SAFETY FIRST

This document is to be used in conjunction with the full user guide available from the manufacturer or to download at bossaccesstowers.com/literature.

Safe use

Please read this guide carefully. Please note that diagrams are for illustrative purposes only.

- Check that all components are onsite, undamaged and that they are functioning correctly - (refer to Checklist and Quantity Schedules in the user guide). Damaged or incorrect components should not be used.
- Check ground on which tower is to be erected and moved is capable of supporting the tower.
- The safe working load is 275kgs (606lbs), per platform level, uniformly distributed up to a maximum of 950kgs (2100lbs), per tower (including self- weight).
- Beware of horizontal forces (e.g. power tools) which could generate instability.
- Maximum horizontal force equals 30kg.
- Towers must only ever be climbed from the inside and using the rungs directly below the trapdoor.
- It is recommended that towers should be tied to a solid structure when left unattended.
- Only use the adjustable legs to level the tower and not to gain extra height. Adjustable legs should only ever be extended to minimum amount required to level the tower.

Lifting of equipment

- 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.
- Assembled mobile towers should not be lifted with a crane or other lifting device.
- Ensure the safe working load of the supporting decks and the tower structure is not exceeded.

Movement

- The tower should only be moved by manual effort, and only from the base.
- No person or materials should be on the tower during movement.
- Caution should be exercised when wheeling a tower over rough, uneven or sloping ground, taking care to unlock and lock castors. If stabilisers are fitted, they should only be lifted a maximum of 25mm above the ground to clear ground obstructions.
- The overall height of the tower when being moved, should not exceed 2.5 times the minimum base dimensions, or 4 metres overall height with stabilisers fitted in the correct position (whichever is the smallest). If stabilisers are not fitted in the standard position, the overall height of the tower should not exceed 2m.
- Before use, check the tower is still correct and complete.
- After every movement of the tower use a spirit level to check that it is vertical and level to within 10mm/m and set the adjustable legs as required.
- Do not move the tower in wind speeds over 7.7 metres per second (17 mph).
- Mobile access towers are not designed to be lifted or suspended.

NOTE: If the tower is moved, you MUST inspect prior to use.

Ties

For further information on tying-in a tower please contact your supplier or the manufacturer.

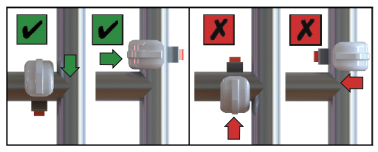
Maintenance - storage - transport

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 indentation greater than 5mm must not be used.

PRE-USE SAFETY CHECKLIST

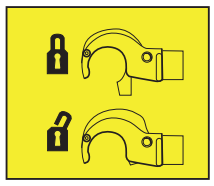
Refer to this checklist before using each time.

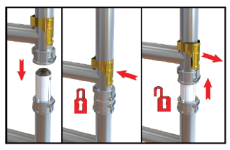
Description	Yes
Tower structure upright and level	
Castors locked and legs correctly adjusted	
Diagonal braces fitted	
Stabilisers fitted as specified	
Platforms located and wind-locks engaged	
Interlock clips engaged	
Toe boards located	
Guardrails fitted correctly and positively locked. See illustration below	



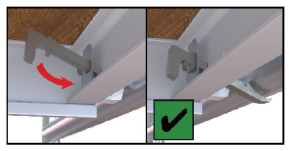
Ensure horizontal braces and guardrails are fitted correctly.

Always fit as shown.





Ensure interlock clips on frame members are in the 'locked' position.



Ensure wind-locks are engaged before moving onto the deck levels.

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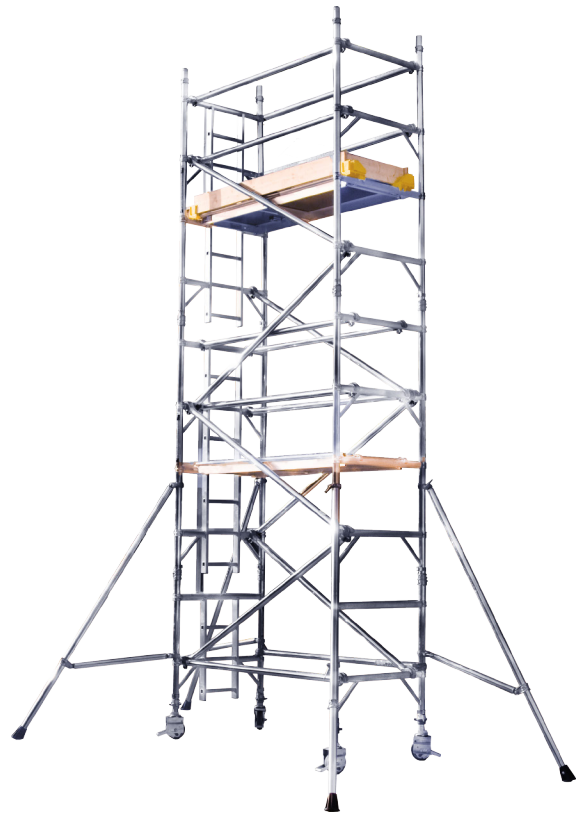


LADDERSPAN 3T

Mobile Aluminium Tower 850/1450 Ladderspan

3T - Through the Trapdoor Method

QUICK GUIDE

QUANTITY SCHEDULE 850 WIDTH TOWERS

BoSS 850 Ladderspan to EN 1004: Available in 2 lengths - 1.8m and 2.5m

Component	Working height (m) / Platform height (m)	Internal or external use														Internal use only							
		3.2 / 1.2	3.7 / 1.7	4.2 / 2.2	4.7 / 2.7	5.2 / 3.2	5.7 / 3.7	6.2 / 4.2	6.7 / 4.7	7.2 / 5.2	7.7 / 5.7	8.2 / 6.2	8.7 / 6.7	9.2 / 7.2	9.7 / 7.7	10.2 / 8.2	10.7 / 8.7	11.2 / 9.2	11.7 / 9.7	12.2 / 10.2	12.7 / 10.7	13.2 / 11.2	13.7 / 11.7	14.2 / 12.2
125/150/200mm Castor		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Adjustable Leg Assembly		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
850 2 Rung Ladder Frame			1	1			1	1			1	1			1	1			1	1			1	1
850 2 Rung Span Frame			1	1			1	1			1	1			1	1			1	1			1	1
850 3 Rung Ladder Frame			1		1		1		1		1		1		1		1		1		1		1	
850 3 Rung Span Frame			1		1		1		1		1		1		1		1		1		1		1	
850 4 Rung Ladder Frame		1		1	1	2	1	2	2	3	2	3	3	4	3	4	4	5	4	5	5	6	5	6
850 4 Rung Span Frame		1		1	1	2	1	2	2	3	2	3	3	4	3	4	4	5	4	5	5	6	5	6
1.8m/2.5m Trapdoor Deck		1	1	1*	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
1.8m/2.5m Horizontal Brace (Red)		6	6	6	6	10	10	10	10	14	14	14	14	18	18	18	18	22	22	22	22	26	26	26
2.1m/2.7m Diagonal Brace (Blue)		2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.8m/2.5m Side Toe Board		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
0.6m End Toe Board		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Toe Board Holder		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
SP7 Fixed Stabiliser				4	4	4	4	4	4	4														
SP10 Telescopic Stabiliser											4	4	4	4	4		4	4	4	4	4	4	4	4
SP15 Telescopic Stabiliser																4								
Total Self-Weight of Tower (kg) - 1.8m		**72**	**79**	**106**	**126**	**139**	**146**	**151**	**172**	**186**	**204**	**210**	**230**	**243**	**250**	**270**	**276**	**289**	**296**	**301**	**321**	**335**	**341**	**347**
Total Self-Weight of Tower (kg)- 2.5m		**84**	**90**	**117**	**143**	**158**	**165**	**172**	**198**	**225**	**233**	**239**	**264**	**280**	**286**	**382**	**318**	**334**	**341**	**347**	**372**	**488**	**395**	**401**

*If you are unable to position the working platform easily from the ground, you may require an additional fixed platform for this tower height. Always use stabilisers where specified.

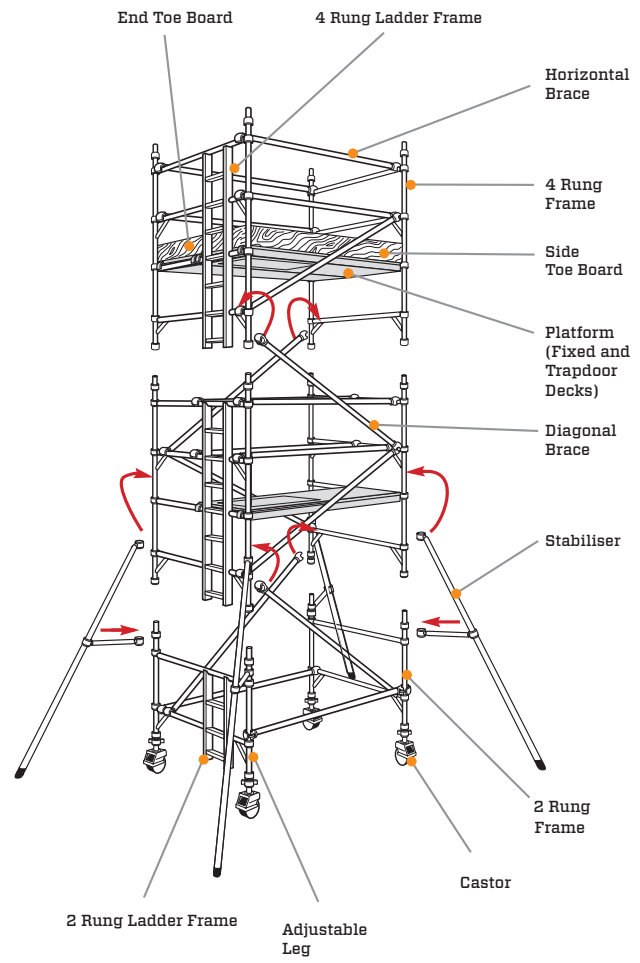
QUANTITY SCHEDULE 1450 WIDTH TOWERS

BoSS 1450 Ladderspan to EN 1004: Available in 2 lengths - 1.8m and 2.5m

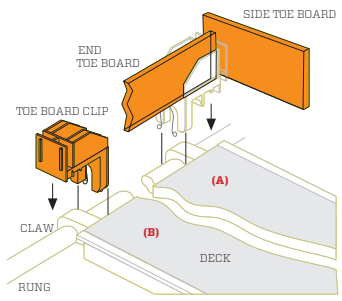
Component	Working height (m)* / Platform height (m)	Internal or external use														Internal use only							
		3.2 / 1.2	3.7 / 1.7	4.2 / 2.2	4.7 / 2.7	5.2 / 3.2	5.7 / 3.7	6.2 / 4.2	6.7 / 4.7	7.2 / 5.2	7.7 / 5.7	8.2 / 6.2	8.7 / 6.7	9.2 / 7.2	9.7 / 7.7	10.2 / 8.2	10.7 / 8.7	11.2 / 9.2	11.7 / 9.7	12.2 / 10.2	12.7 / 10.7	13.2 / 11.2	13.7 / 11.7	14.2 / 12.2
125/150/200mm Castor		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Adjustable Leg Assembly		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1450 2 Rung Ladder Frame			1	1			1	1			1	1			1	1			1	1			1	1
1450 2 Rung Span Frame			1	1			1	1			1	1			1	1			1	1			1	1
1450 3 Rung Ladder Frame			1		1		1		1		1		1		1		1		1		1		1	
1450 3 Rung Span Frame			1		1		1		1		1		1		1		1		1		1		1	
1450 4 Rung Ladder Frame		1		1	1	2	1	2	2	3	2	3	3	4	3	4	4	5	4	5	5	6	5	6
1450 4 Rung Span Frame		1		1	1	2	1	2	2	3	2	3	3	4	3	4	4	5	4	5	5	6	5	6
1.8m/2.5m Fixed Deck		1	1	1*	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1
1.8m/2.5m Trapdoor Deck		1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
1.8m/2.5m Horizontal Brace (Red)		6	6	6	6	10	10	10	10	14	14	14	14	18	18	18	18	22	22	22	22	26	26	26
2.1m/2.7m Diagonal Brace (Blue)		2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.8m/2.5m Side Toe Board		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1.2m End Toe Board		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Toe Board Holder		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
SP7 Fixed Stabiliser					4	4	4	4	4	4														
SP10 Telescopic Stabiliser											4	4	4	4	4		4	4	4	4	4	4	4	4
SP15 Telescopic Stabiliser																4								
Total Self-Weight of Tower (kg) 1.8m		**91**	**99**	**103**	**146**	**161**	**169**	**175**	**195**	**210**	**231**	**237**	**257**	**272**	**279**	**300**	**206**	**320**	**328**	**334**	**354**	**369**	**377**	**383**
Total Self-Weight of Tower (kg) 2.5m		**108**	**116**	**143**	**169**	**185**	**194**	**201**	**226**	**243**	**264**	**271**	**296**	**313**	**321**	**343**	**354**	**370**	**378**	**385**	**411**	**427**	**436**	**443**

*If you are unable to position the working platform easily from the ground, you may require an additional fixed platform for this tower height. Always use stabilisers where specified.

COMPONENTS



FITTING TOE BOARDS



ASSEMBLY PRINCIPLES

The manufacturer recommends that two persons are used to build BoSS Towers. Above 4m height, it is essential that at least two persons are used. Only climb the tower from the inside.
Always start building with the smallest height frames at the base of the tower:

850 towers:

Platform height in metres	Frame at base
1.7, 2.2, 3.7, 4.2, 5.7, 6.2, 7.7, 8.2, 9.7, 10.2, 11.7, 12.2	2 rung
2.7, 4.7, 6.7, 8.7, 10.7	3 rung
1.2, 3.2, 5.2, 7.2, 9.2, 11.2	4 rung

1450 towers:

Platform height in metres	Frame at base
1.7, 2.2, 3.7, 4.2, 5.7, 6.2, 7.7, 8.2, 9.7, 10.2, 11.7, 12.2	2 rung
2.7, 4.7, 6.7, 8.7, 10.7	3 rung
1.2, 3.2, 5.2, 7.2, 9.2, 11.2	4 rung

Where all three frame heights are used in a tower, start with 2 rung frames at the base, with the 3 rung frames next and the 4 rung frames on the top. Refer to the Quantity Schedules for detail. The procedure illustrated shows a 1450 tower starting with a 2 rung frame and a platform height of 4.2m. If building an 850 tower, the following method can be used with single decks at all levels.

During use

Beware of high winds in exposed, gusty or medium breeze conditions. We recommend that in wind speeds over 7.7 metres per second (17mph), cease working on the tower and do not attempt to move it. If the wind becomes a strong breeze, (expected to reach 11.3 metres per second - 25 mph) tie the tower to a rigid structure. If the wind is likely to reach gale force, (over 18 metres per second - 40 mph) the tower should be dismantled.

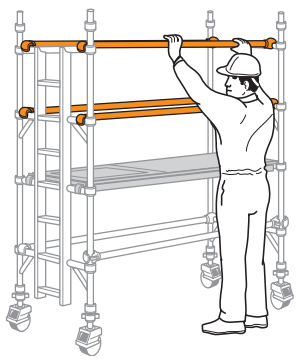
Wind description	Beaufort scale	Beaufort no.	Speed in mph	Speed in m/sec
Medium breeze	Raises dust and loose paper, twigs snap off	4	8 - 12	4 - 6
Strong breeze	Large branches in motion, telegraph wires whistle	6	25 - 31	11 - 14
Gale force	Walking is difficult	8	39 - 46	17 - 21

- Beware of open-ended buildings, which can cause a funnelling effect.
- 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.
- The assembled tower is a working platform and should not be used as a means of access or egress to other structures.
- Beware of horizontal forces (e.g. power tools) which could generate instability. Maximum horizontal force 30kg.
- The stairway towers, featuring an inclined staircase access, are for frequent use by personnel carrying tools and/or materials.
- Do not use boxes or stepladders or other objects on the platform to gain extra height.

ASSEMBLY PROCEDURE
Assembly for 850 towers

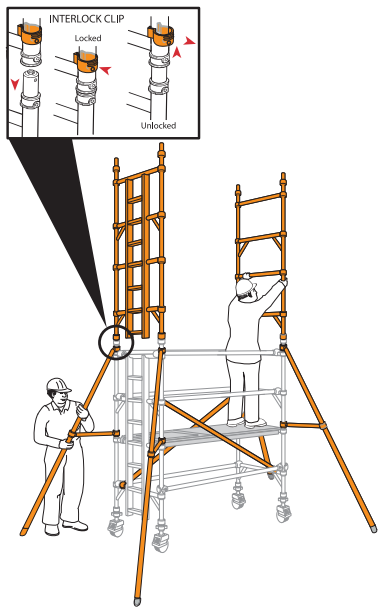
1 Insert adjustable leg/castor assemblies into end frames and lock the castors (see Step 1 of the 1450 assembly). Base plates can be fitted to the adjustable legs if it is not necessary to move the tower. Fit two horizontal braces to the 850 end frames as shown in Steps 2 and 3 for the 1450 tower procedure.

2 Fit a trapdoor deck on the 2nd rung. Fix the horizontal braces (red) as guardrails on the 3rd and 4th rungs (2 and 4 rungs above the platform) on both sides of the tower.

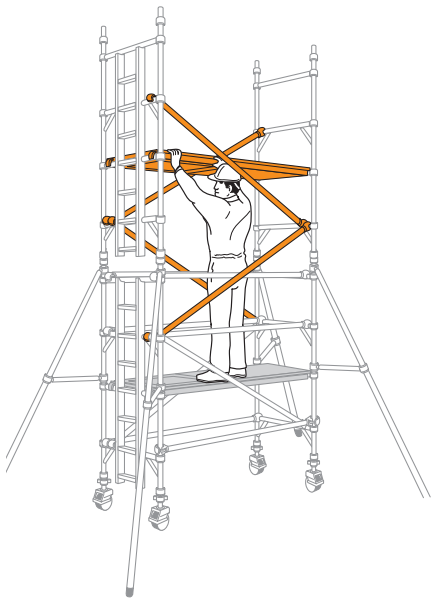


3 Fit two diagonal braces in opposing directions between the 1st and 3rd rungs. Ensure that the frames are vertical and level by checking with a spirit level and setting the adjustable legs as necessary. Fit stabilisers. Fit the next pair of end frames and check the frame interlock clips are engaged.

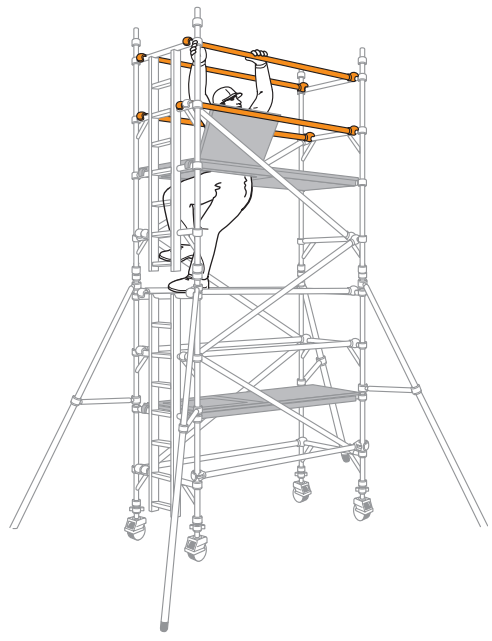
IMPORTANT. Only use the adjustment on the legs to level the tower and not to gain extra height.



4 Fit two pairs of diagonal braces in opposing directions between the 3rd and 5th rungs and the 5th and 7th rungs. Locate a trapdoor deck on the 6th rung, with the trapdoor next to the ladder.



5 Climb up the inside of the tower and from the protected position of the trapdoor, fit guardrails to the 7th and 8th rungs (in that order) on both sides of the tower.



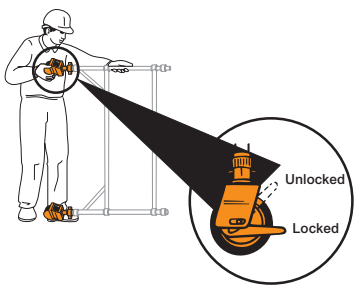
6 Continue the procedure until the required working height is reached, adding additional pairs of end frames, diagonal braces and fitting trapdoor platforms, as shown on previous steps. At every platform level, add horizontal braces as guardrails from the protected position within the trapdoor (as shown in Step 5).

Fit a single diagonal at the top of the tower as shown. Fit the toe boards - see the component section for guidance on how to fit.

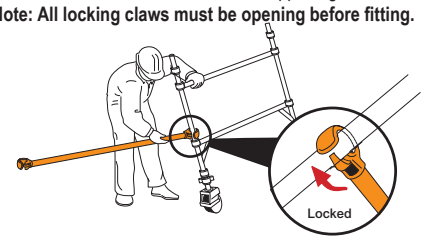
The tower is now complete.

ASSEMBLY PROCEDURE
Assembly for 1450 towers

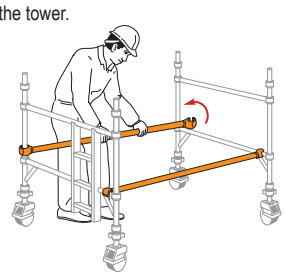
1 Push castor into adjustable leg. Push castor/adjustable leg assemblies into 2 rung span frame. Lock castors. Repeat procedure with 2 rung ladder frame. **Note: Base plates can be fitted to adjustable legs in lieu of castors if it is not necessary to move the tower.**



2 Fit one horizontal brace (red) onto the vertical of a span frame, just above the bottom rung, with the claw facing outwards. The frame will now be self supporting.
Note: All locking claws must be opening before fitting.

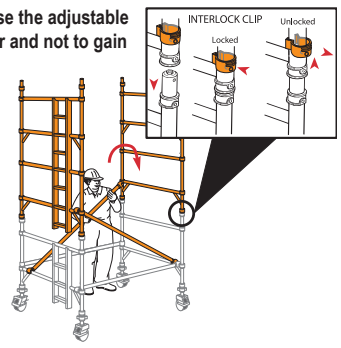


3 Position the ladder frame as shown and fit the other end of the horizontal brace on to the vertical. Fit a second horizontal brace on the other side of the frames to square the tower.



4 Fit two additional end frames, ensuring the frame interlock clips are engaged. Fit two diagonal braces (blue) in opposing directions, between the 1st and the 3rd rungs. Ensure the frames are vertical and level by checking with a spirit level and setting the adjustable legs as required.

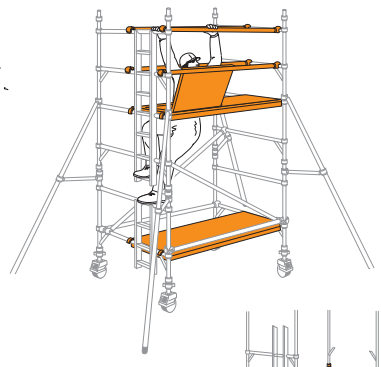
IMPORTANT - Only use the adjustable legs to level the tower and not to gain extra height.



5 Fit a temporary deck on the lowest rungs. Fit a trapdoor deck on the 4th rung (2.0m) with the trapdoor next to the ladder. Ensure the trapdoor is positioned with the hinges towards the outside of the tower as shown. Climb the ladder and, from the protected trapdoor position, fit guardrails on the 5th and 6th rungs (in that order) on both sides of the platform.

Do not climb onto the deck until all guardrails are in place.

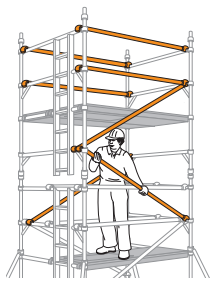
When horizontal braces are fitted as guardrails, they should be 0.5m and 1.0m (1 and 2 rungs) above the platform level in all cases. Remove the temporary deck from the lowest rung.



Fit stabilisers.

6 Fit the next pair of diagonal braces in opposing directions between the 3rd and 5th rungs.
Add two additional end frames.

7 Add two more diagonal braces between the 5th and 7th rungs. If finishing at this height (4.2m platform) reposition the fixed deck to the 8th rung on the tower. Fit a trapdoor deck alongside it, with the hinges towards the outside of the tower, and the trapdoor next to the ladder. Add a single diagonal between the 7th and 9th rungs as shown. Climb up the ladder, and from the protected trapdoor position, fit the guardrails on the 9th and 10th rungs, in that order, on both sides of the tower.



ASSEMBLY PROCEDURE
When building beyond a 4.2m platform height

8 Continue to add pairs of end frames, diagonal braces and fit trapdoor decks as shown in the previous steps. Add guardrails at 0.5m and 1.0m, (in that order), above the platform from the protected trapdoor position.
Do not climb onto the deck until all guardrails are in place.

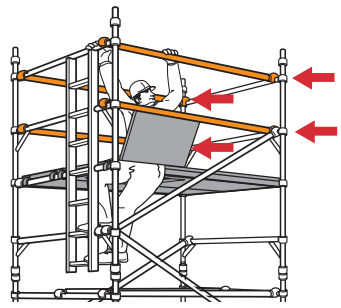
Continue until the required height is reached.
Re-position the fixed deck to the required platform height and fit a trapdoor deck alongside it as shown in Step 7. Fit a single diagonal at the top of the tower as shown in Step 7. Fit the final guardrails as shown in Step 7.

9 Fit the toe boards - see the components section for guidance on how to fit.

The tower is now complete.

DISMANTLING PROCEDURE

To take down the tower reverse the building sequence. When removing guardrail braces, unlock the four claws furthest from the trapdoor and then return immediately to the protected position within the trapdoor. You may then unlock the claws at the other ends of the guardrails to remove them from the tower.



For a detailed user guide, please go to bossaccesstowers.com/literature