



Trade King 730

Aluminium Scaffold Tower

Tested and Certified to EN1004 Class 3

This instructions and equipment described are in accordance with :
EN:1298 - IM - en x de
EN:1004:2004 (Class 3) (8 metres outdoor / 8 metres indoor)
EN 1004 3 8/8-D



Instruction Manual



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INTRODUCTION

Please read this guide carefully.

Please note that diagrams are for illustrative purposes only.

Trade King 730 mobile aluminium towers are light-weight scaffold towers used throughout the building and construction industry 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, the highly versatile towers provide 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 King 730** mobile tower should have a copy of this guide.

If you need further information, design advice, additional guides or any other help with this products, please contact : **Loyal Scaffolding Limited** on +852 3488 3860 or email to loyalscaffolding007@yahoo.com.

COMPLIANCES

These instructions and the equipment described in accordance with :

EN:1298-IM-en x de

EN:1004:2004 Class 3 (8 metres outdoor / indoor)

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.

Safety First

A. SAFETY NOTES





1. Check that all components are on site, undamaged and that they are functioning correctly – (refer to Checklist & Quantity Schedule). Damaged or incorrect components shall 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, and must be capable of supporting the weight of the structure.
Level and slope
Obstructions (ground and overhead)
Wind conditions (current and potential).
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 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. **The 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 **864** kg per tower (including self weight).
8. Tower **must** always be climbed from the inside using the built in ladder during assembly 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 other objects on the platform to gain additional height.
12. Never bridge between a tower and a building unless specification and approved.
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 without consulting your local branch.
18. Raising and lowering components, tools, and/or materials by rope should be conducted within the tower base. Ensure that the safe working load of the supporting decks 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 are Beaufort Scale 0-4 as described table (Page 4 Wind Speed Safety Rules)
22. Beware of horizontal forces (lateral force) when using power tools, wash jet 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-please refer to your supplier for advice.
24. Do not use any lifting equipment on the mobile scaffold tower.
25. Do not extend the platform height of the tower by the use of ladders, boxes or other devices..
26. Always beware of live electrical apparatus, cables or moving parts of machine
27. Before each use or re-use of the mobile tower check the tower is vertical. Check with spirit level and adjust legs as need, the structure is still assembled correctly, and its complete. No environmental change have affected the tower (snow, wind, ice etc.); if so, correct as necessary before use.

Safety First

B. WIND SPEED SAFETY RULES

1. Beware of high winds in exposed, 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 building and unclad building

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. STABILISERS / BALLAST

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

E. MOVEMENT

1. The tower should only be moved by manual effort, and only from the base.
2. Do not move the mobile scaffold tower with vehicles (e.g. lift trucks). Do not lift, pull or push the mobile scaffold tower with a lift truck.
3. When moving the tower, always beware of any live electrical apparatus, overhead cables or moving parts of machinery.
4. Ensure that the platforms are free of persons and equipment and that brake locks are off prior to movement.
5. Caution should be exercised when wheeling a tower over rough, uneven or sloping ground, taking care to unlock and lock castors. If stabilizers are fitted, they should only be lifted a maximum 25mm above the ground to clear ground obstructions.
6. The overall height of the tower when being moved, should not exceed 2.5 times the minimum base dimensions, or 4 metres overall height.
7. Before use, check the tower is still correct and complete.
8. After every movement of the tower use a spirit level to check that it is vertical and level and set the adjustable legs as required.
9. Do not move the tower in wind speeds over 20 km/hour .

Safety First

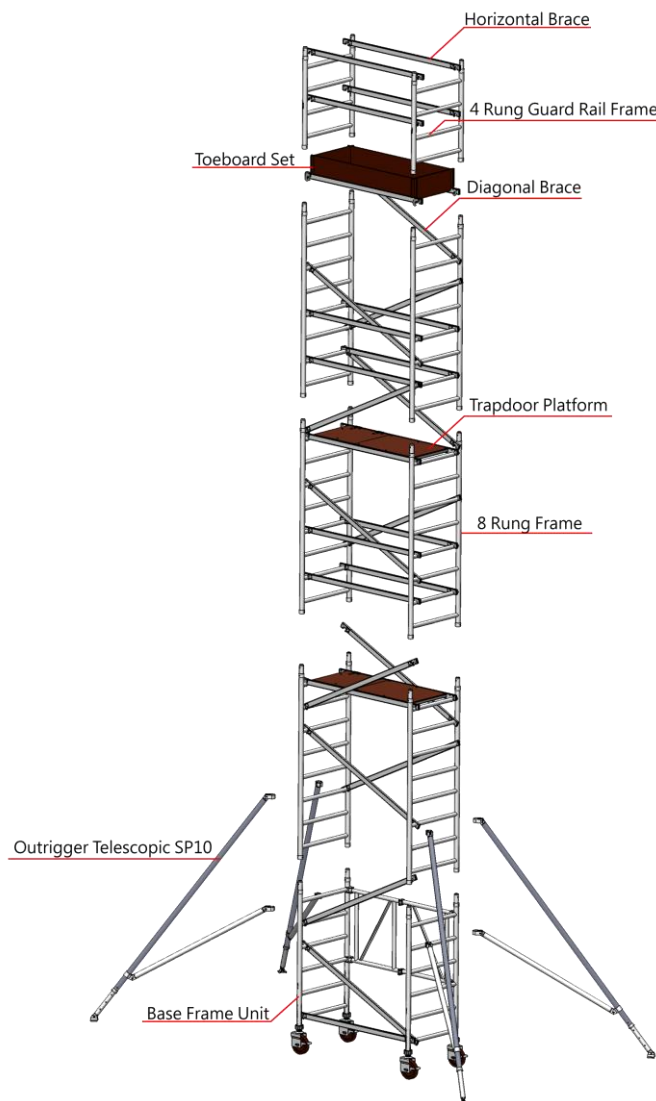
F. TIES

1. Ties should be used when the tower goes beyond its safe height beyond the limits of the stabilisers/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 50.8mm dia. 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 height.
3. For further information on tying-in a tower please contact your supplier.

G. MAINTENANCE – STORAGE - TRANSPORT

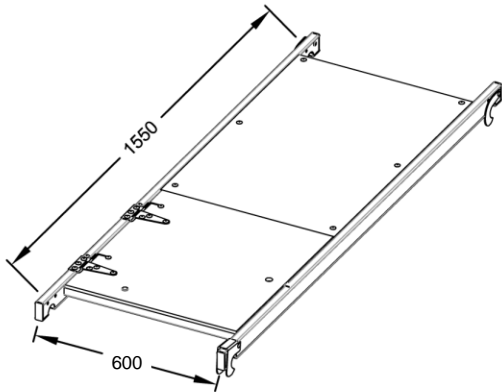
1. All components and their parts should be regularly inspected to identify damage, particularly to joints. Lost or broken parts should be replaced, and any tubing with indentations greater than 5mm should be put to one side for manufacture repair. Adjustable leg threads should be cleaned and lightly lubricated to keep them free running.
2. Brace claws, frame interlock clips, trapdoor latches and platform windlocks should be regularly checked to ensure they lock correctly
3. Components should be stored with due care to prevent damage.
4. Ensure components are not damaged by excessive strapping force when transported.

Components

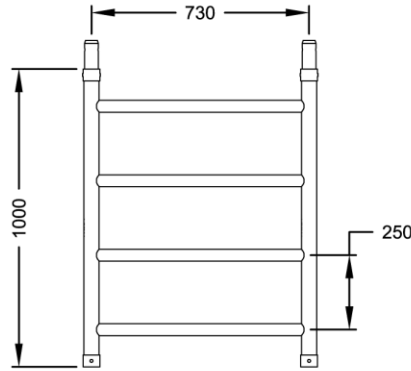


Trade King 730 Aluminium Scaffold Tower

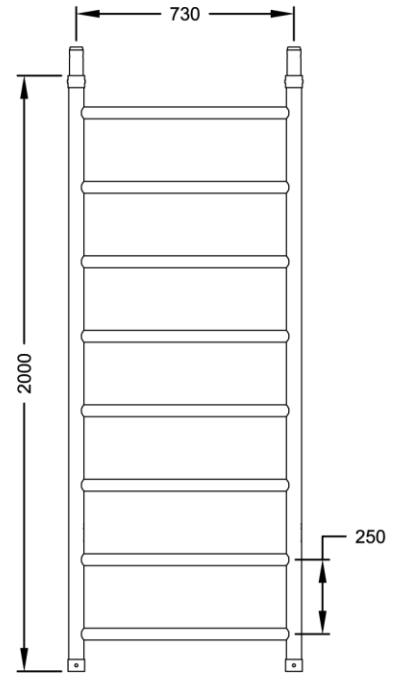
Components List



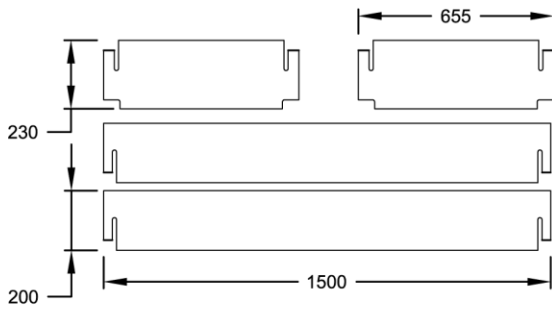
Trapdoor Platform
730E-T-P
Weight : 8.35kg



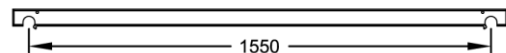
4 Rung Guard Rail Frame
730E-4-B
Weight : 3.2kg



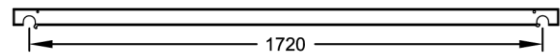
8 Rung Frame
730E-8-B
Weight : 5.7kg



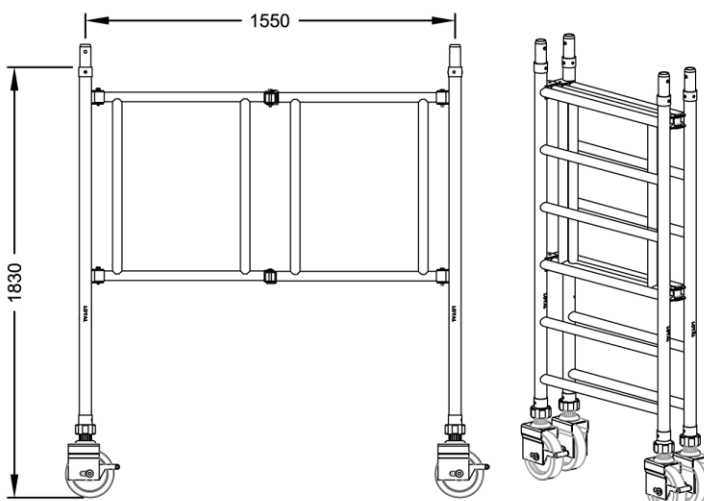
Toeboard Set
730E-TB
Weight : 9.2kg



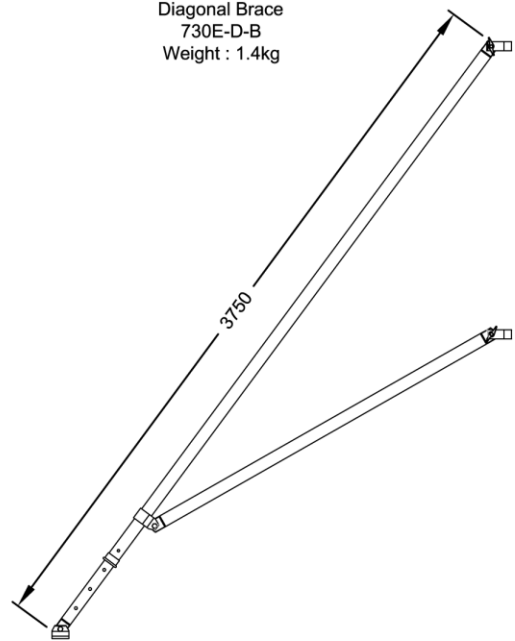
Horizontal Brace
730E-H-B
Weight : 1.3kg



Diagonal Brace
730E-D-B
Weight : 1.4kg



Base Frame Unit
730E-BF
Weight : 31.65kg



Outrigger Telescopic SP10
730E-SP-10
Weight : 9.10kg

Quantity Schedule

730 Width Towers

Trade King 730 to EN 1004

Internal / External Use

Description	Tower Height (m)	1.83	2.83	4.83	6.83	8.83
	Platform Height (m)	0.90	1.65	3.65	5.65	7.65
730E Base Frame Unit c/w Castors	1	1	1	1	1	1
730E 8 Rung Ladder Frame			2	4	6	
730E 4 Rung Guardrail Frame		2	2	2	2	
Horizontal Brace 1.55m (RED)	2	5	9	9	13	
Diagonal Brace 1.72m (BLUE)		2	5	9	13	
Trapdoor Platform	1	1	2	2	3	
Telescopic Stabiliser			4	4	4	
Toeboard Set		1	1	1	1	
1.55m Span Tower Total Self-Weight (kgs)	44.0	66.3	130.5	147.5	178.0	

NUMBER OF WORKING PLATFORMS ALLOWED

The MAXIMUM SAFE WORKING LOAD (the combined weight of the users, tools and materials) that may be placed on the tower is the total weight less the self weight of the tower. The total weight for the towers in the schedule is **864 kg**

Numbering of working platforms allowed: the maximum load is 864kg this is 3 working platform, if the maximum height is decrease the maximum load (self load+230kg x number of working platform) should decrease accordingly..

Example 1:

A Trade King 730 tower built with a 7.65m platform height and a platform length of 1.55m has a self weight of 178kg.

$$864.0\text{kg} - 178.0\text{kg} = \mathbf{686 \text{ kg maximum safe working load}}$$

Total weight self weight (**user, tools and materials**)

Example 2:

A Trade King 730 tower built with a 3.65m platform height and a platform length of 1.55m has a self weight of 130.5kg.

$$864.0\text{kg} - 130.5\text{kg} = \mathbf{733.5 \text{ kg maximum safe working load}}$$

Total weight self weight (**user, tools and materials**)

For greater heights and loads, consult [Loyal Scaffolding Limited](#) for guidance.

PLATFORMS LOADING

On an **Trade King 730** tower a platform comprise of a single deck only. 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 deck.

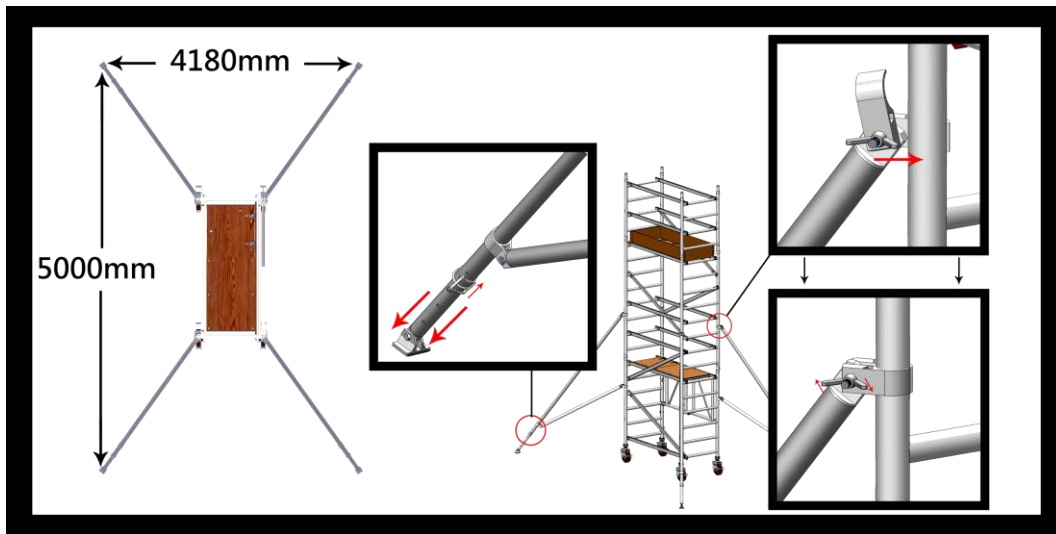
The quantities above will enable **Trade King 730** towers to be built safely and therefore comply with the requirements of the EN1004. They include double guardrails to all platforms, and toeboards will need to be added if any levels are used as working platform and for storage of materials. EN 1004 requires platforms at least every 4.2m, and these measures will exceed that requirement

BALLAST : Internal/External use

There is no requirement for ballast on **Trade King 730** tower if using stabilisers as detailed in the table above.

STABILISERS

To improve rigidity, stabilisers can be used at lower level than shown in the table on **page 7** and fitted as below figure.



Assembly Procedure

Mobile Towers

ASSEMBLY AND DISMANTLING PROCEDURES

When building a Trade King 730 Scaffold Tower

- ◆ All platforms feature double guardrails on both faces of each platform(s).
- ◆ All guardrails should be 1 and 2 rungs (0.5m and 1.0m) above platforms.
- ◆ Never stand on an unguarded platform positioned above the first rung of a tower. If your risk assessment shows it necessary, you may also need to guardrail platform at this level.
- ◆ **Always start building with the folded base unit at the base of the tower.**

TO DISMANTLING A Trade King 730 Scaffold Tower

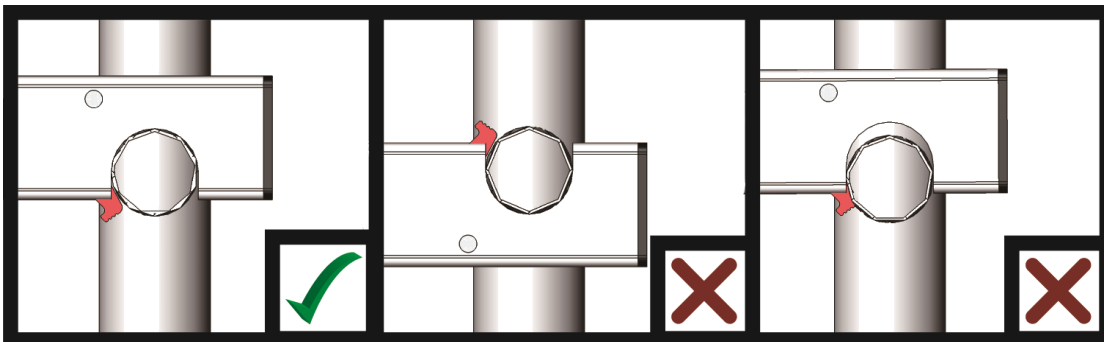
- ◆ Remove toeboards, and pass down the tower.
- ◆ Unclip farthest end of braces and immediately go to protected trapdoor position to complete removal.
- ◆ Remove upper platforms from protected levels below.
- ◆ Pass removed components out of the tower to a colleague.

Safety Checklist

Mobile Towers

CHECKLIST

1. Ensure all brace operate properly and lock correctly prior to erection
2. Inspect components prior to erection
3. Inspection tower prior to use
4. Tower upright and level
5. Castors locked and legs correctly adjusted
6. Diagonal braces fitted
7. Stabilisers/outriggers fitted as specified
8. Platforms located and windlocks on
9. Toeboards located
10. Check guardrails are fitted correctly as below figure

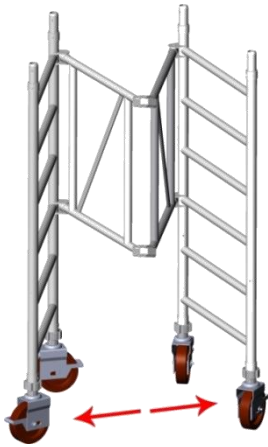


Refer to this checklist before using each time.

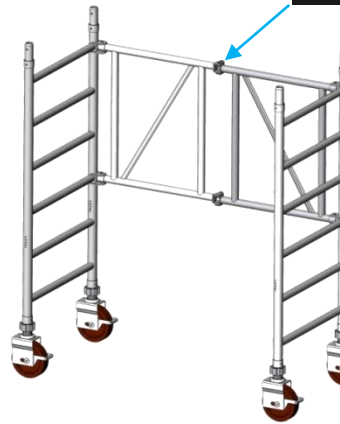
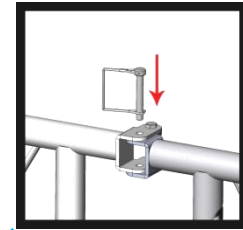
Assembly Procedure

ASSEMBLY FOR Trade King 730 MOBILE TOWERS

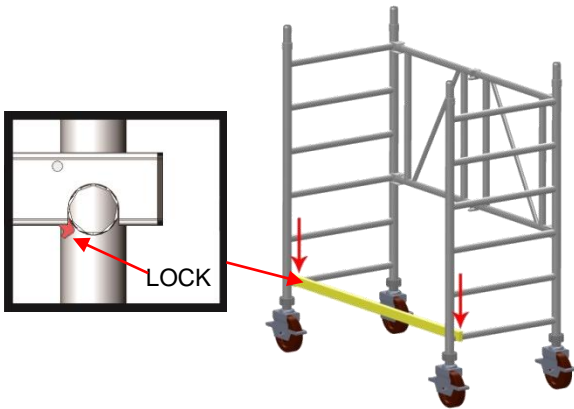
Always start building with the folded base unit at the base of the tower.



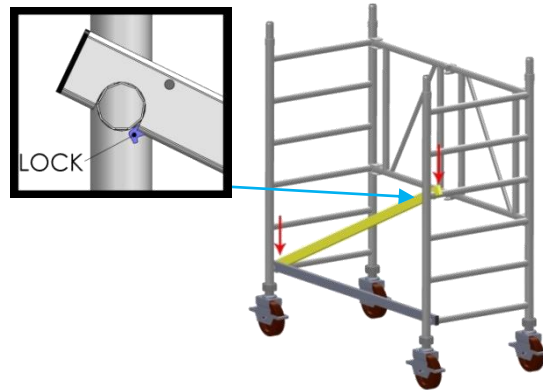
Step 1. Set up the folded base stand. (pre-assembly)



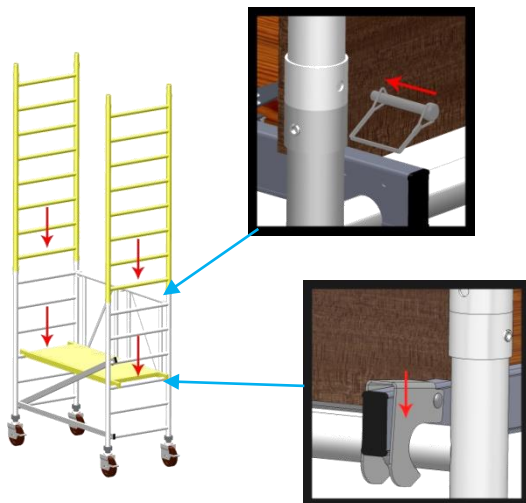
Step 2. Locked all the castor wheels (4 Nos.) and folded hinge **IMPORTANT** — Only use the adjustable on the legs to level the tower and not to gain extra height



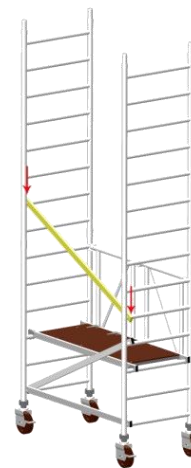
Step 3. Fit one horizontal brace (RED) onto the bottom rung (1st rung)



Step 4. Fit one diagonal braces (BLUE) in between the 1st and 4th rungs



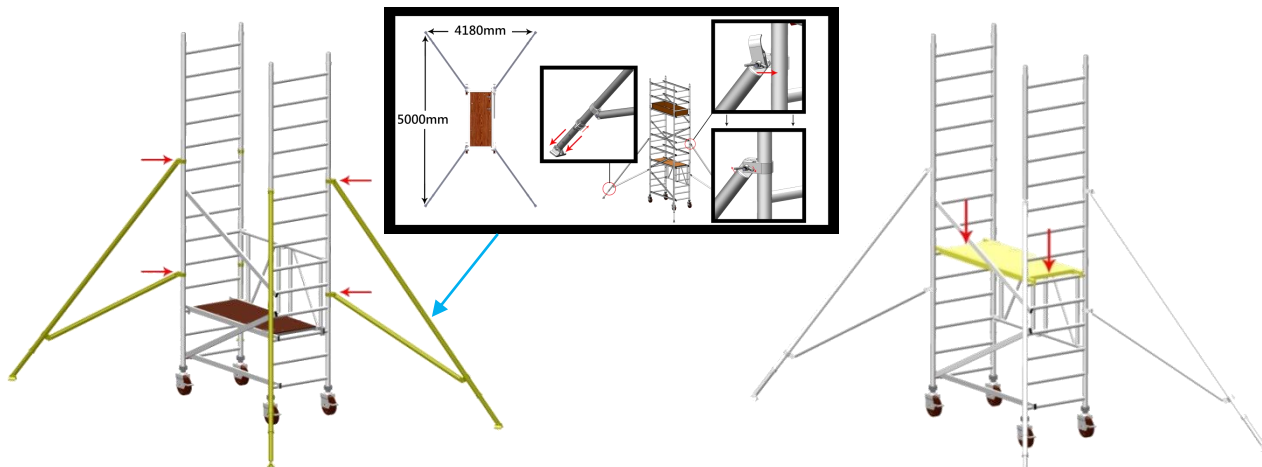
Step 5. Fit one temporary platform on the 3rd rungs and locked the securing hook. Fit one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



Step 6. Fit one diagonal braces (BLUE) in between the 5th and 8th rungs

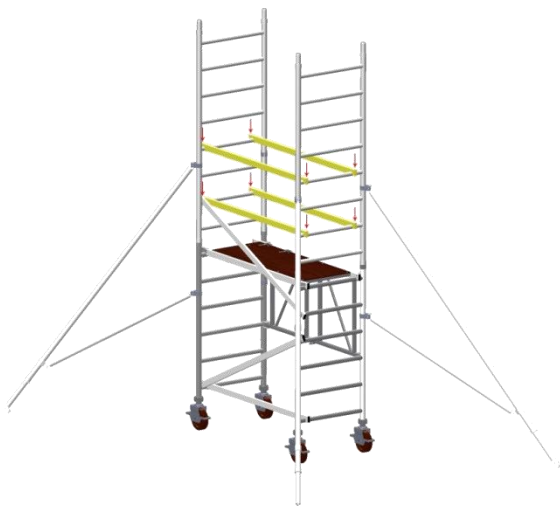
Assembly Procedure

ASSEMBLY FOR Trade King 730 Mobile Tower

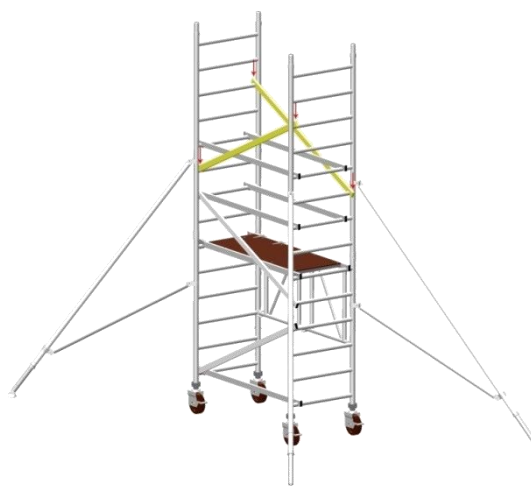


Step 7. Fit stabilisers to each corner of the mobile scaffold tower to increase the effective base dimensions, as per the plan view shown. To obtain the maximum extension of the stabilisers the lower arm should be as near to horizontal as possible.

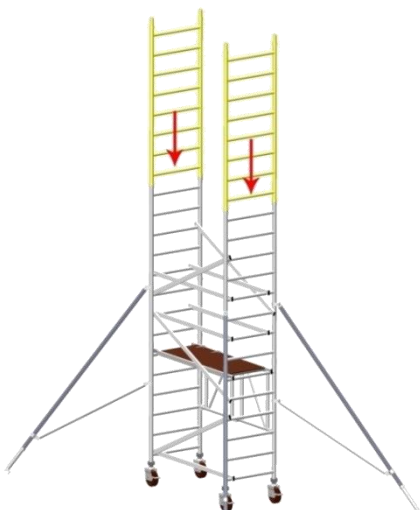
Step 8. Remove temporary platform from the lowest rung to the 6th rungs.



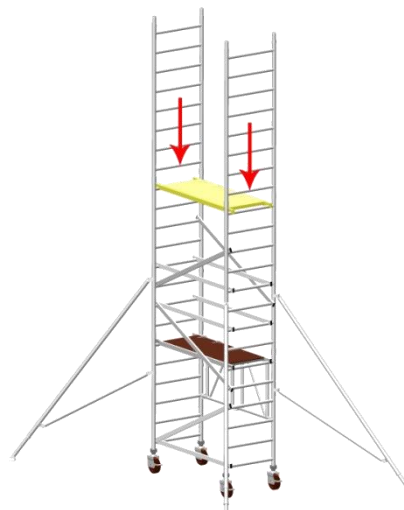
Step 9. Fit the temporary guardrails (RED) on the 8th and 10th rungs, in that order, on both sides of the tower.



Step 10. Fit one pair of diagonal braces (BLUE) in opposite direction between the 9th and 12th rungs



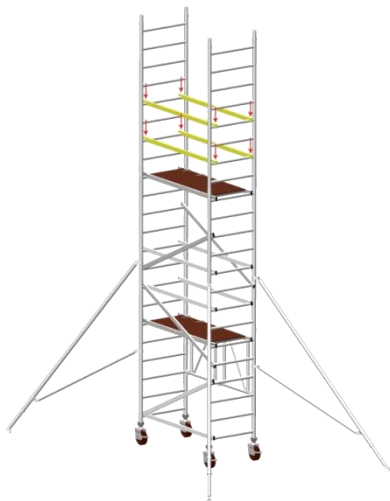
Step 11. Fit next one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



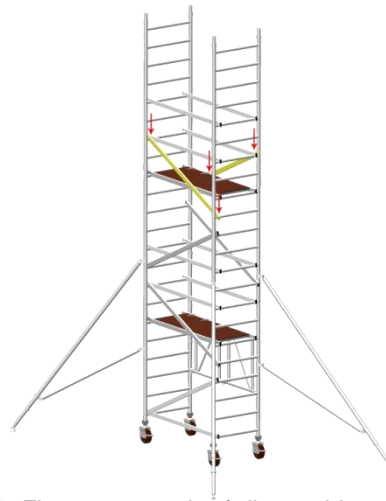
Step 12. Fit one trapdoor platform on the 14th rungs and locked the securing hook.

Assembly Procedure

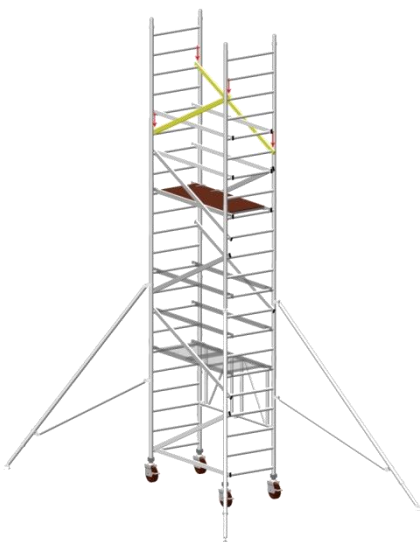
ASSEMBLY FOR Trade King 730 Mobile Tower



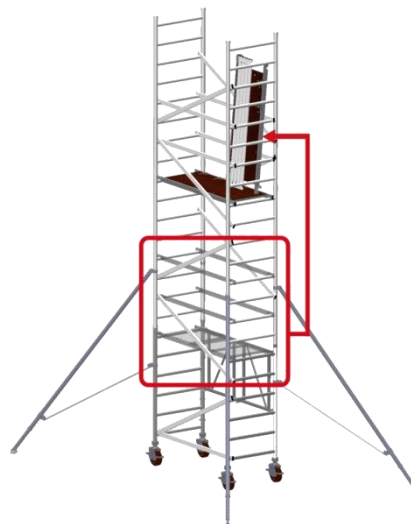
Step 13. Fit the guardrails (RED) on the 16th and 18th rungs, in that order, on both sides of the tower.



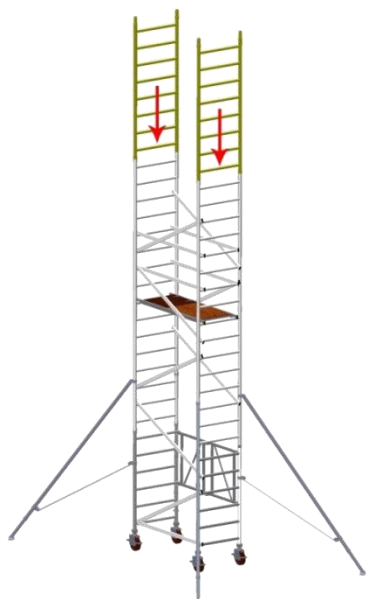
Step 14. Fit next one pair of diagonal braces (BLUE) in opposite direction between the 13th and 16th rungs



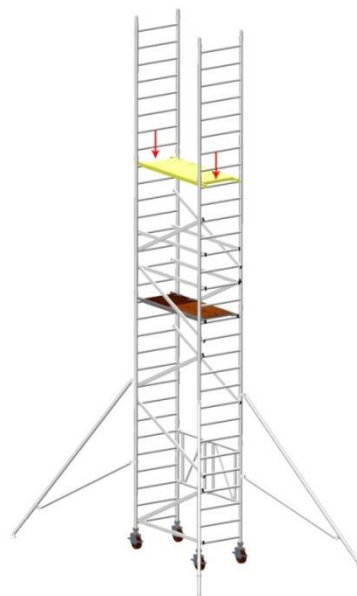
Step 15. Fit another one pair of diagonal braces (BLUE) in opposite direction between the 17th and 20th rungs



Step 16. Remove temporary platform and the guardrails from the lowest level and placed on the 14th rungs trapdoor platform



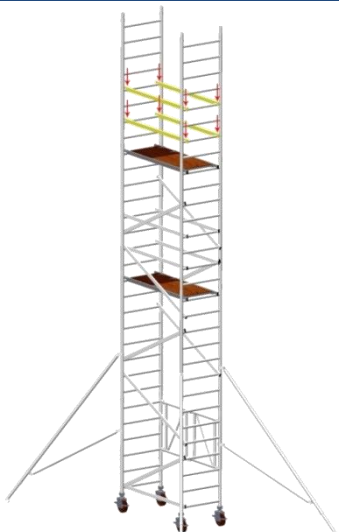
Step 17. Fit another one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



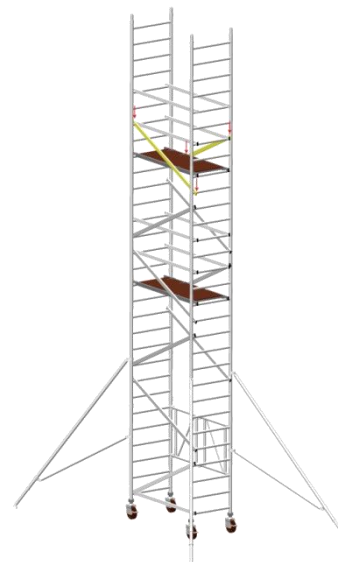
Step 18. Fit next one trapdoor platform on the 22nd rungs and locked the securing hook.

Assembly Procedure

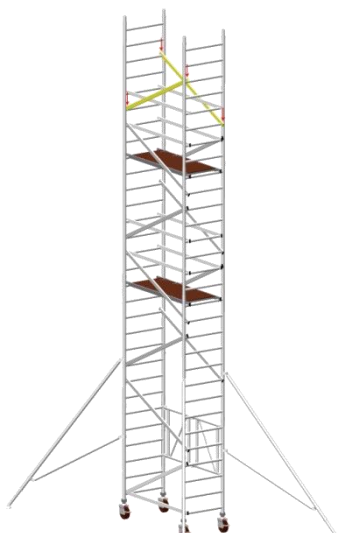
ASSEMBLY FOR Trade King 730 Mobile Tower



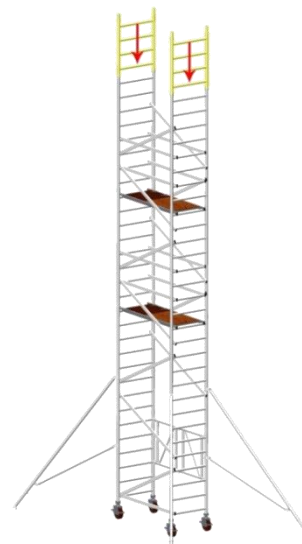
Step 19. Fit the guardrails (RED) on the 24th and 26th rungs, in that order, on both sides of the tower.



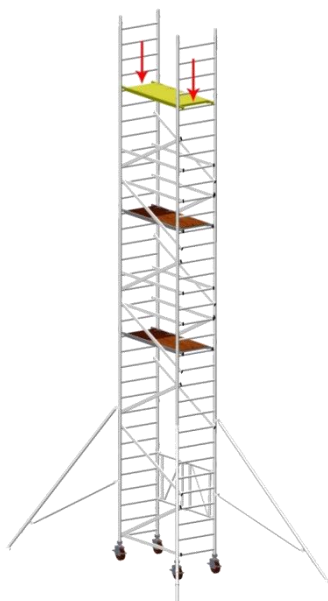
Step 20. Fit one pair of diagonal braces (BLUE) in opposite direction between the 21st and 24th rungs



Step 21. Fit next one pair of diagonal braces (BLUE) in opposite direction between the 25th and 28th rungs



Step 22. Fit one pair of 4 Rungs guardrail frames and check the frame interlock clips are engaged.



Step 23. Fit next one trapdoor platform on 30th rungs and locked the securing hook.



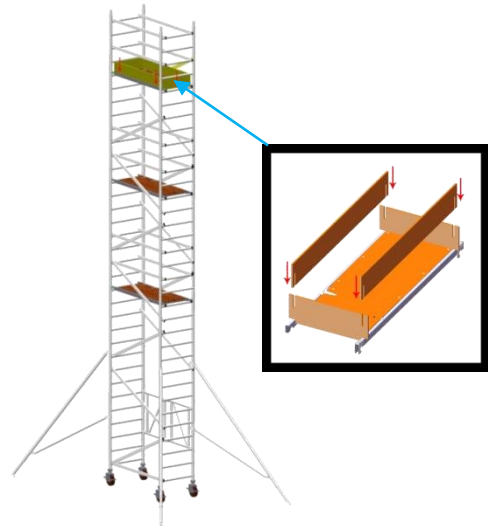
Step 24. Fit the guardrails (RED) on the 32th and 34th rungs, in that order, on both sides of the tower.

Assembly Procedure

ASSEMBLY FOR Trade King 730 MOBILE TOWERS



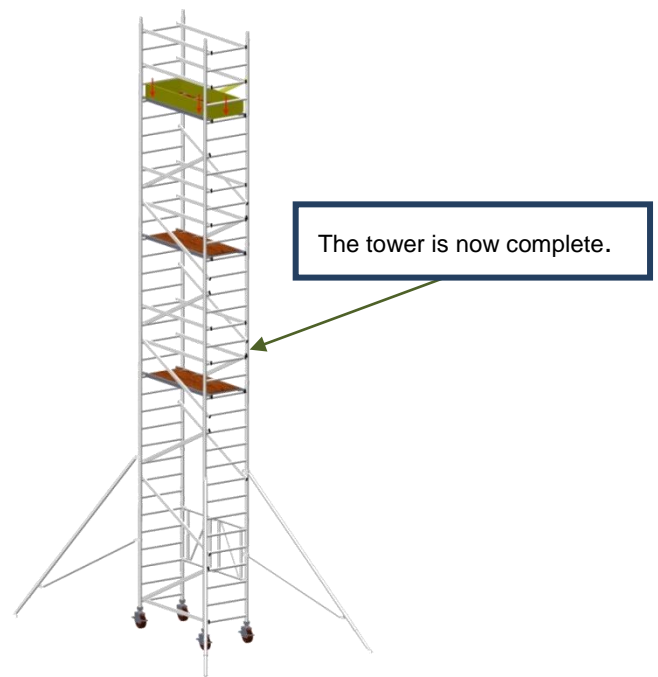
Step 25. Add a single diagonal brace between the 29th and 32th rungs as shown.



Step 26. Fit toeboards over the platform as shown



Step 27. Before using or relocated the tower. Check the tower in upright and leveling within an inclination of 1%.



Dismantle Procedure

To take down the tower reverse the erection sequence. When removing guardrail braces, unlock the securing hook furthest from the trapdoor and then immediately to the protected position within the trapdoor. You may then unlock the securing hook at the ends of the guardrail to remove them from the tower

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

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