



# RAPID TOWER INSTRUCTIONS MANUAL

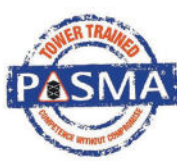
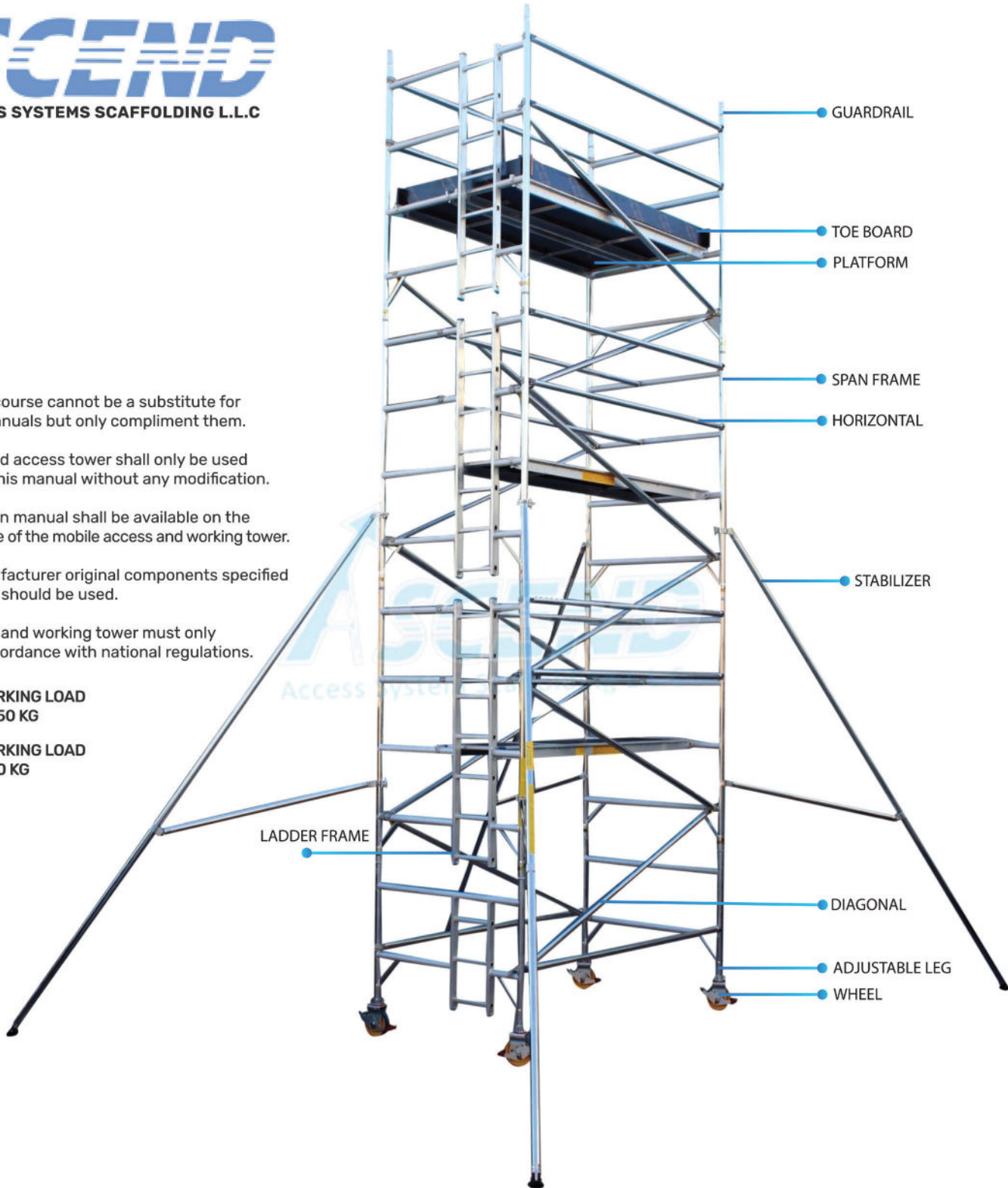
MANUFACTURER OF ALUMINIUM SCAFFOLD TOWERS AND LADDERS "EN1004-2" ACCORDING TO "EN1004-1 : 2021"

EN 1004-2-en



ASCEND ACCESS SYSTEMS SCAFFOLDING L.L.C

- User training course cannot be a substitute for instruction manuals but only complement them.
- This mobile and access tower shall only be used according to this manual without any modification.
- This instruction manual shall be available on the locations of use of the mobile access and working tower.
- Only the manufacturer original components specified in this manual should be used.
- Mobile access and working tower must only be used in accordance with national regulations.
- MAX SAFE WORKING LOAD STRUCTURE 750 KG
- MAX SAFE WORKING LOAD PLATFORM 250 KG



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# RAPID TOWER ASSEMBLY INSTRUCTIONS MANUAL

The law requires that the personnel erecting, dismantling Or altering the tower must be competent. Any person erecting Ascend Mobile Tower must have a copy of this guide.



**Step 1** Press **STOP** Lock Brakes on all castor wheels.



**Step 2** Insert castor and adjustable leg in to the 3 rung span and ladder (or base frame) Make sure all the adjusting nuts are approximately at the same height.



**Step 3** Add two horizontal braces, **BLUE** colour coded to the vertical, member of the frame as low as possible. Both Brace hook line must face from inside towards outside.



**Step 4** Position two diagonal braces **YELLOW** colour code from first to third rung of each frame in the opposite direction as illustrated.



**Step 5** Fit trapdoor Platform on 1st rung allowing the correct guardrail height above.



**Step 6** Fit four handrail braces two on the outside and two on the mid rung of the frame as shown, on lower levels these may not be required.



**Step 7** Level the mobile tower, using spirit level. Use adjustable leg of wheel to level the tower. within an inclination of 1%



**Step 8** Standing on the platform fit one Span & one Ladder frame, ensuring the ladder frames are in line.



**Step 9** After adding frames engage interlock clips.



**Step 10** Continue with diagonal brace in zig-zag pattern from 3<sup>rd</sup> to 5<sup>th</sup> and 5<sup>th</sup> to 7<sup>th</sup> rung both the sides in Opposite direction Make sure diagonal brace is aligned.



**Step 11** Remove trapdoor platform 1st rung and fit 3<sup>rd</sup> rung from the top and make sure trapdoor opens on the side of ladder frame, apply wind lock system onto the frame rung. (as illustration 3 )



**Step 12** Fit stabilizers ASAP to increase the base dimension. Position the stabilizer so that the foot pads are approximately equidistant from other at 45° for maximum stability.



**Step 13** sitting through the door opening of the platforms, position horizontal brace on 6<sup>th</sup> & 7<sup>th</sup> rung On both the open sides of platform. Two on the outer side and two on the mid rungs of the frame.



**Step 14** Continue to build the tower using the 3T method, same as step 8, 9, 10, 11 & 13.



**Step 15** Position platforms at final height of the structure on 3<sup>rd</sup> rung from the top. ensure wind lock systems are in the correct locked position.



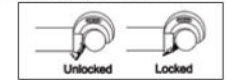
**Step 16** Sitting through trapdoor fit two horizontal braces on both open sides of the platforms.



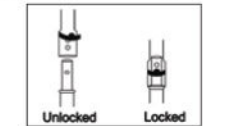
**Step 17** Fit the toe board. Slide the side board into the correct slot in the board. Ensuring the object shouldn't fall and trap door opens fully.

## ILLUSTRATION

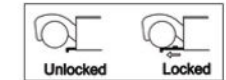
### Assembly Process



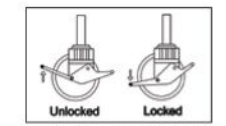
1)Brace lock - Sort the braces into horizontal and diagonal braces, the diagonal braces are slightly longer



2)Snap pins - Unlock the interlock Clips on all frames. When installed, always move the interlock clip to the "Locked" Position.



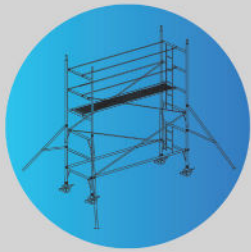
3)Windlock - A windlock clip is installed on the platform at the hook. This is locked as shown here.



4)Wheel lock - Install castor / leg assembly to frame by pushing the leg into the frame tube. This Should be done with manual force only, no tools. Lock Castors before ascending any part of the tower.

### Dismantling the Tower

Please Dismantle the Tower reverse from build process.



# RAPID TOWER INSTRUCTIONS MANUAL

## ASCEND RAPID TOWER BASEOUT

### 1.7m Baseout

This base out will allow the operative to achieve 1.8m, 3.8m, 5.8m, 7.8m, 9.8m and 11.8m Platform heights

- 1: Fit leg and castor assembly into the 2 rung Span Frame and in 2 rung Ladder Frame
- 2: Fit horizontal brace on frame lower rung on each side as shown
- 3: Attach both horizontal braces to Ladder frame as shown in illustration
- 4: Fit 3 rung Span and Ladder frames, ensure the interlock clips are engaged
- 5: Fit 2 diagonal braces in opposing direction from the 1st rung to the 3rd rung as shown
- 6: Place platform on the 3rd rung ensuring hatch is to the ladder side and it opens outwards. Check the platform is secure and level then lock the wind locks.
- 7: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 8: Using the 3T method of assembly, fit horizontal bracing on the 4th and 5th rungs. The platform is now safe Stand On.



### 2.7m Baseout

This base out will allow the operative to achieve 2.8m, 4.8m, 6.8m, 8.8m and 10.8m Platform heights

- 1: Fit leg and castor assembly into the 3 rung Span Frame and in 3 Rung Ladder Frame.
- 2: Fit horizontal brace on frame lower rung on each side as shown
- 3: Attach both horizontal braces to Ladder frame as shown in illustration
- 4: Fit 2 diagonal braces in opposing direction from the 1st rung to the 3rd rung as shown. Fit 4 rung ladder and span frame, ensure the interlock clips are engaged
- 5: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 6: Fit another 2 diagonal braces in opposing direction from the 3rd rung to the 5th rung.
- 7: Place platform on the 5th rung ensuring hatch is to the ladder end and it opens outwards. Check the platform is secure and level then lock the windlocks. Using the 3T method of assembly, fit horizontal bracing on the 6th and 7th rungs, the platform is now safe to stand on. Please note you need to use a Platform on the 1st Rung



### 2.0m Baseout

This base out will allow the operative to achieve 2.3m, 4.3m, 6.3m, 8.3m and 10.3m Platform heights

- 1: Fit leg and castor assembly into the 2 rung Span Frame and in 2 Rung Ladder frame.
- 2: Fit horizontal brace on frame lower rung on each side as shown
- 3: Attach both horizontal braces to Ladder frame as shown in illustration
- 4: Fit 4 rung Span and Ladder frames, ensure the interlock clips are engaged
- 5: Fit 2 diagonal braces in opposing direction from the 1st rung to the 3rd rung as shown
- 6: Place platform on the 4th rung ensuring hatch is to the ladder side and it opens outwards. Check the platform is secure and level then lock the wind locks.
- 7: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 5: Fit 2 diagonal braces in opposing direction from the 3rd rung to the 5th rung as shown
- 9: Using the 3T method of assembly, fit horizontal bracing on the 5th and 6th rungs. The platform is now safe Stand On.



**"Do not stand on the unprotected platform"**

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SCAFFOLD TOWERS AND LADDERS "EN1004-2"  
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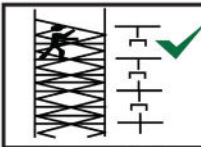
The following "GREEN" pictograms indicate proper use. The following "RED" pictograms indicate misuse and are provided as a visual reminder for use. They are not an exhaustive list of use instructions or warnings.



Maximum Working wind speed



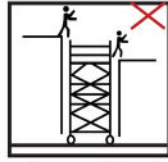
Maximum Inclination for working 1%



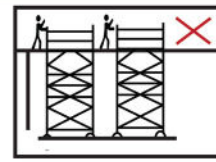
Maximum distance is 2 metre between platform



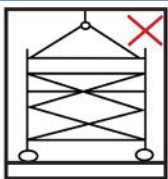
Do not move the people or materials on it



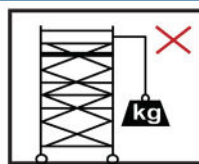
Do not use the tower for access and egress to other structures



Do not Bridge Between towers or other structures



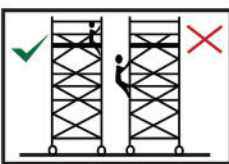
Do not suspend the tower



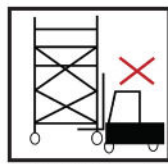
Do not lift heavy objects from the tower



Do not stand on an unguarded Platform



Do not climb the outside of the tower



Do not lift the tower with mechanical equipment



Do not use ladder boxes or other objects to gain height.

# GENERAL SAFETY RULES

## ● Instruction for use shall, when followed by the user contribute to reducing the risk of injury to people and risks of any damage.

1. A risk assessment has been done and all parts safety equipment (Rope etc) and auxiliary tools are available on site for erection and dismantling the tower.
2. The ground condition will take the working load as specified .
3. The location of tower should be checked to prevent hazards during erection & dismantling, moving and while working on the tower. Level and slope, obstruction and wind condition should be checked.
4. Minimum 2,3 persons are required to safely erect and dismantle the tower.
5. Check instructions before use. Mobile access working towers may only be erected and dismantled by person competent for working on aluminium movable tower.
6. Do not use any scaffold tower which is damaged, which has not been properly erected, which is not firm and stable, and which has any missing or damaged parts.
7. Do not erect a scaffold tower on unstable ground, slopes or objects such as loose bricks, boxes or blocks. Only a sound rigid footing must be used.
8. Ensure that the scaffold tower is always level and the adjustable legs are engaged. Check that you have taken all necessary precautions to prevent the tower being moved, or rolling away.
9. Ensure that all frames, braces and platforms are firmly in place and that all locking hooks are functioning correctly. Ensure that all frame locking clips are engaged. If any missing, replace them. Never mix parts or components from other manufacturers. Damaged components should be replaced with the new components.
10. Distance between platforms shall not exceed 2.25m. expect the distance to the first platform max 3.4m
11. Ensure that the scaffold tower is within the maximum platform height stated, and that the appropriate stabilizers or outriggers shall always be fitted when specified.
12. Outdoor scaffold towers should, wherever possible, be secured to a building or other structure. It is good practice to tie in all scaffold towers of any height, especially when they are left unattended, or in exposed or windy conditions.
13. A free standing scaffold tower must not be used in winds stronger than 17mph/27kph/ Beaufort scale 4. Be cautious if erecting or using the tower in open places, such as hangers or un-cladded buildings. In such circumstances the wind forces can be increased, as a result of the funnelling effect.
14. Mobile access and working towers are not designed to be sheeted.
15. Do not erect or use a scaffold tower near un-insulated, live or energised electrical machinery or circuits, or near machinery in operation.
16. If an overhead hazard exists, head protection should be worn.
17. Do not lean ladders against the tower, or climb outside of tower. Whatever your intended access system, it should only be used inside the tower. Except where this is permit in accordance with EN1004-1.
18. Never climb on horizontal or diagonal braces. Do not gain access or descend from the working platform other than by the intended access system.
19. Do not work from ladders or stairways, they are a means of access only.
20. Always lift components from inside the tower.
21. When lifting materials or components always use reliable lifting materials to ensure there is no possibility of it falling.
22. Always tie the tower when it is left unattended .
23. Guardrails and toe boards must be fitted to the working platforms. Never stand on unguarded platform.
24. Never jump on to or off platforms.

## ● Instructions for use are as integral part of the safe operation and maintenance of a mobile access and working tower.

25. Never place the working platform on the guardrail frame. Always keep double height guardrail at each platform levels, never stand on an unguarded platform.
26. DO NOT exceed the safe working load of the platform or structure by accumulating debris, material tools on platforms as these can be a significant additional load.
27. The tower should always be accessed from the inside using the ladder frame ,never climb up from outside. Ensure that the locking hooks on the platform are functioning correctly.
28. Beware of horizontal forces (e.g. when using power tools), which could generate instability or overturning of the tower. Maximum horizontal force 20kg.
29. Should you require additional platform height, add further frames. NEVER extend your adjustable legs to achieve extra height, these are for levelling only. NEVER use a ladder or other objects on the platform to achieve additional height.
30. Do not throw the scaffold parts , always lower them to the ground.
31. Mobile towers are not designed to be lifted or suspended. Permissible load according to scaffold load group is 200 kg/m<sup>2</sup>. Load Class 3.
32. It is not permissible to attach and use hoisting facilities on towers, unless specifically provided for by the manufacturer.
33. According to EN 1004 : 2004 the double width tower must not be exceeded 12 mtr to top platform for indoor use and 8 Mtr platform height (working height 10 mtr) for outdoor use.
  - For single width tower maximum working height for both interior and exterior work is 8 mtr.
  - If the platform height reaches more than 6 mtr for single width and 8 mtr for the double width scaffold, then it should be secured against the wall prior to use.
  - Always tie to a solid structure, while tying the tower attach a tie at 4 mtr interval.
34. The maximum working load on the Ascend RAPID is 750 kg for overall structure (including tower self weight) and 250 kg evenly distributed on the platform. This must not be exceeded.
35. Always take care of Aluminium scaffold tower equipment. Remember your safety depends on the safe erection and use of the equipment. It is not permissible to attach bridging between a tower and a building.
36. Mobile access and working under tower in accordance with EN 1004-1 are not designed to be used as a means to enter or exit other structures e.g. as a stair tower.
37. Mobile access and working tower in accordance with EN 1004-1 are not designed to be used as a means of edge protection.
38. While storing and transporting mobile access tower components make sure it is properly bundled and kept in such a way that its components does not damaged while storing and transporting. Provide necessary packing as required.
39. Only one platform level should be working platform at one time, maximum number of person permitted on the working platform at one time is two.
40. Mobile access and working tower designed in accordance with EN 1004-1 are not anchor points for personal fall of the arrest equipment.
41. Tower after assembly or alteration should have scaf tag which mentions.
  - a. The name and contact details of the responsible personel.
  - b. Also to mention the tower is ready for application or not.
  - c. The load class and the uniformly distribute load.
  - d. The mobile access and working tower is intended for indoor user only.
  - e. The date of assembly.
42. Always face the scaffold ladder during ascent or descent.
43. Restricted in areas with electrical hazards.

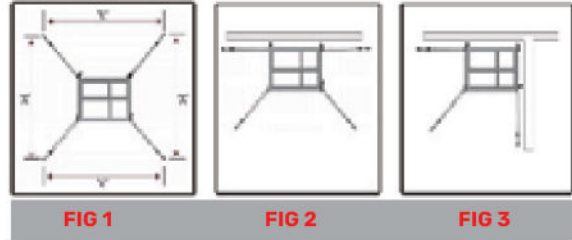
## MAINTENANCE RULES

Ensure that the scaffold tower is kept clean.

- Grease all moving parts with commercial oil. Wipe off excess oil. Position the stabilizers symmetrically to obtain the MAXIMUM BASE
- Spigots and sockets should fit together with ease and be secured by an interlock clip.
- Check frames and braces, adjustable legs and boards for paint, grit, burrs etc. Remove any foreign substance with a light wire
- Where brace, ladder and platform hooks attach the frames, ensure that the frame rungs are kept clean.
- Ensure that all locking hooks function correctly. If necessary lubricate with light oil.
- Please check that spigot are in to the position and should fit easily into frames.
- The inside diameter of all hooks should be kept clean to ensure they fit to other components without being forced.
- If in any doubt about the proper use and maintenance of the scaffold tower equipment, consult the manufacturer.
- Do not misuse or abuse the scaffold tower with heavy objects, hammers etc. Do not throw components in and out of vehicles or to the ground when the tower is being dismantled. Such abuse may reduce the structural integrity of the scaffold tower. Adjustable leg's thread should be clean and lightly oiled. Under no circumstances damage or incorrect components shall be used , Either repair it or get replacement.

## USE OF STABILIZERS

Stabilizers are to be used, when specified, to guarantee the structural stability of the tower



ALWAYS ENSURE STABILIZER SIZE IS CORRECT AND ABLE TO SUPPORT TOWER

- Lightly tighten the upper clamps above the third rung on each corner post. Position the lower clamp above the bottom rung. Ensure the lower arm is as horizontal as possible. Position the stabilizers so that the footpads are approximately equidistant from each other, as shown in (Fig 1). Adjust the stabilizer and reposition the clamps as required to make firm contact with the ground. Ensure the clips with locking pin are in place. When in the correct position, tighten the clamps firmly.
- To position the tower against a wall, do not remove the stabilizer; move parallel with the wall. (Fig 2)
- To position the tower in a corner, remove the inside stabilizer and place the outside two parallel with the wall. (Fig 3)

## MOVING A TOWER

1. If you must move a tower, remove all materials and personnel. When moving a scaffold tower, force must be applied from the base. The tower should only be moved manually on firm, level ground which is free from obstacles. Normal walking speed should not be exceeded during relocation. The ground over which a tower is moved should be capable of supporting the weight of the structure. Make sure tower height is not above 4 mtr while moving the tower. Recheck the tower level and reposition stabilizer before use .
2. Check the location is firm and free from pot holes.
3. Raise the stabilizer feet only enough (25mm) to clear the Obstructions.
4. Wind speed should not exceed 29km/h(Beau fort force 4).
5. Check that there are no power lines or obstruction overhead.
6. Before each use check that the MAT is vertical or need readjustment.
7. Whether the structure assembly is still correct and complete.
8. That no environmental changes influence safe use of the MAT.
9. Adjust the wheel if required to level the mobile access and working tower using the spirit level within the inclination of 1% after the movement.
10. Inclination should not be more than 1% while moving the tower.
11. Mobile access and working tower shall not be moved with loose materials or persons on it.

Beaufort scale	Description	Air Speed	Action
0	Calm. Smoke rises easily	1 MPH	None Required
3	Leave & small twigs in constant motion, wind extended light flag	12 MPH	No Immediate action required
4	Moderate breeze, small branches move	17 MPH	Cease work
5	Strong breeze, Large branches bend	25 MPH	Tie tower to a rigid structure
>6	Walking progress impeded	40 MPH	Dismantle tower if such conditions are expected