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WORK AT HEIGHT

STANDARD OPERATING PROCEDURE

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**Document Approval History**

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# Purpose

To provide guidance on all working at height so it is planned, controlled and managed on site to ensure the safety and welfare of all persons working at height and those who may be affected by work at height.

# Definitions

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| Concept | Definition |
| Accident | An incident which results in death, injury loss, or damage |
| Competent person | person who has acquired through training, qualification or experience the knowledge and skills to carry out the task. |
| Exclusion zone | means an area from which all persons are excluded during excavation work. |
| Hazard | A potential source of harm. |
| PPE | Personal Protective Equipment |
| Risk | Combination of the probability of occurrence of harm and the severity of that harm |
| Safe System of Work | A method of working that eliminates or reduces the risk of injury |
| Work at height | Work at height means work in any place where, if precautions were not taken, a person could fall a distance liable to cause personal injury |
| MEWP | Mobile Elevated Work Platform |

# Roles & Responsibilities

**Employer:** The employer is responsible for thehealth, safety and welfare at work of all his employees, and other people who might be affected by their activities, The employer shall do whatever is reasonably practicable to achieve this. It is also its responsibilities:

* The provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health
* The arrangements for ensuring the safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances
* To provide information, instruction, training and supervision to ensure the health and safety at work of his employees;
* To provide any place of work under the employer’s control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks;
* The provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risks to health, and adequate as regards facilities and arrangements for their welfare at work.

It’s employer’s responsibilities to assess risks in the workplace. Risk assessments should be carried out that address all risks that might cause harm in your workplace. It must also:

* give you information about the risks in your workplace and how you are protected, also instruct and train you on how to deal with the risks.
* consult employees on health and safety issues. Consultation must be either direct or through a safety representative that is either elected by the workforce or appointed by a trade union.

**Employees**: Workers must take care of their own health and safety and that of others who may be affected by your actions at work. Workers must co-operate with employers and co-workers to help everyone meet their legal requirements. As a worker, if you have specific queries or concerns relating to health and safety in your workplace, talk to your employer, manager/supervisor or a health and safety representative.

**Contractors**: Contractors shall make sure they plan, manage and monitor the work under their control. They also must comply with directions given to them by either the principal contractor or the employer.

**Supervisors:** Ensure that a risk assessment has been conducted before the commencement of work and at any time the scope of work changes or the risk of a fall increases. Provide adequate supervision and assistance.

**HSE Advisors:** Ensure that equipment available is compliant with client and regulatory requirements and is fit for purpose. Arrange or provide training required by the risk assessment. Conduct an inspection and investigation in the case of incident occurrence. Retain a copy of all working at height risk assessments.

# Training & Competence

# Personal Protective Equipment

The minimum mandatory PPE required for work in a construction zone will be:

* Hard Hat
* Safety Shoes
* Eye Protection (safety glasses)
* Reflective Jacket
* Safety Gloves

In addition to the above, additional PPE may be required as would be stated in the Risk Assessment. These can include:

* Safety Harness
* Fall Protection System (lifeline)

# Procedure

## Ladders

### Hazards

The main hazards associated with ladders include:

* Not securing the ladder properly.
* Unsafe use of ladder (over-reaching, sliding down, etc.).
* Using ladder where a safer method should be provided.
* Using ladder with a defect. (Note: Painting of timber ladders which could hide defects is prohibited
* Unsuitable base to ladder.
* Insufficient handhold at top of ladder or at stepping off position.
* Insufficient foothold at each rung.
* Using ladder near overhead electrical cables, crane contacts, etc.
* Ladder at unsuitable angle, swaying, springing, etc.

### Controls

* Only industrial ladders are permitted on site. Ladders may be constructed in timber or anti-slip galvanized steel. No domestic grade ladder is permitted.
* Ladders with defective rungs or stiles must not be used.
* Ladders must be in good condition and of adequate length and strength for the work in progress.
* Ladders must be secured at the top and be long enough to extend 1.05 metres above the landing place.
* Ladders must be placed at an angle of 1:4 or 75°
* Place ladders on a firm level base.
* Only one person should use a ladder at a time.
* Ensure that the step-off area is clear if using a ladder to reach a platform.
* Ladders should be positioned so that over reaching is not necessary and when working persons should not stand on the top three rungs.
* Ladders should be inspected as part of the regular inspection of scaffolding on the site.

## Fixed Scaffolding

### Hazards

The main hazards associated with the use of scaffolding include:

* Falls from height.
* Falling materials.
* Collapse of structure.
* Unsuitable base.
* Overloading.
* Unsound materials.
* Unsafe access.
* Untrained erectors.
* Adverse weather conditions.
* Overhead cables and other obstructions.
* Traps in working platform.

### Controls

* All scaffolders working at site must be trained and qualified by a 3rd party trainer approved trainer..
* All materials must be in sound condition and checked before each use by the scaffolder.
* Standards must be placed on a base plate and if necessary, on a timber sole plate to ensure a firm foundation.
* Tube joints in adjacent bays or lifts should be staggered and as close to the standard/ ledger connection as possible.
* Swivel couplers must be used on ledgers or bracing joints.
* Face bracing must be provided to all scaffolds.
* Ties must be fitted as the scaffold is erected and be in accordance with design requirements. Where ties cannot be provided then the method of ensuring that the scaffold is adequately supported must be specified and recorded.
* Ledger bracing must be fitted as required.
* Single couplers must only be used in non-load bearing situations.
* Platform boards must be adequately supported. (A maximum span of 1.2m and maximum overhang of 150mm for 38mm boards).
* Guardrails and toe boards must be fitted to all exposed edges of working or access platforms.
* Ladders must be in good condition and secured at the appropriate angle (1 in 4) with sufficient projection or other handhold at the stepping off position (1.05m).
* Any scaffold being erected, altered dismantled, or otherwise not suitable for use by employees, must have a notice-erected warning that it is not to be used.
* The Safety Engineer / Officer must be consulted at an early stage if there are any extensive or unusual scaffolding conditions.
* All scaffolds must be checked at the end of each working day to ensure that access to the scaffold is prevented.
* Scaffolding must be inspected before first use, after any substantial alteration, after an event that is likely to affect its stability and at intervals not exceeding seven days. Appropriate entries will be made on the Scafftag ‘Records of Inspections’ held on site.
* Alterations to any scaffold must be carried out by a competent person. Nobody will remove any part of a scaffold unless authorized to do so.

## Mobile Scaffolds

### Hazards

The main hazards associated with the use of scaffolding include:

* Falls from height.
* Falling materials.
* Collapse of structure.
* Unsuitable base.
* Overloading.
* Unsound materials.
* Unsafe access.
* Untrained erectors.
* Adverse weather conditions.
* Overhead cables and other obstructions.
* Tipping over due to moving.

### Controls

* Check location for overhead electricity cable hazards and other obstructions.
* Towers should be erected on firm, level ground with metal base plates and adequate timber sole plates (unless ground is concrete or similar).
* Castor wheels, if fitted, should only be used on level ground and be fitted with brakes.
* Components should be correctly fitted together, and the tower kept vertical.
* Manufacturer’s instructions must be followed regarding erection, especially for bracing.
* Maximum height to least base width ratio must be established from the manufacturer. This may include an allowance for outriggers where fitted. (Commonly 3:1)
* Wherever possible, the tower should be tied to the structure using secure points. This applies especially in windy or exposed conditions.
* When moving a tower, no personnel or loose materials should be on the platform. Always apply pressure at or near the base of the tower.
* Platforms must be fully boarded, with guardrails and toe boards, and access provided by trapdoors.
* Towers should be loaded only in accordance with manufacturer’s instructions.
* All mobile tower scaffolds which remain erected for periods in excess of seven days will be inspected by a competent person and appropriate entries made in the ScaffTag ‘Record of Inspections’ held on site.

## Mobile Elevated Work Platforms

### Hazards

The main hazards associated with the use of mobile elevating work platforms include:

* Falls of persons or materials from the platform.
* Trapping in the platform mechanism or structure.
* Trapping between the platform and fixed obstruction.
* Overturning due to overloading, uneven ground, wind, etc.
* Collisions when in motion or use.
* Failure of the mobile elevating work platform structure.
* Unintentional movement due to accidental or incompetent use of controls.
* Person stranded at high level due to power failure or breakdown.
* Contact with electricity.
* Persons struck by the mobile elevating work platform.
* Use of mobile elevating work platform on public roads or at night.

### Controls

* Only trained and authorized persons will operate and work from this equipment. They will also check the equipment before each use e.g. tires, brakes, lights, fuel/power, leaks, general defects etc. in accordance with the manufacturers guidance.
* Work surface areas should be level and firm. Where rough terrain equipment is available, the manufacturers’ guidance on ground support requirements will be followed.
* Ensure there are no obstructions especially overhead cables etc., in the areas where the platform is to be taken or used.
* Ensure clear working areas around the equipment by the use of warning signs, barriers, cones etc. This is especially important if work takes place where the public have access.
* Ensure arrangements are made to ensure the stability of equipment if it is not possible to make full use of outriggers etc. that may be fitted.
* Ensure good visibility and lighting during work operations.
* Ensure that the safe working load for the machine is displayed and followed, and that all tests, inspections and examinations are carried out and recorded.
* Follow manufacturers’ guidance on working in windy conditions, these platforms should generally not be operated in wind exceeding 16mph. If there is any doubt, then leave the platform at its lowest position and ‘DO NOT USE’ until wind levels reduce.
* Ensure safety devices fitted are working correctly.
* Ensure safe access to the platform for boarding at ground level.
* Ensure any electrical supply is routed safely and is connected to the mains supply in an approved manner.
* Ensure the platform is fully guarded during use and provision is available and used for securing safety harnesses to the platform only during use. Work should be done only from within the platform area without having to lean out.
* Ensure guards are fitted and maintained on all moving parts where a person could be trapped or entangled. This may require a cage around the base, especially in public areas.
* Wherever possible, all movement controls should be sited to be operated from the platform. If this is not possible, then clear communications should be established between the platform and ground.
* Emergency stop and isolation switches etc. should be clearly marked and operatives using the equipment should be aware of the emergency procedures.
* Platforms, when not in use or unattended, should be secured at ground level and immobilized to prevent unauthorized operation.
* Only use the platform for the work it was intended.
* Keep the platform clean and free from loose materials or debris etc. This may require regular attention depending on the work being carried out.

# Emergency Arrangements