

Layher Uni Light Tower
Instructions for Assembly and Use

Mobile working platforms
according to DIN EN 1004:2005-03

Working platform 0.75 x 1.8 m

max. working height:
indoors 9.3 m
outdoors 9.3 m

Load bearing capacity 2.0 kN/m²
on max. one working level
(scaffold group 3 as per DIN EN 1004:2005-03)



Layher® 

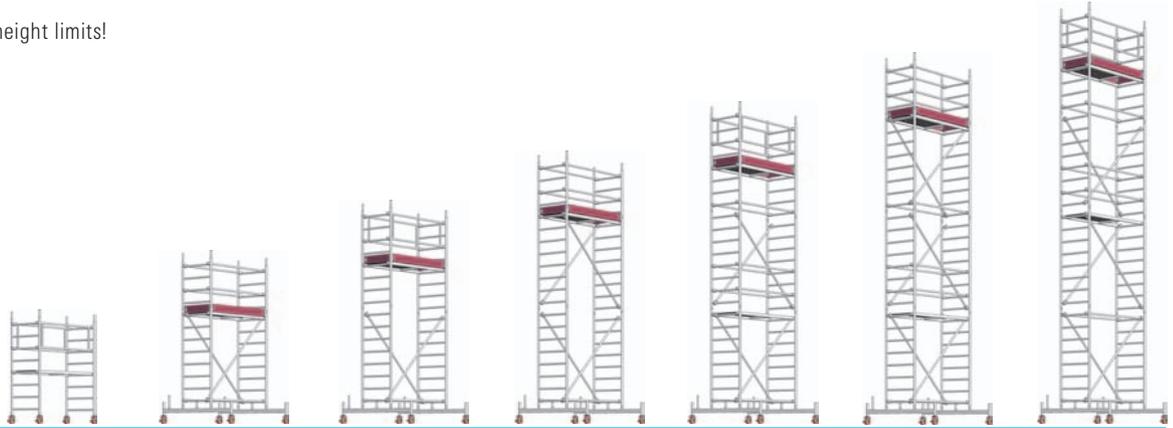
More Possibilities. The Scaffolding System.

Tower Types

For outdoor use observe height limits!

Layher Uni Light Tower

Tower Models 3201– 3207



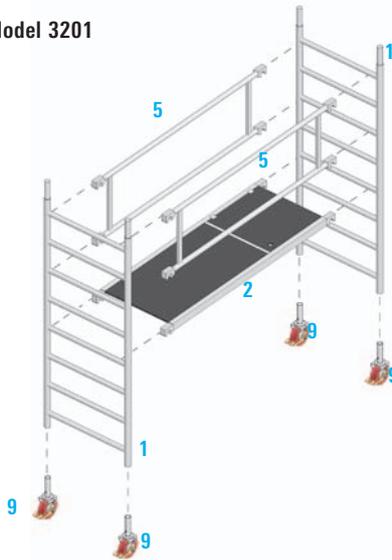
Tower Model	3201	3202	3203	3204	3205	3206	3207
Working height (m)	3.15	4.3	5.3	6.3	7.3	8.3	9.3
Scaffold height (m)	2.44	3.55	4.55	5.55	6.55	7.55	8.55
Platform height (m)	1.15	2.3	3.3	4.3	5.3	6.3	7.3
Weight (kg)	54.3	118.7	127.1	148.9	190.6	208.3	222.7

Assembly

►1 Pay attention to the General Assembly and Usage Instructions on page 6. The examples shown of the tower models 3201–3207 are designed for use indoors and outdoors. Pay attention to the parts list and ballasting table on page 5.

►2 Tower Model 3201

Drawing 1



Insert the castors **9** into the ladder frames **1** and secure against falling out by fastening the bolts M 12x60 and self-securing nuts through the holes provided. Connect and brace both ladder frames **1** with two double guardrails **5**. Clip the access deck **2** onto the 4th rung from the bottom. The snap-on claws of all parts are to be locked onto the ladder frames **1** from above.

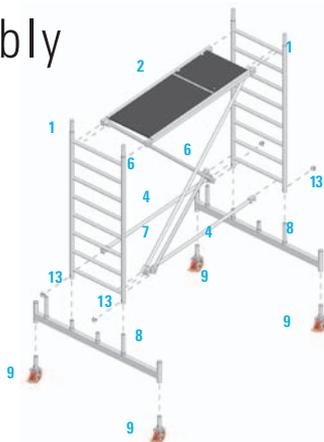
A three-part side guard must be attached when this is required by the regulations applying for the job to be performed.

In order to remove the different parts, depress the locking clips of the snap-on claws. The red claws of the deck enable a single person to assemble or dismantle them easily; open them at one end and rest the base of the clips on the rung. Now open the opposite clips and remove the deck.

Assembly

►3 Basic assembly

**Tower Models
3202 – 3207**



Insert the castors **9** into the mobile beam **8** and secure against falling out by fastening the bolts M 12x60 and self-securing nuts through the holes provided. Insert the ladder frames **1** onto the mobile beam **8** and secure with spring clips **13**. Clip the two diagonal braces **6** onto the ladder frames **1**. Mount two guardrails **4** and one horizontal brace **7** onto the first rung of the ladder frame **1** from the bottom.

For models 3205 and 3206 only, one access deck **2** will be locked onto the first rung of the ladder frame **1** from the top. For model 3207 only, two guardrails **4** will be locked onto the first rung of the ladder frame **1** from the top. Pay attention to the ballasting tables.

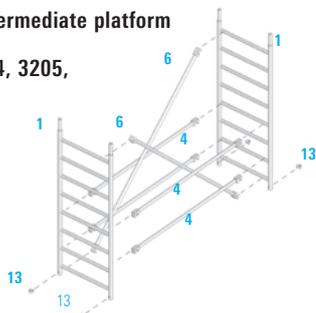
Layer Uni Light Tower

Once mounted push all diagonal braces **6 and guardrails **4** outwards as far as possible.**

For the following assembly steps see:
for Tower Model 3202 chapter 5.1.
for Tower Model 3203 chapter 5.2.
for Tower Model 3204 up to 3207 chapter 4.

►4 Assembling the intermediate platform

**Tower Models 3204, 3205,
3206 and 3207**



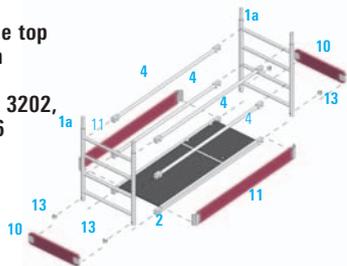
Erect the intermediate platform by inserting two ladder frames **1** and fixing two diagonal braces **6**. Secure the ladder frames **1** with spring clips **13**. For tower model 3205, 3206 and 3207 only 4 guardrails **4** will be locked onto the 2nd and 4th rung of the ladder frames **1** from the bottom. Once mounted push all diagonal braces **6** and guardrails **4** outwards as far as possible.

For the following assembly steps see:
for Tower Model 3204 and 3206 chapter 5.1.
for Tower Model 3205 and 3207 chapter 5.2.

During assembly and dismantling, system decks or scaffold planks according to DIN 4420-3 (minimum measurement: 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.

►5 Assembling of the top working platform

►5.1 Tower Models 3202, 3204 and 3206

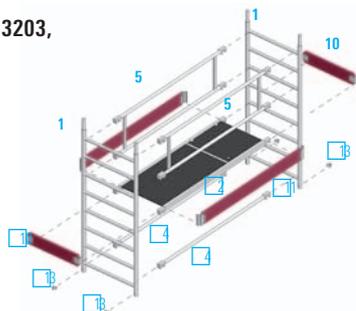


Insert an access deck **2** on the top rung of the ladder frames **1**. Start mounting the top working platform by inserting both ladder frames **1a** and secure them with spring clips **13**. Lateral protection will consist of four guardrails **4**.

Mount two toe boards 1.8 m **11** between the ladder frames **1a** and secure them by adding two end toe boards 0.75 m **10**.

Once mounted push all diagonal braces **6 and guardrails **4** outwards as far as possible.**

►5.2 Tower Models 3203, 3205 and 3207

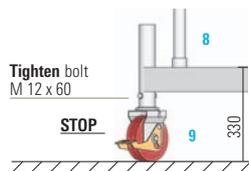


Insert ladder frames **1** and secure them with spring clips **13**. Onto the 5th rung of the ladder frame from the top attach the access deck **2**. Then build in the lateral protection with two double guardrails **5**. After that mount two toe boards 1.8 m **11** between the ladder frames **1** and secure them by adding two end toe boards 0.75 m **10**.

For tower model 3205/3207 **only**, two additional guardrails **4** are clipped onto the first rung of the ladder frame **1** from the bottom. **After assembly push all double guardrails **5** and guardrails **4** outwards as far as possible.**

Assembly

6 Operating the castors



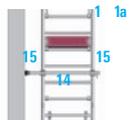
During assembly and while working, the castors **9** must be kept locked by pressing down the brake lever labelled STOP.

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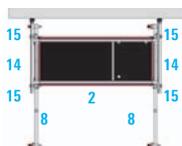
When the brake is locked, the lever labelled STOP is in the down position. For movement, the castors are unlocked by pushing the other lever down.

Wall support

side view



Top view



under load

For work performed on a load-bearing wall, ballasting can be reduced in accordance with the ballasting table (see page 5). In this case, wall supports must be installed on both sides of the tower. Use a Uni-distance-tube **14** and fix it to the ladder frame **1, 1a** with the couplers **15**. The mobile beams are to be mounted so that the

extension arms project from the side opposite to the wall. The wall supports must be attached at the height of the top working platform or at most 1 m below that.

Dismantling

During assembly and dismantling, system decks or scaffold planks according to DIN 4420-3 (minimum measurement: 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.

To remove the different 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 clips on the rung. Now open the opposite clips and remove the deck.

Dismantling is carried out in the reverse order of assembly.

Remove the diagonal braces **6** and bracing elements only after having taken down the ladder frames **1** situated above.

Components

1a Ladder frame 75/4 1297.004



1 Ladder frame 75/8 1297.008



2 Access deck 1.8 m 1242.180



3 Deck 1.8 m 1241.180



4 Guardrail 1.8 m 1205.180



5 Double guardrail 1.8 m 1206.180



6 Diagonale 2.5 m 1208.180



7 Horizontal brace 1.95 m 1209.180



8 Mobile beam 1.8 m 1214.180



9 Castor 150, Plastic wheel, 4 kN with single action brake device Bolt M 12 x 60 with nut 1308.150 1203.060



10 End toe board 0.75 m 1238.075



11 Toe board with claw 1.8 m 1239.180



12 Ballast (10 kg) 1249.000



13 Spring clip 1250.000



14 Uni-distance tube 1.1 m 1275.110



15 Special double coupler, rigid 19 mm WS 1269.019 22 mm WS 1269.022



16 Base ledger 1.8 m 1211.180



Tower Model	Ref.	3201	3202	3203	3204	3205	3206	3207
Ladder frame 75/4	1297.004	–	2	–	2	–	2	–
Ladder frame 75/8	1297.008	2	2	4	4	6	6	8
Access deck 1.8 m	1242.180	1	1	1	1	2	2	2
Double guardrail 1.8 m	1206.180	2	–	2	–	2	–	2
Guardrail 1.8 m	1205.180	–	6	2	6	8	12	10
Diagonal brace 2.5 m	1208.180	–	2	2	4	4	6	6
Mobile beam	1214.180	–	2	2	2	2	2	2
Horizontal brace 1.95 m	1209.180	–	–	–	1	1	1	1
Toe board 1.8 m, with claw	1239.180	–	2	2	2	2	2	2
End toe board 0.75 m	1238.075	–	2	2	2	2	2	2
Spring clip	1250.000	–	8	8	12	12	16	16
Castor 150, 4 kN	1308.150	4	4	4	4	4	4	4
Special bolt with nut	1203.060	4	4	4	4	4	4	4
Ballast	1249.000	For the number of ballast weights see the Ballasting table.						

Ballasting

In order to ballast the tower use Layher ballast weights **12**, Part No. 1249.000 (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.**

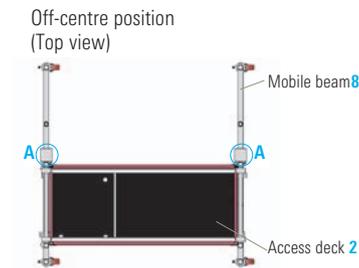
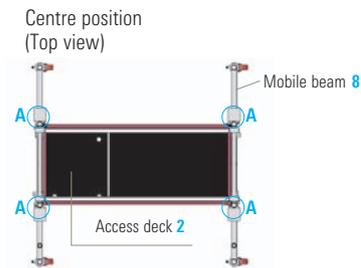
The ballast weights must be distributed evenly to all ballasting fixing points. The remainder, not divisible by 4, is distributed to the fixing points A.

Tower Model		3201	3202	3203	3204	3205	3206	3207
Indoor use	Erection in centre position	○	○	4	8	12	12	16
	Erection in off-centre position	–	2	6	10	14	12	16
	Erection in off-centre position with wall support	–	○	4	8	10	12	14
Outdoor use	Erection in centre position	○	○	4	10	14	20	26
	Erection in off-centre position	–	4	8	12	20	20	26
	Erection in off-centre position with wall support	–	○	4	8	10	12	14

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

How to position ballast weights

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



General Instructions on Assembly and Usage

Layher Uni Light Tower

The rolling tower may be used for the scaffolding group and as additionally specified in the German operating safety regulations (BetrSichV).

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 EN 1004:2005-03

- inside buildings 12.0 m
- outside buildings 8.0 m

The material and ballasting requirements on page 5 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 spigot 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 5 of these **Assembly and Use Instructions**.

5. During assembly and dismantling, system decks or scaffold planks according to DIN 4420-3 (minimum measurement: 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. At intermediate decks used for climbing only, two guardrails are required. For small towers where the height of the deck exceeds 1.0 m, equipment must be provided that permits the attachment of side guards in accordance with DIN EN 1004:2005-03

9. Access to the working platform is only permitted on the inside (**exception Tower Type 3201**) using the ladder rungs provided.

10. It is not permitted to work on two or more decks at the same time. In the event of discrepancies consult the manufacturer.

11. Persons working on mobile towers should not lean or press against the guardrails, nor jump onto platforms.

12. It is not permitted to affix lifting or hoisting devices to mobile towers.

13. 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.

14. No persons or loose objects must remain on the tower when moving it.

15. After moving the tower, lock the castors by pressing the brake lever.

16. Do not expose the tower to corrosive liquids or gases.

17. Mobile working platforms must not be bridged between each other, or a building **without special verification**. The same applies to special erections, e.g. suspende use etc.

18. 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.) 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.

19. In order to achieve different working heights decks may be fixed one rung higher or lower. Take care to comply with the prescribed guardrails at heights of 1 m or more. Diagonal braces, too, must be placed at the corresponding lower or higher level. Contact the manufacturer in order to find out whether an **additional static calculation** will be necessary.

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).

20. Keep the access hatches shut, except when climbing the tower.

21. The mobile beam may double as a rung for climbing up and down.

22. All couplers must be fastened with 50 Nm.

23. Set the rolling tower verhedly by placing suitable materials underneath it. The inclination must not exceed 1%.

24. A rolling tower is not intended for use as a stairway tower providing access to other structures.

25. It is prohibited to jump on the decks.

26. 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.

27. If stipulated, mobile beams or tower supports or outriggers and ballast must be installed.

28. It is prohibited to increase the height of the decking by using ladders, boxes or other objects.

29. It is not permitted to construct bridges between the rolling tower and a building.

30. Rolling towers are not designed to be lifted or suspended.

All dimensions and weights are guideline values. Subject to technical modification. Our deliveries shall be made exclusively in accordance with our currently valid General Terms of Sale.

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More Possibilities. The Scaffolding System.

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