

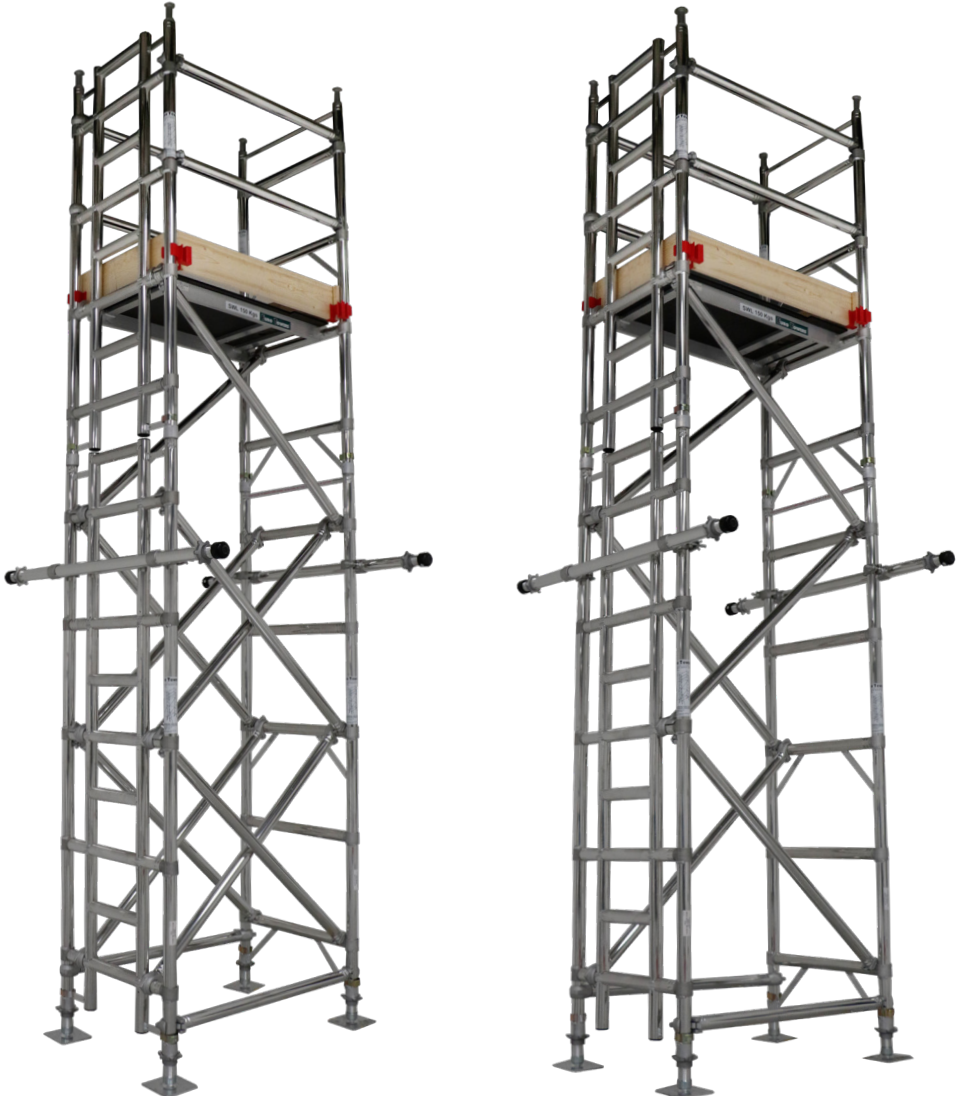
# EURO TOWERS LTD

UK Manufacturer of Aluminium Access Equipment

## LIFT SHAFT TOWER SYSTEM

**MAX SAFE WORKING LOAD FOR STRUCTURE: 750KG**

**MAX SAFE WORKING LOAD FOR PLATFORM: 250KG**



For more information or any questions please contact Euro Towers LTD

Phone: 01604 644 774 Email: [enquiries@eurotowers.co.uk](mailto:enquiries@eurotowers.co.uk) Web: [www.eurotowers.co.uk](http://www.eurotowers.co.uk)

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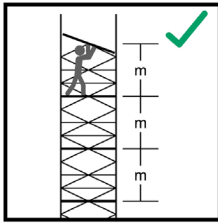
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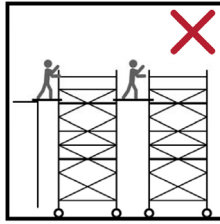
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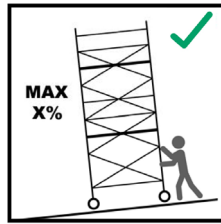
# SAFETY DO'S AND DONT'S



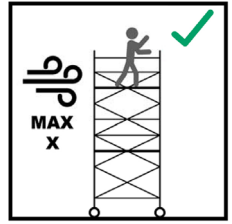
Maximum distance between platforms shall not exceed 2.25m except the distance to the first platform max 3.40m



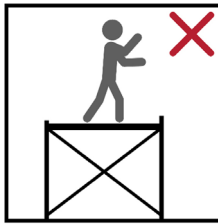
Do not bridge between towers or other structures Please contact Euro Towers for information on the correct equipment for Bridging Towers



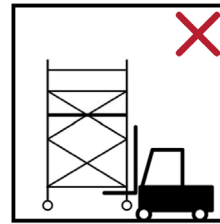
Maximum inclination for movement. Note the maximum angle allowed is 1%.



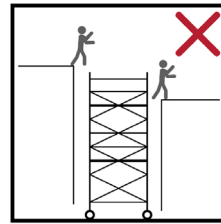
Do not build, dismantle or attempt to work on an access tower if the wind speed exceeds 17MPH



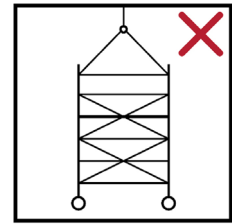
Do not stand on an unguarded platform



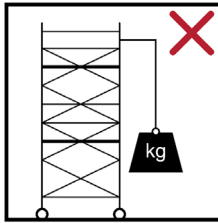
Do not lift the tower with mechanical equipment



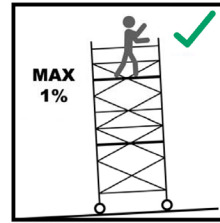
Do not use the tower for access and egress to other structures



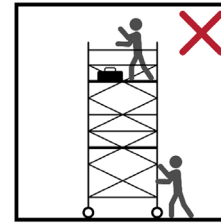
Do not suspend the tower



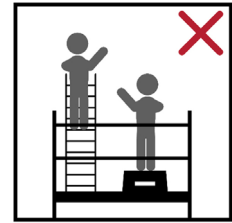
Do not lift heavy objects from the tower



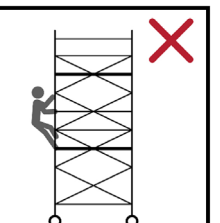
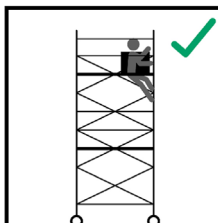
Maximum inclination for working. Note the maximum angle allowed is defined by the manufacturer.



Do not move the tower with people or materials on it



Do not use ladders, boxes or other objects to gain extra height



Do not climb the outside of the tower

# GENERAL SAFETY RULES

**Prefabricated tower scaffolds are for the purpose of working at height safely.**

## **Before You Start**

1. Familiarise yourself with these instructions paying attention to these safety notes before you use the equipment supplied. Towers may only be assembled and dismantled by a COMPETENT person familiar with these instructions.
2. User training courses cannot be a substitute for instruction manuals but only complement them. Although training is not a specific legal requirement, it is one of the most recognised methods of proving competency.
3. This product shall only be used according to the instruction manual.
4. Only original Euro Towers components specified in this manual shall be used.
5. It is recommended that this user manual be used in conjunction with a suitable risk assessment and method statement relative to the project.
6. This instruction manual shall be available on the location of use of the prefabricated tower scaffold
7. This prefabricated tower scaffold shall only be used according to this manual without any modification.
8. Prefabricated tower scaffolds shall only be used in accordance with national regulations
9. You will require the following PPE to help avoid personal injury, Hard Hat, Safety Gloves, Safety Shoes and Hi Vis vest or jacket
10. Tools required for safe erection of a tower are: Spirit level.
11. As part of your risk assessment do not begin to erect, move or dismantle your tower in excessive weather conditions including heavy rain, sleet/snow or weather that can affect your anti slip surfaces. Also avoid working in extreme heat and high winds.
12. Ensure you selected the correct platform height tower in relation to the desired working height (usually 2m) to avoid over reaching and other unsafe practices.
13. Inspect all individual components before use to ensure quantity, compatibility, any damages and all parts function correctly. Damaged or incorrect components shall NOT be used.
14. Check the quantity of components supplied corresponds correctly to the kitting list of the tower height you are planning to build. Do not start assembly if you do not have the correct number of components. Do not use any tower that has missing or damaged parts or has not been properly assembled.
15. Erect an exclusion zone and place warning signs if applicable to your location of work.
16. It is recommended that a minimum of two person erect, alter and dismantle a Tower but during the risk assessment additional person(s) may be required to perform the task safely.

## **Inspection, Care, Maintenance and transport**

17. Regularly inspect the individual components to ensure that they are not damaged and function properly. Damaged components shall be isolated, tagged and removed from use. They should be replaced and sent for repair or scrap.
18. Inspect all tubes on frames, stabilisers and braces for dents, cuts and holes, damaged equipment should be isolated, tagged and removed from use. Check all joints for cracked welds and that they are secure.
19. Inspect Brace Hooks, check the clicker is functioning correctly and the hook is not distorted from abuse. Check the brace is not bent out of shape.
20. Inspect Platform for damage to the decking and fixings and that (if fitted) the trapdoor opens and closes freely and the hinge is secure. Check the aluminium framework for damage and for cracked welds that may be damaged due to overloading. Check the hooks are not distorted from abuse and the wind lock clips are attached and functioning properly.
21. Inspect Stabiliser couplers tighten and can be loosened freely. Ensure rubber foot is securely fitted and not worn out. Check for adjusting pins on telescopic stabilisers are fitted and secured
22. Inspect castors, checking that the wheel turns and spins freely, that the brakes engage and stops the castor from spinning. Ensure the castor has no flat spots and has a suitable SWL and is correctly marked.
23. Inspect the adjustable leg threads are clear of burrs and the nut runs freely up and down the thread. Check the nut housing for abuse or missing nodules.
24. Light oil or lubricating spray may be used to free up jammed, clickers, castors, adjustable leg nuts, stabiliser couplers, trap door hinges and latches.
25. Do not put excessive loads on the components during storage.
26. When transporting the components do not use excessive strapping forces when securing the load, this may distort and damage components if not done with care.
27. Check ground conditions are suitable for erecting and moving the tower and the ground can take the loads imposed by the tower including weight of equipment and persons. Do not assemble tower on unstable ground such as drain, manhole covers, compacted fill or any other hazards highlighted during the risk assessment
28. Ensure the level and slope of the area where the tower is to be erected, moved and dismantled is within the levelling height of the adjustable legs.
29. Check for obstructions that could prevent safe erection, moving and dismantling of the tower.
30. Ensure the Tower is level. Castor wheels should always remain LOCKED unless moving the Tower. Adjustable legs are used for levelling the Tower. NEVER use to gain additional height. Extra height is gained by using additional compatible components. Other items such as ladders, steps or boxes should never be used to gain additional height.
31. Check for overhead hazards such as power lines. Do not assemble a tower near uninsulated, live or energised electrical machinery or circuits, or near machinery or plant that is in operation.

32. All components should be passed up or down by hand where possible, where this is not possible use a suitable material for lifting (e.g. Heavy corded rope) and sufficient knot ties (e.g. hitch knot or timber hitch) DO NOT use mechanical hoists.
33. Towers MUST always be climbed from the inside for access and egress using the Integrated ladders or designated rungs. NEVER climb the outside of a Tower.
34. Do not lean ladders against a tower or climb the outside. Climb the ladder from the inside as per the supplied access system and use the trapdoor for access and egress
35. Never climb on Diagonal or Horizontal braces. Never jump on to or off platforms
36. Working is only permitted on a platform with a complete side protection including guardrails and toe boards
37. After assembly or alteration, the following minimum information shall be displayed on the tower:
  - a. The name and contact details of the person responsible
  - b. If the tower is ready for application or not
  - c. The load class and the uniformly distributed load
  - d. If the prefabricated tower scaffold is intended for indoor use only; and
  - e. The date of assembly

### **Safe Use & Loadings**

38. Before use, check that all components listed in the kit list have been used in the Tower in the correct position. Then repeat all checks if the tower has been moved, modified, left unattended or the environment changes.
39. Care should be taken when using Power Tools or Jet washing or anything specific to your job that could imply side loads and cause the tower to overturn. Maximum permitted side load must not exceed 30kg (300N)
40. When lifting components or materials keep within the base of the Tower. Ensure the total weight of the User(s) any debris or materials being lifted does not exceed the Safe Working Load (SWL) of an individual platform (250kg) or the overall structure (750kg) Loads must be uniformly distributed on the working platform and not block trapdoors.
41. Prefabricated tower scaffolds designed in accordance with EN1004-1 are not anchor points for personal fall arrest equipment.
42. Work should only be completed from one Working Platform at any time complete with Guardrails and Toe-boards to prevent persons and materials falling from the tower. Work should not be attempted from any other part of the tower including stairs or braces.
43. The maximum number of person(s) permitted on the working platform at any time should not exceed the SWL (250kg). This should include any tools and or materials
44. You should never stand on an unprotected platform (guardrails must be in place)
45. Consider measures to avoid unauthorised access or tampering when the tower is left unattended.

### **Stability & Moving**

48. Ensure the 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. Always apply ALL castor brakes or use base plates for static towers or inclined surfaces.
49. Ensure that the scaffold tower is within the maximum platform height as stated and that the appropriate stabilisers are fitted to suit. \*refer to kitting list
50. A scaffold tower should not be used or moved in wind speeds stronger than 17mph (7.7meters per second) (Beaufort force 4). Wind speeds in excess of this consider tying the tower to a rigid structure or dismantling before it is exposed to the strong winds.
51. Beware of the potential wind factors where there is a possibility for the tunnelling effect of open-ended buildings, unclad buildings and at the corners of buildings
52. NEVER fit sheets or cladding to a Tower. Such items can act as a sail and impose extreme horizontal loads onto a tower causing it to overturn.
53. When moving a tower plan the route removing any obstructions, ensuring the ground can take the weight of the tower, beware of soft and uneven ground. Pay attention for overhead hazards. Ensure that all materials and persons are removed from the Tower. If there are any doubts about the route, then dismantle and erect in new location.
54. Towers should only be moved manually by pushing at the base of the tower at a usual walking speed on a slope no greater than 1%. The Tower height should be reduced to 4m if all 4 stabilisers are in place and 2m if less than 4 stabilisers are in place. Stabilisers are raised approximately 25mm clear off the ground and then castors are unlocked before moving.
55. When the Tower is repositioned reapply the brakes on castor wheels ensuring the Tower is still complete and correct. The tower shall be levelled using the adjustable legs for both horizontal and vertical alignment. The stabilisers can then be lowered making firm contact with the ground.
56. Prefabricated tower scaffolds in accordance to EN1004-1 should NEVER be lifted or suspended by a crane or moved by mechanical means
57. Prefabricated tower scaffolds in accordance to EN1004-1 are not designed to be used as a means to enter or exit other structures, e.g. as a stair tower.
58. Prefabricated tower scaffolds in accordance to EN1004-1 are not designed to be used as a means of edge protection

**In the event that an alteration to the prefabricated tower scaffold design is required, approval from the supplier and/or designer shall be obtained and a revised instruction manual or assembly, user and dismantling plan created.**

*Further information on inspection and maintenance can be found on Euro Towers inspection posters. For further safety information or downloading instructions call Euro Towers or visit our website. [www.eurotowers.co.uk](http://www.eurotowers.co.uk)*

# KIT LIST

PLATFORM HEIGHT	1.41m	3.27m	5.13m	6.98m	8.84m	10.69m	12.40m
WORKING HEIGHT	3.41m	5.27m	7.13m	8.98m	10.84m	12.69m	14.40m
OVERALL TOWER HEIGHT	2.66m	4.52m	6.38m	8.23m	10.09m	11.94m	13.65m
PARTS LIST							
Base Plate	4	4	4	4	4	4	4
Adjustable Leg	4	4	4	4	4	4	4
4 Rung Plain Frame		1	2	3	4	5	6
4 Rung Ladder Frame		1	2	3	4	5	6
5 Rung Plain Frame	1	1	1	1	1	1	1
5 Rung Ladder Frame	1	1	1	1	1	1	1
Diagonal Brace	2	6	8	10	12	14	16
Horizontal Brace	6	10	10	14	18	22	26
Trapdoor Platform	1	2	2*	3*	4*	5*	6*
Side Prop	2	2	4	4	6	6	8
Toeboard Assembly	1	1	1	1	1	1	1
TOWER WEIGHT (KGS)							
TOWER WEIGHT (KGS)	61	94	135	169	210	243	290
Temporary Platform*			1	1	1	1	1
Total no. of rungs	5	9	13	17	21	25	29
All to							

14.26m	16.12m	17.94m	19.83m	21.68m	23.54m	25.39m	27.25m	29.10m	30.95m
16.26m	18.12m	19.94m	21.83m	23.68m	25.54m	27.39m	29.25m	31.10m	32.95m
15.51m	17.37m	19.19m	21.08m	22.93m	24.79m	26.64m	28.50m	30.35m	32.20m
4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4
7	8	9	10	11	12	13	14	15	16
7	8	9	10	11	12	13	14	15	16
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
18	20	22	24	26	28	30	32	34	36
30	34	38	42	46	50	54	58	62	66
7*	8*	9*	10*	11*	12*	13*	14*	15*	16*
8	10	10	12	12	14	14	16	16	18
1	1	1	1	1	1	1	1	1	1
<b>EIGHT (KGS)</b>									
313	359	392	434	467	508	542	583	616	657
1	1	1	1	1	1	1	1	1	1
33	37	41	45	49	53	57	61	65	69
owers over 10.69m platform height must be double braced on the first 2 sets of braces at the base.									

# ASSEMBLY STEPS

## How to fit a side prop



## How to fit a brace



## How to remove a brace



For levelling purposes only, the buttress legs can be adjusted by turning the leg nut as shown.



Castor unlocked

Castor locked  
(Note castor wheel axle has moved in line with the leg tube)



## **USE OF SIDE PROPS**

Side Props increase and improve the STABILITY of the Lift Shaft Tower. Position the Side Props symmetrically to obtain the MAXIMUM STABILITY

Position the first set of Side props above the first rung of the first platform level and then every 3.5m.

## **SAFE WORKING LOADS**

The MAXIMUM number of persons on a Lift Shaft Tower at any one time during assembly and dismantling is TWO.

The MAXIMUM number of simultaneous Work Platforms allowed is ONE.

The MAXIMUM number of persons allowed on a Work Platform is ONE.

The MAXIMUM number of persons allowed on a Rest Platform is ONE.

To calculate you are within safe working loads you MUST take into account the total weight of the tower, the equipment and materials you are using and the people on the tower.

# ASSEMBLY STEPS



1. Insert a base plate into each adjustable leg, leave approximately 25mm between the nut and the end of the leg for levelling purposes.



2. Insert the assembled legs into each 5 rung frame.



3. From inside the tower, fit in 2 horizontal braces to the vertical member of the frames, as low as possible, below the 1st rung.



4. Add 2 diagonal braces from the 1st to 3rd rungs as shown, check and adjust the base position (if required) for the build.



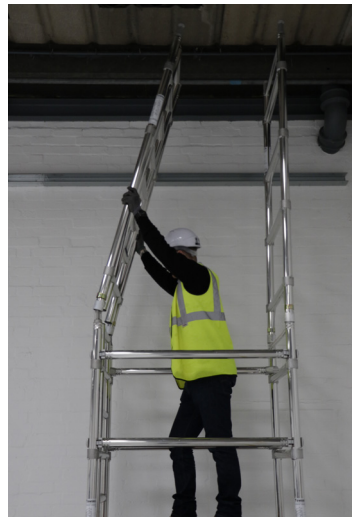
5. Add temporary trapdoor platform to the 3rd rung, trapdoor at the ladder end.



6. Level the tower adjusting the leg nut using a spirit level as a guide.



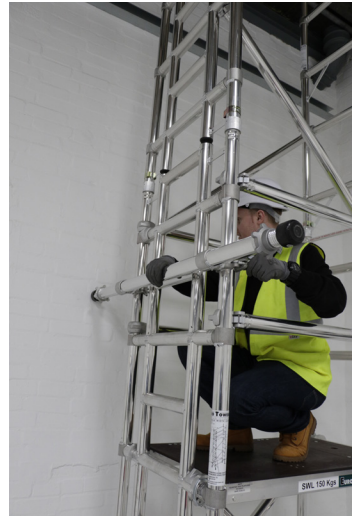
7. Sitting through the trapdoor fit 4 horizontal braces to the verticals above each rung of the frames above the platform to complete a guardrail.



8. Fit a 4 rung ladder and 4 rung plain frame to the 5 rung base frames, ladders MUST run continuously throughout the tower; lock in place with the interlock clips.



9. Fit 2 diagonals to the frame rungs in a cross pattern starting 2 rungs up from the platform. ALL other platform levels start 1 rung up from the platform.



10. Fit a side prop to the outside of the frames at each end above the platform ensuring the couplers are tight, wind the legs to engage the walls, check there's no side movement. FIT SIDE PROPS EVERY OTHER PLATFORM LEVEL.



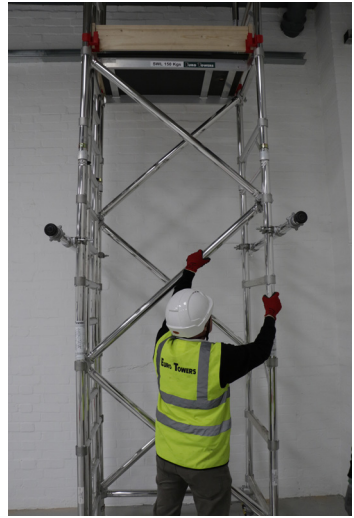
11. Fit the next trapdoor platform to the 4th rung above the platform alongside the brace hooks. Ensure the trapdoor is at the ladder end,



12. Sitting through the trapdoor fit 4 horizontal braces to the verticals above each rung of the frames above the platform to complete a guardrail.



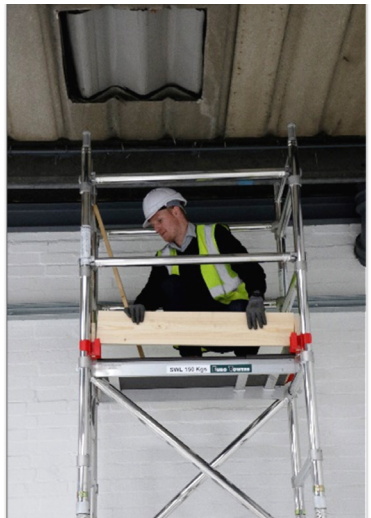
13. Go back down to the 1st platform, sitting through the trapdoor remove all the guardrail braces and descend to the ground and remove the temporary platform.



14. Fit 2 diagonal braces to complete the brace run on the tower. THIS COMPLETES THE BASE SET UP FOR ALL TOWERS UP TO 10.69m PLATFORM HEIGHTS. REPEAT STEPS 8 - 12 UNTIL YOU REACH YOUR REQUIRED HEIGHT. GO TO STEP 16.



15. ALL TOWERS ABOVE 10.69m PLATFORM HEIGHT DOUBLE BRACE THE BASE THEN REPEAT STEPS 8 – 12. Fit 4 diagonals to the 2 base run of braces running in opposite directions to the existing ones on the tower. You should create an X on each side on the first 2 levels of braces



16. Fit toeboard clips and toeboards to complete the tower.

Dismantling is the reverse of assembly

