



LAYHER SOLOTOWER

INSTRUCTIONS FOR ASSEMBLY AND USE

DIN EN 1004-2-DE



Edition 10.2022

Ref. No. 8107.341

Mobile working platforms
According to DIN EN 1004-1:2021
Working platform 0.75 x 1.13 m

max. working height
in closed areas: 6.15 m
outdoors: 6.15 m
perm. load capacity 2.0 kN/m²
on max. one working level
(Load class 3 according to
DIN EN 1004-1:2021)



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NOTE

The DIN EN 1004-2-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.

 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 mobile working platform **SoloTower** made by Wilhelm Layher GmbH & Co KG, of Göglingen-Eibensbach, Germany.



Number of persons required for assembly, modification and dismantling: ▶ 1 person

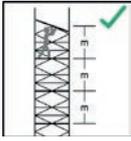
Caution: Layher SoloTower may only be assembled, modified and dismantled under the supervision of a person who has been qualified, trained and authorised for operations involving “mobile working platforms”.

2. GENERAL DIRECTIONS FOR ASSEMBLY AND USE

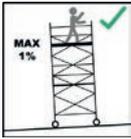
The mobile working platform may be used for the specified load class in accordance with the stipulations of DIN EN 1004 and taking into account the appropriate sections of the German Ordinance on Industrial Safety and Health (BetrSichV).

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).
- ▶ The maximum platform height for mobile working platforms in accordance with DIN EN 1004 is
 - inside buildings: 12.00 m
 - outside buildings: 8.00 m
- ▶ 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.
- ▶ All ladder frame joints must always be secured using spring clips.
- ▶ The access hatches must be kept shut whenever they are not in use.
- ▶ Mobile working platforms are not designed to be covered. Mobile working platforms are not designed to be used as side protection.
- ▶ If stipulated, the base must be widened by means, for example, of mobile beams or stabilisers or outriggers and ballast must be installed.
- ▶ Stability **must be ensured during every phase** of assembly and dismantling as well as when the platform is moved. **The necessary ballast weights and/or wall supports** (see corresponding section in these Instructions for Assembly and Use) **must generally be attached before any risk of falling arises.**
- ▶ The adjustable mobile beams may only be inserted in conformity with the instructions for assembly and use. Any ballasting that is required must be installed prior to adjustment in accordance with the ballast specifications given in the section on "Models".
- ▶ To assemble the upper platforms, the individual parts must be passed up from one level to the next. Small quantities of tools and materials can be carried up by the personnel, or failing that hoisted to the working level using transport ropes.
- ▶ On intermediate levels used solely for ascent, toe boards can be dispensed with.
- ▶ Working on two or more working levels at the same time is not permitted. In the event of exceptions, the manufacturer must be consulted. When work is being done on several levels, they must be completely fitted with 3-part side protection.
- ▶ 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 and spigots 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.
- ▶ Couplers in the structures must be tightened to 50 Nm.



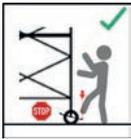
The maximum distance between the platforms must not exceed 2.25 m. Exception: The distance between the assembly level (the ground) and the first platform. The maximum distance permitted here is 3.40 m.



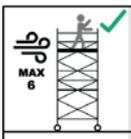
Mobile working platforms must be set to the perpendicular using the adjusting spindles or by inserting suitable materials underneath them. The maximum permitted tilt is 1 % (in horizontal direction = scaffolding length / 100).



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.



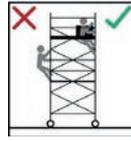
After movement, the wheels must be locked by pressing down the brake lever.



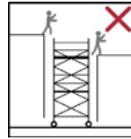
When used in the open air or in open buildings, **any work on the mobile platform must be stopped immediately if the wind strength exceeds 6 on the Beaufort scale.** At these wind speeds or at the end of a shift, mobile working platforms must be moved to a location where they are protected from the wind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



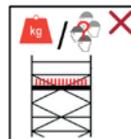
A wind strength of more than 6 can be recognized by noticeable difficulty in walking. If possible, mobile working platforms used outside buildings must be securely fastened to the building itself or to another structure. It is recommended that mobile work platforms be anchored if they are left unattended.



Upward access to mobile working platforms is permitted only on the inside of the tower. External access is not permitted.



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.



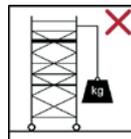
Due to the maximum load-bearing capacity of the structure, there may be a limit to the number of persons who may be present on a working level at any given time. This maximum load on the working level due to persons, tools and material must be checked in advance and be limited if necessary.



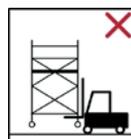
Failure to respect the maximum load limit can overload the structure and/or cause it to collapse. Serious or fatal injuries are possible.



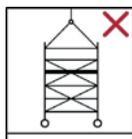
It is not permitted to increase the platform height by using ladders, boxes or other mechanisms.



It is not permitted to lift heavy objects by attaching and using 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.



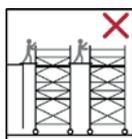
In certain cases, and following consultation with the manufacturer, it may be possible to reinforce the structure by replacing the appropriate components.



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



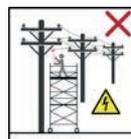
It is not permitted to stand and move around on unsecured levels/platforms of mobile working platforms.



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 permissible to assemble 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.



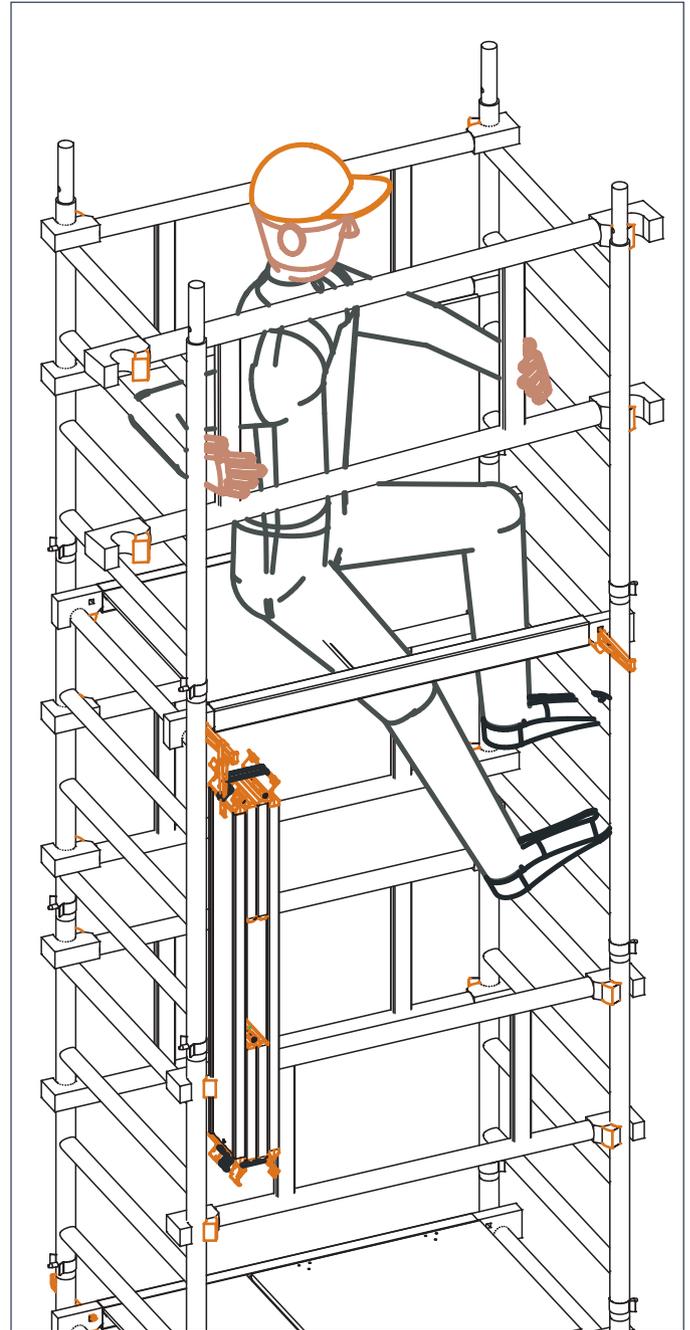
3. MEASURES FOR FALL PREVENTION

3T method

Preventing falls during assembly, modification or dismantling

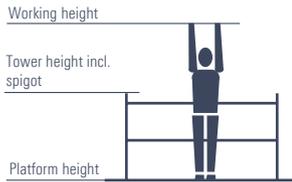
This is the so-called 3T (Through The Trapdoor) method, in which assembly is done through the trapdoor to the next level up by means of the double guardrail, in order to prevent falls.

After climbing up on the inside using the rungs of the ladder frame, the double guardrails are fitted from a sitting position. Once the fall prevention has been fitted, the level in question is secure all round and can then be accessed.





4. TOWER MODELS



SoloTower

Tower model	1600102	1600103	1600104
Working height [m]	4.15	5.15	6.15
Tower height [m]	3.37	4.37	5.37
Platform height [m]	2.15	3.15	4.15
Weight [kg] (without ballast)	118.8	151.9	167.6
Ballasting (stated in units)			
In closed areas			
Assembly central	0	0	0
Assembly off-set	L0 R5	L0 R8	L0 R10
Assembly off-set with wall bracing	0	0	0
Outdoors			
Assembly central	0	0	0
Assembly off-set	L0 R5	L0 R8	L0 R10
Assembly off-set with wall bracing	0	0	0

L = left / R = right X = not permitted / not possible 0 = no ballast required.

All heights stated without possible spindle extension! For attachment of ballast weights see p.30, section 6 entitled Ballasting.

Please note: The ballasting table contains updated information. By releasing this document, the issue from 04.2019 loses its validity.

5. ASSEMBLY AND DISMANTLING

Observe the general directions for assembly and use on pages 5 – 7. The examples shown for assembly are intended for use in closed areas and outdoors up to a maximum platform height of 4 metres (see table of models, page 10).

Snap the snap-on claws of the decks into the ladder frames **1** from above. Snap in the snap-on claws of the double guardrails **2** from the inside.

Level the tower after basic assembly. This is done using the threaded spindles of the castors **7**.

Always tighten screw couplers provided with nuts using a suitable wrench (approx. 50 Nm).



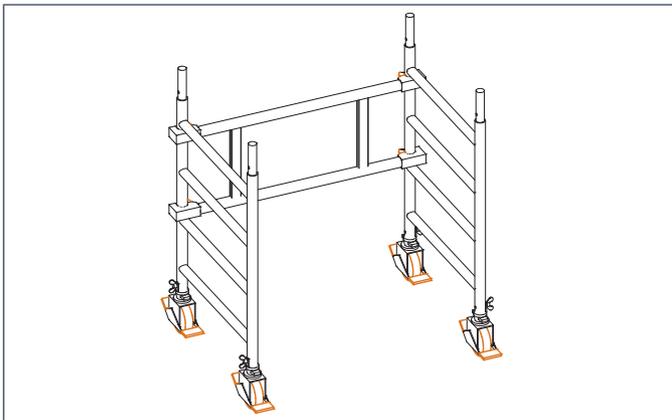
The snap-on claws of the double guardrails **2 and access decks **3** and the spring clips **8** on the ladder frames **1** must be properly snapped in and then secured. Lock the s **7** during assembly, modification or dismantling and when there is anybody on the tower.**

The item numbers **1–11** of the parts in the complete document relate to the section entitled Components of the System on page 38 and 39.

5.1.1. Assembly sequence for model 1600102

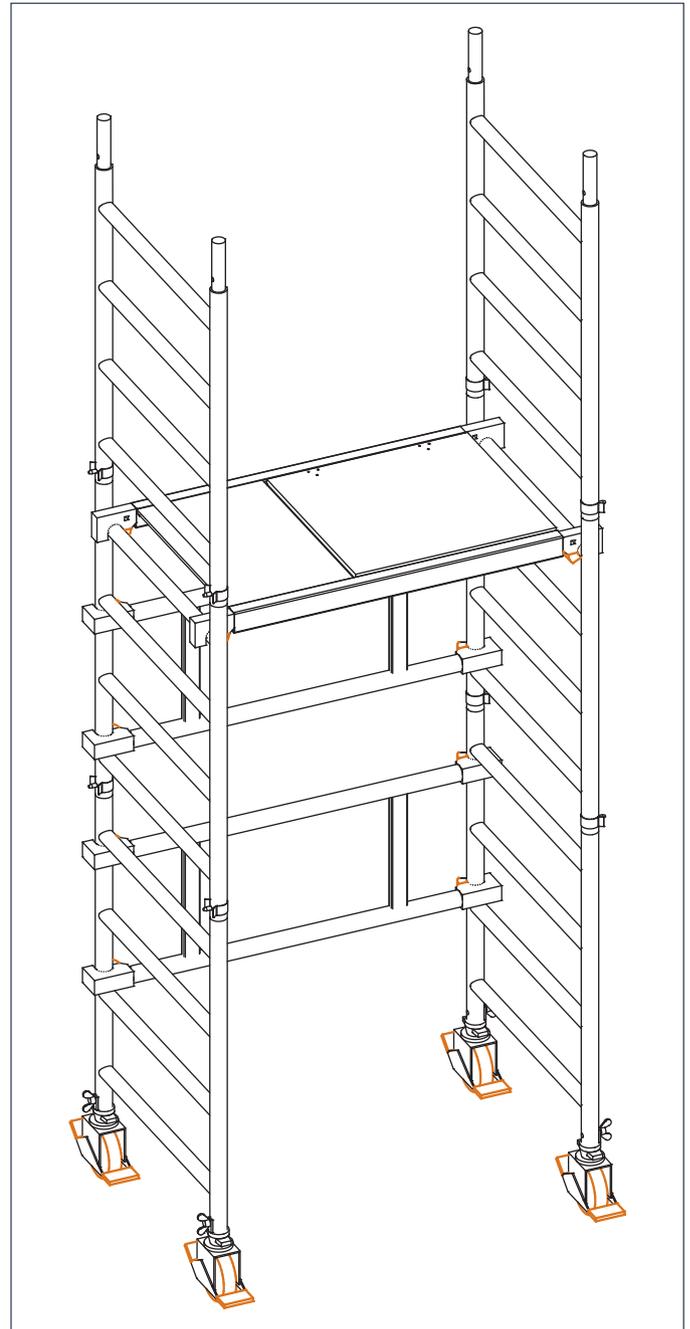
Basic assembly

1. Insert 2 castors **7** into each 1 m ladder frame **1** and fix them using the locking screw at the appropriate end of the upright.
2. Connect the 1 m ladder frames **1** with a double guardrail **2** between the 2nd and 4th rungs from the bottom as initial bracing.



Assembly of model 1600102

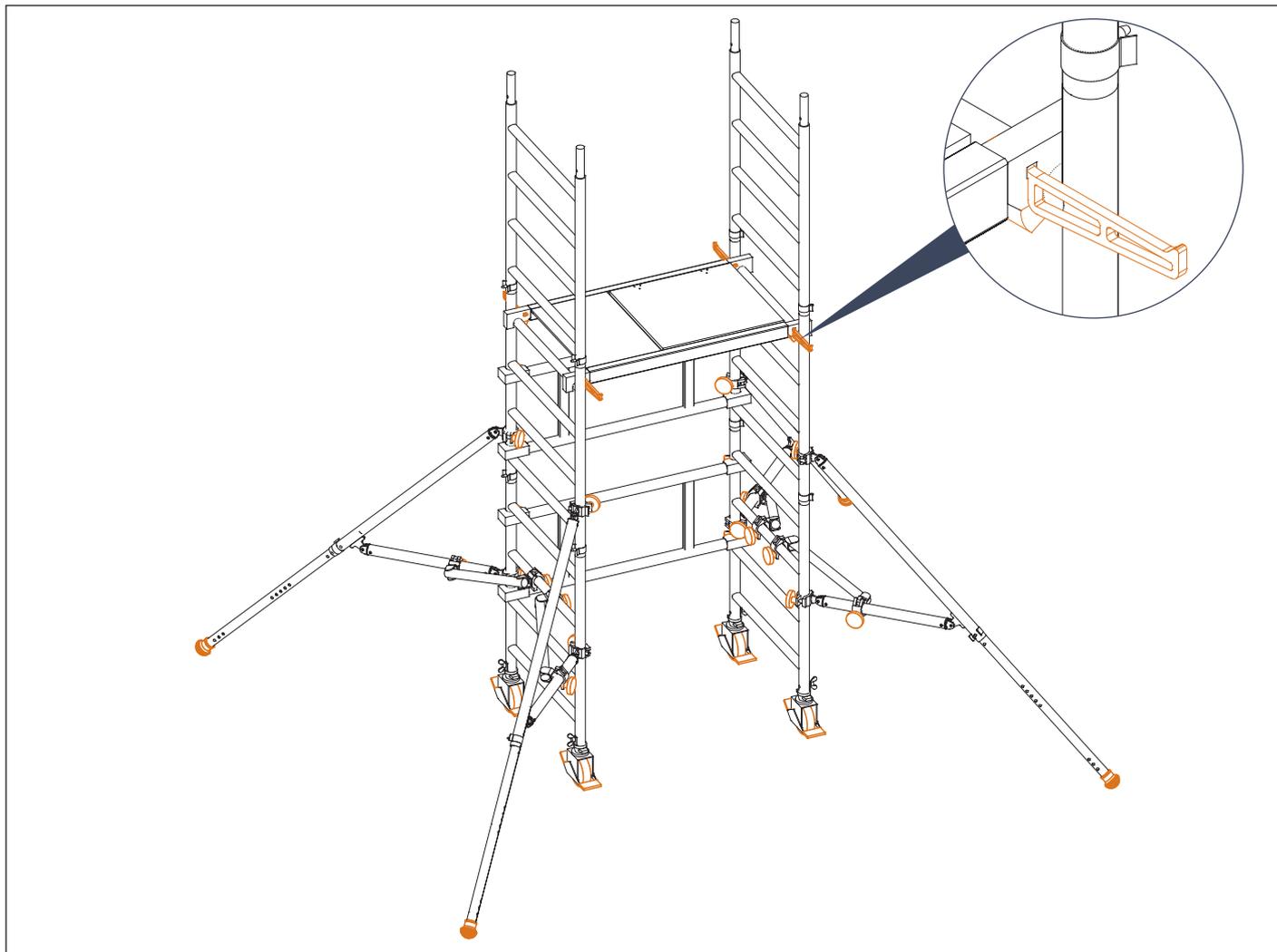
1. Join the 1 m ladder frames **1** together, secure them with spring clips **8**, place them onto the ladder frame spigots provided for them in the basic assembly, and then secure the joints too with spring clips **8**.
2. Fit the access deck **3** on the 8th rung from the bottom and snap it properly into place using the snap-on claws.
3. Fit the double guardrail **2** as bracing between the 5th and 7th rungs from the bottom, and snap it properly into place using the snap-on claws.



4. Fitting of the stabilisers **4** on all 4 uprights of the already assembled ladder frames (see p.35, section entitled Stabiliser attachment).

5. Safeguard the stabilisers **4** against unintended rotating by fitting the rotation lock **5** between the 3rd rung of the 1 m ladder frame **1** and the transverse tube of the stabiliser.

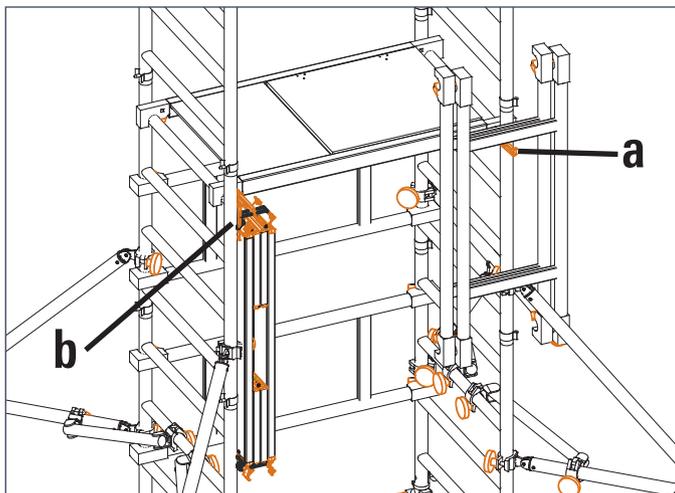
6. Insert assembly hooks **9** into the recesses provided for them in the snap-on claws of the already assembled access deck **3**.



7. Position the components needed for further assembly on the assembly hooks **9**.

Part arrangement for model 1600102

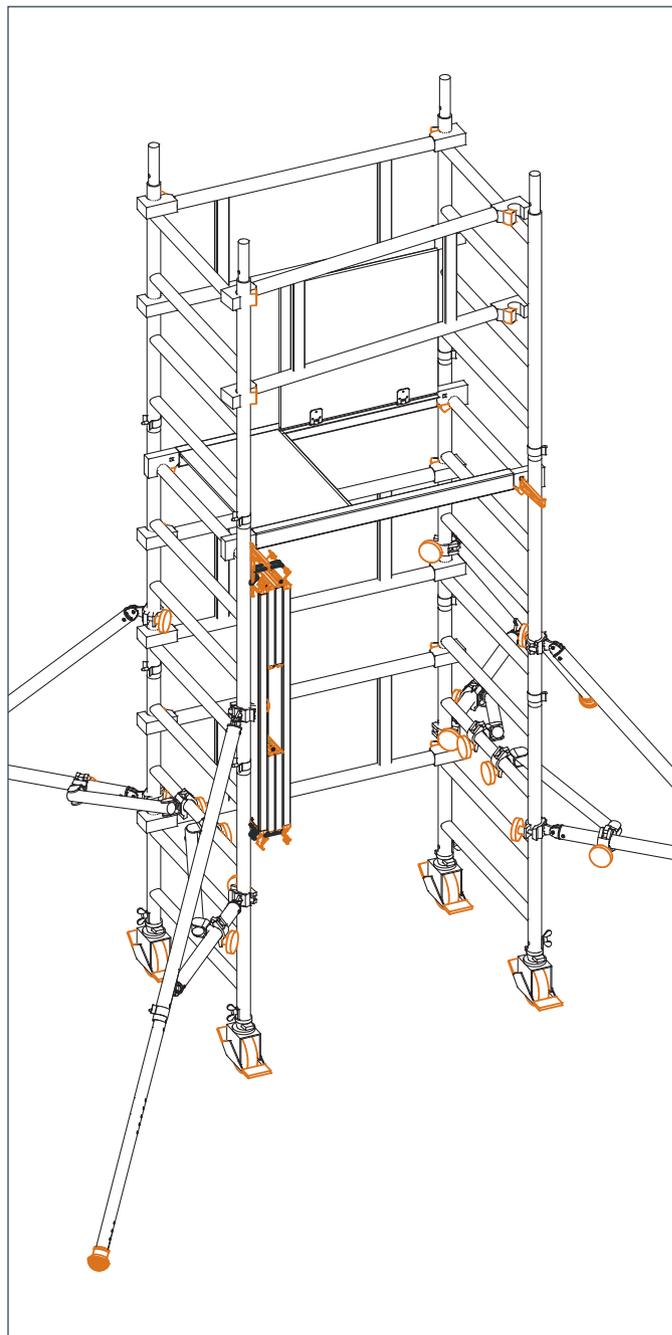
- a. ▶ 2x double guardrail **2**.
- b. ▶ 1x toe board unit **6**.

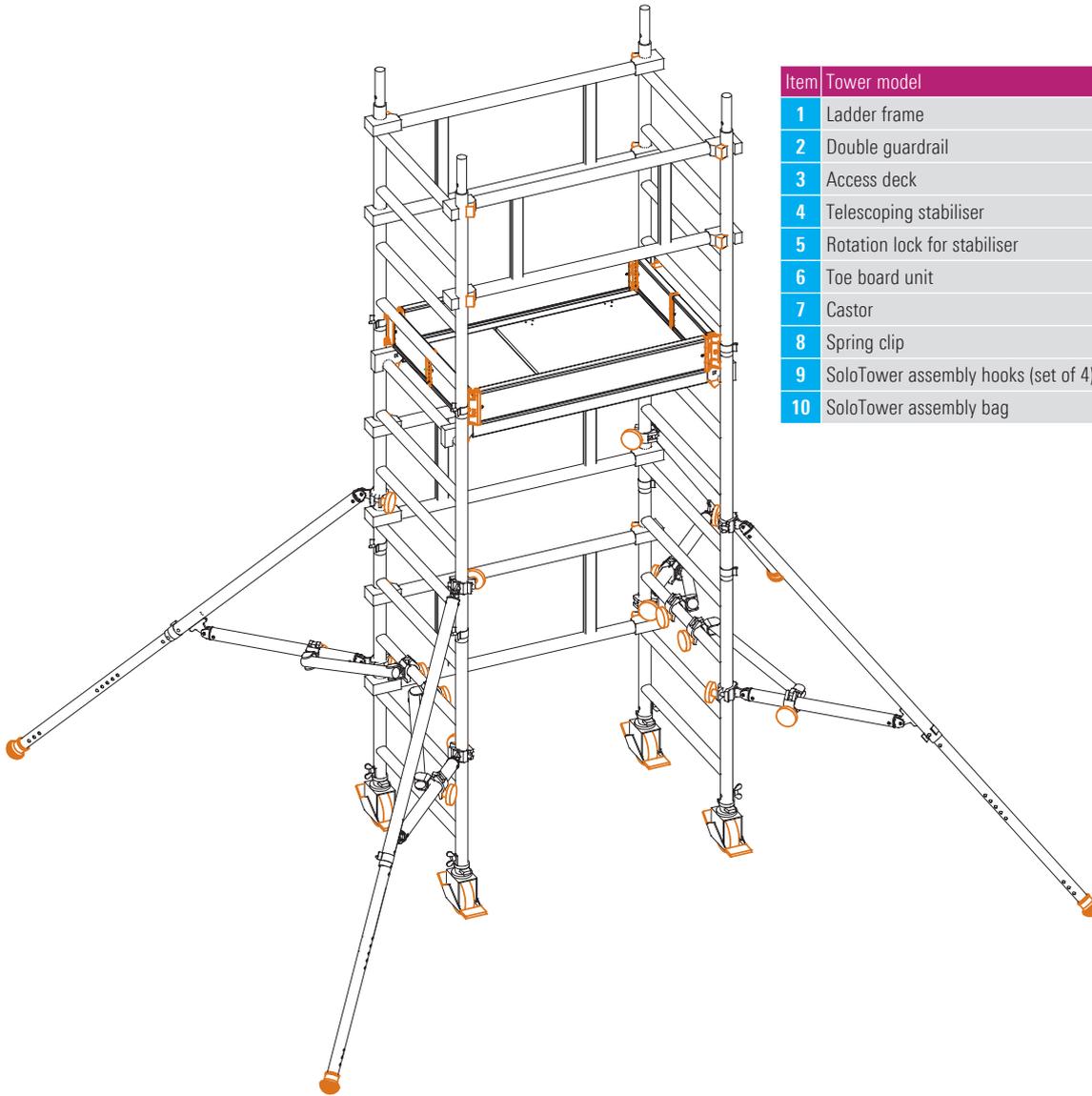


8. Climb up on the inside using the rungs of the ladder frame and through the trapdoor provided.

9. Further assemble the side protection for the next level while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**. Take the two double guardrails **2** from "a" as listed under 7, fit them with the top chord over the last rung and snap them into place properly using the snap-on claws. (see p.8, section entitled Measures for Fall Prevention).

10. Take the toe board unit **6** from "b" as listed under 7, fold it open on the work level now constructed and fit it as a frame around the access deck (see p.36, Fitting the toe board unit).





Item	Tower model	Reference No.	1600102
1	Ladder frame	1297.004	6
2	Double guardrail	1342.113	4
3	Access deck	1242.113	1
4	Telescoping stabiliser	1240.000	4
5	Rotation lock for stabiliser	1248.261	4
6	Toe board unit	1240.113	1
7	Castor	1300.150	4
8	Spring clip	1250.000	8
9	SoloTower assembly hooks (set of 4)	1300.002	1
10	SoloTower assembly bag	1300.003	1

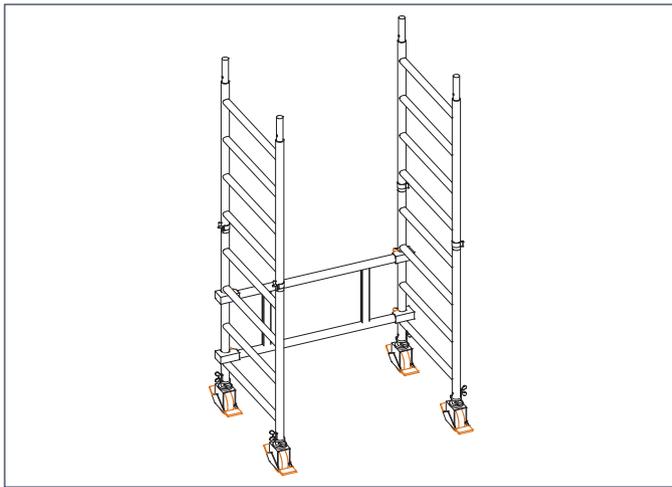
5.1.2. Dismantling sequence for model 1600102

1. Insert 2 assembly hooks **9** into the recesses provided for them in the snap-on claws of the access deck **3**.
2. Fold the toe board unit **6** together and position it in the assembly hooks **9**.
3. Dismantle the two double guardrails **2** while sitting in the trap-door opening, protected from falls by the sides of the access deck **3**, then position the guardrails in the assembly hooks **9**.
4. Climb down on the inside using the rungs of the ladder frame **1** to the ground.
5. Remove the positioned components from the assembly hooks **9**.
6. Remove the stabilisers **4**.
7. Remove the access deck **3** at the 8th rung.
8. Remove the ladder frames **1**.
9. Dismantle the basic assembly.

5.2.1. Assembly sequence for model 1600103

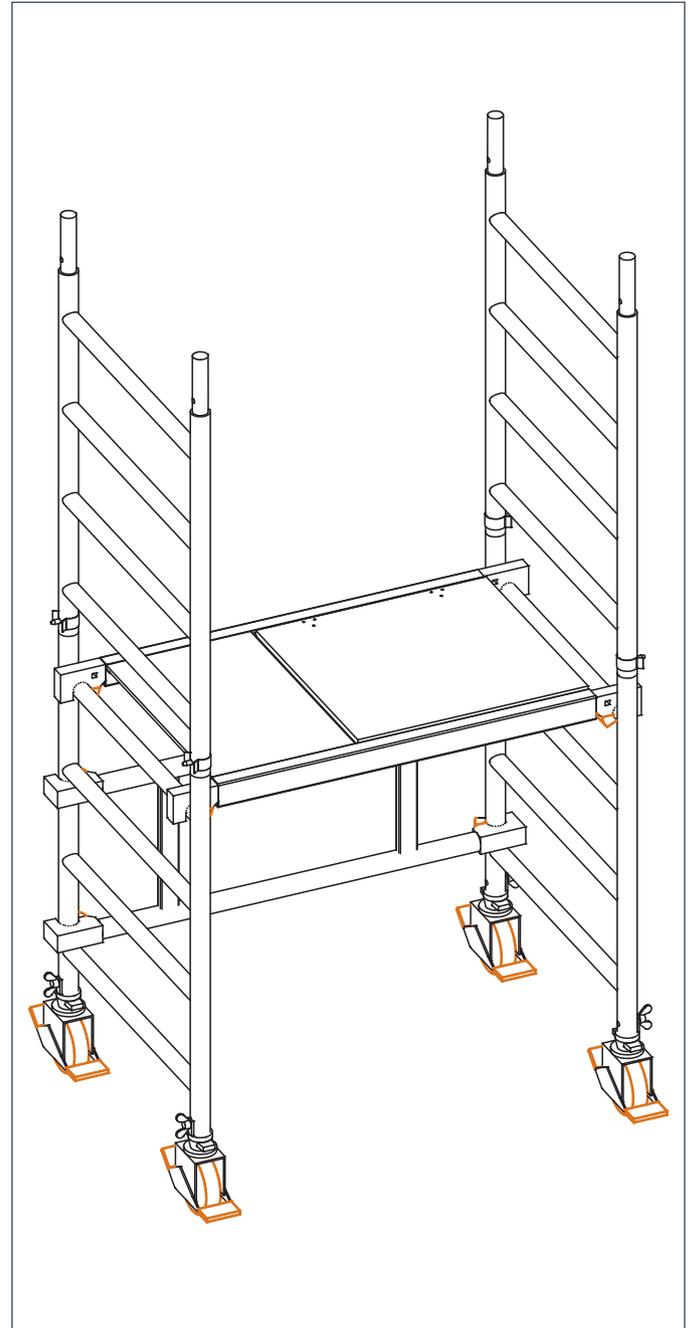
Basic assembly

1. Join the 1 m ladder frames **1** together, then secure them with spring clips **8**.
2. Insert 2 castors **7** into each of the bottom 1 m ladder frames **1** and fix them using the locking screw at the appropriate end of the upright.
3. Connect the previously joined 1 m ladder frames **1** with a double guardrail **2** between the 1st and 4th rungs from the bottom as initial bracing.



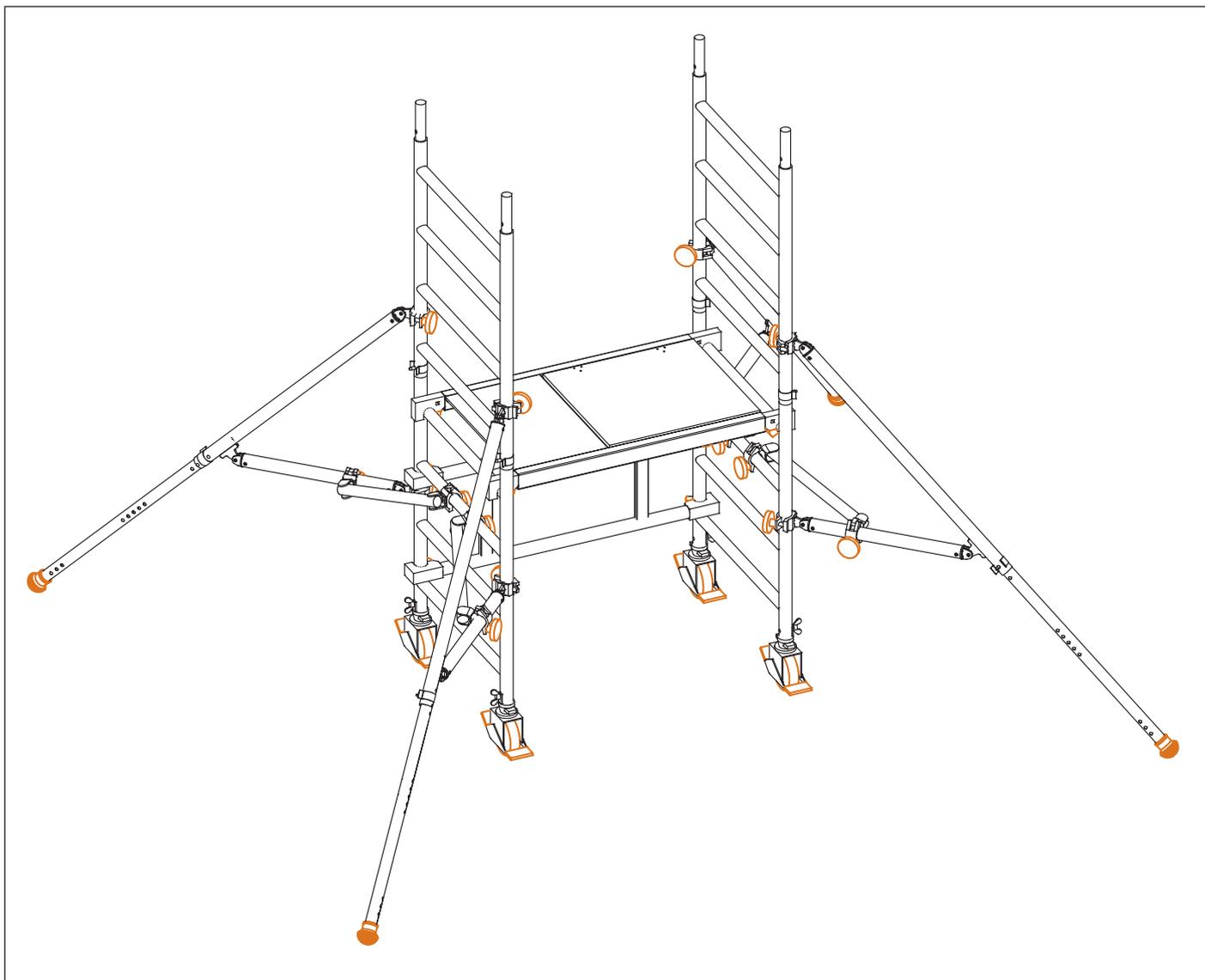
Assembly of model 1600103

1. Fit the access deck **3** on the 4th rung from the bottom and snap it properly into place using the snap-on claws.



2. Fitting of the stabilisers 4 on all 4 uprights of the already assembled ladder frames (see p.35, section entitled Stabiliser attachment)

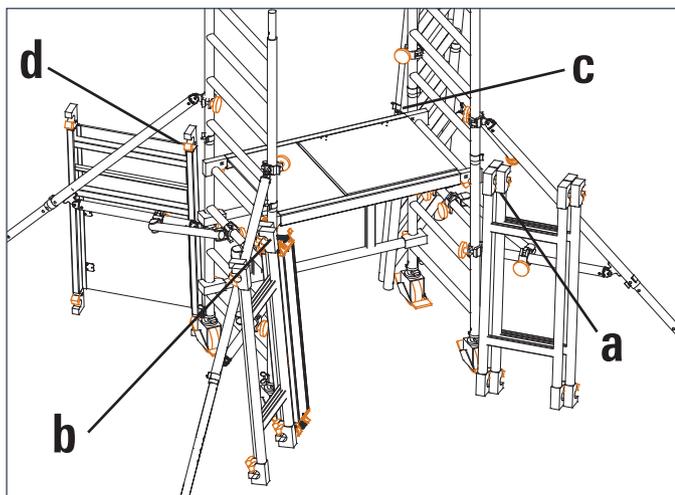
3. Safeguard the stabilisers 4 against unintended rotating by fitting the rotation lock 5 between the 3rd rung of the 1 m ladder frame 1 and the transverse tube of the stabiliser.



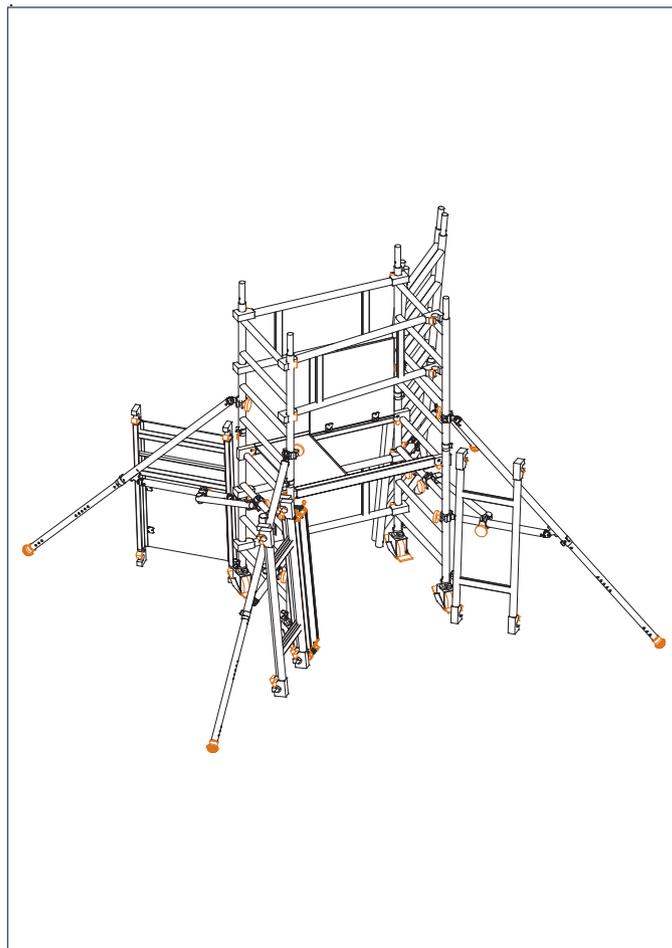
4. Position the components needed for further assembly close to hand around the already assembled access deck **3**.

Part arrangement for model 1600103

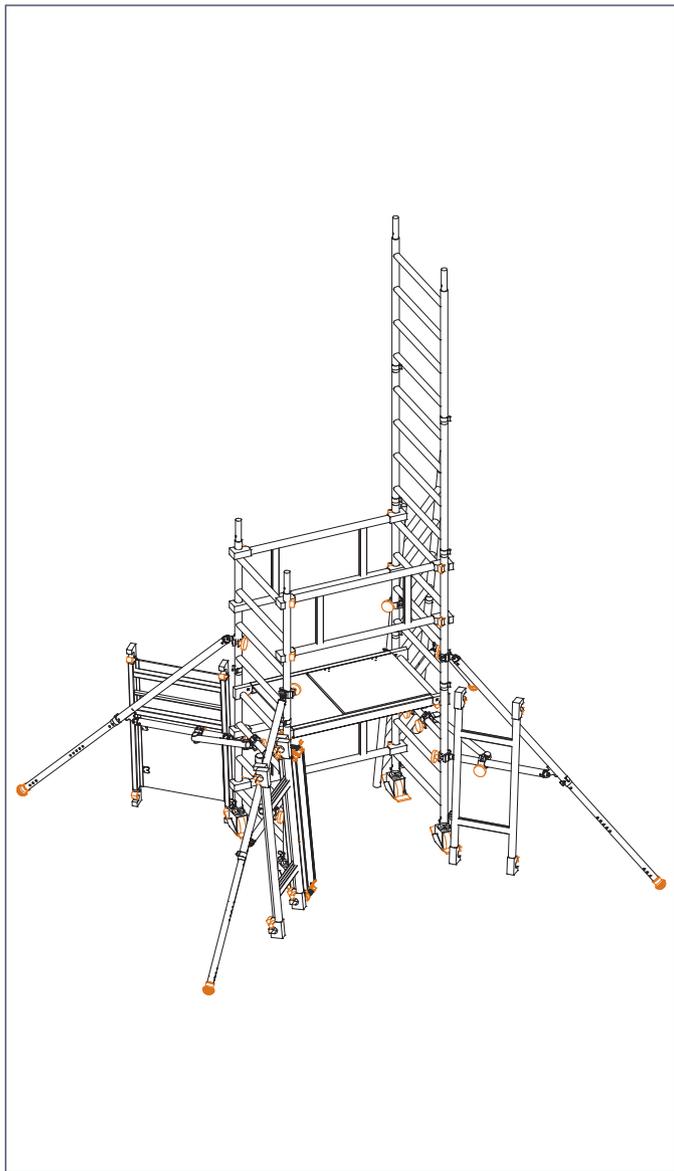
- a. ▶ 3x double guardrail **2**.
- b. ▶ 1x toe board unit **6**.
2x double guardrail **2**.
- c. ▶ 2x previously assembled 1 m ladder frame **1**.
- d. ▶ 1x access deck **3**.



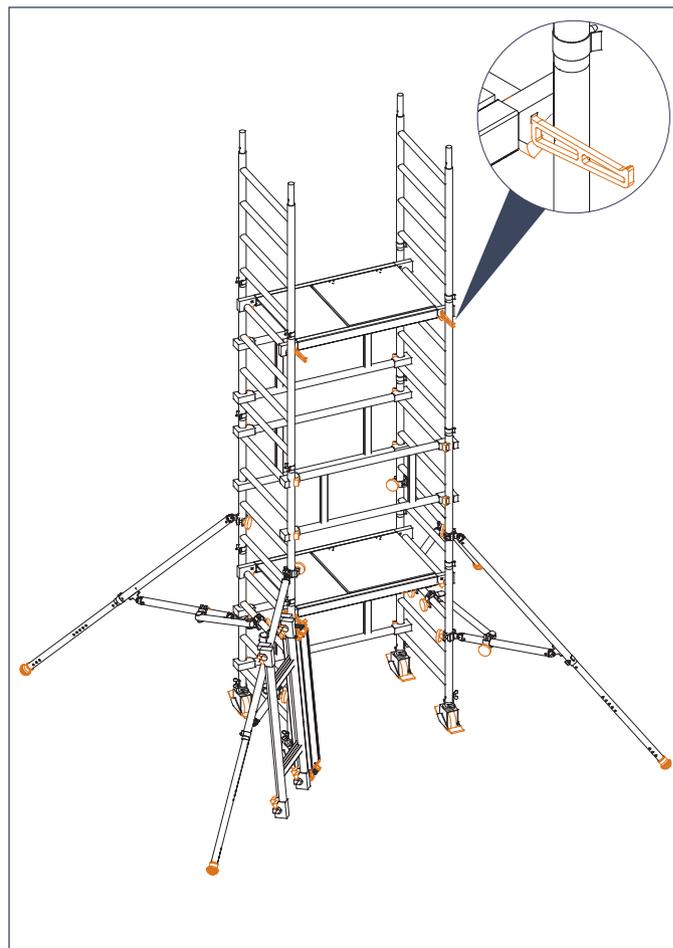
5. Climb up on the inside using the rungs of the ladder frame and through the trapdoor provided.
6. Further assemble the side protection for the next level while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**. Take the two double guardrails **2** from "a" as listed under 4, fit them with the top chord over the last rung and use the snap-on claws to snap them into place properly. (see p.8, section entitled Measures for Fall Prevention).



7. Place the previously joined ladder frames from "c" as listed under 5 into the spigots provided of the already assembled ladder frames, then secure the joints with spring clips **8**.



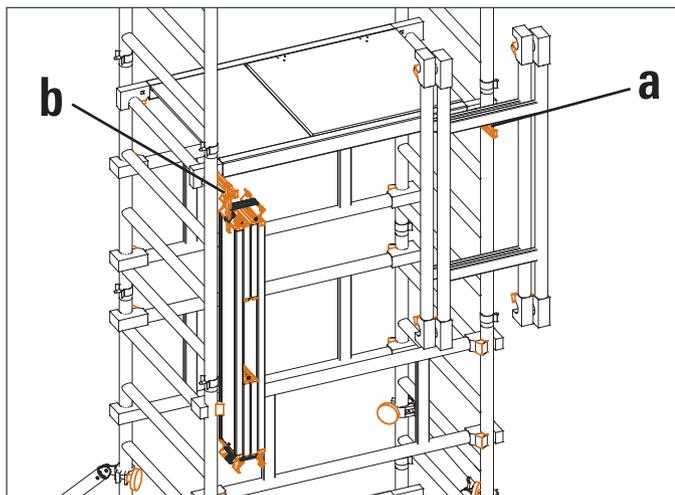
8. Fit the double guardrail **2** as bracing between the 5th and 7th rungs above the current platform height and snap it properly into place using the snap-on claws.
9. Fit the access deck **3** on the 8th rung above the current platform height and snap it properly into place using the snap-on claws.
10. Insert assembly hooks **9** into the recesses provided for this in the snap-on claws of the already assembled access deck **3**.



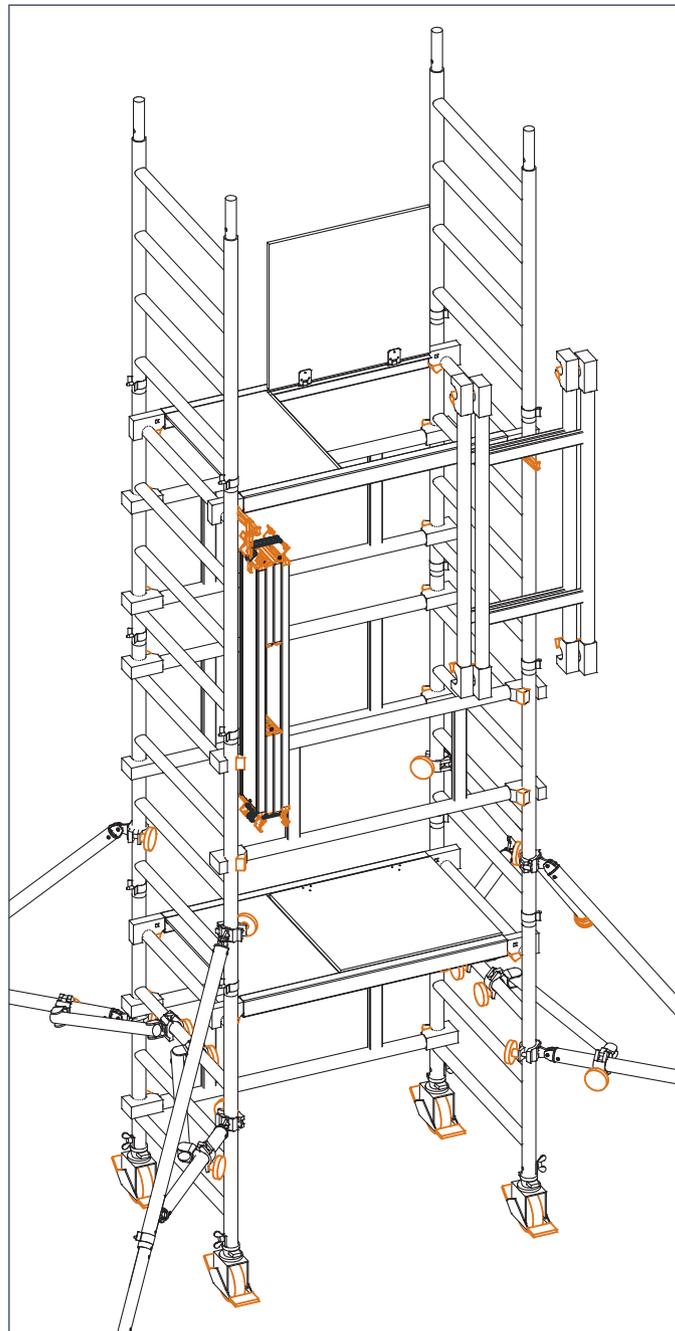
11. Diagonal movement of the components positioned in the assembly hooks 9 for further assembly.

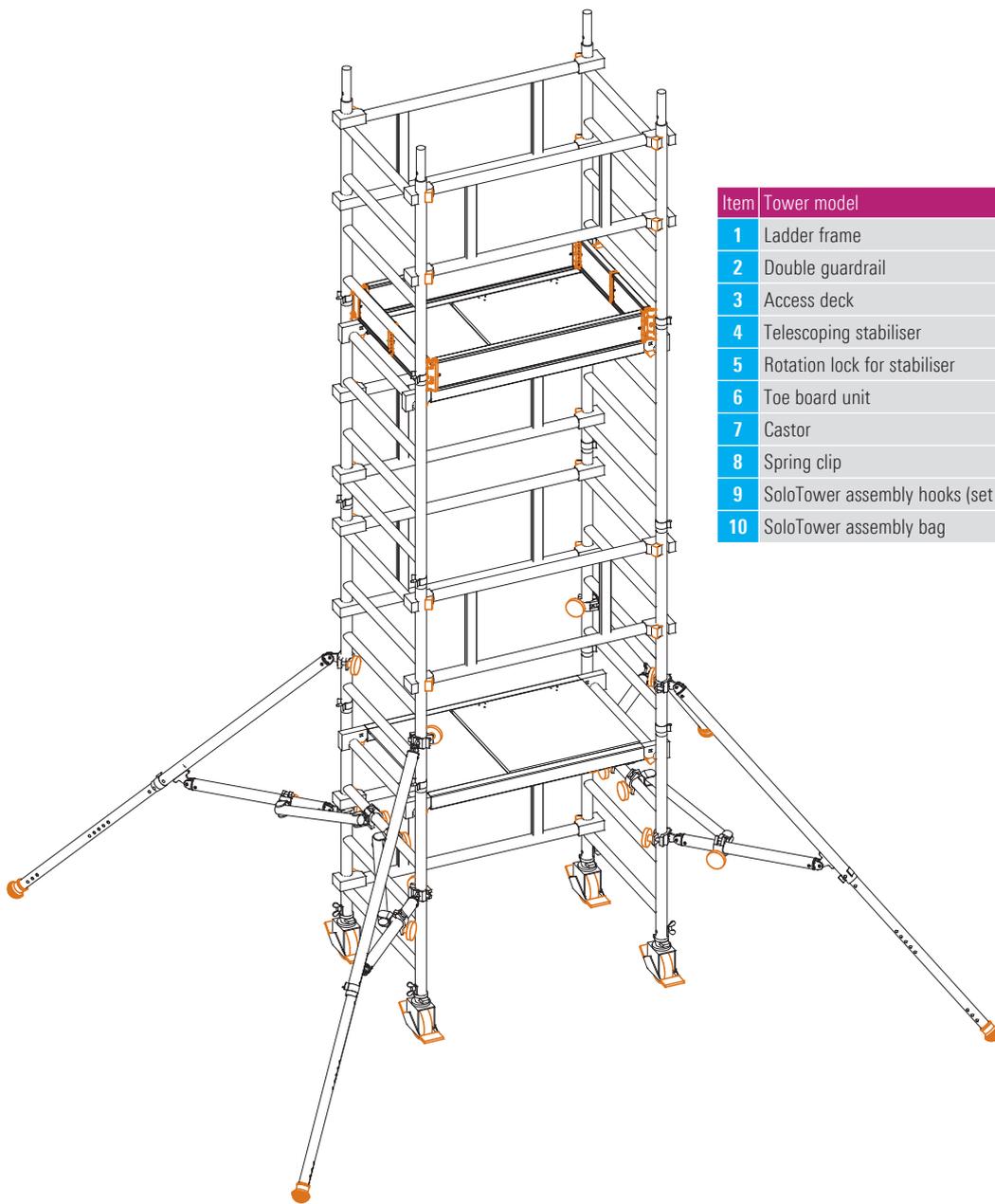
Part arrangement for model 1600103

- a. ▶ 2x double guardrail 2.
- b. ▶ 1x toe board unit 6.



12. Climb up on the inside using the rungs of the ladder frame and through the trapdoor provided.
13. Further assemble the side protection for the next level while sitting in the trapdoor opening, protected from falls by the sides of the access deck 3. Take the two double guardrails 2 from "a" listed under 11, fit them with the top chord over the last rung and use the snap-on claws to snap them into place properly. (see p.8, section entitled Measures for Fall Prevention).
14. Take the toe board unit 6 from "b" listed under 11, fold it open on the work level now constructed and fit it as a frame around the access deck (see p.36, section 6, Fitting the toe board unit).





Item	Tower model	Reference No.	1600103
1	Ladder frame	1297.004	8
2	Double guardrail	1342.113	6
3	Access deck	1242.113	2
4	Telescoping stabiliser	1240.000	4
5	Rotation lock for stabiliser	1248.261	4
6	Toe board unit	1240.113	1
7	Castor	1300.150	4
8	Spring clip	1250.000	12
9	SoloTower assembly hooks (set of 4)	1300.002	1
10	SoloTower assembly bag	1300.003	1

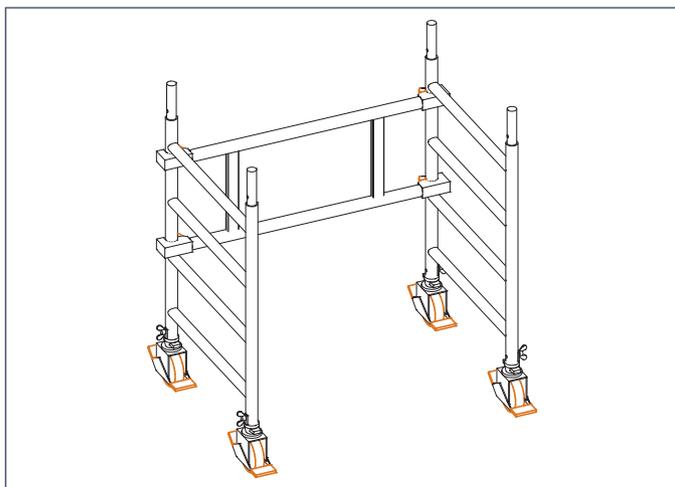
5.2.2 Dismantling sequence for model 1600103

1. Insert 2 assembly hooks **9** into the front recesses provided for them in the snap-on claws of the access deck **3** fitted at the top level.
2. Fold the toe board unit **6** together and position it in the assembly hooks **9**.
3. Dismantle the two double guardrails **2** while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**, then position the guardrails in the assembly hooks **9**.
4. Climb down on the inside using the rungs of the ladder frame **1** to the level underneath it.
5. Remove the components from the assembly hooks **9** and then position them close to hand around the basic assembly.
6. Dismantle and position the double guardrail **2** as bracing between the 5th and 7th rungs above the present platform height.
7. Dismantle and position the access deck **3** at the 8th rung above the present platform height.
8. Dismantle and position the previously joined ladder frames **1**.
9. Dismantle and position the two double guardrails **2** while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**.
10. Climb down on the inside using the rungs of the ladder frame **1** to the ground.
11. Remove the positioned components.
12. Remove the stabilisers **4**.
13. Remove the access deck **3** at the 4th rung.
14. Remove the ladder frames **1**.
15. Dismantle the basic assembly.

5.3.1. Assembly sequence for model 1600104

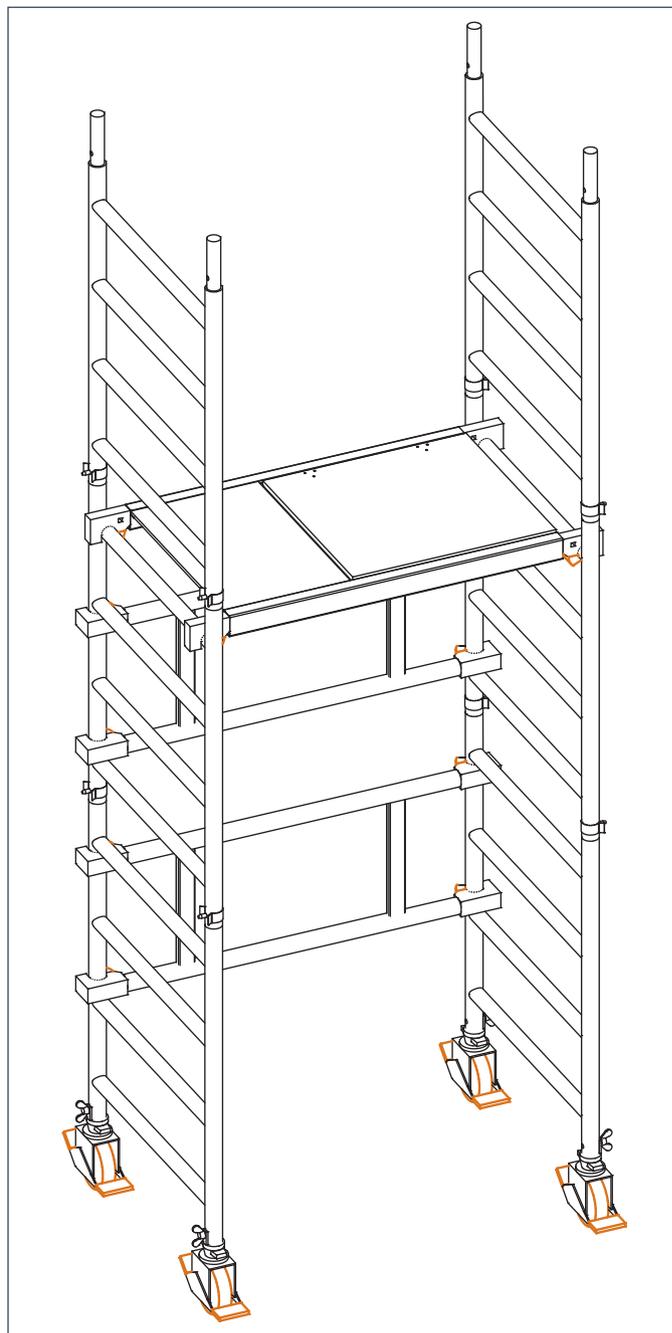
Basic assembly

1. Insert 2 castors **7** into each 1 m ladder frame **1** and fix them using the locking screw at the appropriate end of the upright.
2. Connect the 1 m ladder frames **1** with a double guardrail **2** between the 2nd and 4th rungs from the bottom as initial bracing.



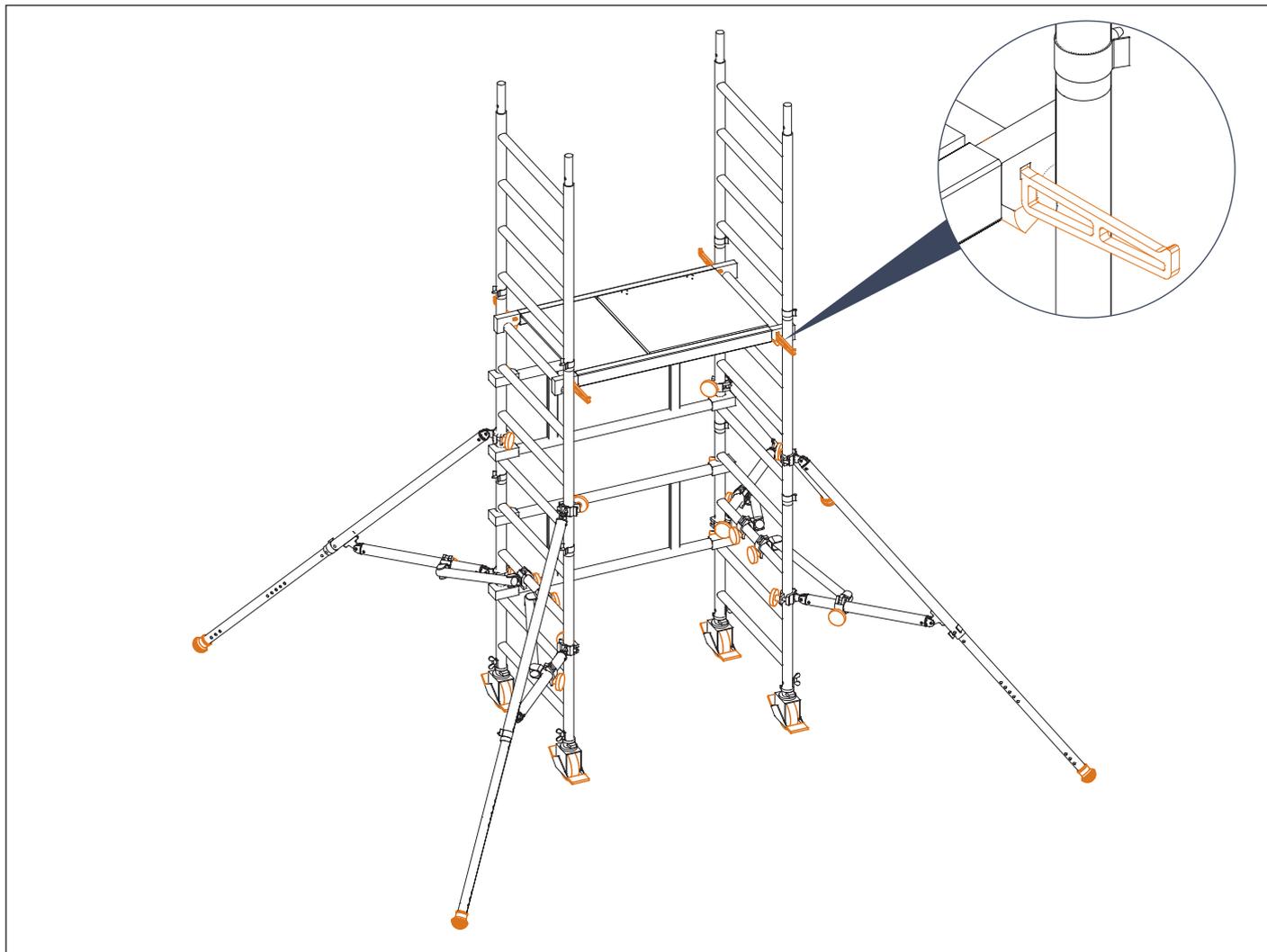
Assembly of model 1600104

1. Join the 1 m ladder frames **1** together, secure them with spring clips **8**, place them onto the ladder frame spigots provided for them in the basic assembly, and then secure the joints too with spring clips **8**.
2. Fit the access deck **3** on the 8th rung from the bottom and snap it properly into place using the snap-on claws.
3. Fit the double guardrail **2** as bracing between the 5th and 7th rungs from the bottom, and snap it properly into place using the snap-on claws



4. Fitting of the stabilisers **4** on all 4 uprights of the already assembled ladder frames (see p.35, section entitled Stabiliser attachment).
5. Safeguard the stabilisers **4** against unintended rotating by fitting the rotation lock **5** between the 3rd rung of the ladder frame **1** and the transverse tube of the stabiliser.

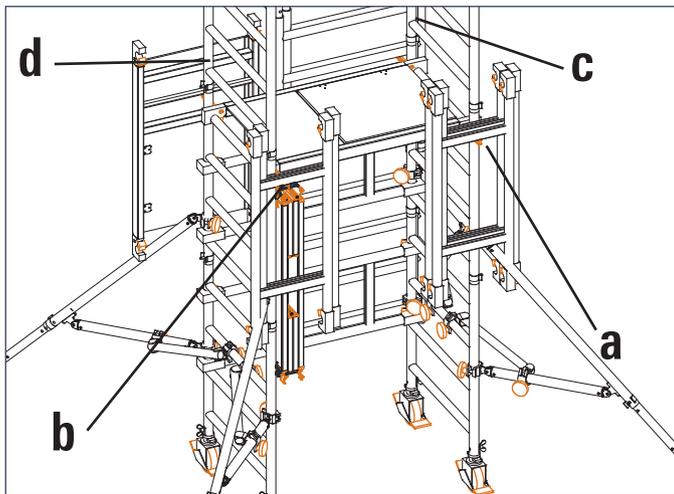
6. Insert assembly hooks **9** into the recesses provided for them in the snap-on claws of the already assembled access deck **3**.



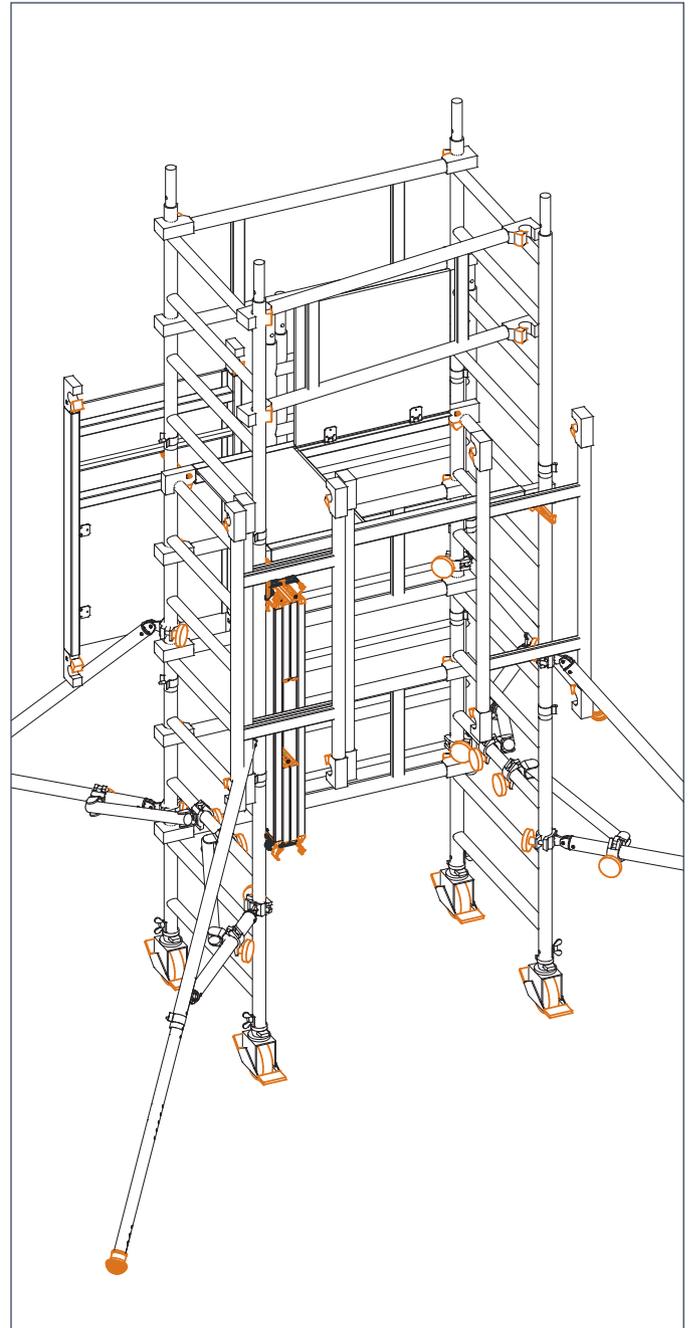
7. Position the components needed for further assembly on the assembly hooks **9**.

Part arrangement for model 1600104

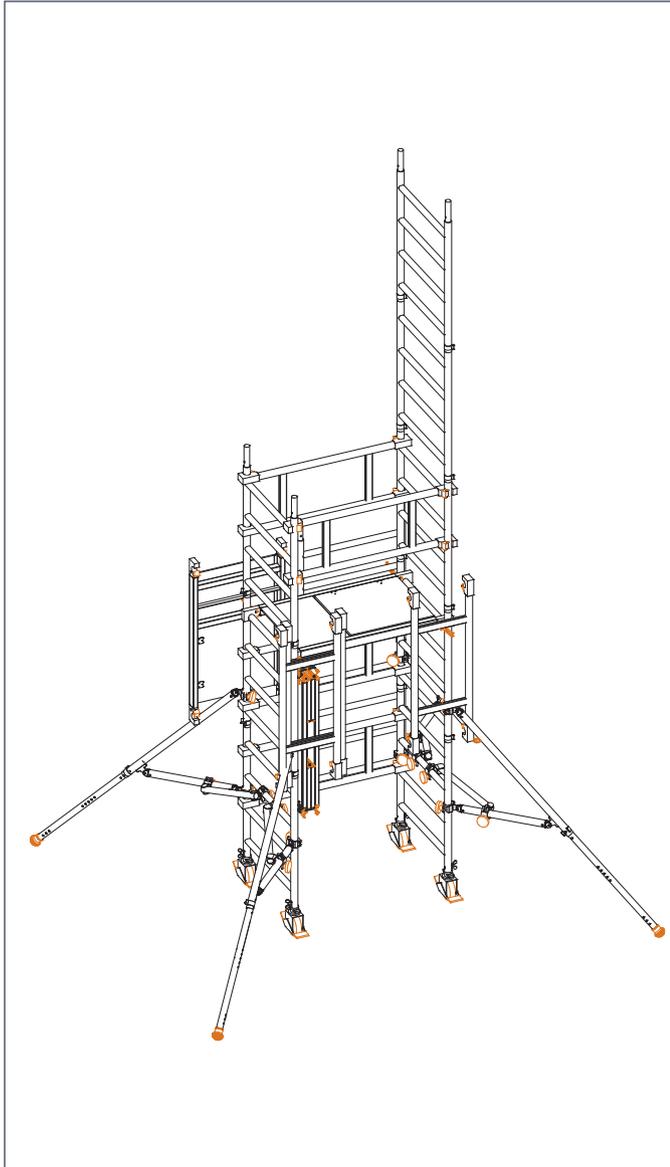
- a. ▶ 3x double guardrail **2**.
- b. ▶ 1x toe board unit **6**.
2x double guardrail **2**.
- c. ▶ 2x previously assembled 1 m ladder frames **1**.
- d. ▶ 1x access deck **3**.



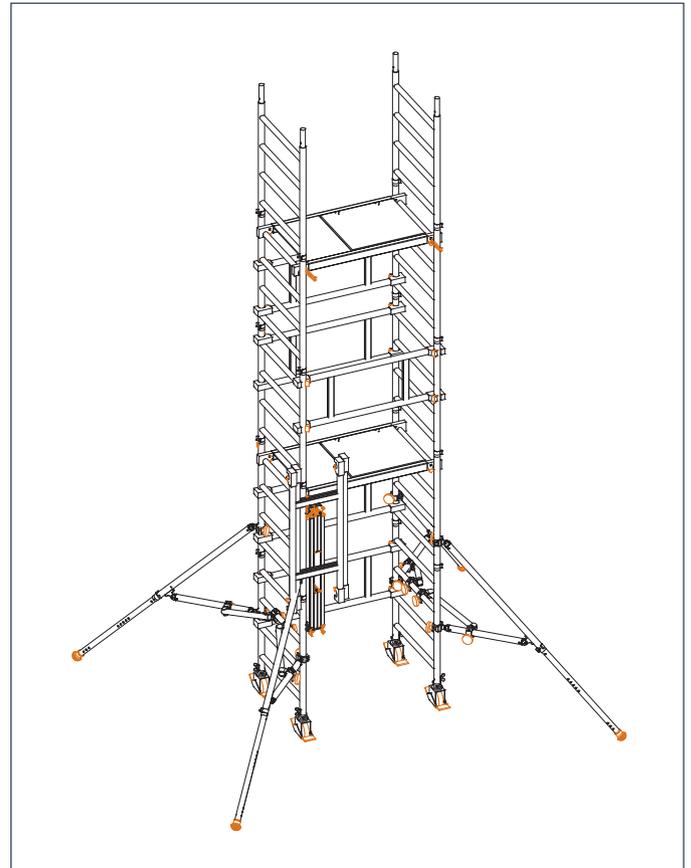
8. Climb up on the inside using the rungs of the ladder frame and through the trapdoor provided.
9. Further assemble the side protection for the next level while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**. Take the two double guardrails **2** from "a" listed under 7, fit them with the top chord over the last rung and use the snap-on claws to snap them into place properly. (see p.8, section entitled Measures for Fall Prevention).



10. Place the previously joined ladder frames from "c" as listed under 7 into the spigots provided for the purpose in the already assembled ladder frames, then secure the joints with spring clips 9.



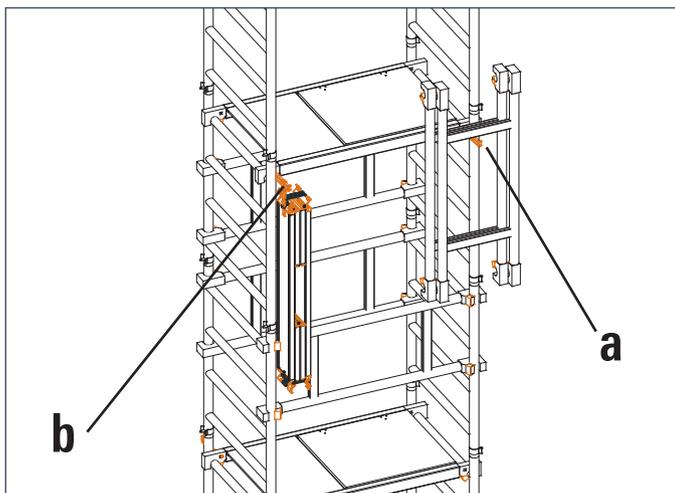
11. Fit the double guardrail 2 as bracing between the 5th and 7th rungs above the current platform height and snap it properly into place using the snap-on claws.
12. Fit the access deck 3 on the 8th rung above the current platform height and snap it properly into place using the snap-on claws.
13. Reposition both assembly hooks 9 on the hatch side of the access deck 3 from the present platform height to the front recesses provided in the snap-on claws of the access deck 3 assembled at the next level.



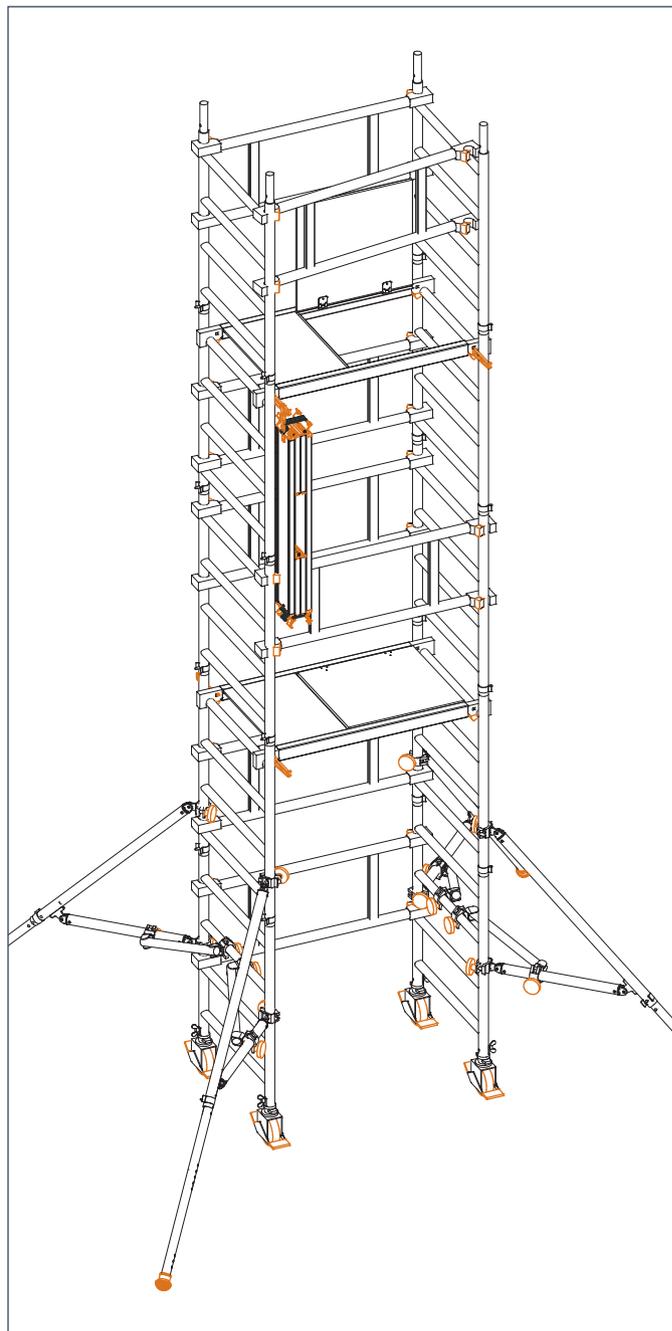
14. Diagonal movement of the components positioned in the assembly hooks for further assembly.

Part arrangement for model 1600104

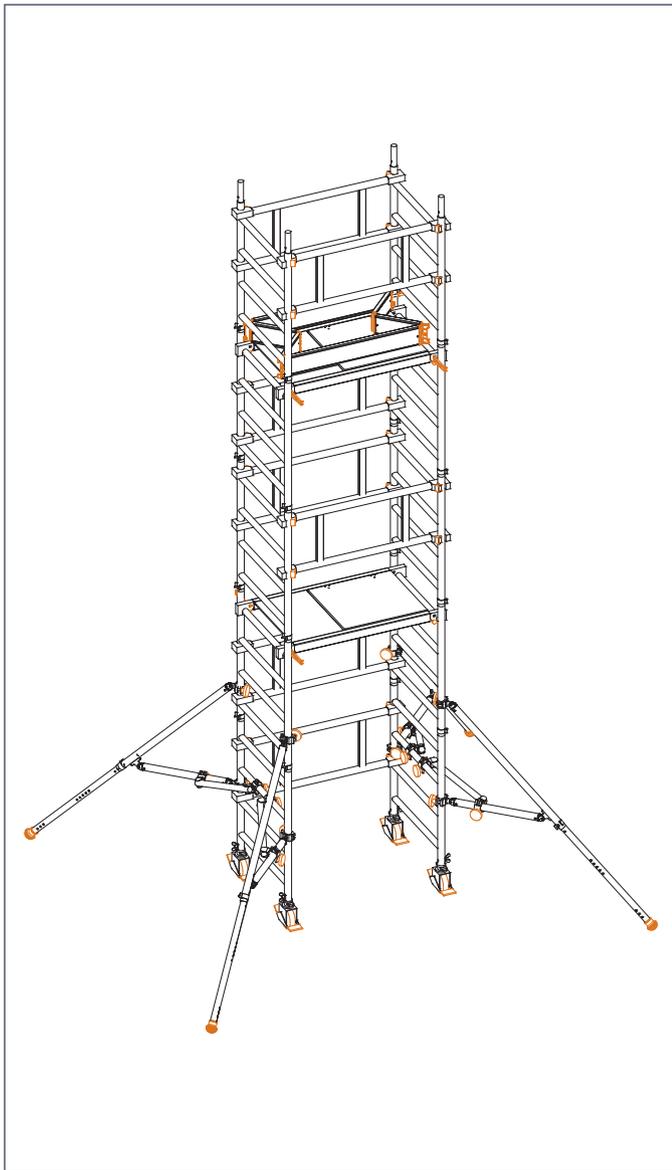
- a. ▶ 2x double guardrail **2**.
- b. ▶ 1x toe board unit **6**.

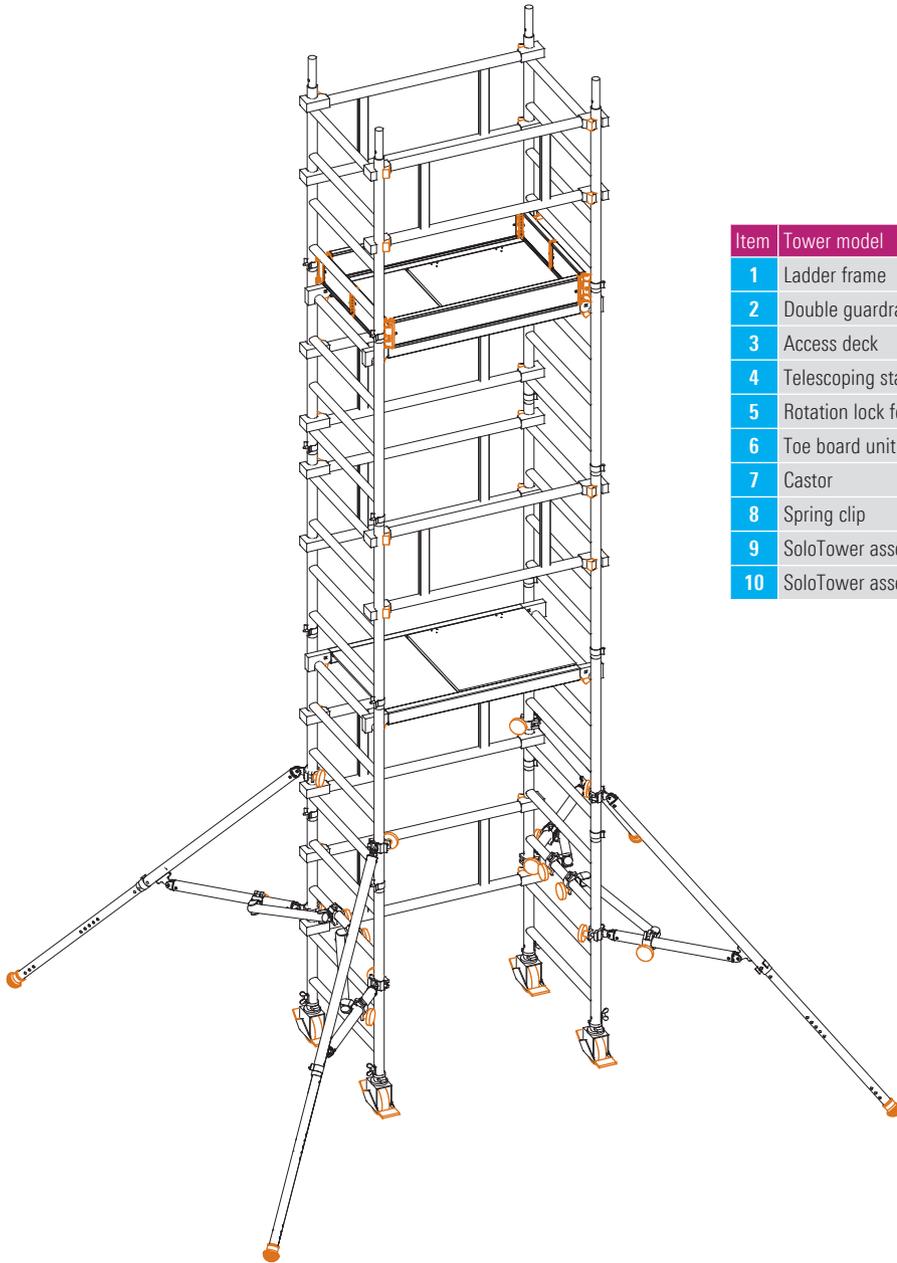


15. Climb up on the inside using the rungs of the ladder frame and through the trapdoor provided.
16. Further assemble the side protection for the next level while sitting in the trapdoor opening, protected from falls by the sides of the access deck **3**. Take the two double guardrails **2** from "a" listed under 14, fit them with the top chord over the last rung and use the snap-on claws to snap them into place properly. (see p.8, section entitled Measures for Fall Prevention).



17. Take the toe board unit **6** from "a" as listed under 14, fold it open on the work level now constructed and fit it as a frame around the access deck
(see p.36, section 6, Fitting the toe board unit).





Item	Tower model	Reference No.	1600104
1	Ladder frame	1297.004	10
2	Double guardrail	1342.113	7
3	Access deck	1242.113	2
4	Telescoping stabiliser	1240.000	4
5	Rotation lock for stabiliser	1248.261	4
6	Toe board unit	1240.113	1
7	Castor	1300.150	4
8	Spring clip	1250.000	16
9	SoloTower assembly hooks (set of 4)	1300.002	1
10	SoloTower assembly bag	1300.003	1

5.3.2. Dismantling sequence for model 1600104

1. Insert 2 assembly hooks **9** into the front recesses provided for them in the snap-on claws of the access deck **3** fitted at the top level.
2. Fold the toe board unit **6** together and position it in the assembly hooks on the access deck **3**.
3. Dismantle the two double guardrails **2** while sitting in the access deck **3** protected from falls, then position the guardrails in the assembly hooks **9**.
4. Climb down on the inside using the rungs of the ladder frame **1** to the level underneath it.
5. Insert 2 assembly hooks **9** into the recesses provided for them in the snap-on claws of the lower access deck **3**.
6. Reposition the components into the assembly hooks **9** fitted at the platform level on the access deck.
7. Reposition the 2 assembly hooks **9** from the upper level to the access deck **3** of the present platform height.
8. Dismantle and position in the assembly hooks **9** the double guardrail **2** between the 5th and 7th rungs above the present platform height.
9. Dismantle and position the access deck **3** at the 8th rung above the present platform height.
10. Dismantle and position the previously assembled ladder frames **1** in the assembly hooks **9**.
11. Dismantle the two double guardrails **2** while sitting in the access deck **3** protected from falls, then position the guardrails in the assembly hooks **9**.
12. Climb down on the inside using the rungs of the ladder frame **1** to the ground.
13. Remove the positioned components from the assembly hooks.
14. Remove the assembly hooks **9**.
15. Remove the stabilisers **4**.
16. Remove the access deck **3** at the 8th rung.
17. Remove the ladder frames **1**.
18. Dismantle the basic assembly.

6. BALLASTING

For ballasting, use Layher ballast weights **11** of 10 kg each. Couplers with hand wheels permit simple, quick and secure fixing of the ballast required at the correct places. As a general principle, only ballast weights of solid materials may be used, not liquid or granular materials.

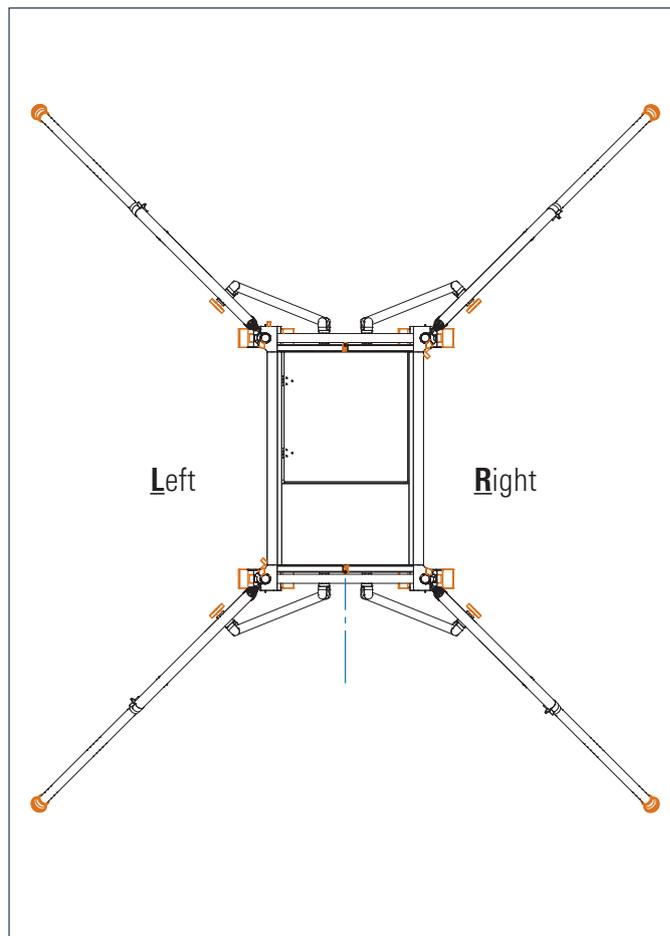
The ballast weights must be spread over the lowest connection points and evenly spaced on the side indicated in the model table (see p. 10, section entitled Tower models).

The indivisible remainder is then distributed over the same side, where possible, in the middle or diagonally inside the tower.

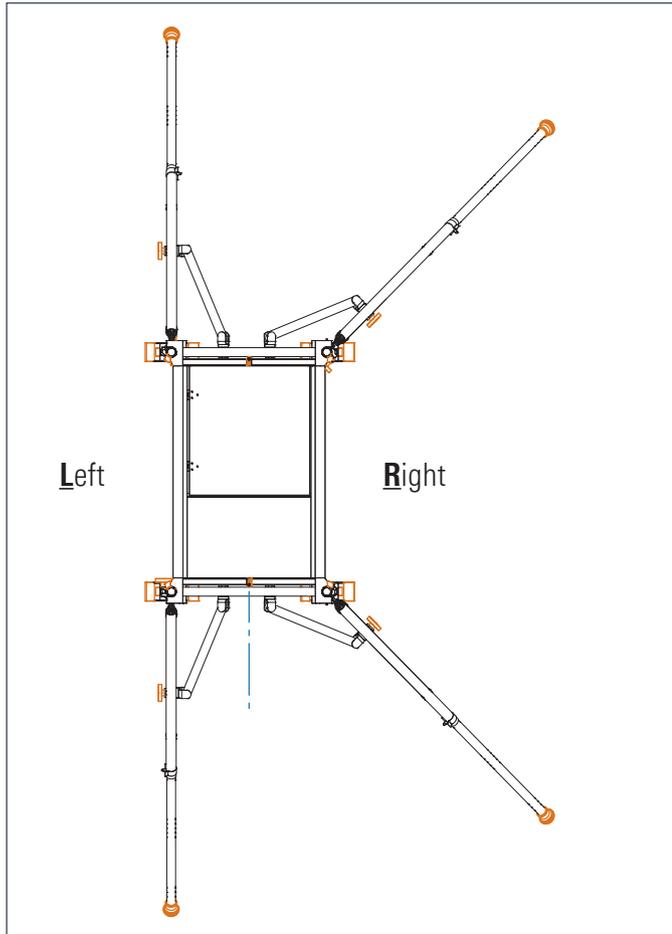
Depending on the assembly variant and the number of ballast weights needed, it may be necessary to provide additional fastening points, which can for example be done using scaffolding tubes and couplers.

Attachment of ballast weights

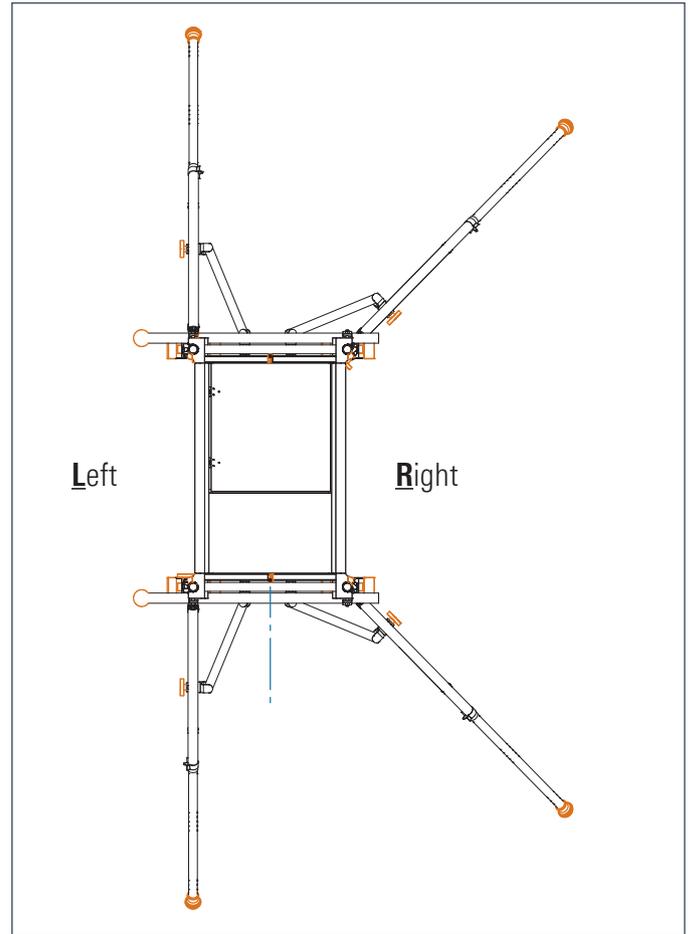
Assembly central:



Assembly off-centre:



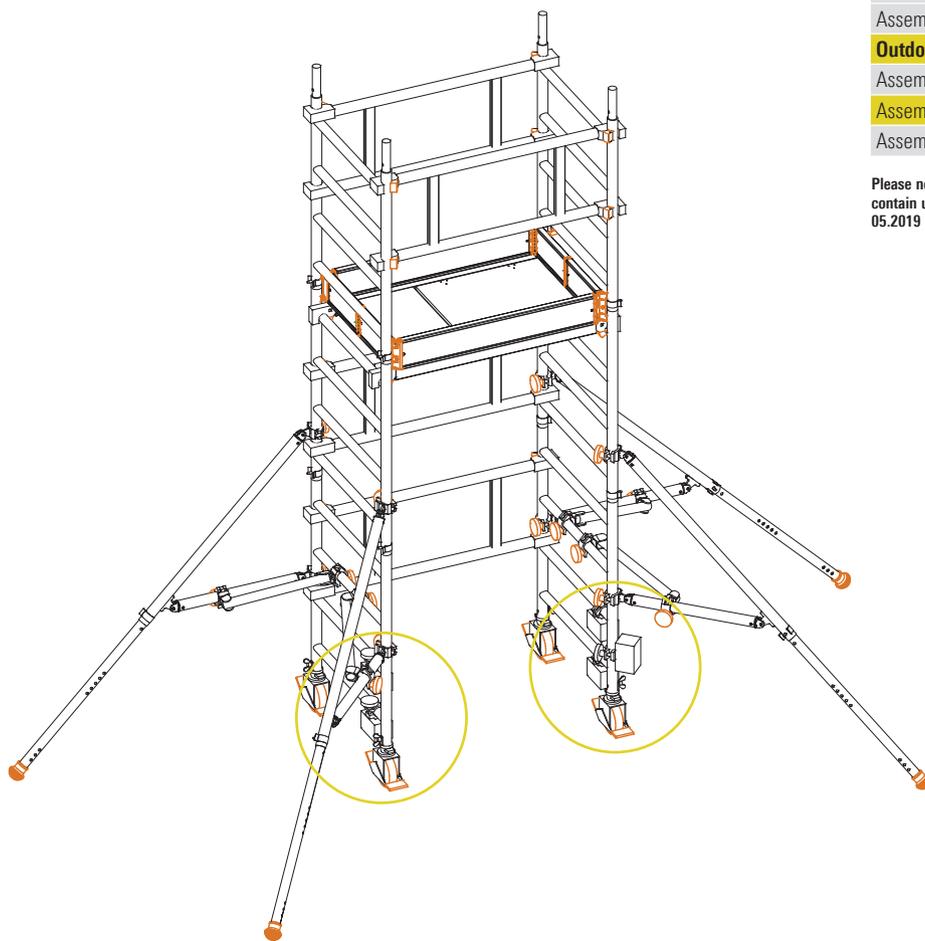
Assembly with wall bracing:



Example for assembly of model 1600102

Assembly outdoors and in off-centre position

For ballast see page 10.

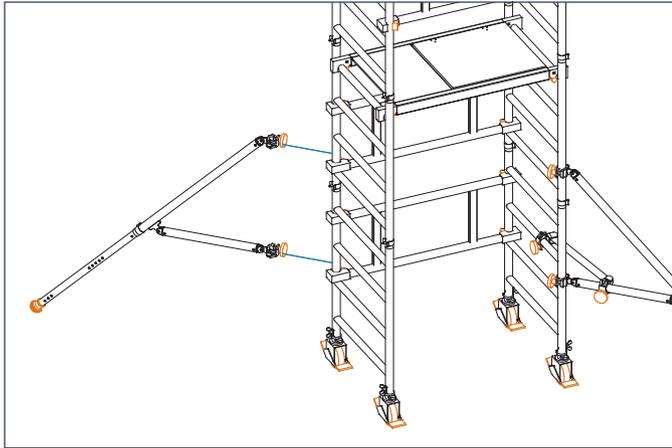


Tower model	1600102
Working height [m]	4.15
Tower height [m]	3.37
Platform height [m]	2.15
Weight [kg] (without ballast)	118.8

Ballasting	
In closed areas	
Assembly central	0
Assembly off-set	LO R5
Assembly off-set with wall bracing	0
Outdoors	
Assembly central	0
Assembly off-set	LO R5
Assembly off-set with wall bracing	0

Please note: The ballasting table and the figure shown on the left contain updated information. By releasing this manual, the issue from 05.2019 loses its validity.

7. STABILISER ATTACHMENT



Every model described in these instructions must have, on each upright of the ladder frames, a stabiliser including a rotation lock to ensure stability of the tower.

Base-widening devices such as stabilisers should always be attached before the tower is accessed to prevent it from toppling over.

For fitting, position the first half-coupler directly above the 5th rung of the ladder frame, but do not tighten it yet. Once the half-coupler is positioned, temporarily remove the spring clip, allowing the telescoping tube to be extended to the required length and then secured in a congruent hole by reinserting the spring clip. Move the positioned half-coupler along the upright tube to bring the stabiliser to the right position, so that the rubber foot at the end of the stabiliser is in firm contact with the ground.

The transverse tube of the stabiliser can now be fastened to the upright tube with the second half-coupler, while ensuring that the rubber foot always remains in contact with the ground to provide the required support.

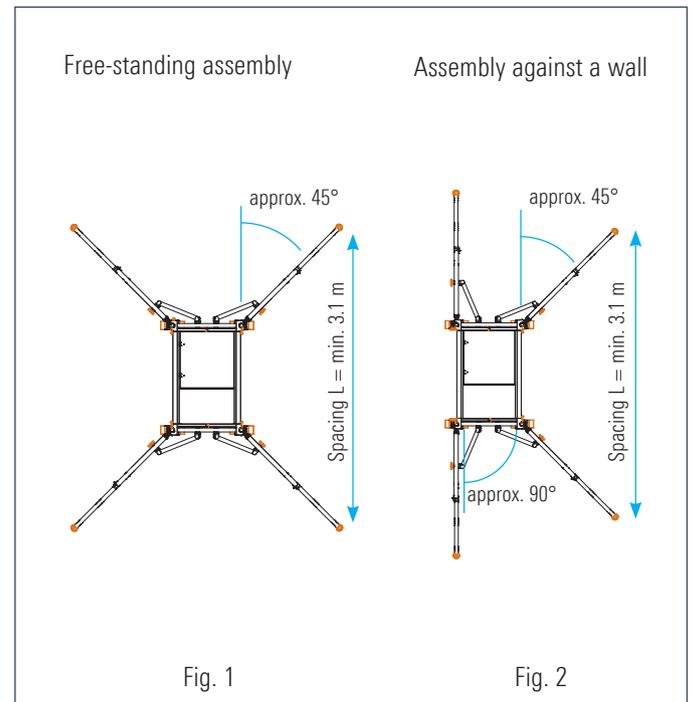
After aligning the stabilisers, tighten all the half-couplers using the hand wheel. Then safeguard the stabiliser against inadvertent rotation using the rotation lock provided.

The positions of the stabilisers must be set as follows:

Free-standing assembly: in each case about 45° to the tower's longitudinal side (Fig. 1).

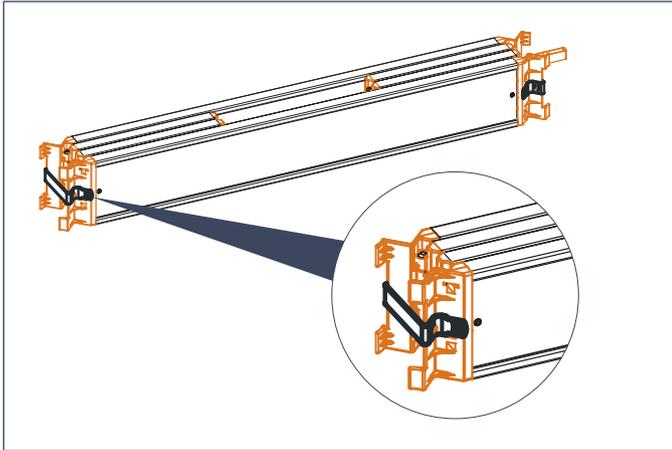
Assembly against wall: on the wall side about 90° to the tower end face Side facing away from wall about 45° to the tower's longitudinal side (Fig. 2).

The specified angles can be checked after attachment of the stabilisers on the basis of the length dimensions "Spacing L". When moving the tower, the stabiliser must not be lifted more than 2 cm off the ground.

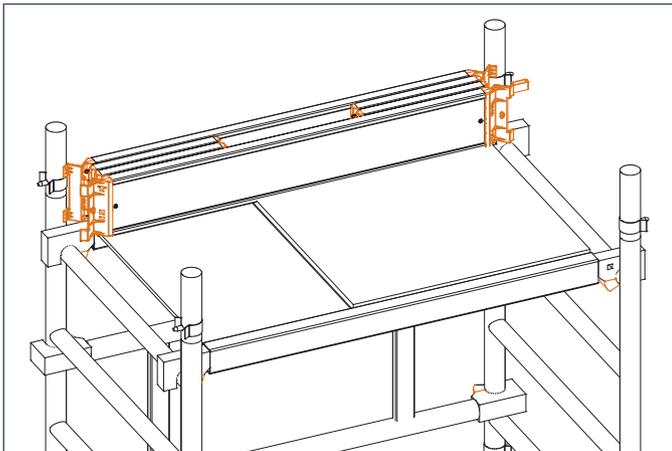


8. FITTING THE TOE BOARD UNIT

1. Undo the rubber strips on both sides

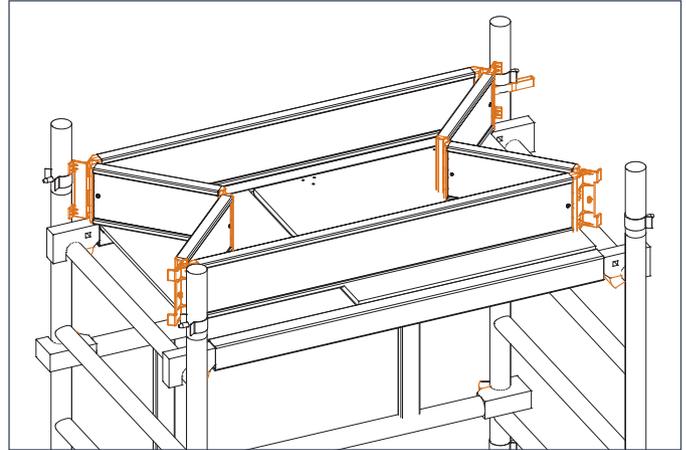


2. Place the toe board unit against the uprights of the ladder frame on one side



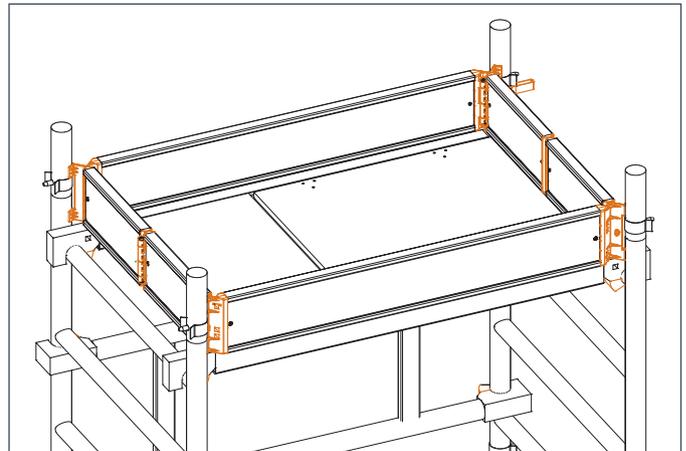
Ladder frame and guardrail truncated for clearer view.

3. Fold open the toe board unit



Ladder frame and guardrail truncated for clearer view.

4. Place the toe board unit against the opposite uprights



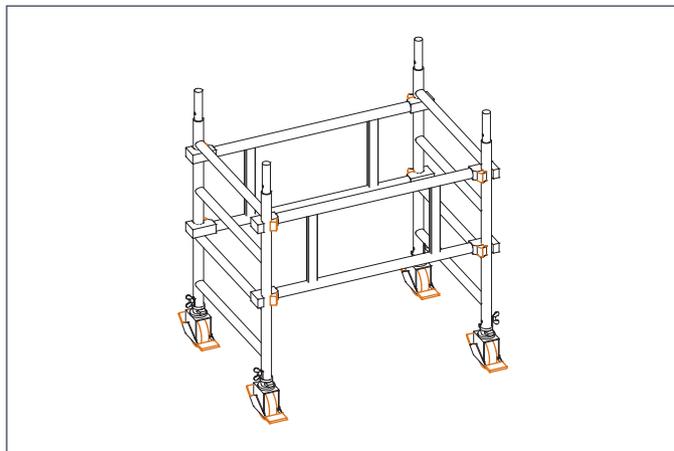
Ladder frame and guardrail truncated for clearer view.

9. COMPONENT TRANSPORT / TRANSPORT UNIT

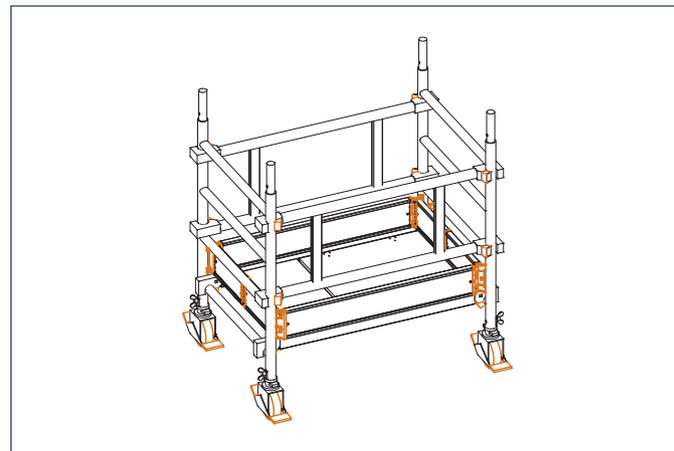
Thanks to the compact dimensions of the Layher SoloTower components, they can be transported to their place of use in a mobile unit made up of these components.

Assembling the transport unit

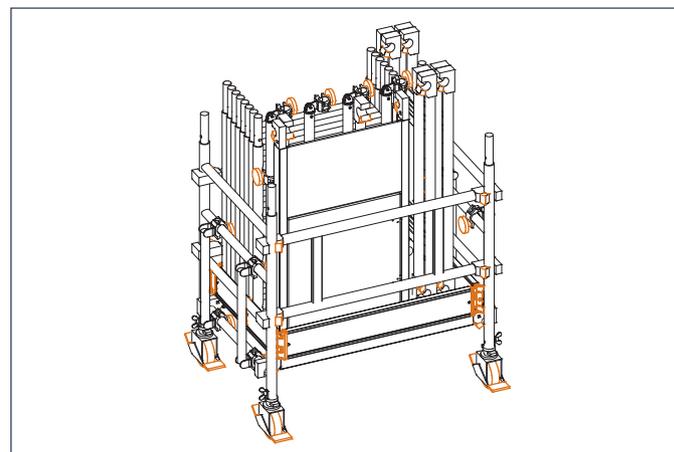
1. Connect 2 ladder frames with preassembled s to 2 double guardrails **2**.



2. Fit an access deck **3** to the bottom rungs of the two ladder frames to act as the floor of the transport unit.
3. Fit the toe board unit **6** as a frame on the access deck **3**.



4. Put all the remaining components upright into the transport unit and then secure them using tensioners against unintended movement.



5. When loading this transport unit into or onto vehicles, comply with the generally valid rules and regulations governing the securing of loads for the respective vehicle.

10. PARTS LIST

SoloTower

Item	Tower model	Reference No.	1600102	1600103	1600104
1	Ladder frame	1297.004	6	8	10
2	Double guardrail	1342.113	4	6	7
3	Access deck	1242.113	1	2	2
4	Telescoping stabiliser	1248.000	4	4	4
5	Rotation lock for stabiliser	1248.261	4	4	4
6	Toe board unit	1240.113	1	1	1
7	Castor	1300.150	4	4	4
8	Spring clip	1250.000	8	12	16
9	SoloTower assembly hooks (set of 4)	1300.002	1	1	1
10	SoloTower assembly bag	1300.003	1	1	1

11. COMPONENTS OF THE SYSTEM



1

1297.004 Ladder frame,
aluminium
Rungs with non-slip
grooving.



2

1342.113 Double guardrail,
aluminium.



3

1242.113 Access deck,
aluminium frame with deck
and hatch of phenolic-
resin-coated plywood.



4

**1248.000 Telescoping
stabiliser;**
aluminium.
Telescoping:
min. 1.2 m.
max. 2.0 m.

5



1248.261 Rotation lock for stabiliser,
aluminium, 0.5 m.

6



1240.113 Toe board unit,
aluminium.

7



1300.150 Castor
plastic, PA
dia. 150 mm.

8



1250.000 Spring clip,
steel.

9



**1300.002 SoloTower
Assembly hooks (set of 4),**
steel.

10



**1300.003 SoloTower
Assembly bag,**

11



1249.000 Ballast (10 kg),
steel, hot-dip-galvanised
with half-coupler.



1275.110 Uni distance tube,
aluminium,
with hook and rubber foot.

4700.019 Double coupler
steel, galvanised.



**6344.400
Tower identification block**



6344.010 See-through pocket,
with integrated prohibition sign.





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