

MOBILE ALUMINIUM TOWERS



Purpose: To give all employees, customers and other contractors a basic understanding of the precautions and rules for safety to be observed when using mobile aluminium scaffolding.

Assembling a Tower

The principle hazards associated with the use of mobile scaffolds are: -

- Falls from height
- Falling objects from height
- Failure or collapse of scaffolding

Assembly

- Inspect components before use
- Assembly should be by using the Manufacturer's Manual and carried out by suitably trained persons e.g. PASMA
- Check the suitability of the site
- Ensure the correct positioning of braces having first checked the brace hooks are firmly in position
- Make sure the tower is level
- Apply the correct procedure when lifting or lowering

Moving

- Ensure sufficient people are available to complete the move
- Check the intended route for hazards
- Remove all material from, and ensure no personnel are on the tower
- Lift the stabilisers 25mm only off the ground
- Unlock the castors. This is the only time the brakes should be released, and they must be put back on at the earliest opportunity
- Never use mechanical means to move a tower e.g. FLT, Crane etc
- Never try to move the tower by pulling along from the platform level
- When moving avoid pot holes, ducts, drains, manholes and overhead hazards
- After the move, check the alignment, vertical and both horizontal planes
- Ensure the frame interlocking clips are still engaged
- Reposition stabilisers/outriggers as necessary and ensure they are in contact with the ground
- Remember to tie in again if the tower was tied in before, or if it now needs to be

Hazards – Electricity Cables

- Avoid danger from overhead lines (Refer to HSE Guidance Note GS6(Rev)
Safe Recommended Clearance Electricity Pylons = 15 metres
Wooden Poles Carrying Cables = 9 metres

Working Safely

Hazards – Windy Conditions

- If the wind reaches 17mph cease work on the tower
- If the wind speed is expected to reach 25mph tie the tower
- If the wind speed is expected to reach 40mph the tower should be dismantled
- Be cautious using towers in open ended buildings because of the funnelling effect
- The horizontal pressure exerted by water jetting, shot blasting etc should not exceed 20kgs on a free standing tower
- Never sheet in a freestanding tower

Overloading

- Design loads can vary. Check with the manufacturers instructions
- Typical Safe Working Load (SWL) for a tower is 750kgs
- Typical maximum design load for a platform is 250kgs
- Never drop components to the ground, pass them or use a rope
- Never force components off
- Remove any ties progressively as the tower is dismantled from the top until it becomes free-standing
- Only remove the stabilisers/outriggers when you have to. Leave them in place as long as possible

Other Hazards

- Never climb the tower on the outside; always use the internal ladder
- Do not use adjustable legs to gain extra height, they are only for levelling purposes
- Do not lift excessive loads or any loads outside the base area of the tower
- Fit double guard rails and toe boards to all working platforms
- If working in public areas you have a statutory obligation to children and others to segregate work areas and prevent unauthorised persons from gaining access
- You may need a special licence to erect a tower in a public place
- Avoid the temptation to use ladders, steps or boxes to gain additional height

