Aluminium Mobile Scaffolds Method of Use: Safety Hazards and Risk Assessment

This method provides you guidelines for the safe use of aluminium mobile scaffolds and standard instruction applies to all applications where people are using aluminium mobile scaffold towers.

Overall project manager and HSE manager are responsible for the implementation of this standard safety procedure.

The use of lightweight aluminium mobile scaffold towers on construction sites is a popular alternative to using traditional tube and fitting scaffolds. However, these systems are limited in their capabilities and should only be used when they satisfy the general site safety requirements.

Hazard and Risk Assessment

An assessment should be made prior to the use of a Mobile Scaffold to ensure that a tower scaffold is suitable for its intended purpose.

The risk assessment should identify the likelihood of workers being exposed to any significant risks and thereby take positive measures to reduce any risks to that which is as low as reasonably practicable ALARP.

Risk Checklist

The type of risk may include:

- Failure to erect in accordance with the approved design
- Height being too great relative to the effective base dimension.
- Failure to use outriggers or stabilizer when required.
- Tower being used on or moved on sloping or obstructed surfaces, without attention to vertical alignment and stability.
- Towers not being secured to building or adjacent structure when they should be.
- Moving the tower carelessly – pulling it along at working platform level, or pulling at the base with persons on platform.
- Not ensuring ground is clear of obstruction, potholes, ducts etc.
- Not ensuring tower is clear of overhead obstructions.
- Bracing members not being fitted in accordance with instructions.
- Guardrails or toe boards not being fitted allowing men or materials to fall from working platform.
- Using the tower in adverse weather conditions.
- Using a mobile tower when the castor wheels have not been locked and leg locks have not been secured.
- Exceeding the Safe Working Load.

- Using sheeting around the tower.
- Extending the height of the top platform by use of ladders, boxes or other devices.
- Failure to observe recommended access procedures ascending or descending towers.
- Using a tower in the vicinity of overhead electrical lines. They are not normally insulated, are dangerous and you should keep well clear.

Mobile Scaffold Usage Control Measures– General

- The following control measures are common to all scaffolds and should be applied in all circumstances, unless otherwise stated herein:
- Should only be erected, dismantled, altered or inspected by competent persons.
- Prior to use it should be visually inspected and the inspection recorded.
- If erected for more than seven days it should be inspected after each seven day and the results entered into a register.
- Inspections should also be carried out following any adverse weather conditions or disturbance which could have affected its stability.
- Incomplete towers left unattended should display a notice stating "The scaffold should not be used".
- Any damaged parts should be removed from the work area.
- Third parties including the general public should be protected by providing fences or coming off the area.
- A purpose made access ladder should be provided inside the tower.

Mobile Scaffolding in Use Control Measures

The following items are not exhaustive but should be satisfied wherever mobile towers are used:

- Should be used on firm level ground.
- The brakes locked whenever it is in use.
- The designed load bearing capability should not be exceeded.
- Access should be gained by means of an internal ladder.
- Outriggers or stabilizers should be used to ensure the following height to minimum base ratios is never exceeded:
  - 3:1 subject to weather e.g. Outside.
  - 3½:1 not subject to weather or inside.
  - 2½:1 moving a tower fitted with stabilizers.
- If a tower is likely to be moved when erected, preference to the use of outriggers should be given.
- Towers should not be moved whilst persons or materials are on the working platform

- Only move towers by manually pushing near the base.
- The height should not be increased by using step/or ladders etc. on top of the working platform, or by placing planks on hand rails.

Safety Consideration for Erection of Scaffold Towers

All the scaffold towers shall be erected strictly in accordance with the manufacturers/suppliers guide.

Special consideration should be given to:

- Floor conditions.
- Vertically plumb.
- Correctly fitting joints.
- The condition of locating clips, adjustable feet.
- Diagonal opposed cross bracing.
- Internal access ladder.
- Full board/level working platform.
- Working platform hatch (hinged to outside).
- Guardrail height 901 mm – 1150 mm, correctly positioned above working platform.
- Intermediate guardrail or other means to prevent person falling between guardrail and toe board.
- Toe boards.
- Stability.
- Working in close proximity to overhead services should be avoided, a minimum distance of 6m should be maintained.
- Local by-laws.
- Protection for third parties.
- Sheeting should not be used on the tower as wind loading may overturn the tower.
- Secure tower to structure wherever possible by means of chains and eyebolts.
- Whenever a fall risk position exists safety harnesses must be utilized and Training provided.

Hiring of Scaffold Towers from other Parties

Particular care should be given when placing an order for the hiring of a tower.

Particulars should include:

- Working platform height.
- Maximum number of persons that may work on the platform.
- Any need for intermediate working platforms.
- Weight of any materials to be placed on the platform.
- Requirements for access, stabilizers, outriggers, ballast/ties etc.

- Ensure that the information leaflet is provided to persons erecting the tower

Mobile (Aluminium) Scaffold Towers Safety Checklist

Hired Towers

1. Has sufficient detail been given to the supplier?
2. Has a check been carried out to satisfy that the equipment is in satisfactory condition?
3. Are the erection instructions available to the erector?

Checklist for Erection of Tower

1. Has the person erecting the tower received training?
2. Are all component parts available e.g. handrails, toe boards outriggers etc.
3. Is correct means of access available e.g. internal access ladder?

Checklist for Use of Tower

1. Are all persons using towers suitably instructed in its safe use?
2. Is the area of use free from debris and holes in the floor?
3. Are guard rails and toe boards in place?
4. Is the tower working platform being used within its safe height constrains.
5. Are wheels being locked, when in use?
6. Have internal access ladders been provided and fitted.

Inspection Requirements for Mobile Scaffold Towers

1. Do users visually check the tower at least once daily?
2. Is an inspection required and if so it is recorded in the register.