



TOWER SAFETY WEEK

Essential Points to Buying, Owning and Looking After a Mobile Tower

This booklet has been designed to cover the essential points you need to know about owning and using a mobile access tower. Four main areas are covered:



- Guidance for buying or hiring a mobile access tower
- Competence and training
- Tower inspections
- Care of your tower

Guidance for buying or hiring a Tower

PASMA strongly recommends that you only buy, hire or use a mobile tower which is certified to product standard EN1004 (BS EN1004 in the UK). This is the European product standard for mobile access towers (scaffold towers).

Towers which conform to EN1004 must meet minimum safety requirements which include; materials, strength, stiffness, stability, guardrails, access, platforms and user instructions and information.

You can be sure that a tower which is certified in accordance with EN1004 by a recognised approval body such as BSI or TUV will meet these safety critical requirements.

Non-Compliant Towers

Towers which do not meet the requirements of EN1004 are potentially very dangerous because:

- They are often not supplied with purpose made platforms with trapdoors for safe entry and exit. Improvised platforms made from scaffold board or other boards can easily slip or break causing a fall
- They are frequently not supplied with the required stabilisers. Stabilisers are NOT an accessory and they should always be supplied and used in accordance with the manufacturers instructions
- They do not have built in access. Accessing a tower using an external ladder or climbing the tower on the outside will cause it to become very unstable and there is a good chance that it will overturn. Climbing the frames of these towers is dangerous and you can easily slip and fall
- The dimensions of the guardrails are often insufficient to prevent a fall
- They cannot be assembled and dismantled using either of the two recognised safe methods; Through The Trap (3T) or Advance Guard Rail (AGR)



Buy or Hire?

If you want to buy or hire a mobile access tower then a good place to start is the PASMA website. You will find the contact details of PASMA members who manufacture, sell or hire EN1004 mobile access towers.

If you can't afford to buy an EN1004 tower, hiring can be a very cost effective way of obtaining a safe mobile tower. When hiring, specify an EN1004 tower and it will come with all the components to build a safe tower.



Competence and Training

In the workplace, the Work at Height Regulations require that you must be competent in the safe use of work at height equipment, which includes mobile access towers. You must ensure that not only the person building the tower is competent but also those who specify, use and supervise or manage the use of the tower are competent to do so.

A competent person is a person who can demonstrate that they have sufficient professional or technical training, knowledge, actual experience, and authority* to enable them to:-

- Carry out their assigned duties at the level of responsibility allocated to them;
- Understand any potential hazards related to the work (or equipment) under consideration;
- Detect any technical defects or omissions in that work (or equipment), recognise any implications for health and safety caused by those defects or omissions, and be able to specify a remedial action to mitigate those implications.

*Note: "authority" here means delegated authority to the individual by his employer to carry out a certain function or duty.

Assembling, altering, dismantling or working on a mobile access tower will involve working at height. The Advisory Committee on Work at Height Training (ACWAHT) indicate that for anyone who works at height, competence implies:

- To know and understand the specific legal duties under the Work at Height Regulations which apply to them as an individual
- To understand who controls their activity and the lines of communication to use
- To understand the principles of fall protection that the Regulations require to be used
- To be able to recognize safe and unsafe situations/ activities
- To understand how to deal with the hazards associated with the task allocated to them
- To have adequate training in the correct use and limitations of any work equipment allocated to them for the task
- To understand the need for and the ability to check the adequacy of the safety equipment allocated to them
- If that equipment has been issued to them on a personal basis, an understanding of the correct procedure for storage, maintenance and inspection
- To understand safe procedures of work and state the correct procedure for the task, the emergency (including rescue) procedures in place for the work and their role in it
- To know the procedure for reporting any defects, hazards or unsafe procedures they detect

PASMA provides training and verifies competence in the use of mobile access towers through its network of over 400 training centres. The PASMA Photocard provides proof that you have undergone and successfully completed training to a nationally recognized standard. All delegates receive both theoretical and practical training before being assessed to determine their competency.

Use of Mobile Tower

- Never work on a platform without guardrails
- Never stand on an unprotected platform when building or dismantling a tower
- ALWAYS follow the manufacturer's or supplier's instruction manual
- Ensure that these manuals are available to the operatives erecting and using the tower, and to the person supervising the work
- No manual should mean no tower





Inspecting and Looking After Your Mobile Access Tower

In accordance with the requirements of the Work at Height Regulations all equipment for work at height must be properly maintained and inspected to ensure that it is fit for use. A PASMA trained operative will be taught what to look for when inspecting mobile tower equipment in both pre-use and routine inspections. You can also refer to PASMA Guidance which gives information on what to look for in both types of inspection, routine and pre-use.

Inspections

If you are using a mobile tower in the workplace, then there are two types of inspection that need to be carried out:

- Recorded pre-use inspections following assembly of the tower, and at regular intervals thereafter if the tower is still in use
- Routine inspections of the components of the tower

Recorded inspections following assembly of the tower

The Work at Height Regulations specifies that where the safety of work equipment – in this case the mobile tower - depends on how it is installed or assembled then it must not be used unless it has been inspected in that position.

In a pre-use inspection you're primarily checking that the tower has been assembled correctly in accordance with the manufacturer's instructions, with all the correct parts present and that it is safe to use. However, you will also be checking that none of the parts are damaged such that they could affect the safety of the tower.

- The tower should be inspected after assembly and before first use
- A written report should be produced and given to the person for whom the report was compiled within 24 hours
- Where it remains in use, the tower should be re-inspected and a report compiled at least every 7 days
- The tower should be re-inspected following any exceptional event that may have jeopardised its safety
- There is no requirement to re-inspect the tower every time it is moved in the same workplace
- A written copy of the report should be kept:
 - At site until the work is completed
 - Then at your office for another 3 months

PASMA recommends the use of the PASMA Tower Inspection Record for this purpose because it satisfies the requirement to a) complete a written report, b) by affixing to tower, to give to the person for whom it was completed and c) the need to retain & keep records safe.

If a tower is incomplete or is in a dangerous condition then the red reverse side of the inspection record should be used to inform the person on whose behalf the inspection was carried out that the tower is:

- Incomplete
- Damaged
- Unsafe

The PASMA Inspection Record should be placed in a prominent position at or adjacent to the access point on the tower.





Routine inspections on the components of the tower

In a routine inspection you will closely inspect every part of the mobile tower equipment when it is unassembled for deterioration, contamination and damage. The reason for carrying out the inspections in the unassembled condition is that you cannot easily check some parts once they are assembled, e.g. the spigots of the end frames or the mechanisms of the braces.

These routine inspections on the components of the tower should be carried out by a competent person and properly recorded in accordance with the regulations which require that:

- “Every employer shall ensure that no work equipment;
- leaves his undertaking or
 - if obtained from the undertaking of another person, is not used in his undertaking unless it is accompanied by physical evidence that the last inspection required to be carried out under this regulation has been carried out”.

If you do find any damaged equipment then it is vital that it is segregated, marked and reported to someone in authority to either have them repaired or removed from service. All components and their parts should be checked to ensure that they are in good condition:

- Castors should be undamaged, rotate freely and brakes function correctly
- Adjustable legs should be straight and the thread undamaged and clean
- Frames tubes should be undamaged and straight without visible cracks, holes or other damage or contamination
- Frame joints, spigots and foot-rims should be secure and undamaged with no visible signs of cracking
- Interlock clips should be present and operate correctly
- Braces and stabilisers should be undamaged and straight without cracks, holes, other damage or contamination
- Locking hook mechanisms and clamps should function correctly
- Telescopic stabilisers should extend correctly
- Platforms frames must be undamaged, flat and square and not contaminated
- The platform hooks must be undamaged with no visible signs of cracking and they must be secure in the platform framework
- Plywood decking should not be damaged, split or warped and it should be firmly fixed to the platform framework
- Trapdoors should be secure and open and close properly
- The labels on all tower component labels should be intact and legible

Care of a Mobile Tower

It's important that, once you have invested in a tower, then you know how to take care of it. Below are some key points to ensure that your tower has a safe, long, and efficient life:

- Good maintenance will extend the life of your mobile tower equipment and ensure that it works properly and safely every time you bring it out for use.
- If you do find any damage, any repairs must be carried out ONLY by the manufacturer or their approved agent. If the parts cannot be repaired then they must be replaced
- Good storage conditions are vital to ensure the long potential life of your mobile tower equipment. If the equipment is stored outside in poor conditions for extended periods then it will require more frequent inspection, more maintenance and probably earlier replacement. So if you can store it undercover in reasonable conditions then it makes sense to do so.
- A mobile tower has moving components: the brace claws, adjustable legs, stabiliser couplers, frame interlock clips, platform trapdoors, platform wind locks – these are safety critical components and must be properly maintained. If you keep your tower outdoors or in poor conditions for extended periods without any maintenance then these components can deteriorate and stop working. That can be both annoying and time wasting when you go to use the tower but even more importantly, neglect could lead to a failure of the component and a serious accident or even a fatality
- If you are not sure how to maintain the tower then contact the manufacturer for advice

