



Trade King 730

Aluminium Scaffold Tower

Tested and Certified to EN 1004-1:2020

This instructions and equipment described are in accordance with :

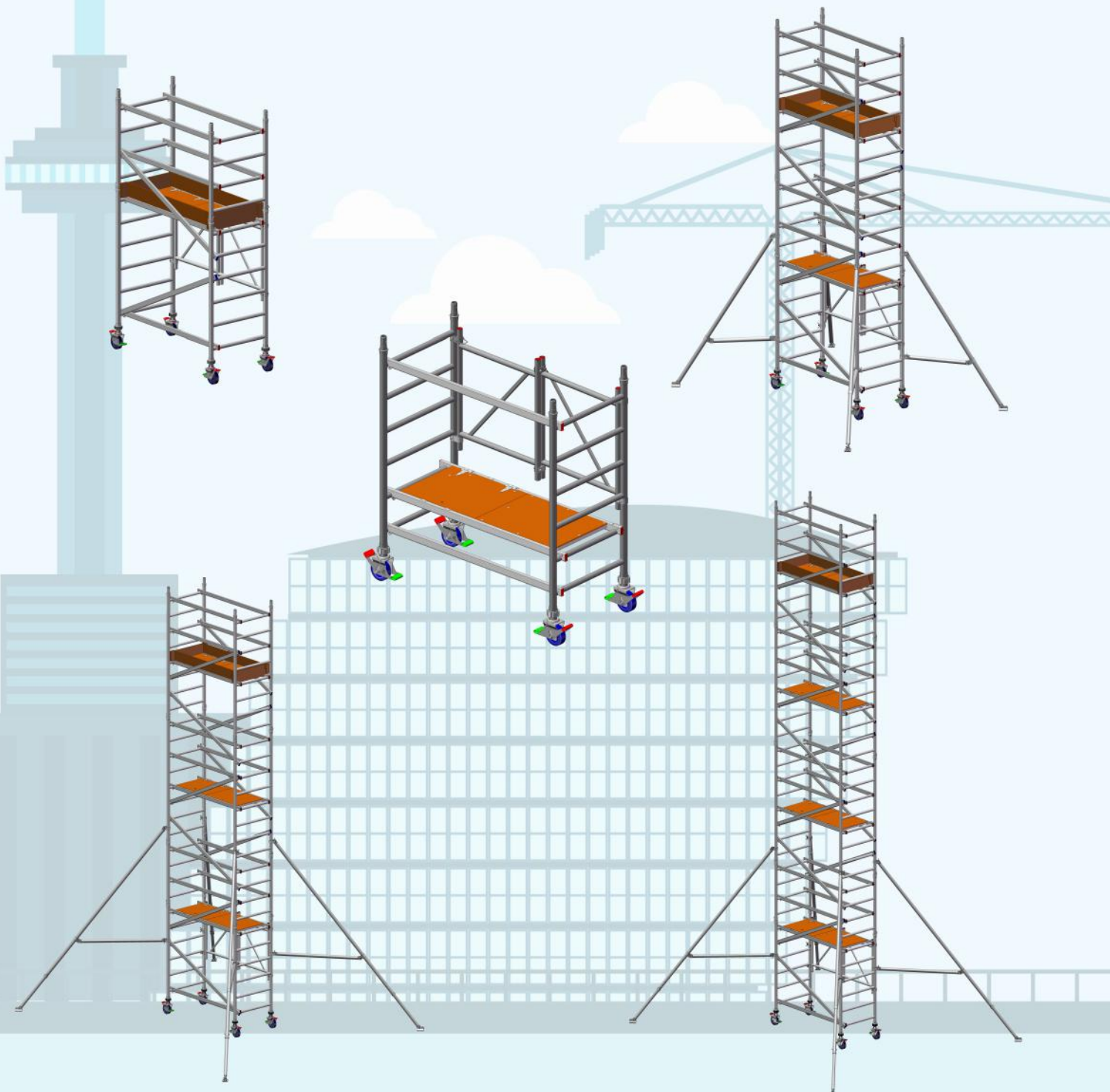
EN 1298 - IM - en x de

EN 1004-1:2020 (Class 3) (8 metres outdoor / 8 metres indoor)

EN 1004 3 8/8-XXXD H2



Instruction Manual



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 sales@aluminium-scaffoldtowers.co.uk

COMPLIANCES

These instructions and the equipment described in accordance with :

EN 1298-IM-en x de

EN 1004-1:2020 Class 3 (8 metres outdoor / indoor)

EN 1004 3 8/8 XXXD H2

TOWER DESINATION



EN 1004 3 8/8 XXXD H2

Design Code

Load Class (2 = 153kg/m² UDL, 3 = 204kg/m² UDL)

Maximum Platform Height Outdoors (m)

Maximum Platform Height Indoors (m)

Access Method

A = Stairway, B = Stair Ladder, C = Inclined Ladder, **D = Vertical Ladder**

Clear Height Class (H1 = 1.85m, **H2 = 1.9m**)

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.





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 object 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 30.
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.
28. **This tower must not be used as an anchor point for Personal Fall Arrest Equipment**
29. Only has **One Working Platform** at a time.

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. OUTRIGGERS

1. Outriggers shall always be fitted when specified.
2. The Quantity Schedules show the recommended stabilisation. 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. 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 outriggers 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 .

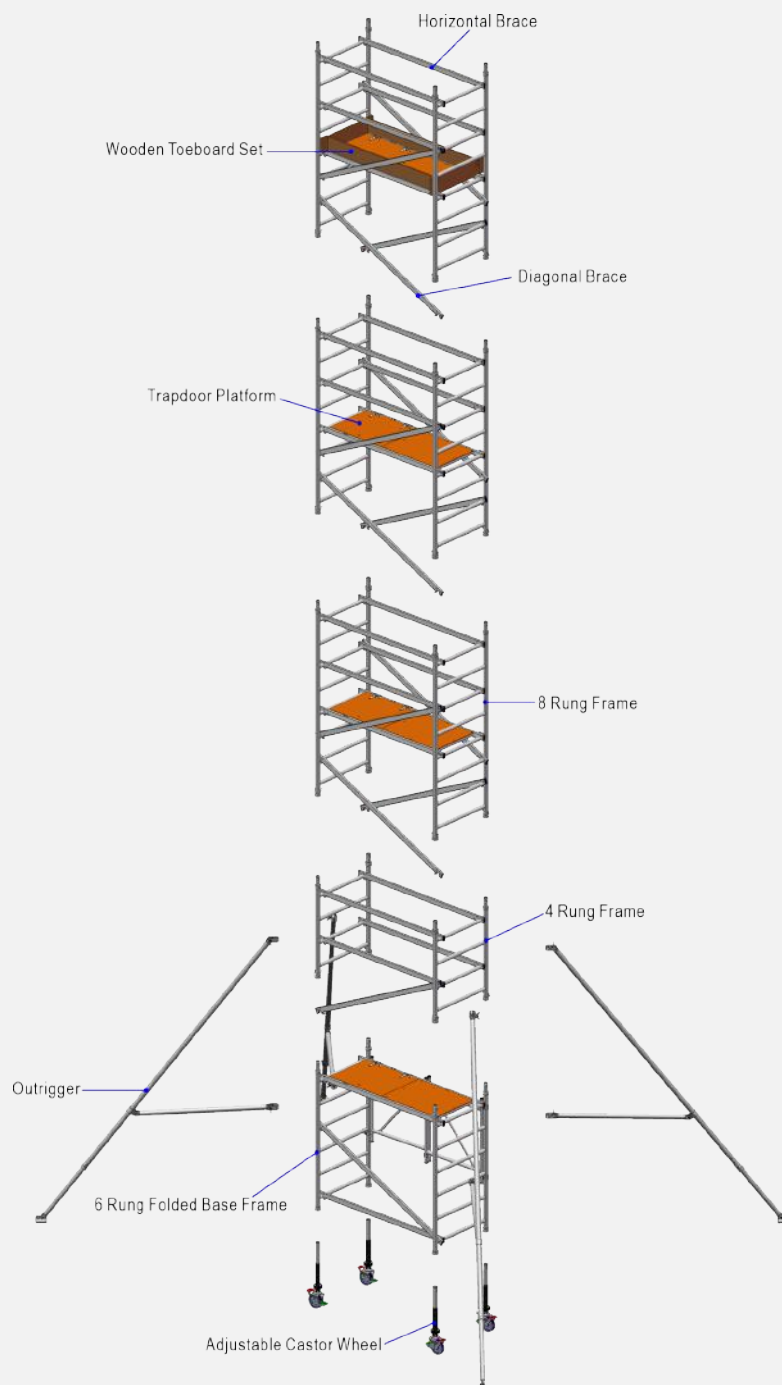
F. TIES

1. This structure is designed to be self-supporting under the loading condition requirements of EN 1004-1:2020 and does not require tying in. Consideration should be given to potential wind conditions if the tower is left unattended.

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.

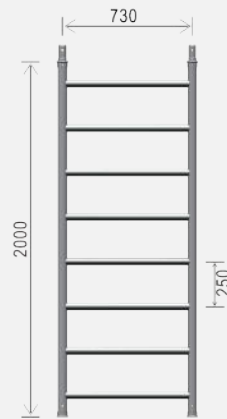
Components



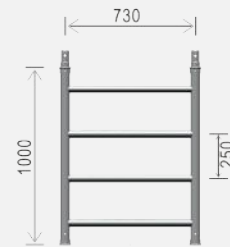
Trade King 730 Aluminium Scaffold Tower Components



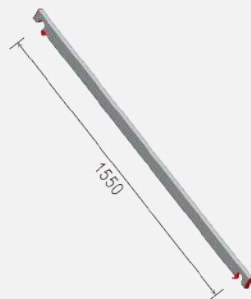
6 Rung Folded Base Frame
730mm x 1500mm x 1550mm
Part No. TK730-B-F



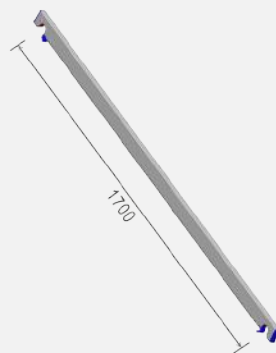
8 Rung Ladder Frame
730mm x 2000mm
Part No. TK730-8-B



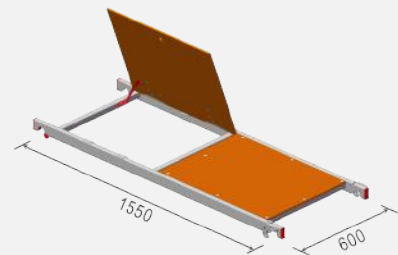
4 Rung Ladder Frame
730mm x 1000mm
Part No. TK730-4-R



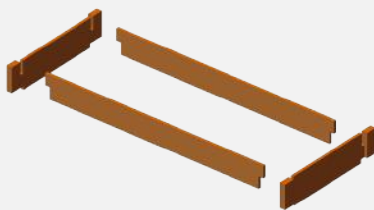
Horizontal Brace
1550mm
Part No. TK730-H-B



Diagonal Brace
1700mm
Part No. TK730-D-B



Trapdoor Platform
600mm x 1550mm
Part No. TK730-T-P



Wooden Toeboard Set
600mm x 1550mm
Part No. TK730-T-B



Fixed Outrigger
2350mm
Part No. TK730-SP7



Telescopic Outrigger
3180-3700
Part No. TK730-SP10



Castor Wheel
150mm dia.
Part No. 600-F-150



Safety Snap Pin
Ø9.2mm
Part No. SSP

Quantity Schedule

730 Width Towers

Trade King 730 to EN 1004

Internal / External Use

| Description | Tower Height (m) | 1.83 | 2.75 | 3.75 | 4.75 | 5.75 | 6.75 | 7.75 | 8.75 |
|--|---------------------|------|------|------|-------|-------|-------|-------|-------|
| | Platform Height (m) | 0.67 | 1.65 | 2.65 | 3.65 | 4.65 | 5.65 | 6.65 | 7.65 |
| Castor Wheel Ø150mm c/w adj.leg | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| TK730 Folded Base Frame Unit | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TK730 8 Rung Ladder Frame | | - | - | 2 | 2 | 4 | 4 | 6 | 6 |
| TK730 4 Rung Ladder Frame | | - | 2 | - | 2 | - | 2 | - | 2 |
| TK730 Horizontal Brace 1.55m (RED) | | 2 | 5 | 5 | 9 | 9 | 13 | 13 | 17 |
| TK730 Diagonal Brace 1.72m (BLUE) | | - | 2 | 4 | 6 | 7 | 10 | 11 | 14 |
| TK730 Trapdoor Platform | | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 |
| Fixed Outriggers | | | | 4 | 4 | - | - | - | - |
| Telescopic Outriggers | | - | - | - | - | 4 | 4 | 4 | 4 |
| TK730 Wooden Toeboard Set | | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.55m Span Tower Total Self-Weight (kgs) | | 38.4 | 61.3 | 92.8 | 107.3 | 120.8 | 145.3 | 151.3 | 175.6 |

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**

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 175.6kg.

$$864.0\text{kg} - 175.6\text{kg} = \mathbf{688.4 \text{ kg maximum safe working load}}$$

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 107.3kg.

$$864.0\text{kg} - 107.3\text{kg} = \mathbf{756.7 \text{ kg maximum safe working load}}$$

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 2.25m, and these measures will exceed that requirement

BALLAST : Internal/External use

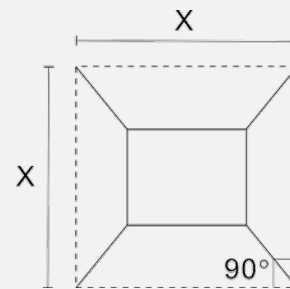
There is no requirement for ballast on **Trade King 730** tower if using outriggers as detailed in the table above.

OUTRIGGERS

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

Trade King 730 Tower Dimension X

| Outrigger Type | Platform Length 1.55m |
|----------------------|-----------------------|
| Fixed Outrigger | X = 3450 |
| Telescopic Outrigger | X = 4350 |



Outrigger **feet** should form a square as shown in diagram and table above.

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 2 and 4 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.**



THIS TOWER MUST NOT BE USED AS AN ANCHOR POINT FOR PERSONAL FALL PROTECTION EQUIPMENT.

TO DISMANTLING A Trade King 730 Scaffold Tower

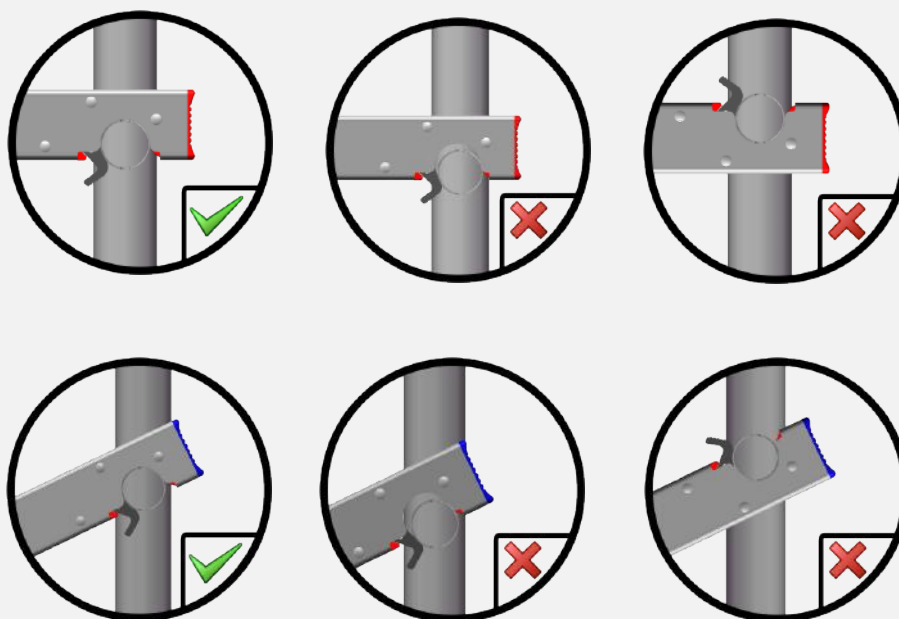
- ◆ Remove toeboards, and pass down the tower.
- ◆ Unclip farthest end of braces and immediately go to protected trapdoor position to complete removal.
- ◆ Remove upper platforms from protected levels below.
- ◆ Pass removed components out of the tower to a colleague.

Safety Checklist

Mobile Towers

CHECKLIST

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

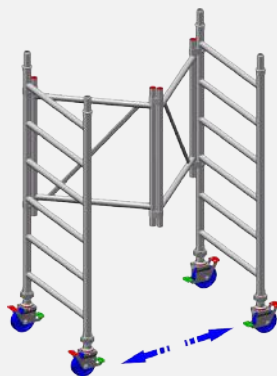


Refer to this checklist before using each time.

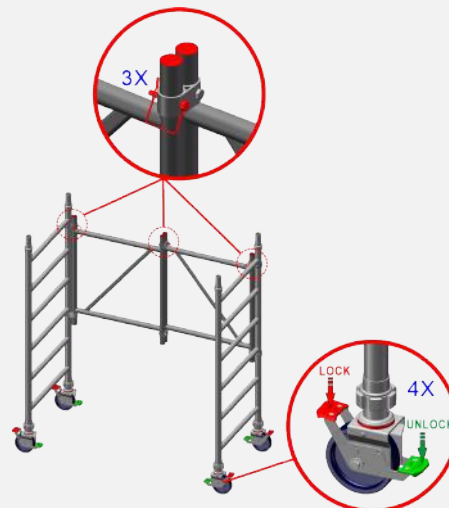
Assembly Procedure

ASSEMBLY FOR Trade King 730 MOBILE TOWERS

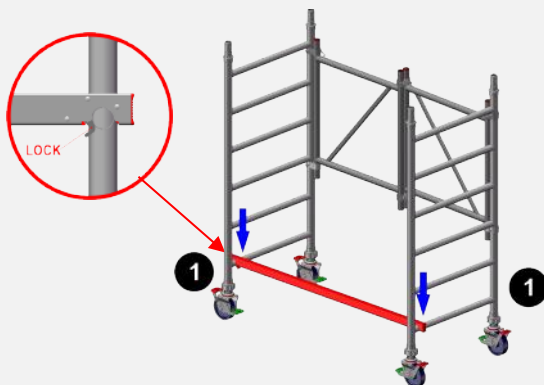
Always start building with the folded base unit at the base of the tower.



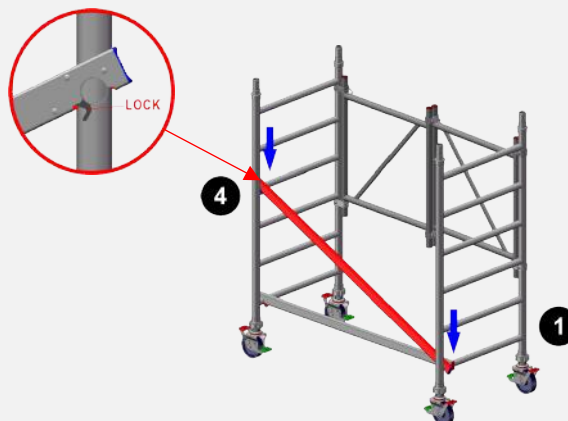
Step 1. Set up the folded base stand. (pre-assembly)



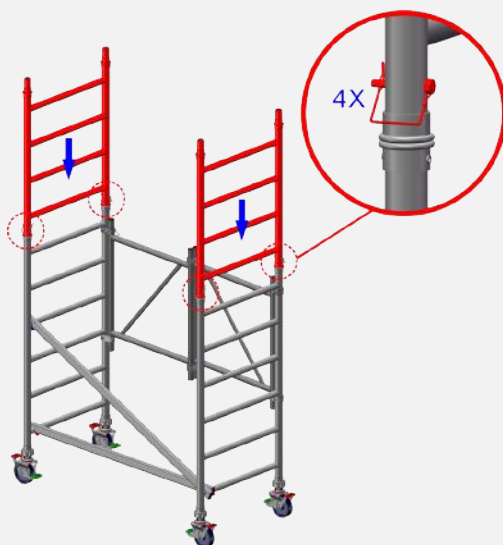
Step 2. Locked all the castor wheels (4 Nos.) and folded hinge
IMPORTANT — Only use the adjustable on the legs to level the tower and not to gain extra height



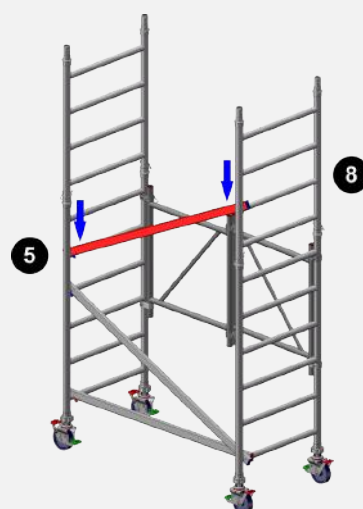
Step 3. Fit one horizontal brace (RED) onto the bottom rung (1st rung)



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



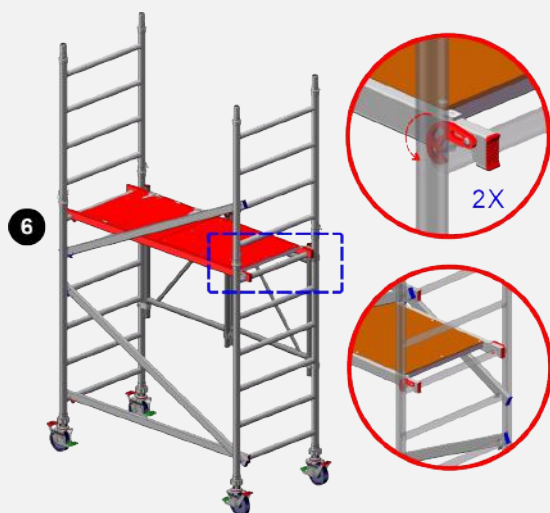
Step 5. Fit one pair of 4 Rungs guardrail frames and check the frame interlock clips are engaged.



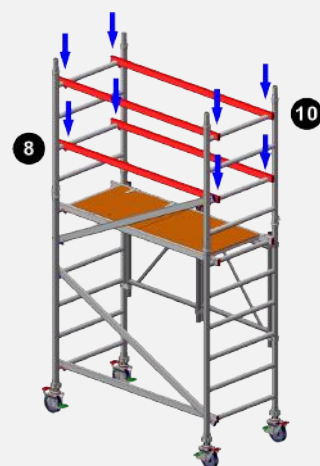
Step 6. Fit one diagonal braces (BLUE) in between the 5th and 8th rungs

Assembly Procedure

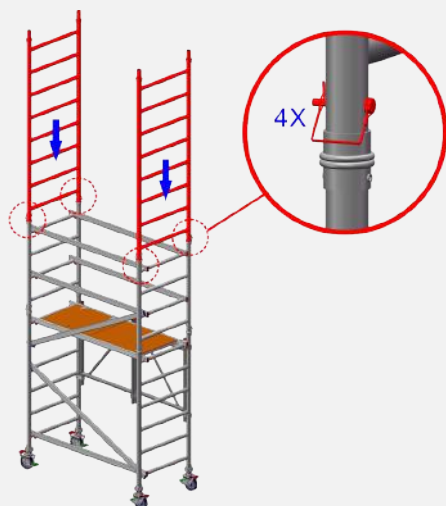
ASSEMBLY FOR Trade King 730 Mobile Tower



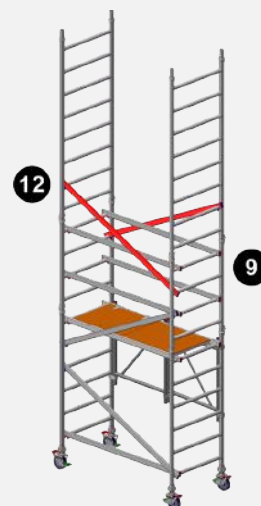
Step 7. Fit one trapdoor platform on the **6th** rungs and locked the securing hook.



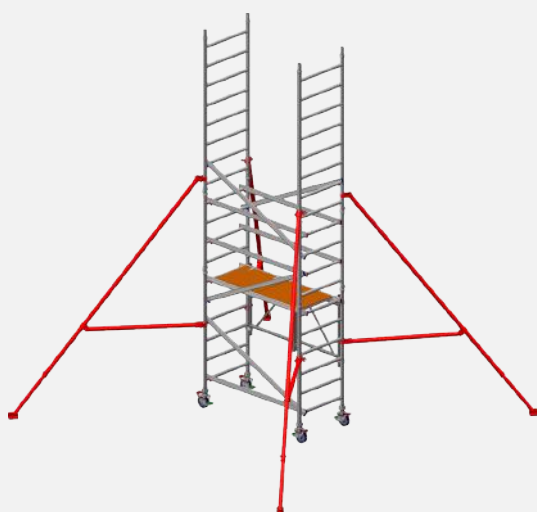
Step 8. Fit the horizontal braces (**RED**) on the **8th** and **10th** rungs, in that order, on both sides of the tower.



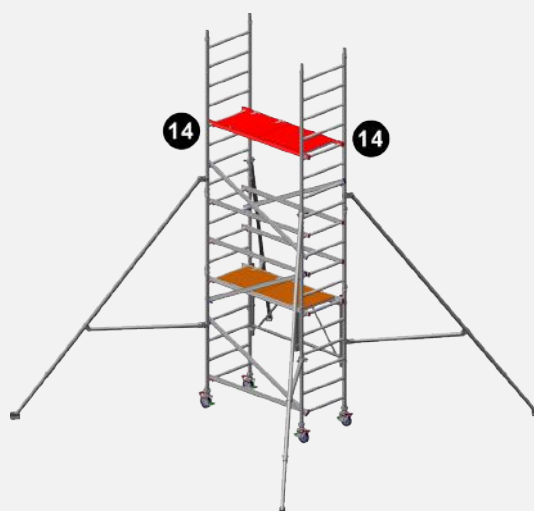
Step 9. Fit one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



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



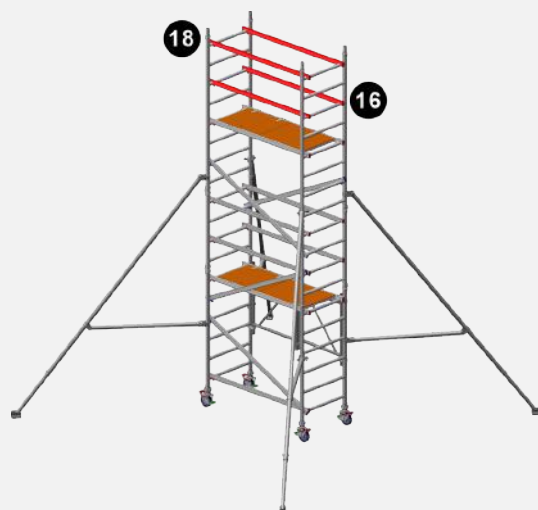
Step 11. Fit stabilisers to each corner of the mobile scaffold tower to increase the effective base dimensions, as per the plan view shown. **To obtain the maximum extension of the outriggers**, the lower arm should be as near to horizontal as possible.



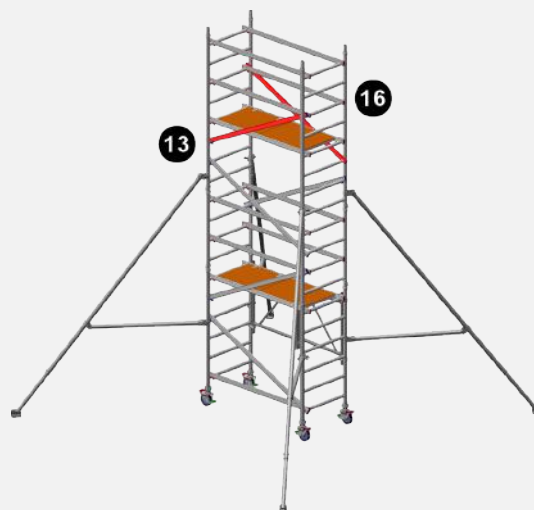
Step 12. Fit one trapdoor platform on the **14th** rungs and locked the securing hook.

Assembly Procedure

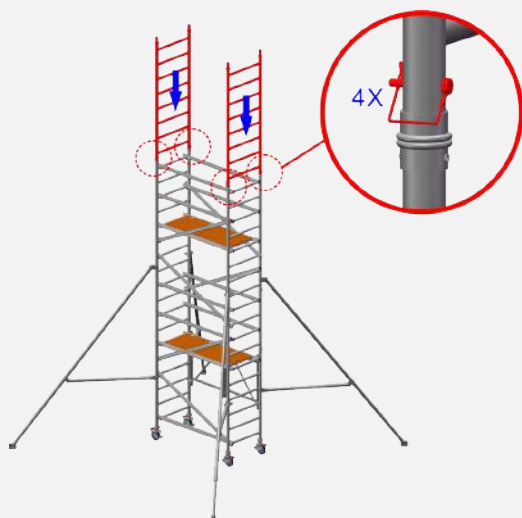
ASSEMBLY FOR Trade King 730 Mobile Tower



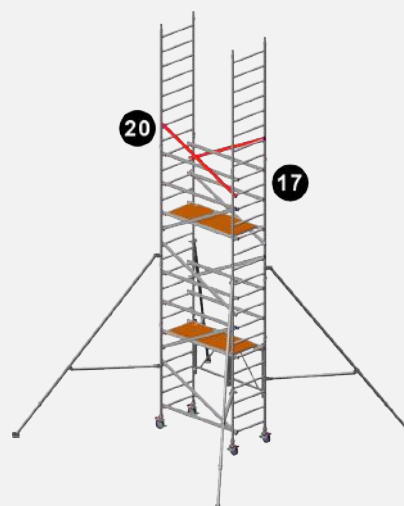
Step 13. Fit the horizontal braces (**RED**) on the **16th** and **18th** rungs, in that order, on both sides of the



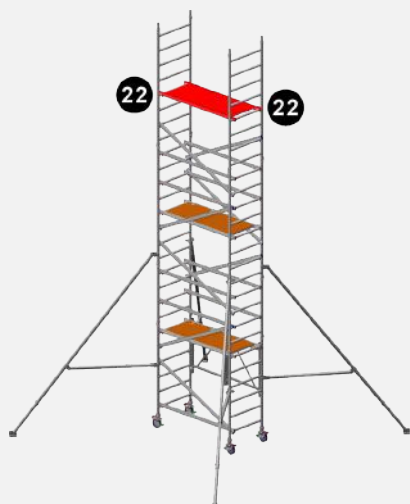
Step 14. Fit next one pair of diagonal braces (**BLUE**) in opposite direction between the **13th** and **16th** rungs



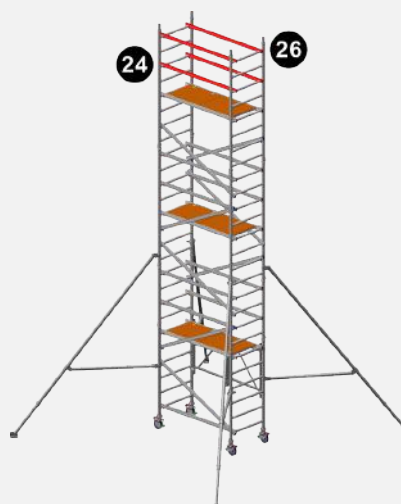
Step 15. Fit next one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



Step 16. Fit another one pair of diagonal braces (**BLUE**) in opposite direction between the **17th** and **20th** rungs



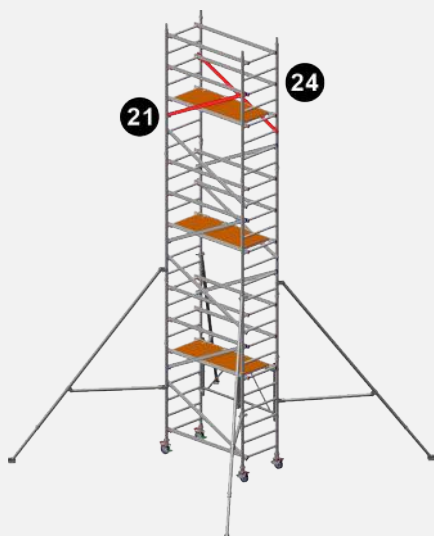
Step 17. Fit next one trapdoor platform on the **22nd** rungs and locked the securing hook.



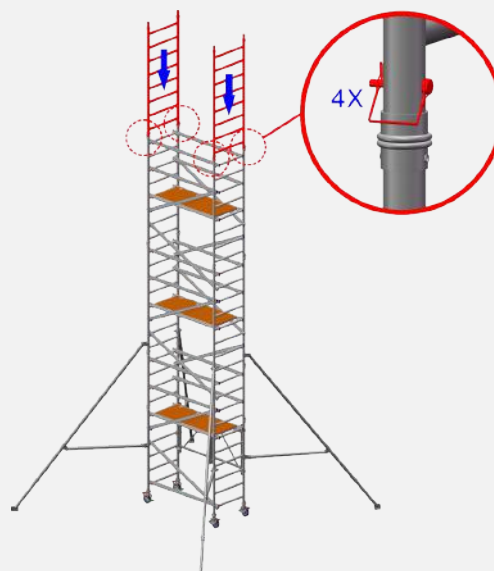
Step 18. Fit the horizontal braces (**RED**) on the **24th** and **26th** rungs, in that order, on both sides of the tower.

Assembly Procedure

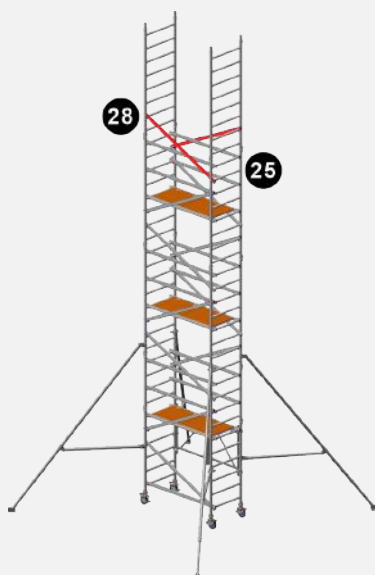
ASSEMBLY FOR Trade King 730 Mobile Tower



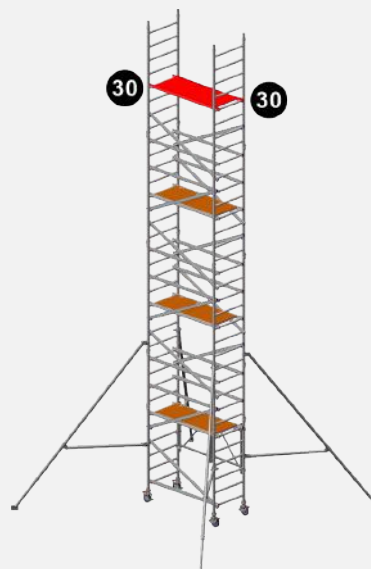
Step 19. Fit one pair of diagonal braces (BLUE) in opposite direction between the 21st and 24th rungs



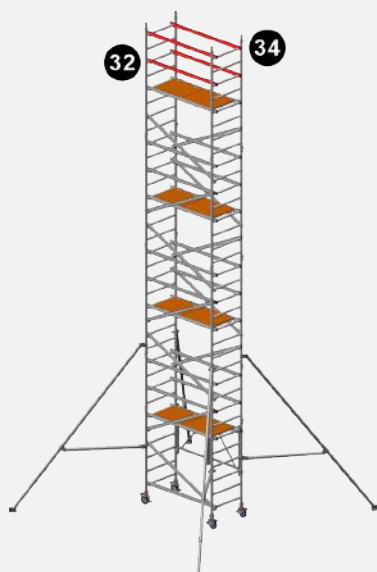
Step 20. Fit another one pair of 8 Rungs ladder frames and check the frame interlock clips are engaged.



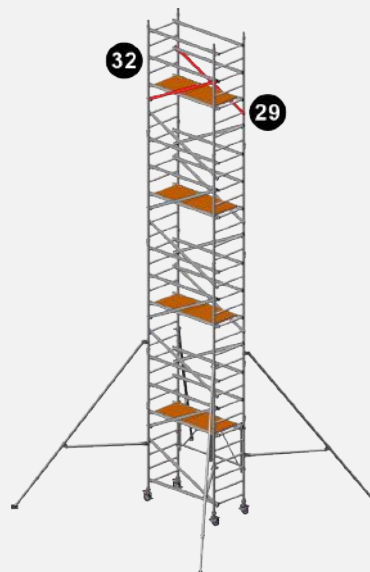
Step 21. Fit next one pair of diagonal braces (BLUE) in opposite direction between the 25th and 28th rungs



Step 22. Fit next one trapdoor platform on 30th rungs and locked the securing hook.



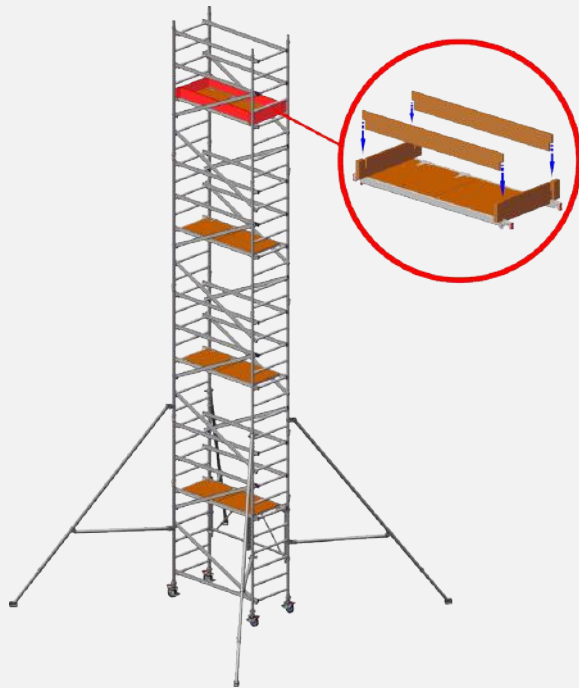
Step 23. Fit the horizontal braces (RED) on the 32th and 34th rungs, in that order, on both sides of the tower.



Step 24. Fit next one pair of diagonal braces (BLUE) in opposite direction between the 29th and 32th rungs

Assembly Procedure

ASSEMBLY FOR Trade King 730 MOBILE TOWERS

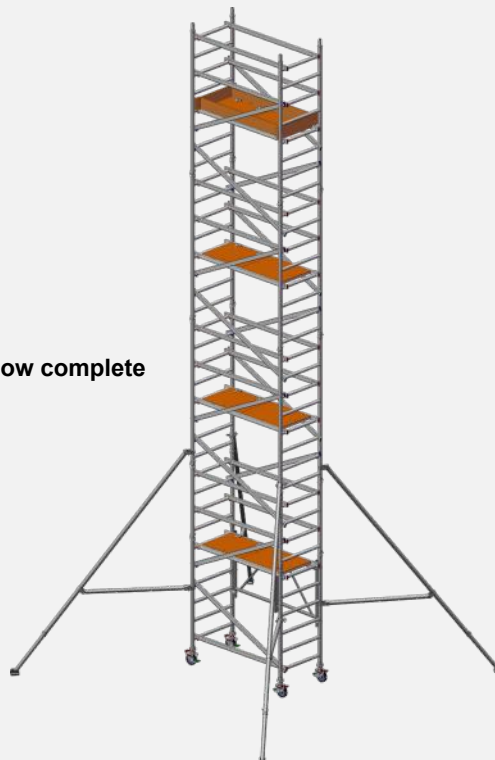


Step 25. Fit toeboards over the platform as shown



Step 26. Before using or relocated the tower. Check the tower in upright and leveling 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, 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

Notes :

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



Loyal Scaffolding Limited

LOT 1029-B, DD 124, Shek Po Road, Hung Shui Kiu, Yuen Long, N.T., Hong Kong.

 +852 3488 3860

 sales@aluminium-scaffoldtowers.co.uk

 www.loyal-scaffolding.com