

JUMBO TOWER INSTRUCTION MANUAL AGR METHOD

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













www.ascenduae.com

Nad Al Hamar, Dubai

MOBILE ADVANCE GUARDRAIL TOWER

The Ascend Jumbo Scaffold is a unique design of towers, which allows us to access with the complete safety. Anti-slip steps and platform with the safer access methods to assemble and dismantle. The number of components in the Tower- Kit is sufficient for proper installation.

WORKING HEIGHT		4	4.5	5.5	6	6.5	7.5	8	8.5	9.5	10	10.5	11.5	12	12.5	13.5	14
TOWER HEIGHT		3	3.5	4.5	5	5.5	6.5	7	7.5	8.5	9	9.5	10.5	11	11.5	12.5	13
PLATFORM HEIGHT		2	2.5	3.5	4	4.5	5.5	6	6.5	7.5	8	8.5	9.5	10	10.5	11.5	12
SIZE: WIDTH 140 CM LENGTH 255CM																	
COMPONENTS	UNIT WEIGHT	7.															
20CM WHEEL	5.78	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ADJUSTABLE LEG		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2 RUNG LADDER FRAME	4.70	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1
2 RUNG SPAN FRAME	3.70	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1
3 RUNG LADDER FRAME	6.80	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0
3 RUNG SPAN FRAME	5.40	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0
4 RUNG LADDER FRAME	9.00	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6
4 RUNG SPAN FRAME	7.10	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6
256.5CM TRAPDOOR PLATFORM	14.08	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6
256.5CM STANDARD PLATFORM	13.70	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6
255CM HORIZONTAL BRACE	2.32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
275CM DIAGAONAL BRACE	2.46	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
255 CM ADVANCE GUARDRAIL	7.65	2	2	4	4	4	6	6	6	8	8	8	10	10	10	12	12
244CM WOODEN SIDE TOEBOARD	3.38	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
118CM WOODEN END TOE BOARD	1.84	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
300 CM LONG STABILIZER	4.64	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
450CM LONG STABILIZER	5.90	0	0	0	0	0	4	4	4	4	4	4	0	0	0	0	0
600CM LONG STABILIZER	6.90	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4
TOWER WEIGHT IN KGS							<u> </u>								<u> </u>		
2.55 MTR LONG		110.7	146.8	184.5	188.4	205.9	248.8	252.7	270.2	307.9	311.8	329.3	371.1	375	392.5	430.3	434.2



JUMBO 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 and *Lock Brakes on all*



Step 2 Insert castor and adjustable

leg in to the 2 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 bottom of the span frame and ladder frame rungs .Brace hook facing outside from the Inside.



Step 4 Level the Mobile Tower .
using sprit level.
Use the adjustable jack of the
wheel if require to level the tower
with an inclination of 1%.



Step 5 Fit one span frame and one ladder frame to the lower frame. Make sure ladder frame is in one line.



Step 6 After adding frames engage Interlocking clips.



Step 7 Fit two diagonal braces yellow colour coded from 1st rung to 3rd rung of the frame, braces must be positioned in the opposite Direction as shown.



Step 8 Add advance guardrail frame to the top rung on both the sides.



Step 9 Position one standard & one trapdoor three rungs lower from the top.Make sure trapdoor opening on the side of ladder frame. Apply wind lock. As Illustration3



Step 10 Fit stabilisers 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 11 Standing on the platform continue to build the structure following step 5,6, 8 & 9.



Step 12 Add two advanced guardrail frames to the top rungs of tower.



Step 13 Position platforms three rungs lower from the top and apply wind lock.



Step 14 Add toe boards to complete the structure. Slide the side board into the correct slot in the end boards, ensuring the object cannot fall through & the trapdoor can open fully.

ILLUSTRATION





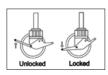
1)Brace lock - Sort the braces into horizontal and diagonal braces, the diagonal brasses are slightly longer in size.



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.

IMPORTANT NOTICE PLEASE DISMANTLE IN REVERSE FROM BUILD SAFELY

Dismantling is the reverse except when dismantling the Advance guardrails, Unclip the four end of the hooks and then remove the platform. Do not remove the Advance guardrails while standing on the platforms to avoid any risk of fall



ASCEND JUMBO TOWER BASEOUT

1.7m Baseout

This base out will allow the

- 1: Fit leg and castor assembly into the 2 rung Span Frame and in 2 rung Ladder Frame
- 2: Fit horizonal brace on frame lower rung on each eida ae ehown
- 3: Attach both horizontal braces to Ladder frame as chown 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
- 6:Fit Advance guardrail frame to the 5th rung on both side as shown
- 7: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 8: Place both Trandoor platform and Standard 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 as shown. The Platform is now safe to Stand On



2.7m Baseout

This base out will allow the operative to achieve 2 8m 4 8m 6 8m 8 8m and

- 1: Fit lee and castor assembly into the 3 rung Span Frame and in 3 Rung Ladder Frame.
- 2: Eit horizonal 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 4rung ladder and span frame,ensure the interlockclips are engaged
- 5: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 6:Fit Advance guardrail frame to the 7th rung on both side as shown
- 7: Place both Trapdoor platform and Standard platform on the 5th rung ensuring hatch is to the ladder side and it opens outwards check the platform is secure and level then lock the wind locks as shown. The Platform is now safe to Stand On Please note you need to use



2.0m Baseout

This base out will allow the -----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 horizonal brace on frame lower rung on each side as shown
- 3: Attach both horizontal braces to Ladder frame as charm in illustration
- 4: Fit 4 rung Span and Ladder frames ensure the interlock clins are engaged
- 5: Fit 2 diagonal braces in opposing direction from the 1st rung to the 3rd rung as shown
- 6: Fit the stabilisers ensuring that the maximum footprint is achieved.
- 7:Fit Advance guardrail frame to the 6th rung on both side as shown
- 8: Place both Trapdoor platform and Standard 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 as shown. The Platform is now safe to Stand







"Do not stand on the unprotected platform"

ASCEND ACCESS SYSTEM SCAFFOLDING NADD AL HAMAR, DUBAI UNITED ARAB EMIRATES











- +971 4 885 5001
- sales@ascenduae.com
- www.ascenduae.com
- 💿 Nad Al Hamar, Dubai

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.
- A risk assessment has been done and all parts safety equipment (Rone etc) and auxiliary tools are available on site for erection and dismantling the tower
- The ground condion will take the working load as specified.
- 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.
- Minimum 2.3 persons are required to safely erect and dismantle the tower.
- Check instructions before use. Mobile access working towers may only be erected and dismantled by person competent for working on
- aluminium movable tower. 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.
 - as loose bricks, boxes or blocks. Only a sound rigid footing must be used. Ensure that the scaffold tower is always level and the adjustable legs are engaged. Check that you have taken all necessary precautions to

Do not erect a scaffold tower on unstable ground, slopes or objects such

prevent the tower being moved, or rolling away. 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

10. Distance between platforms shall not exceed 2.25m. expect the

be replaced with the new components.

- 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.
- descend from the working platform other than by the intended access

18. Never climb on horizontal or diagonal braces. Do not gain access or

- 19. Do not work from ladders or stairways, they are a means of access only.
- 20. Always lift components from inside the tower.
- 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 quardrail at each platform levels, never stand on an unquarded 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.

33. According to EN 1004: 2004 the double width tower must not be

- 31. Mobile towers are not designed to be lifted or suspended. Permissible load according to scaffold load group is 200 kg/m2. Load Class 3.
- 32. It is not permissible to attach and use hoisting facilities on towers, unless specifically provided for by the manufacturer.
- 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 scaftag 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.

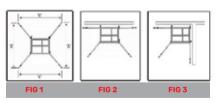
MAINTENANCE RULES

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.
- 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.
- 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 twings in constand motion, wind extended light flag	12 MPH	No Immediate actionrequired
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