

More Possibilities. The Scaffolding System.

LAYHER STARO ROLLING TOWER INSTRUCTIONS FOR ASSEMBLY AND USE

DIN EN 1004-2-DE



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NOTE

The DIN EN 1004-2-de-compliant products or assembly variants shown in these Instructions for Assembly and Use may be subject to country-specific regulations. Subject to local regulations, we reserve the right not to supply all of the products illustrated here.

Beyond the currently valid General Terms of Sale of Wilhelm Layher GmbH & Co KG, **no liability** is assumed for damage of whatever nature that has been incurred due to the following reasons:

- Non-compliance with instructions
- Improper assembly, and use of the product not for its intended purpose
- Use of non-original and damaged Layher components
- Unauthorised structural changes
- Improperly performed repairs, including and above all when non-original Layher spare parts are used
- Events caused by force majeure (disasters, foreign objects)

The respective user shall ensure on their own responsibility that the points as stated and also the current safety regulations are complied with and that use for the intended purpose is assured.

These Instructions for Assembly and Use must:

- be available at the place of use of the mobile working platform.
- be fully respected during the assembly, modification and dismantling of the mobile working platform, including all specifications they contain, and no modifications to them are permitted or are permissible only after consultation with the manufacturer.

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These instructions cannot cover all the possible applications. If you have any questions regarding specific applications, please contact your local Layher partner who will be happy to advise you on all questions relating to the products, their use or special assembly regulations.

EXPLANATION OF SYMBOLS

Additional information and notes on the assembly, modification, dismantling and use of mobile working platforms and situations in which it is necessary to consult with the manufacturer are indicated by the symbol opposite.



When assembling, modifying, dismantling or using mobile working platforms, failure to observe the present Instructions for Assembly and Use and the applicable work safety regulations may result in a variety of hazards and/or require increased attention on the part of the user. Situations in which such hazards may arise and/or in which users must be required to pay increased attention are indicated by the symbol opposite.



When assembling, modifying, dismantling or using mobile working platforms, failure to observe the present Instructions for Assembly and Use and the applicable work safety regulations may result in risks due to electrical voltages. Situations in which risks due to electrical voltages may arise are indicated by the symbol opposite.



When assembling, modifying, dismantling or using mobile working platforms, failure to observe the present Instructions for Assembly and Use and the applicable work safety regulations may result in risks of falling. Situations in which risks of falling may arise are indicated by the symbol opposite.

1. INTRODUCTION

General

These instructions for assembly and use relate to the assembly, modification and dismantling of the **Staro rolling tower** mobile working platform made by Wilhelm Layher GmbH & Co KG, of Güglingen-Eibensbach, Germany.



Number of persons required for assembly, modification and dismantling: > 2 persons

Caution: The Layher Staro rolling tower may only be assembled, modified and dismantled under the supervision of a person who has been qualified, trained and authorised for operations involving "mobile working platforms".

2. GENERAL DIRECTIONS FOR ASSEMBLY AND USE

The mobile working platform may be used for the specified load class in accordance with the stipulations of DIN EN 1004 and taking into account the appropriate sections of the German Ordinance on Industrial Safety and Health (BetrSichV).

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

- The user must verify the suitability of the selected mobile working platform for the work to be performed (Section 4 of BetrSichV).
- Assembly, modification or dismantling of the mobile working platform in accordance with the present instructions for assembly and use may only be performed under the supervision of a qualified person or by professionally suitable employees after special instruction. Only the models shown in these instructions for assembly and use may be built and also used. The mobile working platform must be inspected before, after or during assembly, but no later than before it is put into service (Section 14 of BetrSichV). During assembly, modification or dismantling, the mobile working platform must be marked with a keep-out sign indicating "no entry" (BetrSichV Annex 1, Para. 3).
- It must first be checked that all parts, auxiliary tools and safety equipment for assembling the mobile working platforms are available at the site.
- Mobile working platforms are not designed to be covered.
- Mobile working platforms are not designed to be used as side protection.
- Stability must be assured during every phase of the assembly.
- It is necessary to prevent horizontal and vertical loads that can cause the mobile working platform to topple over, for example:
 - by pushing against the side protection
 - additional wind loads (tunnel effect of through-type buildings, unclad buildings and corners).

- Before installation, all parts must be inspected to ensure they are in flawless condition. Only undamaged original parts of the mobile working platforms from Layher may be used. Components such as snap-on claws or securing flaps must be cleaned of dirt after use. Components must be secured against slipping and impacts when transported by truck. Components must be handled in such a way that they are not damaged.
- The mobile working platforms must not be subjected to any aggressive fluids or gases.

MAX 1%	₿'

Mobile working platforms must be set to the perpendicular using the adjusting spindles or by inserting suitable materials underneath them.

The maximum permitted tilt is 1 % (in horizontal direction = scaffolding length / 100).



Movement is only permitted on sufficiently firm ground with a max. inclination of 4% (approx. 2.5°), in the longitudinal direction or perpendicular to this, and the speed must not exceed normal walking pace (4 km/h). All impacts must be avoided.



After movement, the wheels must be locked by pressing down the brake lever.



When used in the open air or in open buildings, **any work on the mobile platform must be stopped immediately if the wind strength exceeds 6 on the Beaufort scale**. At these wind speeds or at the end of a shift, mobile working platforms must be moved to a location where they are protected from the wind or must be or suitable measures must be taken to secure them against toppling over.



A wind strength of more than 6 can be recognized by noticeable difficulty in walking. If possible, mobile working platforms used outside buildings must be securely fastened to the building itself or to another structure. It is recommended that mobile work platforms be anchored if they are left unattended.



It is not permitted to climb onto and across different mobile working platforms, to climb onto mobile working platforms from other objects or structures or to jump onto deck surfaces.



It is not permitted to increase the platform height by using ladders, boxes or other mechanisms.



It is not permitted to lift heavy objects onto mobile working platforms or to attach and use lifting gear at mobile working platforms.



It is not permitted to lift mobile working platforms using mechanical equipment.



In the standard version, mobile work platforms are not designed to be lifted or suspended.

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In certain cases, and following consultation with the manufacturer, it may be possible to reinforce the structure by replacing the appropriate components.



It is not permitted to move the mobile platform when persons and/or loose objects are present on it.



It is not permissible to stand and move around on unsecured levels/platforms of mobile working platforms.

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In the standard version, it is not permitted to establish bridges between different mobile working platforms or between mobile working platforms and other objects or structures.



In certain cases, and following consultation with the manufacturer, this may be possible if the structure is reinforced (special construction form) and a special verification of stability is performed for this or a structural calculation is performed.



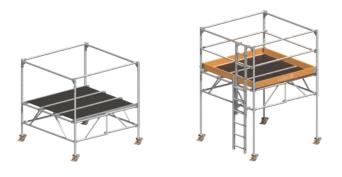
When working with mobile working platforms at or in the vicinity of electrical equipment and overhead cables, it is necessary to respect the following additional instructions.

It is only permitted to erect and use mobile working platforms if:

- the equipment is no longer live.
- > the deactivated equipment has been secured against reactivation.
- > the equipment has been checked for the absence of voltage.
- neighbouring live parts have been secured by means of protective mechanisms.
- in the case of work performed in the vicinity of overhead electrical cables, an adequate safety distance as specified in VDE 0105-100 can be / is respected.



3. TOWER MODELS



Tower model	7000	7001
Working height [m]	2.76 - 2.98	3.10 - 3.77
Tower height [m]	1.89 - 2.01	2.13 - 2.80
Platform height [m]	0.76 - 0.98	1.10 - 1.77
Weight [kg]	99.90	133.10

4. ASSEMBLY SEQUENCE

Observe the general instructions for assembly and use on page 5.

Basic assembly

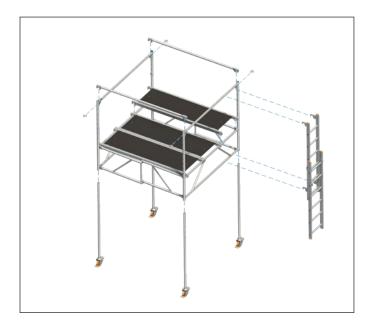
Tower model 7000



Pursuant to the national regulation ASR-2.1 which is applicable in Germany and in the light of DGUV regulation 38 (German accident prevention regulations), mobile working platforms with a platform height of less than 1 m can also be used without the three-part side protection required by standard DIN EN 1004-1.

- 1. Open the folding section of the Staro basic tower1.
- Insert the four leg tubes with wheels 4 into the opened Staro basic tower 1 and pin each of them at the top hole using the spring clips fixed to the upright tube.
- 3. Place the Staro decks 2 onto the central transverse tube of the base frame and snap them into place.
- 4. The guardrails 3 are fixed using snap-on claws which must be snapped onto the top transverse tube of the base frame from above.

- 5. If ascent is achieved by rising directly from a sitting position on the working level then you can continue directly at point 7. In the case of alternative ascent using the Staro ladder 7, this aid to ascent must be suspended in the top and bottom transverse tubes of the rigid part of the basic tower. When doing this, it is important to make sure that the securing flaps at the lower suspension hooks prevent inadvertent lift-out. The sliding ladder must be adapted to the appropriate deck height by moving the upper ladder rung by rung. The ladder must not rest on the ground.
- 6. After mounting the components required for the platform height in question, it is possible to change over and pull out the leg tubes in order to lock the assembly at the required platform height.
- 7. Before climbing the tower, the wheels must be locked by pressing down the brake lever.





At a platform height of less than 1 m, the working level can be accessed by swinging out a standard; alternatively, access is possible by rising from a sitting position from the centre of the working level. In both cases, it is essential to avoid tilting the structure.

Basic assembly Tower model 7001

- 1. Open the folding section of the Staro basic tower 1.
- 2. Insert the four leg tubes with wheels 4 into the opened Staro basic tower 1 and pin each of them at the top hole using the spring clips fixed to the upright tube.
- 3. Place the Staro decks 2 onto the central transverse tube of the base frame and snap them into place.
- 4. The guardrails 3 are fixed using snap-on claws which must be snapped onto the top transverse tube of the base frame from above.
- 5. Pin the intermediate rails 8 through the 5th hole (from the top) of the base frame's upright tubes using the spring clips that are fixed to the guardrail.
- 6. Snap in two guardrails 3 from above at the intermediate guardrails
- 7. Used as an aid to ascent 7, the Staro ladder must be suspended in the top and bottom transverse tubes of the rigid part of the basic tower. When doing this, it is important to make sure that the securing flaps at the lower suspension hooks prevent inadvertent lift-out. The sliding ladder must be adapted to the appropriate deck height by moving the upper ladder rung by rung. The ladder must not rest on the ground.
- 8. Arrange two toe boards 5 parallel to the decks between the leg tubes and stabilise these by inserting two end toe boards 6.
- 9. After mounting the components required for the platform height in question, it is possible to change over and pull out the leg tubes in order to lock the assembly at the required platform height in steps of 11 cm.
- 10. Before climbing the tower, the wheels must be locked by pressing down the brake lever.



5. DISMANTLING SEQUENCE

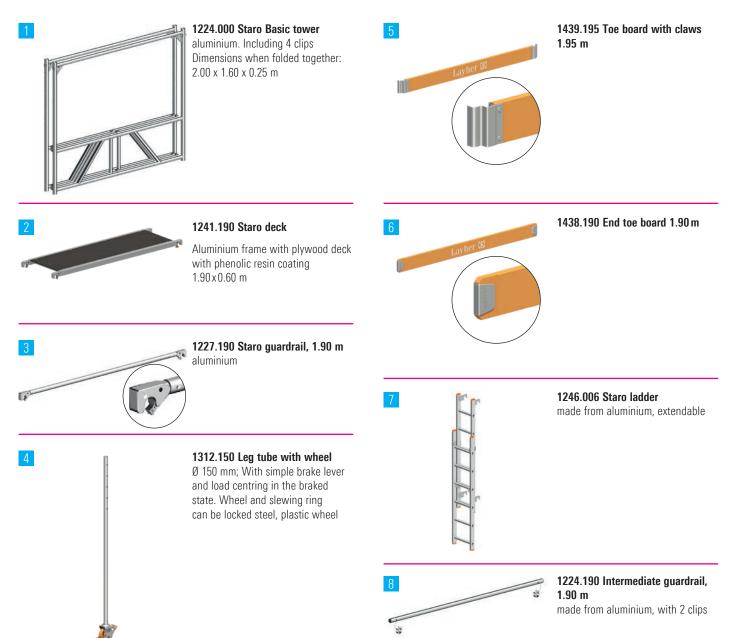
Dismantling is performed in the reverse order to assembly. To lift out the individual parts, open the snap-on claws by pressing their locking clips.

The orange locking clips of the decks permit effortless installation and removal by a single person; first open them and place the deck with the opened clips on the rung, then open the opposite clips and lift out the deck.

6. PARTS LIST

Tower model	Ref. No.	7000	7001
Staro basic tower, incl. 4 clips	1224.000	1	1
Staro guardrail 1.90 m	1227.190	2	4
Staro deck 1.90 m	1241.190	3	3
Leg tube with castor	1312.150	4	4
Ladder for Staro rolling tower	1246.006	0	1
Intermediate guardrail 1.90 m	1224.190	0	2
End toe board 1.90 m	1438.190	0	2
Toe board 1.95 m	1439.195	0	2

7. COMPONENTS OF THE SYSTEM



8. CERTIFICATE

In view of possible expiry dates and/or updating, you can obtain the appropriate certificate on request using the contact details stated overleaf.







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Wilhelm Layher GmbH & Co KG

Scaffolding Grandstands ladders

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