

Using a harness and fall arrest lanyard

Important note

Adequate training on correct use of fall arrest equipment must be provided to the user by a competent person before the equipment is issued for use. Simply reading the associated product instructions is not adequate training.

The harness and fall arrest lanyard (as fall arrest system)

A fall arrest system is designed to arrest an accidental fall in a controlled way. There are different types of fall arrest systems including lifeline systems, retractable type fall arrestors, fall arrest lanyards and others. Using a harness and fall arrest lanyard as fall arrest system is quite common and also relatively cost effective. We explore the use of this fall arrest system here.

A full body harness is the only acceptable body holding device that can be used in this fall arrest system. Ensure that you have the correct size harness for your body shape and size. Once adjusted, the harness webbing should be close fitting but not uncomfortably tight. Ensure after fitment of the harness that all surplus webbing is neatly tucked away to avoid snagging.

When working at a place where there is a possibility of falling accidentally (on a ladder, a platform, scaffolding, a structure or near a deep hole), then the fall arrest system must be attached to a suitable anchor point at all times.

It is often only possible to remain attached to an anchor point at all times by using a double legged lanyard and by then using the two lanyards in tandem.

Choice of attachment point is important (see 'Diagram: Fall factors'). A higher point of attachment will result in a shorter fall and therefore exposure to a smaller force during fall arrest. The anchor-point or structural member chosen to serve as the anchor point must have a minimum required strength sufficient to withstand a force of 6kN.

Choosing an attachment point be mindful of the risk of a lateral 'pendulum fall' scenario.

Also be mindful of the 'minimum free space' (MFS) below when working at heights. MFS is the distance from the anchor point to the floor or nearest obstruction below. Our standard fall arrest lanyard is for use where there is a minimum of 5.5m of MFS available.

At the work station, hooks should wherever possible be connected to the attachment point together side by side. Placing hooks separately on anchor points that are far apart may result in a dangerous fall arrest.

Do not work with lanyards hanging under-arm or around or over a part of the structure. Best practice is working with lanyards hanging freely between the harness attachment point and the hook attachment point.

Hooks must attach in such a way that in a fall the force of the arrest is directed longitudinally through the length of the hook. Never back hook the lanyard hook onto the lanyard.

Where lanyard and harness are connected as separate items, they must be connected at an attachment point on the harness marked 'A', using a suitable connector.

We recommend, wherever feasible, to make this fall arrest system a personal issue item.

Energy absorbing element

The key component of the fall arrest lanyard is the energy absorbing element. A lanyard that excludes the energy absorbing element is by definition not a fall arrest lanyard.

Limitations of a harness and fall arrest lanyard

The equipment is intended for 'fall arrest' purposes only. It is not intended to be used for either 'work restraint' or 'rope access', or for any other purpose and may never be utilised outside of its limitations.

The equipment is tested for users up to 100kg in mass (including the mass of the user, their apparel and any equipment attached to their person). Users with mass exceeding 100kg must always attach the fall arrest system at or above head height.

Users exceeding 120kg may not use the equipment.

While it is good practice to create a temporary anchor point using an endless sling or anchor strap always bear in mind that the maximum total length between anchor point and harness attachment point (total lanyard length) should not exceed 2 meters.

Unless otherwise specified our fall arrest lanyards are 1.75 meters in length as standard.

