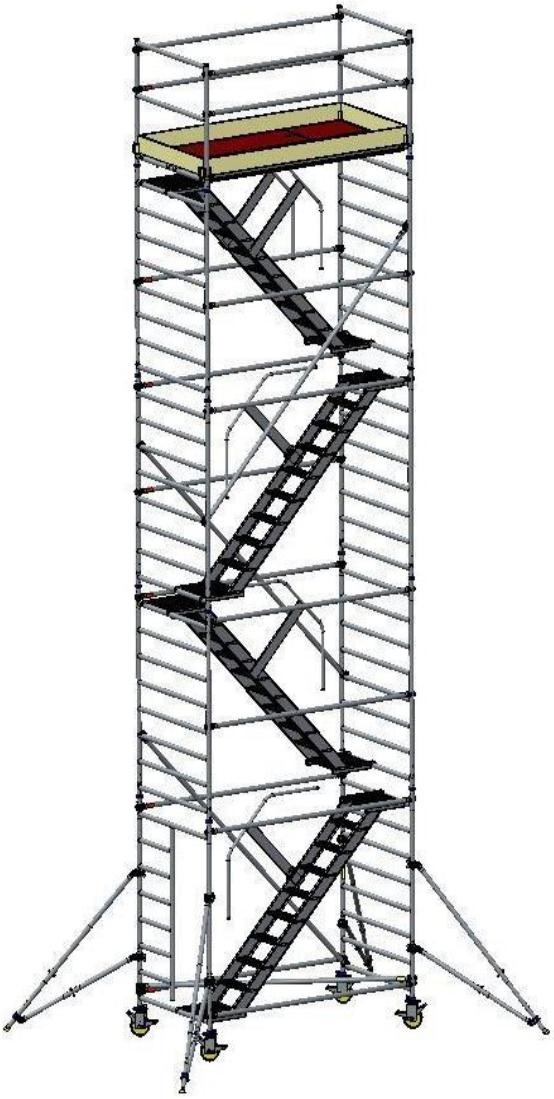
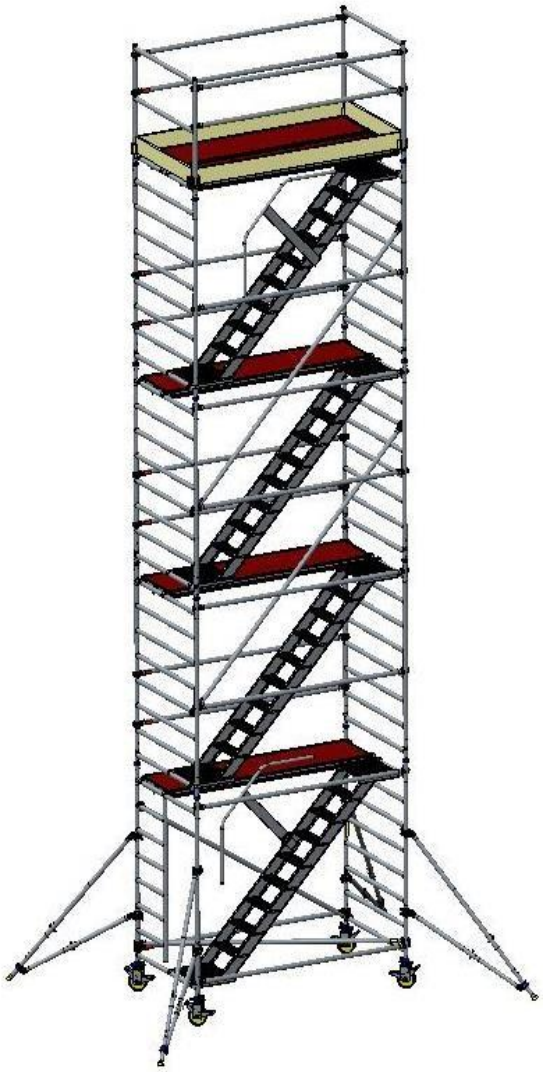
User manual aluminum Staircase





Maximum load: 200 kg/m2
Maximum platform height:

- **Inside 12.000 mm**
- **Outside 8.000 mm**

Aluminum staircase

The EasyStairs staircases are very stable and have a high load-bearing capacity. They are wide and have railings on both sides of the stairs. This makes the staircase always safe to enter. Even in bad weather or with full hands. The Stair Towers are also flexibly adjustable in height. The steps remain flat. All our staircase are provided with the European EN12811 quality mark. You are therefore assured of a high-quality and safe staircase

Safety instructions

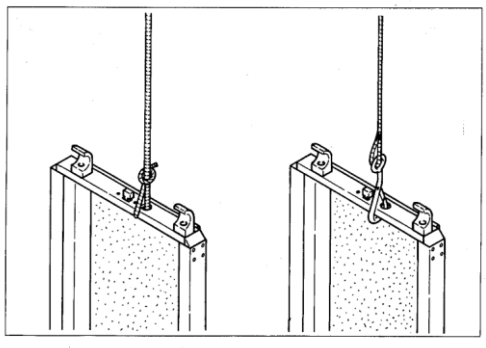
Check for construction
Check whether the fitters are sufficiently qualified and check whether the location where the tower is to be installed is safe and suitable.

Watch out:
- The soil must be sufficiently load-bearing and level.
- The area must be free of obstacles both on and above ground.
- Check whether the wind conditions are such that the tower can be used.
- Check that all parts are present at the workplace.
- Damaged, incorrect or non-original parts must never be used.

Personal protection and tools.
- Always wear work gloves, safety shoes and a safety helmet.
- Strong rope for manually lifting parts or tools.
- Attaching fall protection to the scaffolding is not permitted. (If fall protection is necessary, use the existing facade or other solid building structure.)

Construction
The assembly of the stair tower is described in the assembly instructions and must be carried out by at least 2 people. Also use railings during assembly, if necessary temporarily mounted.
The stair tower must be set up flat with a maximum tilt of 1% (maximum 1 cm tilt over a length of 1 metre); check this with a spirit level; correction is possible by turning the spindle nuts of the wheel spindles. The wheels must always be on the brake, except when moving.
Ensure that the wheels are secured, either by tightening the wing nut or by tilting the locking cam over the projecting edge of the stiffening ring.
The platforms must be secured by sliding the catch of the blow-out protection under the rung. The windows must be secured to each other by means of the locking pin.
The horizontals or railings must be attached to the uprights in such a way that the openings of the claws point outwards.
At least 1 platform with hatch must always be present at the working level; the working level must be equipped with: railing, knee rail and side planks all around.

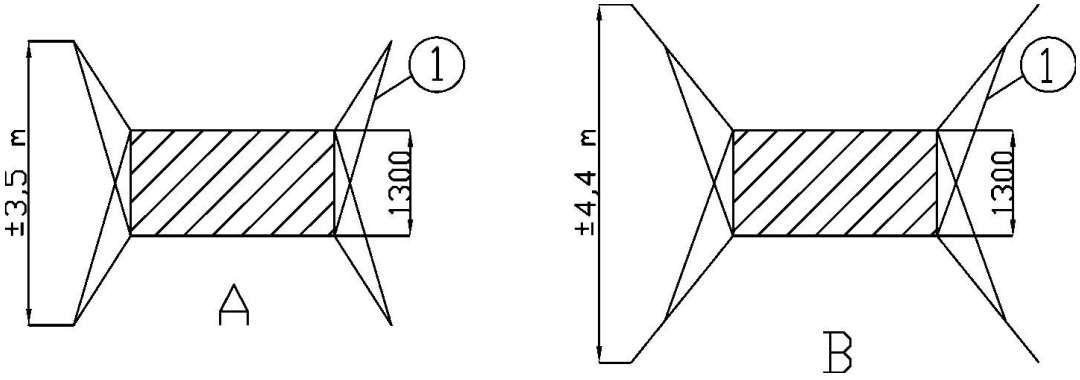
Raising parts
Lifting components for higher areas should be done by passing the components from platform to platform. Components can also be lifted using a sturdy rope. Use a proper knot, loop or hook to secure the components. Hoisting equipment should not be attached to the stair tower.



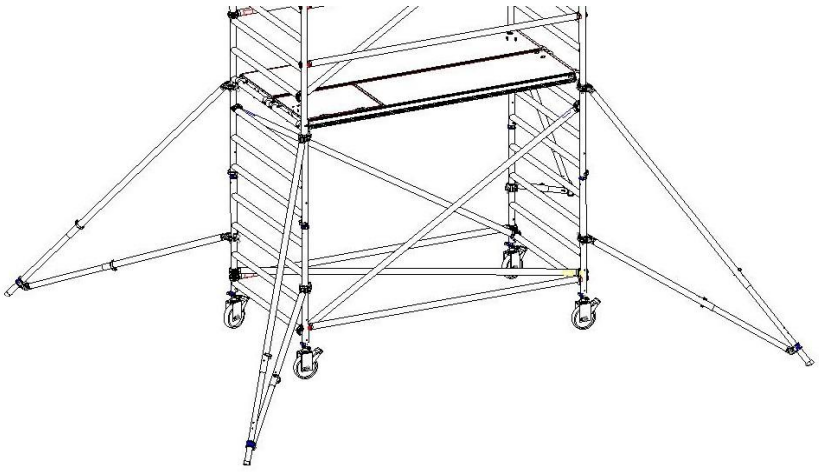
Extension legs and extension arches
The extension legs/extension arches prescribed in the table must always be fitted as soon as the bottom rung of the stair tower has been built. During assembly, the tops of extension legs/extension arches must fit against the bottom of the rungs to prevent unintentional upward sliding.
The basic shape to be used, i.e. the arch to be used (small or large), can be read from the assembly tables.

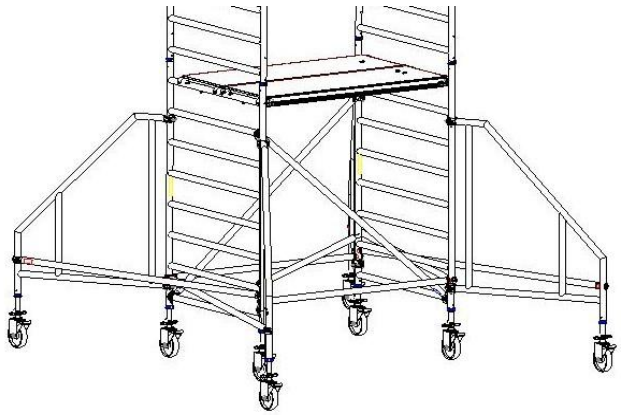
<u>The basic shapes drawn below must be strictly adhered to!</u>

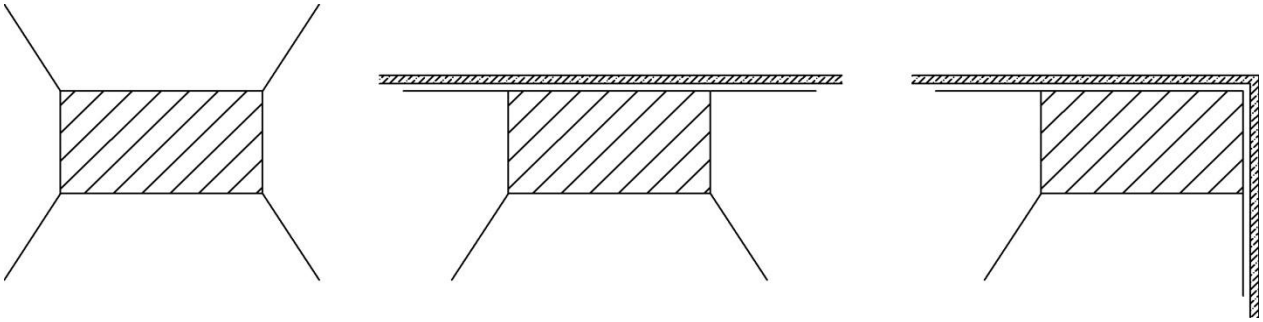
If the prescribed shape is deviated from, ballast weights may need to be placed; contact the manufacturer/supplier for this. Small arches may be replaced by small legs and large arches by large legs, provided that the same basic shape is maintained when using legs as for the arches. This means that the outrigger legs, seen in top view, must be mounted in the same position as the outrigger arches.



Basic shapes
A: Small arch, length 1.300 mm B: Large arch, length2.000 mm
1: Brace, length 2.500 mm, art. no. 9501.200.030



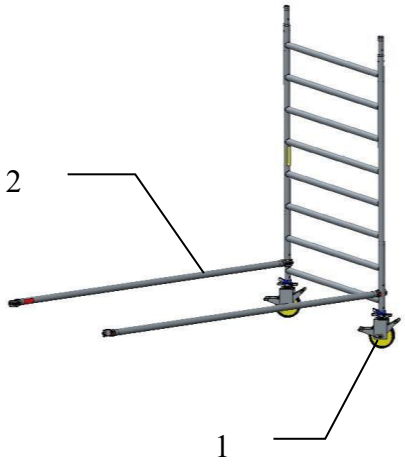




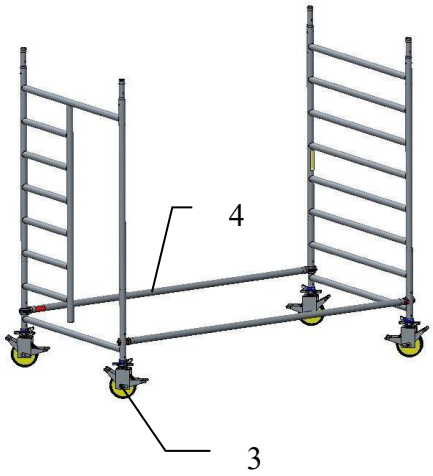
If the staircase is placed against a wall, do not remove the expansion leg/arch, but turn it parallel to the wall. If the staircase is placed in a corner, remove the inner expansion leg/arch, and turn the outer two parallel to the wall.

Assembly model ZigZag

1. Insert both wheels into the window. Make sure the wheels are secured properly.
2. Place the horizontals on the window uprights.

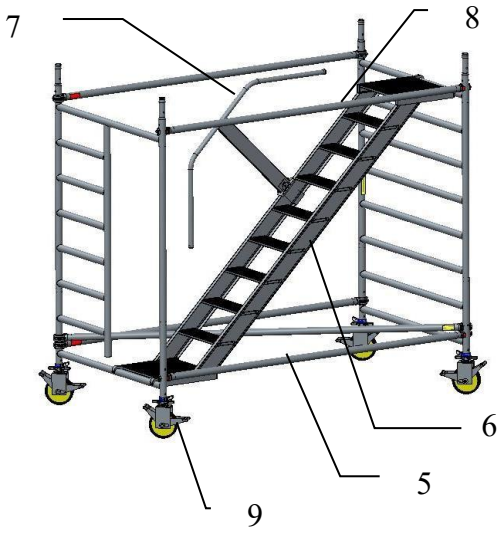


3. Insert both wheels into the window. Make sure the wheels are secured properly.
4. Place the horizontals on the window uprights.



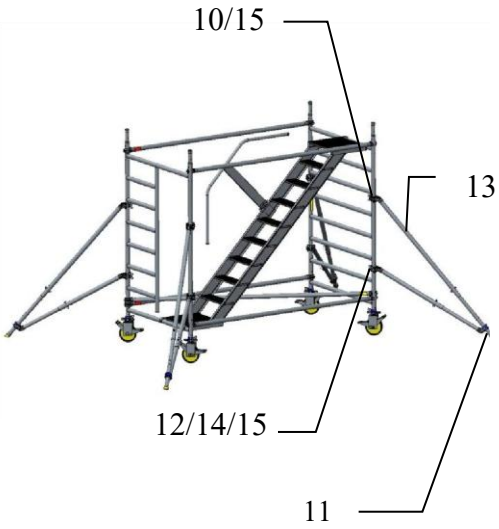
5. Place horizontally/diagonally.
6. Place the ladder. Make sure the ladder is properly secured (under the rung).
7. Place the stair railing on the inside sides of the stairs.
8. Place the two horizontals on the window uprights.
9. Apply the brakes and level the tower by turning the wheel spindle nut.

Tighten the wing bolt firmly between the 5th and 6th step from the bottom.

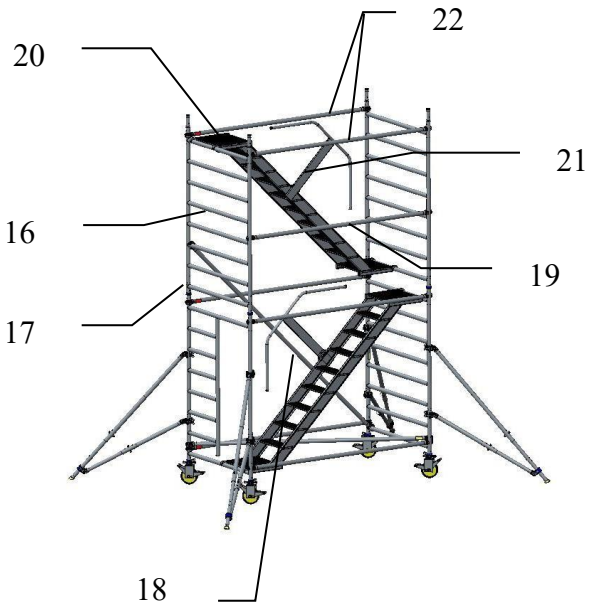


Now place the four extension legs.

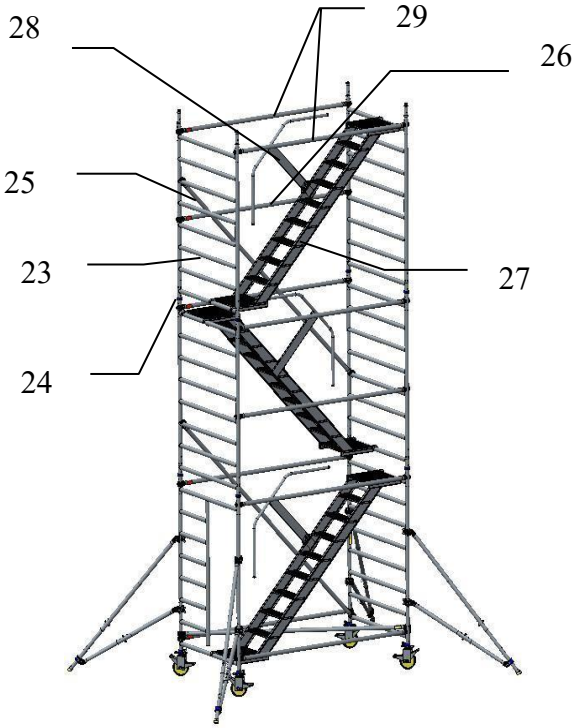
10. Place the top link under the 6th or 7th rung on a small leg, 9th or 10th rung on a large leg.
11. Place the foot on the ground, observing the prescribed basic form.
12. Make sure the bottom link fits between the two rungs.
13. Rotate the leg so that the prescribed basic shape is maintained.
14. Hand-tighten the bottom coupling on the upright and slide the coupling up over the upright until the leg is slightly under tension.
15. Tighten both couplings firmly.



16. Place both windows.
17. Place locking pins between the windows.
18. Place the diagonal (from 1st to 11th rung) in the bottom layer.
19. Place a horizontal on the window uprights.
20. Place the ladder, making sure it is properly secured.
21. Place the handrail on the inside of the stairs.
22. Place the two horizontals on the window uprights.

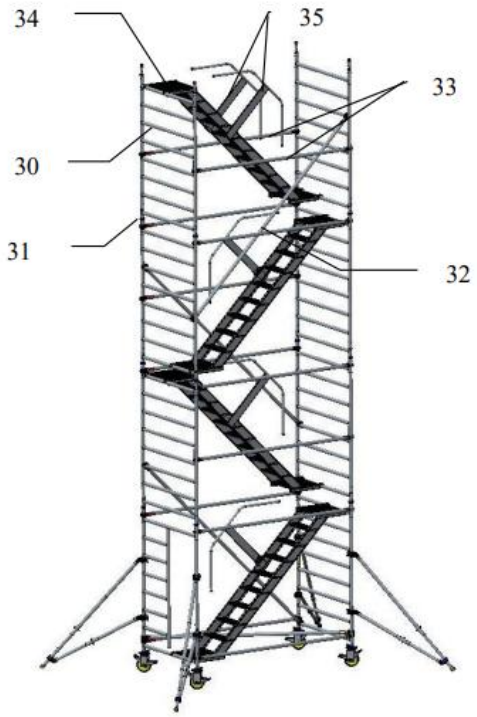


23. Place both windows.
24. Place the locking pins between the windows.
25. Place the railing diagonally along the stairs from the previous layer.
26. Place a horizontal on the window uprights.
27. Place the ladder, make sure the ladder is properly secured.
28. Place the stair railing on the inside of the stairs.
29. Place both horizontals on the uprights of the windows.



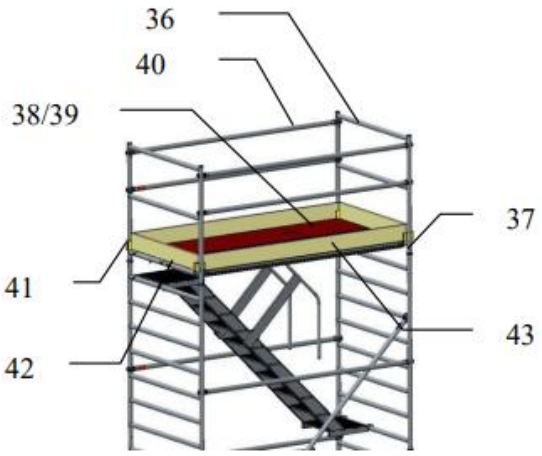
Second to top layer:

30. Place both windows.
31. Place the locking pins between the windows.
32. Place the railing diagonally along the stairs from the previous layer.
33. Place the two horizontals on the window uprights.
34. Place the ladder, make sure the ladder is properly secured.
35. Install a stair railing on the inside and outside of the stairs.



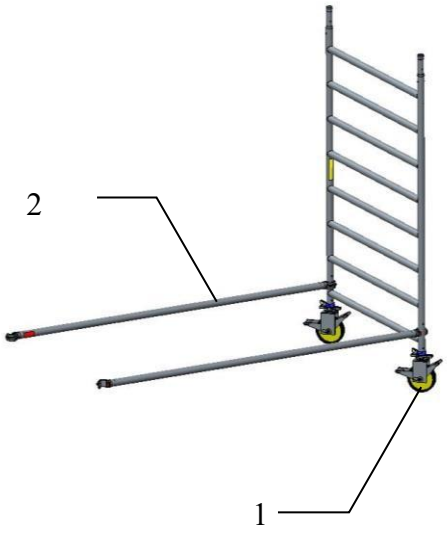
Top layer:

36. Place both windows.
37. Place locking pins between the windows.
38. Place the platform with hatch (above the stairs), slide both anti-wind protection devices under the rung.
39. Place the platform, slide both blow-out protections under the rung.
40. Place the four horizontals on the uprights of the windows.
41. Place the four side shelf holders.
42. Place both side planks 1.22 m apart.
43. Place both side planks 1.73 m or 2.45 m.

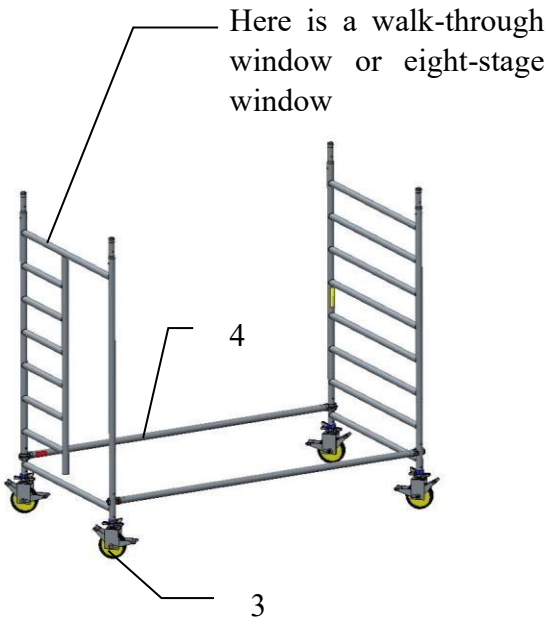


Mounting model Parallel

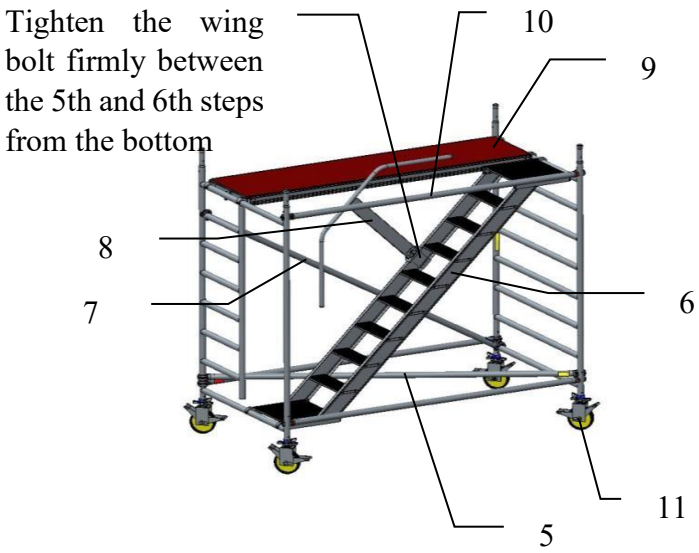
1. Insert both wheels into the window, making sure the wheels are properly secured.
2. Place the horizontals on the window uprights.



3. Insert both wheels into the window, making sure the wheels are properly secured.
4. Place the horizontals on the window uprights.

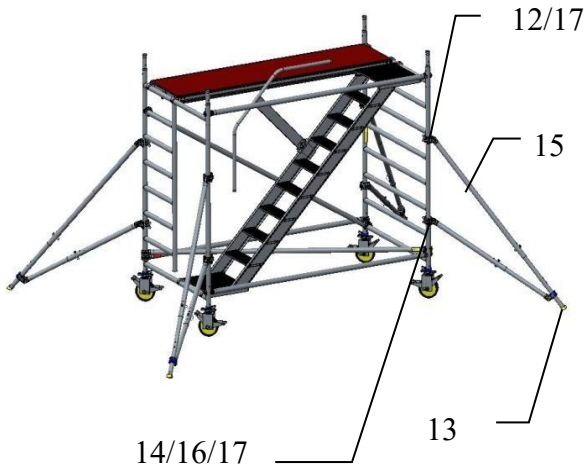


5. Place horizontally/diagonally.
6. Place the ladder, making sure the ladder is properly secured.
7. Place the diagonal (from 1st to 7th rung).
8. Place the stair railing on the inside of the stairs.
9. Place the platform, slide both blow-out protections under the rung.
10. Place the horizontal on the window uprights.
11. Apply the brakes and level the tower by turning the wheel spindle nut.

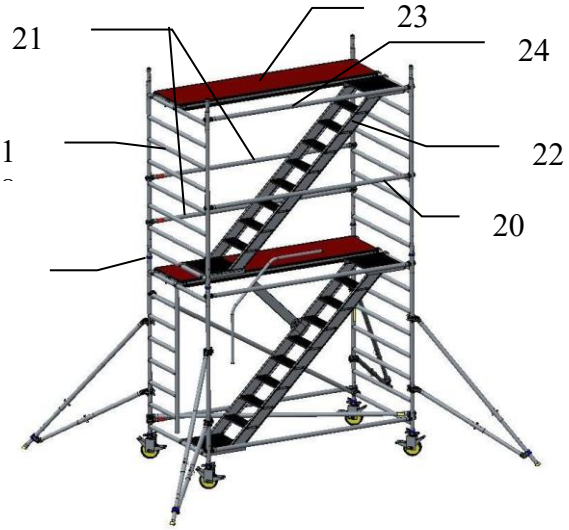


<u>Now place the four extension legs.</u>

12. Place the top link under the 6th or 7th rung on a small leg, 9th or 10th rung on a large leg.
13. Place the foot on the ground, observing the prescribed basic form.
14. Make sure the bottom link falls between two rungs.
15. Rotate the leg so that the prescribed basic shape is maintained.
16. Place the bottom coupling hand-tight on the upright and slide the coupling up over the upright until the leg is slightly under tension.
17. Tighten both couplings firmly.
18. Place both windows.
19. Place the locking pins between the windows.
20. Place a horizontal on the uprights of the windows.
21. Place both horizontals on the uprights of the windows.

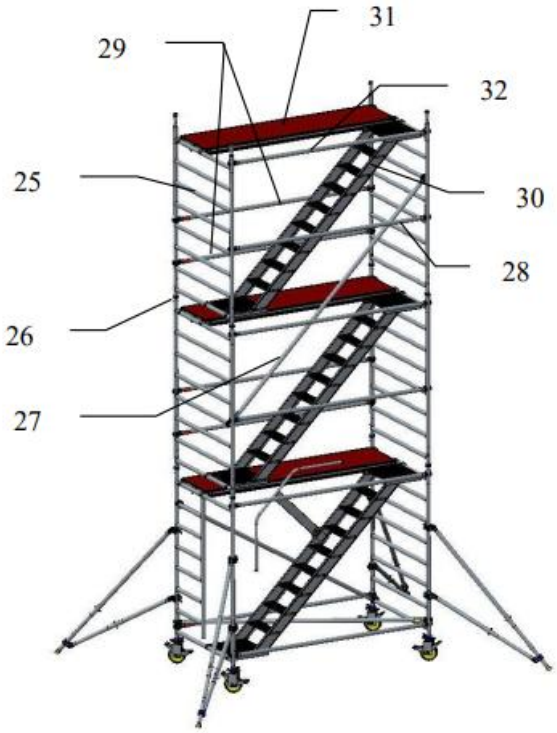


22. Place the ladder, making sure it is properly secured, under the rung.
23. Place the platform, slide both blow-out protections under the rung.
24. Place the horizontal on the uprights of the windows.



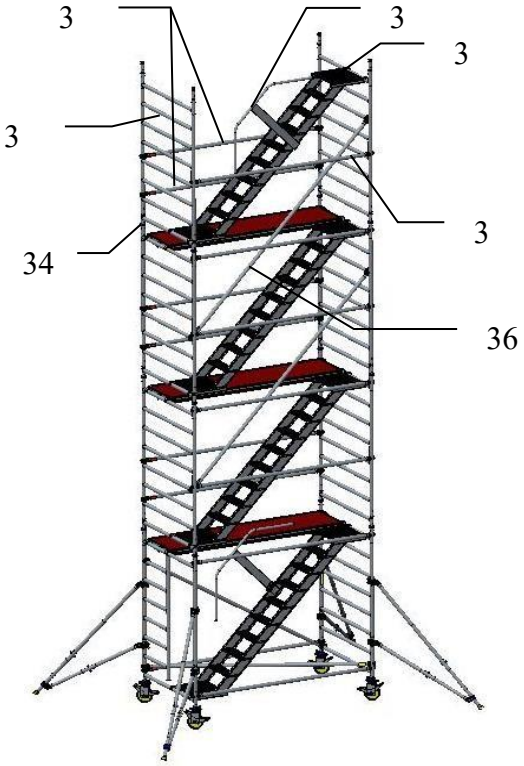
Next layer.

25. Place both windows.
26. Place cotter pins between the windows.
27. Place the handrail diagonally along the stairs from the previous layer.
28. Place a horizontal on the uprights of the windows.
29. Place both horizontals on the uprights of the windows.
30. Place the ladder, making sure the ladder is properly secured.
31. Place the platform, slide both blow-out protections under the rung.
32. Place the horizontal on the uprights of the windows.



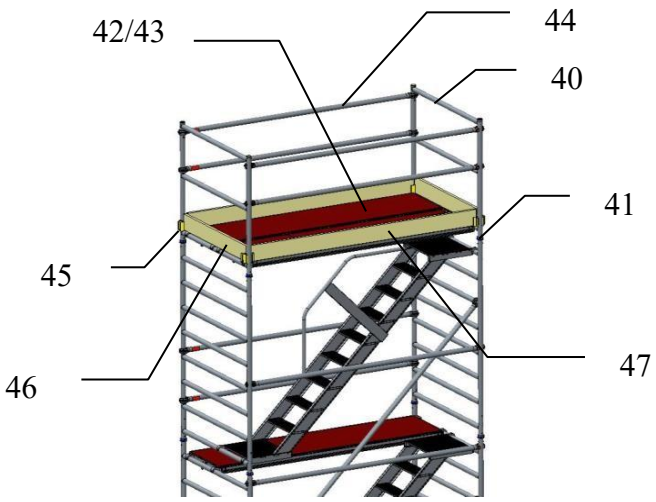
Second to top layer.

33. Place both windows.
34. Place cotter pins between the windows.
35. Place a horizontal on the uprights of the windows.
36. Place the railing diagonally along the stairs from the previous layer.
37. Place both horizontals on the uprights of the windows.
38. Place the ladder, making sure the ladder is properly secured.
39. Place the stair railing on the outside of the stairs.



Top layer.

40. Place both railing frames.
41. Place locking pins between the windows.
42. Place the platform with hatch above the stairs, slide both blow-out protections under the rung.
43. Place the platform, slide both blow-out protections under the rung.
44. Place the four horizontals on the window uprights.
45. Place the four side board holders.
46. Place both side planks 1.22 m.
47. Place both side planks 1.73 m or 1.45 m.



The use of the staircase

Before each use, check that:

- the base (including the extension legs/arches, braking effect of the wheels) of the stair tower is correct,
- the total construction is correct and complete,
- there are changes in circumstances that could affect the safe use of the tower

A staircase is intended to provide access to a workplace.
It is not permitted to use the tower as a suspended scaffold, for the application of cantilevered work floors or to use the tower to step over to other structures.
No bridges may be made between a staircase and a building. No bridges may be made between stair towers, unless specifically calculated applications are used for this purpose.
The maximum working load is 200 kg/m2 (scaffolding class 3); only 1 level may be loaded maximum per tower.
It is prohibited to jump onto the platforms; the hatch of the platform must always be closed, except when climbing or descending.

The maximum platform height is:
- Inside: 12 meters
- Outside: 8 meters

The tower may only be climbed from the inside, via the stairs.
Do not place boxes, steps or other aids on the work floor to gain height. It is prohibited to work on the tower if the wind force is greater than 6 Beaufort (large branches move, umbrellas fold over, the wind speed is 11 - 14 m/s = ± 45 km/h).

If the wind force is expected to be greater than 6 Beaufort, a freestanding stair tower must be either dismantled, moved to a wind-free zone or anchored. This must also be done if the tower is not in use.
Beware of openings in buildings, unclad buildings and corners of buildings that can cause additional wind loads.
Be careful when exerting horizontal forces (e.g. drilling), which push the tower away from a structure; the maximum horizontal force is 30 kg.
Horizontals, railings, knee rails and diagonals may not be used as steps. It is forbidden to attach wind-catching surfaces such as billboards or sails to freestanding towers. The tower may not be exposed to aggressive liquids or gases.

Moving the staircase

Procedure for moving the staircase:

-Check the surroundings for obstacles around the route to be covered by the rolling scaffolding. Ensure a clean surface, check the route for holes / unevenness / cables / irregularities / traffic / passers-by.
-In the event of wind forces greater than 4 Beaufort, the scaffolding may no longer be moved (4 Beaufort: dust, sand and paper are blown up, small branches are torn off; the wind speed is 5.5 - 7.9 m/s = ±20 - 28 km/hour).
-There may be no loose materials or persons on the stair tower.
-The wheel brakes must only be released for moving.
-When moving the stair tower, the support points of the legs/arches may be a maximum of 8 cm free from the surface.
-When moving, the legs/arches must be at an angle of 40° - 50° so that the length and width are maximised.
-The stair tower may only be moved in the longitudinal direction by hand, preferably by 2 people. Make sure that the scaffolding does not warp during moving.
-After the stair tower is in position, immediately lock all wheel brakes by pressing the brake pedal on each wheel.
-After moving, the stair tower must be levelled again, with a maximum tilt of 1% being permitted. (1% = maximum tilt of 1 cm measured per 1 metre)
-After aligning the mobile scaffolding with a spirit level, adjust the support points of the legs/arches so that they make contact with the ground again.
-Before using the mobile scaffolding, check whether the legs/arches are clamped tight and touch the ground.

Please note: If the entire above procedure cannot be followed, the rolling scaffolding must be dismantled and reassembled at the new location.

Anchorage

Anchors should be used when the tower becomes unstable due to e.g. excessive wind force. The anchors should be sturdy and attached to both uprights of the window with right-angled or rotating couplings. Anchor to a construction or building in suitable and proper places. At least every 4 metres high, 2 anchors should be installed (1 per window).

Disassembly

Dismantling the staircase is done in reverse order. Start at the top by removing the side boards and side board holders.
Lowering components should be done by bringing the components down the stairs.
Break down the stair tower from top to bottom. Do not throw components!

Maintenance

All components, especially moving parts and welds, must be checked regularly, but at least once a year, for wear and damage.
Missing and broken components must be replaced.

Aluminium components may no longer be used in the following cases:
- if round tubes have one or more dull dents with a depth of more than 3.0 mm.
- if round tubes have one or more dents directly next to a weld joint, regardless of the dent depth and shape of the dent.
- if square/rectangular tubes have one or more dull dents with a depth of more than 2.0 mm.
- if tubes or tubes have one or more sharp dents or cracks, regardless of the length/depth and location of the dent(s)/crack.

Moving parts, including wheels, must be clean and run smoothly.
Repairs to scaffolding materials must always be carried out in consultation with the manufacturer.

Use and storage

- Stair tower components must be handled and transported with care to prevent damage.
- Storage must be arranged in such a way that only undamaged parts are available in the correct quantities for the construction of the stair tower.
- All parts must be checked for proper functioning and free from contamination or damage before construction.
- Damaged parts may not be used and must be replaced or offered to the supplier for inspection/assessment.
- No tools may be used during assembly and disassembly of the stair tower.
- A stair tower for professional use must be inspected annually by a competent authority/inspector.
- After exposure to extreme forces such as storms etc., the stair tower must be inspected again before it is put into use.
- Hoisting or hanging the stair tower is not permitted.

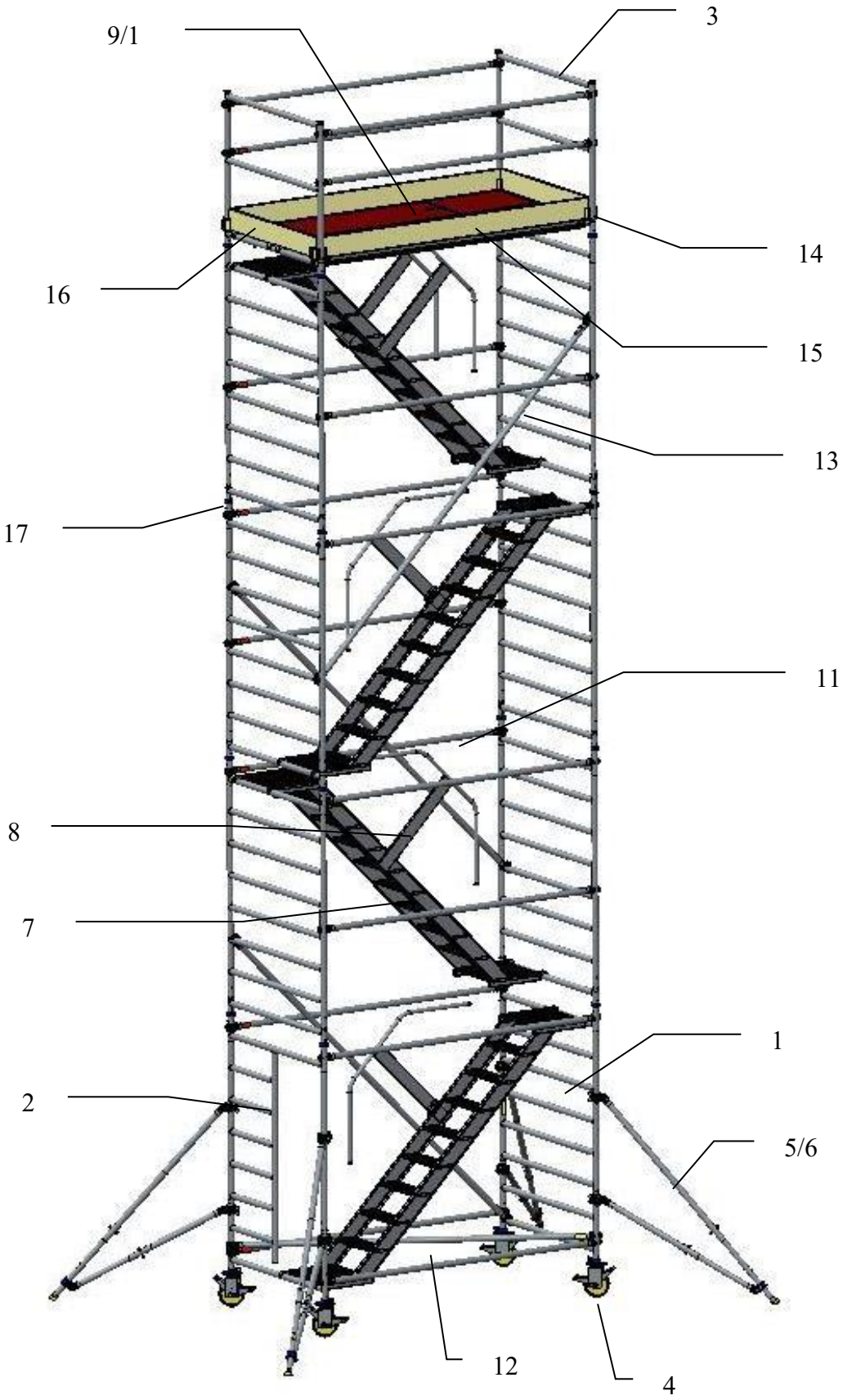
Parts

	Standard parts	Scaffolding length 1.8m	Scaffolding length 2.5m
1	Eight-stage window	9501.200.010	9501.200.010
2	Walk-through window	9501.200.109	9501.200.109
3	Staircase railing window	9501.200.125	9501.200.125
4	Wheel	9501.510.010	9501.510.010
5	Expansion leg 1300	9501.410.100	9501.410.100
6	Expansion leg 2000	9501.420.100	9501.420.100
7	Stairs	9501.600.???	9501.600.370
8	Stair railing	9501.600.???	9501.600.400
9	Platform	9501.310.010	9501.310.020
10	Platform with hatch	9501.330.015	9501.330.025
11	Horizontal (red cam)	9501.200.058	9501.200.030
12	Horizontal/diagonal (yellow cam)	9501.200.049	9501.200.050
13	Railing/diagonal 1-11	9501.600.145	9501.600.020
14	Toe board holder	9501.800.087	9501.800.087
15	Sideboard 1.73m/2.45m	9501.200.086	9501.200.080
16	Sideboard 1.22m	9501.200.090	9501.200.090
17	Locking pin	9501.410.162	9501.410.162
18	Diagonal 1-7 (blue cam)	9501.200.043	9501.200.056

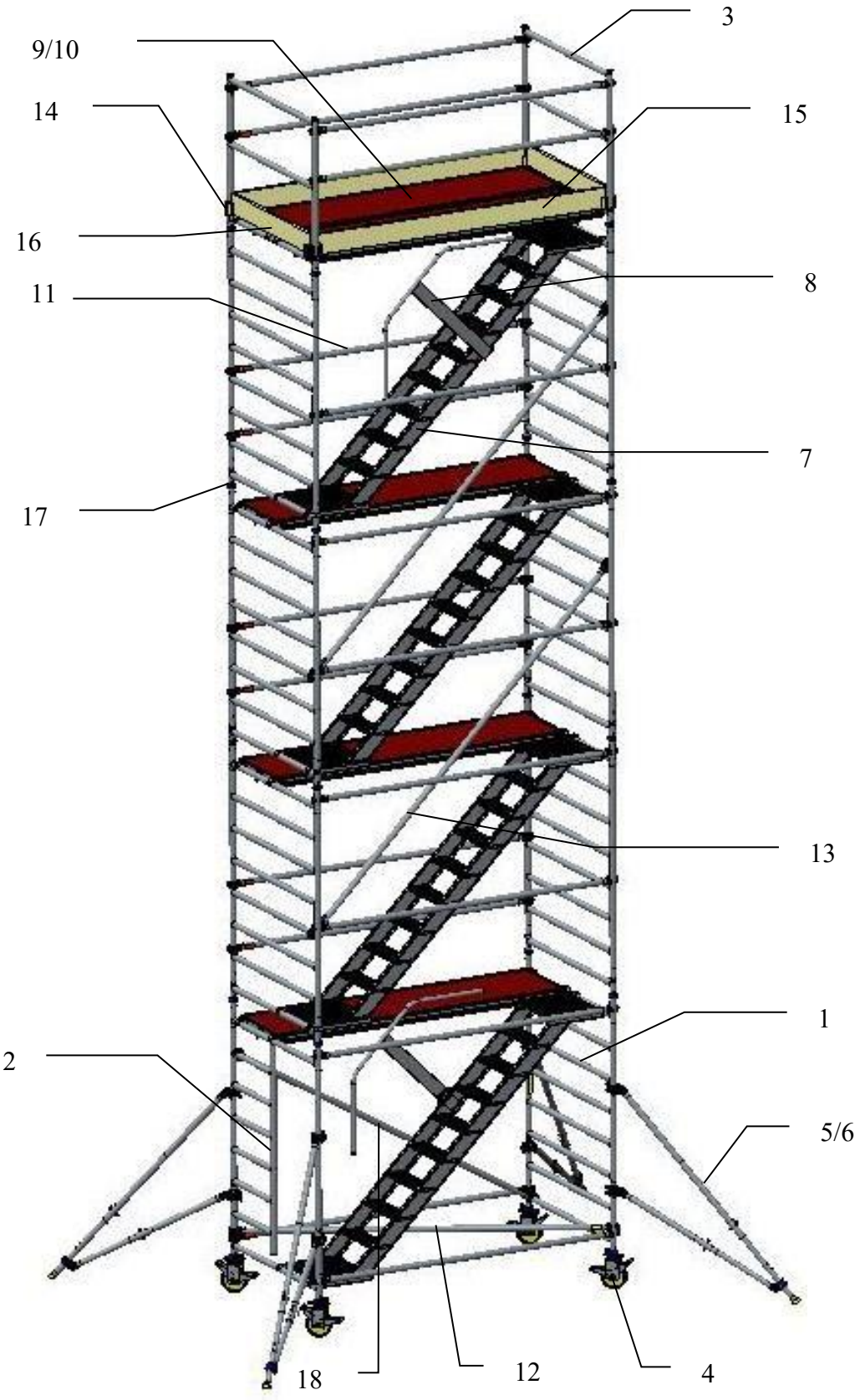
	Alternative parts	Scaffolding length 1.8m	Scaffolding length 2.5m
A	Expansion arch 1300	9501.460.010	9501.460.010
B	Expansion arch 2000	9501.470.010	9501.470.010
C	Spindle with base plate	9501.520.010	9501.520.010
D	Horizontal (brace)	9501.200.030	9501.200.030
E	Eight-stage window	9501.200.010	9501.200.010

A: Alternative for extension leg 1300.
B: Alternative for extension leg 2000.
C: Alternative to castor when using the expansion arch.
D: Option when using the expansion arch.
E: Alternative for walk-through window.

Model ZigZag



Model Parallel



Compostition tables

The following tables show which parts are needed to build a tower to a certain height. Make sure that these parts are present.

Easy Stairs
NEXT LEVEL SAFETY

Composition table of the ZigZag stair tower, available in the lengths: 1.8 m and 2.5 m									
					Working height (m)	6	8	10	12	14
					Platform height (m)	4	6	8	10	12
Description	**Item number**	**KG**								
Eight-step window	9.501.200.010	12,50				3	5	7	9	11
Walk-through window	9.501.200.109	12,00				1	1	1	1	1
Stair tower railing window	9.501.200.125	5,00				2	2	2	2	2
Wheel	9.501.510.010	7,20				4	4	4	4	4
Toe board holder	9.501.800.087	0,20				4	4	4	4	4
Sideboard 1.22 m	9.501.200.090	2,40				2	2	2	2	2
Locking pin	9.501.410.162	0,10				8	12	16	20	24
	Scaffolding length 1.8 m		**Scaffolding length 2.5 m**							
Description	**Item number**	**KG**	**Item number**	**KG**						
Stairs	9.501.600		9.501.600.370	21,30		2	3	4	5	6
Stair railing	9.501.600		9.501.600.400	2,60		3	4	5	6	7
Platform	9.501.310.010	15,00	9.501.310.020	19,50		1	1	1	1	1
Platform with hatch	9.501.330.015	15,00	9.501.330.025	19,50		1	1	1	1	1
Horizontal	9.501.200.058	2,30	9.501.200.030	3,00		10	13	16	19	22
Horizontal/diagonal	9.501.200.049	2,50	9.501.200.050	3,10		1	1	1	1	1
Railing/diagonal 1-11	9.501.600.145	3,10	9.501.600.020	3,70		1	2	3	4	5
Sideboard 1.73 m/2.45 m	9.501.200.086	3,30	9.501.200.080	4,40		2	2	2	2	2
Indoor use only		**KG**								
Expansion leg 1300	9.501.410.100	6,6				4	4	4	4	
Expansion leg 2000	9.501.420.100	9,8								4
For outdoor use only		**KG**								
Expansion leg 1300	9.501.410.100	6,6				4			x	x
Expansion leg 2000	9.501.420.100	9,8					4	4	x	x

Composition table of the Parallel stair tower, available in the lengths: 1.8 m and 2.5 m									
					Working height (m)	6	8	10	12	14
					Platform height (m)	4	6	8	10	12
Description	**Item number**	**KG**								
Eight-step window	9.501.200.010	12,50				3	5	7	9	11
Walk-through window	9.501.200.109	12,00				1	1	1	1	1
Stair tower railing window	9.501.200.125	5,00				2	2	2	2	2
Wheel	9.501.510.010	7,20				4	4	4	4	4
Toe board holder	9.501.800.087	0,20				4	4	4	4	4
Sideboard 1.22 m	9.501.200.090	2,40				2	2	2	2	2
Locking pin	9.501.410.162	0,10				8	12	16	20	24
	Scaffolding length 1.8 m		**Scaffolding length 2.5 m**							
Description	**Item number**	**KG**	**Item number**	**KG**						
Stairs	9.501.600		9.501.600.370	21,30		2	3	4	5	6
Stair railing	9.501.600		9.501.600.400	2,60		2	2	2	2	2
Platform	9.501.310.010	15,00	9.501.310.020	19,50		2	3	4	5	6
Platform with hatch	9.501.330.015	15,00	9.501.330.025	19,50		1	1	1	1	1
Horizontal	9.501.200.058	2,30	9.501.200.030	3,00		10	14	18	22	26
Horizontal/diagonal	9.501.200.049	2,50	9.501.200.050	3,10		1	1	1	1	1
Railing/diagonal 1-11	9.501.600.145	3,10	9.501.600.020	3,70		1	2	3	4	5
Sideboard 1.73 m/2.45 m	9.501.200.086	3,30	9.501.200.080	4,40			1	2	3	4
Indoor use only		**KG**								
Expansion leg 1300	9.501.410.100	6,6				4	4	4	4	
Expansion leg 2000	9.501.420.100	9,8								4
For outdoor use only		**KG**								
Expansion leg 1300	9.501.410.100	6,6				4			x	x
Expansion leg 2000	9.501.420.100	9,8					4	4	x	x