Span 300

ACCESS TOWER SYSTEM

Assembly Guide

INSTANT

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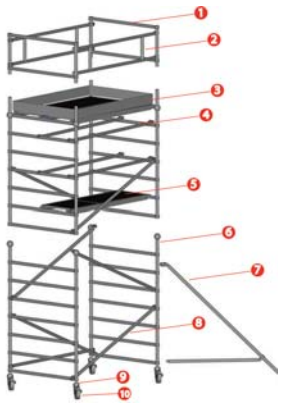
Span 300

Assembly Guide

This Assembly guide is designed to provide you with step by step instructions to ensure your access tower system is erected easily and safely using the 3T (Through the Trap) Safety Standard. Before assembly please read the safety notes carefully.

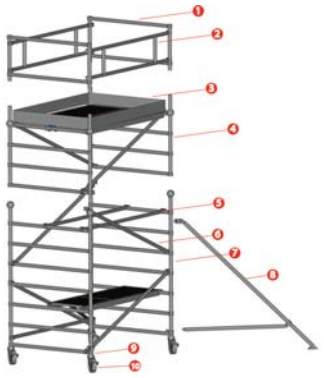
Span 300 is a mobile access tower system complying with EN 1004 and WAHR, anti slip frame access, designed for Class 3 loading.

ASSEMBLY COMPONENTS



4m Platform Height Tower Assembly

1. Guardrail Frame
2. Bracing Frame
3. Toeboard Set
4. Horizontal Brace
5. Trapdoor Platform
6. 7 Rung Frame
7. Stabiliser
8. Diagonal Brace
9. Adjustable Legs
10. Castors



3m Platform Height Tower Assembly

1. Guardrail Frame
2. Bracing Frame
3. Toeboard Set
4. 4 Rung Frame
5. Horizontal Brace
6. Diagonal Brace
7. 7 Rung Frame
8. Stabilisers
9. Adjustable Legs
10. Castors

ASSEMBLY PROCESS

1. Preparation

Locate the tower level adjusters on each leg at 10cm (4ins) from the bottom of the leg.

Unlocked

Unlock the interlock clips on all frames. When installed, always move the interlock clip to the "locked" position.

Locked

Sort the braces into horizontal and diagonal braces - the diagonals are slightly longer. Unlock the brace locks.

Unlocked

Locked

2. Base

Push the four leg assemblies into a pair of 7-rung (2m) frames, with 10cm (4ins) of threaded leg showing.

Follow the erection procedures as shown (Section 4). It is important to follow the bracing pattern precisely. The tower shown in the build procedure is a double width tower. For Single Width Towers, see notes section.

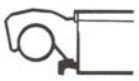
Unlocked

Locked

Note the locking and unlocking position for the castors as shown here.

3. Locking down the platform

A windlock clip is installed on the platform at the hook. This is locked as shown here.



Unlocked

Locked

Safe Working Loads and Working Heights (WAHR)

The safe working load at each level of platform is 360Kg evenly distributed, regardless of whether one or two platforms are installed. Therefore, even if two platforms are installed side by side, total cumulative load shall not exceed 360Kg distributed.

The total loading on the tower structure should not exceed 720kg. Normal maximum platform height for indoor use is 12m for Double Width, and 8m for Single Width. For outdoor use, the maximum height is 8m for Single and Double Widths.

3T Safety Standard - THROUGH THE TRAP

This is an approved method of tower construction which, if carried out by a competent person, complies with all current safety legislation.

Construction - basic principles

- Always install the trapdoor platform over the ladder (if one is fitted).
- Ensure the trapdoor hinges to the OUTSIDE of the tower (not the centre).
- Once the platform has been installed, climb, using the approved method and SIT IN THE TRAPDOOR OPENING.
- While seated, attach horizontal braces to the frames to form guardrails on BOTH SIDES OF THE PLATFORM.
- See assembly instructions for specific placement of guardrails.
- 2 braces are normally required each side - although bracing frames can be used on the outside if desired or specified in the instructions.
- Only when the platform is fully guarded is it safe to stand up.

Dismantling

- Unlock the brace ends furthest away from the trapdoor.
- DO NOT REMOVE BRACES UNTIL SITTING IN THE TRAPDOOR.

REMEMBER - NEVER STAND ON AN UNGUARDED PLATFORM

4. BUILD PROCESS

1

Insert castors and adjustable legs into the 7 rung frames. Clip horizontal brace onto the vertical member just above the 1st rung, with claw facing outwards.

2

Attach diagonal braces in opposing directions from the 1st to the 4th rung. Attach platform to the 3rd rung (ensure trapdoor opens outwards). Check the base with a spirit level in both vertical and horizontal directions and adjust the legs if necessary.

3

Fit guardrails (horizontal braces) to the 6th rung either side of the platform. Insert 2 standard frames to the lower frames, and insert locking pins.

4

Continue diagonal bracing in a zig-zag pattern by attaching 2 diagonal braces on each side (5th to 8th and from the 8th to the 11th rungs).
Fit stabilisers to the base unit - see separate section on stabilisers below.

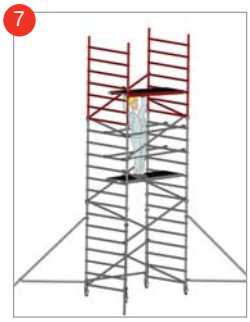
5

Fit trapdoor platform to the 10th rung of the tower.

6

Using the 3T method, clip 4 horizontal braces on the 12th and 14th rungs on both sides of the platform

7



Fit additional standard frames and lock. Clip 4 diagonal braces from rung 12 to 18 in a zig zag pattern (opposing direction). Also move the trapdoor platform from the 3rd rung to the 17th rung.

8

Using the 3T method. Clip 4 horizontal braces to the 19th and 21st rungs on both sides of the platform.

9

Fit two guardrail frames and lock. Fit two bracing frames and one plain platform on the opposite side. Then remove the horizontal brace from inside the platform and place on the lower rung.

10

Fit 1 trapdoor platform on the 21st rung to form the working platform and fit toeboards to complete the build. For towers of different heights see separate section below.

DISMANTLING / MOVING TOWERS

To Dismantle, follow the build process but in reverse order noting the following.

- To remove the guardrail frames or braces, first unlock the hook at the end away from the trapdoor.
- Sitting through the trapdoor, unlock the near end hook and remove the brace.

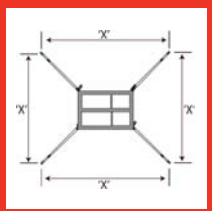
To Move the tower to a new position, first prepare the tower.

- Wind speed should not exceed 29 km/hr (force 4).
- Release the caster brakes.
- Raise the stabiliser feet only enough to clear obstructions.
- Ensure tower is empty (material and personnel).

Move the tower manually by applying force at the base - do not use machinery to push or pull the tower. Once moved - prepare the tower for use.

- Check all casters and stabilisers are in firm contact with the ground.
- Check tower is vertical (spirit level) and adjust legs as required.
- Reapply the caster brakes.

STABILISERS



Lightly tighten the upper clamps above the sixth rung on each corner post. Position the lower clamp above the bottom rung. Ensure the lower arm is as horizontal as possible. Position the stabilisers so that the footpads are approximately equidistant from each other, as seen here. Telescopically adjust the leg and reposition the clamps as required to make firm contact with the ground. Ensure the clips with locking pin are in place. When in the correct position, tighten the clamps firmly.

To position the tower against a wall, do not remove the stabiliser, move parallel with the wall.

To position the tower in a corner, remove the inside stabiliser and place the outside two parallel with the wall.

Ballast weight maybe used to stabilise the tower, please contact your supplier for the correct amount of ballast weight required.

TOWER COMPONENTS REQUIRED

The following tables show a full list of components to build the tower to the platform height specified, complying with the requirements of EN 1004 and Work at Heights Regulations (WAHR). Braces, platforms, guardrail, bracing frames and toeboards are length specific; 2m, 2.5m or 3m. Three unit weights in ascending order are given for these items, for 2m, 2.5m and 3m respectively. Other components are common to towers of all lengths, and their unit weights are also given. Total self-weight of towers are indicated, according to length and height.

ALTERNATIVE CONFIGURATIONS

Single Width Tower

The build process for the Single Width Tower is the same as double width, with the exception of - 2 diagonal braces are used per extension set, rather than 4. See attached figure for bracing details.

Single Width

Towers Above 4m

To build towers with platform heights greater than 4m, build as shown up to step 8. Repeat steps 7 and 8 until desired height is reached. Finish building the tower by completing steps 9 and 10.

Towers with "uneven" platform heights (3m, 5m, 7m etc)

Build as shown up to step 6 (3m platform) or step 8 (5m). Install 1m frames and guardrails using the 3T method described in step 6. Install platforms at working level and guard using guardrail frames and braces. See section 1 for exploded view of the assembly.

5m Platform

Span300 double width towers 2m, 2.5m and 3m length to BS 1139 incorporating EN 1004 and WAHR												
Platform Height in Metres		2.1	3.2	4.1	5.2	6.0	7.1	7.9	9.0	9.8	10.9	11.8
Platform Height in Feet		6'11"	10'7"	13'3"	16'11"	19'7"	23'4"	25'11"	29'7"	32'4"	35'11"	38'7"
Number of Rungs to Platform		7	11	14	18	21	25	28	32	35	39	42
Tower Weight in Kg (2m length)		91	149	156	195	205	241	260	296	305	350	359
Tower Weight in Kg (2.5m length)		106	170	182	227	238	281	302	344	256	397	411
Tower Weight in Kg (3m length)		117	185	198	247	260	306	328	375	387	432	447
NB: Quoted platform heights have 6" extension on adjustable legs for levelling that could be increased or reduced												
Description	**Weight (kg)**											
6" Castor	2.2	4	4	4	4	4	4	4	4	4	4	4
Adjustable Legs	1.1	4	4	4	4	4	4	4	4	4	4	4
Diagonal Brace	1.8/2.2/2.5	3	5	6	9	10	12	14	16	17	18	20
Horizonal Brace	1.7/2.0/2.4	1	3	5	7	9	11	13	15	17	19	21
Trapdoor Platform	14.1/17.5/20.0	1	2	2	3	3	4	4	5	5	6	6
Standard Platform	13.8/17.2/19.7	1	1	1	1	1	1	1	1	1	1	1
Toeboard Set	8.7/11.5/14.4	1	1	1	1	1	1	1	1	1	1	1
Guardrail Frame	3.6	2	2	2	2	2	2	2	2	2	2	2
Bracing Frame	3.8/4.4/5.2	2	2	2	2	2	2	2	2	2	2	2
7-rung Frame	11.2	2	2	4	4	6	6	8	8	10	10	12
4-rung Frame	8.5		2		2		2		2		2	
Stabiliser (50430)	5.2		4	4	4	4	4	4				
Large stabiliser (9090)	6.8								4	4	4	4

Span300 single width towers 2m, 2.5m and 3m length to BS 1139 incorporating EN 1004 and WAHR								
Platform Height in Metres		2.1	3.2	4.1	5.2	6.0	7.1	7.9
Platform Height in Feet		6'11"	10'7"	13'3"	16'11"	19'7"	23'4"	25'11"
Number of Rungs to Platform		7	11	14	18	21	25	28
Tower Weight in Kg (2m length)		69	123	122	162	156	201	195
Tower Weight in Kg (2.5m length)		77	135	144	182	193	235	247
Tower Weight in Kg (3m length)		83	145	155	197	210	255	268
NB: Quoted platform heights have 6" extension on adjustable legs for levelling that could be increased or reduced								
Description	**Weight (kg)**							
6" Castor	2.2	4	4	4	4	4	4	4
Adjustable Legs	1.1	4	4	4	4	4	4	4
Diagonal Brace	1.8/2.2/2.5	2	4	4	6	7	8	9
Horizonal Brace	1.7/2.0/2.4	1	3	5	7	9	11	13
Trapdoor Platform	14.1/17.5/20.0	1	2	2	3	3	4	4
Toeboard Set	6.8/8.4/9.8	1	1	1	1	1	1	1
Guardrail Frame	2.6	2	2	2	2	2	2	2
Bracing Frame	3.8/4.4/5.2	2	2	2	2	2	2	2
7-rung Frame	8.5	2	2	4	4	6	6	8
4-rung Frame	5.7		2		2		2	
Stabiliser (50430)	5.2		4	4	4	4		
Large Stabiliser (9090)	6.8						4	4

USAGE ADVICE

- We recommend a minimum of two people to assemble, dismantle and move the platform tower.
- Check that all components are on site and in good working order.
- Ensure that assembly location is checked to prevent hazards during assembly, dismantling or moving and while working on the tower. Particular attention should be given to the ground condition, whether level or sloping, obstructions and wind conditions. The ground condition should be capable of supporting the tower structure.
- Towers must always be climbed from the inside of the assembly and using the built-in ladder if provided.
- Adjustable legs should only be used to level the tower.
- Lifting operation should be done inside the effective base area of the tower.
- Moving the tower should only be done by manual effect from the base of the tower. When moving tower be aware of overhead hazards (eg. electric cables).
- No personnel or material should be on the platform whilst the tower is being moved.
- Beware of horizontal loads which can lead to instability of the tower. The maximum side force is 20kg.
- When tying in the tower, attach a tie to each upright at 4m height intervals. Ensure that couplers are suitable for 50mm diameter aluminum tube.
- Do not use boxes or steps to gain additional height. If extra height required, contact your distributor to get extra components.
- Do not lift or suspend assembled mobile tower.
- Components are normally hoisted using a rope. Always lift within the tower structure or within the base rectangle defined by the stabilisers.
- Damaged components, or components from other tower systems should never be used.
- Stabilisers should always be fitted when specified. Use the type of stabiliser shown on the component list according to the tower height.
- When wind exceeds Beaufort force 4, cease using the tower. Wind speeds:

Force	Peak Mph	Peak Kph	Guidance
4	18	29	Moderate breeze - raises dust & loose paper
6	31	50	Strong breeze - difficult to use umbrella
8	46	74	Gale force - walking is difficult

CARE AND MAINTENANCE OF THE TOWER AND COMPONENTS

- Keep all equipment clean, especially spigots and sockets where frames join. Spigots should fit easily into stocks. Lubricate with light oil.
- Remove dirt or paint from adjustable legs with a light brush, Lightly oil the leg locks.
- Do not strike or hammer components. Do not throw or drop onto hard surfaces.
- Lightly oil spring mechanism of the hooks.
- For transport and storage, components are best stored vertically.
- Damaged parts should be repaired or replaced, contact your supplier.

Manual is in accordance with EN1298

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