

# Fall Protection – Know the Gear Meeting Kit

## WHAT'S AT STAKE

Let's discuss fall protection gear. When it's not used correctly or maintained properly, the consequences can be severe. When working at heights, falls are a leading cause of serious injuries and even fatalities. The right fall protection equipment – things like harnesses, lanyards, and anchor points – is specifically designed to catch you if a fall occurs, distributing the impact forces safely across your body and preventing you from hitting the ground or other lower levels.

## WHAT'S THE DANGER

Without proper fall protection when working at height, the risk of immediate and severe injuries is alarmingly high. A fall can result in broken bones sustained from the impact of hitting a lower surface or objects in the fall path. Furthermore, the force of a fall can cause devastating damage to the spinal cord, potentially leading to paralysis. Head trauma, including concussions and skull fractures, is also a significant risk. Internal organs can be damaged by the sheer force of the impact, and individuals may also suffer significant cuts and bruising. These immediate injuries underscore the critical need for effective fall protection measures.

### Physics of a Fall

- The greater the distance, the higher the velocity upon impact, leading to more significant forces on the body.
- Landing on a hard or unyielding surface will cause more severe injuries than landing on a softer one (though this is rarely a controlled factor in a workplace fall).
- The way a person lands can determine which body parts absorb

the most force and the type of injuries sustained.

- Fall protection systems are designed to decelerate a fall over a short distance, reducing the peak impact force experienced by the body. If a system fails or is used improperly, this deceleration doesn't occur effectively.

## **Risks Due to Equipment Issues**

- Damaged or worn-out harnesses, lanyards, or anchor points can break under the force of a fall.
- Ill-fitting harnesses may not distribute fall forces correctly, leading to injury or even allowing the worker to slip out of the harness.
- Using lanyards that are too long or attaching them to unsuitable anchor points can increase fall distance and impact force.
- Failure to regularly inspect equipment for damage can mean using gear that is no longer safe.

# **HOW TO PROTECT YOURSELF**

To stay safe when working at height, especially in roles like maintenance or any job requiring elevated work, using the right fall protection gear and following safe practices is key.

## **Know Your Gear**

Understanding your fall protection gear is the first crucial step in staying safe at height. This includes ensuring your harnesses fit properly – snugly but allowing for movement – and that all straps and buckles are in good working order and securely fastened. Choosing the correct type and length of lanyard for the specific task is also essential to limit potential fall distance, and these should always be inspected for any signs of damage like cuts or fraying. Finally, knowing and using appropriate anchor points that are strong enough to withstand the force of a fall is paramount; never attach your lanyard to anything that isn't a designated and secure anchor.

## **Before You Work**

- Before each use, check your harness, lanyard, and any other fall protection equipment for signs of damage. If anything looks worn or broken, don't use it.
- When putting on your harness, adjust the leg straps so you can fit a flat hand between your thigh and the strap. The chest strap should be positioned at chest level, and the shoulder straps should be snug but not restrictive. Give the harness a few tugs to make sure it doesn't slide around too much.
- Think about the task you need to do and identify potential fall hazards. Make sure you have the right equipment for the specific situation.
- Be extra cautious in windy or slippery conditions, as these increase the risk of a fall.

## While You Work

- **Stay Attached:** If you're moving between different work areas at height, always ensure you have secured your lanyard to a new anchor point before detaching from the previous one.
- **Avoid Overreaching:** Instead of stretching far to reach something, reposition yourself or, if possible, have the item brought closer to you.
- **Use Equipment as Intended:** Don't modify or misuse your fall protection gear. It's designed for a specific purpose. Never tie knots in your lanyard to shorten it, as this can weaken its strength.
- **Communicate:** If you have any concerns about your safety or the equipment, speak up to your supervisor or safety personnel.

## FINAL WORD

When working at height, your safety fundamentally depends on a thorough understanding of your fall protection equipment and its consistent, correct use. This isn't merely a recommendation; it's the essential safeguard against severe injury or worse.

