SAFETY FIRST

This document is to be used in conjunction with the full user guide available from the manufacturer or to download at minimaxtowers.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 maximum safe platform load on each platform is 220kgs. The maximum safe tower load (the combined weight of the users, tools and materials) for the complete tower is the maximum tower load (500kg) less the self-weight of the tower.
- 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.

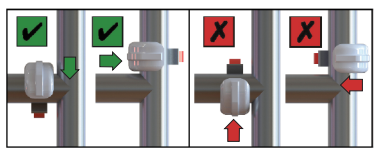
Maintenance - storage - transport

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

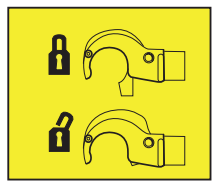
Refer to this checklist before using each time.

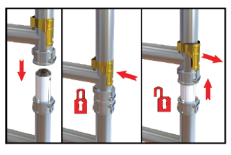
Description	Yes
Tower structure upright and level	
Castors locked and legs correctly adjusted	
Horizontal and diagonal braces fitted	
Stabilisers and props fitted as specified	
Platforms located and wind-locks engaged	
Interlock clips engaged	
Toe boards located	
Guardrails fitted correctly and positively locked	
Tower designation information kit fitted	



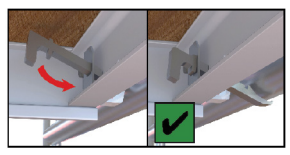
Ensure horizontal braces and guardrails are fitted correctly.

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.

MINIMAX®

MiniMax®

Mobile Aluminium Trade Quality Access Tower System

3T - Through The Trapdoor Method

QUICK GUIDE

PN3304700
©2017 WernerCo Rev. 09/17

QUANTITY SCHEDULE 1.83m PLATFORM LENGTH

Minimax tower to EN1004:

			Internal or external use				
		Composite code	38060600	38060900	38061700	38063700	38065800
		Working height (m)	2.6m	2.9m	3.7m	5.7m	7.8m
		Platform height (m)	0.6m	0.9m	1.7m	3.7m	5.8m
Product Code	Description	Weight	Pack Quantities				
37051800	Base Pack	34kg	1	1	1	1	1
37251900	1 Rung Guardrail Pack	8kg		1			
37251800	2 Rung Guardrail Pack	16kg			1	1	1
34151800	2m Extension Pack	47kg				1	2
31751300	SP7 Stabiliser (Small)	3.8kg ea			4[a]	4	
31851300	SP10 Stabiliser (Medium)	9kg ea					4
37951800	Adjustable Leg Pack[b]	5kg	1	1	1	1	1
39451800	Toe Board Pack	5kg	1[c]	1[c]	1	1	1

		Internal or external use				
	Composite code	38060600	38060900	38061700	38063700	38065800
	Working height (m)	2.6m	2.9m	3.7m	5.7m	7.8m
	Platform height (m)	0.6m	0.9m	1.7m	3.7m	5.8m
Product Code	Description	Component Quantities				
00060000	Folding Base Frame	1	1	1	1	1
37751800	Trapdoor Platform	1	1	1	2	3
00061600	8 Rung Frames				2	4
00061000	Diagonal Braces			1	4	7
00062100	Horizontal Braces		3	5	9	13
57691700	Minimax Side Toe Board	2[c]	2[c]	2	2	2
00062200	Minimax End Toe Board	2[c]	2[c]	2	2	2
39951800	1 Rung Guardrail Frames		2			
00061800	2 Rung Guardrail Frames			2	2	2
31751300	SP7 Stabiliser (Small)			4[a]	4	
31851300	SP10 Stabiliser (Medium)					4
37951800	Adjustable Legs[b]	4	4	4	4	4

a Only required for external use.
b Adjustable legs only required if ground is uneven or sloping.
c Toe boards required if risk assessment shows necessary.

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.

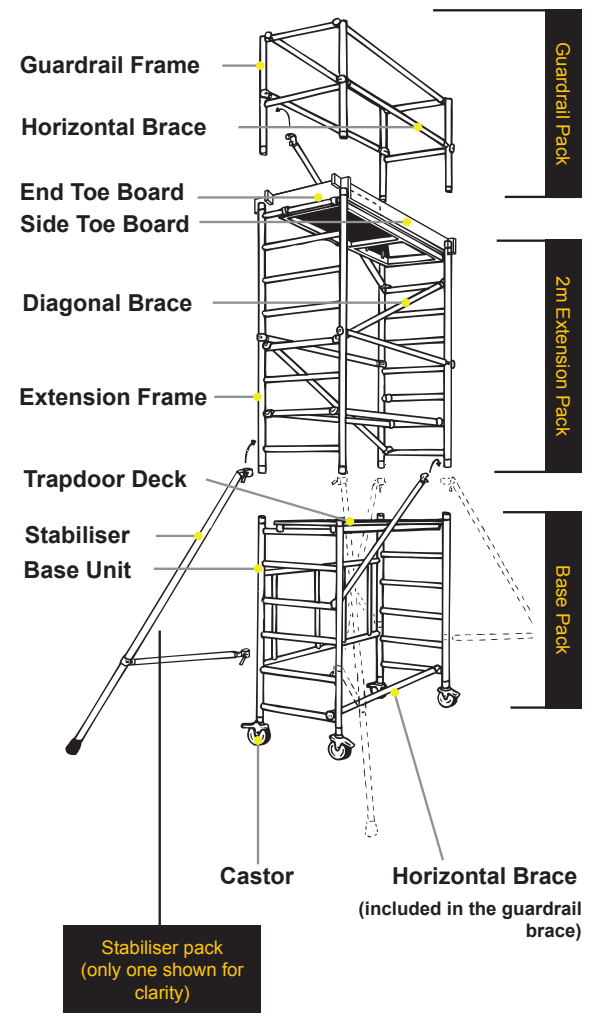
Wind description	Beaufort scale	Beaufort no.	Speed in mph	Speed in m/sec
Medium breeze	Raises dust and loose paper, twigs snap off	4	8 - 12	4 - 6
Strong breeze	Large branches in motion, telegraph wires whistle	6	25 - 31	11 - 14
Gale force	Walking is difficult	8	39 - 46	17 - 21

- 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.
- Do not use boxes or stepladders or other objects on the platform to gain extra height.

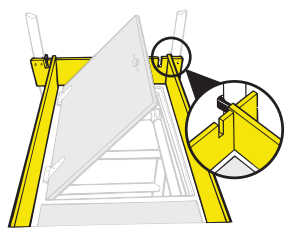
Assembly principles

The manufacturer recommends that two persons are used to build this tower.
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.

COMPONENTS



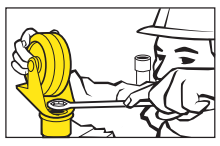
TOE BOARD FITTING



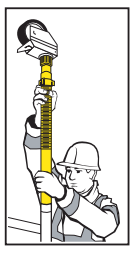
ASSEMBLY PROCEDURE

Fitting adjustable legs

If the ground is uneven or sloping you will need to fit adjustable legs. Turn the base unit upside down so that the wheels are facing upwards. Using a 19mm spanner loosen the fixing bolt and remove the castor from the base.



Follow the instructions in the adjustable leg pack to change the large castor spigot to the smaller one supplied in the pack. Insert the new castor into an adjustable leg and then retighten the fixing bolt with the spanner. Repeat this process for the other castors and adjustable legs. Insert the four leg and castor assemblies into the base unit.



Turn the base the correct way up with the wheels on the ground. Use a spirit level to check the base unit is level and adjust if necessary.

Important: Only use the adjustable legs to level the base and not to gain extra height.

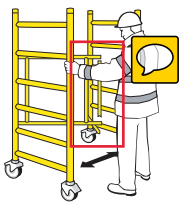
Stage 1

Composite code 38060600

Maximum platform height 0.6m

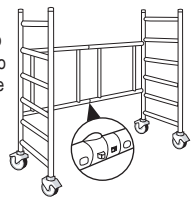
Maximum working height 2.6m

Setting up the base unit



1 Move the base unit into the required position and unfold the end frames.

Push the central folding frame outwards until the two middle hinged joints lock into the open position. Check the trigger on both hinge joints has moved outwards to the locked position.

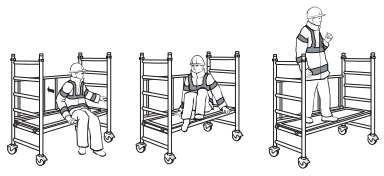


Lock the brakes on all four castors wheels. Ensure the castors are facing outwards from the base unit.

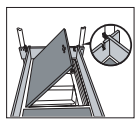
Use a spirit level to check the base is level. If the ground is uneven or sloping you will need to fit adjustable legs.

2 Position the platform at the required height on the rungs of the base unit end frames. Do not position the platform above the 2nd rung. Engage the wind-locks, underneath the rungs, at both ends of the platform.

Climb onto the platform in the sequence shown.



Important: Never climb up the outside of the base unit.



If your risk assessment shows it is necessary, fit toe boards to the platform checking that there are no gaps.

Stage 2

Composite code 38060900

Maximum platform height 0.9m

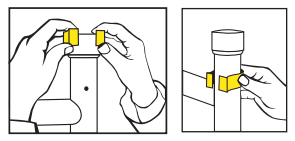
Maximum working height 2.9m

If a risk assessment shows that it is necessary to guardrail the platform at heights up to 0.9M, you will require a 1 Rung Guardrail Pack.

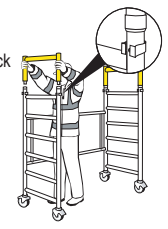
Follow Stage 1 - step 1 - setting up the base unit

If the ground is uneven or sloping you will need to fit adjustable legs.

2 Fit the four spring interlock clips supplied with the guardrail pack. Expand the clips over the top of the base unit uprights and then slide down to engage the pin on the clip into hole in the upright.



Fit a 1 rung guardrail frame at each end of the base unit. Ensure the four frame interlock clips are engaged.



3 Fit a horizontal brace to the top rungs of the guardrail frame, on the folding side of the tower.

Important: Always ensure braces are fully locked in position.

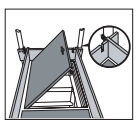
4 Position the platform at the required height on the rungs of the base unit.

Engage the wind-locks, underneath the rungs, at both ends of the platform.

Do not position the platform above the 3rd rung.

Climb onto the platform in the sequence shown below. From the seated position, fit horizontal braces as guardrails on the 5th and 7th rungs, on the open side of the base unit. Do not stand on the platform until the guardrails are in place.

Important:
Never over reach - get down and reposition the base unit platform.



If your risk assessment shows it is necessary, fit toe boards to the platform checking that there are no gaps.

Stage 3

Composite code 38061700

Maximum platform height 1.7m

Maximum working height 3.7m

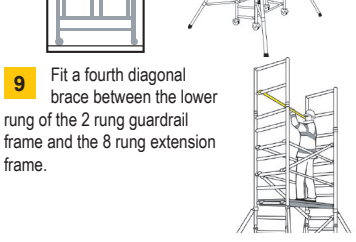
Follow Stage 1 - step 1 - setting up the base unit

If the ground is uneven or sloping you will need to fit adjustable legs.

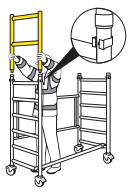
2 Fit a horizontal brace between the bottom rungs on the front face of the base unit.

Important: Always ensure braces are fully locked in position.

3 Fit the four spring interlock clips supplied with the guardrail pack. Expand the clips over the top of the base unit uprights and then slide down to engage the pin on the clip into hole in the upright.

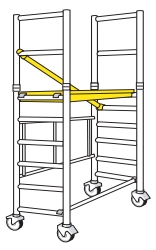


Fit a 2 rung guardrail frame at each end of the base unit. Ensure the four frame interlock clips are engaged.

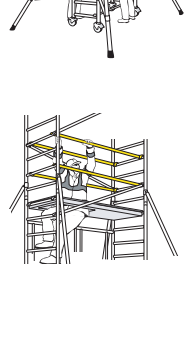


4 Fit a diagonal brace between the 5th rung of the base unit and the lower rung of a guardrail frame.

Fit a trapdoor platform on the 6th rungs of the base unit. Engage the wind-locks, underneath the rungs, at both ends of the platform.



5 If the tower is being used externally, attach one SP7 stabiliser (small) to each corner of the tower. Loosen the clamps and position around the uprights of the tower. Tighten the clamps hand tight.



6 Climb the tower on the inside and from a protected position within the trapdoor, fit four horizontal braces as guardrails on the upper and lower rungs of the guardrail frames, on both sides of the platform.

When horizontal braces are fitted as guardrails they should always be 0.5m and 1.0m above the platform surface.

NEVER stand on a platform until the guardrail braces are in place.

If your risk assessment shows it is necessary, fit toe boards to the platform checking that there are no gaps and that the trapdoor opens and closes correctly. The tower structure is now complete at 1.7m platform height.

Stage 4

Composite code 38063700

Maximum platform height 3.7m

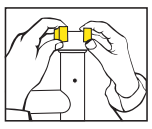
Maximum working height 5.7m

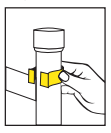
Follow Stage 1 - step 1 - setting up the base unit

2 Fit a horizontal brace between the bottom rungs on the front face of the base unit.

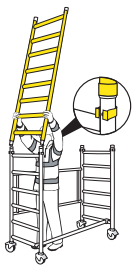
Important: Always ensure braces are fully locked in position.

3 Fit the four spring interlock clips supplied with the extension pack. Expand the clips over the top of the base unit uprights and then slide down to engage the pin on the clip into hole in the upright.





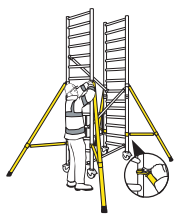
Fit an 8 rung extension frame at each end of the base unit. Ensure the four frame interlock clips are engaged.



4 Fit a diagonal brace between the 4th and 7th rungs of the tower.

Important: Fit another in the opposite direction between the 7th and 10th rungs, on the other side of the tower.

5 Attach a SP7 stabiliser (small) to each corner of the tower. Loosen the clamps and position around the uprights of the tower. Tighten the clamps hand tight.

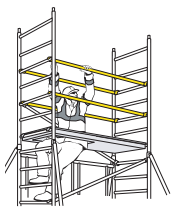


6 Position a trapdoor platform on the 8th rungs of the tower. Engage the wind-locks, underneath the rungs, at both ends of the platform.

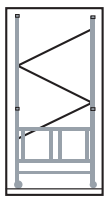
7 Climb the tower on the inside and from a protected position within the trapdoor, fit four horizontal braces as guardrails, two and four rungs above the platform, on both sides of the tower.

When horizontal braces are fitted as guardrails they should always be 0.5m and 1.0m above the platform surface.

Never stand on a platform until the guardrail braces are in place.



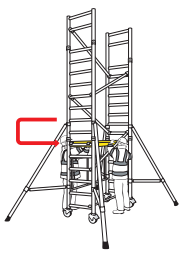
8 Fit a third diagonal brace. The diagonal bracing should follow a zig-zag pattern on alternate sides of the tower. Fit the four spring interlock clips supplied with the guardrail pack. Fit a 2 rung guardrail frame at each end of the base unit. Ensure the four frame interlock clips are engaged.



9 Fit a fourth diagonal brace between the lower rung of the 2 rung guardrail frame and the 8 rung extension frame.

10 The platform must now be repositioned onto the 6th rung of the tower as follows: Unlatch the four guardrail brace hooks furthest from the trapdoor but leave the braces in position. From the protected position trapdoor position, unlatch the four remaining brace hooks and remove the four guardrail braces.

Descend the tower. The platform should now be repositioned in the tower by moving it from 8th rungs to the 6th rungs (the top rungs of the base frame).

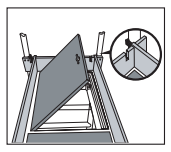


11 Engage the wind-locks underneath the rungs, at both ends of the platform. Climb the tower and from the protected trapdoor position refit the four guardrail braces, two and four rungs above the platform, on both sides of the tower.

12 Position a trapdoor platform on the 14th rungs of the tower the top rungs of the 8 rung extension frames. Engage the wind-locks, underneath the rungs, at both ends of the platform.

13 Climb the tower on the inside and from a protected position within the trapdoor, fit four horizontal braces as guardrails on the upper and lower rungs of the guardrail frames, on both sides of the platform.

Fit the toe boards checking there are no gaps and that the trapdoor opens and closes correctly.



The tower is now complete at a platform height of 3.7m.

Stage 5

Composite code 38065800

Maximum platform height 5.8m

Maximum working height 7.8m

Follow Stage 1 - step 1 - setting up the base unit

If the ground is uneven or sloping you will fit adjustable legs.

Follow Stage 4 - steps 2, 3, 4, 5, 6 and 7

8 Fit a third diagonal brace. The diagonal bracing should follow a zigzag pattern on alternate sides of the tower.

Fit the four spring interlock clips supplied with 2nd extension pack to the uprights of the 8 rung extension frames.

Expand the clips over the top of the base unit uprights and then slide down to engage the pin on the clip into hole in the upright.

Fit an 8 rung extension frame at each end of the base unit.

Ensure the four frame interlock clips are engaged.

9 Fit a fourth diagonal continuing the zig-zag pattern on alternate sides of the tower.

Position another trapdoor platform on the 16th rungs of the tower (the 2nd rungs of the upper extension frame). Engage the wind-locks, underneath the rungs, at both ends of the platform.

10 Climb the tower and from the protected trapdoor position fit a fifth diagonal brace following the zigzag pattern on alternate sides of the tower but positioning the brace 1 rung above the platform as shown.

11 Fit four horizontal braces as guardrails, two and four rungs above the platform, on both sides of the tower.

Fit the four spring interlock clips supplied with the guardrail pack. Expand the clips over the top of the 8 rung extension frame uprights and then slide down to engage the pin on the clip into hole in the upright. Fit a 2 rung guardrail frame at each end of the tower. Ensure the four frame interlock clips are engaged.

12 Fit a sixth diagonal brace continuing the zig-zag pattern on alternate sides of the tower but position the lower hook two rungs above the platform as shown.

Fit a seventh diagonal brace on the opposite side of the tower between the lower rung of the two rung guardrail frame and the 8 rung extension frame as shown.

13 Both platforms must now be repositioned in the tower as follows: On the upper platform, unlatch the four guardrail brace hooks furthest from the trapdoor but leave the braces in position. From the protected position trapdoor position, unlatch the four remaining brace hooks and remove the four guardrail braces. Descend the tower to the platform below. Remove the upper platform from the tower.

14 Repeat the previous steps to remove the four guardrail braces from the remaining platform and then descend from the tower. The remaining platform should now be repositioned in the tower by moving it from 8th rungs to the 6th rungs (the top rungs of the base frame).

Engage the wind-locks, underneath the rungs, at both ends of the platform.

15 Climb the tower on the inside and from a protected position within the trapdoor, fit four horizontal braces as guardrails, two and four rungs above the platform, on both sides of the tower.

16 Reposition a trapdoor platform on the 14th rungs of the tower (the top rungs of the lower 8 rung extension frame.)

17 Climb the tower and from the protected trapdoor position refit the four guardrail braces, two and four rungs above the platform, on both sides of the tower.

18 Position a trapdoor platform on the 22nd rungs of the tower (the top rungs of the upper 8 rung extension frame). Engage the wind-locks, underneath the rungs, at both ends of the platform.

19 Climb the tower and from the protected trapdoor position fit four guardrail braces, 2 and 4 rungs above the platform, on both sides of the tower.

The tower is now complete at a platform height of 5.8m.

DISMANTLING PROCEDURE

Dismantling the tower is the reverse procedure to assembly. ALWAYS reposition platforms and guardrails as shown. When removing or repositioning guardrail braces always proceed as follows: Unlatch the four guardrail brace hooks furthest from the trapdoor but leave the braces in position. From the protected position trapdoor position, unlatch the four remaining brace hooks and remove the four guardrail braces and then descend.

Never stand on a platform without guardrail braces.

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