIL) | fall arrester (LOCKER)

L0450WG
STATIC
R44 11.0
static rope

W9603RX00
FLASH ACCESS
working helmet

RK804BX0R
LIFT
hand ascender

L0450RR
STATIC
R44 11.0
static rope

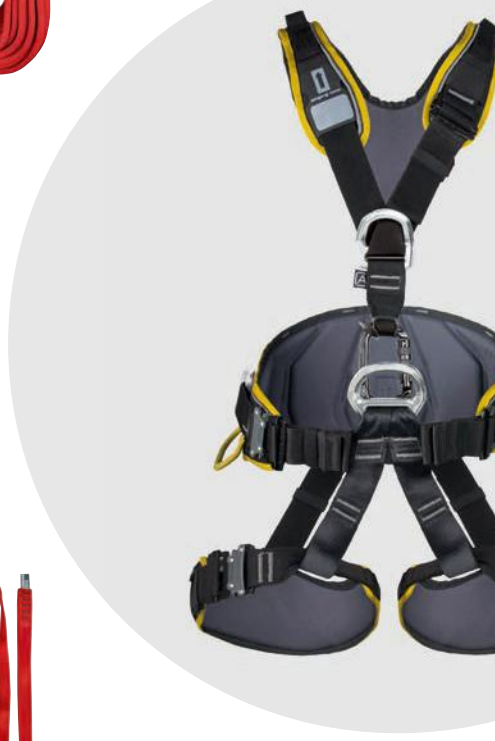


RK805BX00
CAM CLEAN
Chest ascender

K032SIR00
SIR
multipurpose device
for rope acces

W1010BB09
LOCKER
guided type fall arrester

W8100B
ROPE
PROTECTOR



W0079DR
EXPERT 3D
speed
fully adjustable
rope access
harness

W1015B020
LOCKER SLING
certified sling for the Locker

K00500S03
EDGE ROLLER
rope protector

K4241Z005
OVAL STEEL
CONNECTOR
triple lock

K0122EE07
OXY triplelock
light alloy oval
carabiner

W2001
OPEN SLING
sewn sling

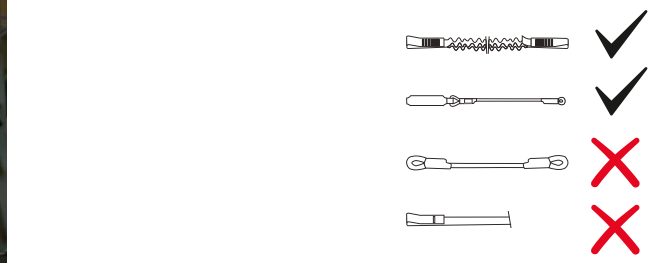
RK801EE00
PULLEY EXTRA
durable and lightweight
pulley

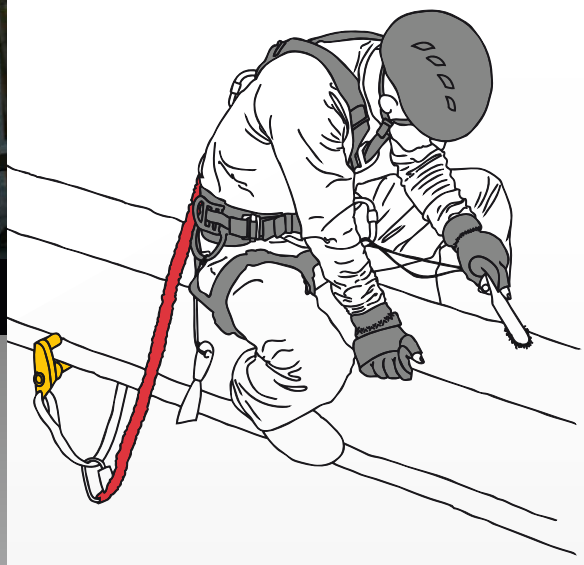
W0010YB
FRANKLIN
work positioning
seat

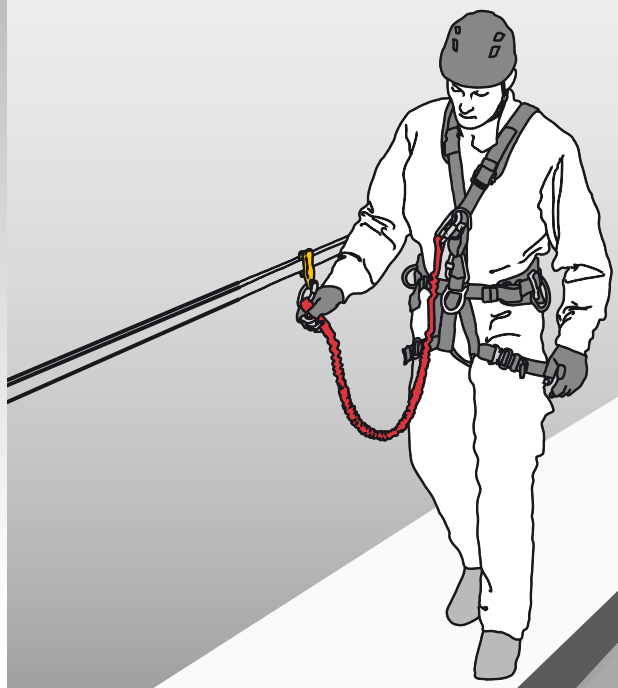
permanent lifelines

Permanent lifelines serve to secure workers in places where it is possible to set up fixed anchor point in the working place or near it. These are then interconnected by steel rope or a rail. For moving and securing, the worker uses connectors (EN 362) or special slider made for this purpose and supplied by the system manufacturer. The advantage of permanent lifelines is their long operating life and variability of use.

Fall arrest systems form an important element of the safety chain. When used correctly, they ensure sufficient absorption of fall energy, thus preventing the worker's body from being damaged. If the worker faints during or after fall, it is necessary to transport him to a safe place. The long hanging of unconscious body may have fatal consequences (trauma caused by hanging). Therefore keep in mind that fall arrest systems should be only used by trained workers. In case of need they should be able to aid each other at rescue and recovery action.







SAFETY FIRST

W9600
FLASH INDUSTRY
working helmet

W1010BB09
LOCKER
guided type fall arrester

W4100Y120
JOULE
energy absorber

K4241Z005
OVAL STEEL CONNECTOR
triple lock

W0063BB
TECHNIC standard
fully adjustable fall arrest and positioning harness

K0122EE07
OXY triplelock
light alloy oval carabiner

W1012WB
SITE + K370
work positioning lanyard

W0052B010
WORKING BAG
transport bag for working harness

W4462X085
REACTOR 140 ROPES „Y" 85 cm
shock absorber

X0075XX14
BANTAM BEAMER

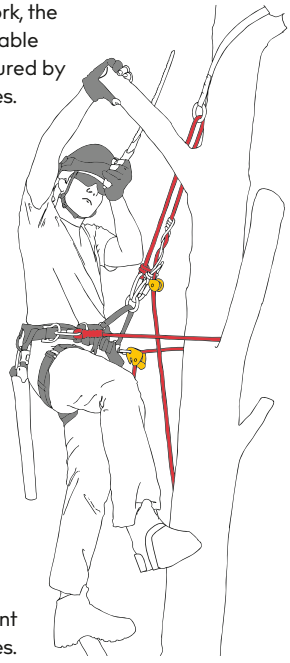
RK801EE00
PULLEY EXTRA
durable and lightweight pulley

W2016*080
SLING LANYARD
sewn sling

tree care

An arborist, arboriculturalist or tree surgeon is a professional in the practice of arboriculture, which is the management and maintenance of the trees. To move around freely and efficiently, arborists fasten a rope from the ground and then install a device for ascending the rope. Once the arborist is in position, he needs to remain balanced and feels comfortable for pruning, removal of dead branches, shaping of tree for structural, health and aesthetic purposes.

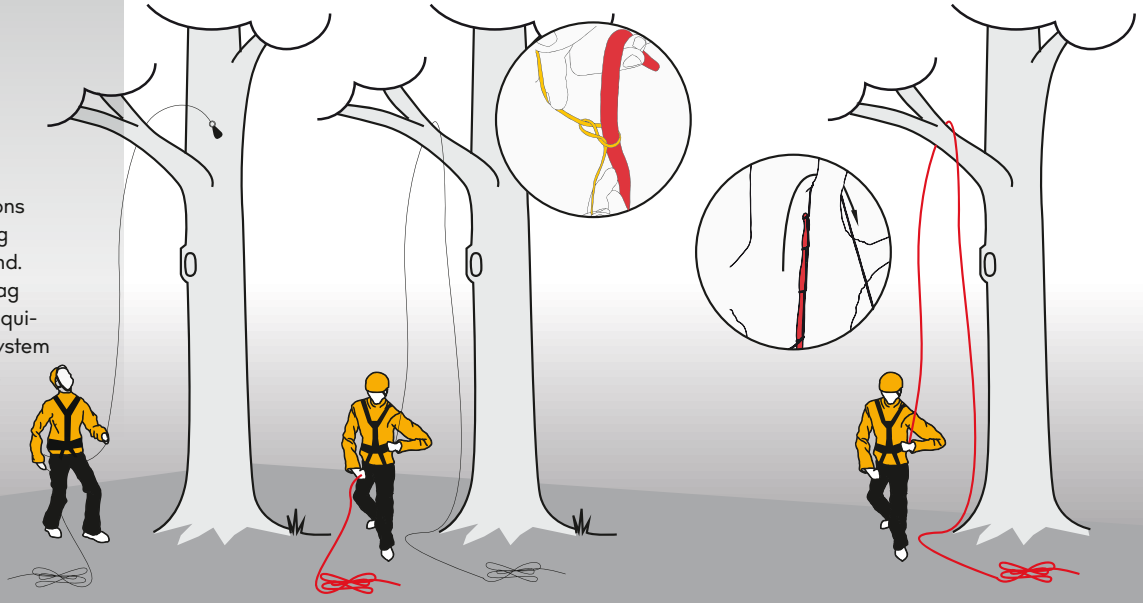
Arborist is an expert who looks after trees in public green areas with the intention to keep them healthy and in a state of operational safety. He proposes solutions for treatment based on arboristic knowledge while taki ng into acc ount the interests of nature and environment conservation as well as regulations affecting work safety. This profession is inherently connected with moving in the tree using rope techniques, where the arborist installed an ascent rope from the ground by throwing a bag. In t he tre e h e can the n choose a suitable anchor point where he places a cambium protector and then places his working rope into it. After reaching the working place and before starting the actual work, the arborist must be in a comfortable and safe position. This is ensured by adjustable positioning devices.



Prior to starting work, the arborist in the tree must always have two independent adjustable positioning devices.

There are several methods of how to use rope techniques to get from the ground into a tree. One method is using a footlock.

One of the most effective options of getting into the tree is setting up ascent ropes from the ground. It is done by throwing a light bag carrying a thin rope over the required anchor point. The ascent system is then pulled by this light rope.



W9602QX00
FLASH AERO
working helmet

RK804BX0R
LIFT
hand ascender

L045000
STATIC R44 11.0
static rope

K0122EE07
OXY triplelock
light alloy oval carabiner

K0119EE00
BORA triplelock
light alloy HMS carabiner

W1040R
JINGLE II
cambium saver

W0061DR
TIMBER 3D
work positioning harness for arborists

K032SIR00
SIR
multipurpose device for rope acces

W1028BY00
TOOL HOLDER

W2001
OPEN SLING
sewn sling

W9500Y
TREEMOUSE
arboristic throwing bag

W1024BX
FOOTER II
ascender webing

C0053RW
FIRS AID BAG
(without contents)

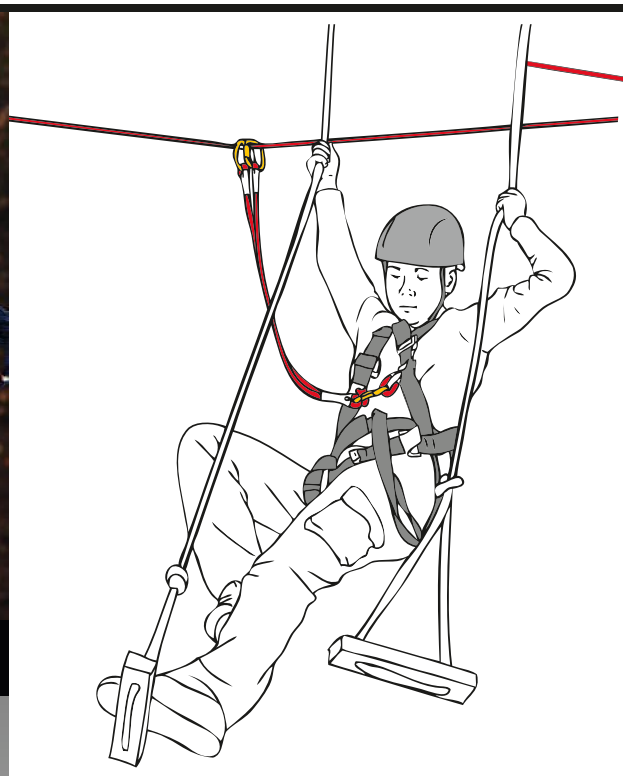
W2608
TIMBER ACCESSORY CORD
with sewn eyes

RK800EE00
PULLEY SMALL
durable and light weight pulley

C0001YY00
CARRY BAG
practical bag for a rope

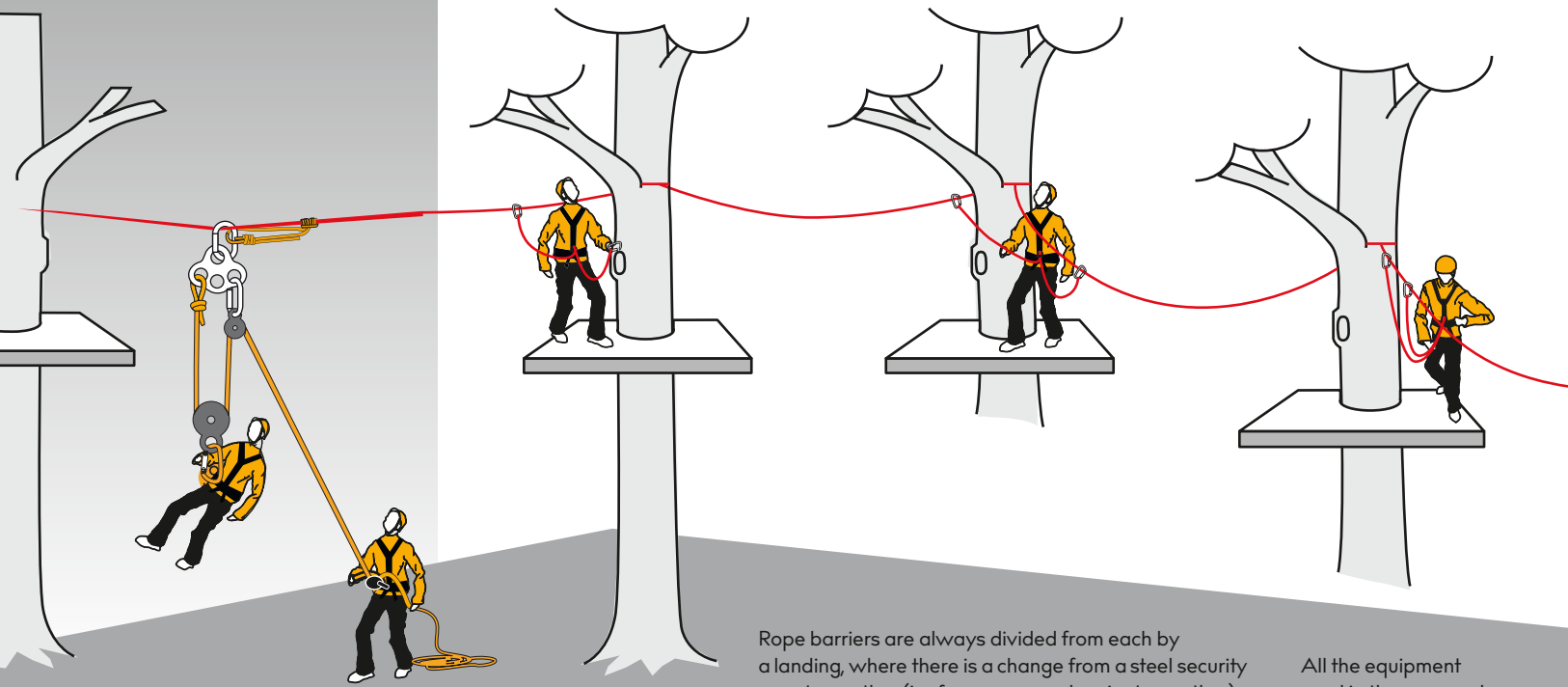
ropes courses and adventure parks

Complete range of the equipment intended for the rope courses and adventure parks. The safety equipment for each participant basically consists of a harness, a lanyard and a belay system. Sometimes helmets are also used.



Rope parks are a combination of working and sports climbing. It is a leisure-time activity mainly carried out by people who are gaining experience with climbing. This activity combines working as well as sports equipment. The person (client) is ideally dressed in a whole-body harness. To connect to the steel security rope there are two connectors and these are connected to the harness by a fabric loop. In addition, the client is equipped with a double pulley, which is connected to the harness fabric loop.

Funicular (fly-over crossing). Here the client must first attach a double pulley to the steel rope on which he slides over the distance given. Behind the pulley, he attaches the first and the second security loop with the connector. The whole weight of client is in the pulley. Security loops move freely behind the pulley.



Rope barriers are always divided from each by a landing, where there is a change from a steel security rope to another (i.e. from one rope barrier to another). The client always has to lock one security loop and the other security loop. It must never happen that both loops are disconnected from the security steel rope at the same time. It is the same system as securing via ferrata.

All the equipment used in the rope park must be checked every 12 months even if it is sports equipment.

W9600
FLASH INDUSTRY
working helmet

K0122EE07
OXY triplelock
light alloy oval carabiner

K82008Z
SMALL CONNECTOR
with automatic locking

W2200W100
LANYARD „I"

W0068BR
BODY II standard
fall arrest harness

K82008Z
MAILLON SMALL OVAL
steel maillon carabiner

RK803BB00
TANDEM PULLEY

C0012YB
FALCONER FULL

K4241Z007
OVAL STEEL CONNECTOR
triplelock

C0053RW
FIRS AID BAG
(without contents)

K9000BB03
PORTER
plastic holder

S9000YY35
GEAR BAG
waterproof bag

EVACUATION SET

K032SIR00
SIR
multipurpose device for rope acces

RK713BB00
RIGGING PLATE 1/3

K4241Z005
OVAL STEEL CONNECTOR
srew

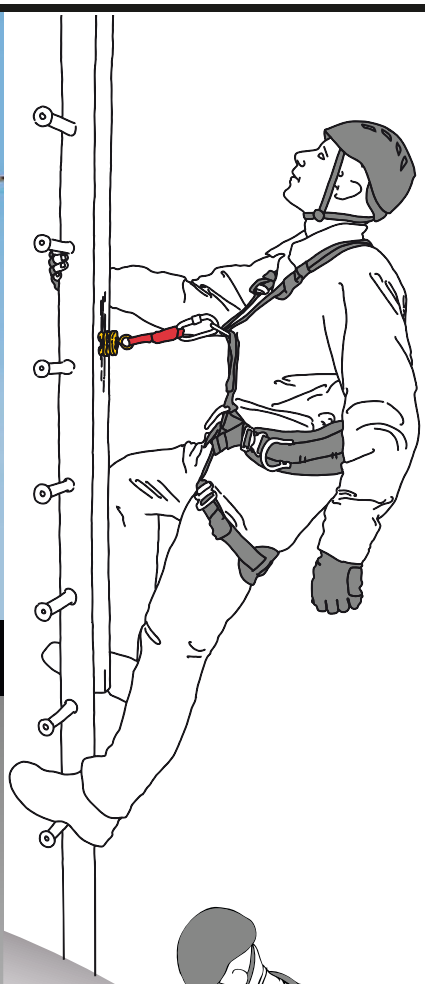
RK800EE00
PULLEY SMALL
durable and lightweight pulley

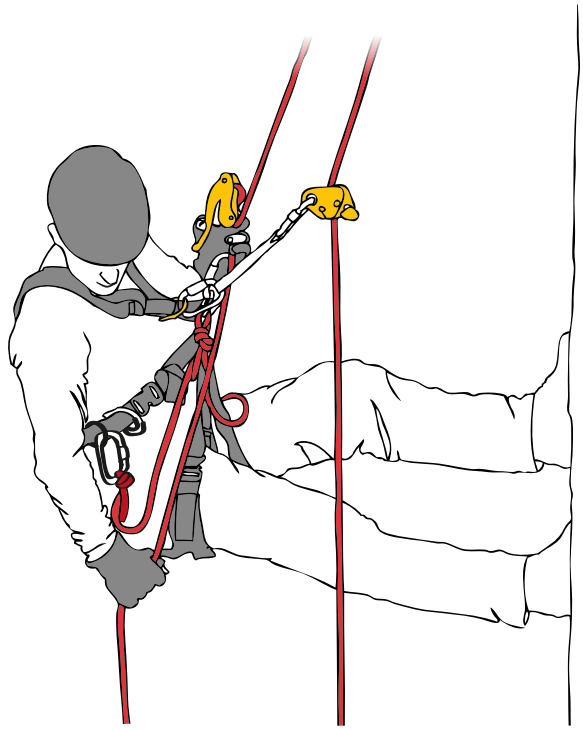
RK801EE00
PULLEY EXTRA
durable and lightweight pulley

K0122EE07
OXY triplelock
light alloy oval carabiner

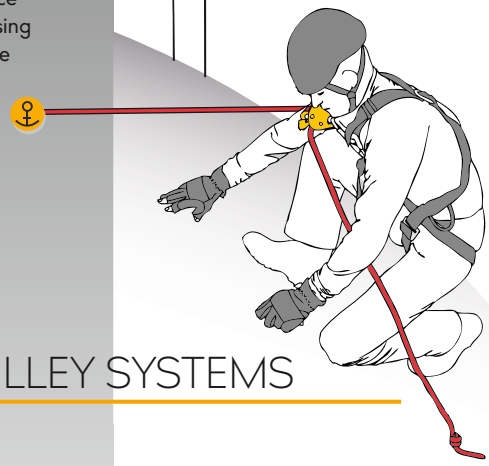
wind turbines

Work at height for wind turbine operators includes the elements of a safe system of work, equipment selection and inspection, use of tools, risk assessment, method statements and emergency procedures. Evacuation and rescue using industry standard equipment are practiced at height.

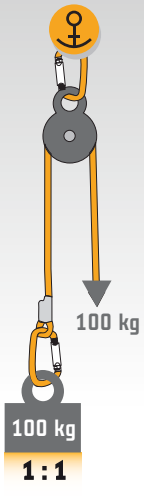


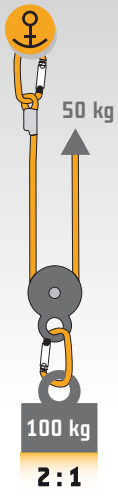


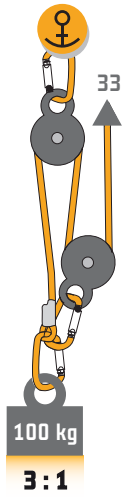
rope descend

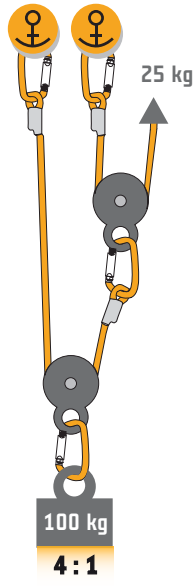


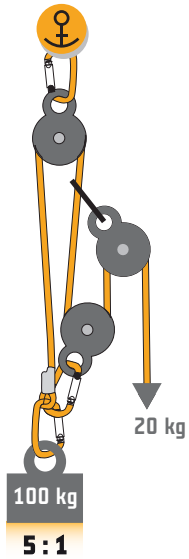
BASIC PULLEY SYSTEMS

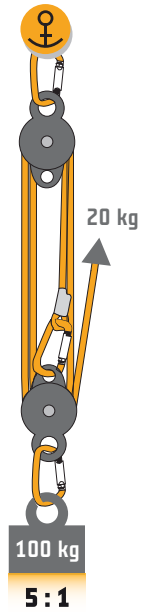


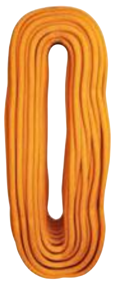




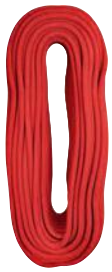








L045000
STATIC
R44 11.0
150 m
static rope



L0450RR
STATIC
R44 11.0
150 m
static rope

W9603QX
FLASH ACCESS
working helmet

RK804BX0R
LIFT
hand ascender

W1010BB09
LOCKER
guided type fall arrester

K032SIR00
SIR
multipurpose device for rope acces

K6400BB
CAM CLEAN
chest ascender

W0079DR
EXPERT 3D speed
fully adjustable rope access harness

W8100B
ROPE PROTECTOR

K4080ZO
D STEEL CONNECTOR
srew

W004*120
EYE SLING
sewn sling

K0119EE00
BORA
triplelock
light alloy
HMS carabiner

RK801EE00
PULLEY EXTRA
durable and lightweight pulley

W1024BX
FOOTER II
ascender webing

RK800EE00
PULLEY SMALL
durable and lightweight pulley

W4462X085
REACTOR 140 ROPES „Y“ 85 cm
shock absorber

W2300W150
LANYARD „I“

ACCESSORIES

K9000BB03
PORTER
accessory carabiner

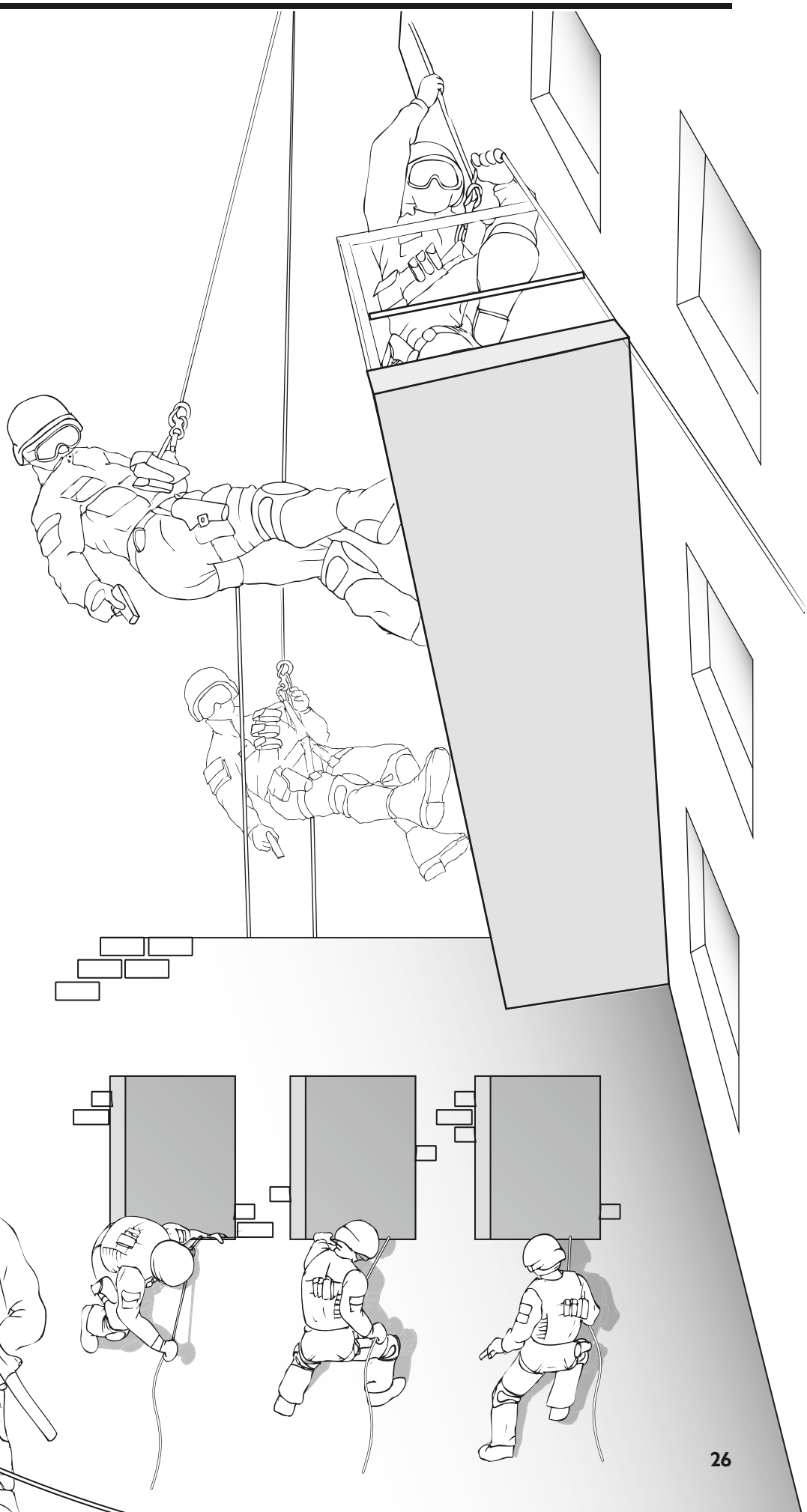
W0010YB
FRANKLIN
work positioning seat

S9000YY50
WORKING BAG
transport bag

C0046BB
TARP DUFFLE
expedition bag

military and special forces

Complete range of black textile and metal (matt) products, including ropes and lanyards. Special ropes with unique features. Easy use of equipment in the cruelest conditions you can image. Handling in gloves, manipulation in a dark and quick releasing are obvious.



X0033
FLASH INDUSTRY
work helmet

K0122BB06
OXY twist lock
light alloy
carabiner

K6180BB
RESCUE FIGURE EIGHT
special figure eight
for rescue

K6132BB
BUDDY
belay tube

L0230BB
STATIC 10,5
static rope

W0022BB
URBAN II
sit harness

W1010BB09
LOCKER
guided type fall
arrester

W1015B020
LOCKER SLING
certified sling for the
Locker

W004*120
EYE SLING
sewn sling

W8100B
ROPE PROTECTOR

W9601BB
SIR
multipurpose device
for rope acces

RK804BX0R
LIFT
hand ascender

W0005BB09
LAIKA
dog harness

ACCESSORIES

K9000BB03
PORTER
accessory carabiner

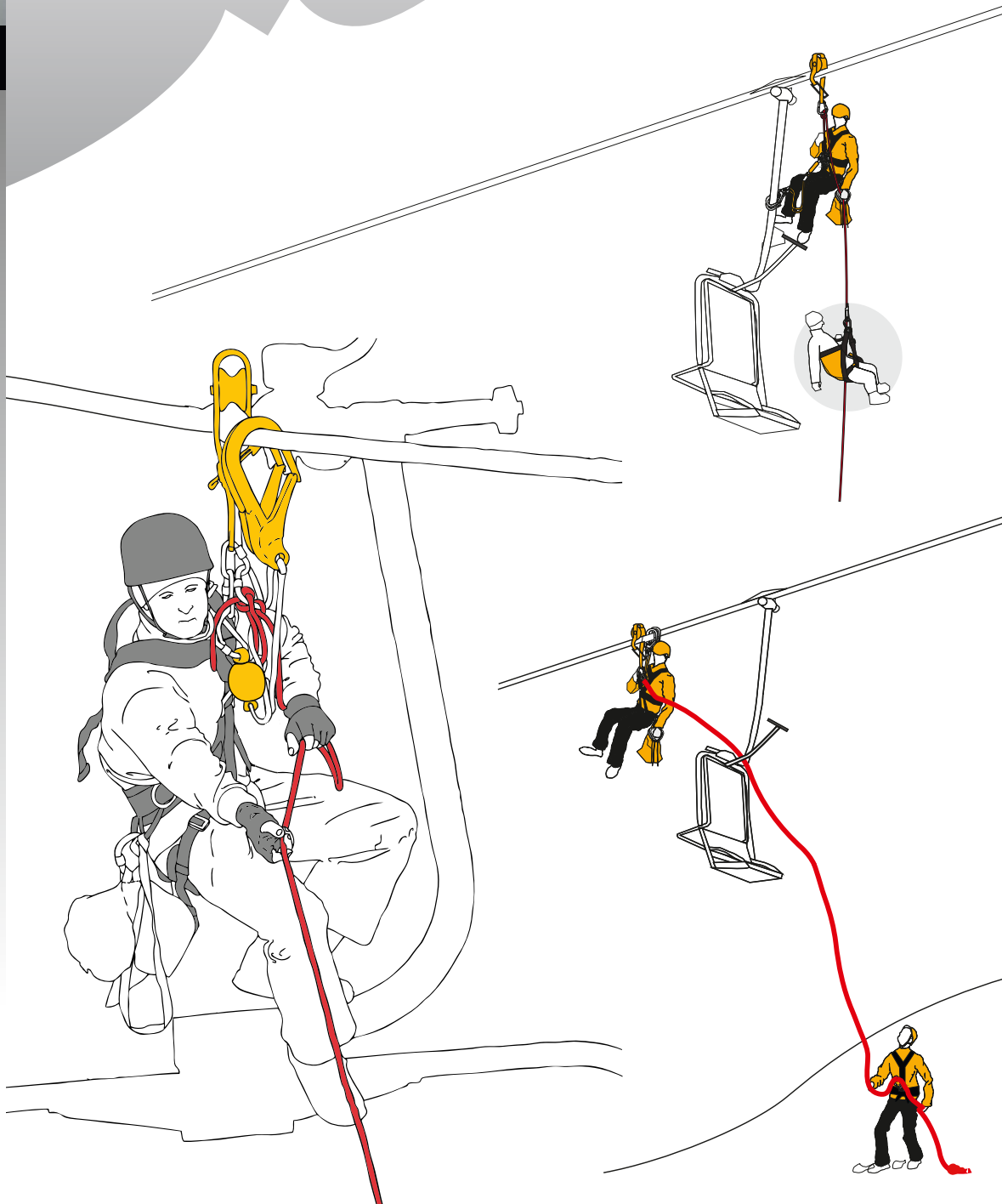
S9000BB35
WORKING BAG
waterproof bag

W1001BB
URNA
leg rope bag

chair lift evacuation

Ski lift or gondola evacuations utilize specialized rescue techniques and gear that must perform regardless of weather conditions.
The success of evacuation operations begins with having the proper ski lift or gondola evacuation gear then hinges upon the instruction, training and practice of the operating personnel.
If the ski lift equipment fails, the person in charge must evacuate passengers according to the evacuation plan. Evacuation of a ski lift requires pecific techniques for movement along a cable. For maximum efficiency, these operations are led simultaneously by several independent teams.
Evacuation is a team effort and requires perfect coordination by everyone involved. SINGING ROCK team cooperates with ski resorts all over Czech Republic to improve rescue methods and develop a new gear.

Rescue activities are unique in many ways when speaking about working at height and above depth. First of all it is an activity when people's lives are saved, therefore the rescuers must work fast, accurately and efficiently to keep themselves safe. That is why rescuers use the simplest methods possible. One of the activities is evacuation of persons from a funicular. Below is presented a complex system of funicular evacuation, prepared by Singing Rock in cooperation with the Czech Republic Mountain Rescue organization. Our experts will be happy to explain you everything necessary.



SAFETY FIRST

W9603RX00
FLASH ACCESS
working helmet

K0107EE00
BORA screw
light alloy
HMS carabiner

K4241Z005
OVAL STEEL CONNECTOR
srew

K355OPP
CONNECTOR GIGA

L0250RR
STATIC 11,0
static rope

W0079DR
Expert 3D speed
fully adjustable rope
access harness

K6180ZO
RESCUE FIGURE EIGHT
special figure eight
for rescue

W4400WW00
REACTOR 140
shock absorber

K82310Z
MAILLON BIG D
steel maillon carabiner

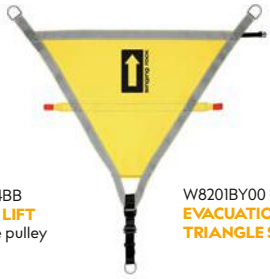
W0003BY09
AXILLAR
rescue sling

K82008Z
MAILLON SMALL OVAL
steel maillon carabiner

W2001*060
OPEN SLING
sewn sling, 60 cm

K0004BB
EASY LIFT
rescue pulley

W8201BY00
EVACUATION TRIANGLE SIT II



S9000YY50
WORKING BAG
waterproof bag

BELAYER

W8201BY00
EVACUATION TRIANGLE SIT II

L0250RR
STATIC 11,0
static rope

W9600
FLASH INDUSTRY
working helmet

K4241Z005
OVAL STEEL CONNECTOR
srew

K0107EE00
BORA screw
light alloy
HMS carabiner

K6180ZO
RESCUE FIGURE EIGHT
special figure eight
for rescue

Warning:
Activities at height such as climbing, via ferrata, caving, rappelling, ski-touring, rescue, work at height and exploration are dangerous activities, which may lead to severe injury or even death. Thus the following is essential before use: careful reading and understanding of the instructions for use acquaintance with the possibilities and limitations of the product adequate apprenticeship in appropriate techniques and methods of use understanding and acceptance of the risk involved. In case of doubt or problem of understanding, contact SINGING ROCK.

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