



High Protection. Best Performance.



## USER INSTRUCTION MANUAL

### SKYLOTEC GmbH

Im Bruch 11-15

56567 Neuwied · Germany

Fon +49-(0)2631-9680 -0

Fax +49-(0)2631-9680 -80

Mail [info@skylotec.de](mailto:info@skylotec.de)

Web [www.skylotec.de](http://www.skylotec.de)

### SKYLOTEC Australia Pty Ltd

Unit 1, 9-12 Altair Pl

South Penrith NSW 2750

Australia

Ph: 02 4721 3337

Fax: 02 4721 0599

**WARNING: THIS USER INSTRUCTION MANUAL DOES NOT REPLACE THE NEED FOR COMPETENCY BASED TRAINING TO BE CONDUCTED FOR THE USER OF THESE PRODUCTS.**

Use this manual as part of a formal training program with documented SAFE WORK PROCEDURES and directions from your OH&S Manager or Safety Consultant. These instructions must be provided to all users before use, and retained for ready reference by the user. The user must read, understand (or have explained) all instructions, labels, markings and warnings supplied with this product and with those products intended to be used in conjunction with them. Please also refer to the Australian, New Zealand standard AS/NZS 1891.4: 2009 for guidance on the selection, use and maintenance of height safety equipment.

The warranty period is 12 months and starts with the handover of the products to the customer at the place of fulfilment, at the latest with the delivery to the customer. If work performance, including work deliveries about non-fungibles, is the subject matter of the contract, the warranty period starts with the acceptance in terms of paragraph 640 BGB.

We take over the costs accruing for the purpose of mending (in particular transport, shipping, work, and material expenses). If these expenses are increased, because the objects were transported to another location than the delivery location of the customer after our delivery, he/she has to bear the additional costs, unless the transfer corresponds the intended use. If we decide for mending a defect, the customer has to enable the execution of work immediately and provide us with the objected goods for examination and processing.

Costs resulting from possibly unjustified claims are borne by the customer. These will be charged according to expense.

Should the rectification or replacement delivery fail, the customer is entitled to claim reduction of payment or withdraw from the contract without prejudice for possible claims for damages.

Warranty claims are excluded in case of only unsubstantial deviations from the agreed condition and only unsubstantial impairment of usability.

Unless determined otherwise in these sales and delivery conditions, further claims are excluded.

[www.skylotec.com](http://www.skylotec.com)

## References

- AS/NZS 1891.1: 2007 Safety belts & harnesses
- AS/NZS 1891.2: 2001 Horizontal lifeline & rail systems
- AS/NZS 1891.3: 1997 Fall Arrest Systems & Devices
- AS/NZS 1891.4: 2009 Selection, use & maintenance
- AS 2865: 2001 Safe Working in a confined space
- AS/NZS 4488 Series Industrial rope access systems
- AS 4142 Series Fibre ropes
- AS 1353 Series Flat synthetic - webbing slings
- AS 4497 Series Round slings – synthetic fibre
- AS 1666 Series Wire - rope slings

Also refer to the relevant fall protection or confined space literature published by the respective government workplace authority.

## WARRANTY

We give a warranty within the scope of the following regulations that the products delivered and services rendered are not subject to defects at the time of passage of risk of the delivery or service, which defects would eliminate or substantially reduce the value or suitability for the common use or the use assumed according to the contract.

If on passage of risk our services and deliveries are subject to defects, we will, at our discretion, mend without charge or re-deliver or re-render, respectively. Wear due to normal use and defects caused by improper use, improper handling, improper storage as well as non-compliance with the manufacturer, assembly or operating instructions, are excluded from the warranty. The warranty claim becomes void in case of improper handling by the customer as well as by third parties instructed by him/her.

Unless expressly agreed otherwise in writing, any details about our products, in particular figures, drawings, technical data and references to standards and specifications included in our offers and brochures, do not represent any guarantee for condition and/or durability in terms of paragraph 443, 276 BGB [German Civil Code], but are only descriptions or identifications. The same applies to the delivery of specimens and samples.

The customer must examine the goods immediately after delivery, even if specimens or samples were handed over in advance, and immediately inform us in writing about defects or quantity variance detected. Otherwise the goods are considered accepted, unless there are defects, which were not detectable during this examination.

## General safety requirements and recommendations:

- Only competent persons should use this equipment.
- Users should ensure that all inspection and service procedures are followed and that the equipment is in good order. AS/NZS 1891.4 (Selection Use and Maintenance) and SKYLOTEC recommend that inspection of our products is conducted before and after each use. Do not use the product if there is any doubt about its ability to perform as required.
- Connection to the harness must only be via the appropriate connection points i.e. where there is a risk of free fall, connection shall only be made to the connection point labelled 'Fall Arrest'.
- Users shall be connected to at least one fall-arrest system whenever they are at risk of a fall.
- Systems and equipment shall be used in such a way as to minimise as far practicable the fall distance, e.g. selecting shorter length Personal Energy Absorbers or by using an SRL. Total 'free fall' distance shall not exceed 2mt.
- Fit and use fall-arrest equipment in accordance with the manufacturer's instructions.
- Handle fall-arrest equipment carefully to ensure parts are not damaged.
- Equipment found to be defective should be tagged "Out of Service" and either repaired as per the manufacturer's instructions or destroyed.
- Fall-arrest systems shall only be used where adequate 'fall clearance' distance has been determined for that system to operate correctly.
- Equipment that has been exposed to a fall situation or 'loaded' shall be tagged "Out of Service" and referred to the manufacturer for inspection.
- All equipment shall be checked for correct assembly before placing any load on it. Place particular attention on ensuring clothing has not become entrapped in snap hooks or other connectors.
- After use the equipment shall be stored in a clean, dry environment and out of direct sunlight.

## Maintenance

SKYLOTEC equipment must be inspected prior to and after each use. Additionally its condition shall be recorded by a competent person every 6 months regardless of whether apparent deterioration is evident. A designated 'Height Safety Equipment Inspector' must maintain a record log of servicing & inspection dates for this equipment. (See AS/NZS 1891.4 for guidance on inspection cycles)

Cleaning may be conducted with SKYLOTEC 'SKYWASH' or Luke warm water with mild soap. Rinse parts in Luke warm water after cleaning. After cleaning & drying,



into the webbing fabric with a brush. Rinse off with clean water and wipe as dry as possible with a clean cloth.

Following cleaning, the equipment should be left to dry thoroughly hanging freely in a position where it will not be exposed to excessive heat or steam.

**STORAGE:**

Harnesses and Personal Energy Absorbers need to be stored in a clean, cool, dry area free of chemical fumes or corrosive elements. Never store in areas where there is direct sunlight. Preferably, equipment should, when not required for use, be kept in properly designed cabinets which permit ventilation. In making provision for storage, it should be kept in mind that no part of the equipment be subjected to unnecessary strain, pressure, excessive heat or humidity. During storage, it should not be possible for the

equipment to come into contact with sharp implements, corrosives or other likely causes of damage.

**For particular and more specific information on selection and maintenance of equipment, consultation of AS/NZS 1891.4 should be undertaken.**

Owners Name:
Product Serial No.:
Date of Manufacture:
Remove from Service Date:

**INSPECTION RECORD CARD**

Note: If your inspection leads you to believe that a harness or lanyard has sustained a free fall, the equipment is to be removed from service and destroyed immediately. Each harness or lanyard found with faults is to be labelled with a 'withdraw from service tag'. The equipment is not to be used beyond this date.

If uncertain after inspection, withdraw the item from service. AS/NZS 1891.1 (2007) Section 6 states, equipment must not be used more than 10 years from the date of manufacture (the date of withdrawal and date of manufacture is clearly marked on every harness and lanyard assembly).

A competent person must examine all Harnesses, Personal Energy Absorbers, Spreader Bars and Pole Straps at least once every 6 months as instructed and record below. Fall Arrest Devices (SRLs) require a competent person to check at minimum every 3 months. The inspection interval for anchorages shall be 12 months.

**Restraint Technique.** A fall-arrest system that enables the user to adjust his Personal Energy Absorbing Lanyard to an approved Anchorage Connector so that he is free to access his work position but is restrained from reaching any potential fall area.

**Full-Body Harness.** An assembly of interconnected shoulder and leg straps, with or without a body belt, designed for attachment to a lanyard, pole strap or fall-arrest device for fall-arrest, confined space retrieval (with Spreader Bar) or work positioning purposes.

**Lower Body Harness.** An assembly of a body belt and leg loops. NOTE: It is not to be used in fall-arrest applications.

**Personal Energy Absorber.** A device or component used in conjunction with a harness which by design reduces the deceleration force imposed by a suddenly arrested fall to 6kN or less.

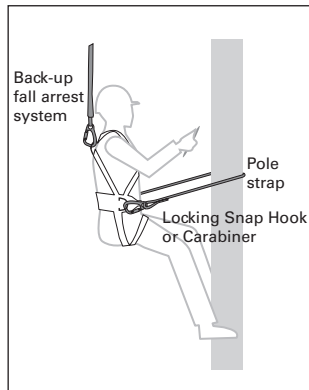
**Lanyard.** An assembly of a line and components which will enable a connection between a harness and an anchorage and which will absorb energy in the event of a fall.

**Pole Strap.** A work positioning strap designed to be placed around a pole or other vertical structure and attached at two points, one on each side of a harness whilst the worker is working on the structure.

**Fall-Arrest Device.** A self-locking device attached to a harness which either travels along or pays out an anchorage line e.g. A Self Retracting Lifeline or Horizontal or Vertical Lifeline.

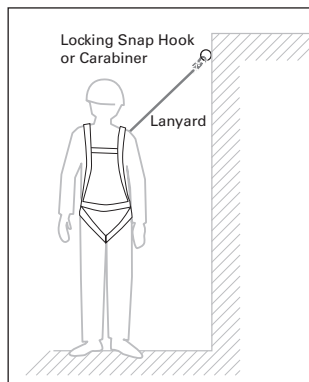
**Suspension.** A suspension system is designed to suspend the user whilst they are moving from location to location in a vertical application. It shall not allow for a free fall incident to occur.

**Competent Person.** Is defined as a person who has through a combination of training, qualification and experience, acquired knowledge and skills enabling that person to perform a specified task.



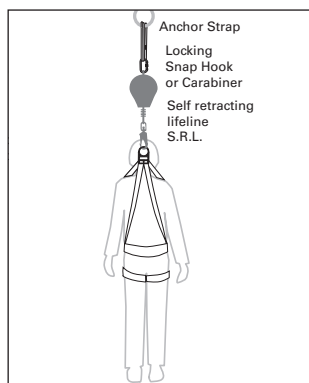
**Work Positioning:**

Is the use of a system that enables the user to work supported in a harness, under tension in such a way as to ensure that a fall will not occur.



**Restraint Technique:**

Is the control on a person's movement by use of a fall-arrest system, which entails connection to an anchorage using an adjustable lanyard or other adjustable component that can be adjusted for length as necessary to physically prevent the person from reaching a position at which there is a risk of a free or limited free fall.



**Fall Arrest:**

Is the fall or the arrest of a fall where the fall distance before the fall-arrest system begins to take any loading, is in excess of 600 mm either vertically or on a slope on which it is not possible to walk without the assistance of a handrail or hand line.

**WHAT TO LOOK FOR WHEN INSPECTING A HARNESS:**

Inspect all machine sewing's for broken stitches or worn threads – special attention should be given to the stitch patterns which retain load bearing components, e.g. hooks, 'D' rings, buckles and adjusters. Inspect all labels ensuring that they are legible and adequately secured.

**Inspect all metal components**

- Buckles – check for distortion, sharp edges, burrs, cracks or worn parts. If applicable, ensure moving parts function satisfactorily.
- 'D' Rings – check for distortion, sharp edges, burrs, cracks or worn parts.
- Snap Hooks – check snap action, ensuring the return spring is functioning correctly and that there is no sideways play on the latch in the closed position. Check for distortion, sharp edges, burrs, cracks or worn parts.
- Automatic Locking Hooks and Carabiners - check that the trigger opens fully and that it returns itself and automatically revolves the ferrule into the locked position. Check for distortion, sharp edges, burrs, cracks or worn parts. The automatic locking action can become impaired by the ingress of sand, dust, etc. Cleanse by soaking in paraffin. If the automatic locking action is clogged with mud soak in hot water to restore action to normal.
- Screwgate Carabiners – check snap action and that screw ferrule functions satisfactorily. Check for distortion, sharp edges, burrs, cracks or worn parts.

**FOR PLATED COMPONENTS, CHECK FOR BREAKDOWN IN PROTECTION AND SIGNS OF CORROSION. ANY HARNESS, OR PERSONAL ENERGY ABSORBERS WITH SUSPECTED FAULTS SHALL BE IMMEDIATELY WITHDRAWN FROM SERVICE AND, IF THE FAULT CANNOT BE RECTIFIED, MUST BE DESTROYED.**

**SERVICE:**

Remove from service and destroy all Harnesses, Pole Straps and Personal Energy Absorbers that are 10 years old from the date of manufacture.

**CLEANING:**

Harnesses, Personal Energy Absorbers and Anchor loops made from man-made fibres should be regularly cleaned. The frequency of cleaning depends upon the conditions in which they are being used but in any event, the period between cleanings should not exceed 3 months.

**INSTRUCTIONS FOR CLEANING:**

First wipe off all surface dirt, mud, dust, etc., with a damp sponge. Rinse out the sponge then, using SKYLOTEC Skywash or a mild solution of water and household detergent, thoroughly lather. Finish off by rinsing with clean water and wiping as dry as possible with a clean cloth. To remove heavy deposits of grease or creosote, use a diluted solution of heavy-duty detergent cleaner and water. Work the diluted liquid

- **ABRASION:**

Generally arises as a result of the rope being passed over a sharp edge whilst under tension. Usually damage manifests itself as broken fibres, yarns or strands. Any significant damage should be cause for the rope to be tagged out of service and destroyed.

- **CUTS, NICKS, ETC:**

Ropes found to have cuts, nicks, etc., are to be considered as potentially dangerous and are to be taken out of service immediately and destroyed.

- **CHEMICAL ATTACK:**

Usually indicated by a change in colour and local weakening or softening of the section affected so that surface fibres can be rubbed off as powder in extreme cases. If contamination is suspected, the rope must be taken out of service and destroyed.

- **HEAT:**

The following are signs that a rope has been subjected to extreme heat – charring, singeing or fusing of the fibres. If any of these are apparent, the rope must be tagged out of service and destroyed.

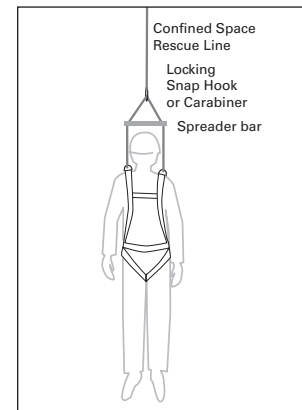
- **SUNLIGHT DAMAGE:**

Any textile products exposed to intense sunlight will be affected by ultra violet light. This is detectable by a pronounced fading of the dye colour. In extreme cases items affected must be taken out of service and destroyed.

- **OVERLOADING:**

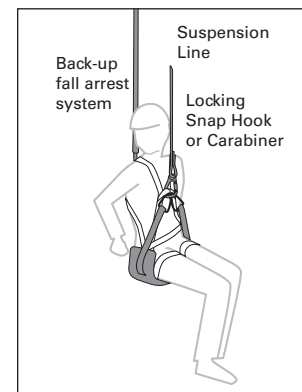
Ropes which have been subjected to heavy loads display the following characteristics; reduction in rope diameter, or after severe loading the rope will be unusually rigid. A rope showing any abnormal characteristics should be tagged out of service and destroyed. Inspection of ropes for the foregoing causes of deterioration should be carried out as follows:

1. Lay out Personal Energy Absorber along workbench.
2. Start at one end, working along to the opposite end, rotate the rope or Personal Energy Absorber slowly, checking the circumference for defects.
3. Check that rope end stitch patterns are sound and that ends are protected with a rubber or plastic sleeve.
4. Ensure thimbles are correctly seated and a tight fit.



**Rescue:**

Typically referred to as Confined Space Entry. It requires the use of an approved harness with a Spreader Bar attachment to provide a vertical lift. Also means the provision of a suitable rescue plan and products to enable a worker to be recovered from a fall as soon as practicably possible. You should not rely on external rescue authorities alone to recover a fallen worker.



**Suspension:**

Used primarily in 'rope access' work where a worker uses in combination two ropes attached to the front and rear attachment points on his harness and a Safety Seat or Bosuns Chair for more comfortable support.



## HARNESSES AND LANYARDS ARE CATEGORISED BY AS/NZS 1891.1: 2007 STANDARD AS FOLLOWS:

**FULL BODY HARNESS:** A full body harness comprises a single assembly of interconnected shoulder and leg straps which may incorporate a waist or other horizontal straps designed to increase the bearing area on the body and designed to prevent the user from falling out of the harness during a fall. It shall not be capable of being separated into two or more pieces. A full body harness shall be used in any situation where a free fall of more than 600mm is possible. It is also recommended for use in conjunction with a pole strap for pole or tower work provided the harness is fitted with the appropriate side attachment points.

Attachment points are provided on full body harnesses as follows;

- At least one centre front attachment point at the chest, waist or both.
- A rear attachment point at the dorsal but never at the rear waist level.

**The above points can all be used for fall-arrest.**

- Side attachment points at waist level may be provided exclusively for use in pairs for attachment of a pole strap. For this purpose the harness needs to have a waist belt or strap as part of the design.
- A harness designed for confined space entry is to include retrieval points at the shoulders to allow lifting in a manner that will have the user in a head-up position. For SKYLOTEC harnesses a spreader bar with wrist loops shall be used.

**Lower Body Harness:** A lower body harness is an assembly of an adjustable waist belt connected to a pair of leg loops by means of front straps and a sitting strap which passes under the pelvis area so as to support the buttock area in a sitting position. It should be used with a pole strap off the side 'D' rings or with a 300mm lanyard off the centre waist 'D' ring. Caution should be exercised when wearing a lower body harness as a user may slip out of the lower body harness if they are inverted.

**Lanyards:** The purpose of a lanyard is to connect a harness to an anchorage point. The lanyard is designed to limit the force on the harness attachment point during the arrest of a fall to 6kN. This is achieved in all SKYLOTEC lanyards by the use of a Personal Energy Absorber as part of the assembly. The assembly is made up of a lanyard, which may be in the form of synthetic fiber rope or webbing, or steel wire rope and a Personal Energy Absorber.

**SKYLOTEC lanyards are available in the following configurations:**

- Single-line lanyard – A single line of fixed or adjustable length with a personal energy absorber and various end anchor hardware options.

damage to the weave pattern shall be cause for rejection. Slight surface damage and the occasional torn yarn may be considered acceptable.

- CUTS, NICKS, BURNS ETC: These, if found anywhere on a harness or personal energy absorber, are to be considered as potentially dangerous and must lead to immediate tagging out of service and destruction of equipment.
- CHEMICAL ATTACK: Usually indicated by discolouration and local weakening or softening of the webbing. The surface fibres, in extreme circumstances, can be rubbed off as a powder. If found, tag out of service and destroy.
- HEAT: Webbing affected by heat become brown and brittle and in extreme cases, break when flexed. If found, tag out of service and destroy.

**INSPECTION OF WEBBINGS SHOULD BE CARRIED OUT AS FOLLOWS:**

1. Lay out product on work bench – major damage or wear will immediately be apparent.
2. For detailed inspection, take a section of the webbing and form an arch of approximately 100mm between your hands. With the outside of the webbing being raised, the resulting surface tension will highlight any broken fibres, stitches, cuts, etc.
3. Pass the webbing through your hands until the whole of the product has been visually inspected, It is a good idea to mark off the separate straps with chalk to indicate those inspected and to avoid the possibility of missing one out.

**INSPECTION OF MAN-MADE FIBRE ROPES:**

The following information details the principal causes of deterioration in man-made fibre ropes and indicates the signs by which they can be recognised.

**ABRASION WARNING:**

Attachment lines, Lanyards etc can be damaged and weakened by contact with sharp edges or abrasive surfaces. Always exercise care when working in situations where ropes could be maltreated.

• **EXTERNAL WEAR:**

Usually follows from the rope being dragged over rough surfaces and results in a general reduction of the cross section of the strands. In extreme cases, the strands become so worn that the yarns are severed on the outer side. In normal use, minor disarrangement or breakage of the outer fibres along the length of the rope is unavoidable. Provided it is not too extensive this may be considered acceptable.



- 6) Do not connect a snap hook directly into the end loops of the anchor loop. The snap hook can be connected to the end loops of the anchor sling by a carabiner. An approved connector, such as a carabiner or shackle, must be used in environments where temperatures exceed 194 F (90C ).
- 7) SKYLOTEC Anchor loops are to be designated and used solely for approved applications.

## INSPECTION OF HARNESSSES AND PERSONAL ENERGY ABSORBING LANYARDS

All SKYLOTEC Harnesses and Personal Energy Absorbers are made to comply with the exacting strength requirements of AS/NZS 1891.1: 2007 and only the highest quality materials are used in their manufacture. The manufacturing process is conducted under an ISO 9001 Quality System. To ensure these products are maintained in safe working order, the following procedures must be adhered to. Thoroughly inspect each item of equipment before and after each use for wear, deterioration or damage. As per AS/NZS 1891.4, the equipment shall be examined by a competent person, other than the user, and a record kept of this examination on an appropriate Inspection Record Card. See Inspection / Record Card at rear of this manual. Equipment found to be damaged or suspect shall not be returned to service until the necessary repairs have been affected, if such can be carried out.

### INSPECTION OF ANCHOR SLINGS

SKYLOTEC Anchor Slings shall be inspected by the user before each use and additionally by a competent person other than the user at intervals of no more than one year. Detailed inspections must be recorded in the inspection log. Remove anchor sling from service immediately if:

- The product has been subjected to the forces of a fall.
- Label is missing or illegible.
- There is evidence of defects, improper function, or alterations of any portion.
- If inspection reveals evidence of defects or damage including tears, abrasions, undue stretching, mildew/mold, missing or broken threads, chemical attack, excessive heating, excessive aging, or excessive wear.

### WHAT TO LOOK FOR WHEN INSPECTING MAN-MADE FIBRE WEBBINGS:

The following information details the principal causes of deterioration in man-made fiber webbings and indicates the signs by which they can be recognised.

- **GENERAL SURFACE ABRASION:** This occurs due to contact with abrasive surfaces and is easily recognisable as the webbing fluffs up along the surface. This often occurs in normal use and is harmless if not too extensive. Man-made fibre webbings have very good abrasion resistance.
- **ABRASION:** Usually caused as a result of the webbing being passed over a sharp edge whilst under tension. Any reduction in the width and thickness or severe

- **Twin-tail lanyard** – A lanyard comprising two fixed length tails each of which separately meets all the requirements of a single line lanyard. A Personal Energy Absorber and various end anchor hardware options make up the assembly.
- SKYLOTEC offers a Lanyard Stowage Point for attachment of the unused tail with each twin lanyard sold.

**NOTE:** When estimating total free fall distance and clearance distances required, the anchorage point and extension of the Personal Energy Absorber needs to be taken into account. It is recommended that structural anchorage points for connection of equipment where possible are always positioned above the user of the equipment.

**Pole Straps:** A Pole Strap is to be used to support a worker on a pole during normal working and in the event of a restrained fall. It may be used with a full body or lower body harness by attachment to the 'D' rings located at the hips and identified as pole strap attachment points. Pole straps are designed so that they constantly remain under tension once in the working position.

**Anchorage Connectors:** An anchor sling is used as a link between the anchor structure and a connector, such as a locking snap hook or carabiner on a fall arrest lanyard. Applications include most fall arrest systems, restraint systems, and rescue systems. SKYLOTEC Anchor Slings are available in several different lengths to suit various anchor structures. The SKYLOTEC Anchor Sling is intended for use by one person only.

**Inspect all equipment before each use.**

**Any item showing excessive wear or deterioration should be tagged 'Out of Service' and destroyed.**

**Failure to observe proper inspection and usage procedures could result in permanent injury or death.**

**Do not make alterations or additions to any SKYLOTEC products without the express permission of SKYLOTEC. Failure to do so will void all warranties and could result in severe injury or death as a result of any non approved alterations or additions.**

## USER INSTRUCTIONS:

You must read and understand, or have the following instructions explained to you. Inspect equipment before using.

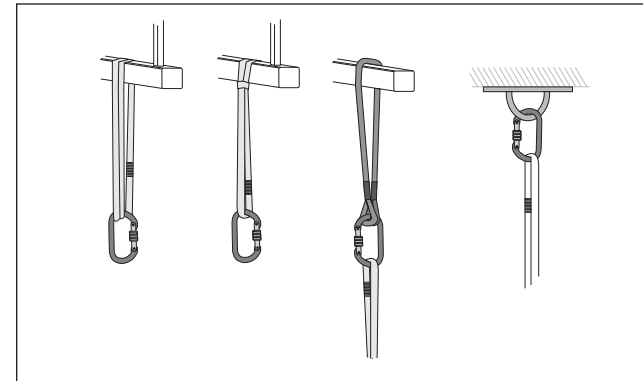
- Do not attempt to work at heights if you are feeling unwell or are susceptible to giddiness.
- Before donning, visually check both the harness and energy absorbing lanyard for defects.
- Follow donning instructions.

**DONNING INSTRUCTIONS.** Please refer to the individual donning instructions on the label of the harness and compare it with the following pictograms:

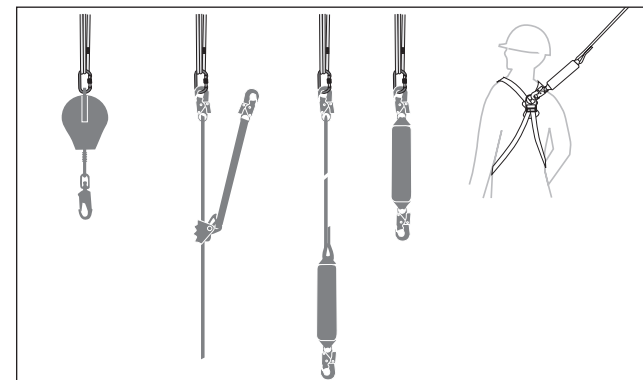
	Open the buckles of the harness / the buckle of the waist band
	Open the buckles of the harness and put on the harness like a jacket.
	Open the buckles of the harness and step through the lower half of the harness

## • ANCHOR LOOPS

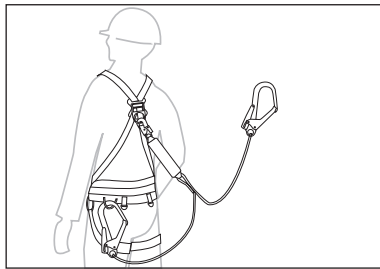
- 1) Choose an appropriate location of the anchorage structure to avoid collision with objects during a fall.
- 2) Choose an appropriate anchor loop length for the application. The connection between the anchorage structure and the anchor loop is as shown below.



- 3) Connect the anchor loop using an appropriate fall arrest connector. The connector used must be in accordance with the strength requirements of AS/NZS 1891.1: 2007 standard. The connection between the anchor loop and a connector of the fall arrest equipment is as shown below.



- 4) Do not tie the anchor loop in a knot, except looping the anchor sling through itself on a suitable anchor structure.
- 5) Use only the SKYLOTEC 40kN LOOP SEP anchor loop on an anchorage structure which has excessively sharp edges.



5) When climbing or working with twin tail lanyards do not connect the unused lanyard to your harness, **unless it is to a designated lanyard parking ring**. This could create a situation where, in the event of a fall the 'parked' lanyard would interfere with the operation of the Personal Energy Absorber, resulting in serious injury or death. SKYLOTEC twin tail personal energy absorbing lanyards are supplied with a Velcro attach Lanyard Stowage Point. The Lanyard Stowage Point attaches to either the left or right shoulder strap of the users harness and is the only place on the harness that the unanchored lanyard tail shall be stowed when not in use.

**NOTE:** Use lanyard Stowage points for twin tail personal energy absorbing lanyards.

**WARNINGS:**

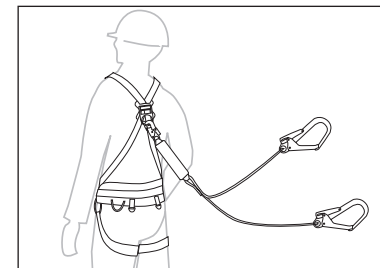
- **CHEMICAL ATTACK.** If any part of an assembly is to be exposed to chemicals, e.g. cleaning materials or hazardous atmospheres, consult SKYLOTEC to determine whether the part is suitable for continued use.
- If the Personal Energy Absorber has been subjected to a fall, impact forces, shows signs of deformation or webbing tear out it must be immediately removed from service and marked as 'UNUSABLE' until destroyed.
- **PROFLEX:** If the 'REMOVE FROM SERVICE' label has been exposed, immediately remove from service and mark as 'UNUSABLE' until destroyed.
- **SHOCKYARD FLEX:** If the rescue loop has been exposed, immediately remove from service and mark as 'UNUSABLE' until destroyed.
- **TWIN-TAIL LANYARDS:** Do not under any circumstance attach the free Lanyard tail to any other part of the harness other than the Lanyard Stowage Point. Back-hooking of the free tail to any point on the wearer, the wearer's equipment or the lanyard below the energy absorber pack other than the Lanyard Stowage Point is prohibited.

	<p>Step through the waist band into the leg straps</p>
	<p>Separate the shoulder straps place over your head and attach the carabiner above the waste D-ring</p>
	<p>Pull the buckle in the chest area through the ring and close it.</p> <p>Close the chest strap buckle.</p>
	<p>Close the leg strap buckles.</p>

	<p>Position the waist band over the navel / on the hips and close.</p>
	<p>Connect the chest loops with the supplied carabiner or a snap hook of the fall arrest device being used.</p>
	<p>Adjust the harness to the individual body height. Adjust the waist band and leg straps.</p>
	<p>Pull the harness straps tight so that two fingers still fit between body and harness.</p>

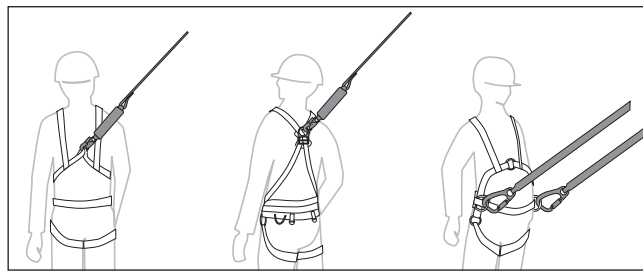
approximately 160kg of force. Should any sign of deformation or webbing tear out from the Personal Energy Absorber occur the device shall be immediately removed from service and marked as 'UNUSABLE' until destroyed.

**Twin Tail Personal Energy Absorbing Lanyards:** The following instructions shall be read and understood when using twin tail lanyards.



- 1) The users of these twin tail lanyards must only ever connect to their harness via the snap hook or carabiner on the Personal Energy Absorber end of the lanyard.
- 2) When using a twin tail lanyard always ensure that at least one of the lanyard legs is connected to the structure.
- 3) Care must be taken when climbing with a twin tail Lanyard to not 'over climb' the lanyard to the extent that the user of the lanyard would be exposed to a free fall greater than 2 m.
- 4) When climbing or working with twin tail lanyards, it is acceptable to have both lanyards connected to the structure provided that the distance between the attached lanyard tails is no wider than arm's length.

- When using a Harness in conjunction with a Pole Strap (for work on poles or structures where the harness is continuously loaded) it should be noted that they are not intended for situations permitting a fall of more than 600mm. Once at the work position, with one end attachment of the Pole Strap attached to the side D ring, pass the Pole Strap around the structure and connect the other end attachment to the opposite side D ring. To adjust to a suitable work position use the adjuster in the webbing to reduce or lengthen the length of the Pole Strap.
- See below pictograms for illustration of attachment of devices to the harness attachment locations.



**• CONFINED SPACE PROVISIONS:**

Harnesses designated for 'Confined Space' are intended for use by persons working in confined spaces where there is a risk of potential free fall and/or being overcome by gases, fumes or vapours. These harnesses are to be used with a spreader bar as a means of providing a 'head up' or vertical lift for the user. The spreader bar is attached via the snap hooks to the nominated and labelled retrieval attachment points on the shoulder straps of the harness. The anchorage (rescue line) attaches to the 'D' ring on the spreader bar. Work required to be carried out in vats, tanks, sewers or other confined spaces requires pre-entry checks for gases, fumes or explosive vapours. These designated retrieval harnesses are also intended for workers in coal bunkers, slack hoppers, grain silos and where there is a danger of suffocating by engulfment in the material they may be above or working on.

**• PERSONAL ENERGY ABSORBERS: (Single line & Twin Tail)**

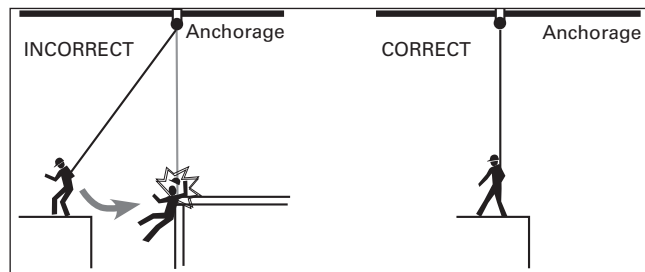
Personal Energy Absorbing lanyards are intended for use by persons that are exposed to potential free fall greater than 600mm. The working slack length on Personal Energy Absorbers must never exceed 2.0m. Always ensure that the clearance distances are calculated, such that if a fall occurs, striking of obstacles or the ground surface will never occur. Personal Energy Absorbers are designed to reduce shock loads in Fall Arrest situations. The Personal Energy Absorber will extend in length due to webbing or stitching tearing and will permanently deform once subject to impact loads, as would be the case in arresting a fall. This deformation will start to occur at

	<p>The D-ring / the webbing ring at the back should sit between the shoulder blades</p>
	<p>The D-Ring at the waist shall be positioned at the navel.</p>
	<p>Before the first use adjust the length of the sliding D-strap to the personal preferences, which basically means:                  Long strap = more comfort.                  Short strap = more mobility.</p>

- Be aware that if your connection point to the harness cannot be visually seen by the wearer then it should be attached prior to donning the harness or checked for security by a second person.
- Having reached your position select a suitable anchorage point, capable of withstanding at least 15kN of force without permanent distortion in the event of a fall.
- The anchorage point should be as high as possible above you in a vertical plane to reduce the fall distance and the potential to pendulum should you fall.
- Consideration must also be given to the surrounding area. Avoid using an anchorage point that would permit you to strike or swing into obstructions before a fall is safely stopped.
- You must read and understand, or have the following instructions explained to you.
- Inspect equipment before using.

**WARNING:** Before making your connection to an anchorage point, always ensure that it is perfectly sound and capable of sustaining shock loads of at least 15kN without distortion in the event of a fall.

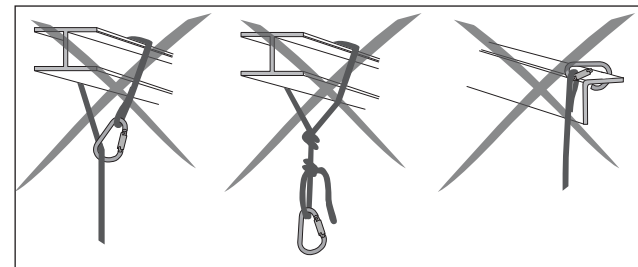
**ANCHORAGE WARNING:**



**Pendulum (Swing) Falls:** Swing falls can occur when the system is not anchored directly above the user. The force of striking an object in a swinging motion can cause serious injury. Always minimize swing falls by working as directly below the anchorage point as possible. Swing fall hazards must be minimized by anchoring directly above the user's work space.

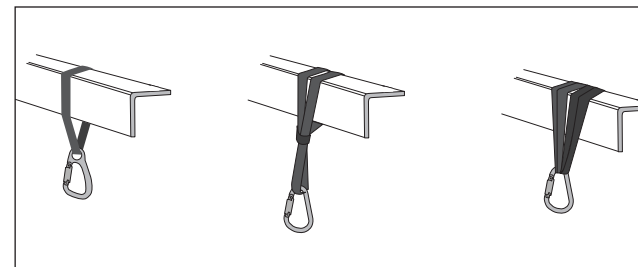
- Never make your anchorage connection below the level of the attachment point on your harness. In making your connections to the anchorage point always observe the following:
  - 1) That the screw ferrule on a screw gate carabiner is fully screwed up into the locked position.
  - 2) If using an automatic locking carabiner that the revolving ferrule has moved into the locked position.

- 3) The latch or gate on either double acting latch snap hooks or carabiners is in a locked and correct position.
- Where a much larger vertical working area is required from a single anchorage point than that permitted by the normal energy absorbing lanyard then a fall arrest harness should be used in conjunction with a self-retracting lanyard (SRL).
  - For attaching a self-locking mobile fall arrest device use as a minimum a double action snap hook or carabiner to make the connection via the rear 'D' ring, or alternatively, the frontal Fall Arrest attachment point. At no time must the connector between the harness and device exceed 300mm.
  - The following methods must NOT be used to make your connection to the anchorage point.



- 1) Do not tie off over sharp edges or snap hook onto the lanyard.
- 2) Do not knot lanyard in any manner. Avoid sharp edges.
- 3) Do not tie off where Hook latch will not fully close.

**LOOP or LOOP SEP with Carabiner**



- Figures illustrate the correct method to follow in making your connection to a structural anchor point when the gate opening of your safety hook is of insufficient size to allow direct connect around the structure.