

A Assembly Instructions

“Fortuna” Bird’s Nest Tower Art.-No. 4594-30

Attention! Only use the instructions included in the scope of delivery for the assembly, installation and maintenance of the respective equipment!



Operator: _____

Location: _____

Revision 0 – 2007-10-23

Erste freigegebene Version

Revision 13 – 2023-07-11 PR

S8+10 Kanalrohr + Hilfskeil hinzugefügt

S23+24 Hinweis eingefügt PR

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**Please note the explanations and abbreviations and notes.
For any queries please contact the manufacturer**

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1 Introduction Assembling

1.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN1176-7 guidelines.

Before installation work commences, please check that you have all of the equipment and fixation components in the parts list provided (see Tables 3-1 and 3-2).

Please consider that the installation has to be carried out only on even terrain (max.slope up to 3%).

Any spare parts that may be required can be obtained directly from your supplier or from Fa. Huck Seiltechnik GmbH

Adress: Huck Seiltechnik GmbH
Dillerberg 3
D-35614 Asslar/Berghausen
Tel. +49 6443 83 11-0
Fax +49 6443 83 11-79

Please do not hesitate to call your supplier if you have any problems during installation or with any other questions. You can reach us at the following **Tel. +49 6443 83 11-0.**



Following installation, complete assembly instructions, maintenance instructions and a maintenance record must be sent to the operator who must confirm receipt in writing. See the last page of this document.



All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray or another similar lubricant.

Drawings / Views

All optical drawings are showing only the measurements/dimensions and are no mandatory technical views of the complete item.

We reserve the right to change technical details of our articles which are serving for the further development of our articles and are reasonable for the customer.

Measurement tolerances

Because of the properties and characteristics of the components, minor measurement tolerances compared to the indication on the sketches are possible.

This concerns all shown measurements except the foundation measurements resp. measurements below upper edge ground level/play area.

2 Datasheet: “Fortuna” Bird’s Nest Tower / Art.-No. 4594-30

1. Component zone: Ø 2.70 m
safety zone: Ø 5.30 m
Height of equipment: 2.44 m
Height of Fall: 1.00 m
Fall protection area: 22,10 m²
2. Required safety surface:

Surface material	Description / mm	Minimum thickness of layer / mm	Maximum height of fall / mm
Lawn / topsoil	-	-	≤ 1000*
Bark mulch	20 – 80 Particle size	300	≤ 2000
		400	≤ 3000
Wood chips	5 – 30 Particle size	300	≤ 2000
		400	≤ 3000
Sand	0,25 – 2 Grain size	300	≤ 2000
		400	≤ 3000
Gravel	0,25 – 8 Grain size	300	≤ 2000
		400	≤ 3000
Other floor materials	As per HIC audited		Critical drop height as tested
Sand and gravel must be well rounded to remove most of the silty or clayey particles. Washed sand or gravel is considered to be alluvial and free from silty or clayey particles. With gravel this is generally described as "pearl gravel". Degree of non-uniformity D60/D10 < 3.0. The grain size can be determined by using a sieve method.			

3. Name and size of the largest part of the device:
Steel post Pos. 01 / Ø101,6 – lg. 3400 mm
4. Name and weight of the heaviest part of the equipment:
Steel post Pos. 01 / ca. 24,5 kg
5. Intended age group: from 2 years
6. **Attention! Device for setting in concrete:**
Foundation

Concrete: C25/30
Concrete requirements: 0,89 m³
Foundation size:
 1x 800 x 800 x 600 mm
 2x 885 x 400 x 400 mm
 2x 680 x 400 x 400 mm
Concrete upper edge: 400 mm below upper edge (O.K.) of play level

Excavation size:

1x 800 mm x 800 mm x 1100 mm (inclusive 100 mm drainage layer)
2x 885 mm x 400 mm x 900 mm (inclusive 100 mm drainage layer)
2x 680 mm x 400 mm x 900 mm (inclusive 100 mm drainage layer)

7.



Round off foundation edges (min.R = 100 mm)! Sizes of foundations are designed for soils class "4-5" (natural ground).

Soil class 4: soft to medium plasticity, interleave bound, with minor portion of stone (portion < 30% with bigger diameter of 63 mm grain size)

Soil class 5: ground with soil class 3 and 4 with big portion of stones (portion > 30% with bigger diameter of 63 mm grain size)

In case of sandy and soft soils, the surface measure of foundations have to be enlarged for about 50%!

8. Assembly time approx.. 45 minutes after completion of concreting the steel post
Needed persons: 3

9. Possibly required spare parts can be obtained directly from your supplier or from the company Huck Seiltechnik GmbH

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Dillerberg 3
D-35614 Asslar/Berghausen
Tel. +49(0)6443/8311-0
Fax.+49(0)6443/8311-79

10. **We hereby confirm that this play equipment has been tested and certified in accordance with the play equipment standard EN 1176-1.**

3 Delivery contents (parts list with part numbers)

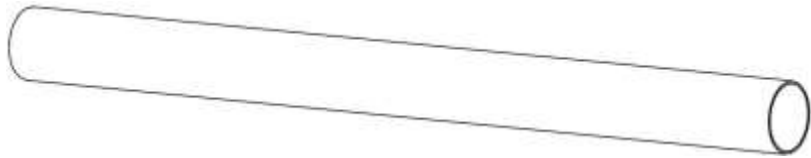

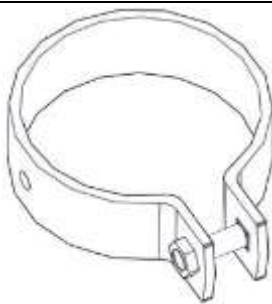
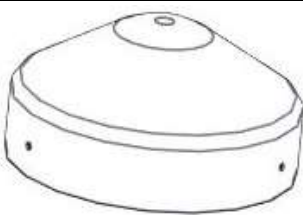
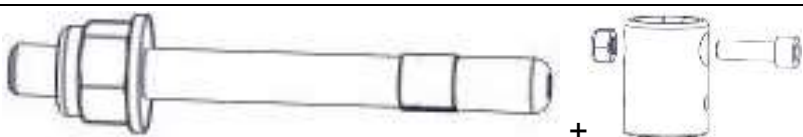
3.1. In words



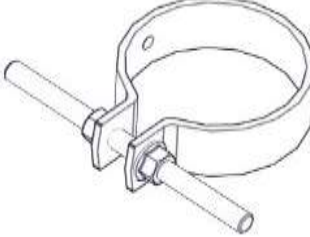
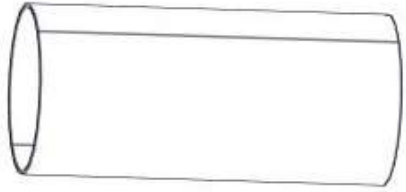

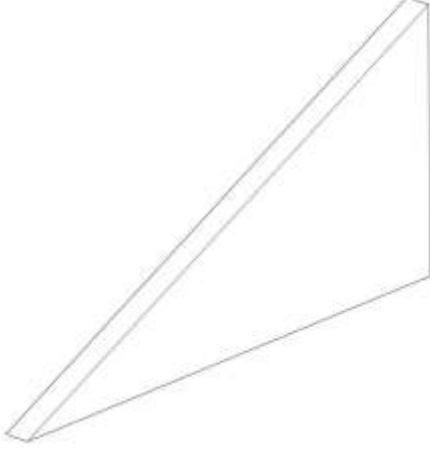
Table 3-1: Delivery contents, in words

Pos.	Quantity	Element / Description	Size	O.K.	Mis-sing
01	1	Steel post	Ø102 mm – lg. 3400 mm		
02	1	Bird's nest with pre-assembled access elements	Ca. Ø1200 mm		
03	2	Pipe clamp with pre- assembled carriage bolt	Ø102 mm		
04	1	Cover cap	Ø102 mm		
05	8	Fix anchor + Chain adapter + screw+ nut	M12 VA		
06	3	Self-tapping screws	5,5 x 25 mm		
07	1	Loctite	3 ml		
08	1	Pipe clamp with threaded bolt + nuts	For Ø102mm		
09	1	Empty pipe (on-site customer)	Ø150-200mm – lg. 650 mm		
10	1	Pavement slab (on-site customer)	400 x 400 mm		
11	4	Support wedges			

3.2. In symbols

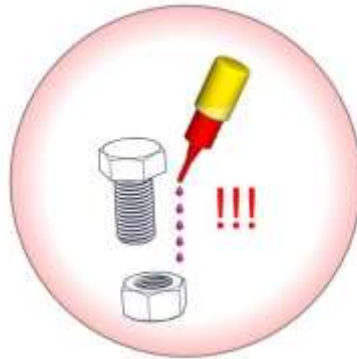
Table 3-2: Delivery contents, in symbols

Pos.	Quantity	Symbol
01	1	 <p>Ø102 mm – lg. 3400 mm</p>
02	1	 <p>Ca. Ø1200 mm</p>
03	2	 <p>Ø102 mm</p>
04	1	 <p>Ø102 mm</p>
05	8	

06	3	 5,5 x 25 mm
07	1	 3 ml
08	1	
09	1	 Ø150-200mm – lg. 650 mm (on-site customer)
10 Gehw. Pl.	1	 400 x 400 mm (on-site customer)
11	4	 On customer side

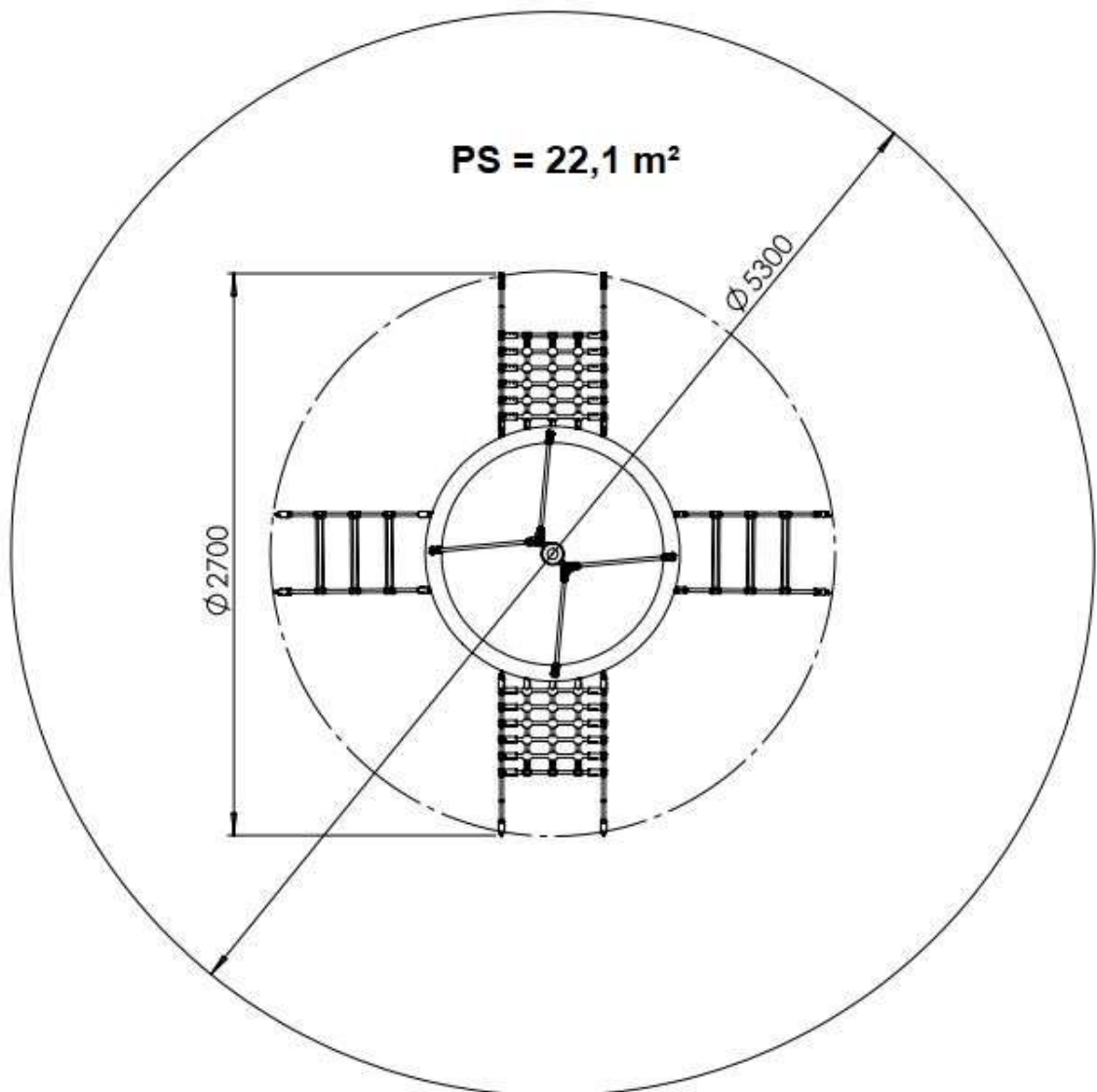
	4 Abbreviations
AB	The legally prescribed setting times must be observed!
D	C25/30 concrete (for foundations) Q.ty required: 0,052 m ²
DT	Detail
ER	Ground, fall protection etc. (ground) 100 mm thick
F	Fall protection
G	Drainage layer
Lg.	length
LRB	Fill the empty pipe with liquid concrete after installation!
O.K	Top edge play level
PS	Minimum safety area
PSA	Adjust the pipe clamps so that the bird's nest, upper edge ring, is 1000 mm above the play level (O.K.)
KELA	Shorten chain as required
EBT	Installation depth is marked on the post
Gehw.PI	Walkway slab to be organised on site

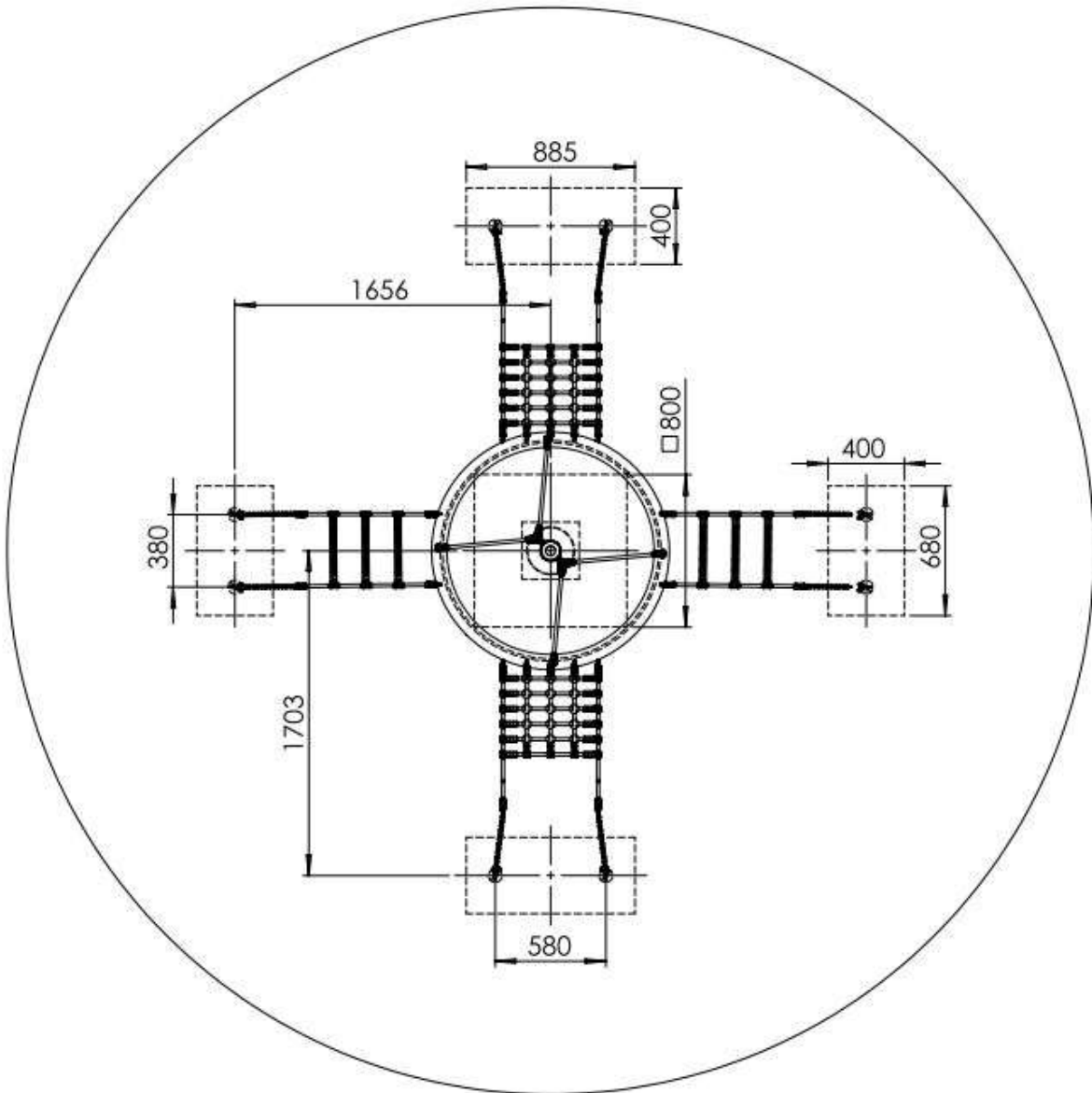
Screw locking device!

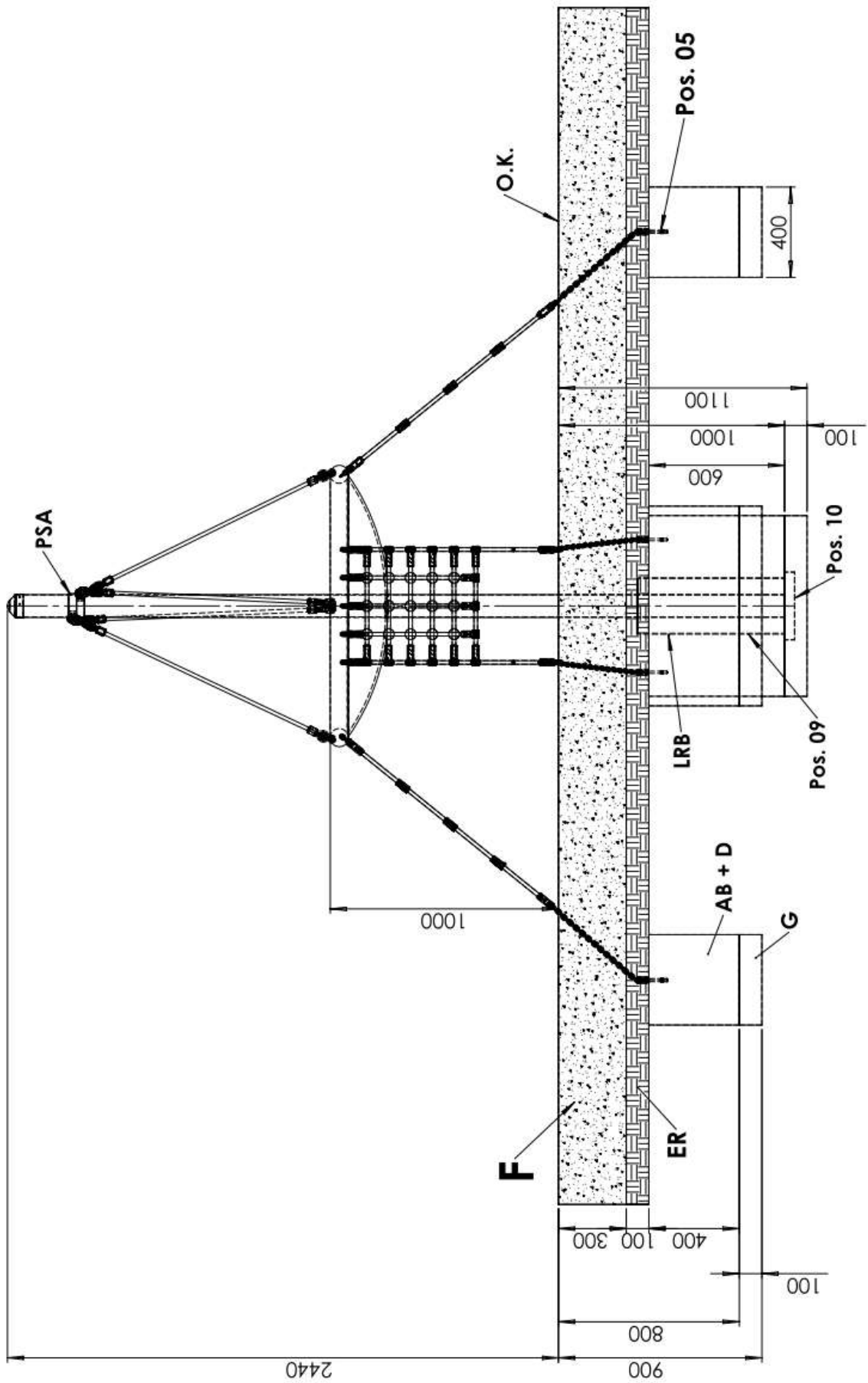


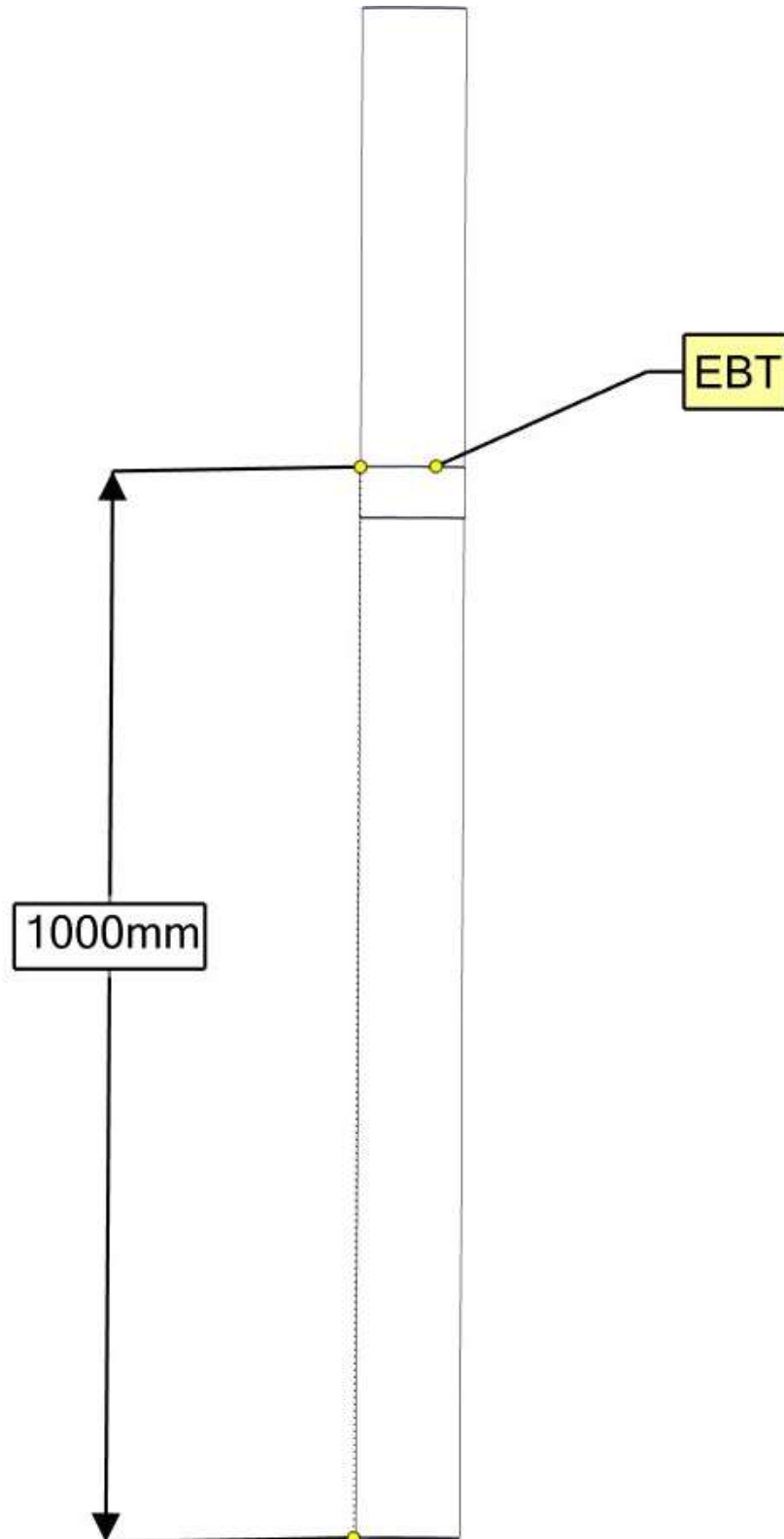
**Glue all screw´s, nuts and sleeves with loctite.
(not les than 5 drops!)
(except for lock nut)**

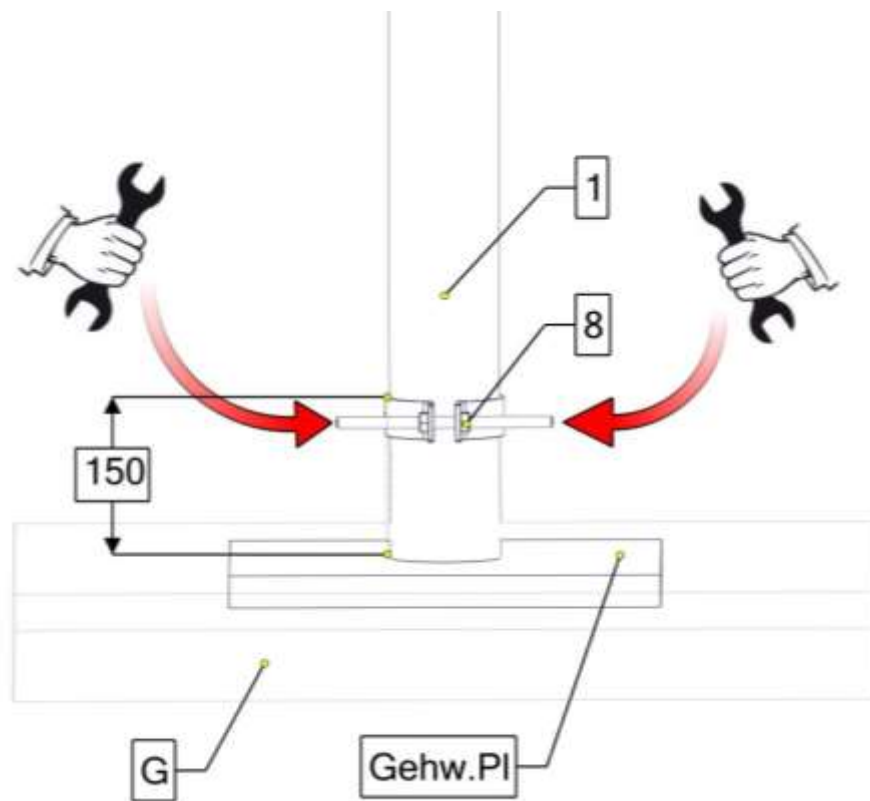
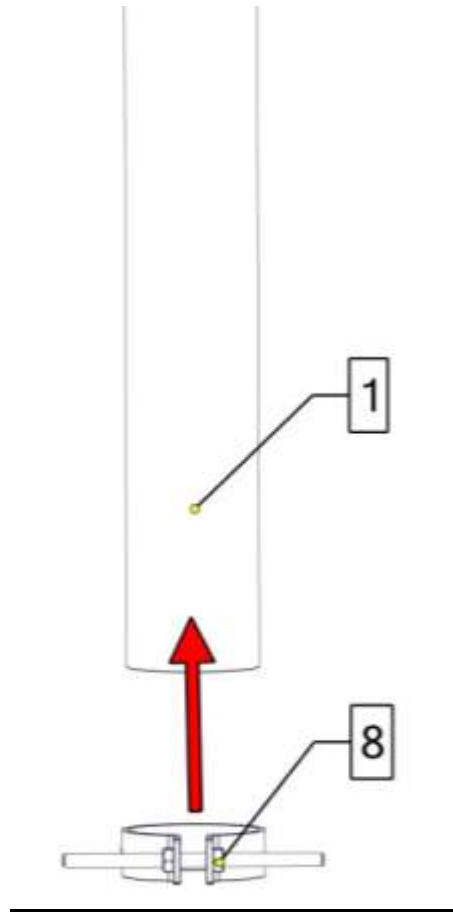
5 Assembly instructions

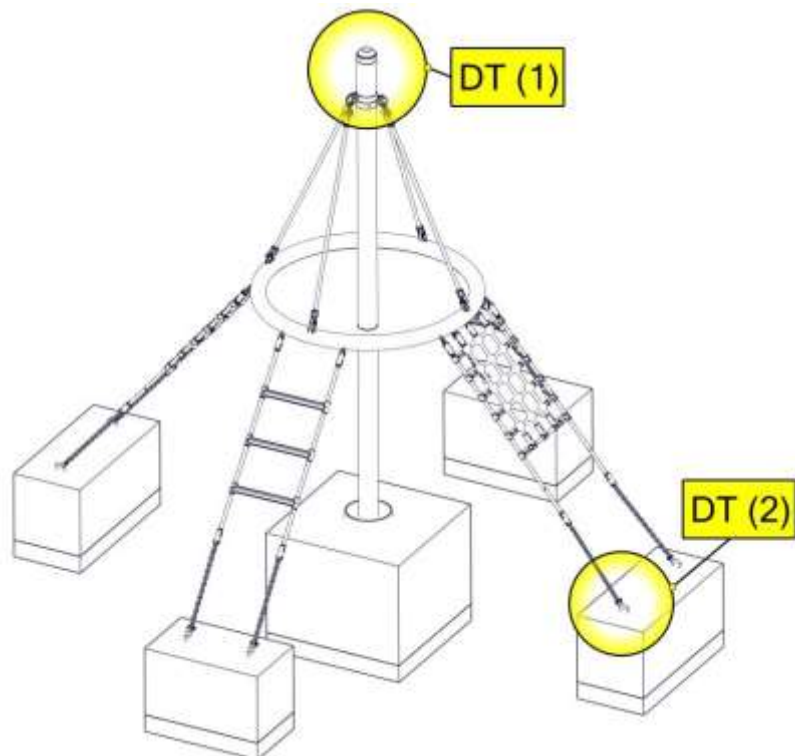
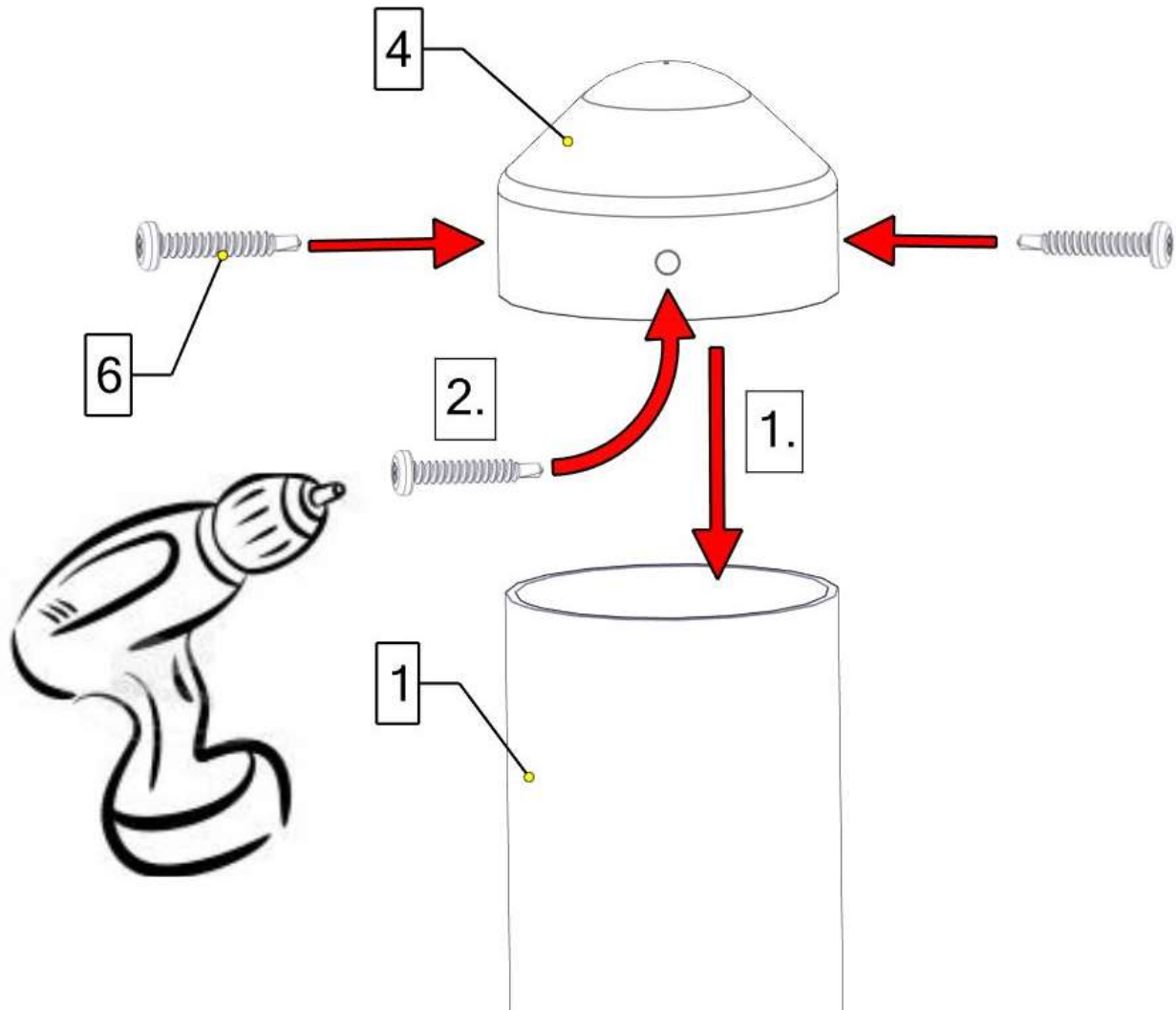




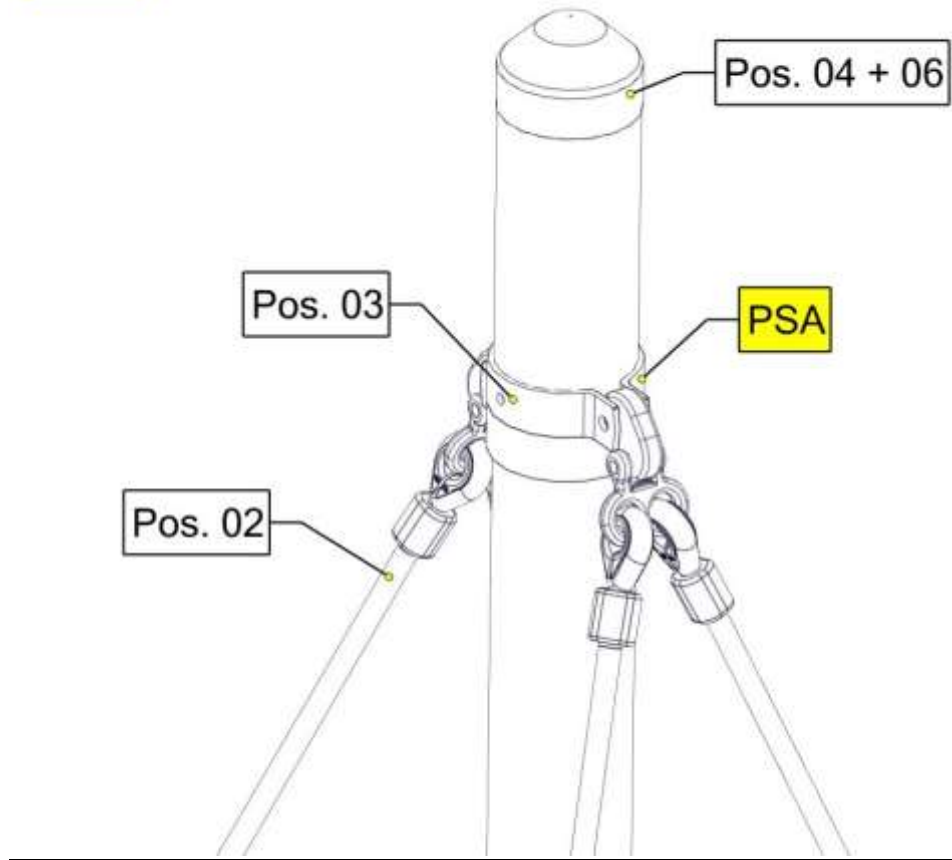




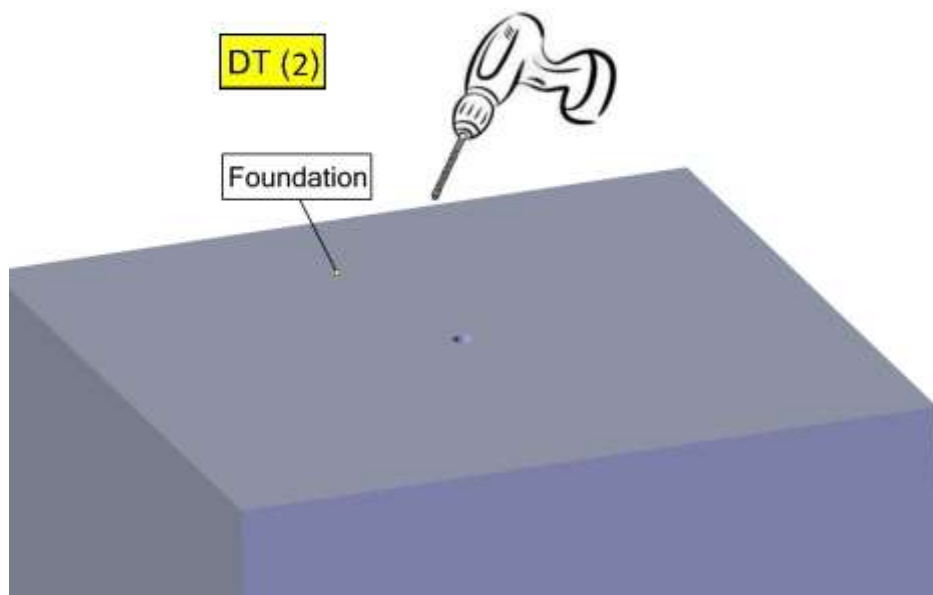


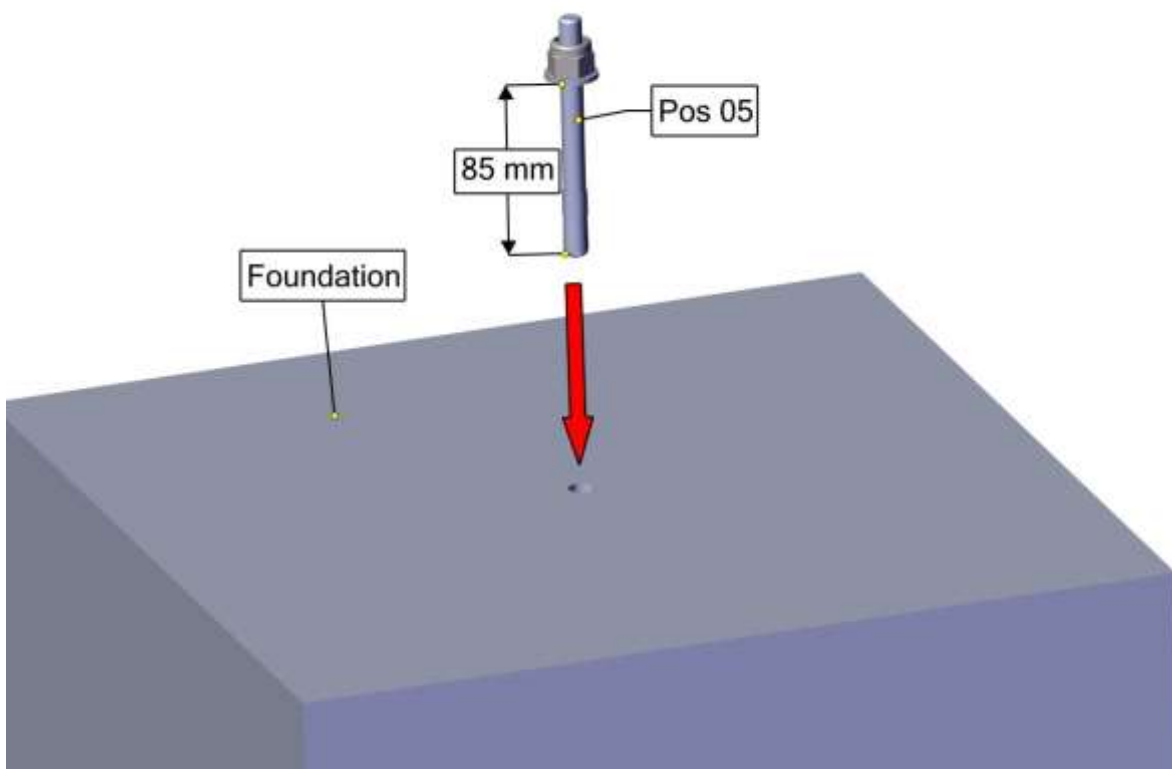
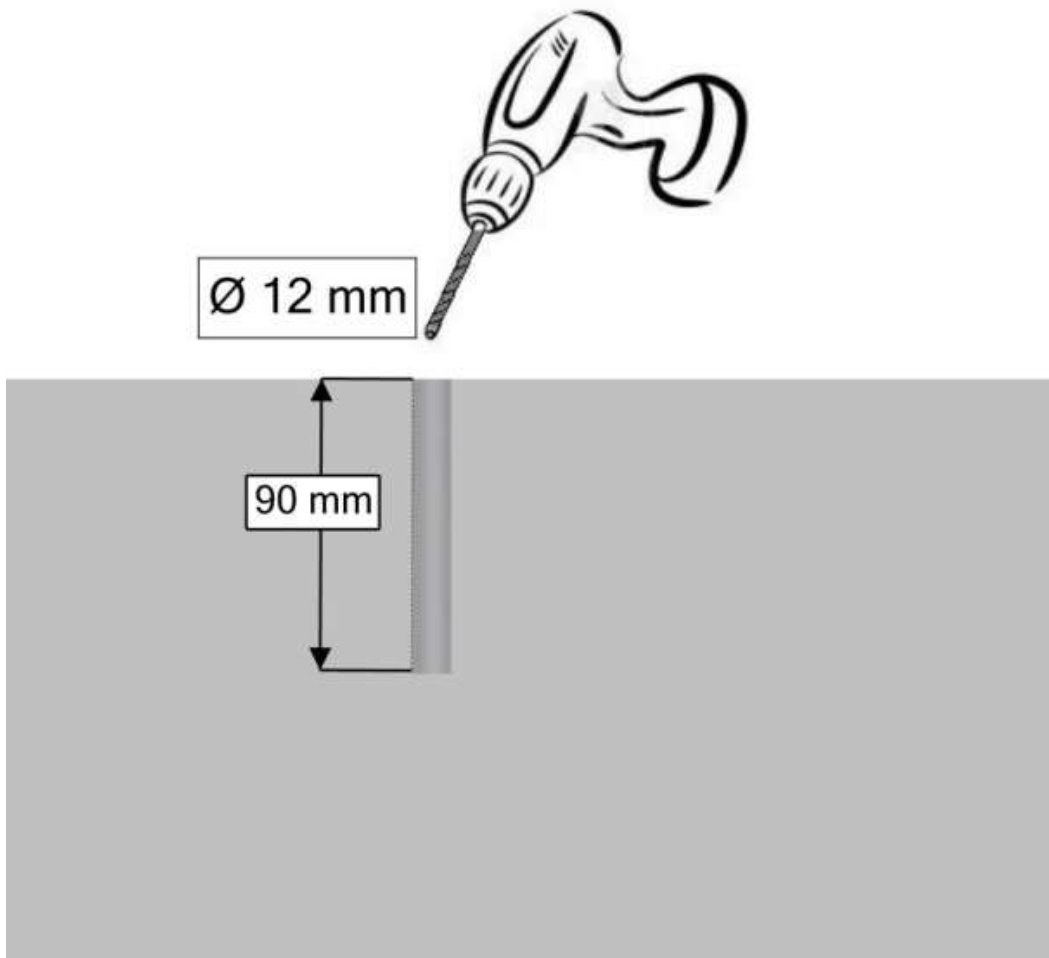


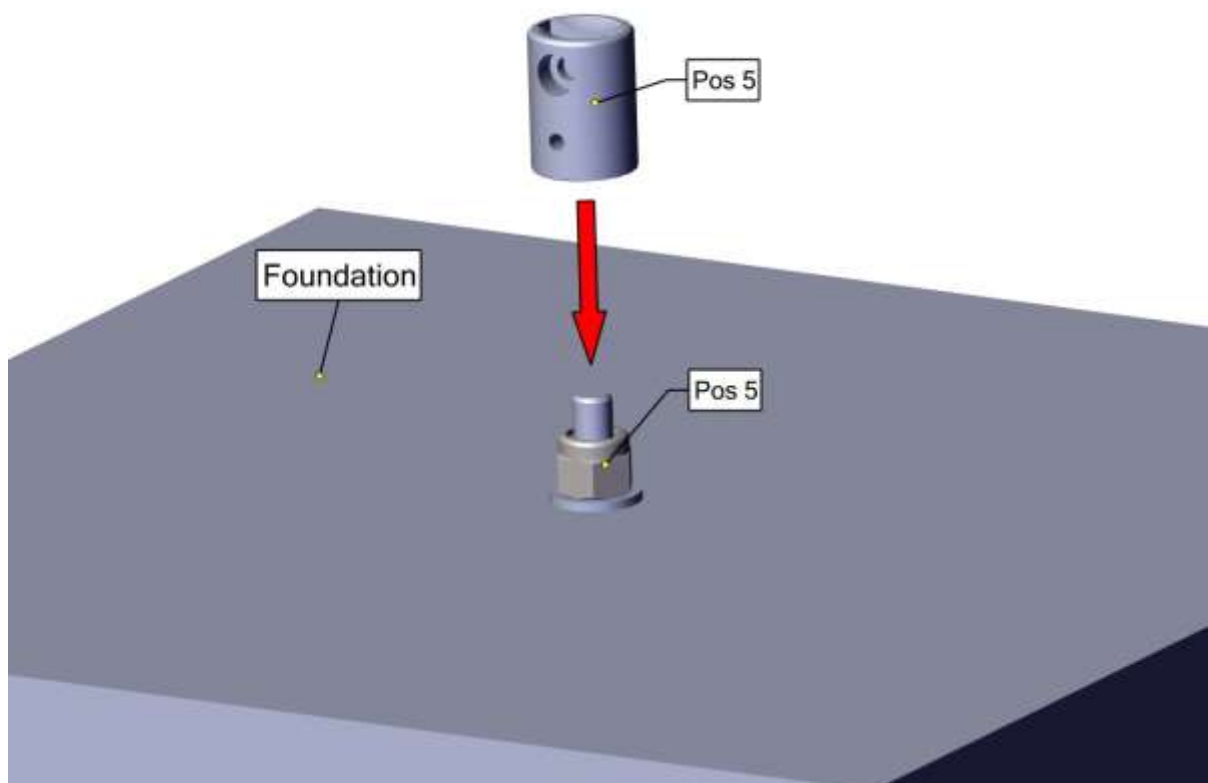
DT (1)

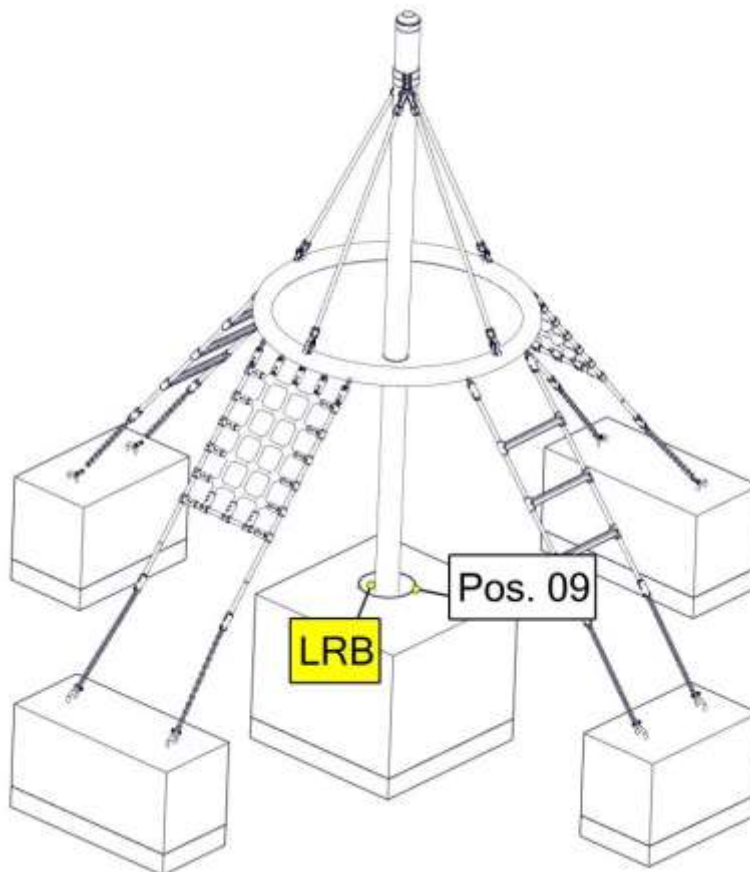
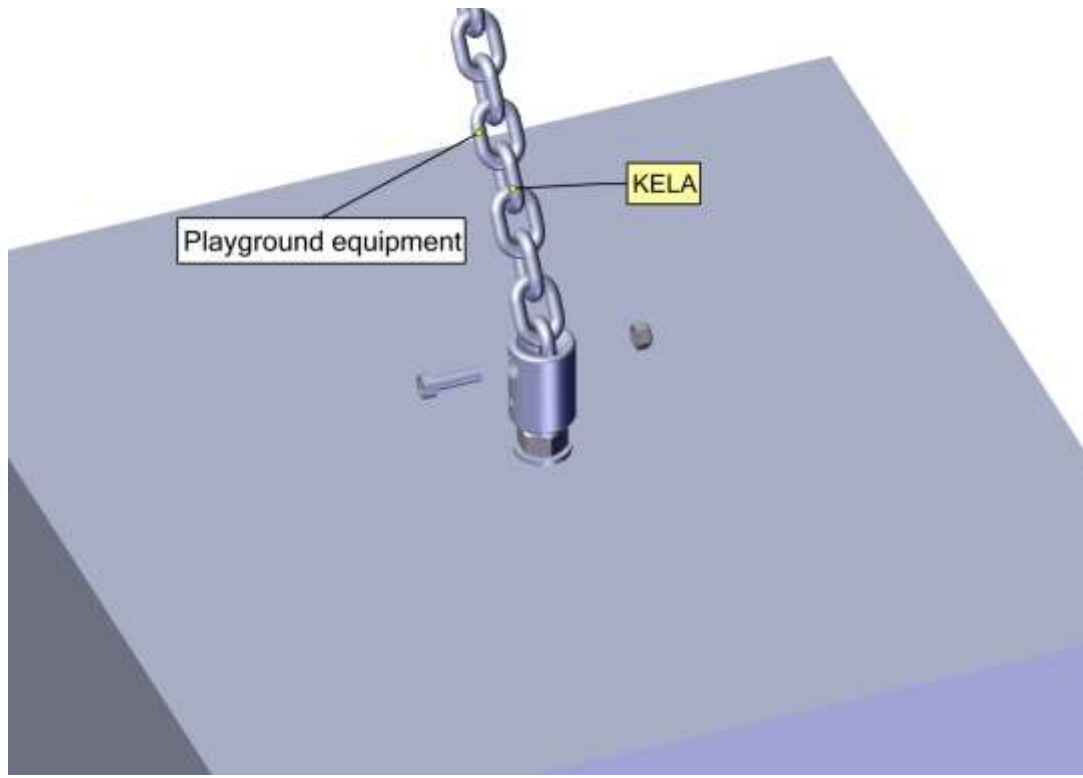


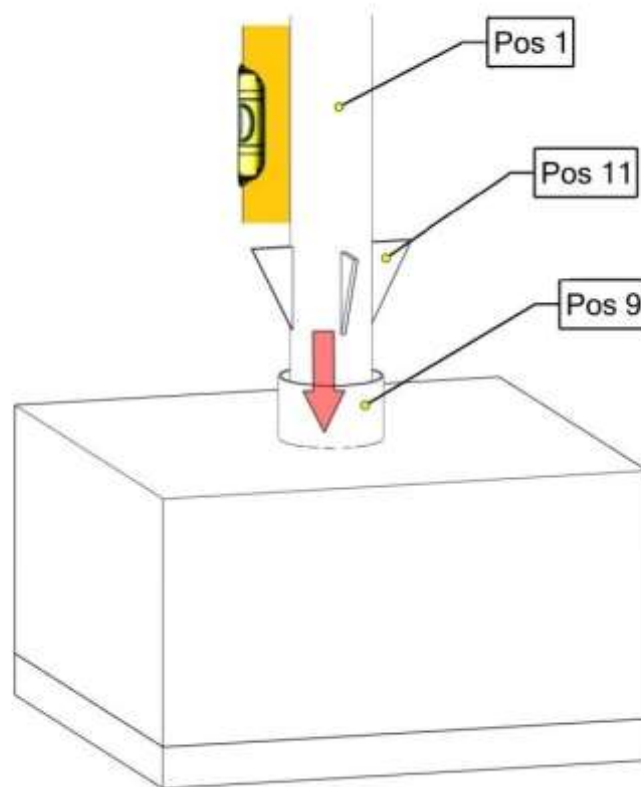
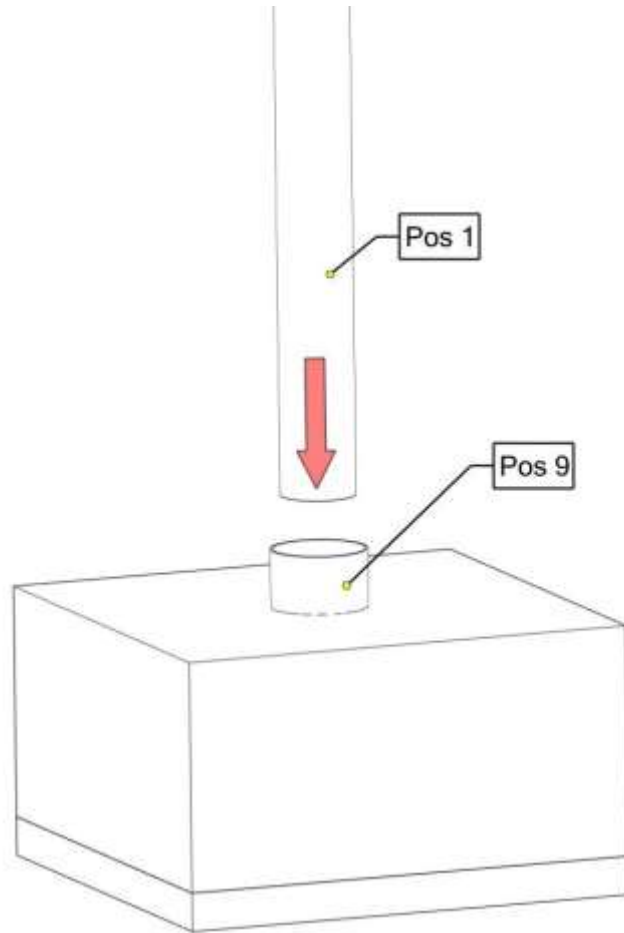
Fixed anchor/plug fastening for M12-15-30 /110

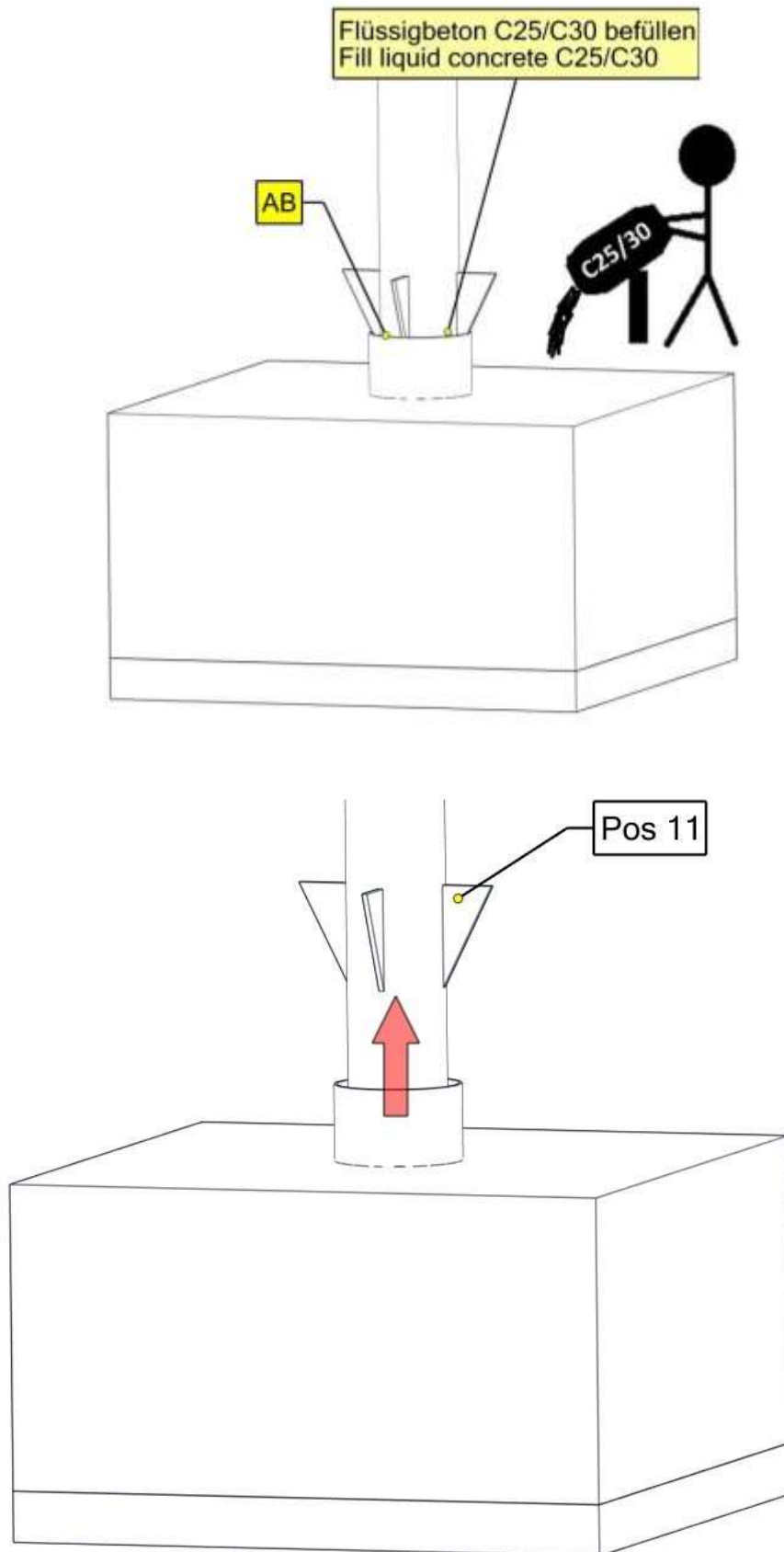


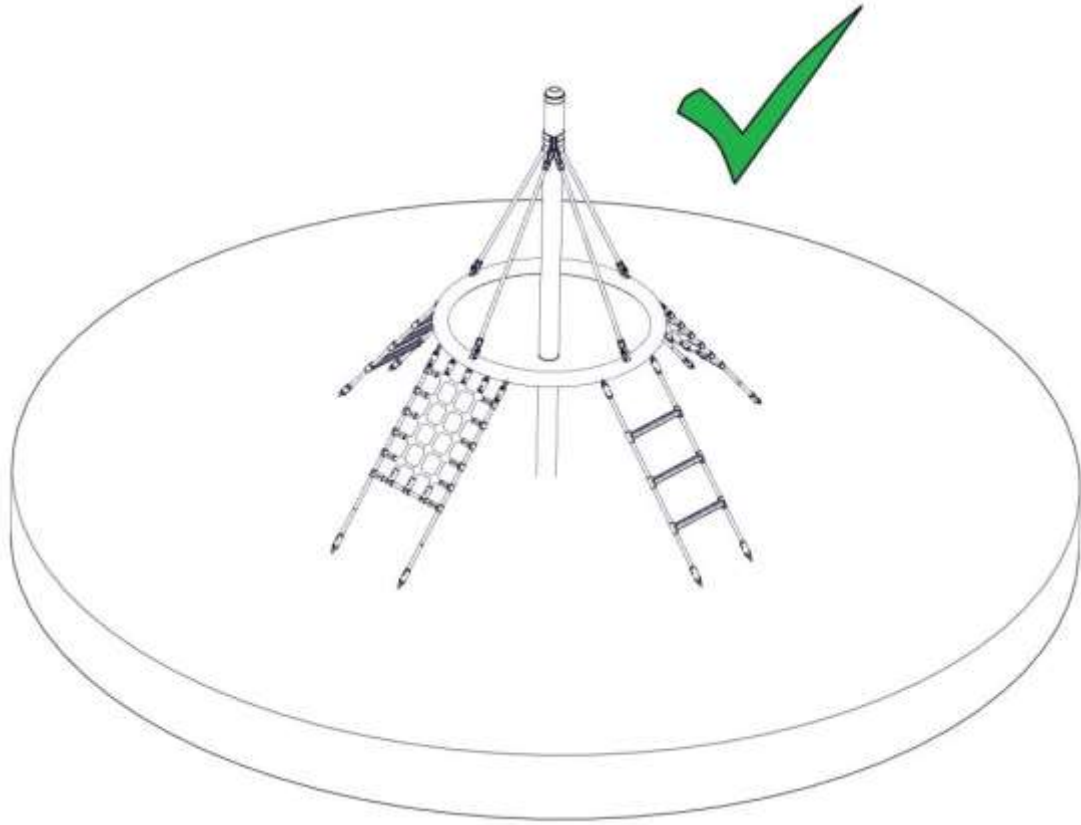


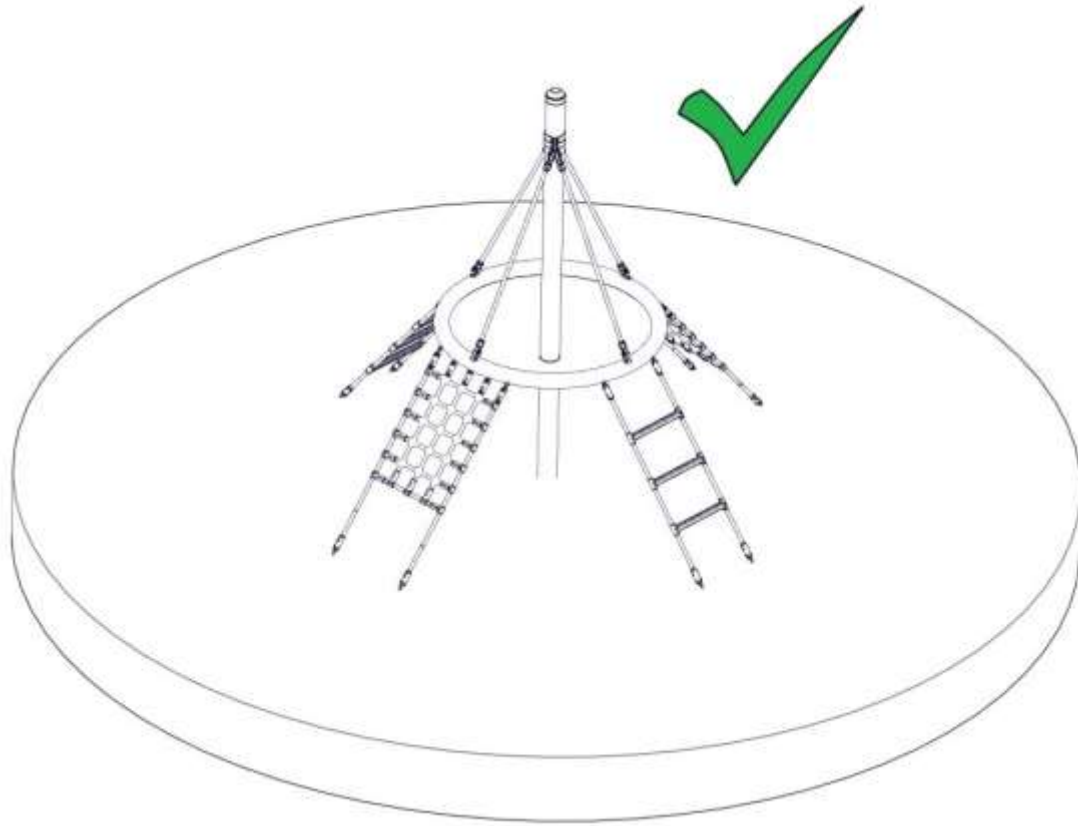












6 Post installation checks



Notice

If the equipment has not been installed safely, you must ensure that the public is prevented from using it.

6.1 Marking filler depth

Labelling the posts to show the depth of material provided as fall protection (i.e. loose filler).

6.2 The equipment has not been installed safely in the following cases:

- Safe equipment installation is not complete.
- The protective surface has not been installed yet.
- Appropriate maintenance work cannot guarantee operational safety.

6.3 Removal of all assembly aids

Please make sure that all assembly aids have been removed from the playing area. The equipment must not be approved for use until this check has been made.

6.4 Information about inspection of the equipment before it is used for the first time

There are no special inspection requirements to be met before the equipment is used for the first time.

6.5 Retighten bolts

After one week of play, please retighten all bolts again. Later upon respective maintenance.

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B Maintenance instructions

“Fortuna” Bird’s Nest Tower Art.-No. 4594-30



7 Introduction Maintenance

7.1 General informations

This equipment should be installed, inspected, maintained and operated in accordance with EN 1176-7 guidelines.



Notice

Please note: Providing any necessary repairs are carried out, a piece of play equipment that is inspected regularly cannot become so damaged that it is dangerous.

Any spare parts which may be required can be obtained directly from your supplier or from Fa. Huck Seiltechnik GmbH

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This equipment should only be assembled, maintained and repaired by **persons with the necessary expertise.**

A copy of the inspection record should be given to the operator, who must confirm receipt.

**This maintenance instruction is based on the standard
“EN 1176-1:2017”.**

8 General maintenance information

8.1 Maintenance intervals

Maintenance intervals are based on average use. Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use.

8.2 Inspection frequency

The frequency of inspections must be based on actual use. Factors that affect frequency include vandalism, location (e.g. coastal proximity), air pollution and the age of the equipment.

8.3 Maintenance products and procedures

All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray or another similar lubricant.

8.4 Spare parts

All spare parts must conform to the manufacturer's specifications.

8.5 Identifying spare parts

All spare parts are listed in the parts list. The parts list follows the installation requirements.

8.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary for the disposal of individual equipment components.

8.7 Special measures during the break-in period

No later than 2 weeks after assembly, all screwed connections should be checked and tightened if necessary.

8.8 Maintenance of protective surfaces

Surfaces providing fall protection must also be maintained regularly. It is particularly important to maintain the correct level of loose surface material and add more if necessary.

8.9 Faults



Faults must be repaired as soon as they are detected. If serious defects that compromise safety cannot be repaired straight away, the public must be prevented from using the equipment with immediate effect.

8.10 Loose screws



Loose screws always cause quality problems and put safety at risk. Therefore, loose screws should always be tightened and checks carried out to ensure that there are no missing screws (e.g. look out for holes you can see through).

8.11 Preventing equipment use

Use of the equipment should be prevented in the event of incomplete installation, disassembly, maintenance, repairs and faults.

8.12 Claims/liability for faults

Steel posts and footings are guaranteed if regular maintenance is carried out and recorded in writing. Our general terms and conditions apply. Maintenance first takes place after 3 years. The steel posts must be excavated as far as the concrete foundations and checked for corrosion.

Zinc paint should be applied to any corroded areas and scratches. Check ropes for abrasion. Retreat any that are very worn.

9 Maintenance timetable

9.1 Special advices

9.1.1 Maintenance interval

We strongly advise you to carry out inspections and maintenance work within the specified periods as use of the equipment, the weather and malicious vandalism cause wear and tear that compromises the safety and function of the equipment.

9.1.2 Maintenance intervals in the event of intensive use

Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use.

9.1.3 Faults that compromise safety



Notice

In the event of a fault that compromises safety, quick action must be taken. This may involve repairing it immediately or shutting down and dismantling the equipment.

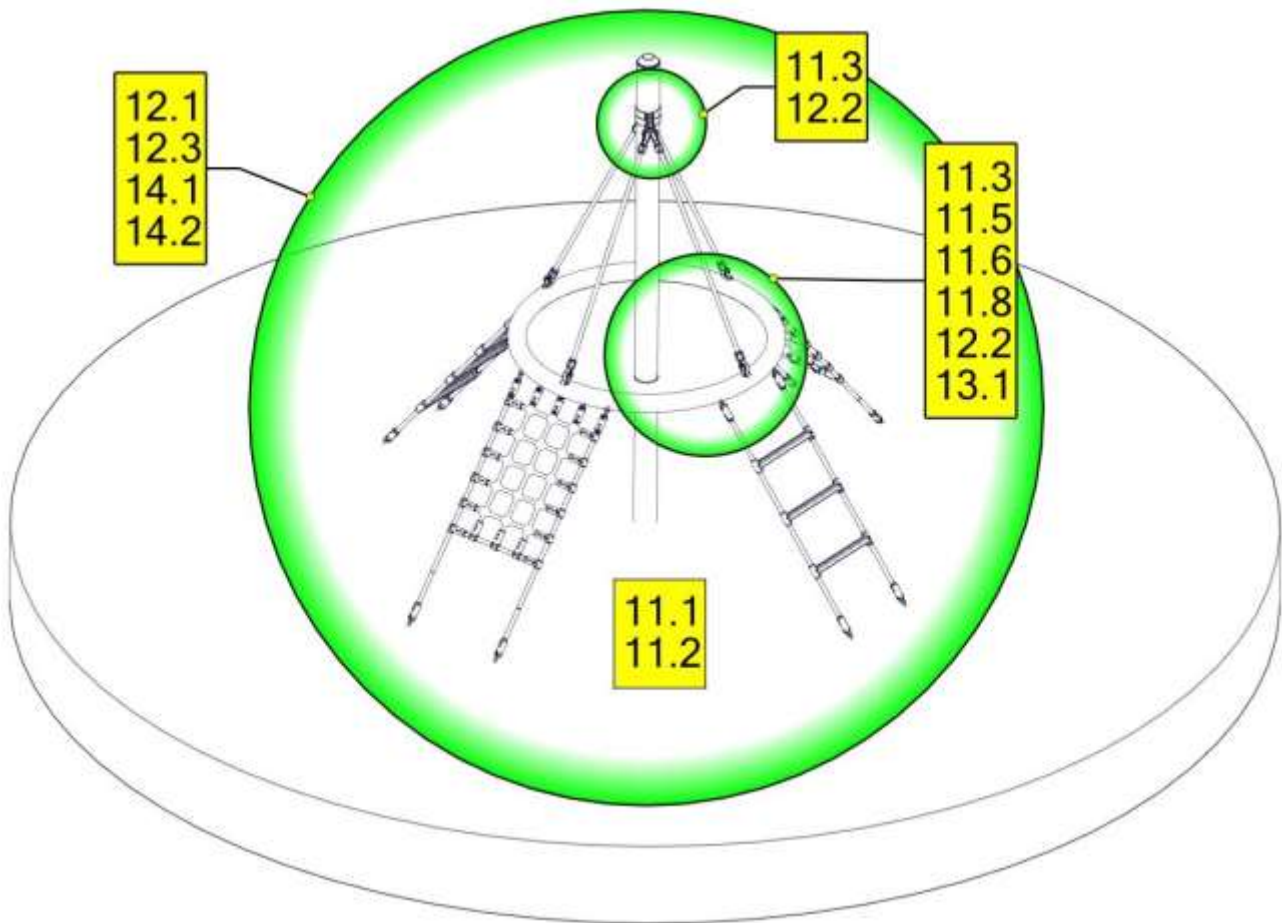
9.1.4 Faults that compromise function



Notice

Faults that compromise function should also be repaired immediately. Such faults lower the value of the equipment to the user and encourage malicious vandalism, which may render the equipment less safe. Any damage should also be repaired immediately.

10 Regular maintenance



Regular maintenance

11 Monthly maintenance

- 11.1 Check the spaces between the equipment and the ground (clearance and height of fall).**
- 11.2 Check the ground surface in the area with fall protection for hard objects and loose foundations.**
- 11.3 Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.**
- 11.4 Check that moving metal parts (joints, springs, etc.) move smoothly and are not worn. Replace if necessary. It is not necessary to lubricate joints as we only use maintenance-free metal roller bearings.**
- 11.5 Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.**
- 11.6 Check rubber parts, sleeves, etc. for wear and tear or damage and replace if necessary.**
- 11.7 If necessary, remove excess padding material from the post footings due to danger of rotting.**
- 11.8 Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary.**
- 11.9 Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.**

12 Quarterly maintenance

- 12.1 Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.**
- 12.2 Tighten all forms of attachment.**
- 12.3 Repaint and retreat surfaces.**
- 12.4 Maintenance of fall protection surfaces.**
- 12.5 Lubrication of joints.**
- 12.6 Check the height of the fall and top up with loose filler if necessary. If the posts are labelled, top up as far as the mark.**
- 12.7 Retighten all bolts**


13 Half yearly maintenance

- 13.1 **Stability (check posts, bracing, foundations, etc.). Ascertaining whether there are any changes in equipment safety as a result of repairs that have been carried out or components that have been added or replaced.**

	<h1>Annual Maintenance</h1>
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14 Annual maintenance

- 14.1 **Ascertaining that the equipment, foundations and surfaces are safe for operation.**
- 14.2 **In particular, the equipment should be checked for decay and corrosion. It may be necessary to dig out or excavate certain components in order to do so. Zinc paint should be applied to corroded areas and scratches.**

	<p>The equipment must be inspected by someone with the necessary expertise in strict compliance with the instructions issued by Huck Seiltechnik GmbH.</p> <p>A copy of the inspection record should be given to the operator, who must confirm receipt.</p>
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16 Hand over document



After the installation of the equipment pass the installation and maintenance documents to the operator. The operator has to receive the hand over documents. The complete filled and signed hand over document should be sent to the supplier Huck Seiltechnik GmbH per Telefax +49 6443 8311-79

Art.-No.: 4594-30

Type of item: "Fortuna" Bird's Nest Tower

Serial number: _____

Customer or operator (Town, Town council, Kindergarten, etc.):

Competent person in charge:

Installation company (address):

Responsible assistant (assembler):

Received the complete assembly instructions, maintenance instructions and maintenance printout,

(Signature of operator)
(Stamp)

(Signature of installation company)

Date: _____