Miller, part of the Bacou-Dalloz group, is the global leader in fall protection equipment, with over 50 years' experience in the development and manufacture of high performance equipment to make working at height safer.

Working closely with key industries, such as construction, telecoms, utilities, oil & gas, forestry, rescue services and the military, Miller continue to develop innovative solutions for all aspects of working at height protection – fall arrest; work positioning and work/travel restraint. All Miller products are designed with not only safety but wearer comfort uppermost in mind. The goal is always to provide ergonomic, functional, stylish and comfortable products that encourage 100% wear time.

Making the right selection and training in the correct use and fitting of fall protection equipment is critical to safe working at height.

Miller, through your EUROSAFE Member, provide comprehensive product support for customers covering every aspect of safe working at height – from risk assessment and selection of equipment to correct fitting of harnesses, lanyards, fall limiters, lifelines, rope and rope grabs.

All Miller products are made at ISO 9002 certified manufacturing facilities in Europe. Every item is produced in accordance with EU standards, the HSE Working at Height regulations 2005 and is designed to function under the most exacting requirements or conditions.

Work Planning and Hazard Identification

Before any work at height begins, it must be thoroughly planned.

The hazards **must** be identified, negated or minimised and other basic safety procedures followed. Any PFPE (Personal Fall Protection Equipment) must be selected taking into account:

- ✔ frequency and duration of use
- ✔ working at height category
- ✔ work hazards
- ✔ fall clearance
- ✔ available anchor points
- ✔ the requirement for timely and effective rescue or evacuation

Working At Height Categories

Your working at height environment reflects the equipment that must be used.

The categories summarised below have been defined by European Standards and are used as the base for all high access operations.

1. Fall arrest

Equipment used to prevent the operative from hitting the ground in the event of a fall.

Minimum equipment:
- Full body harness
- lanyard
- energy absorber
- connectors
- anchor point.

2. Work positioning

Equipment holding an operator in their place of work or used to suspend an operator into a work-station.

Minimum equipment:
- Work positioning belt/ sit-harness
- intermediate connection
- connector
- anchor point.

3. Work restraint (Travel restraint)

Equipment used to prevent the wearer from approaching a position from which they can fall.

Minimum equipment:
- Work restraint belt
- intermediate connection
- connector
- anchor point.

Fall Protection Equipment

Personal Fall Protection Equipment (PFPE) Selection

This table shows the minimum harness requirements for each work category. Some overlap occurs for the application of multi-function harnesses.

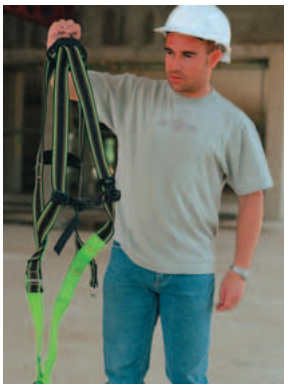
Harness Type	European Standard	Work Restraint	Work Positioning	Fall Arrest	Suggested work activity
Work Positioning Belt	EN358	✔	✔		Telecomms linesman
Sit Harness	EN813	✔	✔		Arboriculture / rope access
Full Body Harness	EN361	✔		✔	MEWPs / non-tech fall protection work / work restraint use
Multifunction Full Body Harness	EN358 EN813 EN361	✔	✔	✔	Telecomms tower work and technical rescue

An energy absorber MUST be included in the system when using an EN361 harness for fall arrest purposes.

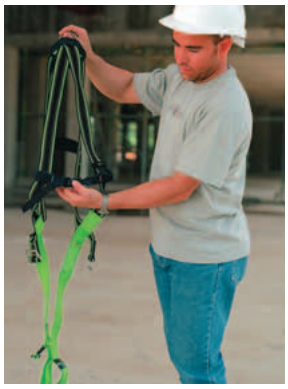
The selection of appropriate intermediate connections is equally important. The table below will help with the selection of your ancillary equipment.

Environment	Retractable block-webbing	Retractable block steel	Rope Lanyard	Webbing Lanyard	Pole Rope/Strap	Personal Fall Limiters
Low Level	✔				✔	✔
High Level	✔		✔	✔	✔	✔
Haz Chems		✔			✔	
Mechanical		✔	✔			
Warehouse	✔	✔	✔	✔		
Construction	✔	✔	✔	✔	✔	✔
Telecomms			✔	✔	✔	

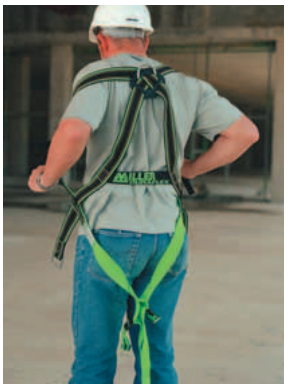
Harness Fitting



1 Hold harness by back D-ring. Shake harness to allow all straps to fall in place.

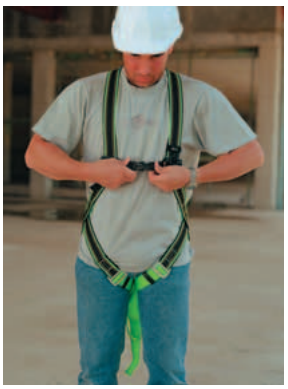


2 If chest, leg and/or waist straps are buckled, release straps and unbuckle them.



3 Slip straps over shoulders so D-ring is located in middle of back between shoulder blades.

4 Pull leg strap between legs and connect to opposite end. Repeat with second leg strap. If belted harness, connect waist strap after leg straps.



5 Connect chest strap and position in midchest area. Tighten to keep shoulder straps taut. If harness has black elastic strap, thread strap through final slot to secure it.

6 After all straps have been buckled, tighten all straps so that harness fits snug but allows full range of movement. Pass excess strap through loop keepers.

Special Hazard

For further guidance please contact your EUROSAFE Member who will be pleased to assist with product selection

Intermediate Connections

Manyard® with galvanised connectors

Twin Lanyard

Lanyards

- A portable attachment between a worker at height and an anchor point
- Ideally attached above the shoulder
- Up to 2.0m in length
- Fall arrest lanyards must incorporate an energy absorber
- Options are: single leg lanyard or twin-leg (double) lanyard.

Twin Lanyards

- Used to ensure connection to an anchorage at all times when climbing on and around an open structure
- The unused leg of the twin Lanyard must be stowed on a designated 'park' point on the harness
- Keeping the 'live' Lanyard as high as possible minimises fall clearance, reducing the effects of a fall by stopping impact with structures/the ground when working at low levels.
- Two single energy-absorbing Lanyards should never be used together.

Personal Fall Limiters (PFLs)

- Ideal solution where fall clearance is minimal and good anchor points above shoulder height are in place.
- Remember: there is only one 'leg' to this lanyard, if you remove it to move around structure you are UNSAFE.

Self-Retracting Lifelines (SRLs)

- Great fall arrest solution, when used correctly! Normally rigged to points above ladders or access routes where other forms of protection are inappropriate
- They usually have prescribed arcs (check specific manufacturers information marked on the drum housing) of 30-45° from vertical.
- This means a pendulum may occur in a fall. Beware of what you could hit in this situation.

Rope and Rope Grabs

- Commonly found on access ladders on warehouse/ high-bay racking cranes
- The rope grab is your life line. Make sure it is attached to an upper attachment point on your harness and DO NOT let it pull the rope up as you climb. This will not protect you if you fall.
- The rope should be either attached to the ladder base or weighted, allowing the rope grab to flow smoothly up and down.

Always follow the manufacturers instructions when using all Intermediate Connections.