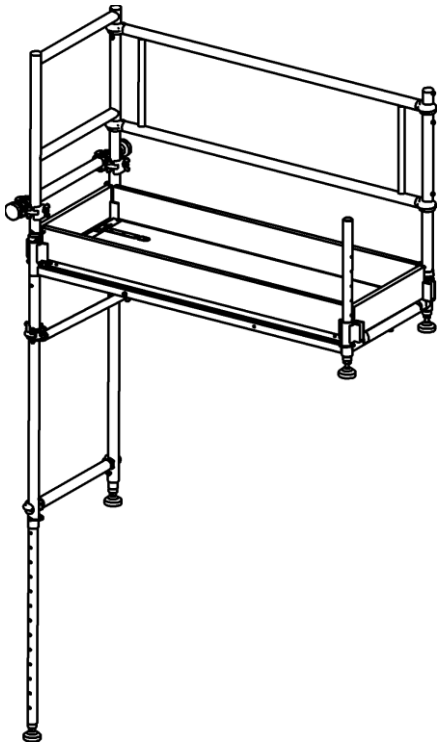
ASSEMBLY AND USER MANUAL

CUSTERS® ALUMINIUM STAIRWAY TOWER SCAFFOLDING



maximum load: 200 kg/m^2
(2 people plus tools)

APRIL 2009

CUSTERS HYDRAULICA B.V.

Smakterweg 33,	**5804 AE VENRAY NL**	**Telephone**	**: +31 (0) 478 55 30 00**
P.O. box 22,	**5800 AA VENRAY NL**	**Fax**	**: +31 (0) 478 55 30 10**
email	**custers @ custers.nl**	**Website**	**: www.custers.nl**

CONTENTS

1 INTRODUCTION

The Custers stairway tower scaffolding is intended for maintenance work in the stairwell of existing dwellings and is to be erected in the stairwell of an existing staircase.

The Custers stairway tower scaffolding is available in low and high versions.

This manual is intended to instruct you step by step how to assemble your stairway tower scaffolding easily and safely. Incorrect assembly may result in serious personal injury. Read the safety instructions carefully before assembly. The erection and dismantling of the scaffolding should be done by experienced and knowledgeable persons only.

The user is responsible for having this manual at hand at the place where the stairway tower scaffolding is being assembled and used, as well as with the person who supervises the work.

If there are any uncertainties with regard to this manual, please contact your supplier and/or producer.

Producer:

Custers Hydraulica B.V.
Smakterweg 33
5804 AE Venray Nederland
Telephone: +31 (0) 478 553 000
Telefax: +31 (0) 478 553 010
Homepage: www.custers.nl

Supplier:

2 WARRANTY AND LIABILITY

Custers warrants material and manufacturing defects for 12 months after delivery.
The warranty means that we repair faults at our expense or - at our sole discretion – will take back all or part of the delivered goods and replace them with a new delivery.
If we replace products delivered in fulfilment of our warranty obligation, the replaced products become our property. All costs arising from the aforementioned obligation shall be borne by the commissioning party. If products are provided for processing, repair, etc., a warranty will only be given for the adequacy of the execution of the operations that have been assigned.

Our liability does not apply:
a. If the faults are the result of improper use or any other causes not involving material or manufacturing defects.
b. If the cause of the defects cannot be clearly demonstrated.
c. If all instructions for the use of the products, including the guidelines as indicated in this manual, have not been strictly and completely observed.

The manufacturer's liability does not apply if the buyer, on his own initiative, makes or arranges for changes and/or repairs to the delivered products.

3 CHECK BEFORE THE DELIVERY

Upon receipt, check that the stairway tower scaffolding is complete and undamaged.
Contact your supplier immediately if you notice that the parts of the stairway tower scaffolding are damaged or that the delivered parts are incomplete.

4 SAFETY NOTES

4.1 Check before assembly

Verify whether the technicians are sufficiently qualified and that the place where the stairway tower scaffolding is to be erected is safe and suitable.

Caution:
-The steps (on which the stairway tower scaffolding is to be erected) must be sufficiently load-bearing and flat.
-The space must be free of obstacles, both on the ground and above ground.
- Check to make sure that you have all the parts at the workplace.
-Never use damaged, incorrect or non-original parts.

4.2 Assembly

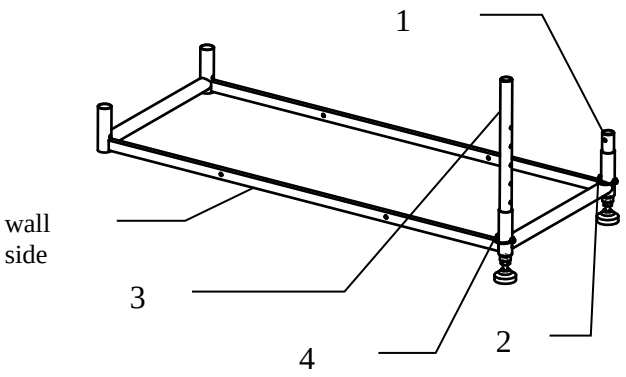
The assembly of the stairway tower scaffolding is described in the assembly instructions and must be carried out by at least 2 persons.
The stairway tower scaffolding must be erected on a flat surface; This can be ensured by using a spirit level; correction is possible by turning the base feet of the height-adjustable support. The platforms must be secured by sliding the pawl of the blow-away protection under the rung. The frames must be secured against each other using locking pins. The horizontal ledgers or handrails must be positioned in such a way that the openings of the claws point outwards.

4.3 Lifting up parts

Lifting parts onto higher areas should be done by passing the parts upwards.
Hoisting equipment may not be attached to the stairway tower scaffolding.

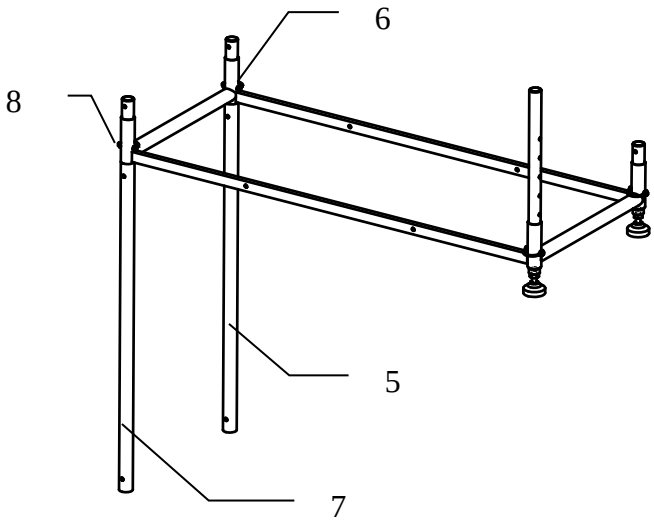
5 ASSEMBLY OF THE STAIRWAY TOWER SCAFFOLDING

5.1 Stairway tower scaffolding low version

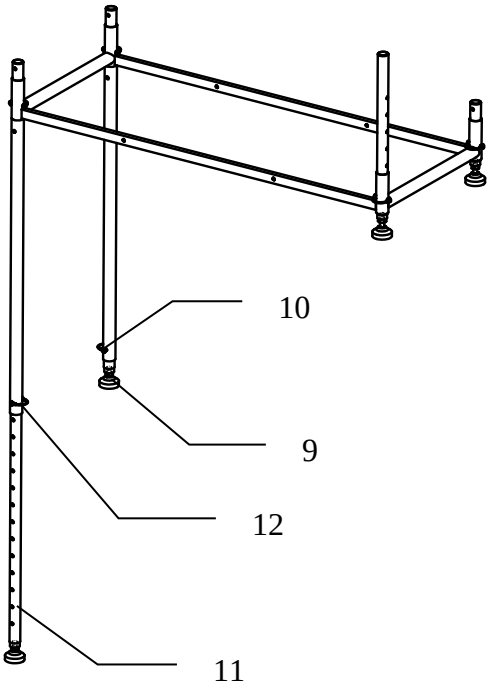


1: insert the short height-adjustable support in the base frame
2: secure with a locking pin
3: insert the medium height-adjustable support in the base frame
4: secure with the locking pin

-Place the base frame with both height-adjustable supports on the highest desired step; make sure that the medium height-adjustable support is placed to the side of the wall.
-the other side of the base frame is supported on the lower steps depending on the version of the stair:
-adjust the medium support to other hole, to support the lower step.
-exchange the short and medium height-adjustable supports.

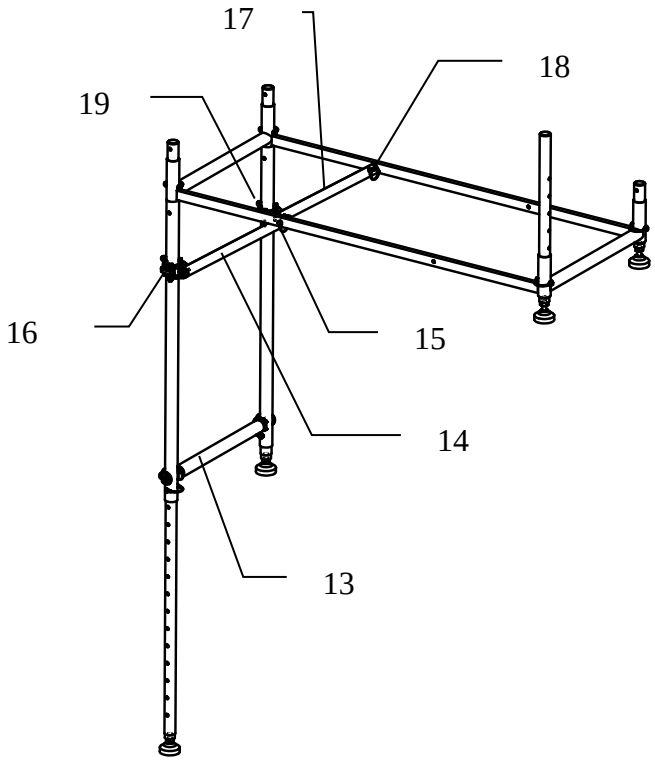


5: insert the support leg in the base frame
6: secure with a locking pin
7: insert the support leg in the base frame
8: secure with a locking pin

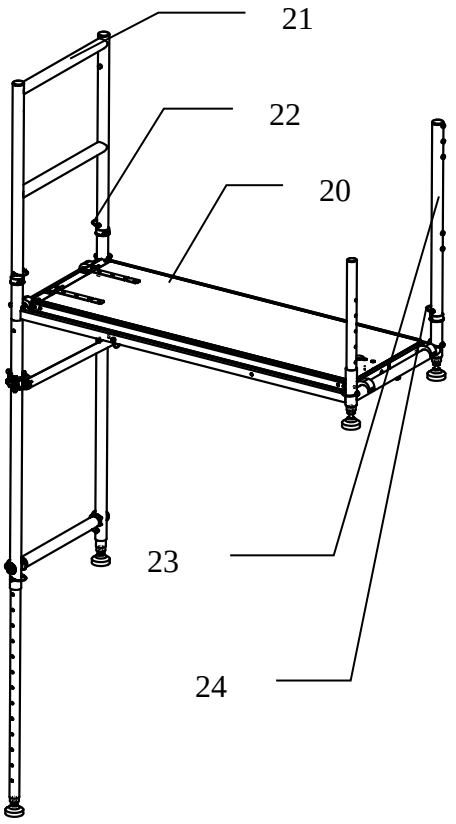


9: insert the long height-adjustable support in the support leg
10: secure with a locking pin
11: insert the long height-adjustable support in the support leg
12: secure with a locking pin

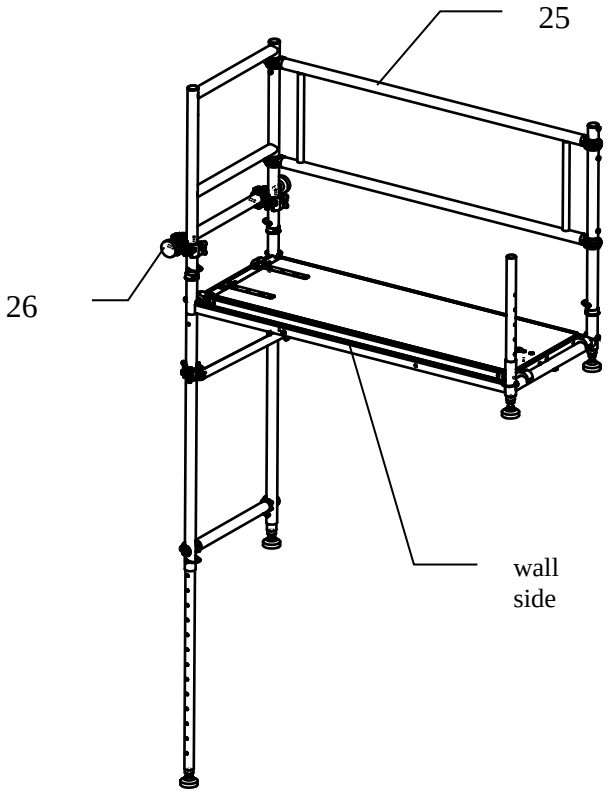
make sure that the base frame is horizontal, by adjusting the length of the "legs":
-coarse adjustment: move the locking pin to another hole
-fine adjustment: turn the base of the height-adjustable support



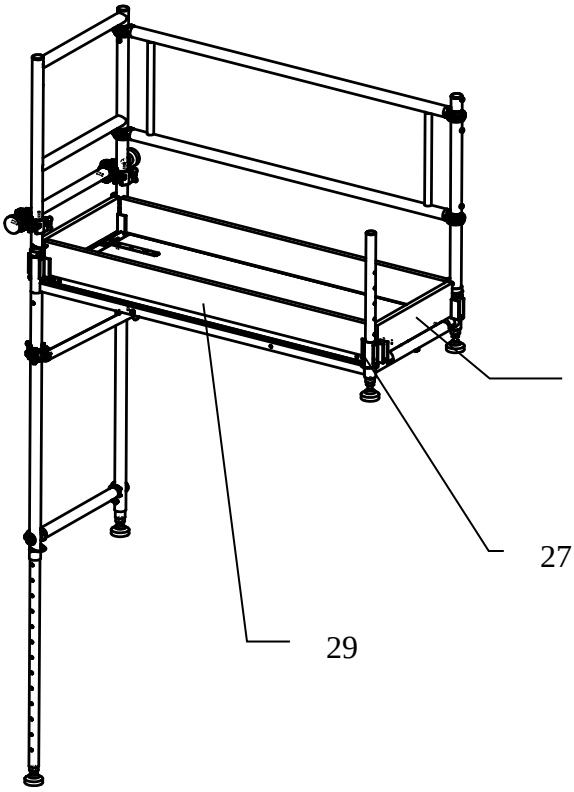
13: place the horizontal ledger; if desired, for free passage to the steps, remove this horizontal ledger <u>after</u> placing the wall support.
14: place the strut
15: secure with a locking pin through the hole in the base frame
16: tighten the joint firmly
17: place the strut
18: secure with a locking pin through the hole in the base frame
19: tighten the joint firmly



20: place the platform; make sure that the hatch opens in the right direction;
slide the blow-away protections under the rung
21: place the end handrail
22: secure with 2 locking pins
23: place the handrail stand
24: secure with a locking pin

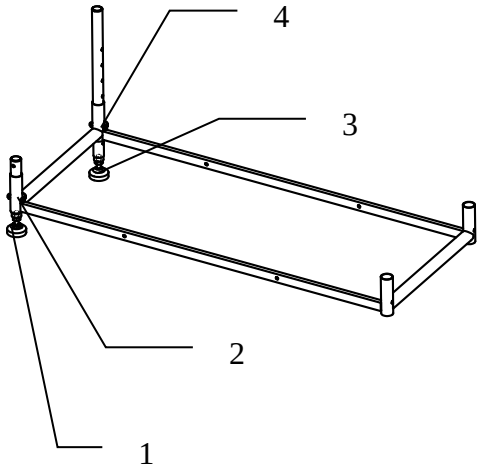


25: place the double handrail
26: place the 2 swivel joints and the wall anchor; tighten the joints firmly; unscrew the feet from the wall spindle, so that wall anchor pushes firmly against the wall (one-sided or two-sided)
Note: if it is not possible to use wall anchors, then use height-adjustable extension legs (like in the high version).



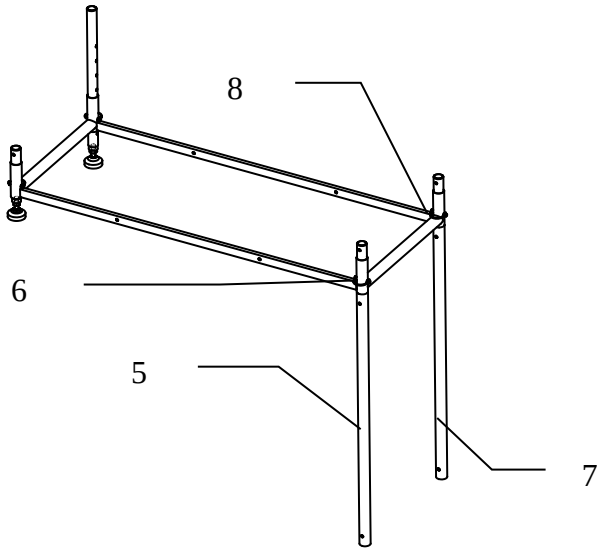
27: place the 4 toe board holders
28: place both transverse toe boards
29: place both longitudinal toe boards

5.2 Stairway tower scaffolding high version

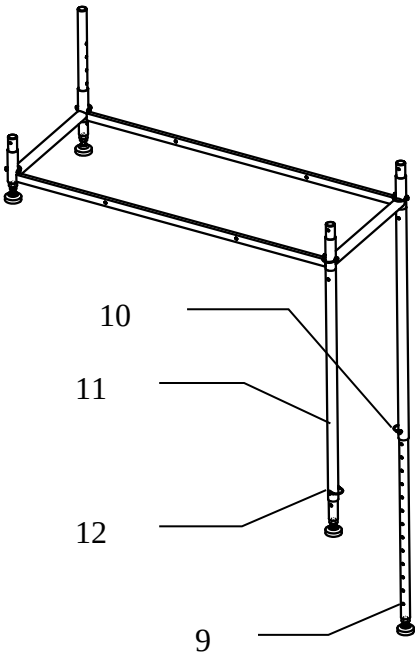


1: insert the short height-adjustable support in the base frame
2: secure with a locking pin
3: insert the medium height-adjustable support in the base frame
4: secure with a locking pin

-place the base frame with both height-adjustable supports on the highest desired step
-the other side of the base frame is supported on the lower steps
depending on the version of the stairs:
-adjust the medium support to the other hole, to support on lower step
-exchange the short and medium height-adjustable supports.

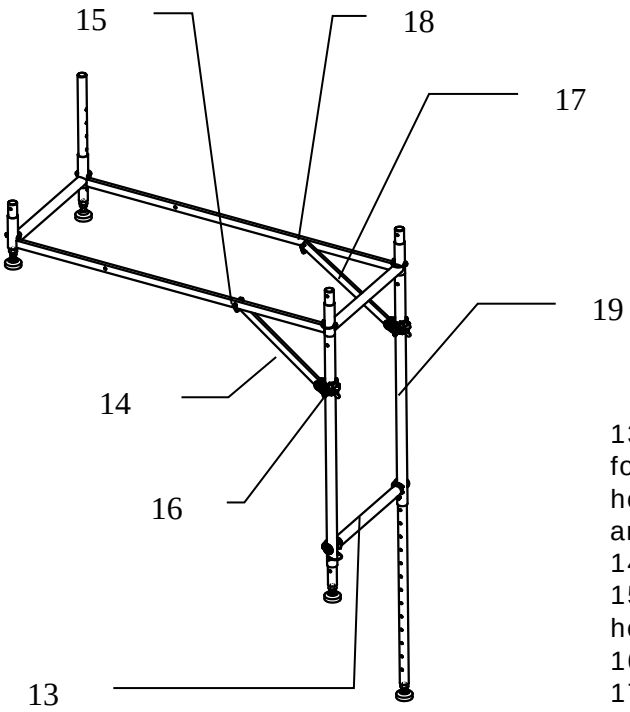


5: insert the support leg in the base frame
6: secure with a locking pin
7: insert the support leg in the base frame
8: secure with a locking pin

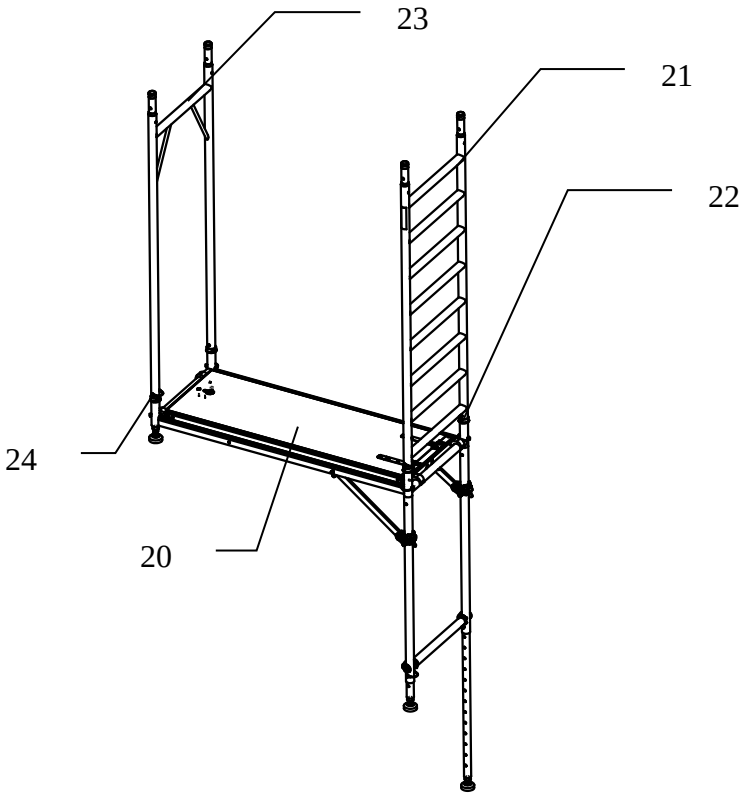


9: insert the long height-adjustable support in the support leg
10: secure with a locking pin
11: insert the long height-adjustable support in the support leg
12: secure with a locking pin

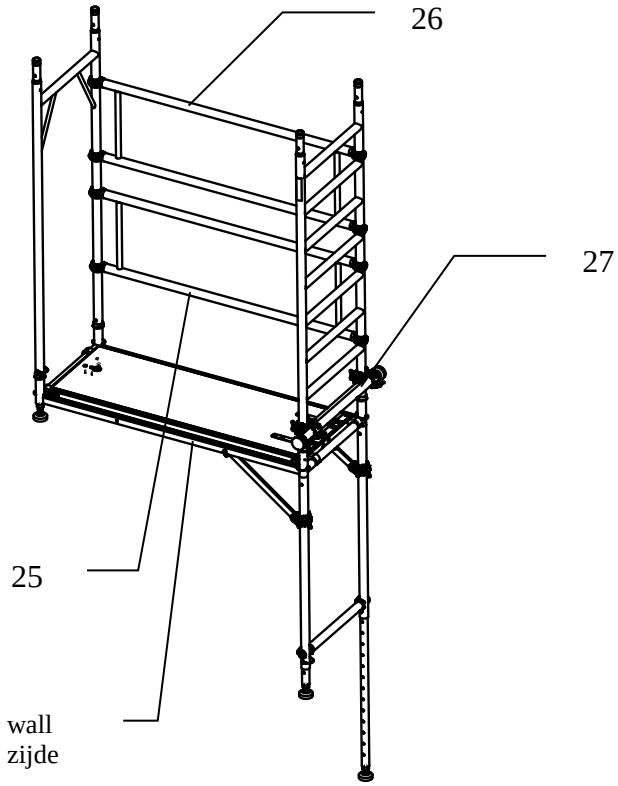
make sure that the base frame is horizontal, by adjusting the length of the "legs":
-coarse adjustment: move the locking pin to another hole
-fine adjustment: turn the base of the height-adjustable support



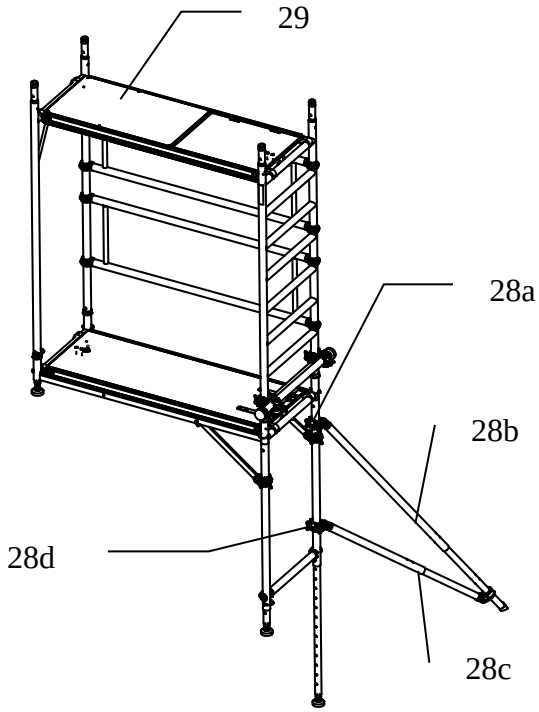
13: place the horizontal ledger; if desired, for free passage to the steps, remove this horizontal ledger <u>after</u> placing of the wall anchors
14: place the strut
15: secure with a locking pin through the hole in the base frame
16: tighten the joint firmly
17: place the strut
18: secure with a locking pin through the hole in the base frame
19: tighten the joint firmly



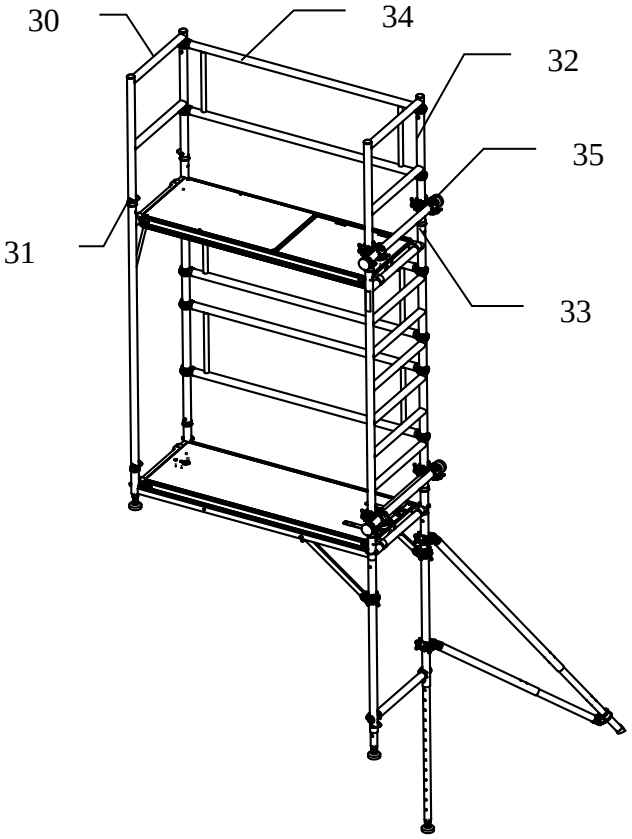
20: place the platform; make sure that the hatch opens in the right direction; slide the blow-away protections under the rung
21: place the 8-stage frame
22: secure with 2 locking pins
23: place the walk-through frame
24: secure with a locking pin



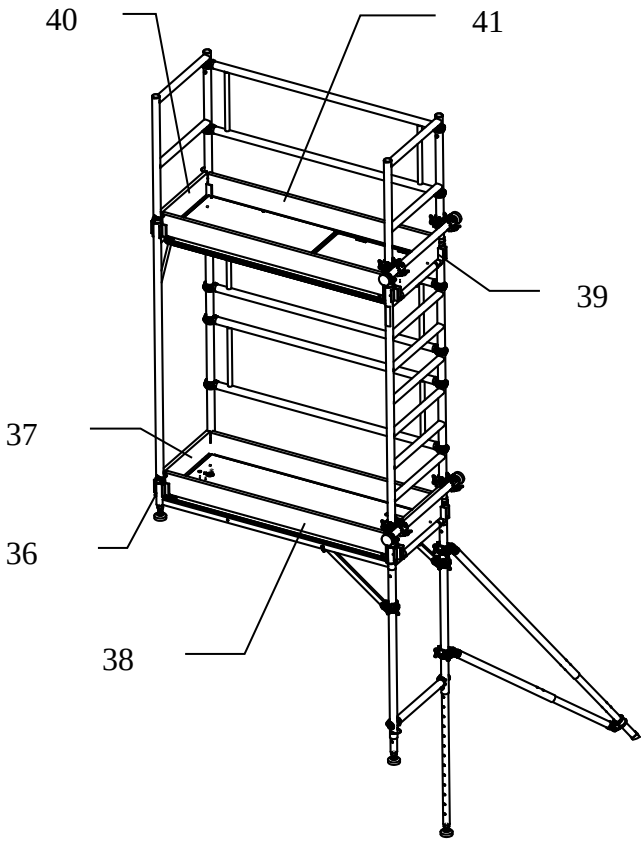
25: place the double handrail
26: place the double handrail
27: place the 2 swivel joints and the wall anchor; tighten the joints firmly; unscrew the feet from the wall spindle, so that the wall anchor pushes firmly against the wall (one-sided or two-sided)



Note: the height-adjustable extension leg should only be used if it is not possible to place the wall anchors:
28: place the height-adjustable extension leg as follows:
28a: place the upper joint on the stand
28b: set the length, so that the base is on the ground; place the locking pin
28c: set the length, so that the lower joint is on the stand, and place the locking pin
28d: tighten the lower joint hand-tight to the stand and slide the joint upwards over the stand until the leg is slightly under tension;
Tighten both joints firmly
29: place the platform; make sure that the hatch is at the side of the 8-stage frame; slide the blow-away protections under the rung



30: place the end handrail
31: secure with 2 locking pins
32: place the end handrail
33: secure with 2 locking pins
34: place the double handrail
35: place the 2 swivel joints and the wall anchor; tighten the joints firmly; unscrew the feet from the wall spindle, so that wall anchor pushes firmly against the wall (one-sided or two-sided)



36: place the 4 toe board holders
37: place both transverse toe boards
38: place both longitudinal toe boards
39: place the 4 toe board holders
40: place both transverse toe boards
41: place both longitudinal toe boards

6 USE

Prior to each use, verify whether:

-the base of the stairway tower scaffolding is correct,
-the total construction is correct and complete,
-there are changes in circumstances that may affect the safe use of the stairway tower scaffolding.

The stairway tower scaffolding is intended to provide access to a workplace, with the purpose of carrying out maintenance work in the stairwell of existing dwellings.
It is not permitted to use the stairway tower scaffolding for other purposes.

The stairway tower scaffolding is to be erected in the stairwell on the existing steps.

No bridges may be made between a stairway tower scaffolding and a building or between stairway tower scaffoldings themselves.

The maximum load amounts 200 kg/m^2 (2 persons plus tools); only 1 level may be loaded per stairway tower scaffolding.

It is forbidden to jump on the platforms; the hatch of the platform must always be closed except when climbing or descending.

The stairway tower scaffolding may only be climbed from the inside, through the frame.

Do not place crates, stairs or other equipment on the work area to gain height.

The stairway tower scaffolding is designed for indoor use, so for use without wind.

Take care when applying horizontal forces (e.g. drilling), which may push the stairway tower scaffolding away from the wall; the maximum horizontal load is 30 kg.

Handrails and guardrails may not be used as steps.

The stairway tower scaffolding must not be exposed to aggressive liquids or gases.

7 DISMANTLING THE STAIRWAY TOWER SCAFFOLDING

Dismantling the stairway tower scaffolding is done in reverse order. Start at the top with removing the toe boards and toe board holders.
Lowering the parts should be done by passing the parts down.
Break down the stairway tower scaffolding from top to bottom. Do not throw down the parts!

8 MAINTENANCE

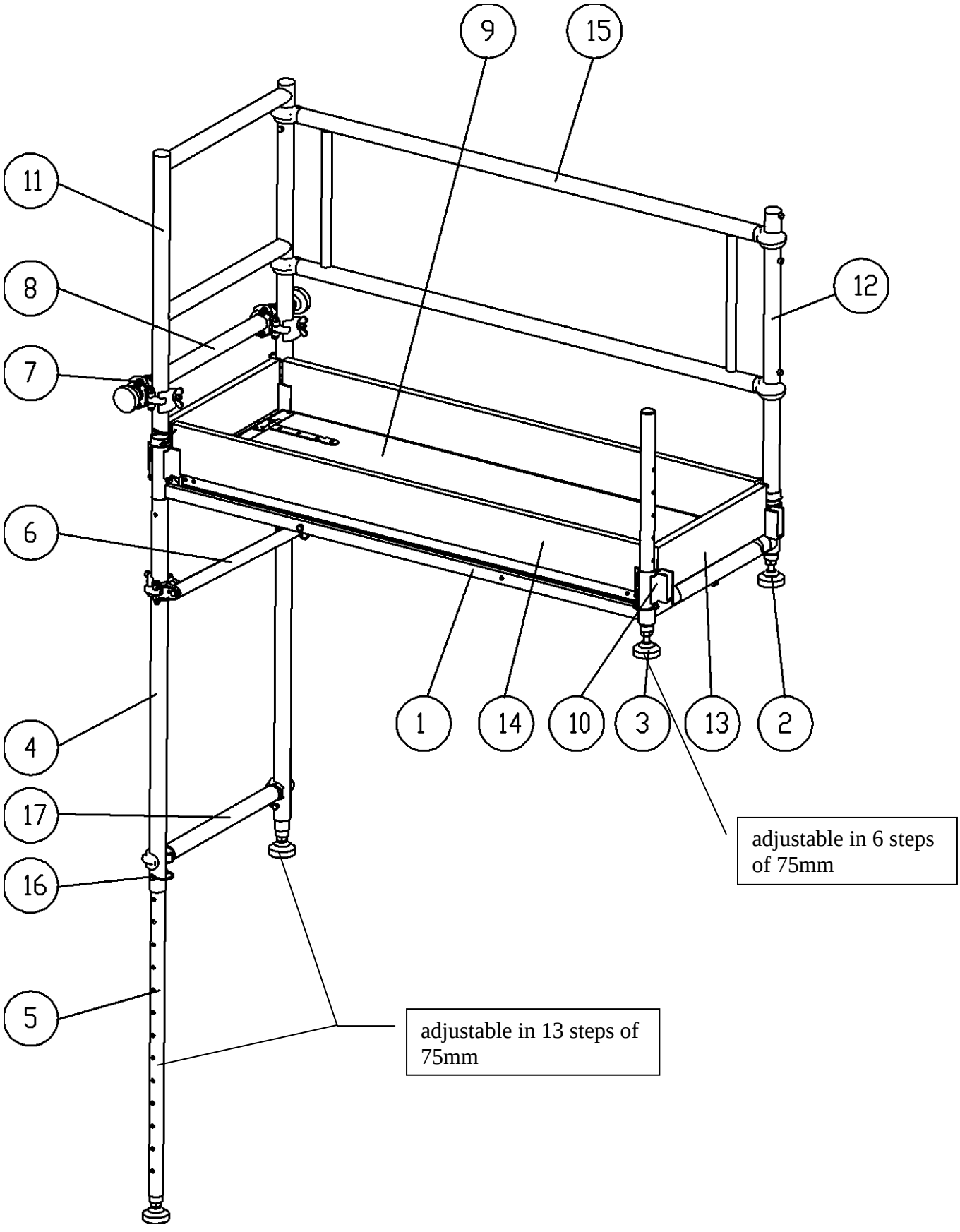
All parts, especially moving parts and welds, must be checked regularly for wear and damage.
Missing and defective parts must be replaced.
Tubes with dents larger than 3 mm or with cracks may no longer be used.
Platforms with longitudinal profiles with larger than 2 mm or with cracks may no longer be used.
Moving parts must be clean and running smoothly.
Repair of scaffolding material must always be carried out in consultation with the manufacturer.

9 PARTS LIST

The following table indicates which parts are required for assembly of a low version stairway tower scaffolding.
Make sure that you have these parts.

No.	quantity	part	order number	dimensions (m)	weight (kg)
1	1	base frame	925.005	1.84x0.74x0.18	4.8
2	1	short height-height-adjustable support	925.010	long 0.36 round 0.08	0.9
3	1	medium height-height-adjustable support	925.015	long 0.80 round 0.08	1.3
4	2	support leg	925.025	long 1.55 round 0.05	1.5
5	2	Long height-adjustable support	925.020	long 1.29 round 0.08	1.8
6	2	strut	925.030	long 0.59	1
7	2	swivel joint	800.935	0.19x0.1x0.1	1.2
8	1	wall anchor	925.035	long 0.97 round 0.08	1.9
9	1	platform with large hatch	330.015	1.85x0.61x0.08	15.6
10	4	toe board holder	800.087	0.12x0.09x0.08	0.2
11	1	end handrail 690	200.122	0.96x0.74x0.05	3
12	1	handrail stand	903.050	long 0.95 round 0.05	1
13	2	toe board	200.092	0.6x0.16x0.03	1.2
14	2	toe board	200.086	1.73x0.16x0.03	2.5
15	1	double handrail 1785	800.058	1.85x0.55x0.05	5.1
16	11	a locking pin	410.162	long 70mm, round 10mm	0.06
17	1	Horizontal ledger	903.039	0.74x0.05x0.05	1.2
18	1	height-adjustable extension leg	410.100	2.2x0.1x0.05	6.6

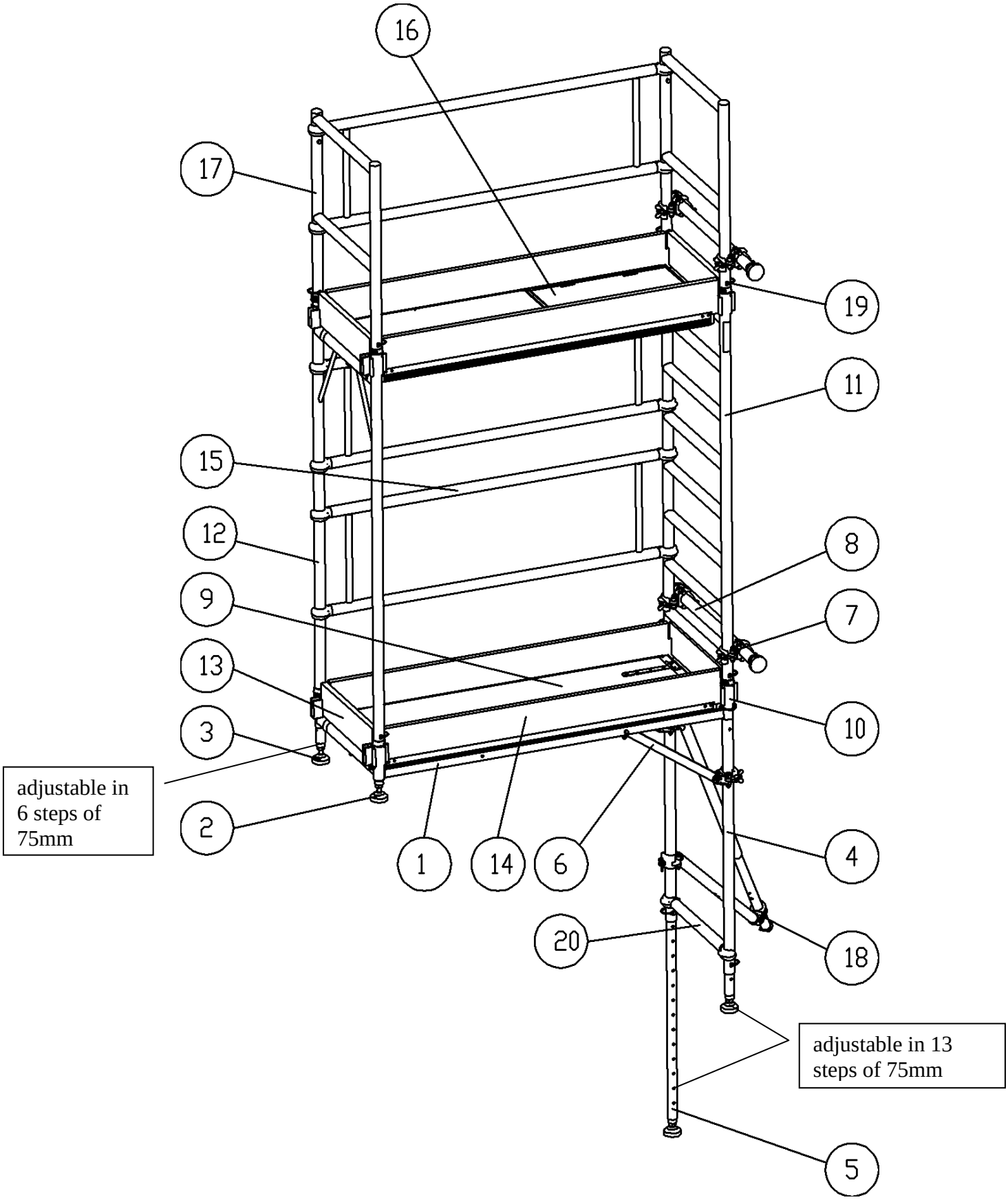
Note: only use the height-adjustable extension leg, if it is not possible to use wall anchors.


9
15
11
8
12
7
6
1
14
10
3
13
2
4
17
16
adjustable in 6 steps of 75mm
5
adjustable in 13 steps of 75mm

The following table indicates which parts are required for assembly of a high version stairway tower scaffolding.
Make sure that these parts are present as well.

No.	quantity	part	order number	dimensions (m)	weight (kg)
1	1	base frame	925.005	1.84x0.74x0.18	4.8
2	1	short height-adjustable support	925.010	long 0.36 round 0.08	0.9
3	1	medium height-adjustable support	925.015	long 0.80 round 0.08	1.3
4	2	support leg	925.025	long 1.55 round 0.05	1.5
5	2	long height-adjustable support	925.020	long 1.29 round 0.08	1.8
6	2	strut	925.030	long 0.59	1
7	4	swivel joint	800.935	0.19x0.1x0.1	1.2
8	2	wall anchor	925.035	long 0.97 round 0.08	1.9
9	1	platform with large hatch	330.015	1.85x0.61x0.08	15.6
10	8	toe board holder	800.087	0.12x0.09x0.08	0.2
11	1	8-stage frame narrow	200.012	2.15x0.74x0.05	8.9
12	1	walk-through frame	920.030	2.15x0.74x0.05	5.1
13	4	toe board	200.092	0.6x0.16x0.03	1.2
14	4	toe board	200.086	1.73x0.16x0.03	2.5
15	3	double handrail 1785	800.058	1.85x0.55x0.05	5.1
16	1	platform with hatch	310.015	1.85x0.61x0.08	15.4
17	2	end handrail 690	200.122	0.96x0.74x0.05	3
18	1	height-adjustable extension leg	410.100	2.2x0.1x0.05	6.6
19	15	a locking pin	410.162	long 70mm, round 10mm	0.06
20	1	Horizontal ledger	903.039	0.74x0.05x0.05	1.2

Note: only use the height-adjustable extension leg, if it is not possible to install wall anchors.


16
17
19
11
15
12
8
9
7
13
10
3
adjustable in 6 steps of 75mm
2
1
14
6
4
20
18
adjustable in 13 steps of 75mm
5