

## Layher ZifaTower

Mobile access and working towers  
in accordance with: HD 1004;  
DIN 4422, Part 1 (Version 8/92)

Working platform 0.75 x 1.8 m

Max. working height:  
in closed rooms 7.3 m, outdoors 7.3 m

Permissible load 2 kN/m<sup>2</sup>  
on max. one working level:  
scaffold group 2 acc. to HD 1004;  
DIN 4422, Part 1 (Version 8/92)



Aluminium Rolling Towers

Instructions for Assembly and Use

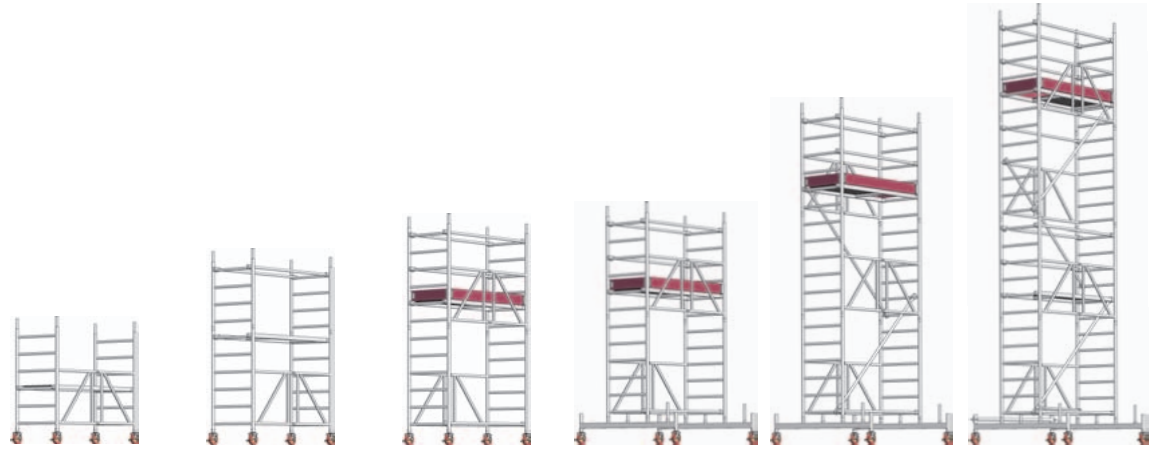


Layher® 

More Possibilities. The Scaffolding System.

# ► Tower types

Layher ZifaTower



Tower model	620	621	622	623	624	625
Working height (m)	2.9	3.65	4.1	4.3	5.8	7.3
Scaffold height (m)	1.84	2.84	3.34	3.49	4.99	6.49
Platform height (m)	0.9	1.65	2.1	2.3	3.8	5.3
Weight (kg) [without ballast]	43.3	60.4	89.6	117.9	146.5	210.5


# ► Assembly


►1 Pay attention to the General Assembly and Usage Instructions on page 8. The examples shown of the tower models 620-625 are designed for use indoors and outdoors. Pay attention to the material lists and ballasting tables on page 6.



## ►2 Basic assembly

### ►2.1 Tower model 620



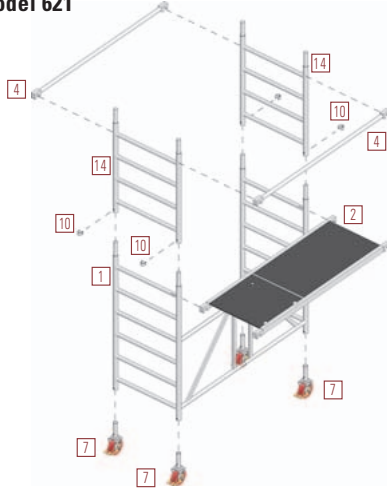
1. Open basic frame  and lock the joints in the hinge.

2. Lock the deck  into the cross rung. Only **the first, second or third rung from below** is allowed to be used.

3. Insert the castors  into the uprights of the basic frame  and secure against falling out with bolts M 12 x 60, with nut.

# Assembly

## ►2.2 Tower model 621



1. Open basic frame [1] and lock the joints in the hinge.
2. Access deck [2] into the cross rung.
3. Insert the castors [7] into the uprights of the basic frame [1] and secure against falling out with bolts M 12 x 60, with nut.

4. Fit ladder frames [14] onto the basic unit [1] and brace them with two guardrails [4]. The joints of the ladder frames must be secured with spring clips [10].

## ►2.3 Tower model 622

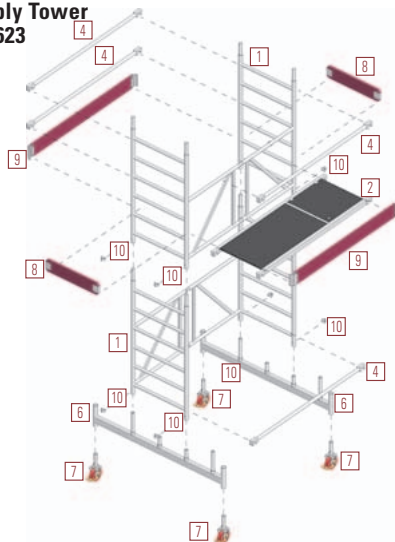
1. Open first basic frame [1] and lock joint in the hinge. Brace with plan brace [5] and guardrail [4] (assembly model to sketch of model 623).

frame [1] and secure against falling out with bolts M 12 x 60 with nut.

2. Insert the castors [7] into the uprights of the basic

Further assembly according to model 623, starting at point 2.4.

## ►2.4 Assembly Tower model 623



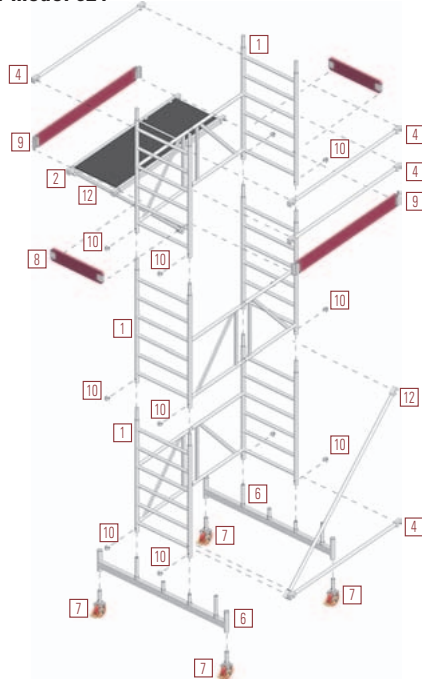
1. Insert the castors [7] into the mobile beam [6] and secure against falling out with bolts M 12 x 60, with nut.
2. Open the first basic unit [1] and firmly engage the joint in the folding section. Brace it with a guardrail [4] and mount it with the ladder frames on the mobile beams [6]. Secure the basic unit [10] on the mobile beams [6] with spring clips.
3. Open second basic frame [1] and lock the joint in the hinge. Put it on the first basic frame turning through 180°, and secure with spring clips [10].

4. Lock access deck [2] into the second rung from bottom of the upper basic frame.

5. Complete working platform [2] with 2 toe boards [9] and 2 end toe boards [8]. Install lateral protection according to regulations with 3 guardrails [4]. After installation push guardrail [4] outwards as far as possible.

# Assembly

## ►2.5 Assembly Tower model 624



1. Insert the castors [7] into the mobile beam [6] and secure them against falling out with bolts M 12 x 60, with nut.

2. Open first basic frame [1] and lock the joint in the hinge. Brace with a guardrail [4] and mount it with the ladder frames on the mobile beam [6]. Secure basic frame [1] with spring clips [10] at the mobile beam [6].

3. Open second basic frame [1] and lock the joint in the hinge. Put it onto the first basic frame, turning through 180°, and secure with spring clips [10].

**During assembly and dismantling, system decks or scaffold planks according to DIN 4420 (min. 28 x 4.5 x 220 cm long), must be built in as auxiliary decks at maximum height intervals of 2.0 m. These auxiliary decks, providing a safe footing for assembly and dismantling, are removed after erection. Each platform must be completely boarded.**

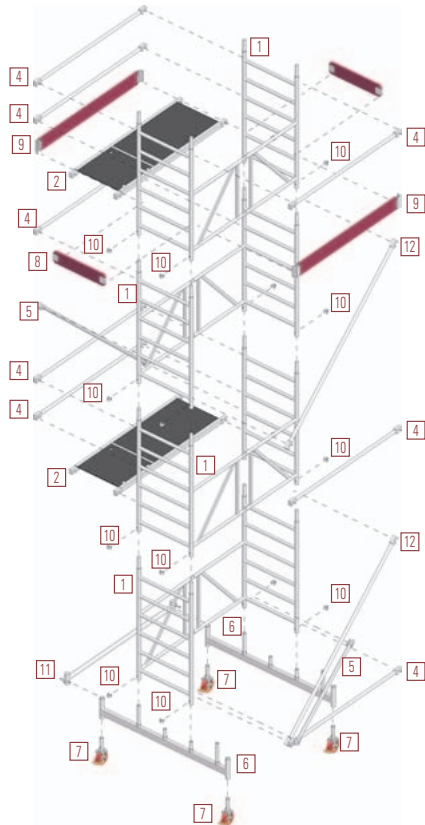
4. Open third basic frame [1] and lock the joint in the hinge. Put it onto the 2<sup>nd</sup> basic frame turning through 180° to the 2<sup>nd</sup> basic frame, and secure with spring clips [10].

5. Lock access deck [2] into the second cross rung from bottom of the upper basic frame. Lock the diagonal braces [12] into the rungs of the ladder frames and push them outwards as far as possible to brace the ladder frames.

6. Complete working platform [2] with 2 toe boards [9] and 2 end toe boards [8]. Install lateral protection according to regulations with 3 guardrails [4]. After installation push guardrails [4] to the outside as far as possible.

# Assembly

## ►2.6 Assembly Tower model 625



1. Insert the castors [7] into the mobile beam [6] and secure them against falling out with bolts M 12 x 60, with nut.

2. Open first basic frame [1] and lock the joint in the hinge. Brace with plan brace [5] and guardrail [4] and insert onto the mobile beam [6]. Secure basic frame [1] with spring clips [10] at the mobile beam [6]. Connect mobile beams [6] with base ledger [11]. The base ledger [11] is inserted onto the projecting tubes at the end of the mobile beam [6] and is wedged after aligning.

3. Open second basic frame [1] and lock the joint in the hinge. Put it onto the first basic frame, turning through 180°, and secure with spring clips [10].

**During assembly and dismantling, system decks or scaffold planks according to DIN 4420 (min. 28 x 4.5 x 220 cm long), must be built in as auxiliary decks at maximum height intervals of 2.0 m. These auxiliary decks, providing a safe footing for assembly and dismantling, are removed after erection. Each platform must be completely boarded.**

4. Lock access deck [2] into the second cross rung from bottom of the upper basic frame. Lock the diagonal braces [12] into the rungs of the ladder frames and push them outwards as far as possible to brace the ladder frames.

5. Install lateral protection according to regulations with 3 guardrails [4]. After installation push guardrails [4] to the outside as far as possible.

6. Open third basic frame [1] and lock the joint in the hinge. Put it onto the 2<sup>nd</sup> basic frame turning through 180° to the 2<sup>nd</sup> basic frame, and secure with spring clips [10].

7. Open fourth basic frame [1] and lock the joint in the hinge. Put it onto the first basic frame, turning through 180°, and secure with spring clips [10].

8. Lock access deck [2] into the second cross rung from bottom of the upper basic frame. Lock the diagonal braces [12] into the rungs of the ladder frames and push them outwards as far as possible to brace the ladder frames.


9. Complete working platform [2] with 2 toe boards [9] and 2 end toe boards [8]. Install lateral protection according to regulations with 3 guardrails [4]. After installation push guardrails [4] to the outside as far as possible.

# Parts list

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Tower model	Ref. No.	620	621	622	623	624	625
Zifa 75, basic frame	1300.006	1	1	2	2	3	4
Ladder frame 75/4	1297.004	–	2	–	–	–	–
Base ledger 1.8 m	1211.180	–	–	–	–	–	1
Access deck 1.8 m	1242.180	–	1	1	1	1	2
Deck 1.8 m	1241.180	1	–	–	–	–	–
Guardrail 1.8 m	1205.180	–	2	4	4	4	8
Diagonal brace 2.5 m	1208.180	–	–	–	–	2	3
Mobile beam	1214.180	–	–	–	2	2	2
Plan brace 1.95 m	1209.180	–	–	–	–	–	1
Toe board 1.8 m, with claw	1239.180	–	–	2	2	2	2
End toe board 0.75 m	1238.075	–	–	2	2	2	2
Spring clip	1250.000	–	4	4	8	12	16
Castor 150, 4 kN	1308.150	4	4	4	4	4	4
Bolt M 12 x 60, with nut	1203.060	4	4	4	4	4	4
Ballast	1249.000	Number of ballast weights according to Ballasting table.					

## Ballasting

In order to ballast the tower, use Layher ballast weights  (10 kg each). Couplers with hand wheels permit simple, quick and secure fixing of the respective ballast required at the correct places. Only these ballast weights are to be used, **liquid or granular ballast materials must not be used**. The ballast weights must be distributed evenly to all ballasting fixing points.

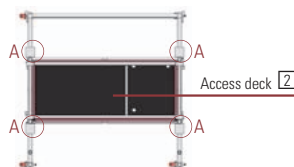
Tower model		620	621	622	623	624	625
Indoor use	erection in centred position	○	○	16	○	4	8
	erection in off-centred position	–	–	–	○	4	8
Outdoor use	erection in centred position	○	○	16	○	4	12
	erection in off-centred position	–	–	–	2	6	14

The figures shown indicate the number of ballast weights of 10 kg each. ○ = no ballasting required.

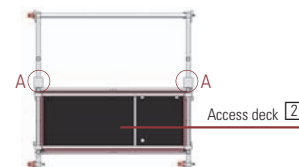
### How to position ballast weights

○ = fixing point for ballast weights  
A = fixing points for remainder of ballast weights not divisible by 4



centred position (top view)

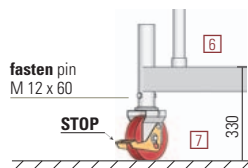


off-centred position (top view)



## Operating the castors

During assembly and while working the castors  must be kept locked by pressing down the brake lever labelled stop. When the brake is locked, the lever labelled STOP is in the down position. For movement, the castors  are unlocked by pushing the other lever down.



# Use outdoors

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For **outdoor use**, ballast weights according to the **ballasting table** on page 6 must be used to grant sufficient standing stability.

## Dismantling

During assembly and dismantling, system decks or scaffold planks according to DIN 4420 (min. 28 x 4.5 x 220 cm long), must be built in as auxiliary decks at maximum height intervals of 2.0 m. These auxiliary decks, providing a safe footing for assembly and dismantling, are removed after the erection. Each platform must be completely boarded.

Dismantling is carried out in the reverse order of the assembly.

**When dismantling, do not remove bracing elements such as diagonal <sup>12</sup>, guardrails <sup>4</sup> or access decks <sup>2</sup> before taking off the upper basic frame <sup>1</sup>.**

To remove parts, open the snap-on claws by depressing the locking clips. The red claws of the decks enable a single person to assemble or dismantle them easily, open them at one end and rest the base of the opened clips on the rung.

Now open the opposite clips and remove the deck.

## Parts list

<sup>1</sup> Zifa 75, basic frame

1300.006



<sup>2</sup> Access deck  
1.8 m

1242.180



<sup>3</sup> Deck  
1.8 m

1241.180



<sup>4</sup> Guardrail  
1.8 m

1205.180



<sup>5</sup> Plan brace  
1.95 m

1209.180



<sup>6</sup> Mobile beam  
1.8 m

1214.180



<sup>7</sup> Castor 150, 4 kN,  
plastic wheel 150 mm Ø  
with single action brake device

1308.150



Bolt with nut  
M 12 x 60

1203.060

<sup>8</sup> End toe board  
0.75 m

1238.075



<sup>9</sup> Toe board  
1.8 m

1239.180



<sup>10</sup> Spring clip

1250.000



<sup>11</sup> Basic ledger  
1.8 m

1211.180



<sup>12</sup> Diagonal brace  
2.5 m

1208.180



<sup>13</sup> Ballast  
10 kg

1249.000



<sup>14</sup> Ladder frame 75/4

1297.004



# General Instructions on Assembly and Usage

## Layher ZifaTower

The rolling tower may be used for the scaffolding group and as additionally specified in the German operating safety regulations (BetrSichV). The rules of the German professional associations governing the building of rolling towers (BGR 172/April 2000) and of small scaffolding units (BGR 173/April 2000) must be complied with. For mobile working platforms (rolling towers), DIN 4422 Part 1 (issue 8/92) applies. For small scaffolding units (platform height  $\leq 2$  m), BGR 173 applies.

### The user of mobile working platforms must comply with the following instructions:

1. The user must check the suitability of the selected rolling tower for the work to be performed (Section 4 of BetrSichV).
2. The max. platform height is, in accordance with DIN 4422 Part 1:
  - inside buildings 12.0 m
  - outside buildings 8.0 mThe material and ballasting requirements on page 6 must be complied with; risk of accidents in the event of non-compliance. For greater heights, additional measures are necessary, obtainable from the manufacturer. Stability of the rolling tower must be assured.
3. The assembly, modification or dismantling of the rolling tower in accordance with the present instructions for assembly and use may only be performed under the supervision of a qualified person and by professionally suitable personnel after special instruction. Only the scaffolding types shown in these instructions for assembly and use may be used. The unit must, after assembly and before being put into service, be inspected by persons qualified to do so (Section 10 of BetrSichV). The inspection must be documented (Section 11 of BetrSichV). During assembly, modification or dismantling, the rolling tower must be provided with a prohibition sign indicating "No access allowed" and be adequately safeguarded by means of barriers preventing access to the danger zone (BetrSichV Annex 2, para. 5.2.5).
4. Before starting assembly, examine all components in order to make sure they are in perfect condition. Only undamaged original components for Layher Mobile tower systems may be used. Tower parts such as snap-on claws and spigots must be cleaned of dirt after use. Tower parts must be protected against slipping and impacts during truck transportation. It must be ensured that the tower parts are stored where they are free from weather effects. Tower parts must be handled in such a way that they are not damaged. For the fixing of ballast weights and wall supports see the tables on page 6. **Attention: Danger of accidents if the ballasting table is not adhered to.**
5. During assembly and dismantling, system decks or scaffold planks according to DIN 4420 (minimum 28 x 4.5 x 220 cm long), must be built in as auxiliary decks at maximum height intervals of 2.0 m. Observe the requirements for maximum support distances of scaffold boards according to their thickness. These

### auxiliary decks, providing a safe footing for assembly and dismantling, are removed after the erection. Each platform must be completely boarded.

Due to structural reasons intermediate platforms with access decks must be built in at maximum intervals of 4.00 m. For safety reasons, it is advisable for two persons to erect the towers above a height of 4.0 m. To assemble the upper tower sections, the individual parts must be hoisted using transportation ropes. Small quantities of tools and materials can be carried up in person, otherwise also hoisted by transportation ropes to the working level.

6. Secure the ladder frame joints with spring clips against unintended lift-off.
7. During assembly push guardrails and diagonal braces outwards as far as possible on the ladder rungs.
8. Access to the working platform is only permitted on the inside of the tower type 623, 622, 624 and 625.
9. Persons working on mobile towers should not lean or press against the guardrails, nor jump onto platforms.
10. It is not permitted to affix lifting or hoisting devices to mobile working platforms.
11. Move the tower manually and only on firm, level ground which is free from obstacles and sufficiently load bearing. Move the tower only longitudinally or diagonally. Avoid any impact. After extending the base one sided with wall supports in use, move parallel to the wall only. Do not exceed normal walking speed during movement.
12. No persons or loose objects must remain on the tower when moving it.
13. Before use and after moving the tower, lock the castors by pressing the brake lever.
14. Do not expose the tower to corrosive liquids or gases.
15. Mobile working platforms must not be bridged between each other, or a building without special verification.
16. At a wind force above 6 (Beaufort-Scale) and after finishing the working shift, move the tower when operating outdoors or in open buildings to a wind protected area or secure it by other appropriate measures against toppling over. (Wind speeds above 6 on the Beaufort-Scale can be recognised by noticeable difficulty when walking). Avoid horizontal and vertical loads that can cause the mobile work platform to topple over, such as
  - horizontal loads, for example when working on adjacent structures
  - additional wind loads (due to tunnel effect from through-type buildings, unclad buildings and corners).If possible, rolling towers used on the outside of buildings must be securely attached to the building or to another structure. It is recommended that rolling towers be anchored when they are left unattended.
17. Keep the access hatches shut, except when climbing the tower.
18. For climbing up and down the mobile beam may be used as a rung.
19. Set the rolling tower vertically by placing suitable materials underneath it. The inclination must not exceed 1%.
20. A rolling tower is not intended for use as a stairway tower providing access to other structures.
21. It is prohibited to jump on the decks.
22. A check must be made that all parts, auxiliary tools and safety equipment (ropes etc.) for erecting the rolling towers are available on the site.
23. When stipulated, mobile beams or outriggers and ballast must be installed.
24. It is prohibited to increase the height of the decking by using ladders, boxes or other objects.
25. It is not permitted to construct bridges between the rolling tower and a building.
26. Rolling towers are not designed to be lifted or suspended.
27. It is not permitted to work on two or more decks at the same time.

All dimensions and weights are for guidance only. Subject to technical modifications.

Sales exclusively on the basis of our currently valid general terms of business.

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More Possibilities. The Scaffolding System.

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