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 225kg (500lbs), per platform level, uniformly distributed up to a maximum of 720kgs (1580lbs), 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.

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

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

Check environmental changes have not affected the tower, and the effective support of the stabilisers. Always fit as shown. Refer to this checklist before using each time.

Check frame interlock clips are locked. See illustration below:





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



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





ZONE:1

Mobile Fibreglass Tower 850/1450 Ladderspan

3T - Through The Trapdoor Method

QUICK GUIDE

PN03304300 ©2017 WernerCo Rev. 12/17

QUANTITY SCHEDULE 850 WIDTH TOWERS

BoSS Zone:1 850 to EN 1004: Available in 2 lengths - 1.8m and 2.5m. Internal/external use - towers under 2.5m are outside of the scope of EN 1004

	Inter	Internal or external use													Internal use only								
Component Working height (m)	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.
	١																						
Platform height (m)	1.2	1.7	2.2	2.7	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.
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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
350 2 Rung Ladder Frame		1	1			1	1			1	1			1	1			1	1			1	1
350 2 Rung Span Frame		1	1			1	1			1	1			1	1			1	1			1	1
350 3 Rung Ladder Frame		1		1		1		1		1		1		1		1		1		1		1	
350 3 Rung Span Frame		1		1		1		1		1		1		1		1		1		1		1	
350 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
350 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
I.8m/2.5m Trap 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
Small Stabiliser			4	4	4	4	4																
Large Stabiliser								4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Ballast Required (External) 1.8m	1																						
Ballast Required (External) 2.5m		1											25	50	75								
Total Tower Self-Weight (kgs) - 1.8n	1 80	92	113	138	151	163	168	195	208	220	226	250	263	275	280	304	317	329	335	359	372	384	38
Total Tower Self-Weight (kgs) - 2.5n		104	126	156	172	184	189	223	239	251	256	287	327	365	395	350	366	378	384	414	430	442	44
Max Tower Loa		720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	72
Max Safe Load (kgs) - 1.8n		628	607	582	569	557	552	525	512	500	494	470	457	445	440	416	403	391	385	361	348	336	33
Max Safe Load (kgs) - 2.5n	1 628	616	594	564	548	536	531	497	481	469	464	433	393	355	325	370	354	342	336	306	290	278	27

Stabilisers should always be fitted when specified

NOTE: Above 8.2m it is necessary to reposition platforms during the assembly and dismantling process to reduce the self-weight of the tower and optimise the maximum safe working load

QUANTITY SCHEDULE 1450 WIDTH TOWERS

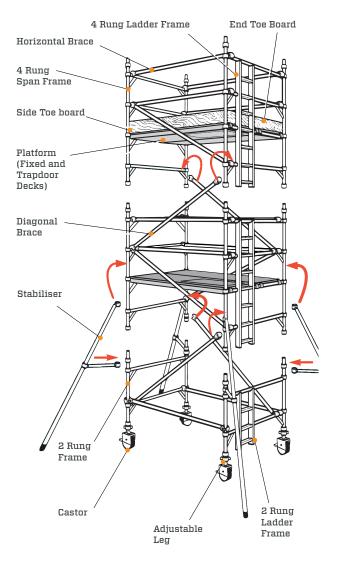
BoSS Zone:1 1450 to EN 1004: Available in 2 lengths - 1.8m and 2.5m. Internal/external use - towers under 2.5m are outside of the scope of EN 1004

		Intern	Internal or external use														Internal use only							
Component	Working height (m)	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2
Platfor (m)	Platform height (m)	1.2	1.7	2.2	2.7	3.2	3.7	4.2	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.
125/150/200mn	n 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		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 La	adder Frame		1	1			1	1			1	1			1	1			1	1			1	1
1450 2 Rung Sr	pan Frame		1	1			1	1			1	1			1	1			1	1			1	1
1450 3 Rung La	adder Frame		1		1		1		1		1		1		1		1		1		1		1	
1450 3 Rung Sp	pan Frame		1		1		1		1		1		1		1		1		1		1		1	
1450 4 Rung La	adder 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 Sp	pan 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 Fixe	d Deck	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	3	3	3	3	4	4	4	4
1.8m /2.5m Traj	p Deck	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	3	3	3	3	3	4	4	4
1.8m/2.5m Hori	zontal 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 Diag	gonal 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 E	Board	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Small Stabiliser	•				4	4	4	4	4	4	4													
Large Stabiliser	r											4	4	4	4	4	4	4	4	4	4	4	4	4
	elf-Weight (kgs) - 1.8m		128	133	177	211	228	235	260	294	311	321	346	380	397	404	376	391	408	415	440	474	491	49
Total Tower S	elf-Weight (kgs) - 2.5m	130	146	152	201	244	261	269	300	342	359	370	401	444	460	468	428	446	463	471	501	544	561	56
	Max Tower Load	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	72
Max	Safe Load (kgs) - 1.8m	610	593	588	545	510	494	486	462	427	411	400	375	341	324	317	345	330	313	306	281	247	230	22
Max	Safe Load (kgs) - 2.5m	592	575	570	520	477	460	453	422	379	362	351	320	278	261	253	293	275	259	251	220	177	160	15

Stabilisers should always be fitted when specified

NOTE: Above 8.2m it is necessary to reposition platforms during the assembly and dismantling process to reduce the self-weight of the tower and optimise the maximum safe working load

COMPONENTS



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

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

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 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.
- 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

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 (red) to the 850 end frames as shown in Steps 2 and 3 for the 1450 tower procedure.

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.



Fit two diagonal braces (blue) 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.



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.



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.



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.

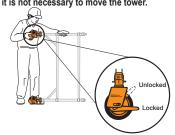
The tower is now complete.



ASSEMBLY PROCEDURE Assembly for 1450 towers

Push castor into adjustable leg. Push castor/adjustable leg assemblies into 2 rung span frame. Lock castors. Repeat procedure with 2 rung ladder frame.

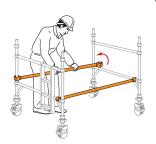
Note: Base plates can be fitted to adjustable legs in lieu of castors if it is not necessary to move the tower.



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. **NB: All locking claws must be opening before fitting.**



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.



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.

Fit a temporary deck on the lowest

Fit stabilisers.

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

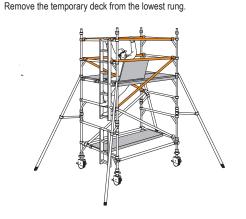
The tower is now complete



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.



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



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

When building beyond a 4.2m platform height

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.

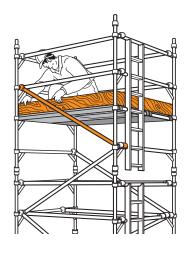
Do not climb onto the deck until all guardrails are in place.



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.

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



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 quardrails to remove them from the tower.