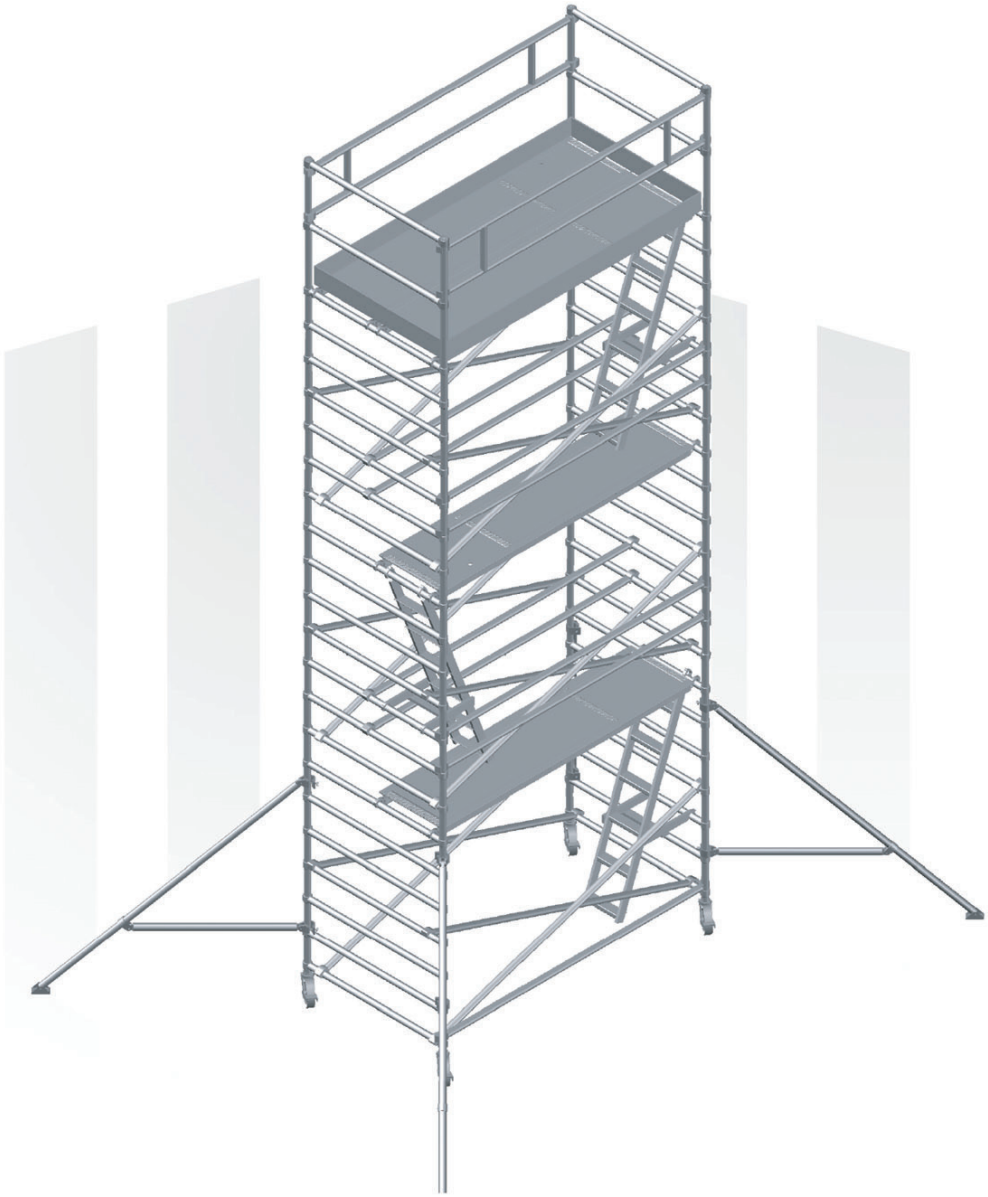


Instant Span 300 alloy tower scaffold system

Instructions for assembly and use

RAMIRENT

Equipment rental at your service

Instant Span 300 assembly manual

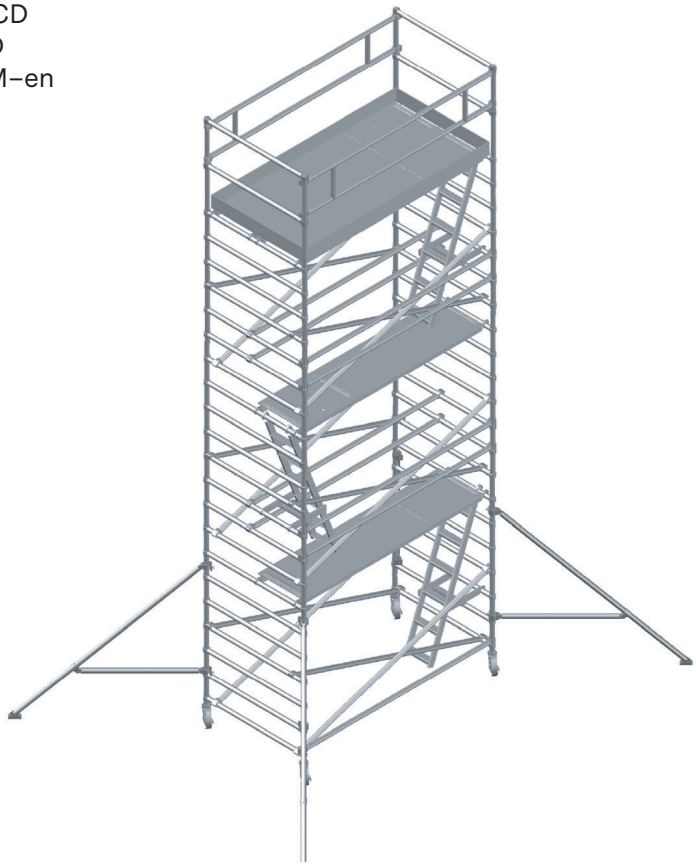
This step-by-step assembly manual is intended to ensure the easy and safe assembly of the tower. Read the safety instructions carefully before starting assembly.

Span 300 is a castor-equipped, mobile tower scaffold system which complies with the EN 1004 Directive. Inclined ladders are used to climb the tower scaffold system.

The tower scaffold system also meets the requirements laid out in the Government Decree on the Safety of Construction Work 205/2009.

Name

SPAN 300 DW: Double-width tower EN 1004–3–8/12–XXCD
SPAN 300 SW: Single-width tower EN 1004–3–8/8–XXCD
The CEN number for this assembly manual is: EN 1298–IM–en

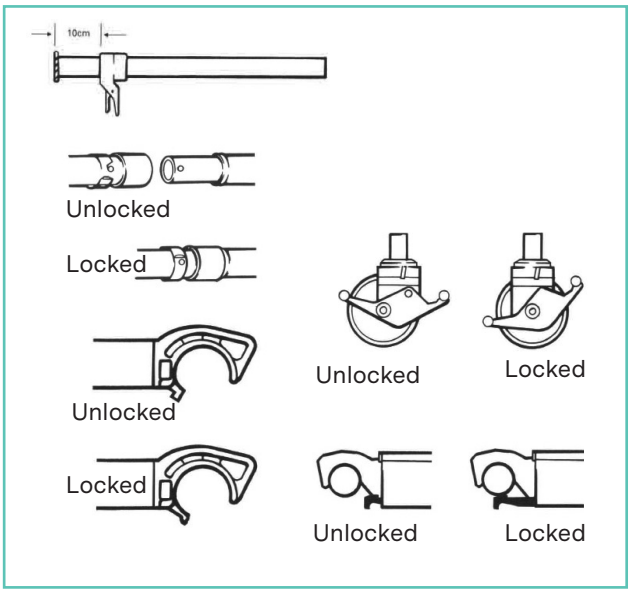


Safe working loads and working heights

The safe working load on each work platform is 360kg, evenly distributed, regardless of whether one or two platforms are installed. Therefore, even if two platforms are installed side by side, the total cumulative load
must not exceed 360kg, evenly distributed.
The maximum gross load of the mobile tower scaffold is 720 kg, which must not be exceeded under any circumstances. The maximum work platform height on a double-width tower (DW) is 12 metres. The maximum work platform height on a single-width tower (SW) is 8 metres. When using outdoors, the maximum height is 8 metres for both single and double-widths.

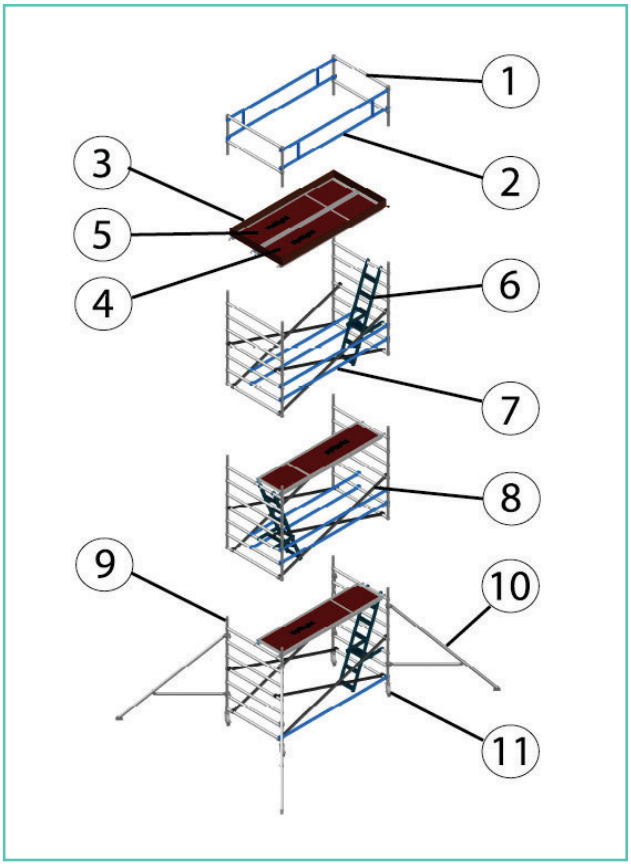
Tower assembly

1. Preparation: Set the level adjusters on each adjustable leg (4 pcs) approximately 10 cm above their lowest point.
   Before installation, ensure that the interlock clips are unlocked (upper hole). After installation, move the interlock clip to the “locked” position (lower hole). IMPORTANT! (An unlocked end frame can cause the tower to tip over).
   Sort the horizontal and diagonal braces. The horizontal and diagonal braces are colour coded (and the diagonal braces are longer). Ensure that the brace locks engage properly.
2. Base: Mount the castor to the adjustable leg. Ensure that the brake functions properly. Install the castor/leg assembly to the end frame by pushing the leg into the frame tube. Do not hammer or otherwise strike the frame!
   Follow the illustrated assembly instructions. (Figure 4). The illustrated instructions are for a double-width tower. For assembly of a single-width tower, please refer to the instructions for a single-width tower.
3. Work platform windlock: Each work platform is fitted with a windlock clip, which is locked as shown here.



Required parts for the tower scaffold system

The following table shows the minimum parts needed to assemble the tower scaffold system to the desired height in accordance the EN 1004 Directive and international standards. Braces, work platforms, guardrails, guardrail frames and toe-boards are 2 metres, 2.5 metres or 3 metres in length. The three unit weights in ascending order are intended for these towers, 2 m, 2.5 m and 3 m separately. The parts for single and double-width towers are listed in separate tables. Stabilisers, adjustable legs and castors are the same for both single and double-width towers and for all lengths. The unladen weight of the tower is listed separately in the table for each length and each height. The table also shows the structural height of the tower, the work platform height and the working height, assuming that the working height is 2 metres above the work platform.



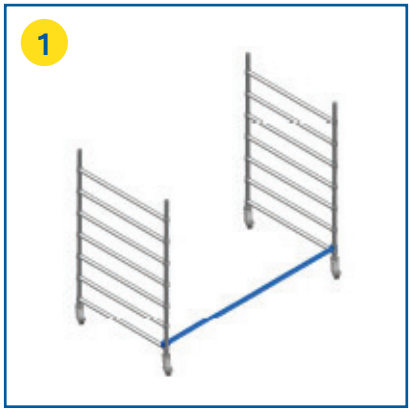
Parts required for assembly

1. Guardrail frame - end
2. Bracing frame - side
3. Toe-board set
4. Work platform (with trapdoor)
5. Fixed work platform
6. Ladder
7. Horizontal brace
8. Diagonal brace
9. 7-rung end frame
10. Stabiliser
11. Adjustable leg and castor

Span 300 wide scaffolds - 2 m, 2.5 m and 3 m lengths in accordance with EN1004							
Work platform height (m)		**3,2**	**4,1**	**6,0**	**7,9**	**9,8**	**11,8**
Working height (m)		5	6	8	10	12	14
Scaffold height (m)		4	5	7	9	11	13
Scaffold weight (kg) - 2 metres long		149	160	205	243	250	286
Scaffold weight (kg) - 2,5 metres long		166	178	229	279	280	328
Scaffold weight (kg) - 3 metres long		192	204	266	328	394	454
The indicated work platform heights include 150 mm (6”) for levelling the leg adjustments. The heights are also adjustable							
Description	**Weight (kg)**	**pcs**	**pcs**	**pcs**	**pcs**	**pcs**	**pcs**
7-rung end frame	11,2	2	4	6	8	10	12
4-rung ladder end	8,5	2					
Guardrail frame - end	3,6	2	2	2	2	2	2
Work platform (with trapdoor)	14 / 18 / 20	2	2	3	4	5	6
Fixed work platform	14 / 17 / 20	1	1	1	1	1	1
Horizontal brace	1,7 / 2 / 2,4	1	5	9	13	17	21
Diagonal brace	1,8 / 2,2 / 2,5	8	8	12	16	20	24
Guardrail element - side	3,8 / 4,4 / 5,2	2	2	2	2	2	2
Telescopic adjustable leg	5,2	4	4	4			
Large stabiliser	6,8				4	4	4
Adjustable legs	1,1	4	4	4	4	4	4
Castor/base plate	2,2	4	4	4	4	4	4
Ladder	9,4	1	2	3	4	5	6
Toe-board set	8,7 / 11,5 / 14,4	1	1	1	1	1	1

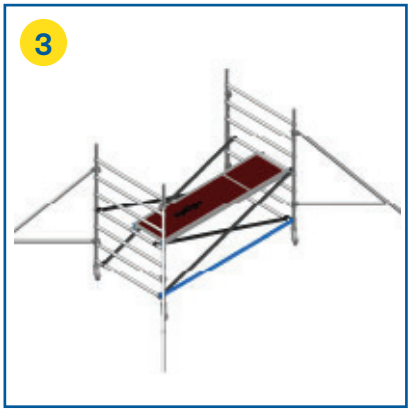
Never stand on a work platform without the guardrails installed

Scaffold assembly

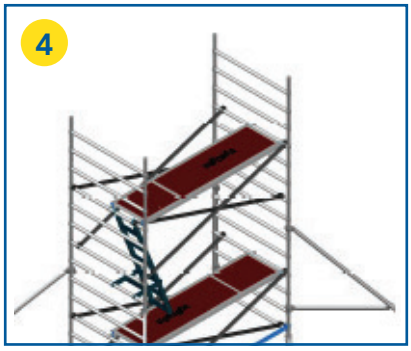


Install the castors and adjustable legs in the 7-rung end frame. Mount horizontal brace 1 to the end frame corner post as shown here (with the brace lock out).

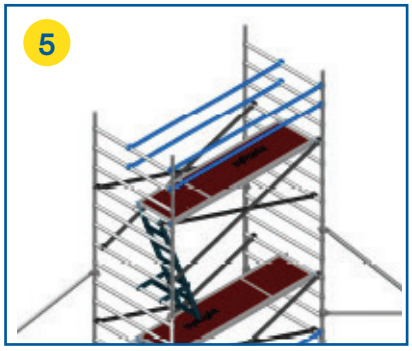
Mount the diagonal braces crosswise. Mount the work platform on one half of the 4th rung level (ensure that the trapdoor opens to the outside). Check the vertical and horizontal straightness using a level. If necessary, straighten using the adjustable legs.



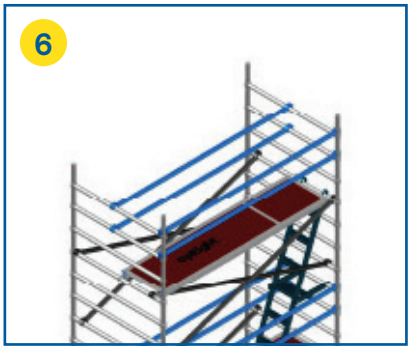
Fasten the stabilisers to all four corners of the tower.



Mount the 7-rung end frame and lock it into place with the brace locks. Mount the diagonal braces to the end frame, with two on each side of the tower. Mount the ladder to the end frame and put the trapdoor platform into place (the trapdoor should be placed at the end of the tower opposite the trapdoor below).

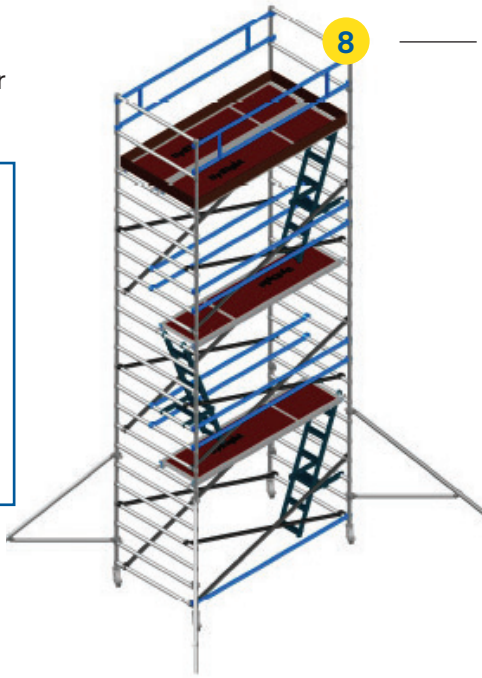


Use the horizontal braces as guardrails above the work platform.
Repeat steps 4 and 5 until the desired height is reached.



When the last end frame extension is in place, install the guardrail frame and lock it in place.

Install the bracing frames.



Finished tower scaffold system.

If necessary, reset the work platforms and inclined ladders to the desired height. The space between levels must not exceed 2 metres. Ensure that 2 horizontal braces are mounted at the correct height on each side of the tower to serve as guardrails.

Note! If there is more than one work platform on the tower, ensure that each platform has two platforms set side by side (double-width tower), bracing frames on both sides of the tower (bracing frames cannot necessarily be replaced with horizontal braces), and the toe-boards are properly installed.

Guidelines for the safe erection of the tower

- We recommend that the erection, movement and dismantling of the tower be done by two people (the installer and an assistant).
- Ensure that all parts are on hand at the assembly site and are in proper condition (no damage that might pose a hazard to the safe erection or use of the tower).
- Ensure that the assembly site has been inspected in order to prevent any hazardous situations from occurring during the assembly, dismantling or movement of the tower, or during its use. Give special attention to the condition of the ground (such as whether it is level or sloping), any obstructions in the area and weather conditions. The ground must be firm enough to bear the total load of the tower scaffold system.
- The tower must always be climbed on the inside of the system, using the inclined ladders or stairs (separate instructions for stairs).
- The adjustable leg is intended to set the vertical straightness of the tower on a sloping surface, not the working height of the tower.
- The tower must only be moved by manually applying force at the base. Watch out for any overhead obstructions (e.g. power lines) when moving the tower.
- No personnel or materials may be on the tower when it is being moved. Moving the tower while standing on a work platform and pulling or pushing from the building wall, eaves or other protrusions is **expressly prohibited.**
- Watch out for horizontal loads that can lead to instability of the tower. The maximum lateral force of the tower is 20 kg.
- If the tower is being secured to a rigid structure, fasten a tie-in to the end frame corner post every 4 metres. Ensure that the couplers used will fit the 50 mm aluminium tube.
- Do not use boxes or steps to gain extra height. If extra height is needed, contact your dealer to request additional components.
- Do not hoist an assembled tower or suspend it on a structure.
- Components are generally hoisted using rope or equivalent.
- Damaged components or components from other tower scaffold systems must never be used.
- Stabilisers must always be installed according to the given specifications. If a site requires the non-standard installation of stabilisers, the stability and safety of the tower must be ensured by a qualified person, who possesses a valid qualification for inspecting tower assemblies. Use the stabilisers described in the parts list according to the height of the tower.
- Never use the tower in winds higher than 8 m/s. When the wind speed exceeds 15 m/s, dismantle the tower if it is directly affected by the wind.

Wind speed	Guideline
5-8 m/s	Moderate breeze - raises dust and loose paper
8-11 m/s	Fresh breeze - small trees in leaf begin to sway
11-14 m/s	Strong breeze - umbrellas used with difficulty

Care and maintenance of the tower scaffold system and its components

- Keep the tower components clean, particularly the frame spigots and sockets, horizontal/ diagonal brace locks, adjustable legs and castors. The components must fit easily when assembling and locks should engage smoothly.
- Clean any dirt or paint from the adjustable legs by brushing them lightly.
- Never hammer or strike any components. Never swing or drop components against hard surfaces.
- Damaged components must be repaired or replaced - contact your dealer.

Dismantling/movement of tower scaffold systems

Dismantling: Follow the assembly instructions in reverse order and give attention to the following:

- Start dismantling by moving work platforms and guardrails to a suitable height so that they can be removed safely from a platform with guardrails in place (compare with the erection of the tower).
- When removing guardrails, make every effort to work in a seated position, with your legs placed through the trapdoor of the work platform and your feet firmly set on the ladder below. Remove overhead work platforms while standing securely on a work platform surrounded by guardrails.

Moving the tower to a new position: First, prepare the tower.

- The wind speed must not exceed 8 m/s.
- Ensure that you stay on a level surface for the entire move.
- Raise the stabilisers enough to clear any obstacles.
- Ensure that the tower is empty of all materials and personnel.
- Once the above-mentioned measures have been taken, release the castor brakes and carefully move the tower to its new position. Move the tower manually by applying force to its base. Do not use any machines to push or pull the tower. After moving the tower, set it up for use.
- Ensure that all the castors and stabilisers are in firm contact with the ground.
- Check to see whether the tower is vertically straight (use a level) and, if necessary, adjust the adjustable legs.
- Lock the castor brakes.

Stabilisers

ALWAYS ENSURE THAT THE STABILISER SIZE IS CORRECT AND WILL PROPERLY SUPPORT THE TOWER

Fasten the upper stabiliser clamp to the corner post above the sixth rung and lightly tighten the wing screw. Fasten the lower stabiliser clamp above the bottom rung of the end frame so that the stabiliser is as horizontal as possible. Set the stabilisers so that the footpads are nearly equidistant from each other as shown in the illustration. Adjust the stabilisers telescopically and set the clamps so that the footpads are in firm contact with the ground as with the castors (do not raise the tower on the adjustable leg - the castor is designed to bear the point
load). Ensure that the telescopic stabiliser locking pin is in place. When the stabilisers are correctly positioned, tighten the wing screws fully by hand (do not use any tools)

Placing the tower against a wall: Do not remove the stabilisers - swing them around until parallel with the wall.
A qualified person should inspect and approve any non-standard assembly).

Placing the tower in a corner: Remove one of the inner stabilisers and swing the other one until it is parallel with the wall. (A qualified person should inspect and approve any non-standard assembly).

Ballast can also be used to stabilise the tower. Contact your dealer for the proper ballast weights.

INSTANT UPRIGHT

This manual is compliant with EN 1298.

RAMIRENT

Ramirent Finland Oy
Tapulikaupungintie 37, 00750 Helsinki
Customer service +358 (0)800 171 414
www.ramirent.fi