

# EURO TOWERS LTD

UK Manufacturer of Aluminium Access Equipment

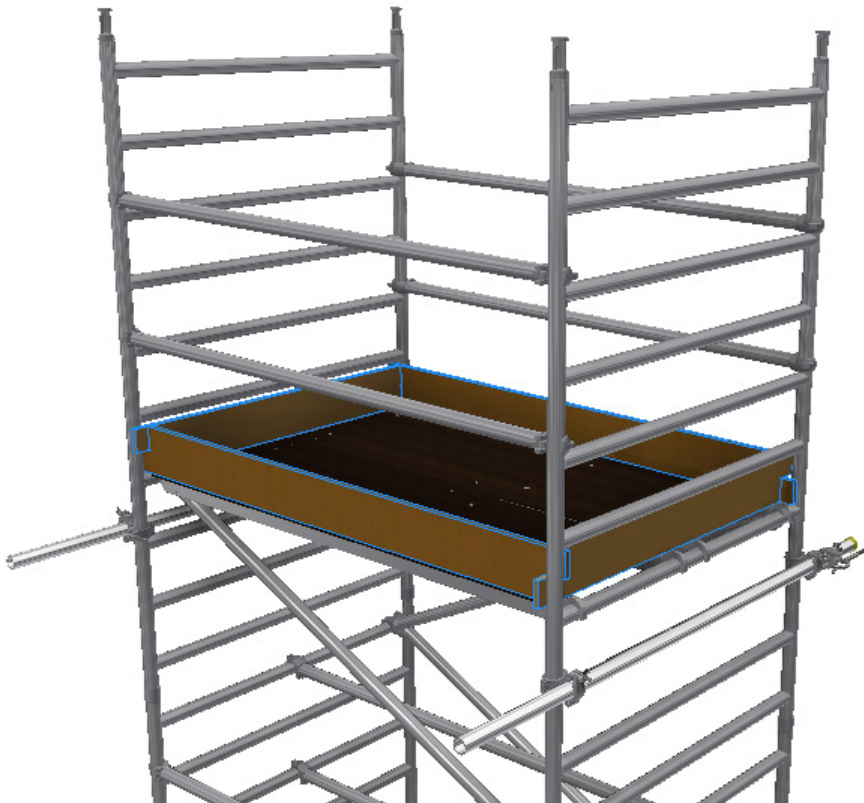
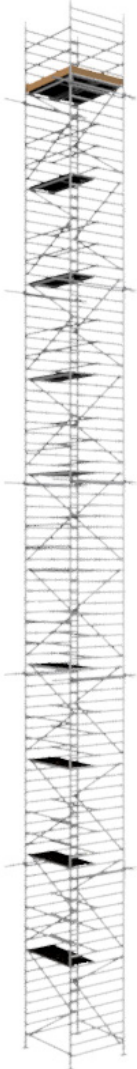
## Tall Tied External 232 Tower

Euro Towers Ltd Tall Tied External 232 Tower Certified to BS 1139-6:2022 Load Class 3 Wind Class 2

FOR USE WITH EURO TOWERS 232 3T TOWER SYSTEMS ONLY.

Prefabricated tower scaffold may only be assembled and dismantled by persons familiar with these instructions

MANUFACTURED BY EURO TOWERS LTD  
INSTRUCTION MANUAL  
EN 1004-2-en



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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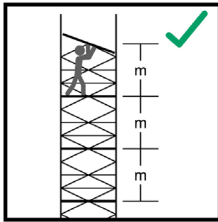
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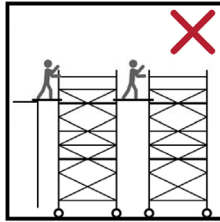
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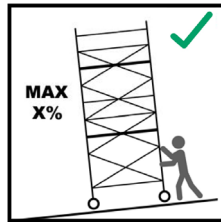
# SAFETY DO'S AND DONT'S



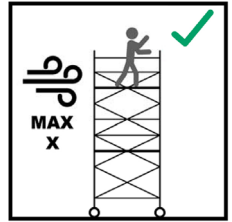
Platforms shall be installed with vertical distances between them not exceeding 2.1 m when assembling and dismantling except the distance to the first platform max 3.40m



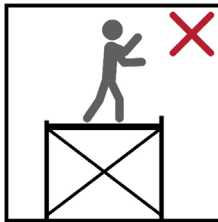
Do not bridge between towers or other structures Please contact Euro Towers for information on the correct equipment for Bridging Towers



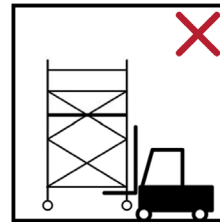
Maximum inclination for movement. Note the maximum angle allowed is 1%.



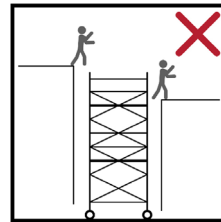
Do not build, dismantle or attempt to work on an access tower if the wind speed exceeds 17MPH



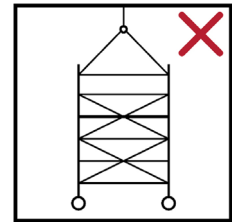
Do not stand on an unguarded platform



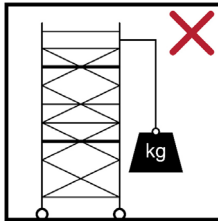
Do not lift the tower with mechanical equipment



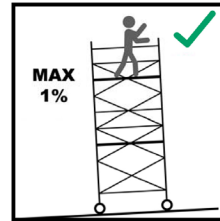
Do not use the tower for access and egress to other structures



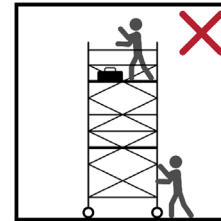
Do not suspend the tower



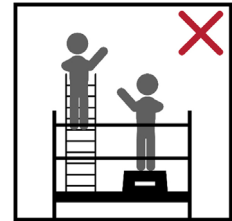
Do not lift heavy objects from the tower



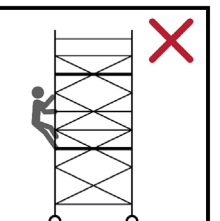
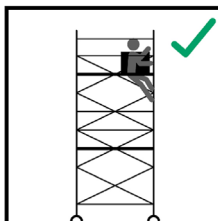
Maximum inclination for working. Note the maximum angle allowed is defined by the manufacturer.



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 information shall be available at the location of use of the prefabricated tower scaffold.
7. This prefabricated tower scaffold shall only be used according to this information.
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. When working outdoors, the weather forecast shall be taken into account before assembly, use and dismantling.
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 should be displayed on the prefabricated tower scaffold and be clearly visible from the ground (e.g. on a tag):
  - a) The name and contact details of the responsible person. 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 indoors use only. e) The date of assembly. f) The maximum number of simultaneous working platforms permitted. g) The maximum number of persons permitted on the working platform(s) during use. h) The maximum number of persons permitted on the tower during assembly and dismantling. i) The maximum number of persons permitted on any one platform. j) The maximum safe working load on working platforms. k) The maximum safe working load on the prefabricated tower scaffold. l) The load class of the prefabricated tower scaffold. m) The maximum horizontal force permitted at the working platform(s). n) The maximum wind limits for working on the prefabricated tower scaffold. o) The maximum wind limits for the prefabricated tower scaffold.

### **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 BS1139-6:2022 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 ladders or braces.
43. The maximum number of person(s) permitted on the working platform at any time should not exceed the SWL. 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 legs are engaged. Check that you have taken all necessary precautions to prevent the Tower being moved or rolling away. Always use base plates for tied towers.
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. Tied external towers should never be moved. To move your tower fully dismantle and then assembled in the desired location.
54. Prefabricated tower scaffolds in accordance to BS 1139-6 should NEVER be lifted or suspended by a crane or moved by mechanical means
55. Prefabricated tower scaffolds in accordance to BS 1139-6 are not designed to be used as a means to enter or exit other structures.
56. Prefabricated tower scaffolds in accordance to BS 1139-6 are not designed to be used as a means of edge protection.
57. A Risk Assessment and Method Statement must be undertaken before installation commences and should include the relevant tying-in method and tying-in locations to be applied to the specific structure being built in line with the guidance contained in the assembly guide.
58. Scaffold couplers and tubes used for tying in must comply with BS EN 74-1:2005 and BS EN 12811-2:2004 respectively. Scaffold tubes used should be in accordance with BS EN39.
59. Please note the typical tube diameter of a Euro Towers tower is 2" (50.8mm) so when using 48.3mm scaffold tube to tie in the structure, a suitable coupler should be used. Where applicable to the application select and install anchors in concrete and masonry in accordance with BS 8539.
60. The permitted stability solution is to securely tie the tied external tower into an adjacent rigid structure capable of with standing the forces that will be imposed upon it by the attachment of the tower.

**Alterations to the prefabricated tower are only permitted where they are shown in these instructions. 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)**

## Assembly and use

DO NOT assemble a Tower on unstable ground or objects such as loose bricks, boxes or blocks. Only a sound rigid footing must be used. Check working area for uneven ground, such as slopes and differences in level. Ensure that the Tower is within the maximum platform height stated.

The tube couplers supplied by Euro Towers are EN74 Certified, any additional couplers used MUST conform to this standard.

Stabilisers or outriggers shall always be fitted when specified, ensure the couplers tighten and loosen freely, ensure the rubber foot is securely fitted and in good condition. Ensure all pins on telescopic stabilisers are fitted and secure.

Ensure that all swivel couplers are tightened fully once in position.

## Weather conditions

This tower is safe to erect / dismantle and work on if forecast wind speeds do not exceed 17mph (27km/h, 7.6m/s, Beaufort scale 4). This tower is tested to Wind class 2 (41 mph, 65.5 km/h, 18.2 m/s Beaufort scale 8) this is in an out of service condition. It is still imperative the tower is dismantled if the forecast wind speeds are to exceed this.

This tower should always be secured to a building or other structure as stated in the general safety rules.

Forecast wind speeds			
Beaufort scale	Ave Speed	Wind description	
4	13-18 mph	Moderate Breeze	Safe to erect / dismantle and work on this tower.
8	39-46 mph	Gale	Unsafe to work on this tower. It must be FULLY tied in or consider dismantling as soon as wind speeds allow.

## Moving and lifting

You cannot move this tower system.

## Permissible loads and persons on the structure

The MAXIMUM number of persons on the Tower Structure during use is 6.

The MAXIMUM number of persons on the Tower Structure during assembly and dismantling is 6.

The MAXIMUM number of simultaneous working platforms is 1.

The MAXIMUM number of persons allowed on a working platform is 4.

The MAXIMUM number of persons allowed on any platform unit is 2.

(Safe working loads should never be exceeded, please refer to the loads below)

SAFE WORKING LOADS (SWL) (UNIFORMLY DISTRIBUTED)

PER PLATORM UNIT 250Kg

PER WORKING PLATFORM 500kg

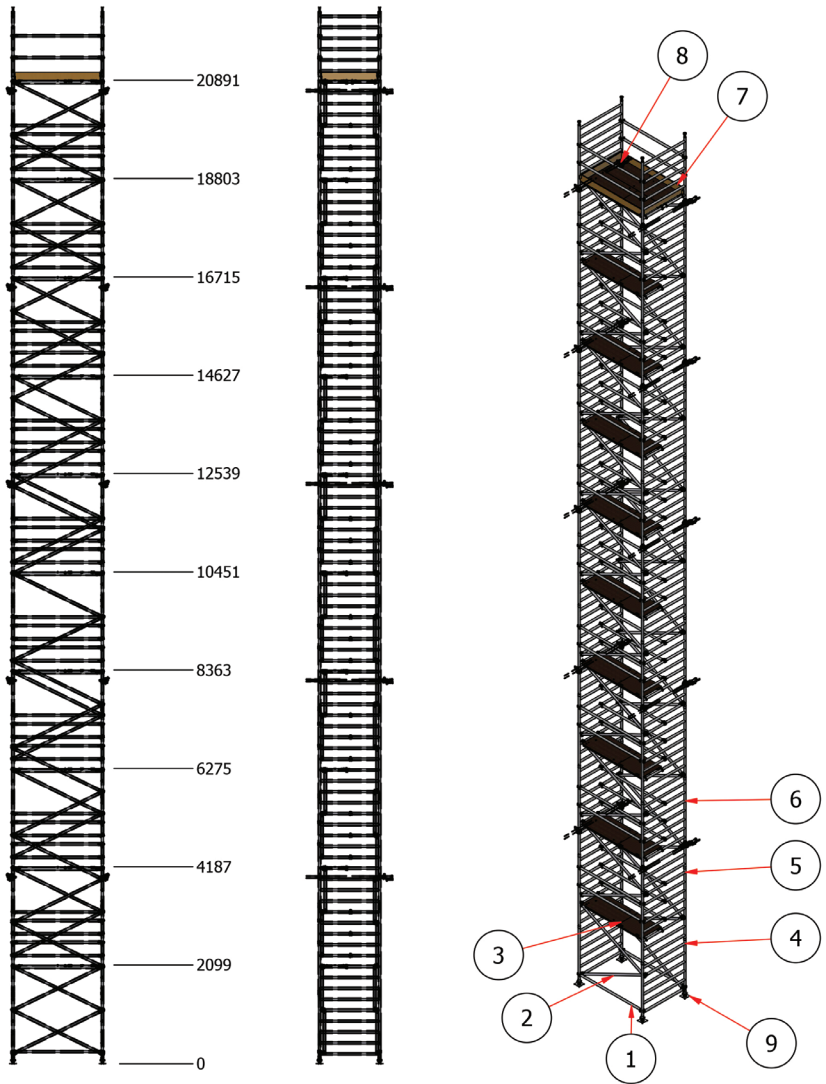
COMPLETED STRUCTURE 750Kg

MAXIMUM IMPOSED POINT (LEG) LOADS PER LEG 400Kg

# KIT LIST

Code	Description	20M	18M	16M	14M	12M	10M	8M	6M	4M	2M
KALA	Adjustable Leg	4	4	4	4	4	4	4	4	4	4
KSBP	Base Plate	4	4	4	4	4	4	4	4	4	4
BKH1,2,3	Horizontal Brace	51	46	41	36	31	26	21	16	11	6
BKD1,2,3	Diagonal Brace	42	38	34	30	26	22	18	14	10	6
PKT1,2,3	Trapdoor Platform	10	9	8	7	6	5	4	3	2	1
PKP1,2,3	Plain Platform	1	1	1	1	1	1	1	1	1	1
FKD3/6	6 Rung DW 232 Frame	2	2	2	2	2	2	2	2	2	2
FKD4/8	8 Rung DW 232 Frame	10	10	8	8	6	4	4	4	2	2
FKD5/10	10 Rung DW 232 Frame	10	8	8	6	6	4	4	2	2	0
TKD1,2,3	DW Toe-Board Assembly	1	1	1	1	1	1	1	1	1	1
	2m Weight kg	<b>575.71</b>	<b>521.06</b>	<b>470.71</b>	<b>416.06</b>	<b>365.71</b>	<b>311.06</b>	<b>260.71</b>	<b>206.06</b>	<b>155.71</b>	<b>101.06</b>
	2.5m Weight kg	<b>649.14</b>	<b>585.10</b>	<b>528.14</b>	<b>466.88</b>	<b>409.92</b>	<b>348.66</b>	<b>291.70</b>	<b>230.44</b>	<b>173.48</b>	<b>112.22</b>
	3m Weight kg	<b>710.50</b>	<b>643.54</b>	<b>580.88</b>	<b>513.92</b>	<b>451.26</b>	<b>384.30</b>	<b>321.64</b>	<b>254.68</b>	<b>192.02</b>	<b>125.06</b>

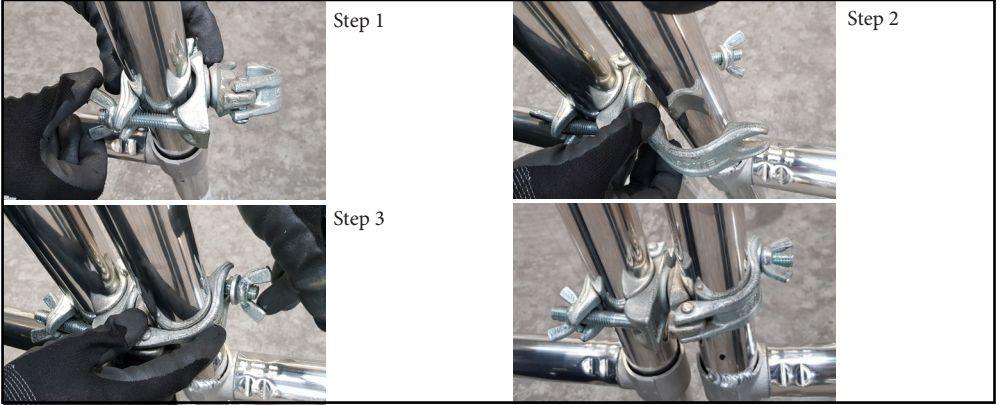
	Weight
KALA	Adjustable Leg 0.98 kg
KSBP	Base Plate 1.03 kg
BKH1	2m Horizontal Brace 1.93 kg
BKH2	2.5m Horizontal Brace 2.24 kg
BKH3	3m Horizontal Brace 2.25 kg
BKD1	2m Diagonal Brace 2.06 kg
BKD2	2.5m Diagonal Brace 2.35 kg
BKD3	3m Diagonal Brace 2.65 kg
PKT1	2m Trapdoor Platform 13.72 kg
PKT2	2.5m Trapdoor Platform 17.62 kg
PKT3	3m Trapdoor Platform 22.07 kg
PKP1	2m Plain Platform 13.46 kg
PKP2	2.5m Plain Platform 17.12 kg
PKP3	3m Plain Platform 20.53 kg
FKD3/6	6 Rung DW 232 Frame 7.78 kg
FKD4/8	8 Rung DW 232 Frame 9.37 kg
FKD5/10	10 Rung DW 232 Frame 11.52 kg
TKD1	2m x DW Toe-Board Assembly 7.60 kg
TKD2	2.5m x DW Toe-Board Assembly 10.38 kg
TKD3	3m x DW Toe-Board Assembly 10.72 kg



PARTS LIST				
ITEM	ITEM QTY	STOCK No.	DESCRIPTION	MASS
1	51	BKH1	2m Horizontal Brace	2.337 kg
2	42	BKD1	2m Diagonal Brace	2.107 kg
3	10	PKT1	2m Trapdoor Platform	13.384 kg
4	2	FKD3-6	6 Rung DW 232 Frame	7.783 kg
5	10	FKD4-8	8 Rung DW 232 Frame	9.367 kg
6	10	FKD5-10	10 Rung DW 232 Frame	11.515 kg
7	1	TKD1	DW 2M Toeboard Assembly	10.937 kg
8	1	PKP1	2m Plain Platform	13.248 kg
9	4	KALA + KSBP	600mm Adj. Leg and 6" Swivel Base Plate	1.607 kg

# HOW TO STEPS

## How to fit a coupler



## How to fit a brace



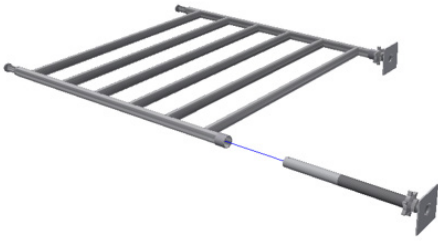
## How to remove a brace



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



# Step By Step Build



1. Release the interlock clips, insert legs and base plates into 2x 6 rung DW frames.



2. Hold this 6 rung DW frame upright and attach 2x horizontal braces above the first rung of the frame. Ensure hooks are facing outwards and the "kliker" is fully engaged. This will enable the frame to stand freely if required.



3. Hold another 6 rung DW frame (with legs and base plates) upright and attach 2x horizontal braces above the first rung of the frame as before. Ensure the "kliker" is fully engaged. Attach 2x diagonal braces in an opposite pattern as shown. Please note the diagonal brace that goes on the trapdoor platform side (highlighted) needs to be in POSITION 2. The opposite brace can be in position 1. See image below for explanation





4. Attach an 8 rung DW frame on top of the 6 rung DW frames, Ensure the interlock clip is engaged on all frames. Level this structure in both directions using a spirit level on the horizontal braces and the rungs.



5. Connect additional diagonal braces in an alternating pattern as shown.



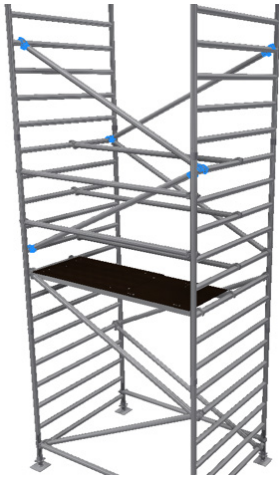
6. Attach a trapdoor platform in the position shown (on the 6th rung from top). Ensure it is orientated so the trapdoor is facing the end of the tower that is climbed.



7. Ascend through the trapdoor and from a seated (3T) position attach 2x horizontal braces to the second and 4th rungs down. Ensure the hooks are facing outwards and the “kliker” is engaged on each brace hook. Attach an additional 3x horizontal braces: to the top, 3rd and 5th rungs down. The hooks will need to face downwards and be in-line with the edge of the platform inside the tower.



8. Attach a 10-rung frame above the 8-rung frame.  
Ensure the interlock clips are engaged.

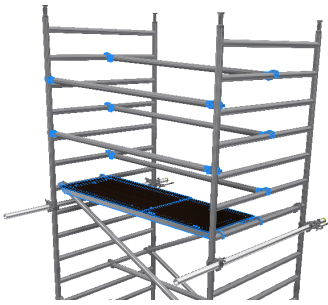


9. Attach 4 diagonal braces as shown, attach the first diagonal brace one rung above the previous one to avoid the platform.



10. Attach 2x tube ties with suitable fixings to each upright using the method shown on page 7. They should be positioned so the coupler rests on the 8th rung above the platform.

**Ensure that all swivel couplers are tightened fully once in position.**



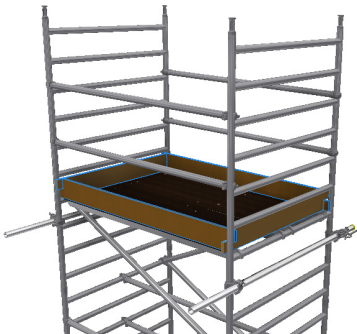
11. Attach a further platform and braces as shown using the 3T method. The platform should be located on the 7th rung down from the top.



12. Attach a further 2x 10 rung frames and 3 diagonal braces above this platform. Ensure the interlock clips on the frames are engaged.



13. Repeat this pattern of frames, platforms and braces, with alternating 8 and 10 rung frames. Attach couplers / tubes and ties below every other platform as explained in step 10.



14. At the top (working) platform install the notched toe-boards as per the kit list.

#### DISMANTLING NOTES:

Dismantling is the reverse of assembly; 3 people minimum will be required to do this safely.

Always work from the ground where possible. To remove the guardrails, push the “kliker” on the brace hook, and lift each end of the guardrail. Disengage the interlock clips before removing any of the frames.

Never work from an unguarded platform.