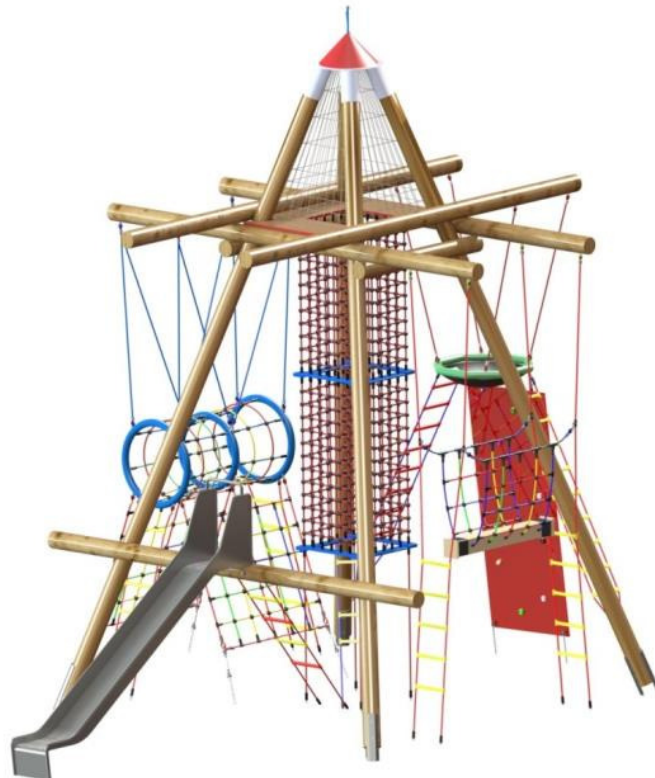


A Assembly Instructions

Black Forest Birds Nest Tower

Art-No. 4652-21



Installer: _____

Location: _____

Revision History

Revision 0 – 2013

The first allowed version

Assembly Instructions

Revision 0

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1 Introduction Assembly

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.

Please do not hesitate to call your supplier if you have any problems during installation or in case of any other questions.



Attention

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



Attention

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.

We hereby confirm that this play equipment has been tested and certified in accordance with the play equipment standard EN 1176

2 Datasheet

1. Space Requirement: 5.65m x 7.85m
 Safety Surfacing: 8.90m x 12.20m
 Height of Equipment: 6.65m
 Fall Height: 3.00m

2. Required safety surfacing:

Surface Material	Description mm	Minimum thickness of layer mm	Maximum height of fall mm
Topsoil/Grass			<= 1000*
Chipped Bark	20 – 80 Grain Size	300	<= 2000
		400	<= 3000
Wood Chippings	5 – 30 Grain Size	300	<= 2000
		400	<= 3000
Sand	0,2 – 2 Grain Size	300	<= 2000
		400	<= 3000
Gravel	2 – 8 Grain Size	300	<= 2000
		400	<= 3000
Other Ground Materials	As recommended by manufacturer		

***In Germany lawn is permitted up to 1.50m fall height.**

3. Name and overall dimension of the largest component:
 4 Douglas Fir Ø180mm Posts, 7.00m long.
4. Name and weight of the heaviest component:
 1 Pallet - Douglas Fir Posts. 4 posts at Ø 18 cm – 7.00m lang
 2 Crossbeams at Ø180mm – 1.80m long and 4 crossbeams
 Ø18cm – 5.00m long. ~ 1080kg
5. Intended Age Group: 6 years and over
6. **Please note that this equipment is set in concrete!**
 Concrete: C25/30, Required Concrete = ~ 1.5 m³
 Foundations / Area to be excavated:
 (Concrete Top = 40cm below the upper ground level)
 see page 18.

4 x 0.50m long x 0.50m wide x 0.40m high,
Total depth: 0.90m including 10cm drainage
5 x 0.78m long x 0.40m wide x 0.40m high,
Total depth: 0.90m including. 10cm drainage
4 x 0.40m long x 0.40m wide x 0.40m high,
Total depth: 0.90m including. 10 cm drainage
1 x 1.10m long x 0.40m wide x 0.40m high,
Total depth: 0.90m including. 10cm drainage



Attention!

Round off foundation edges (min.R = 100 mm)! Sizes of foundations are “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 has to be enlarged by about 50%!

7. Assembly time, once foundations completed: 8 hours.
Required assistants: 3-5 persons.
8. Required Aids: Small excavators, truck crane with a lifting height of about 8m,
Standard tools (e.g. levels, hex wrench, screwdriver, etc.)
9. Any spare parts which may be required can be obtained directly from
Huck Nets UK Ltd, Tel: 01308 425100.
10. **We hereby confirm that this item of play equipment has been tested and certified in accordance with the play equipment standard EN 1176.**

3 Delivery Contents (Parts List with part numbers)

3.1 In Words

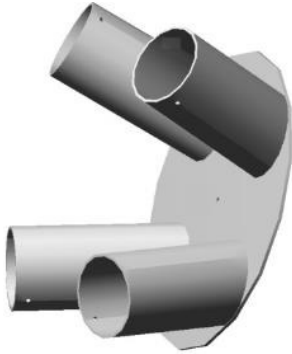





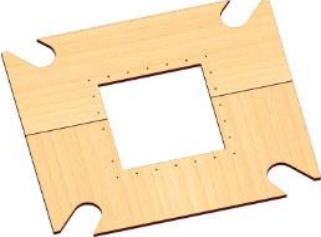

Tabelle3-1: Delivery Contents, in words

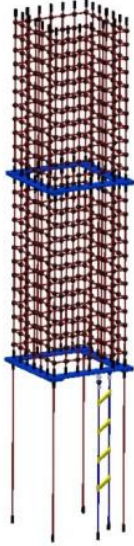

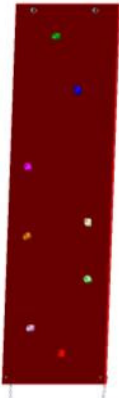
Pos.	Quantity	Element / Description	Size	O.K	Missing
1	1	Steel top post connector	0.93 x 0.93 x 0.34cm		
2	4	Wooden Posts	Ø18cm, 7.00m long		
3	4	Wooden Posts	Ø18cm, 5.00m long		
4	2	Wooden Posts	Ø18cm, 1.80m long		
5	1	Laminated Beams for Pos.14	Ø18cm, 3.50m long		
6	4	Post Shoes for 180mm posts with carriage bolts, washers, nuts and caps	1.25m long		
7	1	Holeplate	2 x 1.85 x 0.71 x 0.03m		
8	4	Connection Wood for Pos.7	2x 0.85x0.10x0.05m 2x 0.66x0.10x0.05m		
9	1	Climbing Chimney			
10	1	2 x Honeycomb Nests with 2 ladders, climbing rope and suspension ropes			
11	1	Climbing Wall	1.00m x 2.25m		
12	1	Climbing tunnel with 2 climbing nets and ladders			
13	1	Rope with 2 ladders, railings and suspension ropes			
14	1	Stainless Steel Slide 1.75m			
15	1	Ladder on back of slide			
16	4	Protection Safety Nets	1.60m x 1.20m		
100	20	Ribbed Plugs SL32 (for Pos. 8)	Ø 40 mm		
101	20	Allen Screw V2A DIN 912 (for Pos. 8)	M10x90		
102	20	U-Disk V2A DIN 125 (for Pos. 8)	Ø 11mm		
103	120	Clamp with plastic insert for V2A (for Pos. 16)	15/19 mm		
104	250	ASSY 3.0 Screws (for Pos. 16)	5,0 x 50/32		

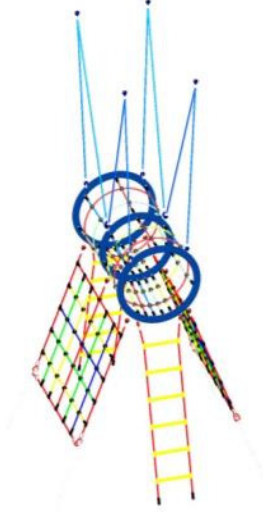
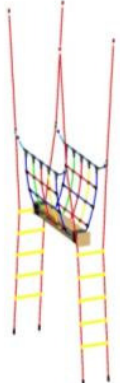
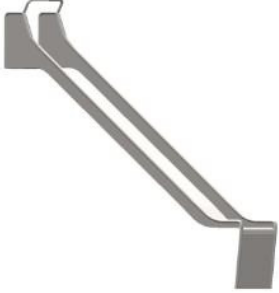

Pos.	Quantity	Element / Description	Size	O.K	Missing
105	8	Wooden Dowls (for closing unused holes)	Ø16mm x 50mm		
106	16	Stop Nut VA DIN 985 (Link suspension ropes to the post)	M12		
107	16	U-Disk DIN 125 (Link suspension ropes to the post)	Ø13mm		
108	42	Pan Head Screw V2A (for Pos. 117/118)	5mm x 30mm		
109	2	Short Shackle (connection chain to climbing wall)	M10		
110	8	Carriage Bolt Vz for Pos. 6	M12 x 230mm		
111	8	U-Scheibe DIN 125 für Pos. 6	Ø13mm		
112	8	Stop Nut Vz Din 985 for Pos. 6	M12		
113	8	Black Cap for Pos. 6	Ø12mm		
114	4	Pan Head Screw V2A (Connection of slide to post)	M12 x 60mm		
115	2	Threaded Sleeve for connection of slide to post	M12		
116	2	Carriage Bolt + Washer + Stop Net + Black Cap (Connection of slide to post)	M16 x 380mm		
117	12	Post Cap	Ø18mm		
118	2	Post Cap	Ø18mm		
		Fastening Wooden Frame			
119	16	6 Head Wood Screw Vz Din 571 (for Pos.1)	M10 x 140mm		
120	16	Washer Vz DIN 125 (for Pos. 1)	Ø10mm		
121	12	6 Head Wood Screw Vz (for Pos. 2/3/4)	M16 x 400mm		
122	12	Stop Nut Vz (for Pos. 2/3/4)	M16		
123	24	Washer DIN 125 (for Pos. 2/3/4)	Ø17mm		
124	12	Black Nut Caps (for Pos. 2/3/4)	Ø16mm		
125	1	Red Cover	Ø600mm		
126	1	Blue Flag			
127	16	Blue/Yellow Nut Caps	Ø40mm		
128	20	Chain Link No.7 & M8 Shackle	900mm long.		

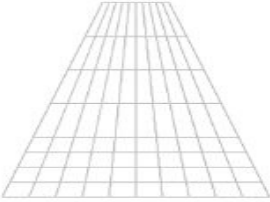











Pos.	Quantity	Element / Description	Size	O.K	Missing
129	1	Ring Nut, Lock Washer & Hex Head Bolt (for erection of the frame with the crane)			
130	20	Ground Anchorage	300 x 120mm		
131	3	Screw in Anchor & Swivel			
132	3	Loctite			
200	10	Batten (To be provided by the customer or site operatives)	40mm X 60mm X 5000mm		













Table 3-1: Delivery Contents, in Symbols






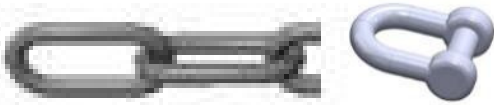




Pos.	Quantity	Symbol	Size
1	1		0,93m x 0,80m x 0,34m
2	4		Ø18cm, 7.00m long.
3	4		Ø18cm, 5.00m long.
4	2		Ø18cm, 1.80m long.
5	1		Ø18cm, 3.50m long.
6	4		Post Shoe, 1.25m long.
7	1		2 x 1.85m x 0.71m x 0.03m
8	4		2x 0,85x0,10x0,05 m 2x 0,66x0,10x0,05 m

Pos.	Quantity	Symbol	Size
9	1		
10	1		
11	1		1,00m x 2,25m

Pos.	Quantity	Symbol	Size
12	1		
13	1		
14	1		P.h. 1,75 m
15	1		

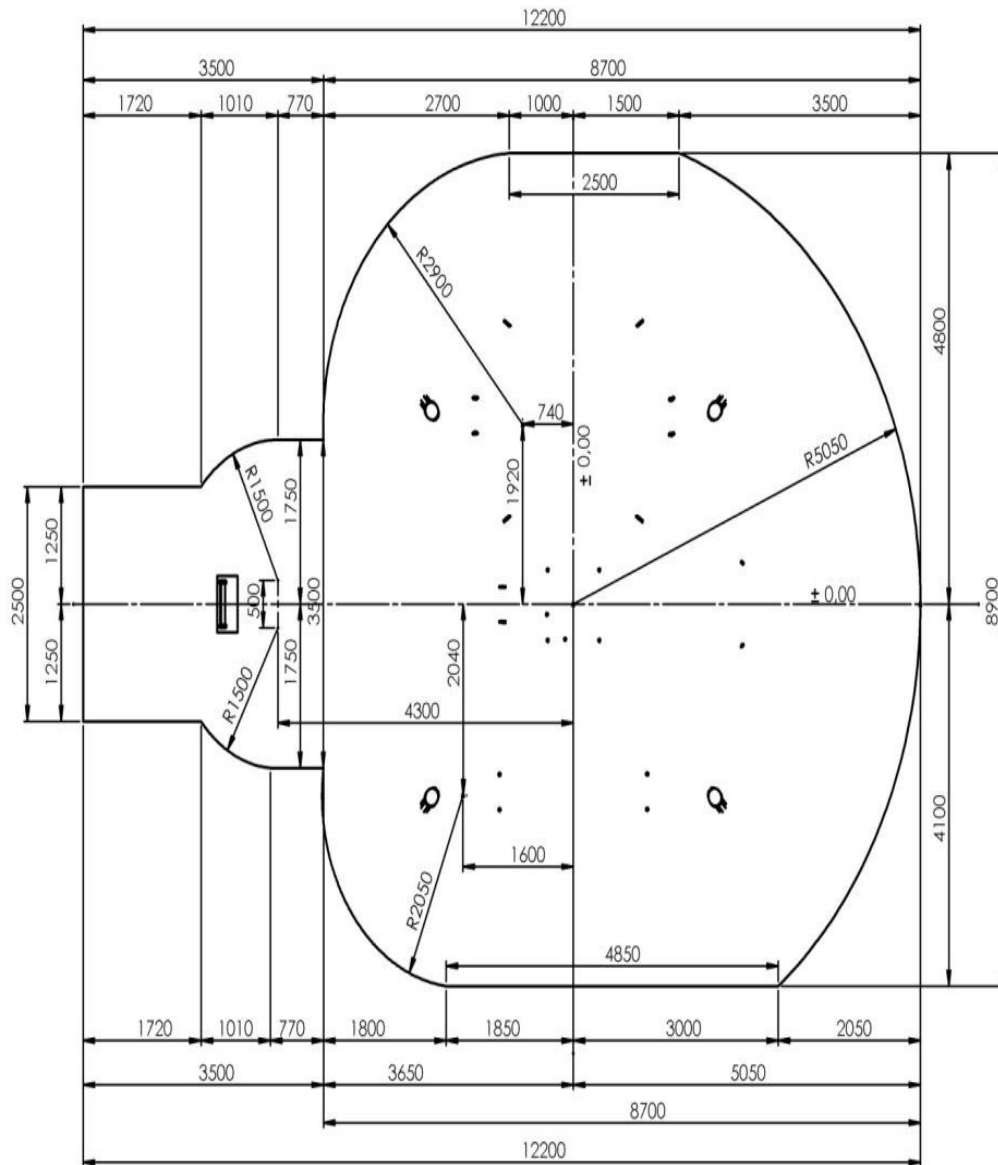
Pos.	Quantity	Symbol	Size
16	4		Ca. 1,60x1,20m
100	20		Ø 40 mm
101	20		M10x90
102	20		Ø 11 mm
103	120		15/19 mm
104	250		5,0x50/32
105	8		Ø 16x50 mm
106	16		M12
107	16		Ø 13mm
108	42		5x30
109	2		M10
110	8		M12x230

Pos.	Quantity	Symbol	Size
111	8		Ø 13 mm
112	8		M12
113	8		Ø 12 mm
114	4		M12x60
115	2		M12
116	2		M16x380
117	12		Ø 18mm
118	2		Ø 18mm
Fastening Wooden Frame			
119	16		M10x140
120	16		Ø 10mm
121	12		M16x400
122	12		M16

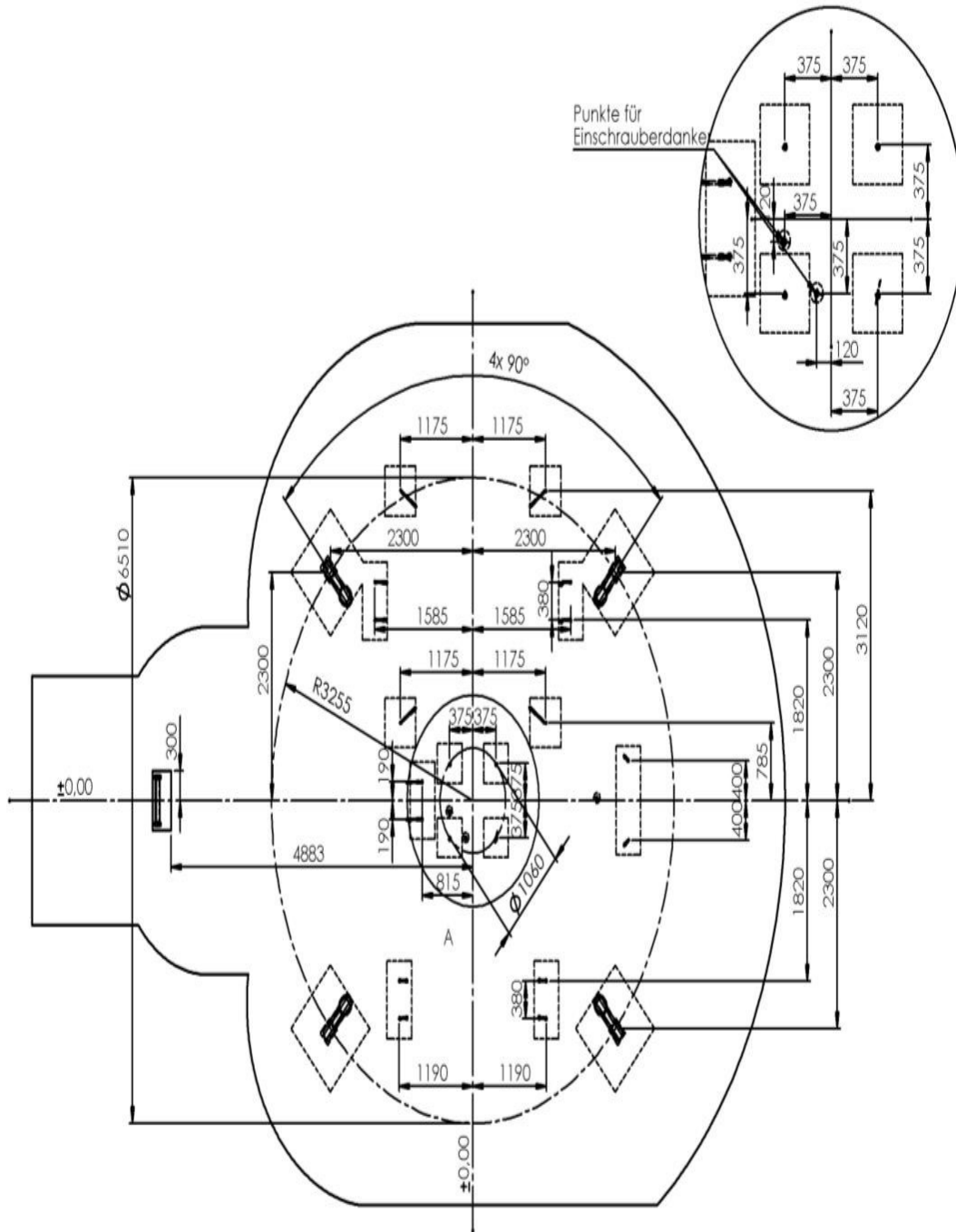
Pos.	Quantity	Symbol	Size
123	24		Ø 17mm
124	12		Ø 16mm
125	1		Ø 600 mm
126	1		
127	16		Ø 40 mm
128	20		900mm lg., 8er Schäkel
129	1		16er
130	20		300x120mm
131	3		
132	3		

Pos.	Quantity	Symbol	Size
200		Batten (To be provided by the customer or site operatives)	

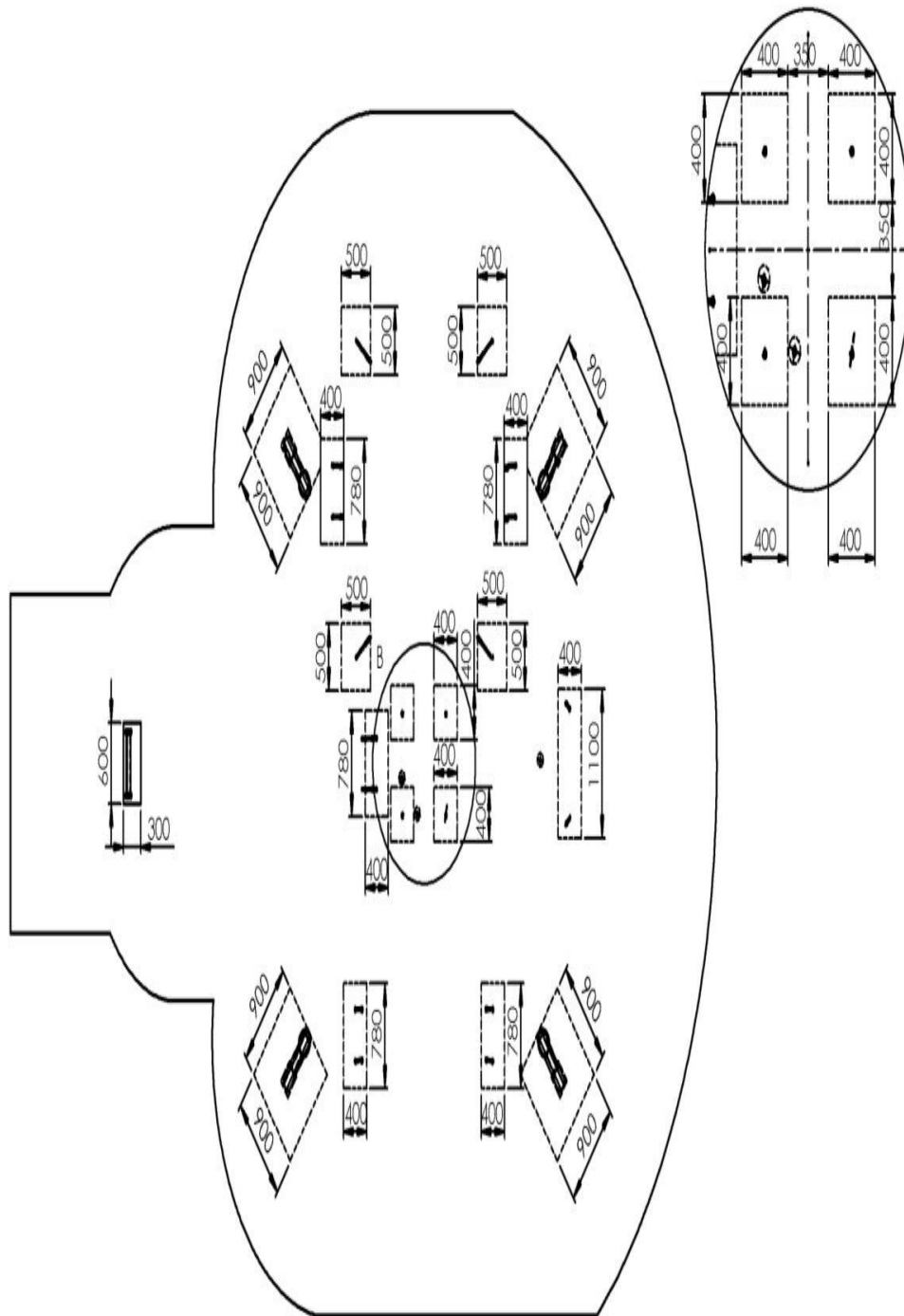
4 Erection Instructions



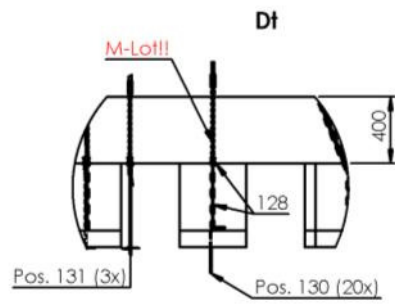
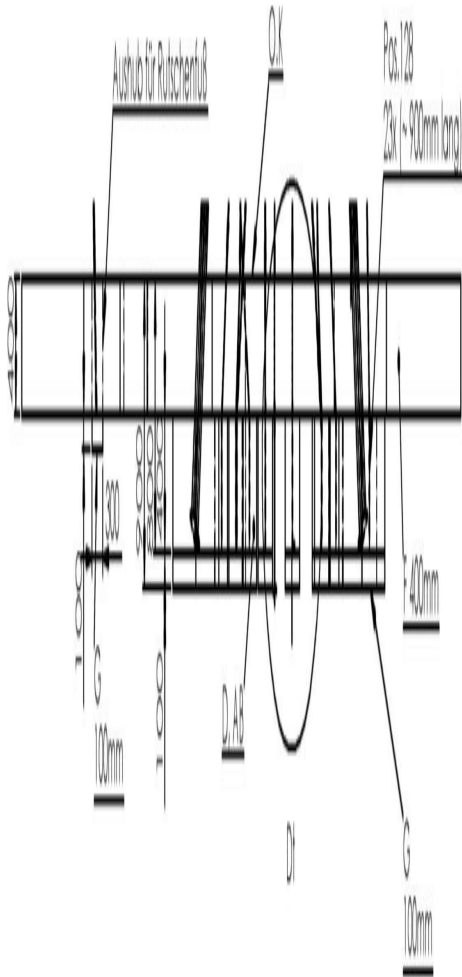
Foundation Plan



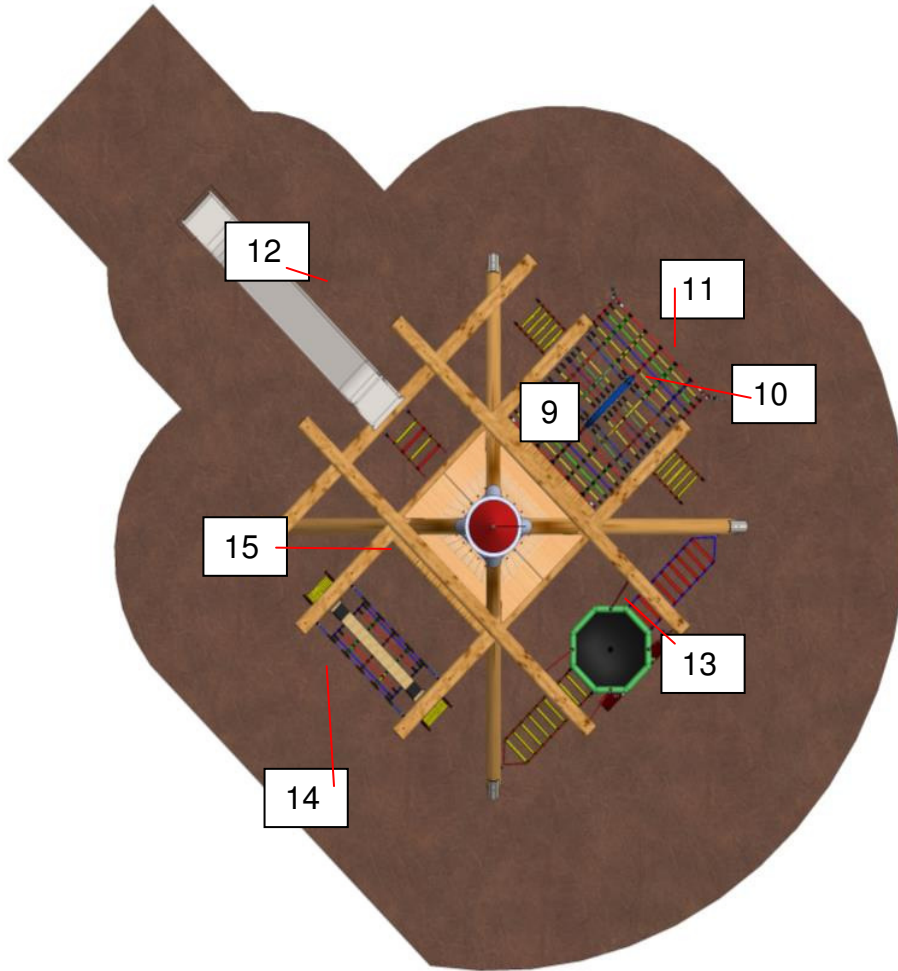
Foundation Size

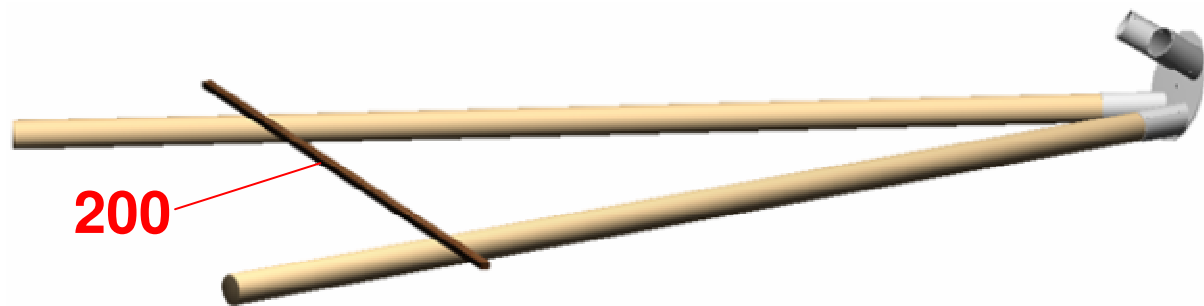
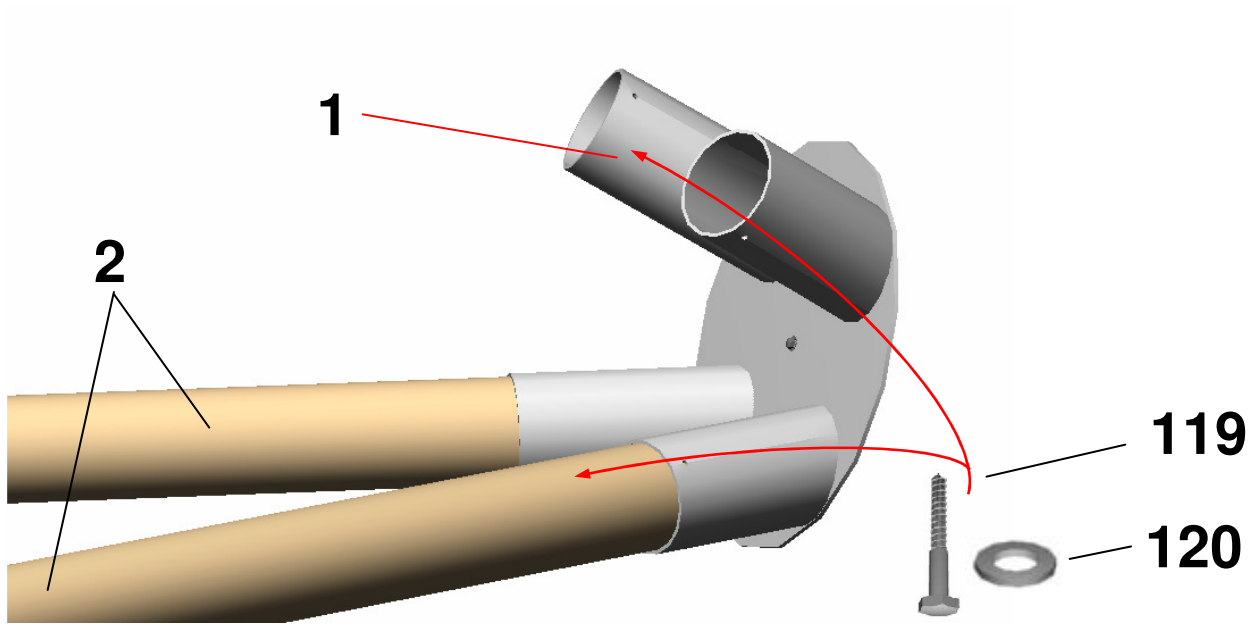


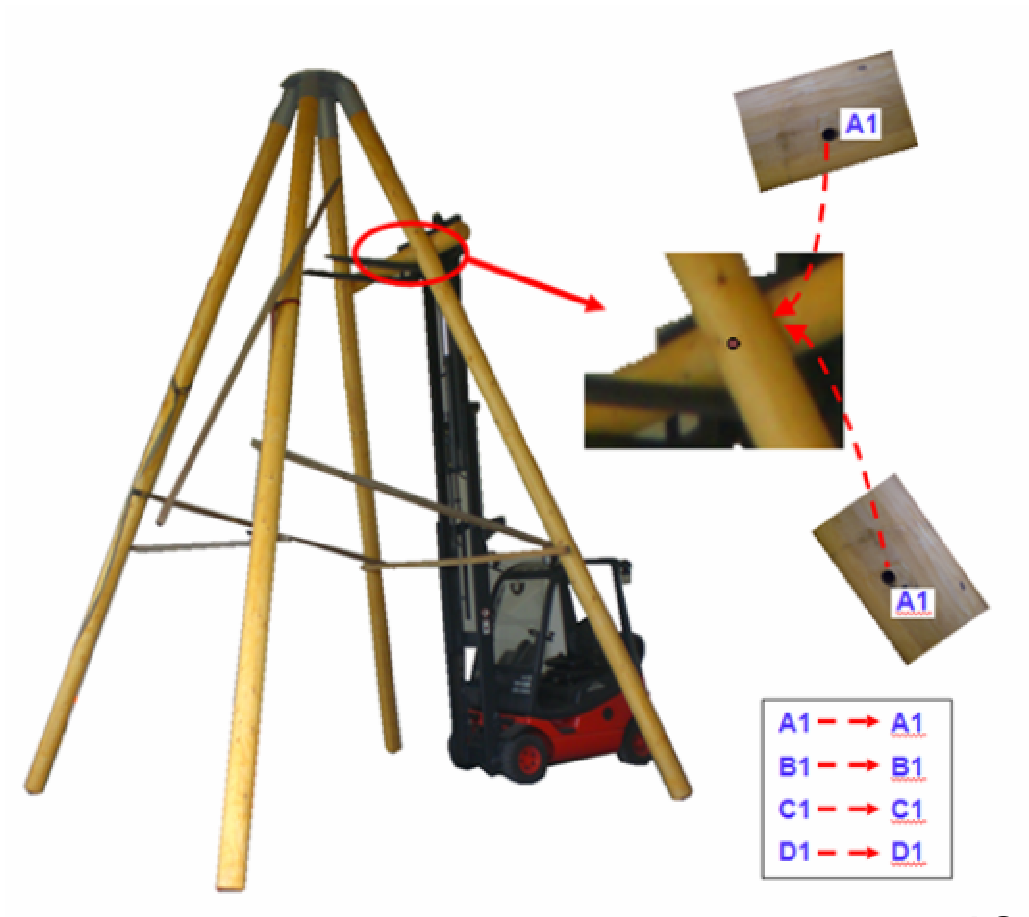
ExcavationDepth



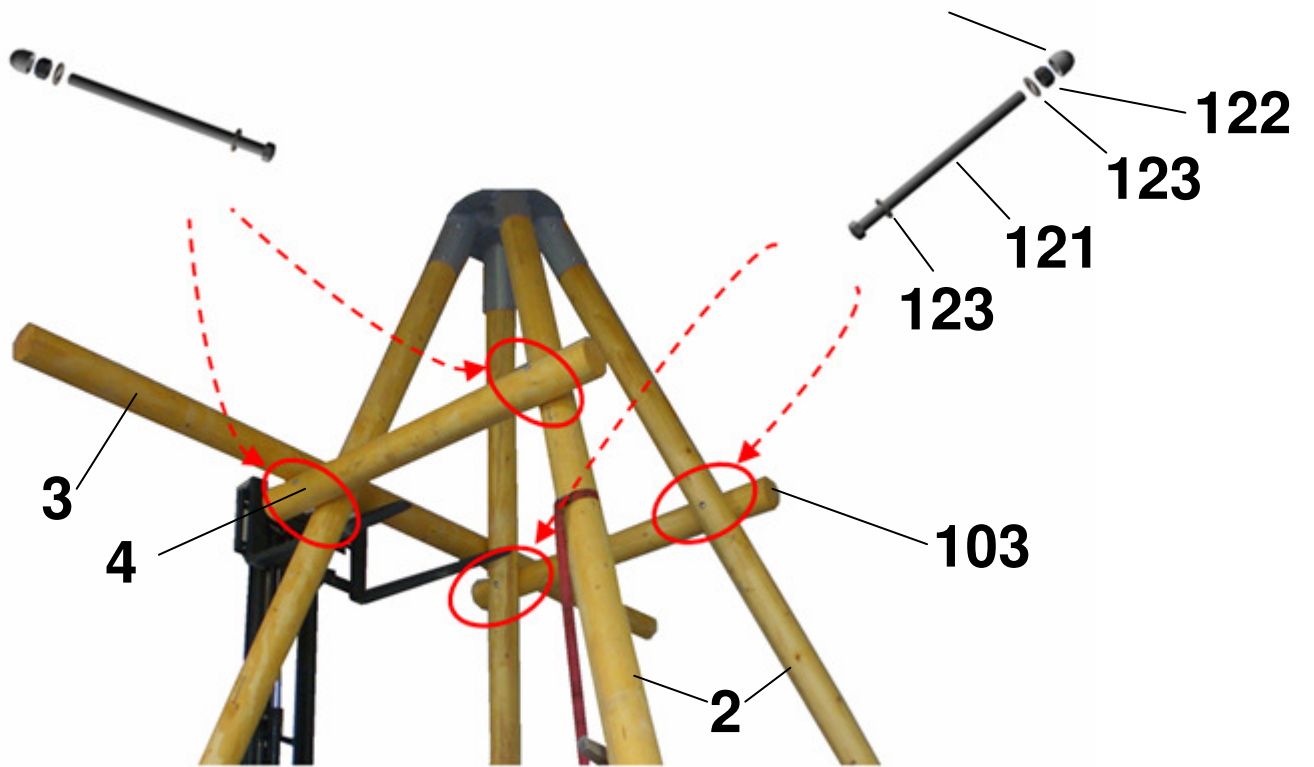
Position of Equipment

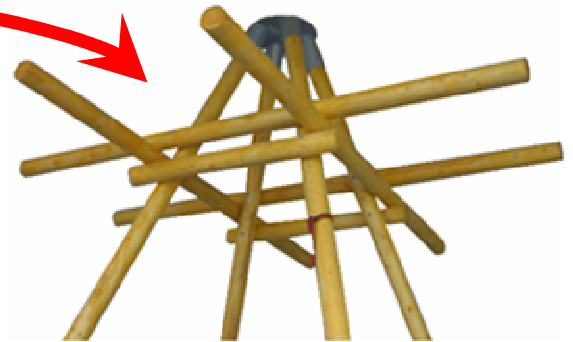




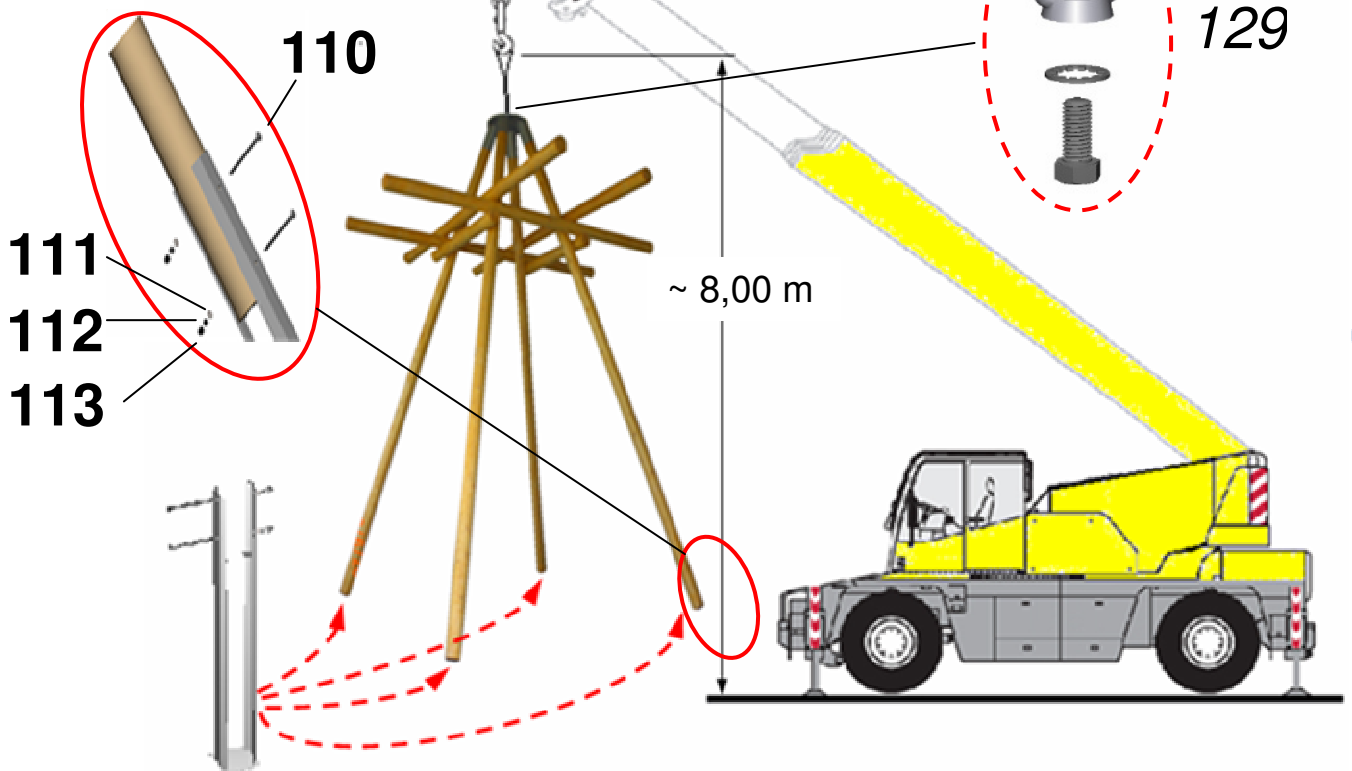


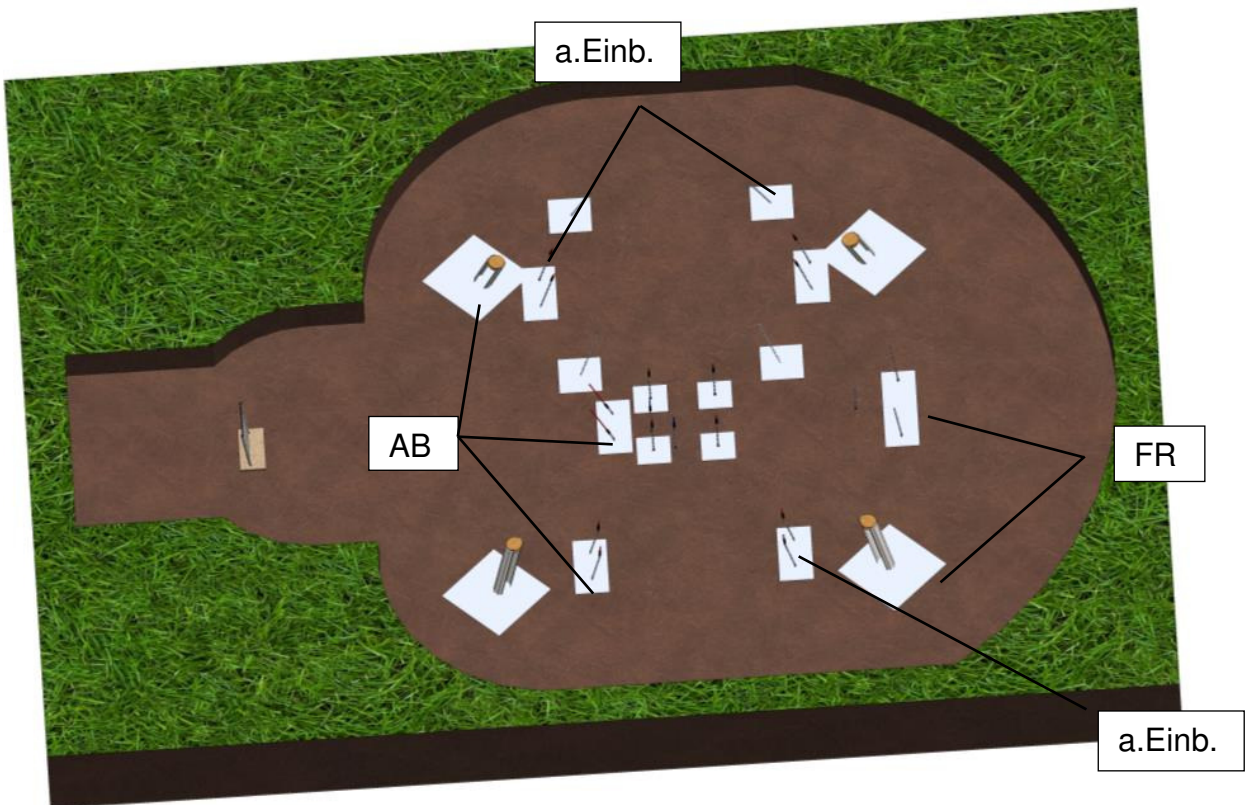
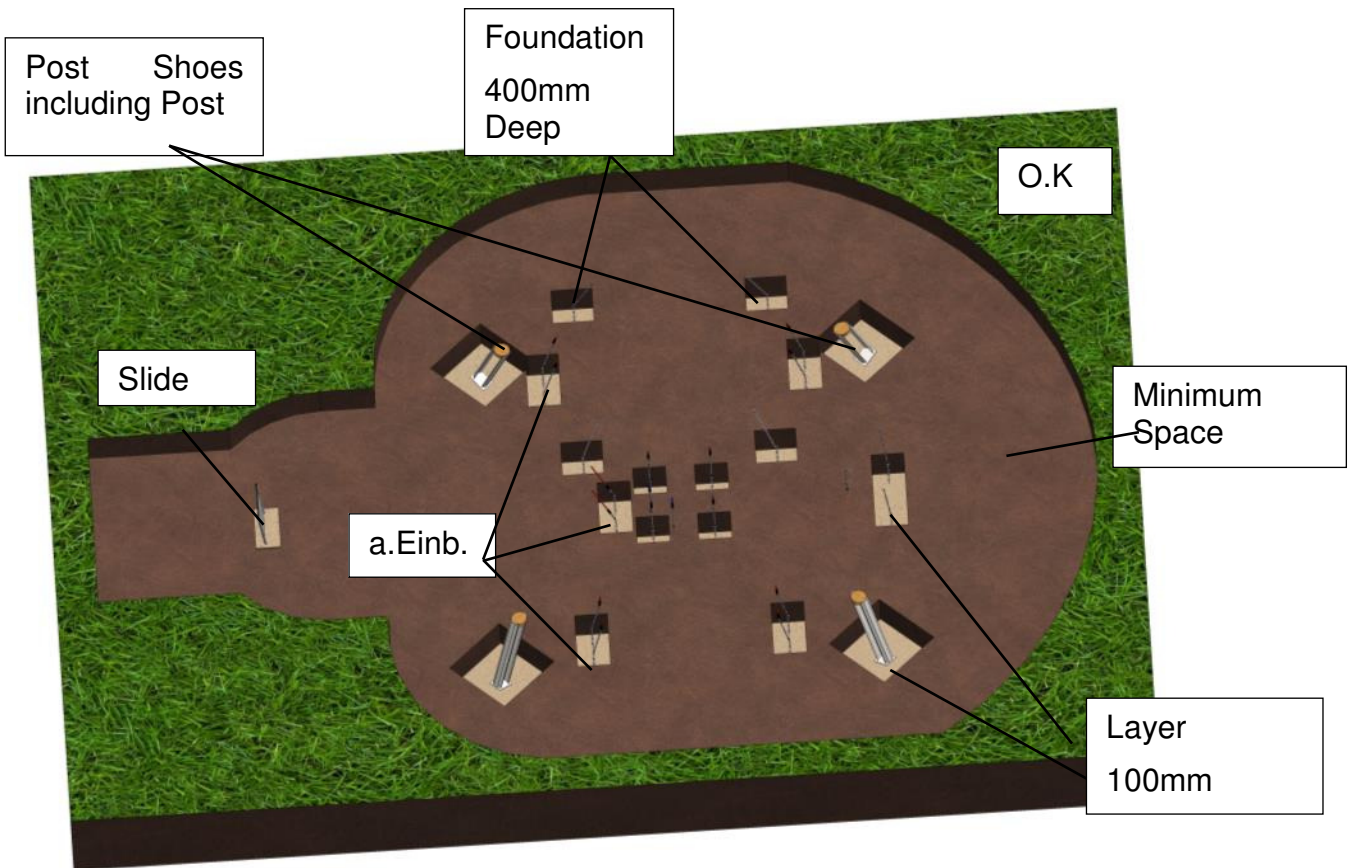
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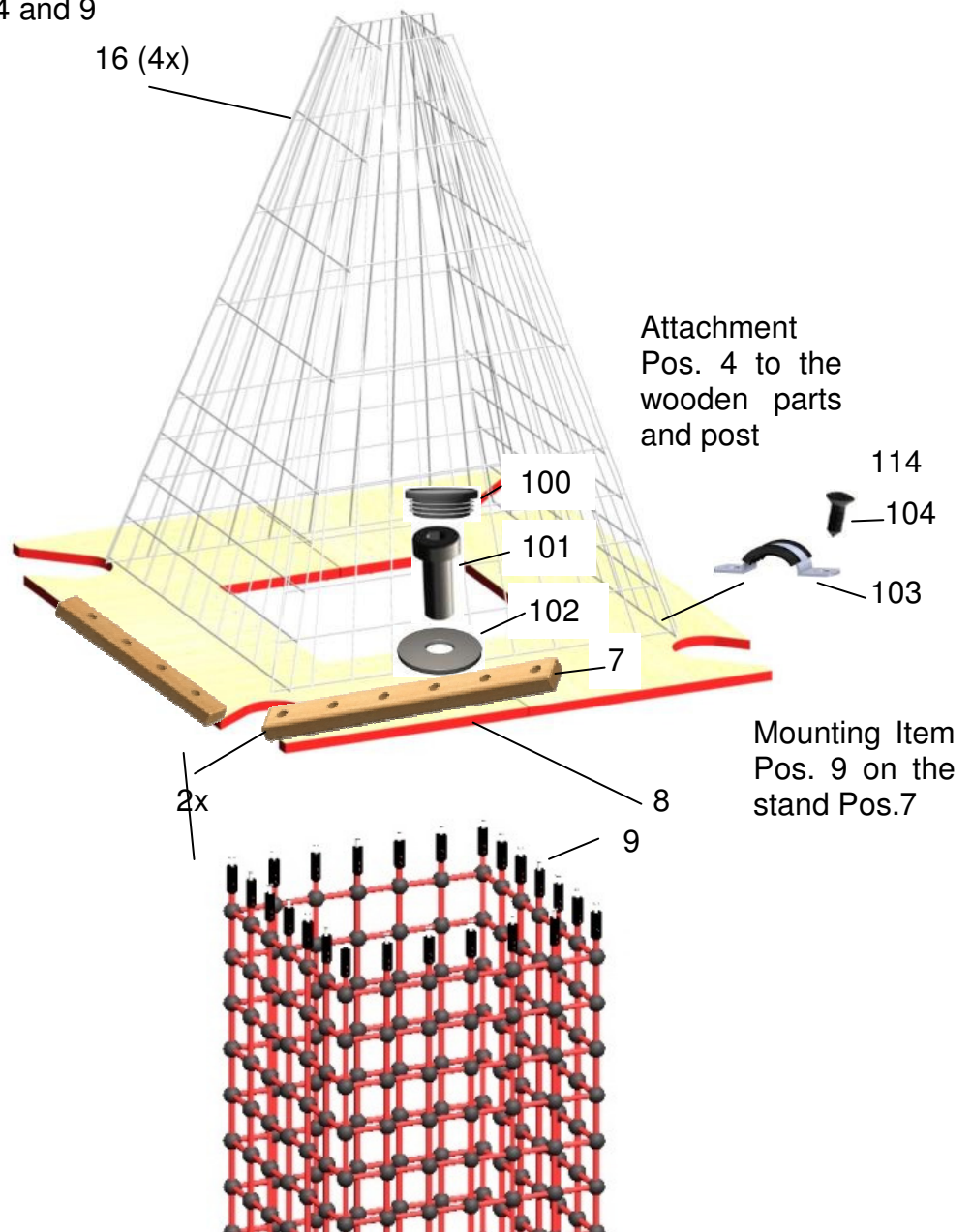


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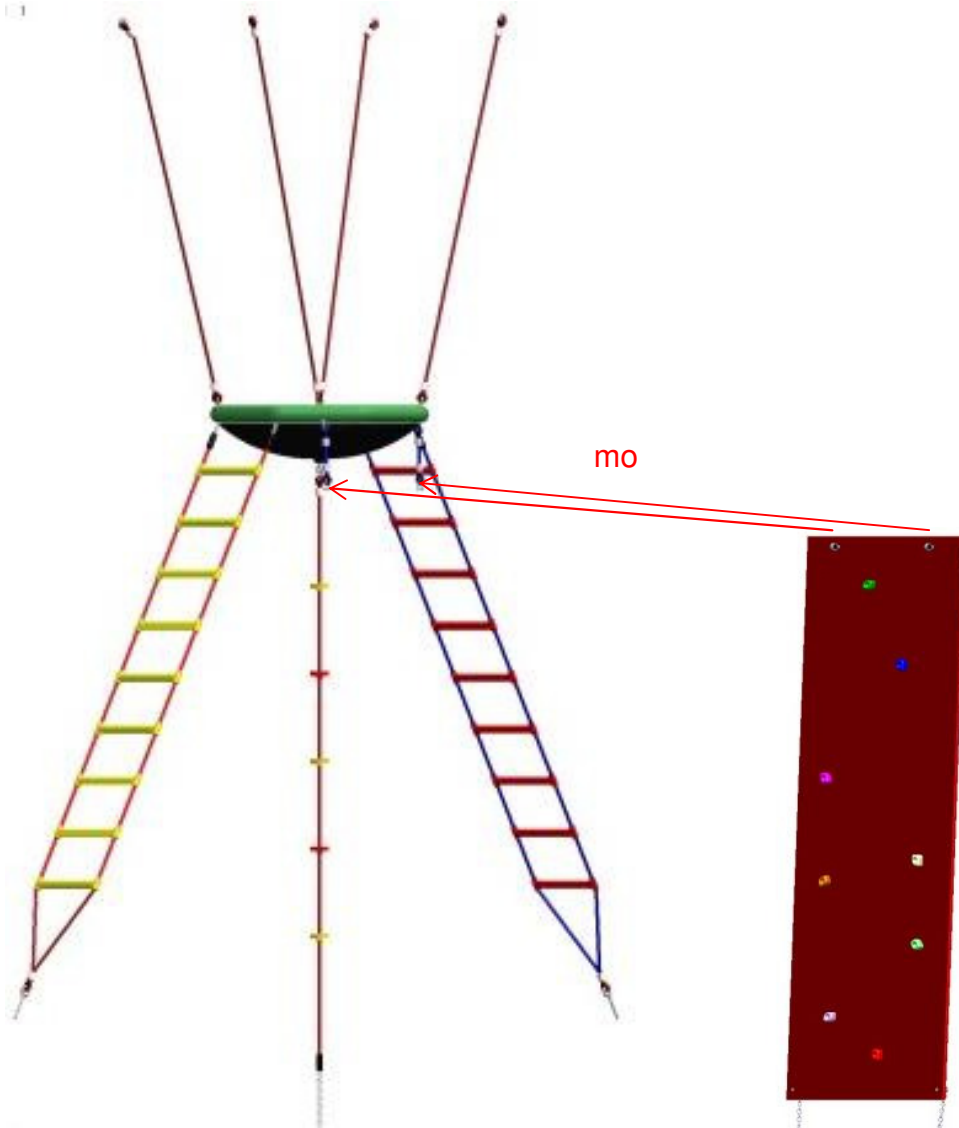


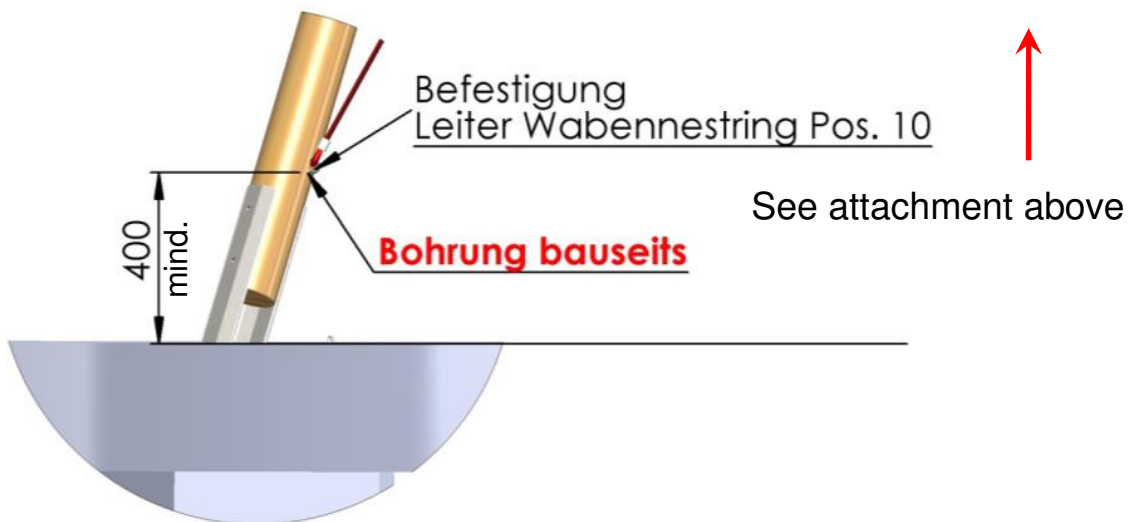
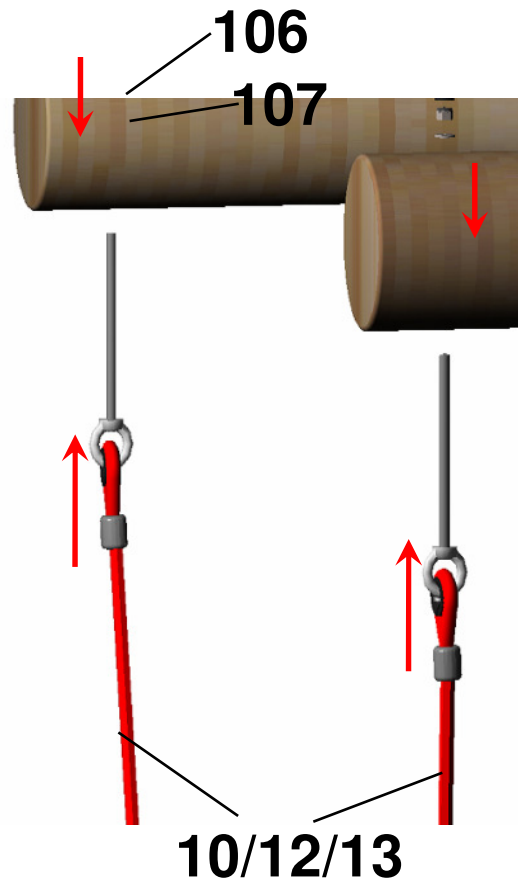
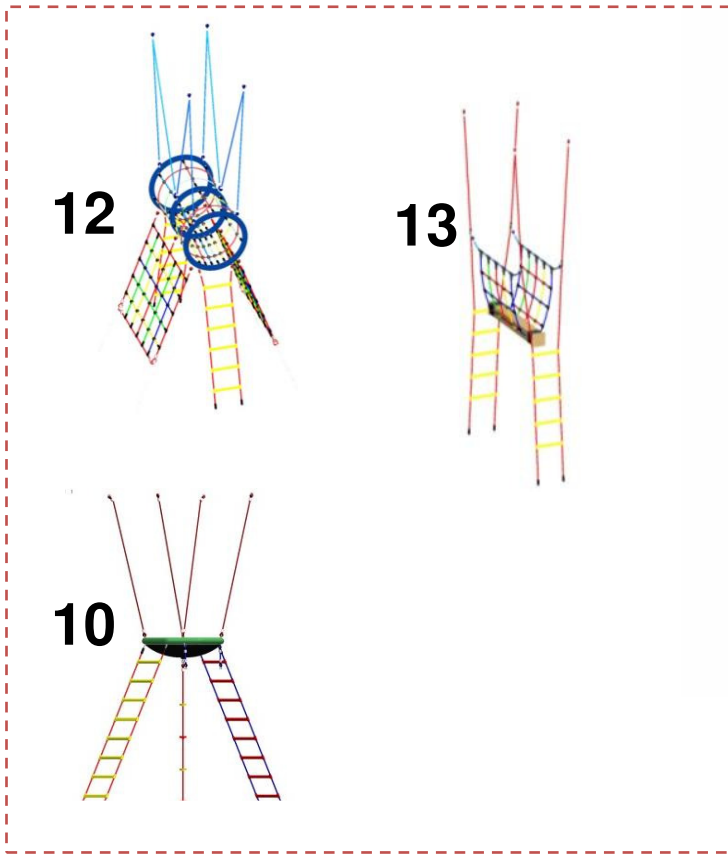


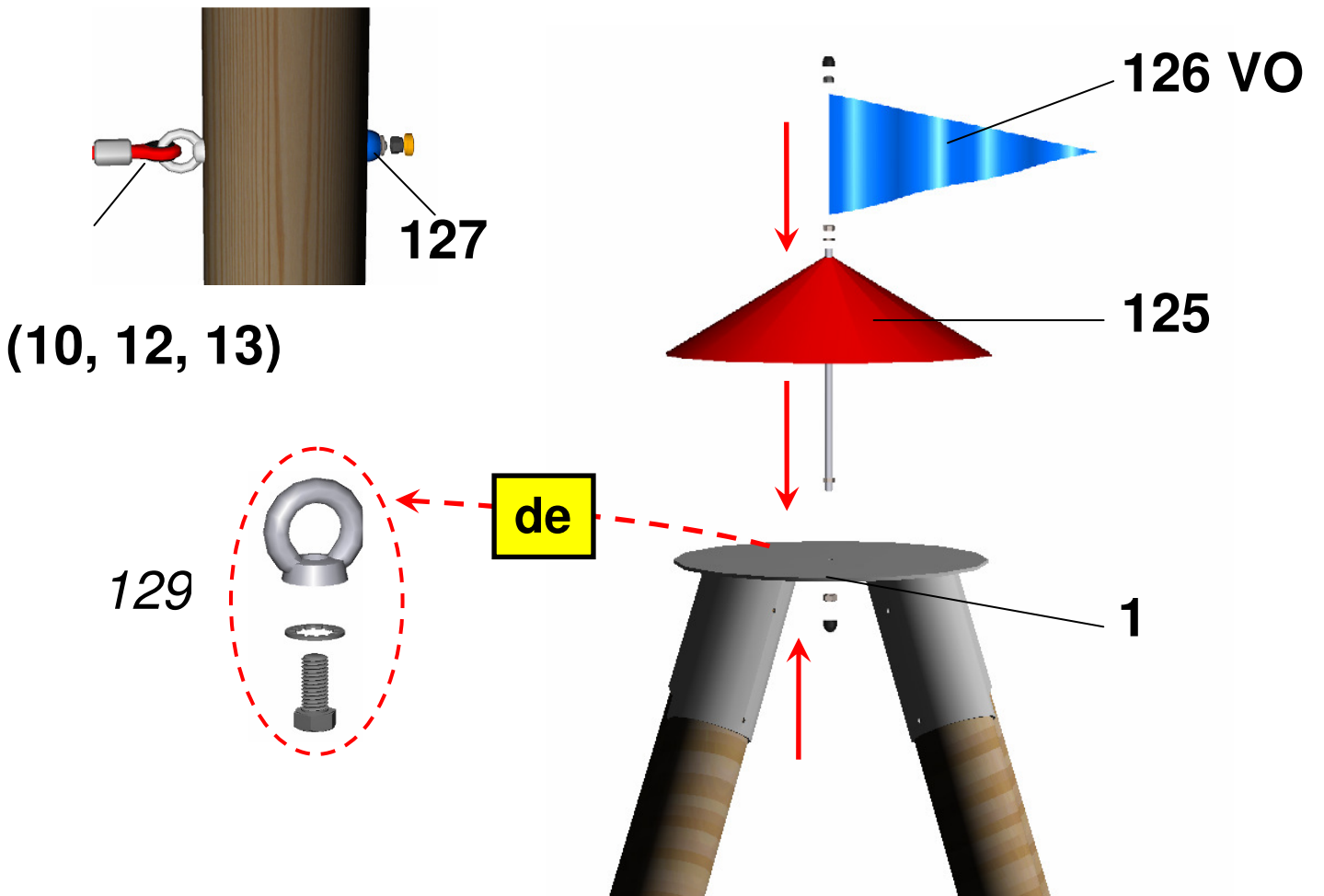
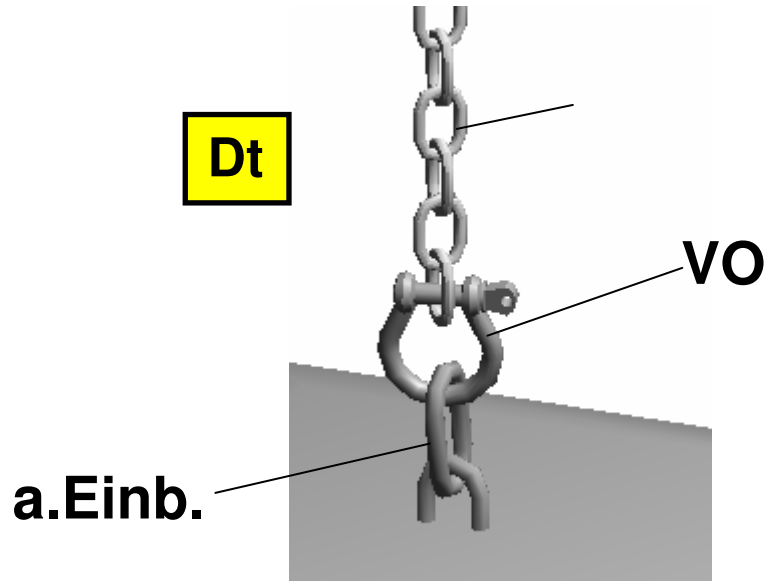
Attachment Pos. 4 and 9



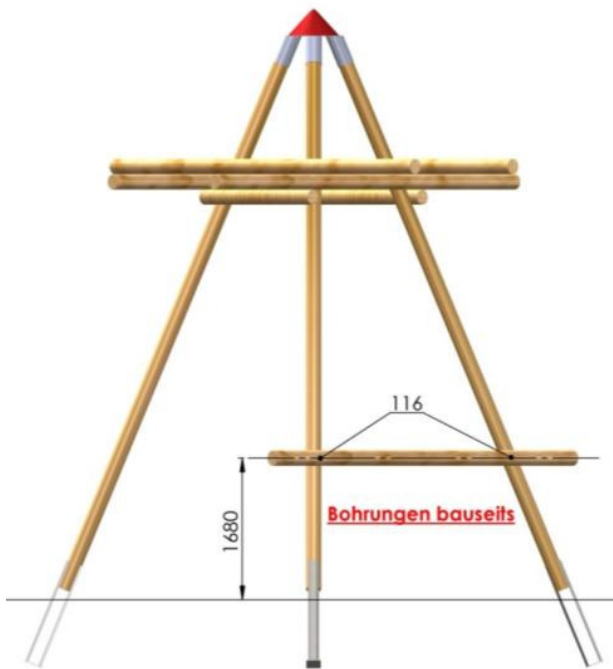
Attachment Pos. 11 and 10



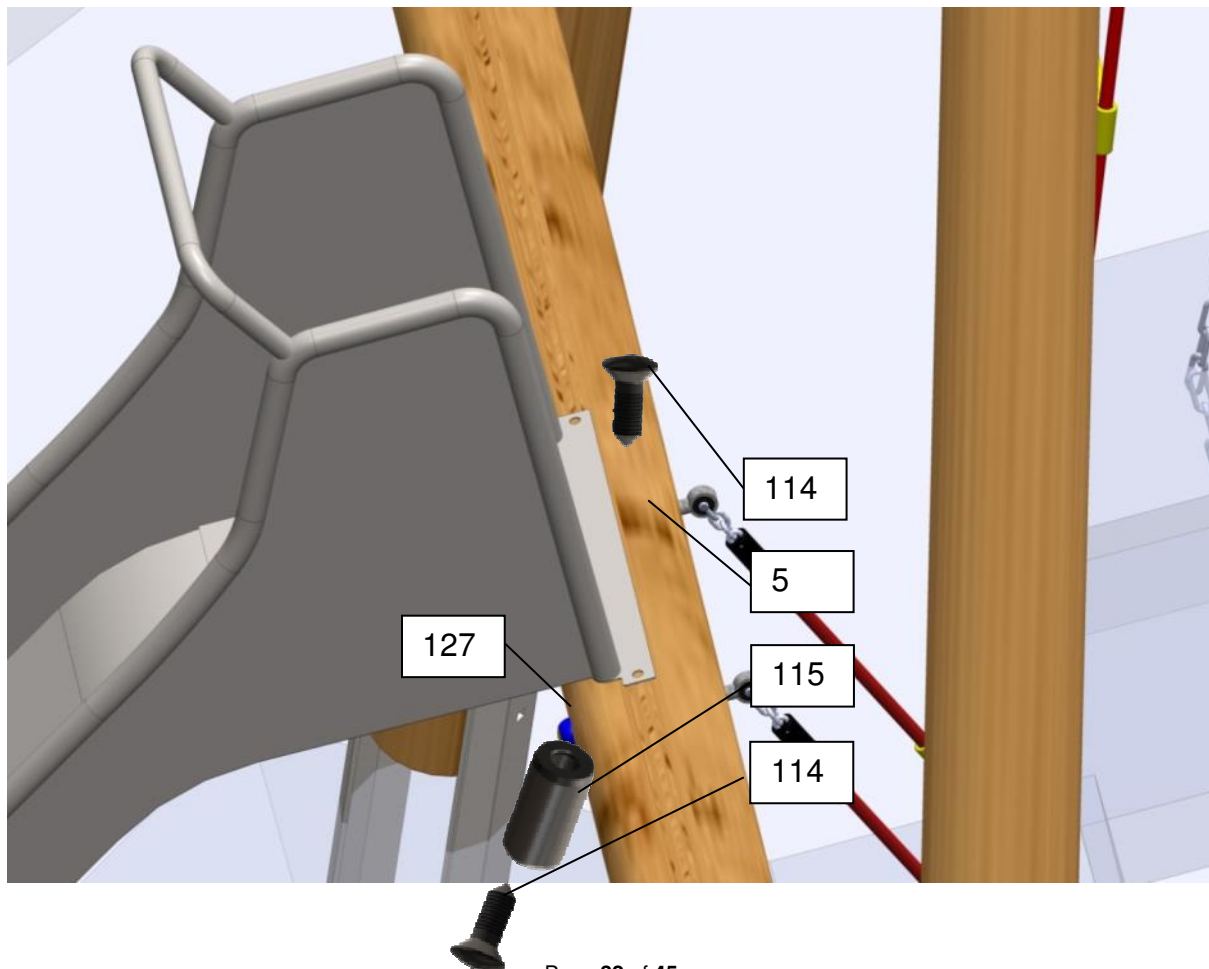






Mounting the Slide bar at the posts



Mounting Slide to the post



	<u>Abbreviations:</u>
AB	Setting time at least 7-8 days
D	Concrete C25/30 (for Foundation) : 1,5 m ³
Dt	Detail
F	Fall Protection
G	Drainage 10 cm
a.Einb.	Concrete in anchor chains
ek	Shorten anchor chains if necessary
ML	Mast length above level of play
M.Lot !!	Mast/Post must be aligned vertically
mo	Mount
O.K	Upper edge of playing level
PS	Safety Area ~78 m ²
R	Radius
VO	Pre-Assembled
	Concrete top edges rounded. Foundation dimensions are valid only for mature, stable ground
	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%!

See drawings for details of shortcuts

5 Post installation checks



Notice

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

5.1 Marking filler depth

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

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

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

5.3 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 carried out.

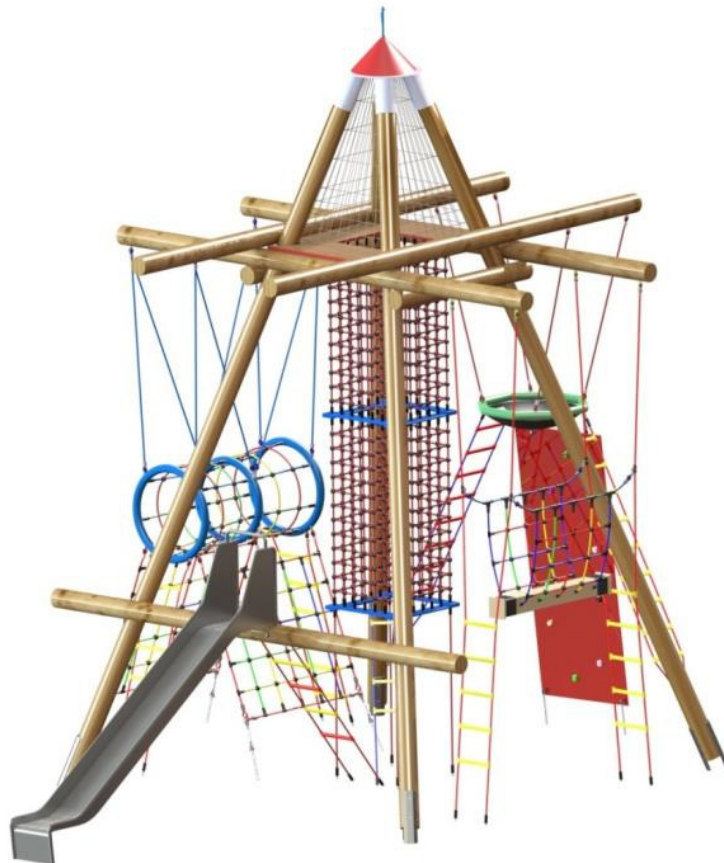
5.4 Information about inspection of the equipment before it is used for the first time

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

5.5 Retighten bolts

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

B Maintenance Instructions Black Forest Birds Nest Tower Art-No. 4652-21



6 Introduction Maintenance

6.1 General information

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.



Attention

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 1176-1:2008”**

7 General maintenance information

7.1 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.

7.2 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.

7.3 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.

7.4 Spare parts

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

7.5 Identifying spare parts

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

7.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary.

7.7 Special measures during the break-in period

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

7.8 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.

7.9 Faults



Attention

Damages must be repaired as soon as they are detected. If serious defects that affect the safety cannot be repaired straight away, the playground item must be blocked with immediate effect.

7.10 Loose screws



Attention

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.

7.11 Preventing equipment use

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

7.12 Claims/liability for faults (steel poles)

Steel posts and footings are covered by our guarantee if regular maintenance is carried out and recorded in writing.

Our general terms and conditions apply. Maintenance of steel poles first takes place after 3 years. The steel posts must be excavated down to the concrete foundations and checked for corrosion.

Zinc paint should be applied to any corroded areas and scratches.

Check ropes for abrasion, replace ropes where coating is damaged down the Steel inlet.

8 Maintenance timetable

8.1 Special advices

8.1.1 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.

8.1.2 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.

8.1.3 Faults that compromise safety



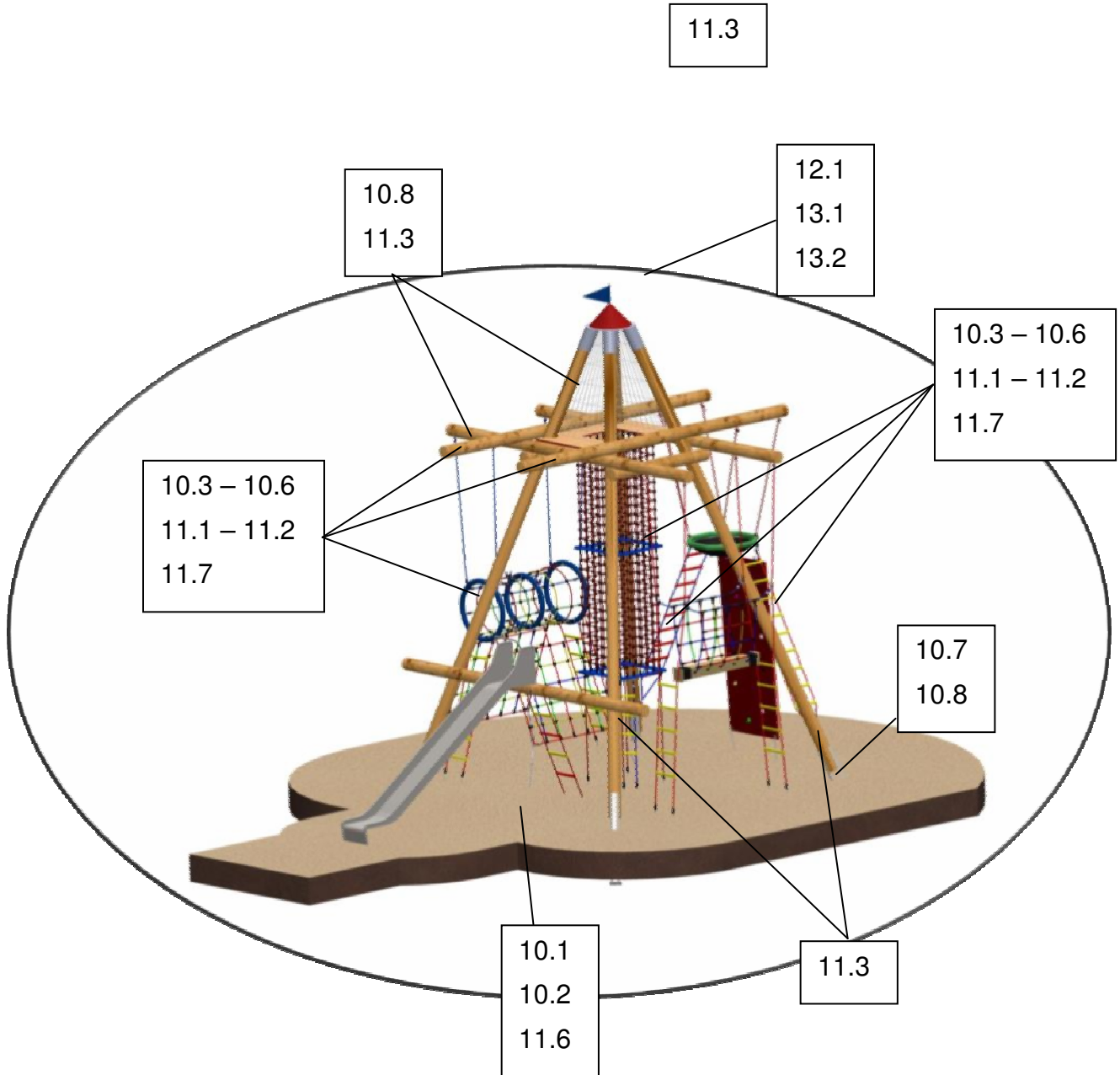
In the event of a fault that compromises safety, quick action must be taken. This may involve repairing it immediately or shutting down and dismantling the equipment.

8.1.4 Faults that compromise function



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.

9 Regular Maintenance (Image)



10 Monthly maintenance

- 10.1 Check the spaces between the equipment and the ground (clearance and height of fall).**
- 10.2 Check the ground surface of fall protection for hard objects and loose foundations.**
- 10.3 Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.**
- 10.4 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.**
- 10.5 Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.**
- 10.6 Check rubber parts, sleeves, etc. for wear and tear or damage and replace if necessary.**
- 10.7 If necessary, remove excess padding material from the post footings due to danger of rotting.**
- 10.8 Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary.**
- 10.9 Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.**

11 Quarterly maintenance

- 11.1 Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.**
- 11.2 Tighten all forms of attachment.**
- 11.3 Repaint and retreat surfaces.**
- 11.4 Maintenance of fall protection surfaces.**
- 11.5 Lubrication of joints.**
- 11.6 Check height of fall protection material and top up with loose filler if necessary. If the posts are labelled, top up to the mark.**
- 11.7 Retighten all bolts.**

12 Half yearly maintenance

- 12.1 The stability of supporting posts, supports, foundations etc. has to be checked. The safety level of the entire system has to be checked after repairs have been carried out or additional system components have been installed or replaced.**



Attention

Annual Maintenance

13 Annual maintenance

- 13.1 **Ascertaining that the equipment, foundations and surfaces are safe for operation.**
- 13.2 **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.**



Attention

The equipment must be inspected by someone **with the necessary expertise** in strict compliance with the instructions issued by Huck Seiltechnik GmbH.

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

14 Maintenance Printout

Name of Item: Black Forest Birds Nest Tower _____ / Art.-No. 4652-21 _____

Location: _____

Customer or Operator: _____
(Council, School, Nursery)

Date of Inspection	Inspector	O.K	Accessible	Barriered	Defects	Repaired by	Date

**Please copy and return once a year after main inspection has been carried out to the manufacturer
Place the confirmation form in the play equipment files.**

15 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.

Art.-No.: 4652-21

Name of Item: Vogelnestturm Black Forrest

Serial Code: _____

Customer or Operator (Council, School, Nursery, etc.):

Competent Person in Charge:

Installation Company (Address):

Responsible Assistant (assembler):

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

(Operator Signature)
(Stamp)

(Installation company signature)

Date: _____