

A Installation Instructions Launch Pad

Art. 4631-10

(Version: Douglas fir posts with post shoes)



Operator: Location:



Revision 0 – 2005-12-16 The first allowed version Assembly instruction FH, SP Revision 2 – 2009-01-26 neue Hinweise All rights rewerved

© Copyright 2003 Huck Seiltechnik GmbH



Contents

Α	Assembly Instruction, Launch Pad, Art. 4631-10	0
1	Introduction Assembling	0
2	Datasheet Launch Pad, Art. 4631-10 (Version: Douglas fir posts with post footings)	0
3	Delivery contents (parts list with part numbers)	0
4	Erection instructions	0
5	Post installation checks	0
В	Maintenance instructions Launch Pad Art. 4631-10	0
6	Introduction Maintenance	0
7	General maintenance information	0
8	Specific maintenance advice	0
9	Maintenance timetable	0
10	Monthly maintenance	0
11	Quarterly maintenance	0
12	Annual maintenance	0
13	Maintenance printout	0
14	Hand over document	0

List of Tables

Table 3-1: Delivery contents, in words	0
Table 3-2: Delivery contents, in symbols	0



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.

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



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.

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



2 Datasheet Launch Pad, Art. 4631-10 (Version: Douglas fir posts with post shoes)

- 1. Space requirement: 10.00 x 13.20 m and/or 12.00 x 16.20 m including safety zone, height of fall 2.80 m
- 2. Required safety surface:

Surface material	Description (mm)	Minimum thickness ^b of layer (mm)	Maximum height of fall (mm)
Topsoil grass			<= 1000 ^d
Chipped bark	20 – 80 grain size	200 300	<= 2000 <= 3000
Wood chippings	5 – 30 grain size	200 300	<= 2000 <= 3000
Sand ^c	0.2 – 2 grain size	200 300	<= 2000 <= 3000
Gravel ^c	2 – 8 grain size	200 300	<= 2000 <= 3000
Other ground materials	As recommended by manufacturer		Critical fall height as checked

^a Appropriate ground material, prepared for use at playgrounds

^b In case of loose fill material, 100mm have to be added onto the minimum layer thickness to compensate the falling away effect (see 4.2.8.5.1).

[°] Without silty or clayey proportions. Grain size can be determined by a sieve test according to EN 933-1. ^d See note 1 in 4.2.8.5.2.

- Name and overall dimension of the largest component: Douglas fir post (1 piece), length 7.00 m, ø 250 mm (the tip is milled to ø 20 cm for cap)
- 4. Name and weight of the heaviest component: Douglas fir post (12 piece), 1280 kg
- 5. Intended age group: 6 years and over

6. Please note that this equipment is set in concrete.

Concrete: C25/30

(Must be installed with armouring steel/reinforcing steel (see pg.17 – 22). Concrete necessary: 15,61 m³
Foundations/area to be excavated (Top edge of concrete rounded, 40 cm below ground level): 1 x 1.80 m long x 1.80 m wide ,total depth 1.30 m including 10 cm drainage 2 x 2.00 m long x 2.00 m wide, total depth 1.30 m including 10 cm drainage 2 x 1.50 m long x 1.50 m wide, total depth 1.30 m including 10 cm drainage 2 x 0.80 m long x 0.80 m wide, total depth 1.10 m including 10 cm drainage 1 x 2.00 m long x 1.00 m wide, total depth 1.10 m including 10 cm drainage 1 x 0.60 m long x 0.45 m wide, total depth 0.80 m including 10 cm drainage 2 x 0.60 m long x 2.50 m wide, total depth 0.80 m including 10 cm drainage 1 x 0.35 m long x 2.50 m wide, total depth 0.80 m including 10 cm drainage
1 x 0.50 m long x 0.50 m wide, total depth 0.80 m including 10 cm drainage





Round off foundation edges (min.R = 100 mm)! Sizes of fundations 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%!

- 7. Assembly time, once foundations complete: approx. 8 hours. Required assistance: 2 - 3 people.
- 8. Any spare parts which may be required can be obtained directly from your supplier
- 9. 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

Table 3-1: Delivery contents, in words

Pos.	Quantity	Element / Descripton	Size	0.K.	Missing
1	1	Douglas fir post with post shoes	Ø 200 mm – 2.00 m long		
2	1	Douglas fir post with post shoes	Ø 200 mm – 2.00 m long		
3	1	Douglas fir post with post fshoes	Ø 250 mm – 4.20 m long		
4	1	Douglas fir post with post shoes	Ø 250 mm – 4.20 m long		
5	1	Douglas fir post with post shoes	Ø 250 mm- 7.00 m long (tip Ø 200 mm)		
6	1	Douglas fir post with post shoes	Ø 250 mm – 5.20 m long		
7	1	Douglas fir post with post shoes	Ø 250 mm – 5.20 m long		
8	1	Douglas for post with post shoes	Ø 250 mm – 5.20 m long		
9+10	1	Entry frame (2 posts) pre- assembled	Ø 200 mm – 2.60 m long		
11	1	Flat net and angled climbing net (hand rail)			
12	1	Climbing net triangular			
13	1	Rope with climbing aids			
14	1	Climbing chimney			
15	1	Vertical climbing net			
16	1	Rope bridge			
17	1	Hand rail			
18	1	Hanging rope			
100	16	blue/yellow caps			
101	16	Washer	for M12		
102	16	Lock nut	M12		
103	18	Black caps	for M16		
104	18	Washer	for M16		



Pos.	Quantity	Element / Descripton	Size	0.K.	Missing
105	18	Lock nut	M16		
106	~ 200	Torx screws	5 x 25		
107	1	Mast cap (red)	for Ø 200 mm		
108	35	Niro clamps			
109	70	Wood screw	6 x 70 mm		
110	30	Dowels	8's		
111	1	Blue flag			
112	1	Black cap	for M16		
113	1	Threaded bolts	M16, 460 mm long		
114	1	Washer	for M16		
115	1	Nuts	M16		
116	1	Lock nut	M16		
117	18	Geka – washer pre- assembled	M16		
118	16	Geka – washer pre- assembled	M12		
119	2	Framing members			
120	1	Covering board in two parts			
121	1	Tin of varnish			
122	1	Paint brush			
123	1	Tension chain complete with Turnbuckle M12	Chain Ø 7 mm, ca. 6,20 m long (see page 33)		
124	8	Ground pegs			
125	8	shackle	M12, verz.		
126	8	chain	70 cm long		



3.2 In symbols

Table 3-2: Delivery contents, in symbols

Pos.	Qunatity	Symbol	
1	1	Ø 200 mm – 2.00 m long	
2	1	Ø 200 mm – 2.00 m long	
3	1	Ø 250 mm – 4.20 m long	
4	1	Ø 250 mm – 4.20 m long	
5	1		
		Ø 250 mm- 7.00 m long(tip Ø 200 mm)	
6	1		
		Ø 250 mm – 5.20 m long	
7	1		
		Ø 250 mm – 5.20 m long	
8	1		
0.10	1	Ø 250 mm – 5.20 m long	
9+10		Ø 200 mm – 2.60 m long	
11	1	VO	
12	1		



Pos.	Qunatity	Symbol
13	1	
14	1	
15	1	
16	1	
17	1	
18	1	
100	16	
101	16	for M12
102	16	M12
103	18	for M16
104	18	for M16
105	18	M16
106	ca. 200	5 x 25
107	1	for Ø 200 mm



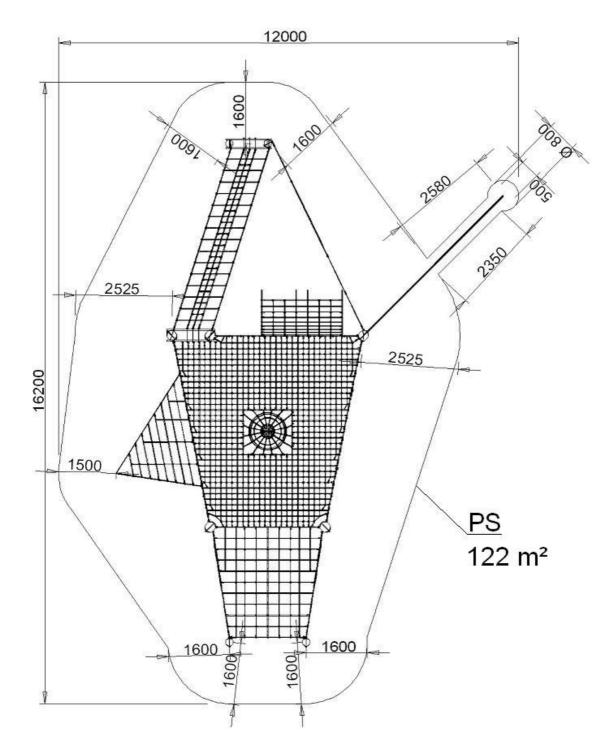
Pos.	Qunatity	Symbol
108	35	
109	70	6 x 70 mm
110	30	B's
111	1	
112	1	for M16
113	1	M16, 460 mm long
114	1	for M16
115	1	M16
116	1	<u>М16</u>
117	18	M16
118	16	M12
119	2	
120	1	
121	1	
122	1	



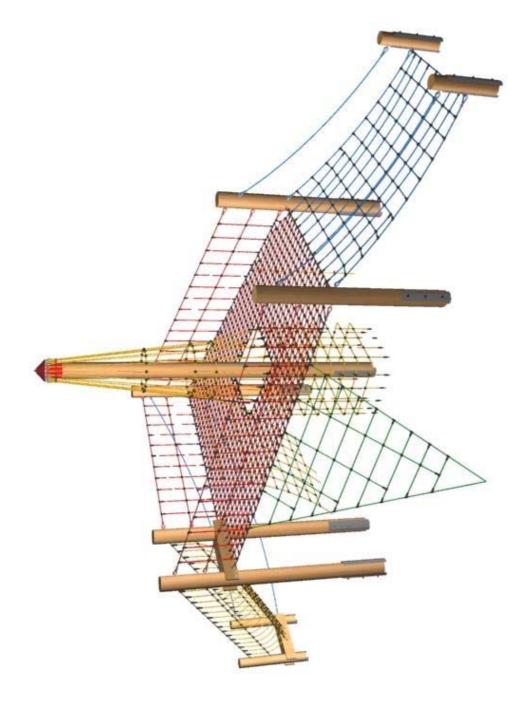
Pos.	Qunatity	Symbol
123	1	Chain Ø 7 mm, ca. 6,20 m long
124	8	
125	8	M12, verz.
126	8	70 cm long



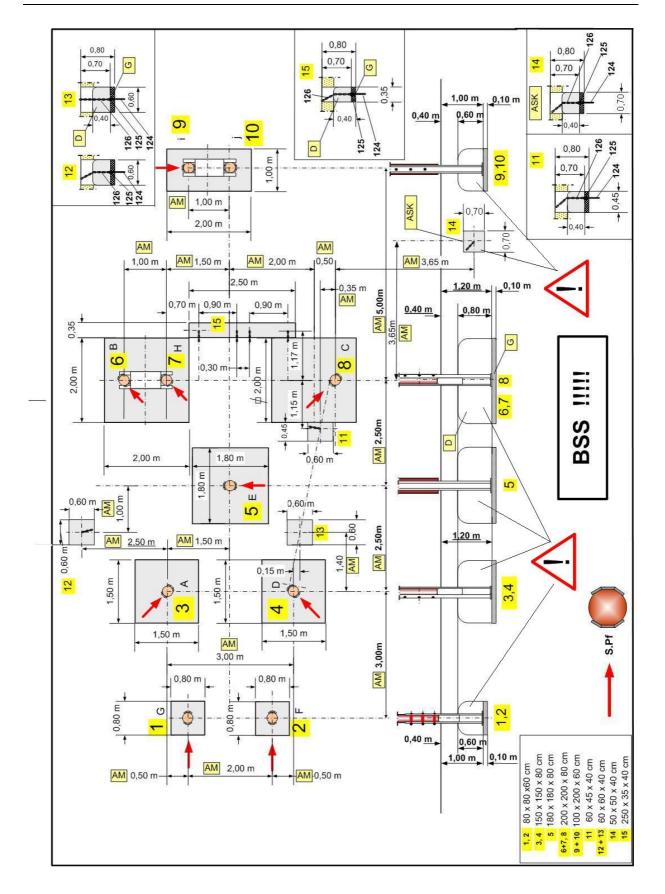
4 Erection instructions



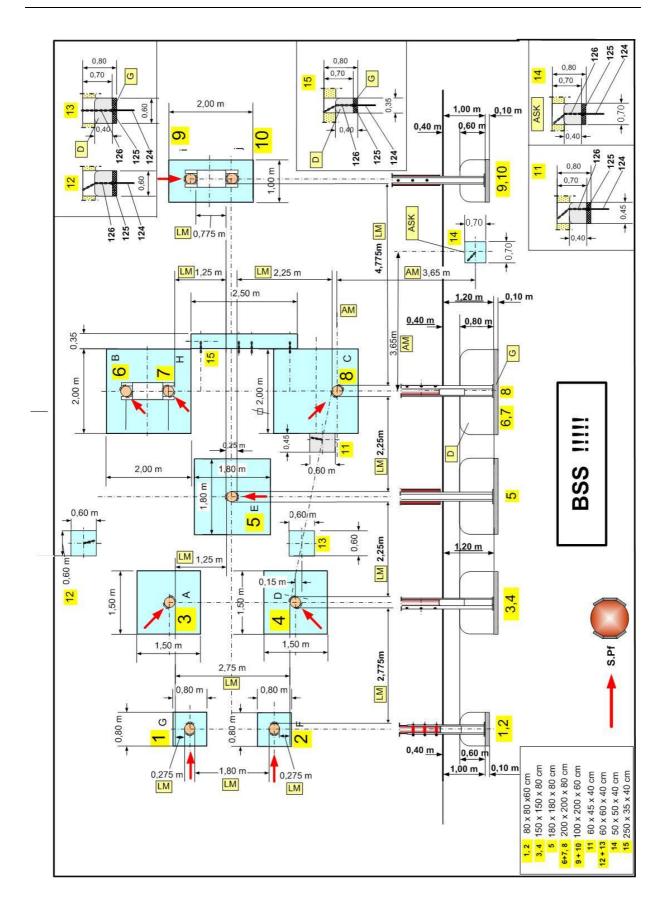




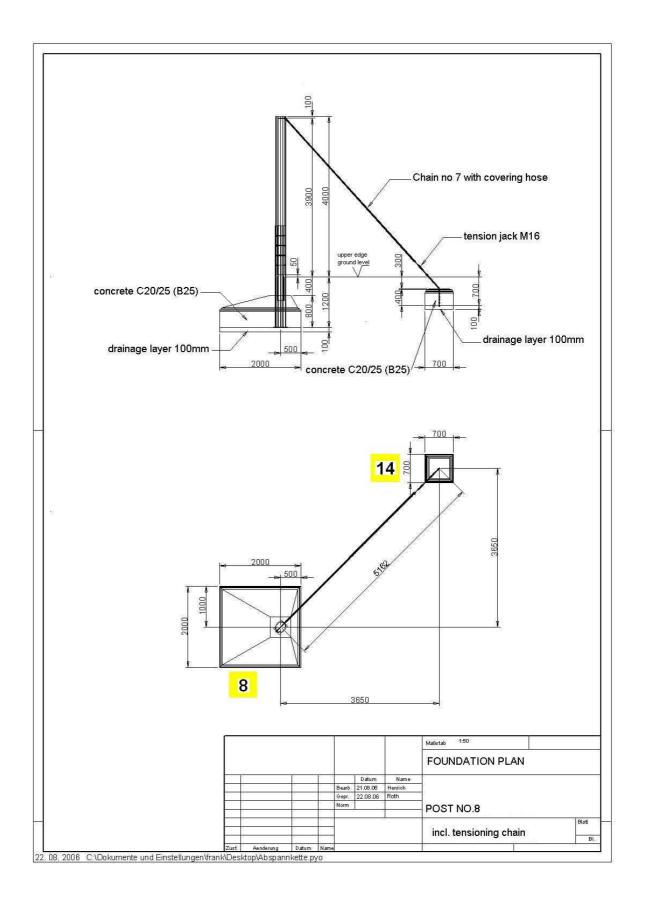






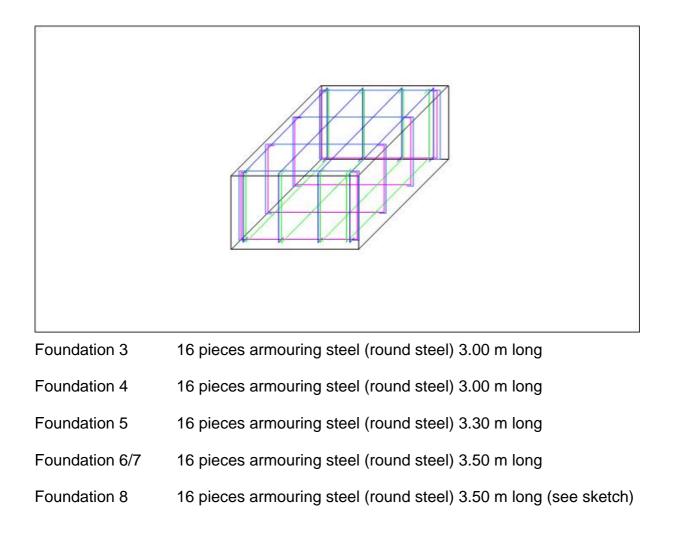




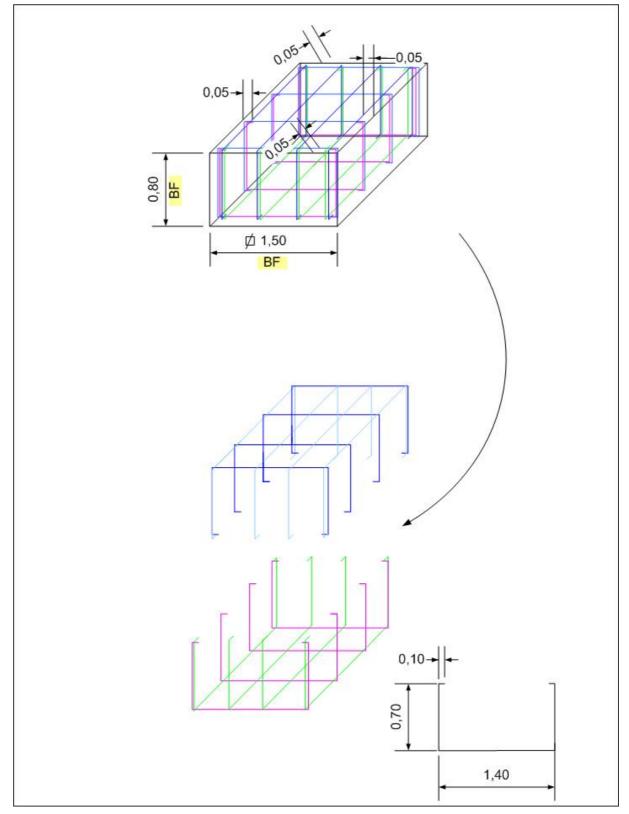




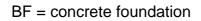
Foundation 3 – 8



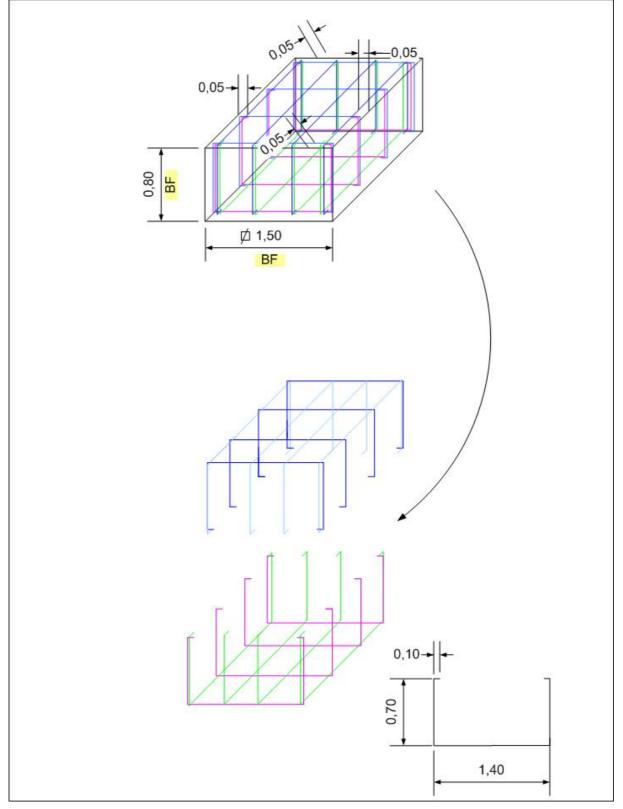




16 pieces armouring steel (round steel) 3.00 m long, Ø 12 mm (siehe Skizze)



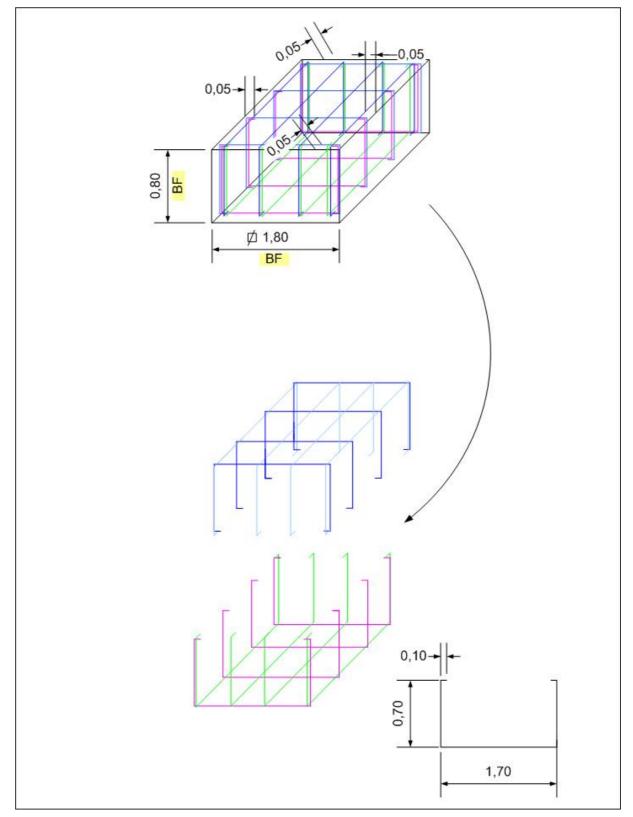




16 pieces armouring steel (round steel) 3.00 m long, Ø 12 mm (see sketch)

BF = concrete foundation



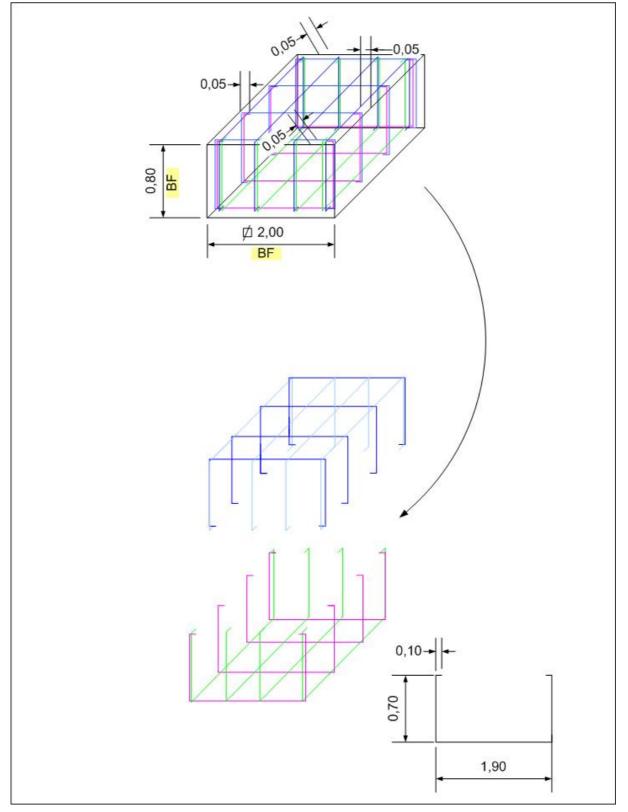


16 pieces armouring steel (round steel) 3.30 m long, Ø 12 mm (see sketch)

BF = concrete foundation



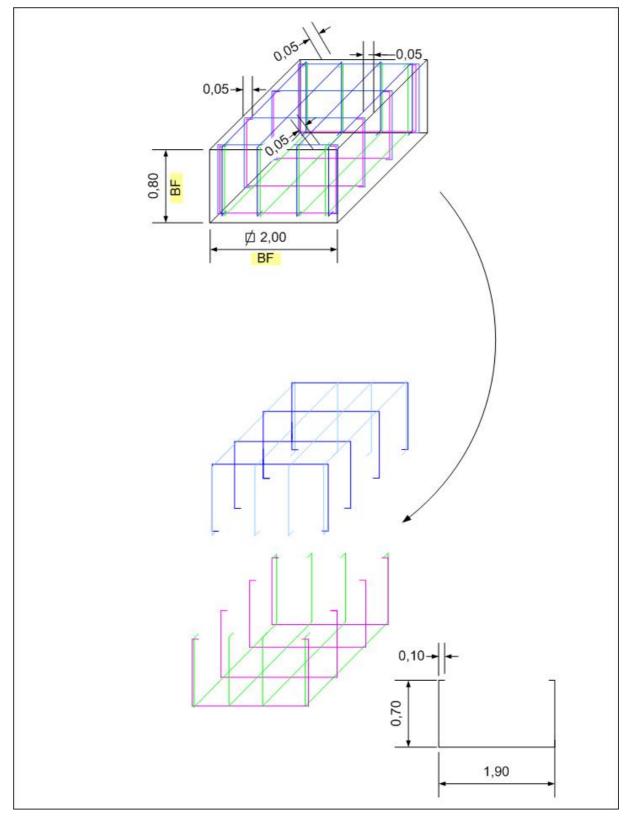
Foundation 6/7



16 pieces armouring steel (round steel) 3.50 m long, Ø 12 mm (see sketch)

BF = concrete fondation

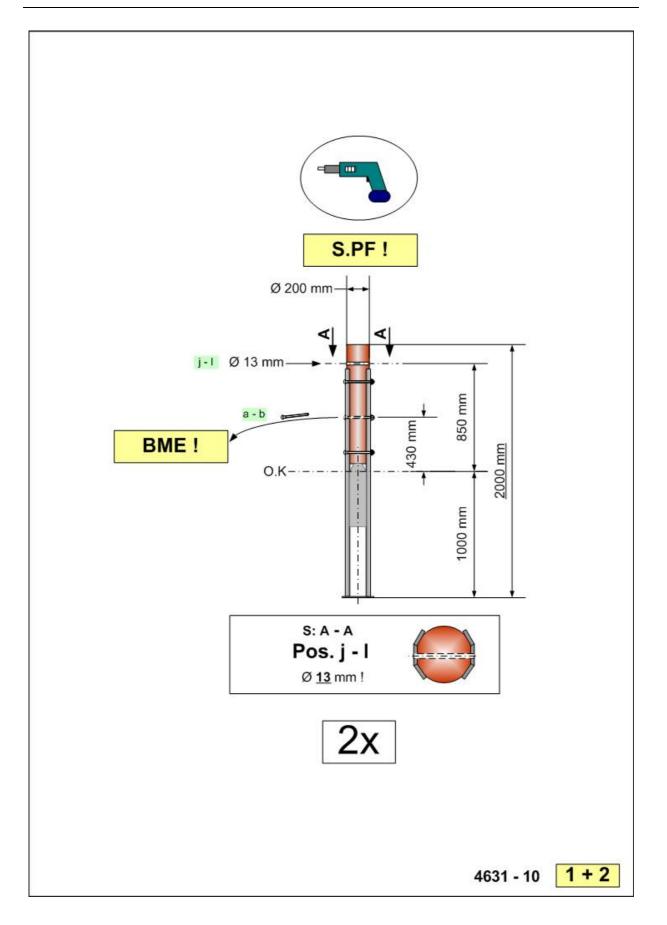




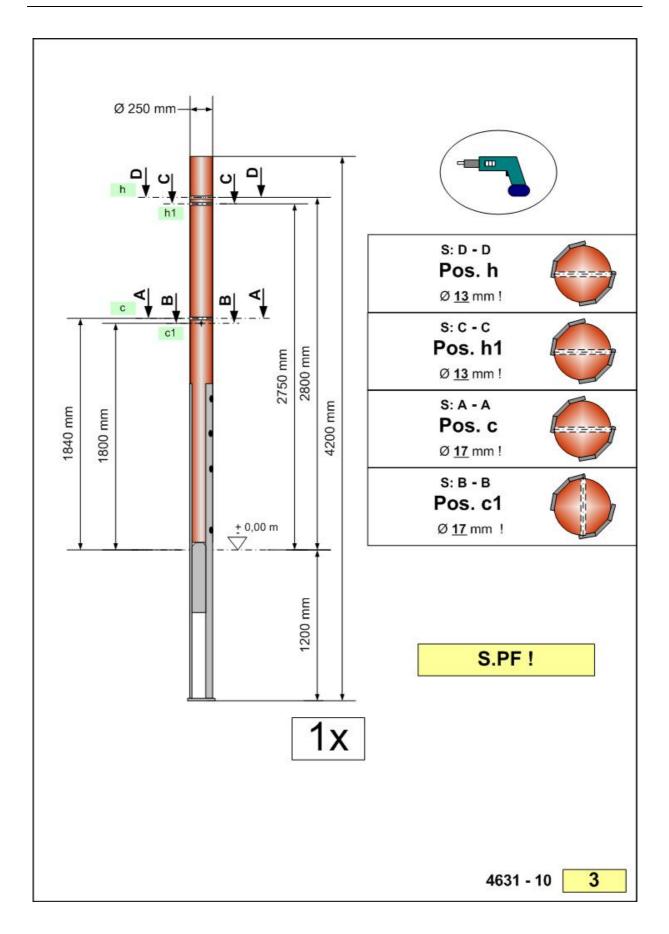
16 pieces armouring steel (round steel) 3.50 m long, Ø 12 mm (see sketch)

BF = concrete foundation

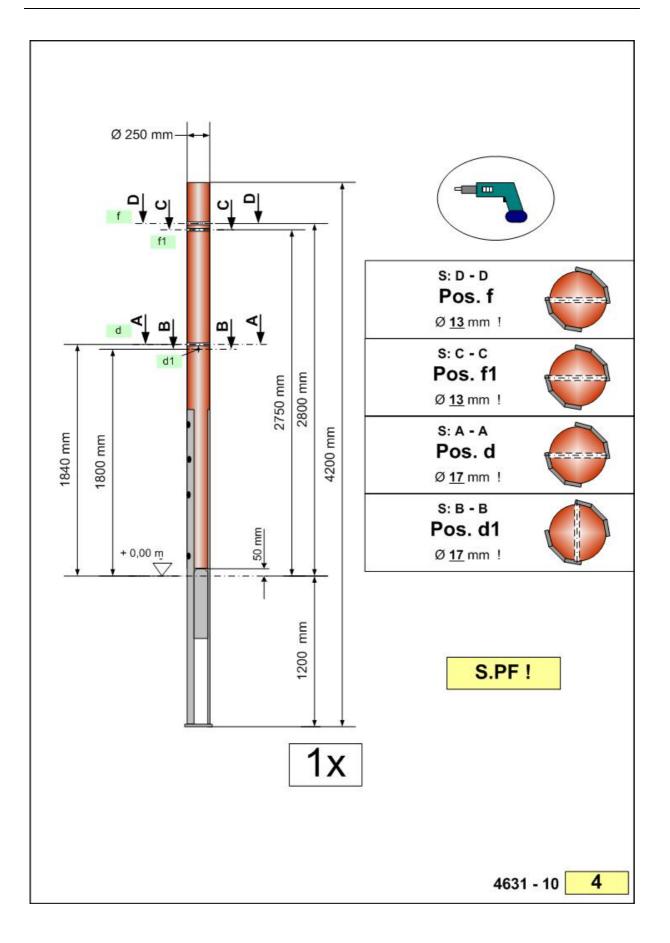




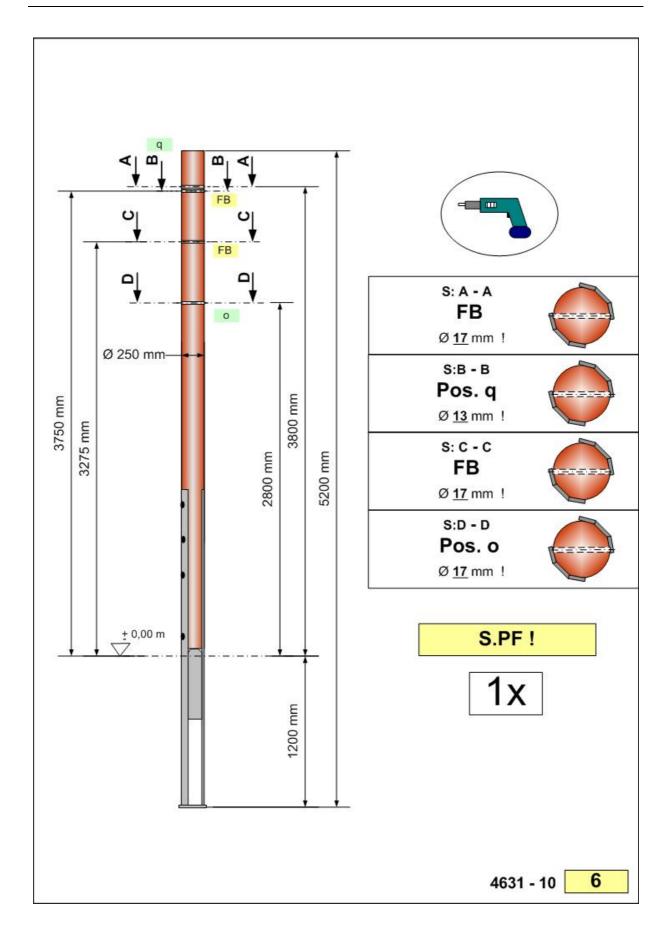




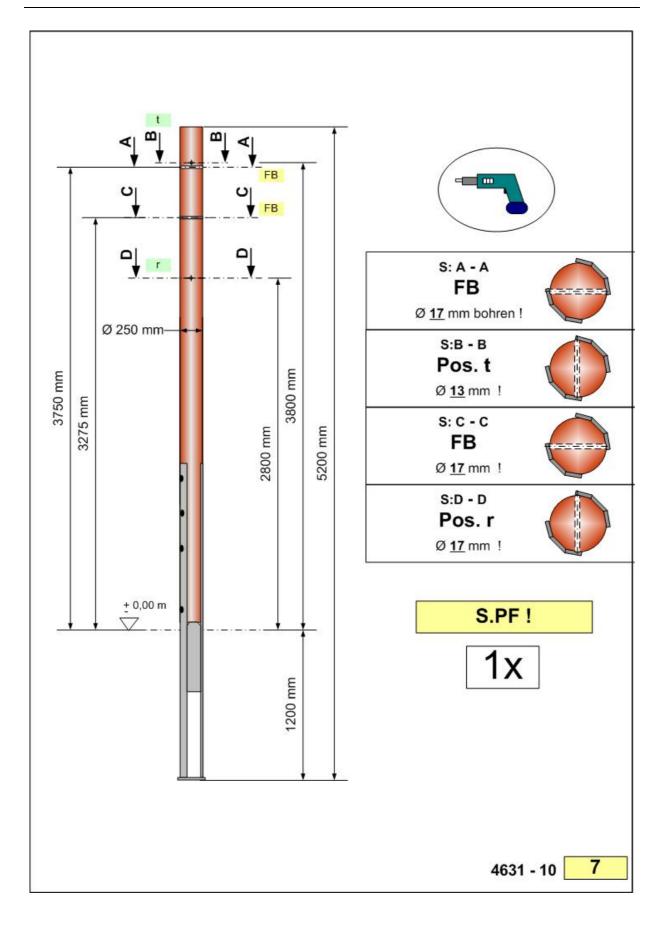




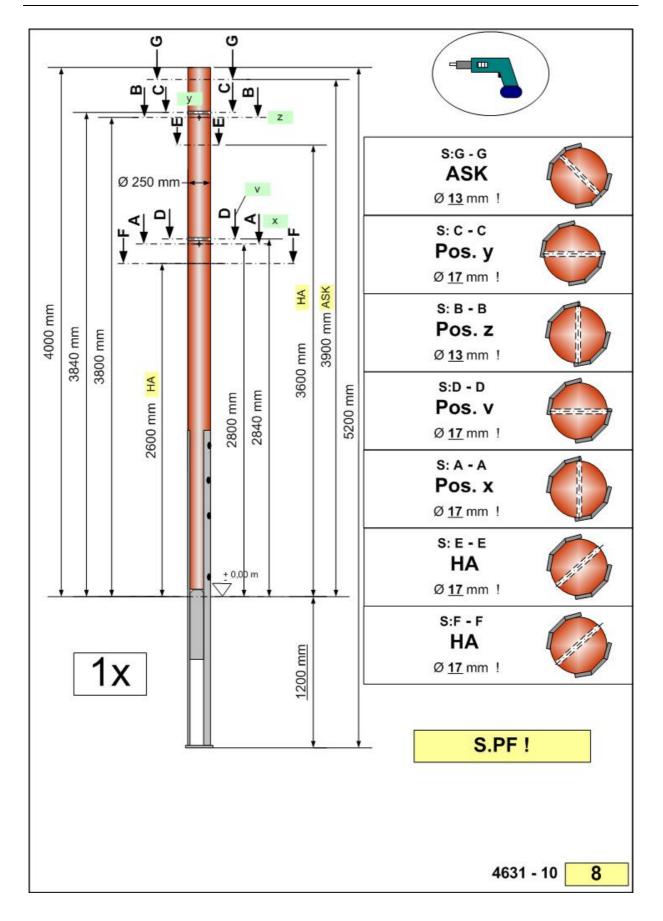




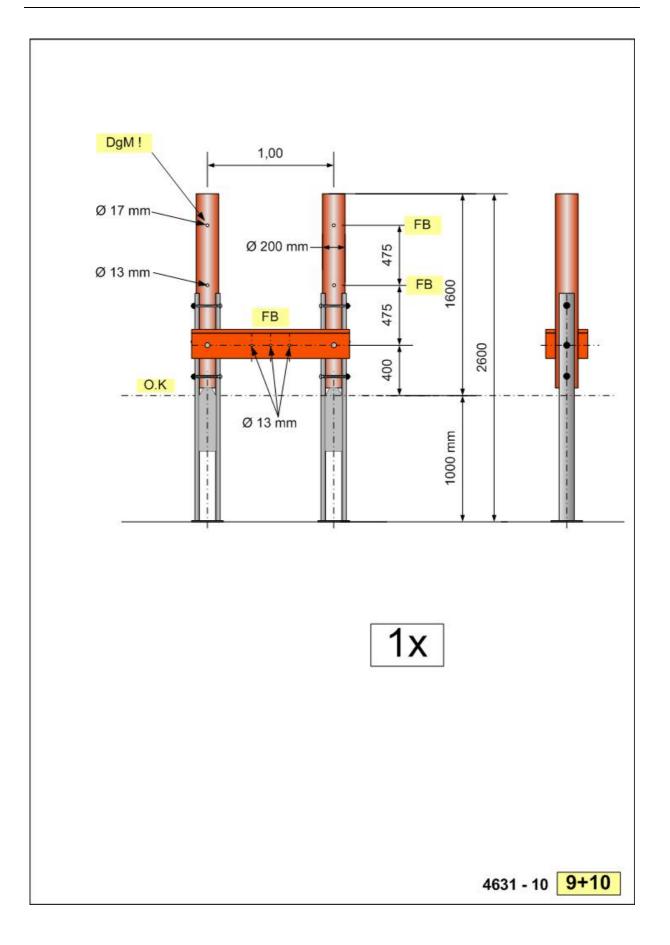




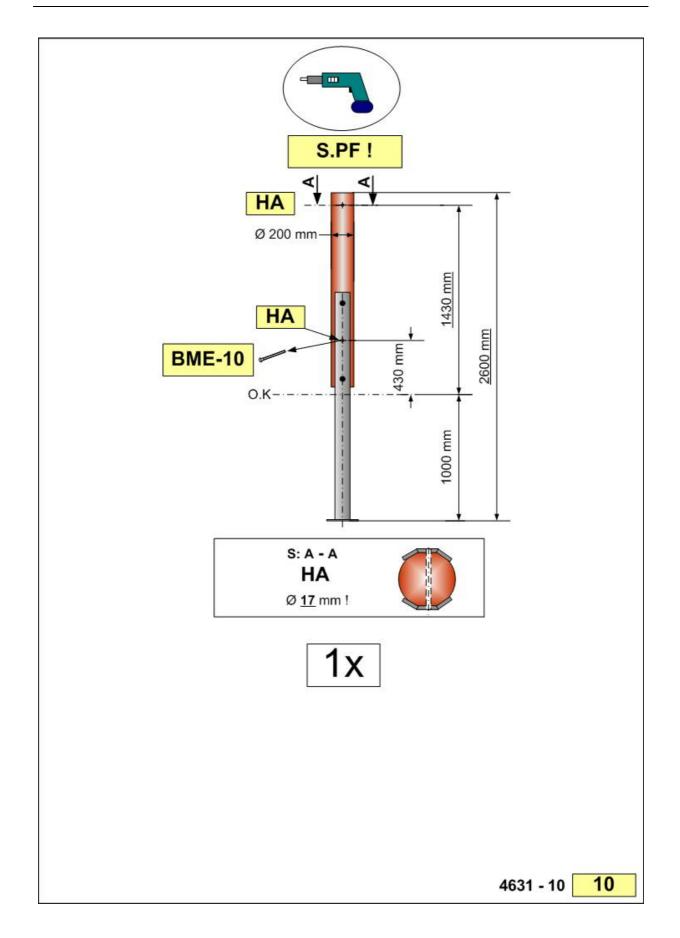




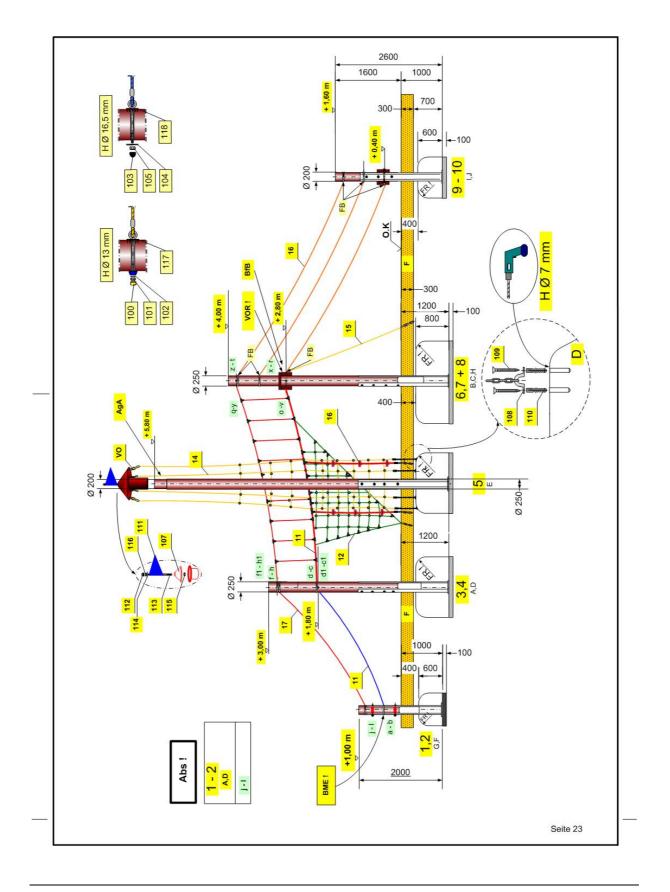




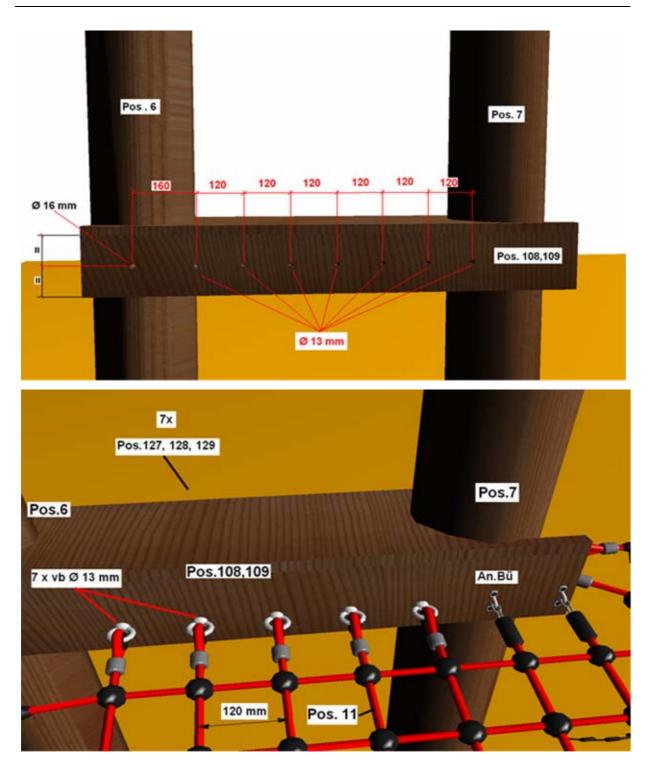




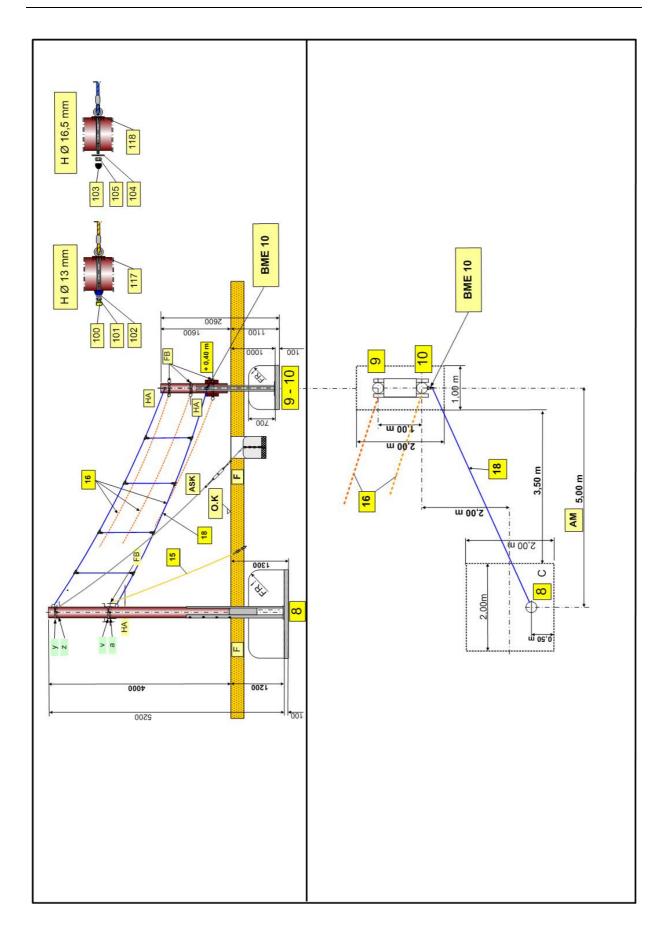




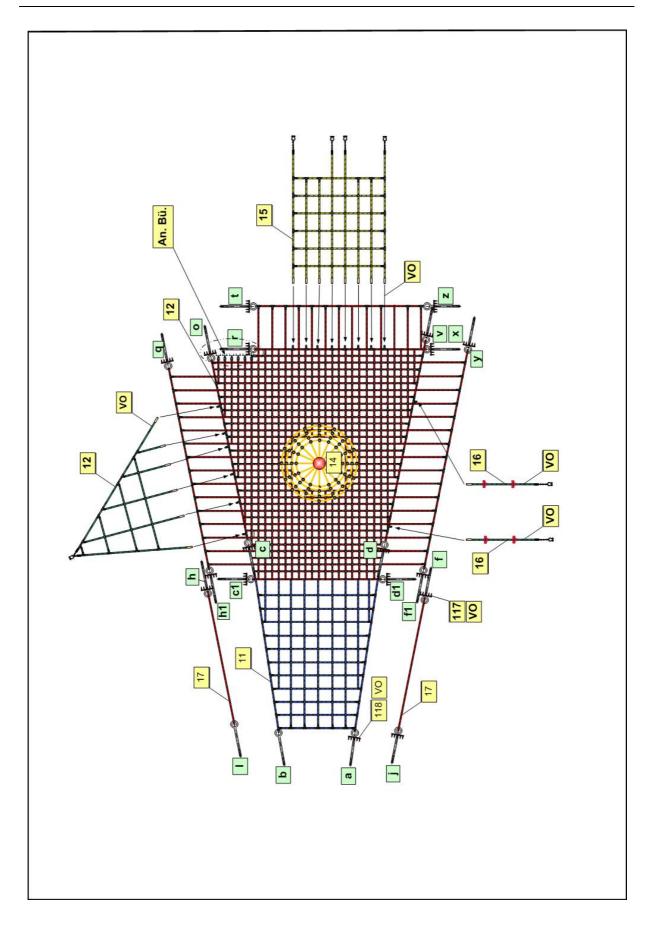














	Version: Douglas fir posts with post footings
ASK	Tension chain
Abs	All drilling to be done on site!
AgA	Milled to Ø 20 cm for cap
An.Bü	Shackel for fixation of the net
AM	Dimension between axes
BME	Remove medium coach bolt M12 of post no. 10 before installation of the <u>climbing rope pos. 18</u>
	Set lower bolt M12 of rope into the borehole.
	The residual coach bolt can be used as spare part.
BME-10	Remove medium coach bolt M12 of post no. 1 + 2 before installation of the slanting access pos. 11
	Set lower bolt M12 of rope into the borehole.
	The residual coach bolt can be used as spare part.
BF	Concrete foundation
BfB	Adopt drilling intervals for bridge crossbars of posts no 9 and 10.
D	Concrete C25/30 (for foundations)
DgM	The drillings for mounting the bridge and framing members will be adopted as for posts 6 + 7.
F	Fall protection
FB	for bridge
FR	Foundation radius at least 10 cm
G	Seepage layer
LM	Clear dimension
O.K	Upper edge of playing level
Pos.	Position
PS	Safety area
SZN	see diagram (unrolling of net)
S.PF	Pay attention to the installation angle of the post footing!
VOR	Screw 2 x mounting members each outside between posts 6 and 7 (must be adapted on site)
	The covering planks are, as shown, also adapted on site and mounted on the framing members.
HA	Hanging rope
Н	Ø(drilling diameter)
BSS !!!!	It is imperative to install armouring steel/reinforcing



	steel see pages 15 – 20 in the respective foundations !!!!				
FD 3-8	Foundation 3 - 8				
	Round off foundation edges (min.R = 100 mm)! Sizes of fundations 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 shortcuts



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.



5 Post installation checks



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:

- Safe equipment installation 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 made.

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

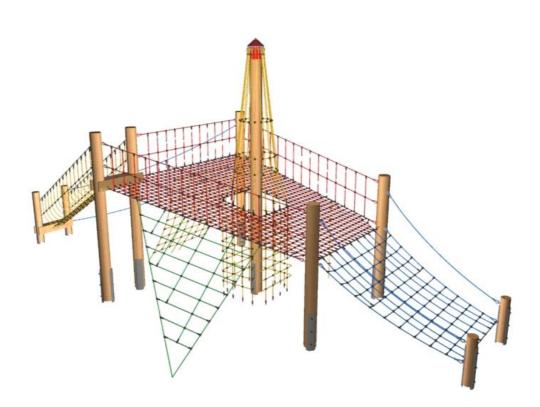
• After one week of play, please retighten all bolts again. Later upon respective maintenance.



B Maintenance Instructions Launch Pad

Art. 4631-10

(Version: Douglas fir posts with post shoes)





Revision history Revision 0 – 2005-12-16

The first allowed version Maiantanance instruction FH, SP

Revision 2 – 2009-01-26 neue Heinweise

All rights reserved

© Copyright 2003 Huck Seiltechnik GmbH



6 Introduction Maintenance

6.1 General informations

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



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.



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 for the disposal of individual equipment components.

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 Drainage holes

All drainage holes should be kept clear.

7.9 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.



7.10 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.

7.11 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).

7.12 Preventing equipment use

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

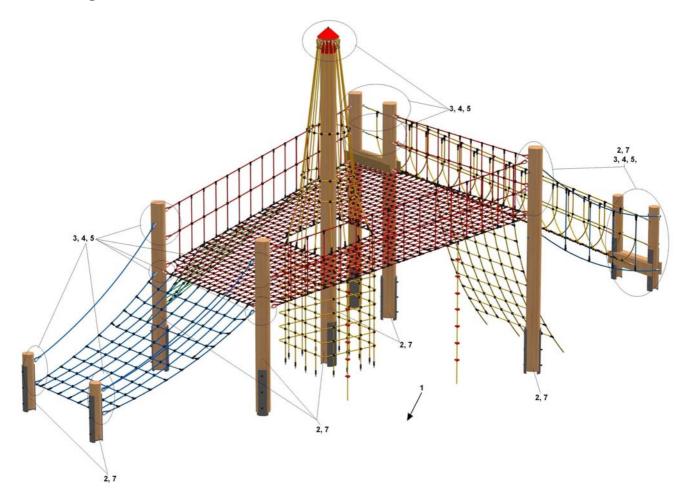
7.13 Safeguarding the guarantee

Steel posts and footings are guaranteed if regular maintenance is carried out and recorded in writing. 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.



8 Regular maintenance

8.1 Image





8.2 Regular maintenance (Text)

m = monthly j = 1/4 quarterly

i = 1/2 half-yearly

m ¼j ½j

		-	
1.	Check ground in fall and protection area for hard objects and loose foundations.	Х	
2.	Check stability (supporting posts, springs, supports, foundations etc.).		Х
3.	Check all connecting elements and fittings for wear and tear and where necessary retighten. Replace damaged components.	Х	
4.	Check that moveable metal components (joints, springs etc) move smoothly and are not worn and where necessary replace. It is not necessary to lubricate joints as we only use maintenance-free metal roller bearings.	x	
5.	Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary	Х	
6.	Check rubber parts, sleeves, rings etc. for wear and tear or damage and replace if necessary.	Х	
7.	Check the surface of wooden parts for damage caused by the weather or external influences and repair (Paint with glaze) or replace if necessary.	Х	
8.	Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.	Х	

It is recommended to carry out the **inspection and maintenance work** out in the specified time-frames, since wear and tear can occur through play, weathering influences or intentional damage, which compromises safety and function levels.

Defects, which compromise safety, must be treated promptly, either by immediately repairing or dismantling or closing down the equipment!

Defects, which compromise function, reduce the play value of the equipment and encourage vandalism, which may compromise safety levels. Damage should also be immediately repaired in this case.

Maintenance and servicing is to be carried only out by professionals.

General: Play equipment which is regularly checked may not be damaged in such a way that it becomes dangerous. However it is essential that where necessary repairs are followed up after regular checks.



8.3 Maintenance timetable

8.4 Special advices

8.4.1 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.

8.4.2 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.

8.4.3 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.

8.4.4 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 Monthly maintenance

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

10 Quarterly maintenance

- Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.
- Tighten all forms of attachment.
- Repaint and retreat surfaces.
- Maintenance of fall protection surfaces.
- Lubrication of joints.
- 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.
- Retighten all bolts

11 Half yearly maintenance

• 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.





12 Annual maintenance

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



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.



13 Maintenance printout

Name of item: Launch Pad______ / Art. No. 4631-10 _____

Location: _____

Customer or operator: _____

(Town, Town council, School)

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 by Telefax (06443) 83 11 79!

Place the confirmation form in the play equipment files.



14 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.: 4631-10 Type of item: "Lilse-Bergen" System 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:	