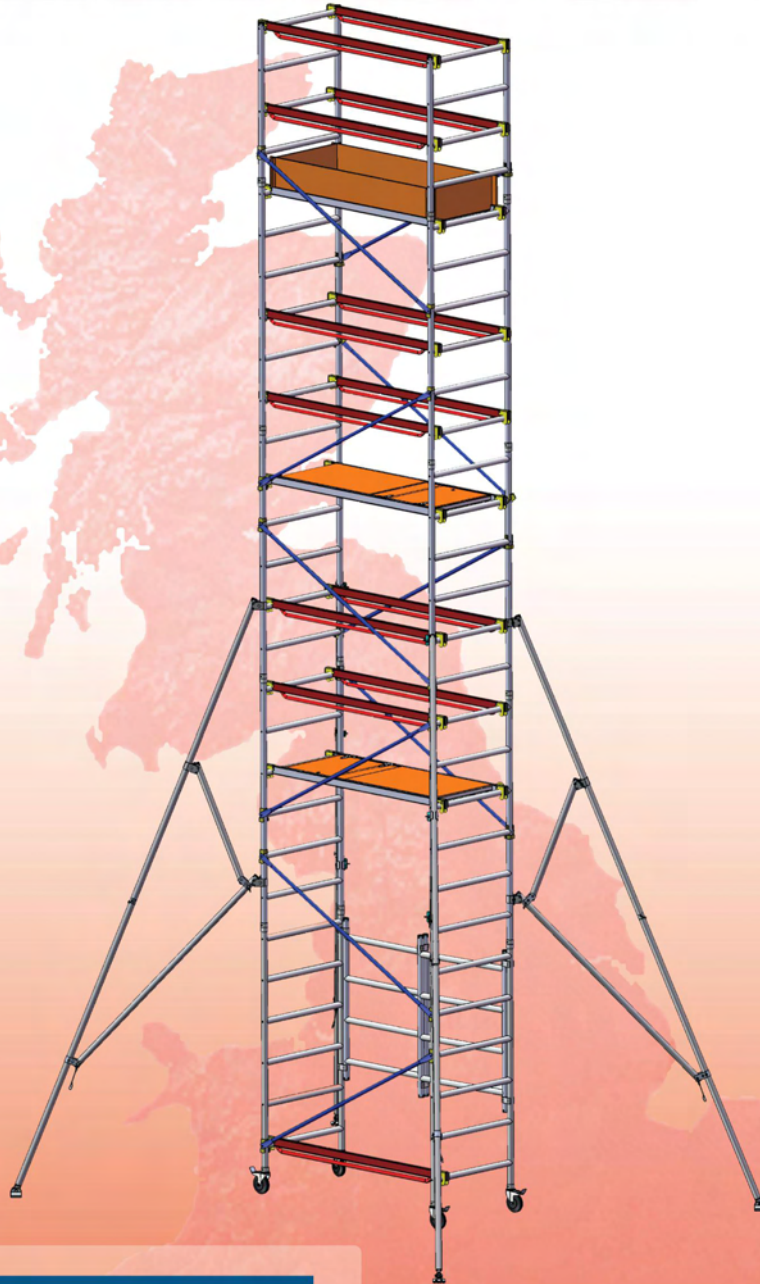


TRADE MASTER

QUICK ERECT ALUMINIUM SCAFFOLD TOWER



ACCESS SOLUTIONS

BPS Access Solutions Ltd.

Tel : +44 (0) 333 006 9776 Fax : +44 (0) 1959 572 932

Website : www.laddersandscaffoldtowers.co.uk

These instructions and the equipment described are in accordance with:

EN:1004:2004 (Class 3)

EN:1298-IM-en x de

INSTRUCTION MANUAL

INTRODUCTION

Please read this guide carefully.

Please note that diagrams are for illustrative purposes only.

TRADE MASTER mobile aluminium towers are light-weight scaffold towers and can be used for both indoor and outdoor access solutions where a stable and secure platform is required. Ideal for maintenance and installation work or short-term access. These highly versatile towers provide a strong working platform for a variety of heights.

This User Guide provides you with step by step instructions to ensure your system is erected easily and safely.

The law requires that personnel erecting towers must be competent and qualified to do so. Any person erecting a **TRADE MASTER** mobile tower should have a copy of this guide.

If you need further information, design advice, additional guides or any other help with this product, please contact : **BPS Access Solutions Ltd.** on 0333 006 9776 or email : customerservices@bpsaccesssolutions.co.uk

COMPLIANCE

These instructions and the equipment described are in accordance with:

EN:1004:2004 Class 3 (7 metres outdoor / indoor)

EN:1298-IM-en x de

PREPARATION AND INSPECTION

Inspect the equipment before use to ensure that it is not damaged and that it functions properly. Damaged or incorrect components shall not be used.

Note : For further information on this product or any other products and services, please contact :

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Safety First

A. SAFETY NOTES





1. Check that all components are undamaged and that they are functioning correctly – (refer to Checklist & Quantity Schedule). Damaged or incorrect components must not be used.
2. Before erecting the tower, check that the location for the mobile access tower does not present any hazards during erecting, dismantling, moving and safe working with respect to :-

Ground conditions - must be capable of supporting the weight of the structure
Level and slope
Obstructions (ground and overhead)
Wind conditions (current and potential) – see Wind Speed Safety Rules (Page 4)
3. Check if the ground on which the mobile access tower is to be erected and moved is capable of supporting the tower.
4. The mobile scaffold tower must only be erected on a horizontal level surface.
5. Lock all castors by pushing down brake levers. The brake levers may only be released for moving the mobile scaffold tower.
6. **A minimum of two competent persons are required to assemble and dismantle this mobile access tower.**
7. The safe working load is **230** kg per platform level, uniformly distributed up to a maximum of **640** kg per tower (including self tower weight).
8. Tower **must** always be climbed from the inside during assembly, dismantling and use.
9. It is recommended that towers should be tied to a solid structure when left unattended.
10. Adjustable legs should only be used for leveling.
11. **DO NOT** use boxes or ladders or others object on the platform to gain additional height.
12. Never bridge between a tower and a building.
13. Do not brace yourself against the side guards when working.
14. Never jump onto platforms.
15. When possible, tie in the tower to a rigid structure when working outdoors or in exposed conditions.
16. Beware of the funneling effect of open ended and unclad building.
17. Debris netting or plastic sheeting should not be fixed to the tower.
18. Raising and lowering components, tools, or materials by rope should be conducted within the tower base. Ensure that the safe working load of the supporting platforms and the tower structure is not exceeded.
19. Tools and materials may only be handed up, always taking the weight of the tools and materials into consideration so as not to overload the working platform. The person handing the load up may only release the load when the recipient of the load is holding securely in his hand.
20. The assembled tower is a working platform and should not be used as a means of access to other structures.
21. The maximum wind condition for moving the tower is between Beaufort Scale 0-4 as described on Page 4 entitled Wind Speed Safety Rules.
22. Beware of horizontal forces (lateral force) when using power tools, jet washers or other tools which could generate instability.
The Maximum horizontal force (lateral force) on a freestanding tower at platform level is 20kg.
23. Mobile towers are not designed to be suspended.
24. Do not use any lifting equipment on the mobile scaffold tower.
25. Always beware of live electrical apparatus, cables or moving parts of machinery.
26. Before each use or re-use of the mobile tower check the tower is vertical with a spirit level and adjust legs as needed, the structure is still assembled correctly and is complete. No environmental change has affected the tower (snow, wind, ice etc.) If so, correct as necessary before use.
27. Tower is designed for use by just one person only.

Safety First

B. WIND SPEED SAFETY RULES

1. Beware of high winds, gusty or medium breeze conditions. We recommend that in wind speeds over 20.0 km/h, cease working on the tower and do not attempt to move it. If the wind becomes a strong breeze, expected to reach 31.0 km/h, tie the tower to a rigid structure. If the wind is likely to reach gale force, over 52.0 km/h, the tower should be dismantled.
2. Wind force can be magnified by the tunneling effect of open ended and unclad buildings.

Beaufort Scale	WIND DESCRIPTION	SPEED In km/h.	SPEED In m/s.	GENERAL EFFECT		ACTION
0-3	Light Breeze	<2-19`	<0.6-5.3`	Raises dust.		No action required.
4	Moderate Breeze	20-30	5.6-8.3	Loose paper, twigs snap off.		Cease working on tower and do not attempt to move it.
5-6	Strong Breeze	31-51	8.6-14.2	Large branches in motion move. Telephone wires whistle.		Tie the tower to a rigid structure.
>6-8	Gale Force	52-75	14.4-20.8	Walking progress impeded.		Dismantle tower if such conditions are expected.

C. LIFTING OF EQUIPMENT

1. Tower components should be lifted using a reliable lifting material (e.g. strong rope), employing a reliable knot (e.g. clove hitch), to ensure safe fastening and always lift within the footprint of the tower.
2. Assembled mobile towers should not be lifted with a crane or other lifting device.

D. OUTRIGGERS / BALLAST

1. Outriggers and ballast weights shall always be fitted when specified.
2. The Quantity Schedules show the recommended outriggers. In circumstances where there is restricted ground clearance for outriggers, contact your supplier for advice.

E. MOVEMENT

1. The tower should only be moved by manual effort, and only from the base.
2. When moving the tower, always beware of any live electrical apparatus, overhead cables or moving parts of machinery.
3. Ensure that the platforms are free of persons and equipment and that brake locks are off prior to movement.
4. Caution should be exercised when wheeling a tower over rough, uneven or sloping ground, taking care to unlock and lock castors. If outriggers are fitted, they should only be lifted sufficiently above the ground to clear ground obstructions.
5. The overall height of the tower when being moved, should not exceed 2.5 times the minimum base dimensions, or 4 metres overall height.
6. Before use, check the tower is still correct and complete.
7. After every movement of the tower use a spirit level to check that it is level and set the adjustable legs as required.
8. Do not move the tower in wind speeds over 20 km/hour.

Safety First

F. TIES

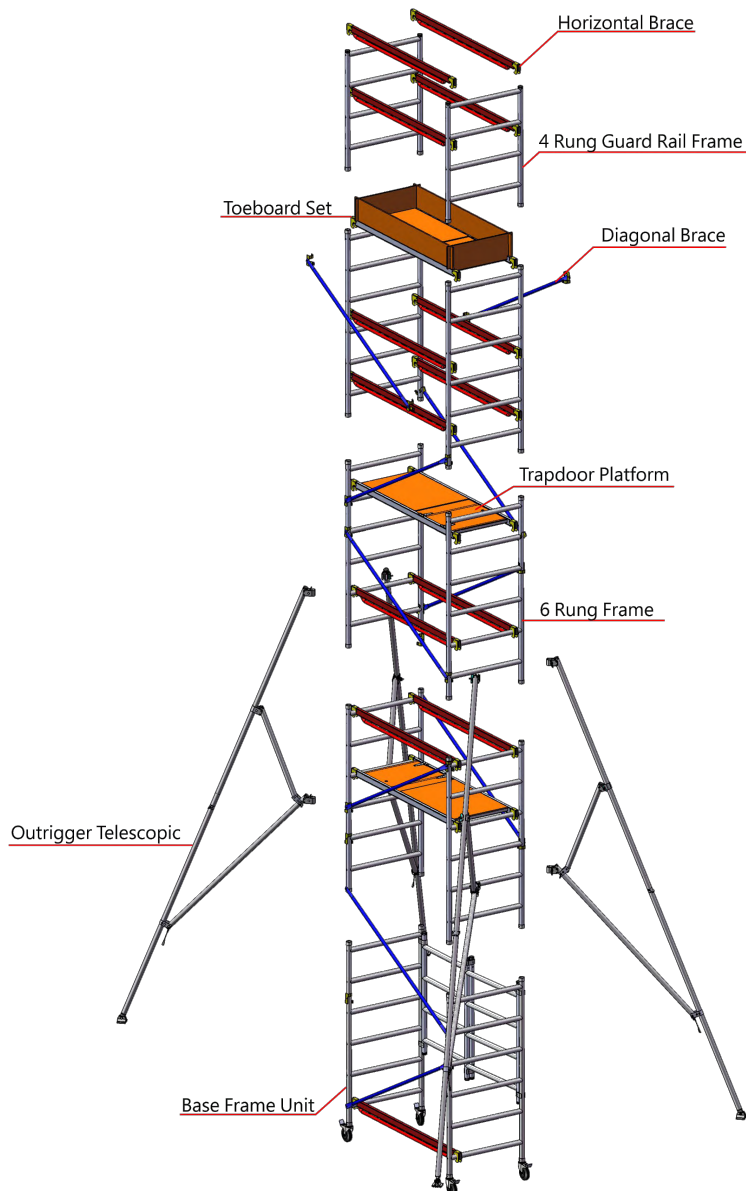
1. Ties should be used when the tower goes beyond its safe height beyond the limits of the outriggers or if there is a danger of instability. They should be rigid, two way ties fastened to both uprights of the frame with load-bearing right angled or swivel couplers. Only couplers suitable for the 40mm diameter tube of the tower should be used. Ideally ties should secure to both faces of a solid structure or by means of anchorages.
2. The tie frequency may vary depending on the application, but they should, at a minimum, be at every 4 metres of height.
3. For further information on tying-in a tower please contact your supplier.

G. MAINTENANCE – STORAGE - TRANSPORT

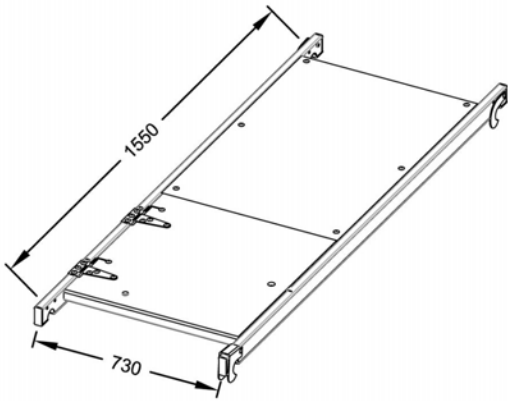
All components and their parts should be regularly inspected to identify damage, particularly to joints. Lost or broken parts should be replaced, and any tubing with indentations greater than 5mm should be put to one side for manufacturer repair.

1. Brace claws, frame interlock clips, trapdoor latches and platform locks should be regularly checked to ensure they lock correctly
2. Components should be stored with due care to prevent damage.
3. Ensure components are not damaged when being transported.

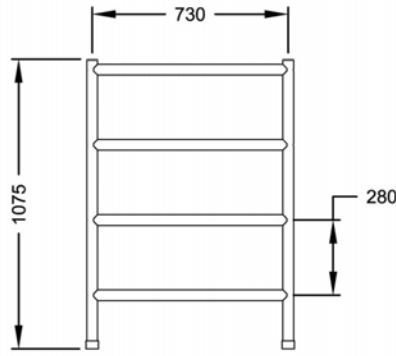
Components



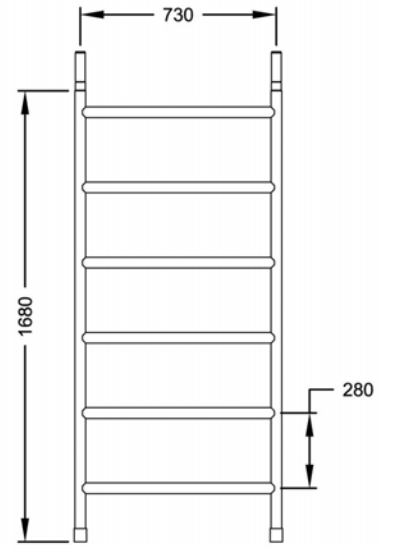
TRADE MASTER Scaffold Tower Components



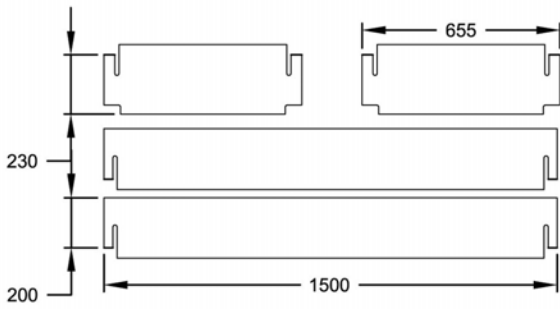
Trapdoor Platform



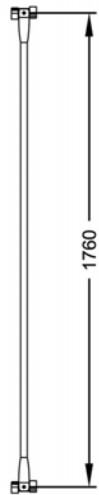
4 Rung Guard Rail Frame



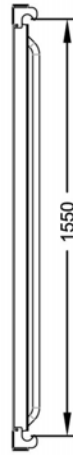
6 Rung Frame



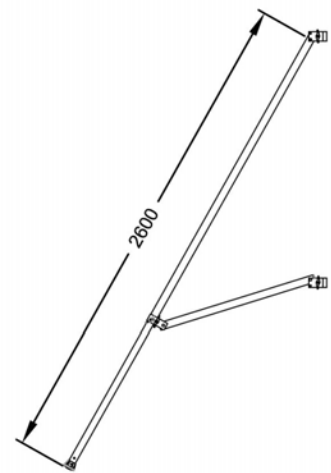
Toeboard Set



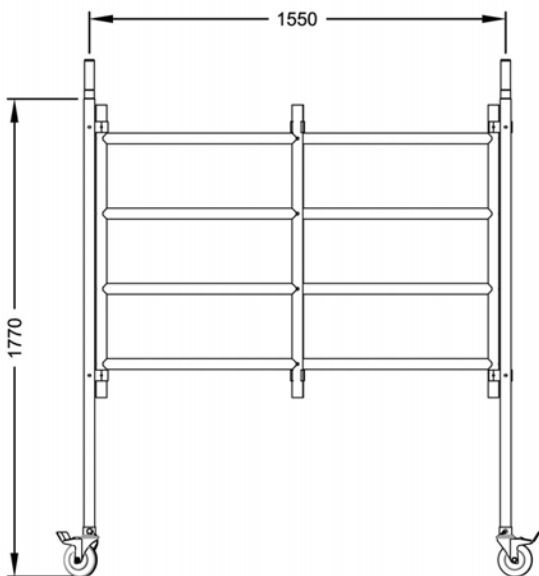
Diagonal Brace



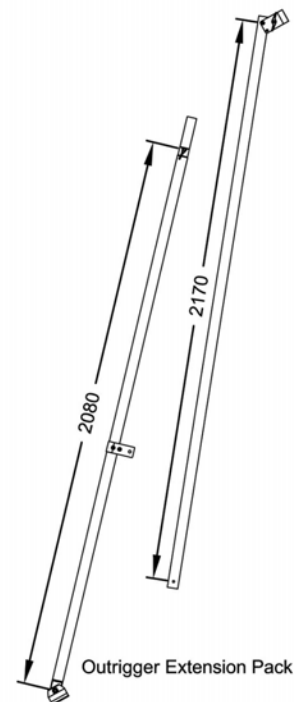
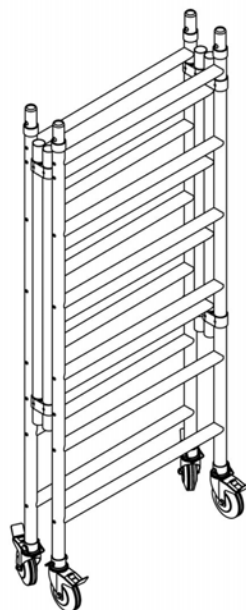
Horizontal Brace



Outrigger Telescopic



Base Frame Unit



Outrigger Extension Pack

Quantity Schedule

Internal / External Use

		PACK 1	PACK 1 +PACK 2	PACK 1 +PACK 2 +PACK 3	PACK 1 +PACK 2 +PACK 3 +PACK 4	PACK 1 +PACK 2 +PACK 3 +PACK 4 +PACK 5a +PACK 5b
Description	Working Height (m)	3.20	4.00	5.70	7.40	9.10
	Tower Height (m)	2.13	3.06	4.74	6.42	8.10
	Platform Height (m)	1.12	1.96	3.64	5.32	7.00
QE 4 Rung Frame			2	2	2	2
QE Folded Base Unit		1	1	1	1	1
6 Rung Ladder Frame				2	4	6
Coloured Horizontal Brace 1.55m (RED)			5	9	9	13
Coloured Diagonal Brace 1.65m (BLUE)		1	2	4	7	10
Telescopic Outrigger				4	4	4
Outrigger Extension Pack						4
Toeboard Set			1	1	1	1
Trapdoor Platform		1	1	2	2	3
Tower Total Self-Weight (kgs)		29.3KG	56KG	88.8KG	97.7KG	132KG

NUMBER OF WORKING PLATFORMS ALLOWED

The MAXIMUM SAFE WORKING LOAD (the combined weight of the user, tools and materials) that may be placed on the tower is the total weight rating for the tower (640KG) less the weight of the tower.

A QUICK ERECT tower built with a 7.00m platform height has a self weight of 132kg:

$$640.0\text{kg} - 132\text{kg} = \mathbf{508\text{ kg maximum safe working load}}$$

As the 3.2m and 4m working height towers have only 1 platform the maximum safe working load is 230kg evenly distributed. The 5.7m and 7.4m working height towers have 2 platforms so the maximum safe working load is 460kg evenly distributed across the 2 platforms. Please see PLATFORM LOADING below for further details.

For greater heights and loads, consult **BPS Access Solutions Ltd.** for guidance.

PLATFORMS LOADING

The maximum safe working load (the combined weight of the users, tools and materials) that may be placed on a platform is 230 kg, evenly distributed over the platform.

The components listed above will enable your **TRADE MASTER** scaffold towers to be built safely and therefore comply with the requirements of EN1004. They include double guardrails to all platforms, and toe boards will need to be added if any levels are used as a working platform and/or for storing materials.

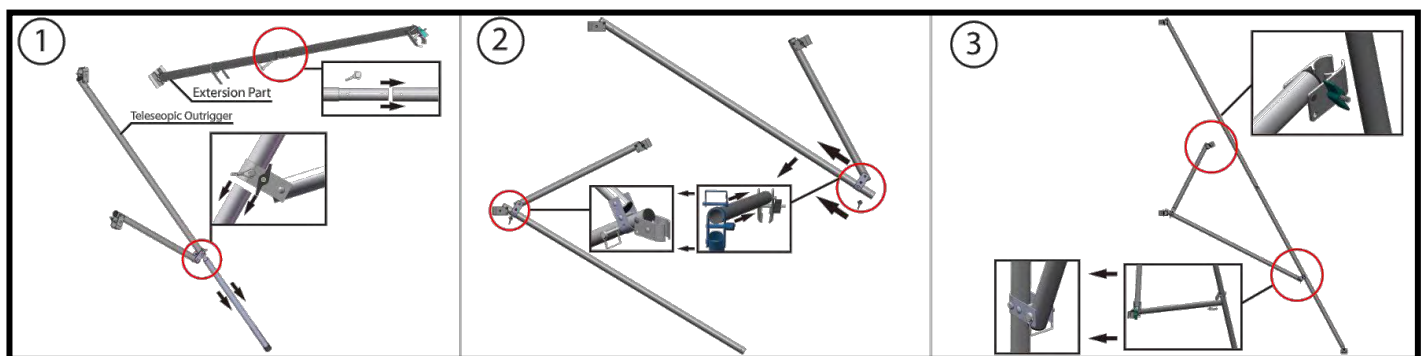
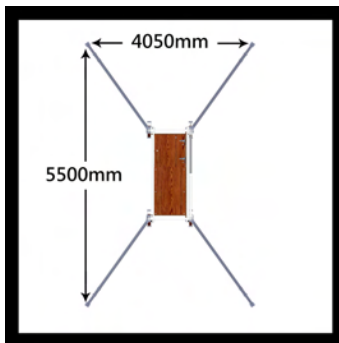
BALLAST : Internal/External use

There is no requirement for ballast on the **TRADE MASTER** scaffold tower if using outriggers as detailed below.

Quantity Schedule

OUTRIGGERS

To improve rigidity, outriggers can be purchased and used on lower heights than shown in the table on **page 7**.



Note : The above Assembly Instructions for Outrigger Extension Pack – for use with 9.1m working height towers

Assembly Procedure

Mobile Towers

ASSEMBLY AND DISMANTLING PROCEDURES

When building a **TRADE MASTER** Scaffold Tower

- ◆ All platforms feature double guardrails on both faces of either individual platforms or fully decked levels.
- ◆ All guardrails should be 2 and 4 rungs above platforms.
- ◆ Never stand on an unguarded platform positioned above the third rung of this tower. If your risk assessment deems it necessary, you may also need to have guardrails at this level.
- ◆ **Always start building with the folded base unit at the base of the tower.**

TO DISMANTLE A **TRADE MASTER** Scaffold Tower

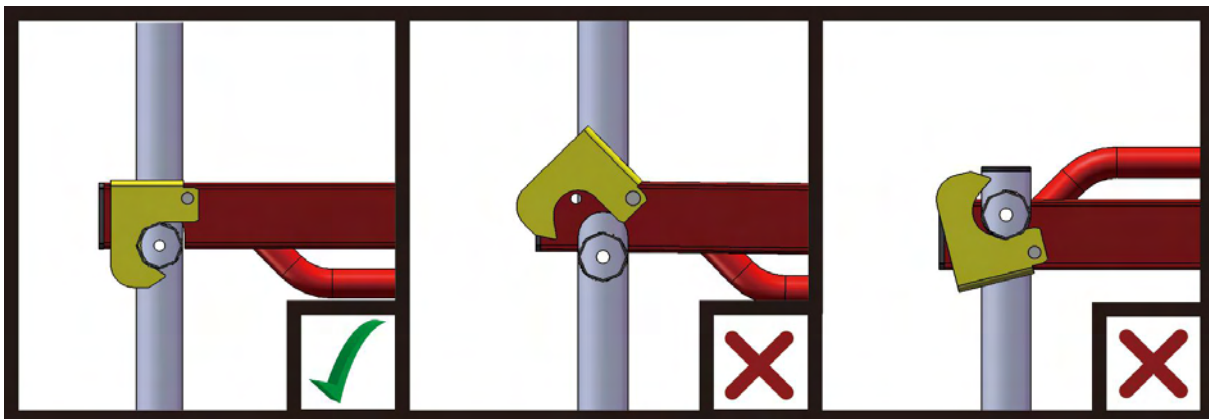
- ◆ Remove toe boards, and pass down the tower.
- ◆ Unclip furthest end of braces and immediately go to protected trapdoor position on ladder to complete removal.
- ◆ Remove upper platforms from protected levels below.
- ◆ Pass removed components out of the tower to a colleague within the tower footprint.

Safety Checklist

Mobile Towers

CHECKLIST

1. Ensure all brace locks operate correctly prior to erection
2. Inspect components prior to erection
3. Inspect tower prior to use
4. Tower upright and level
5. Castors locked and legs correctly adjusted
6. Diagonal braces fitted
7. Outriggers fitted as specified
8. Platforms located and secured
9. Toe boards located
10. Check guardrails are fitted correctly as below



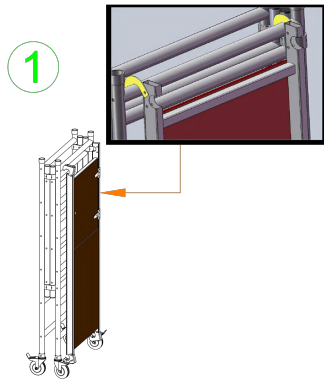
Refer to this checklist before using each time.

Assembly Procedure

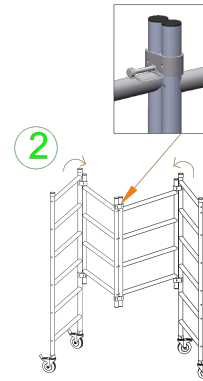
ASSEMBLY FOR 9.1m working height TRADE MASTER Scaffold Tower

To see where you fit temporary platforms on 4m, 5.7m and 7.4m towers please go to page 12. By fitting a temporary platform it allows you to fit braces, a platform and frames above you and this platform can then be removed and used higher up.

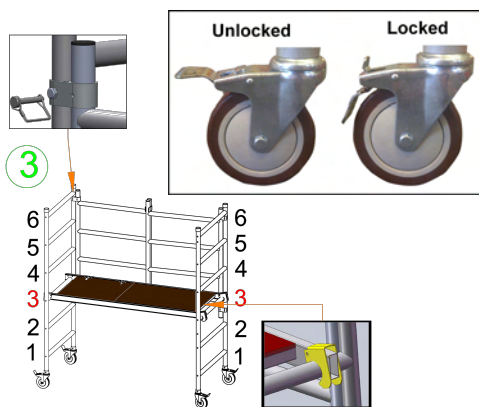
Always start building with the folded base unit at the bottom of the tower.



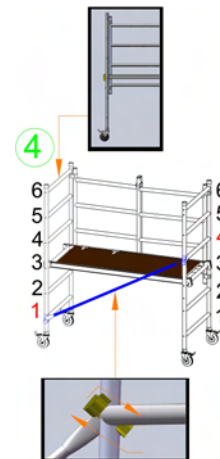
Step 1. Un-pack the folded base unit.



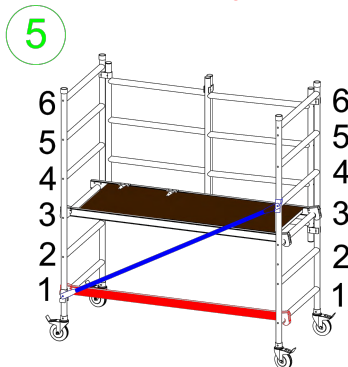
Step 2. Set up the base unit (pre-assembled), lock the middle folded hinge with the provided interlocking clips.



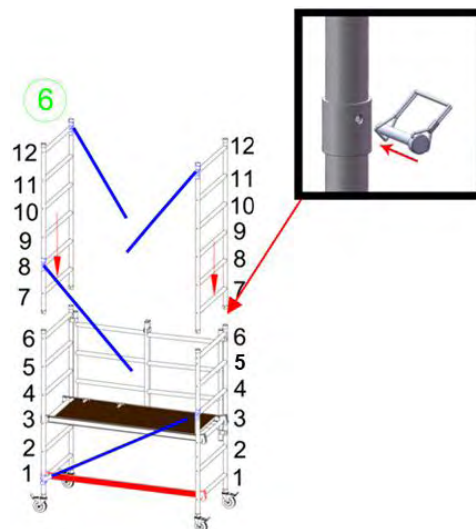
Step 3. Lock all castor wheels as shown and check the interlocking clips are engaged at both ends of the hinged sections. Fit a temporary platform on the 3rd rungs and lock the securing hook. Make sure the tower is level using a spirit level and make adjustments if needed using pins in the wheel shafts
Important – only use the adjustment on the legs to level the tower and not to gain extra height.



Step 4. Fit one diagonal brace (Blue) in between 1st and 4th rungs.



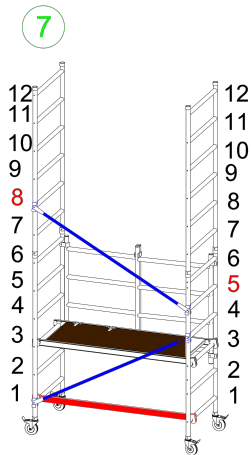
Step 5. Fit one horizontal brace (Red) onto the bottom rung (1st rung)



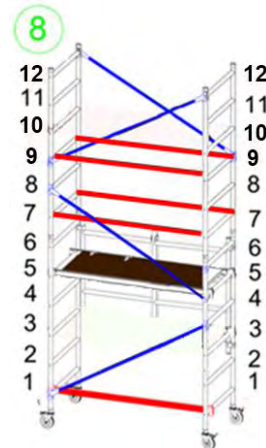
Step 6. Use one pair of 6 rung frames and fit blue bars to what will become the 12th rungs as in picture above. Fit this pair of 6 rung ladder frames and fit the Interlocking clips through the frames. Also fit a blue brace to the front of tower at rung 8.

Assembly Procedure

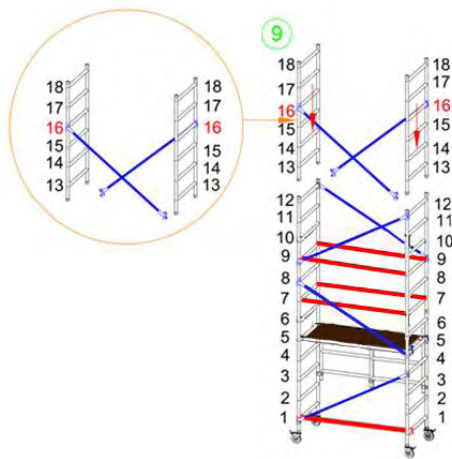
ASSEMBLY FOR TRADE MASTER MOBILE TOWERS



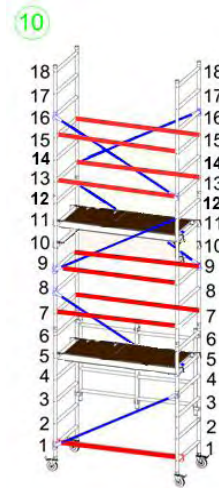
Step 7. Fit diagonal braces (Blue) which are hanging from the top sections to 9th rungs and 5th rung.



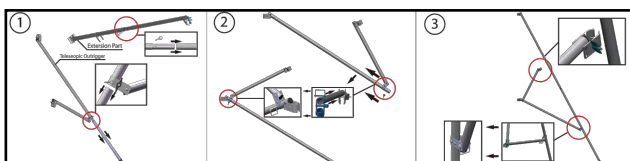
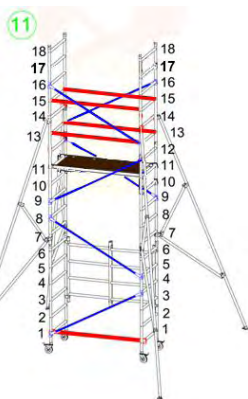
Step 8. Remove temporary platform from 3rd rung and refit at rung 5. Sit inside platform, (as per 3T method) and attach red handrails at rungs 7 and 9.



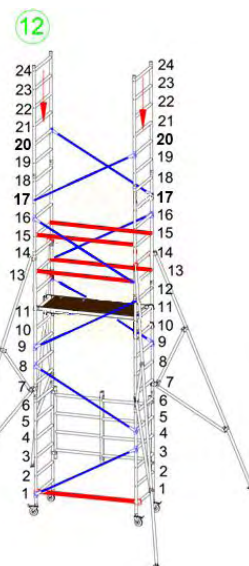
Step 9. Use next pair of 6 rung frames and fit blue bars to what will become the 16th rungs as in picture above. Fit this pair of 6 rung frames and fit the Interlocking clip through the frames. Attach unsecured blue bars to rung 13.



Step 10. Fit the platform to rung 11, and fit guardrails (Red) on the 13th and 15th rungs, in this order, on both sides of the tower. Remove temporary platform from rung 5 and guardrails above this using the 3T method.



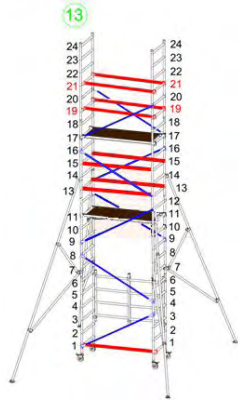
Step 11. Fit the outriggers as shown diagonally coming out from the tower.



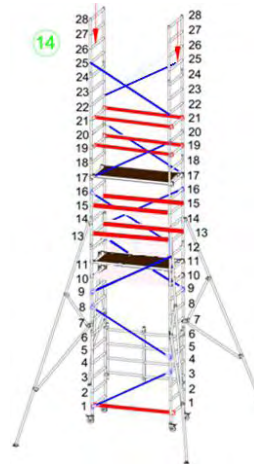
Step 12. Use next pair of 6 rung frames and fit blue bars to what will become the 20th rungs as in picture above. Fit this pair of 6 rung frames and fit the frame Interlocking clips through the frames. Attach unsecured blue bars to rung 17.

Assembly Procedure

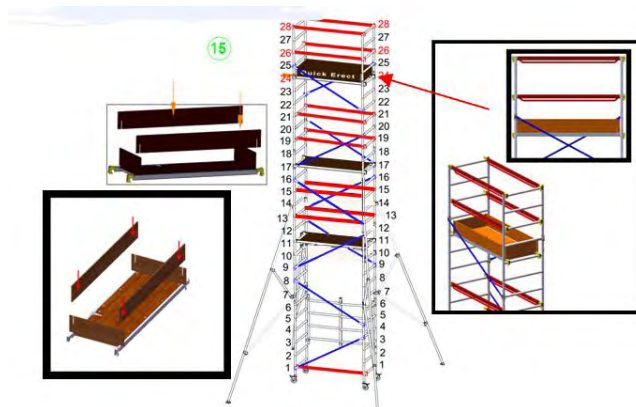
ASSEMBLY FOR TRADE MASTER MOBILE TOWERS



Step 13. Fit the platform to 17th and guardrails (Red) on the 19th and 21th rungs, in this order, on both side of the tower using the 3T method.



Step 14. Use pair of 4 rung frames and fit blue bars to what will become the 25th rungs as in picture above. Fit this pair of 4 rung frames and fit the Interlocking clips through the frame. Attach unsecured blue bars to rung 22.



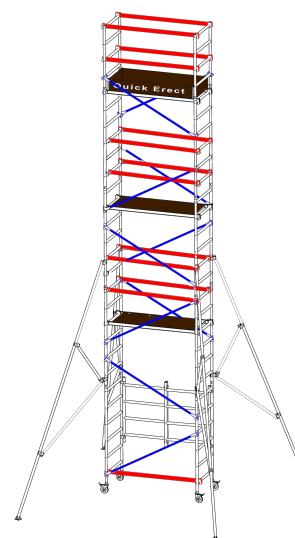
Step 15. Fit one trapdoor platform on the 24th rungs and lock the securing hook. Fit the guardrails (Red) on the 26th and 28th rungs, in this order on both sides of the tower. Fit toe boards over the platform as shown above.

Temporary platforms when building 4m, 5.7m and 7.4m Towers:

Tower Working height	Temporary Platform Rung Height
4m	3 rd rung
5.7m	3 rd & 5 th rung as in 9.4m example
7.4m	3 rd & 5 th rung as in 9.4m example



Step 16. Before using or relocating the tower, check the tower is upright and level within an inclination of 1%.



The tower is now complete

Dismantle Procedure

To take down the tower reverse the erection sequence. When removing guardrail braces / bars, unlock the securing hook furthest from the trapdoor and then immediately go to the protected position within the trapdoor. You may then unlock the securing hooks closest to you on the guardrails to remove them from the tower.