

**ESSENTIAL
STANDARD
no.23**

Working at Height

**Safe People
Happy People
Sustainable Business**

KEY REQUIREMENTS

- **AVOID** Working at Height (WAH) where possible
- **PLANNING** of activities must be undertaken by competent persons who are familiar with the HIGH RISK nature of WAH
- **HIERARCHY of CONTROL** must be followed
- **PREVENT** a fall from occurring if WAH cannot be avoided
- **MINIMISE** the distance of the fall or its consequence if a fall cannot be prevented
- **TRAINING** must be provided to those who plan or undertake WAH activities
- **DESIGN** must consider the need for work to be carried out at height over the lifespan of a building or asset, e.g. construction, use, cleaning, maintenance, demolition
- **EMERGENCY** rescue must be considered during the planning stage

INTRODUCTION

Every year in the UK people are killed and many others suffer life changing injuries because of a fall from height. These avoidable incidents are often attributed to poorly planned works, inadequate management & supervision of Working at Height (WAH) activities, inappropriate methods of working at height being adopted or individuals are not being adequately trained or have the competency to work at height.

Typically, the hazards associated with WAH are people falling:

- From the top of buildings or structures
- From scaffolds, access equipment and working platforms
- Through fragile roofs, skylights etc.
- Through openings e.g. open tanks, chambers, manholes, wet wells, dry wells etc.
- Into excavations or shallow trenches
- Being struck by falling objects



RISK ASSESSMENTS and METHOD STATEMENTS (RAMS)

All work at height activities must be clearly defined and controlled by a safe system of work. Risk assessments and method statements (RAMS) must be task and site specific in accordance with Essential Standard 01.

DEFINITION – WHAT IS WORKING AT HEIGHT?

At Bridges you are generally working at height if you are accessing a structure, using a fixed vertical ladder, working off a mobile ladder or step ladder working near an opening or void (e.g. manholes and excavations) or over or within a shaft.

PLANNING

Anybody responsible for the controlling, managing and supervising of Work at Height (**WAH**) activities, must be suitably trained and competent to **Plan** the works.



When Planning the work, consideration must be given to a safer means of undertaking the work without the need to WAH and a competent person should consider the following:

- **Environmental Factors** - Time of day, task lighting and weather conditions
- **Objects Falling** - Tethering and storing of hand tools
- **Security** - Prevent unauthorised access to work areas
- **Materials and Equipment** - Store in a place where they cannot cause a trip
- **Inspections** - Assess the intended work area for additional hazards

The planning of WAH activities, must follow a Hierarchy of Control that encompasses the following **Three Guiding Principles** in order of preference.

1) AVOID the need to work at height by doing as much work as possible where no risk of a fall or falling object can occur.

2) PREVENT If you cannot avoid WAH, it is essential that measures are in place to PREVENT a fall from occurring with an emphasis placed on collective measures that protect anyone exposed to the risk of a fall over individual measures.

3) MINIMISE the distance and/or consequences of a fall where it is not possible to prevent a fall.

EMERGENCY RESCUE

When planning work at height activities, consideration must be given to how persons are to be rescued should a fall occur, and any such arrangements are communicated to the team. Additionally, those who are to perform the rescue must not be placed in danger and be trained and competent to perform such a rescue.

TRAINING

Any person who plans, supervises, or undertakes work at height must be trained and competent. Additionally, where WAH activities involve using Fall Arrest and Work Positioning systems, the user must be familiar & trained in the use of the equipment and understand what to do in an emergency.

If any person needs to operate a Mobile Elevated Working Platform, they must hold an in-date **IPAF** qualification.

Anyone who erects, alters and dismantles a mobile access tower must hold an in-date **PASMA** qualification.

Work at height involving rope access systems including abseiling may only be undertaken by competent people/companies who are trained and hold an in-date Industrial Rope Access Trade Association (**IRATA**) qualification.

Work at height involving rope access systems for **Basic Tower Climbing & Rescue** may only be undertaken by competent persons who are trained and competent with a **EUSR** skill in this specific activity.

LADDERS – WHAT ARE THE BASICS?

- **Low Risk short duration** tasks lasting **no longer than 30 minutes** to complete may be performed from a ladder or step ladder provided other means are not suitable.
- **Working Off** the top three rungs and overreaching is not permitted.
- **Inspections** should be undertaken pre-use to identify any defects. All must be marked with scaff tag & have a 3-month formal recorded inspection

CHAMBERS, OPENINGS, EXCAVATIONS and SHAFTS

- **Openings** and voids must never be left unguarded. If the work area is to be left unattended, it should be securely barriered and the opening protected
- **Manholes** to be protected by sturdy barriers consisting of a top rail, mid-rail and tapping rail and the opening spanned by a fall prevention grid or similar device.
- **Excavations** must be reinstated as soon as reasonably practicable to do so. Only the minimum length of trench to be left open, therefore when the site is left unattended, the site should be secured with HERAS fencing or hoarding. Exposed edges to be protected by a guardrail system affixed to trench sheets or trench boxes or extend trench sheets to act as edge protection etc.
- **Shafts** shall have specific safety measures & entry procedures clearly defined and adhered to at all times.
- **Gratings and elevated work platforms** - all gratings must be secured with yellow clips and subject to regular inspections.

TANKERS

- **Access** to areas where WAH cannot be avoided should be via a fixed ladder and walkway platforms each fitted with handrails. The walkways and rungs must be made of an anti-slip material.
- **Controls & Gauges** should be accessible from ground level without having to WAH
- **Stowage** of tools should be in lockable compartments at easily reached locations.
- **Hoses** should be stowed in trays and again at a level that can be easily reached without the need to WAH.

LORRIES

Plan deliveries so that the need to WAH is either eliminated or significantly reduced.

Planning should consider how the materials or equipment are to be loaded, unloaded and stored and how they will be accessed at the destination considering:

- **Pre-slinging** materials and equipment prior to delivery to site will avoid the need to climb on lorries
- **Access** to vehicle load beds and other areas at height shall be restricted to authorised personnel only. On-Vehicle fall protection systems such as collapsible guardrails or similar must be used to guard against a fall.
- **Gauges** and controls located so that they are accessible from the ground and using automatic sheeting systems to stop drivers climbing on top of vehicles.
- **Loading & unloading** at sites & depots, stations and platforms must be used to access lorry beds that offer guardrail and handrail collective protection.
- **INERTIA FALL ARREST** using a harness system to protect people working at height, linked to overhead rails or other suitable anchor points.
- **Minimise** the distance and effect of the fall by using collective protective fall measures such as soft-landing systems or nets.
- **Personal Protective Equipment** such as fall arrest or restraint systems are to be used as a last resort if it's not feasible to use collective protective fall measures. Ensure that employees have adequate instruction, information and training in their safe use. Also ensure that an **Emergency Rescue Plan** is in place.

ROOF ACCESS

Any work to be undertaken requiring access to a roof must consider how to safely access the roof, how to get materials to and from the work area as well as consider how to protect a person from a fall.

MEWPS

1. **Plan** activities & consider the type of work to be undertaken, equipment and material to be used, obstructions, weather conditions and Emergency Rescue.
2. **Fall prevention** by the basket having a rigid guardrail system.
3. **Overturing** (SWL) allowance in the MEWP basket is clearly displayed and is never exceeded.
4. **Pre-use Checks** performed to ensure safety features are free from defects.
5. **Overturing** prevented by ensuring the MEWP is on level ground, not used in windy conditions, outriggers are fully deployed, and ground conditions are suitable.
6. **Impact** by other vehicles may be avoided by designating the work area with sturdy barriers to prevent unauthorised vehicles straying into the work area.
7. **Objects** falling on persons below can be prevented by creating an exclusion zone for only authorised person to have access to and storing tools in a tool belt or restrained on a lanyard.
8. **Work restraint** lanyard and full body harness to be worn.
9. **Safe use** of the MEWP by trained, competent & authorized persons only.
10. **MEWPS** are not permitted to be used as a means of access.

SCAFFOLDS

Any work to be undertaken requiring access to or working from a scaffold must adhere to the requirements covered in Essential Standard 10 'Scaffolding'.

PERMIT to Work

Working at Height is deemed a high risk activity, therefore a 'Permit' is necessary.

All permits must be completed and issued by a competent person authorised by the Project Manager.

Permits must only be issued to persons who have been trained in safe working procedures and are competent to carry out the task in a safe manner.

The person carrying out the activity must be identified and named on the permit and acknowledge receipt of the permit.

A permit should only be issued for a defined period of time, if this runs out or circumstances change the activity must be reassessed by a competent person and a new permit issued.

The permit must be cleared or canceled when the work activity has been completed or there a reason to cancel the permit.

Bridges Employees and Sub-Contractors

Employees and sub-contractors are required to meet the requirements set in Bridges Essential Standards. Essential Standards that apply to working at height are:

ES 03 Breaking Ground
ES 04 Working Over or Near Water
ES 01 Risk Assessment
ES 07 Portable Access Equipment,
ES 13 Protecting the Public During Temporary Work Activities
ES 10 Scaffolding
ES 12 Management of Temporary Works
ES 23 Working at Height