

A Assembly instruction
Wichtelwald complete part no. 4594-50
Version: Douglas fir posts Ø16 cm (with post shoes)
(photo without post shoes)



Operator:

Location:

Revision 0 – 2004-11-04

First released version

Assembly instruction

Revision 7 – 2010-04-19 (safety zone)

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Introduction installation

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 table 3.1.1).

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

Address: Huck Seiltechnik GmbH
Dillerberg 3
35614 Asslar/Berghausen
Phone +49 (0)6443 / 8311-0
Fax +49 (0)6443 / 8311-79

Please do not hesitate to call your supplier **+49 (0)6443/ 8311- 99** if you have any problems during installation or in case of any other questions.



The complete assembly instruction, maintenance instruction and maintenance printout are to be handed over to the operator after installation, who has to confirm receipt in writing (see last page)!!!



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 (for example HTS plus Teflon no. 893128, can be purchased from the company Würth) or another similar lubricant.

We herewith confirm that this play equipment is tested and certified according to the new play equipment norm EN 1176.

2 Data sheet: Wichtelwald complete part no.4594-50

1. Space required 6,50 x 6,40 m resp. 9,80 x 9,00 m including safety area
Height of fall: 1,10 m
2. Ground surface

Surface material	Description mm	Minimum thickness of layer mm	Maximum height of fall mm
Lawn top soil			≤ 1000*)
Chipped bark	Grain size 20 – 80	300	≤ 2000
		400	≤ 3000
Wood chippings	Grain size 5 – 30	300	≤ 2000
		400	≤ 3000
Sand	Grain size 0,2 – 2	300	≤ 2000
		400	≤ 3000
Gravel	Grain size 2 – 8	300	≤ 2000
		400	≤ 3000
Other ground surface materials	Like tested according to HIC	400	

*) in Germany, lawn is a sufficient ground surface for heights up to 1,50 m

3. Name and size of the largest part of the equipment:
Douglas fir post with post shoe (1 piece) length 2,60 m, Ø 160 mm
4. Name and weight of the heaviest part of the equipment:
1 freight pallet with Douglas fir posts (11 pieces) ~ 285 kg
5. Allowed age group: 3 years and up
6. Attention! Equipment to be embedded in concrete
Concrete: C25/30
Concrete requirement: 3,92 m³
Size of foundation / excavation:
(Upper edge of concrete = 20 cm below upper edge play level)
1 x 1,00 m long x 1,00 m wide, total depth: 1,00 m including 10 cm percolation layer
10 x 0,80 m long x 0,80 m wide, total depth: 1,00 m including 10 cm percolation layer.



Attention

7. **Upper edges of concrete are rounded! Foundation sizes apply for regular soil classification 4-5 (grown surface).**
Soil classification 4: Light up to medium plasticity, interlaced, with little sediment (proportion < 30 % larger than 63 mm grain size in diameter)
Soil classification 5: Grounds of soil classification 3 and 4 with more sediment (proportion > 30 % larger than 63 mm grain size in diameter)
For safety reasons, foundations of sandy, soft grounds should be layered with a larger surface of at least 50%.

Assembly time of the complete equipment once steel posts are set in concrete approximately 8 hours, number of persons required: 3-4

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

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9. **We herewith confirm that this play equipment is tested and certified according to the new play equipment norm EN 1176.**

3 Scope of supply, parts list with part numbers

3.1.1 in letters

Table 3-1: Scope of supply, parts list with part numbers

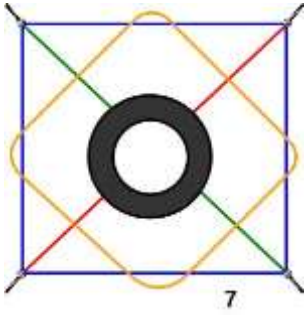
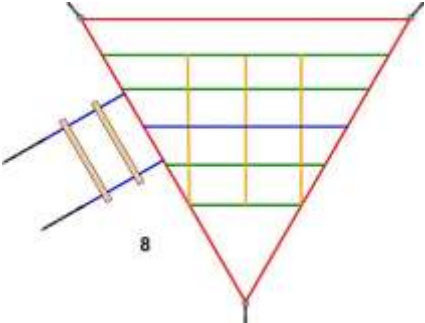

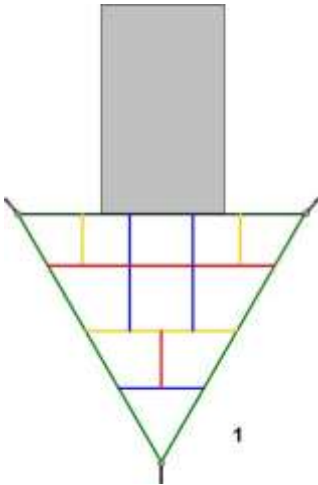
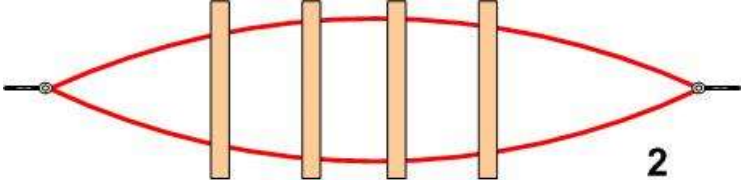
Pos.	Number of items	Element / description	Size	O.K.	Mis-sing
1	1	Douglas fir post with post shoe (P.11)	Ø 160 mm, 2,60 m lg		
2	10	Douglas fir posts with post shoes (P. 1 - 10)	Ø 160 mm, 2,20 m lg		
3	1	Climbing net Net pos. 3			
4	1	Hanging rope with 2 garlands (top) + balancing rope (bottom) Net pos. 4			
5	1	Climbing net with ladder Net pos.5			
6	1	Slanting climbing net Net pos. 6			
7	1	Tyre net Net pos. 7			
8	1	Lounging net + rope ladder Net pos. 8			
9	1	Hammock including safety rope Net pos. 9			
10	1	Climbing net with rubber climber Net pos. 1			
11	1	Rung mat including safety rope Net pos. 2			
100	11	Post caps, Ø 160mm, red			
101	35	Cross-head screws, (Pan Head screws)	5 x 30 mm long		
102	6	Ground anchor, screwable			
103	30	Stop screw nut	M12, VA		
104	30	Washers, DIN 125	Ø 13, VA (f. M12)		
105	30	Blue-yellow caps,	f. M12 (synthetic)		
106	5	Niro-jaw			
107	20	Torx-scews	4 x 25 mm long		

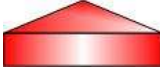

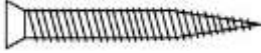




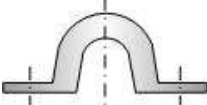


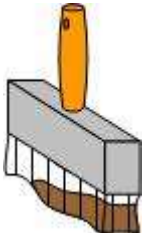
Pos.	Number of items	Element / description	Size	O.K.	Missing
108	2	Articulated swing hooks part no. 4602 (pre- <u>assembled on hammock pos. 9!!!</u>)	M12		
109	10	Torx-screws	4,5 x 60 mm		
111	1	Paint brush			

3.1.2 in symbols

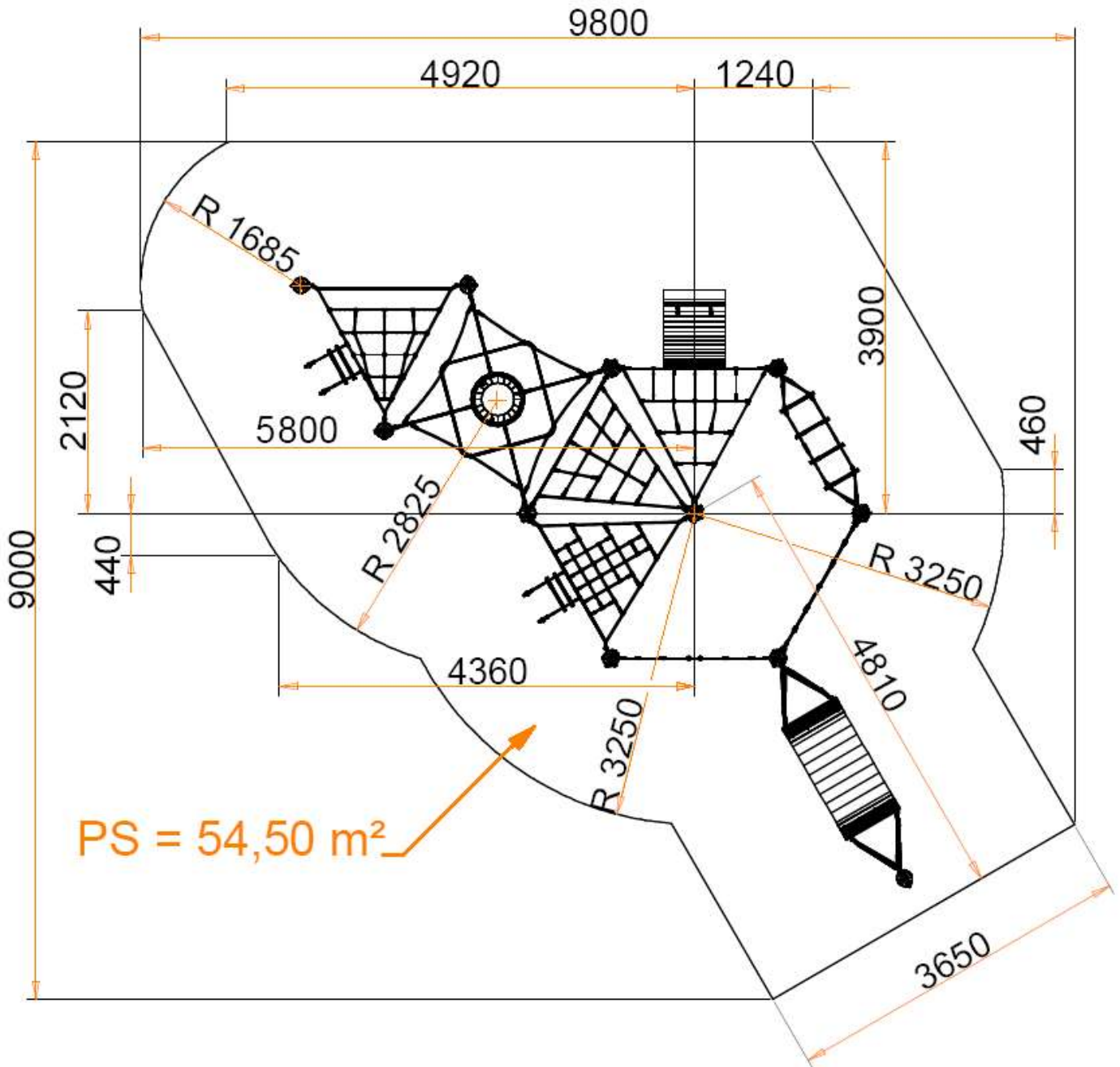
Table 3-2: Scope of supply, parts list with part numbers

Pos.	Number of item	Symbol
1	1	
2	10	
3	1	
4	1	
5	1	
6	1	

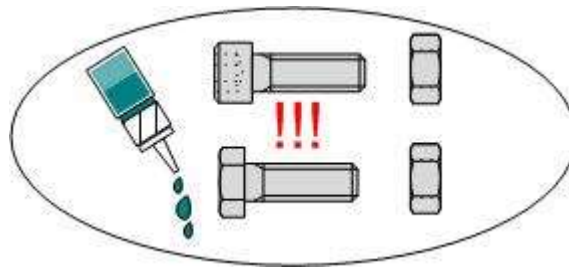
Pos.	Num- ber of item	Symbol
7	1	
8	1	
9	1	
10	1	
11	1	

Pos.	Number of item	Symbol
100	11	
101	35	  5 x 30 mm long
102	6	
103	30	 M12, VA
104	30	 Ø 13, VA (f. M12)
105	30	 f. M12 (synthetic)
106	5	
107	20	 4 x 25 mm long
108		
109		 4,5 x 60 mm
111	1	

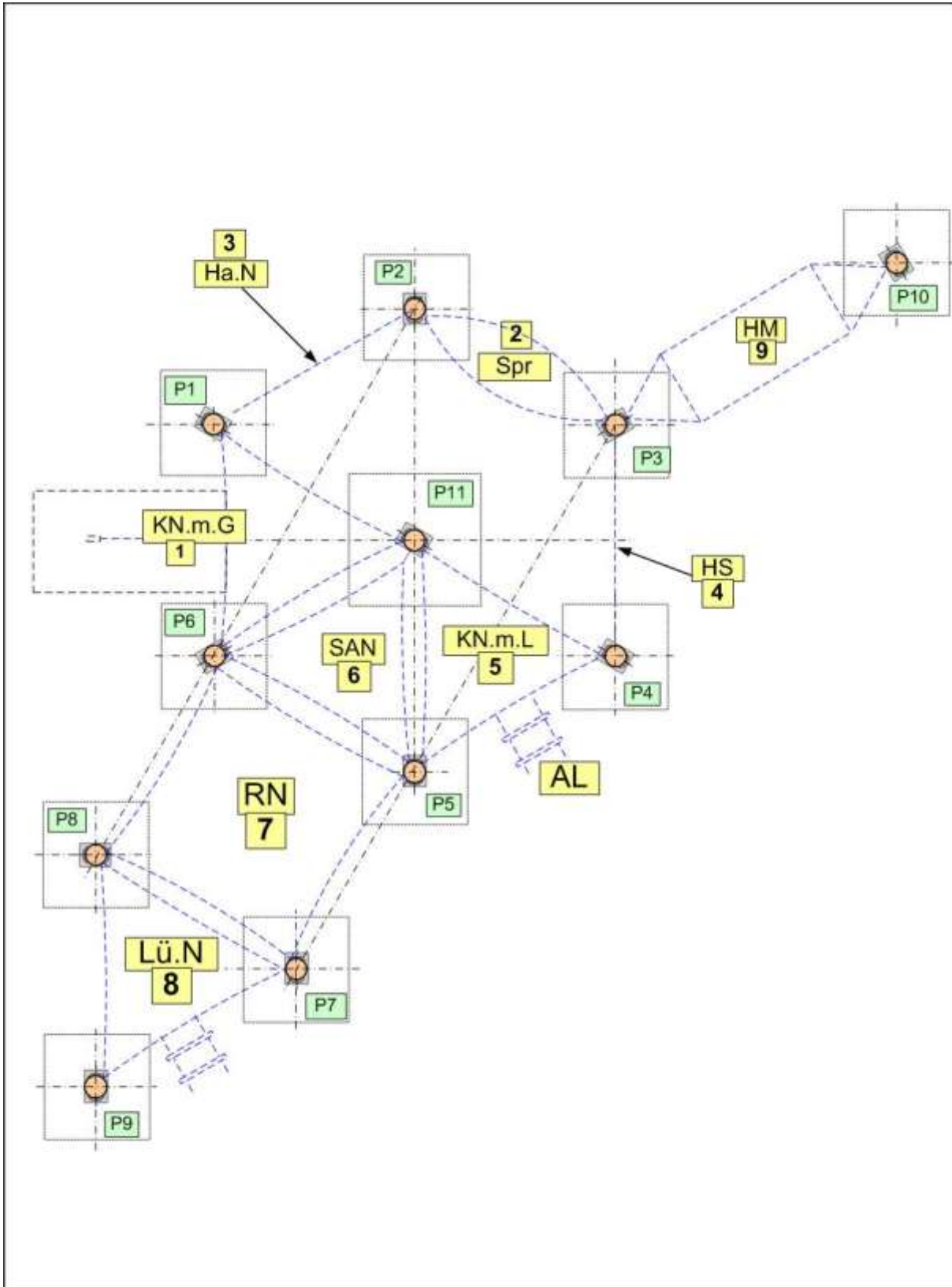
4 Assembly instruction

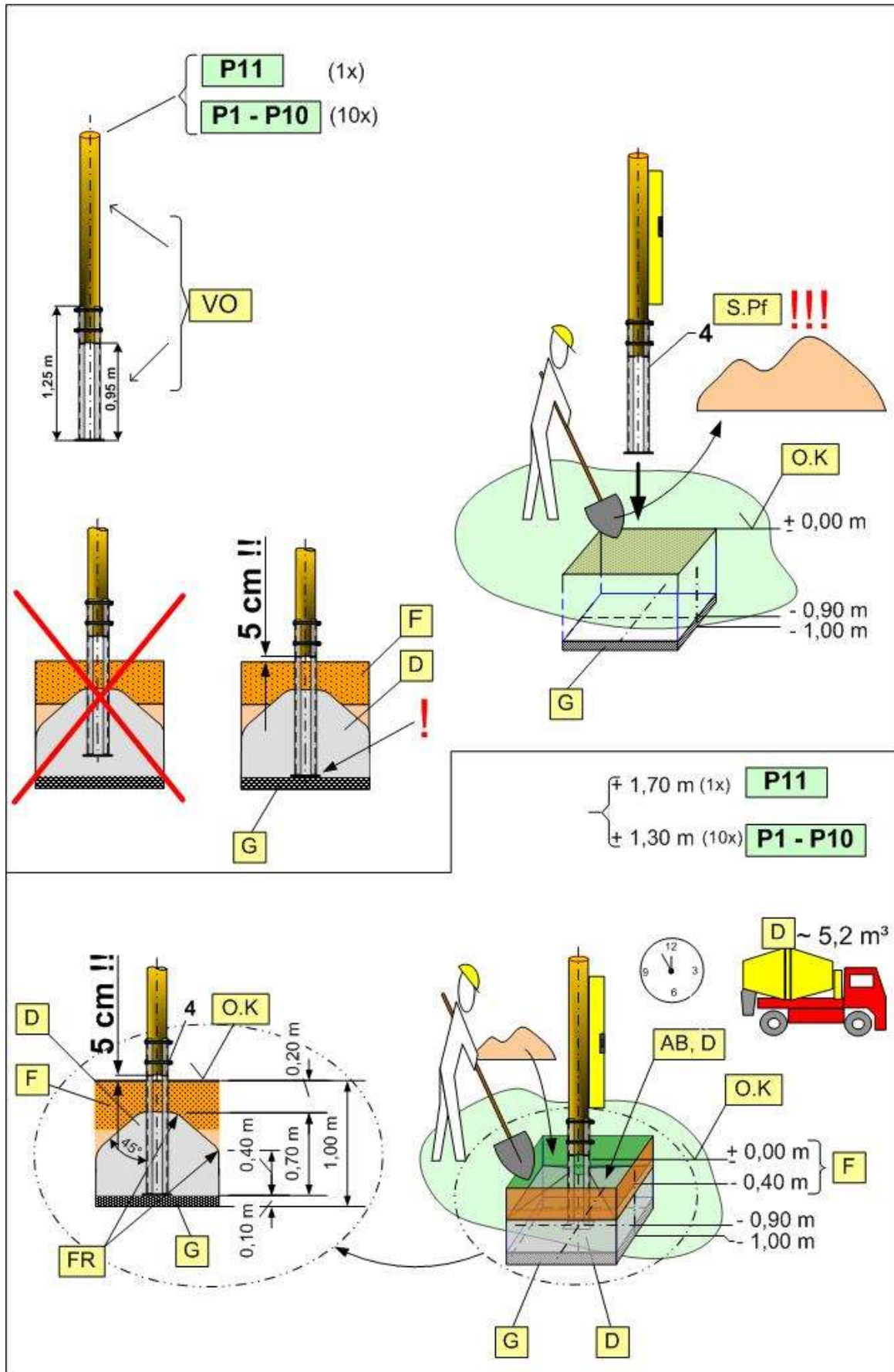


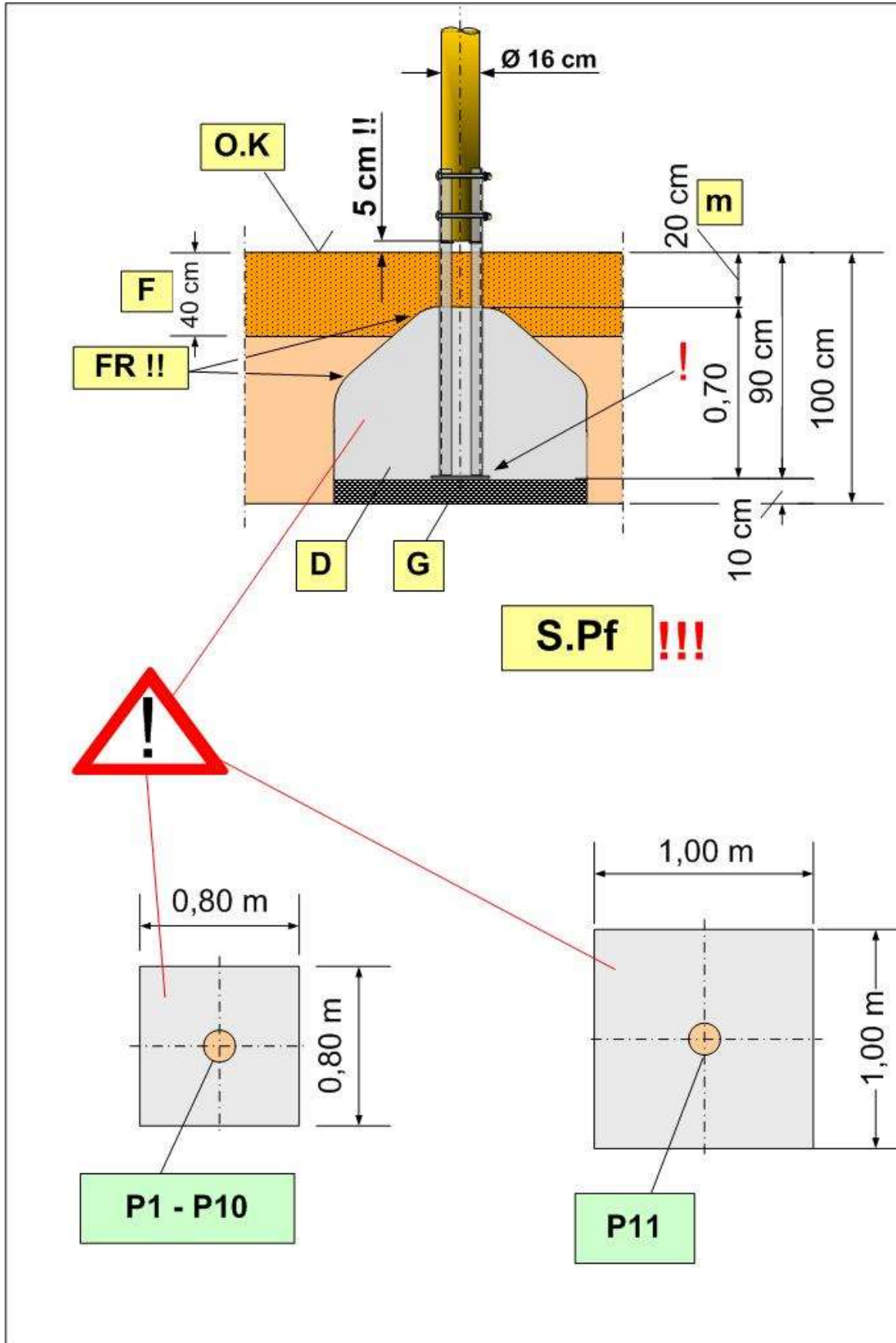
Thread locking !

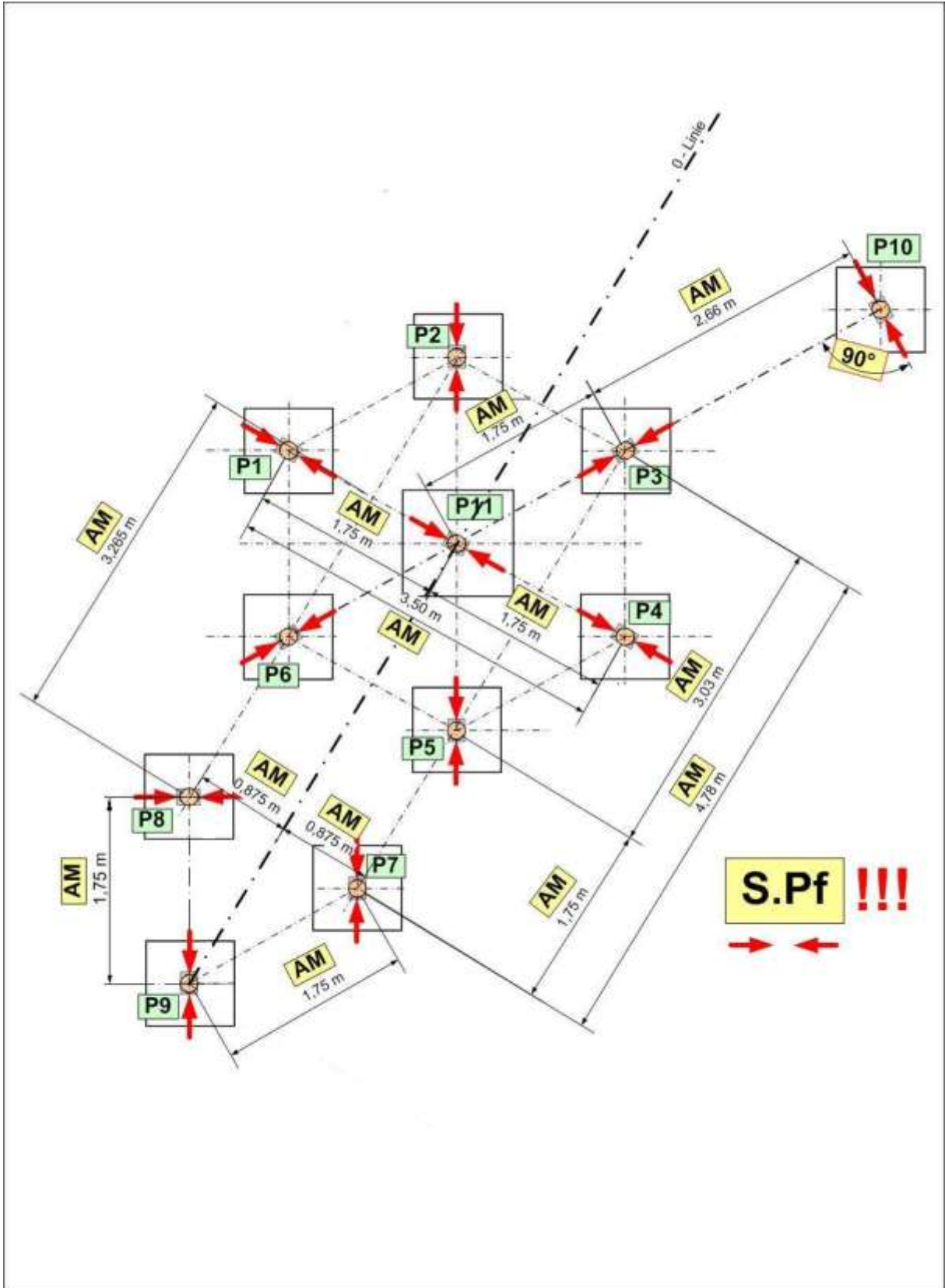


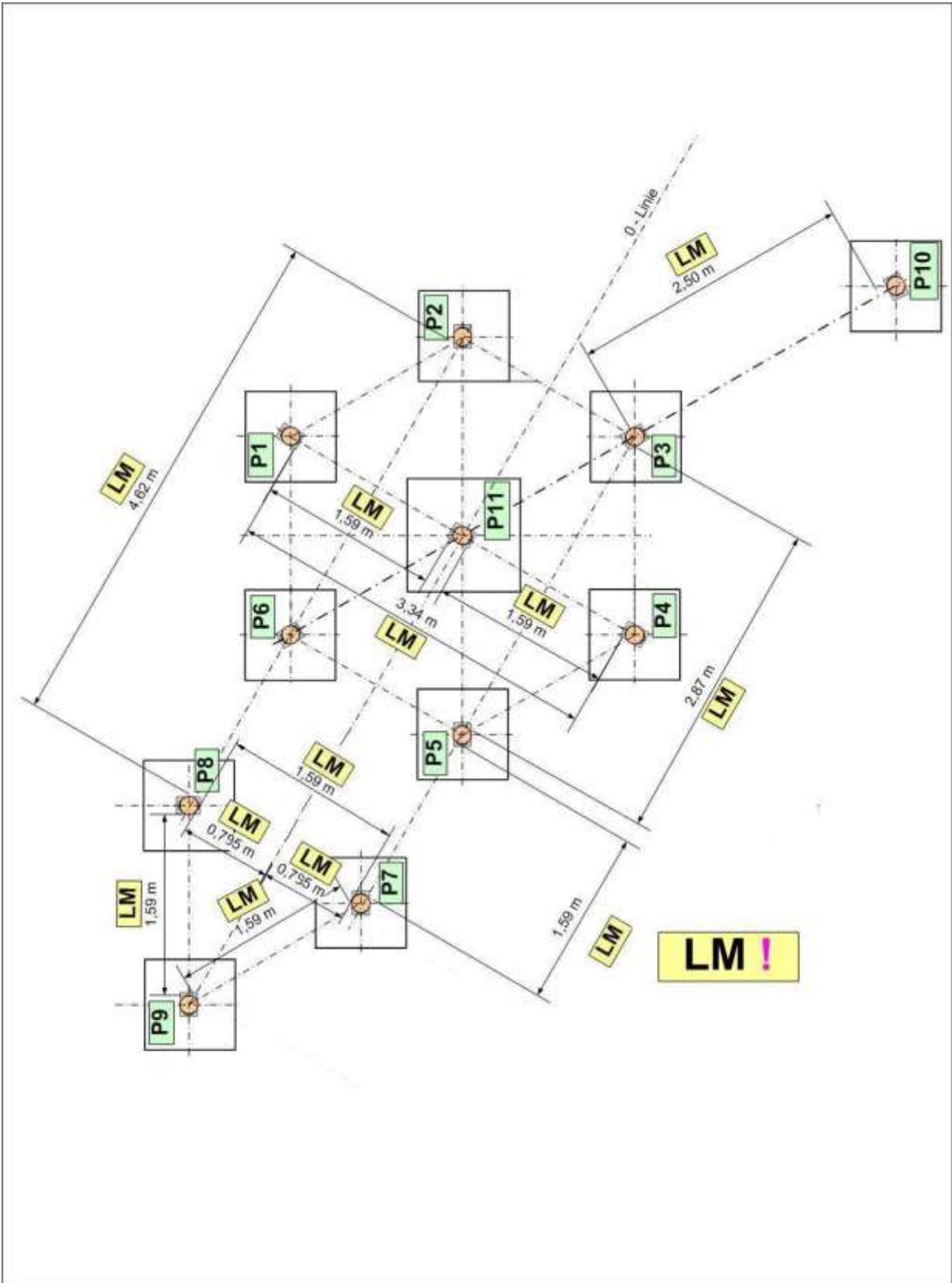
**All screws, nuts and bushes must be secured by
Loctite
(stop screw nuts excepted)
(e.g. for Torx-bushes M12 x 40 at least 5 drops
are required)**

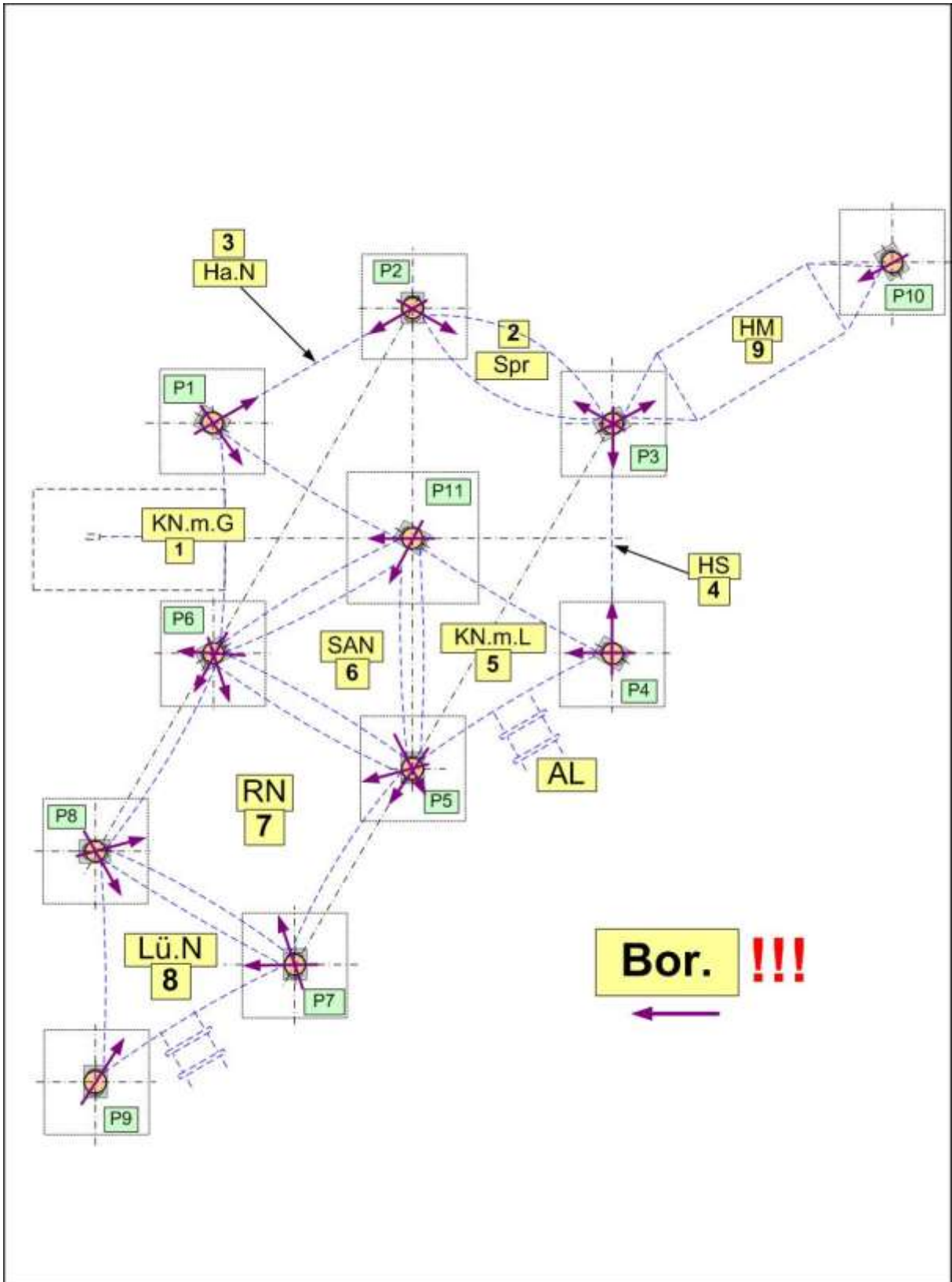


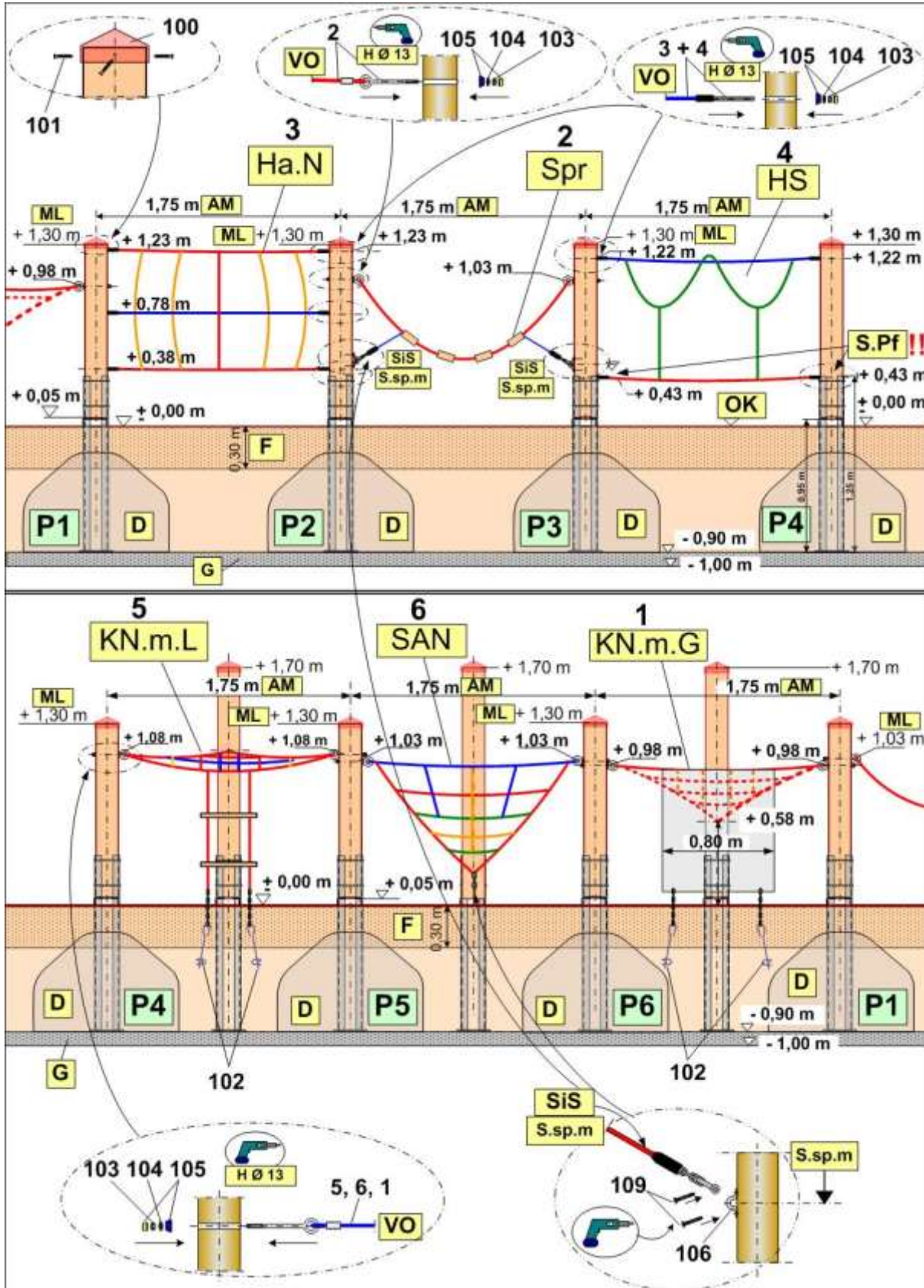


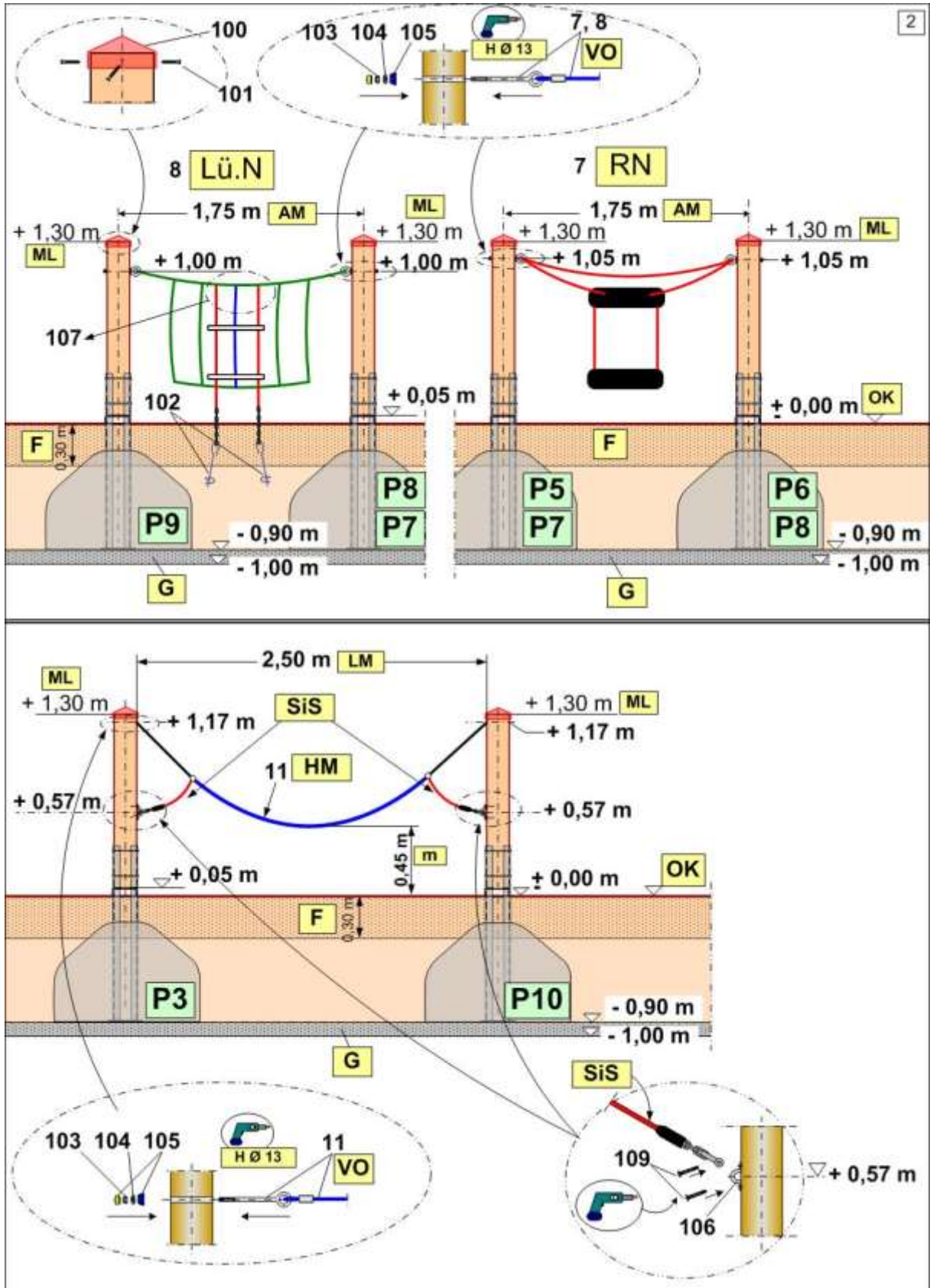


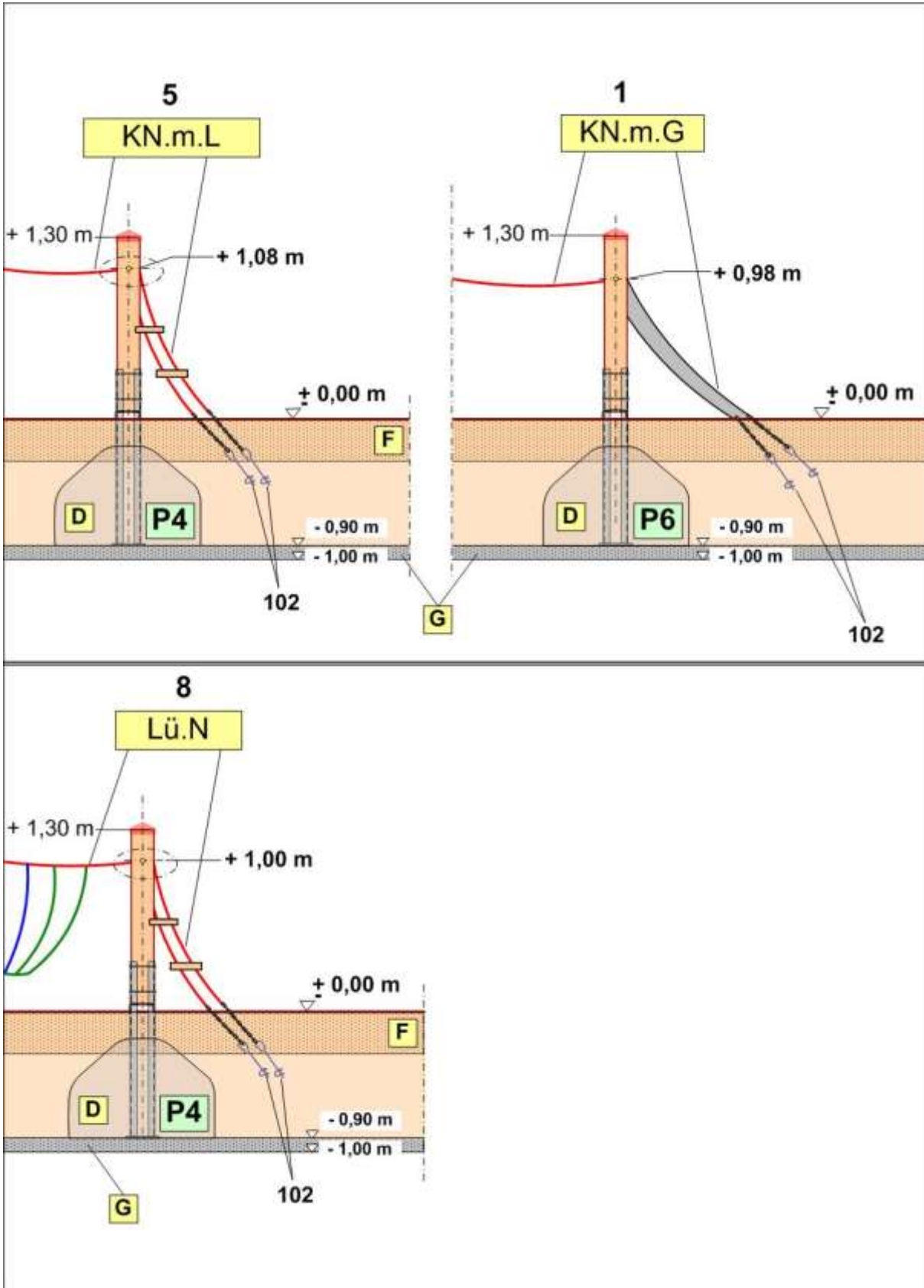


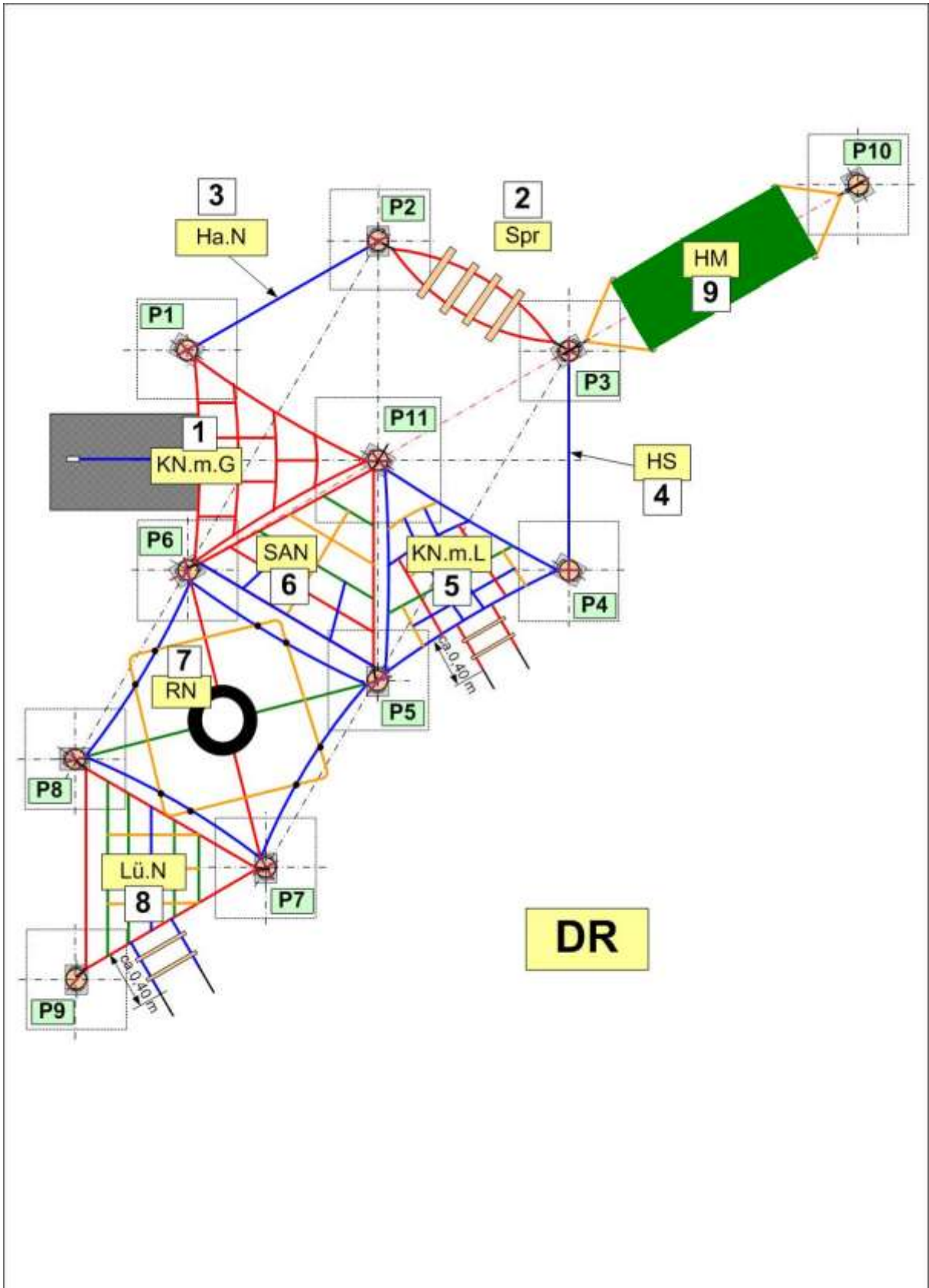













	Version: Douglas fir posts \varnothing 16 cm with post shoes complete
PS	Safety zone
AB	Setting time for concrete minimum 7 - 8 days
AM	Dimensions between axes of posts
LM	Clear post dimension
D	Concrete C25/30 (for foundations)
DR	Top view
F	Fall protection
FR	Foundation radius at least 10 cm
G	Percolation layer
H	\varnothing ... (diameter of tap)
KN.m.G	Climbing net with rubber belt + climbing rope
Spr	Rung mat
Ha.N	Climbing net
HS	Climbing rope with 2 garlands (top) + balancing rope (bottom)
KN.m.L	Climbing net with ladder
SAN	Slanting climbing net
RN	Tyre net
Lü.N	Lounging net (bag net) + climbing ladder
HM	Hammock including safty rope
OK	Upper edge play level
m	At least (minimum)
ML	Length of post above play level
Bor	Note well direction
S.Pf.	Note position resp. installation angle of post shoes
VO	Pre-assembled
S.sp.m	Security rope to be installed under tension!
SiS	Security rope
	<u>Upper edges of concrete are rounded! Foundation sizes apply for regular soil classification 4-5 (grown surface).</u> <u>Soil classification 4: Light up to medium plasticity, interlaced, with little sediment (proportion < 30 % larger than 63 mm grain size in diameter).</u> <u>Soil classification 5: Grounds of soil classification 3 and 4 with more sediment (proportion > 30 % larger than 63 mm grain size in diameter)</u> <u>For safety reasons, foundations of sandy, soft grounds should be layered with a larger surface of at least 50%.</u>

see drawings

5 Examination after installation



If the equipment is not installed in a secure manner you must ensure that access is closed to the public!

5.1 Marking the filling level

- Markings on the equipment to indicate filling levels of fall protection material.

5.2 In the following cases the equipment is not yet safely installed:

- safe installation of the equipment is not fully completed
- impact absorbing surface is not installed yet
- the upkeep of occupational safety through appropriate maintenance can not be guaranteed

5.3 Removing assembly accessories

- Please make sure that all accessories, which were used for the installation of the equipment, are removed from the play area! Only then the equipment can be declared open.

5.4 Details concerning inspection of the equipment prior to the first use

- No acceptance test specifications apply prior to first use.

5.5 Retighten bolts

- Please retighten all bolts after one week of initial use. Later, it is sufficient to retighten the bolts with every maintenance.

B Maintenance instruction
Wichtelwald complete part no. 4594-50
Version: Douglas fir posts Ø16 cm (with post shoes)



Revision history

Revision 0 – 2004-11-04
First released version

Maintenance instruction
Revision 6 – 2008-10-21 (*soil classifications*)

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6 Introduction maintenance

6.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN1176-7 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 that may be required can be obtained directly from your supplier or HUCK Seiltechnik GmbH

Address: Huck Seiltechnik GmbH
Dillerberg 3
35614 Asslar/Berghausen
Phone +49 (0)6443 / 8311-0
Fax +49 (0)6443 / 8311-79



Attention

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

This maintenance instruction is based on the standard “EN 1176-1:1998”.

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 (for example HTS plus Teflon no. 893128, can be purchased from the company Würth) or another similar lubricant.

7.4 Spare parts

All spare parts must comply with the manufacturer's specifications!

7.5 Identifying spare parts

All spare parts are listed in the parts list. You find the parts list in chapter 3.

7.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary.

7.7 Special measures in the starting time

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

7.8 Maintenance of fall protection 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



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

7.10 Loose screws



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

7.11 Preventing equipment use

The use of the equipment should be prevented: in case of incomplete installation, disassembly, maintenance, repairs and faults.

7.12 Guarantee respectively warranty

Steel posts and post shoes 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.

8 Maintenance timetable

8.1 Special advices

8.1.1 Maintenance interval

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

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!!!

8.1.2 Faults that compromise safety



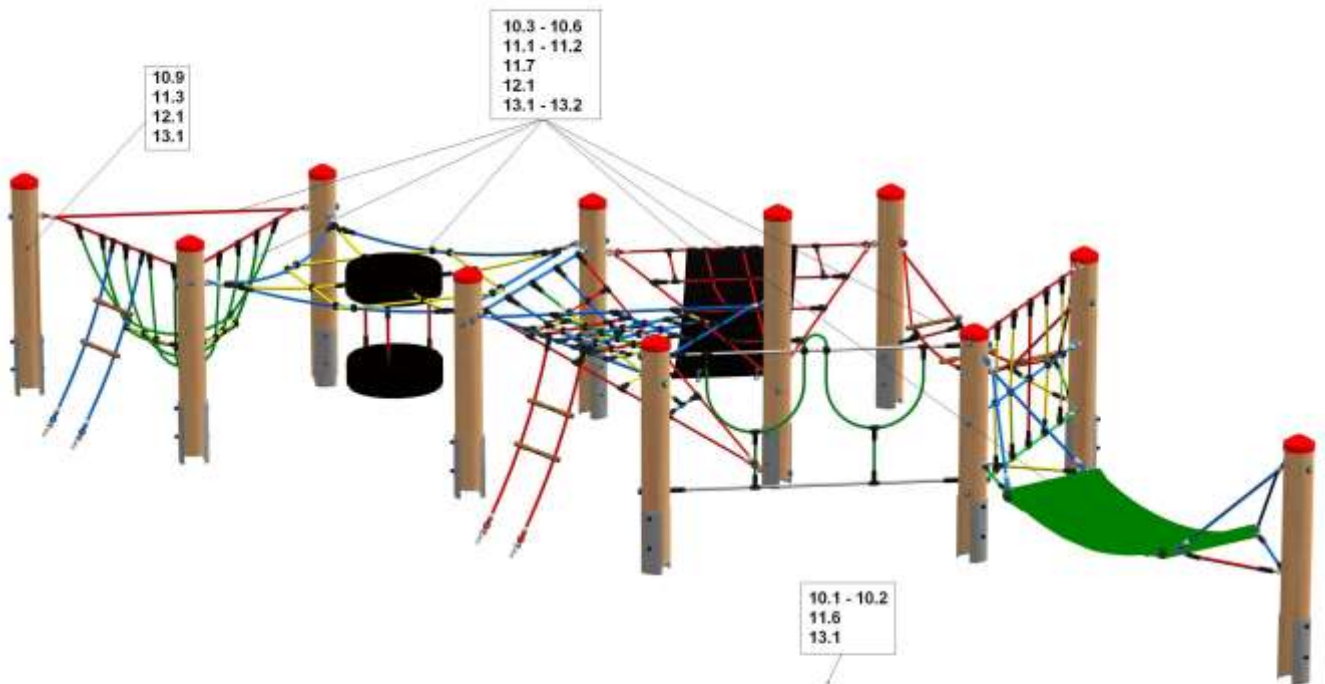
In the event of a fault that compromises safety, quick action must be taken: The equipment has to be closed immediately and repaired or dismantled.

8.1.3 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 damages should be repaired immediately.

9 Regular maintenance (image)



10 Monthly maintenance (text)

- 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.**
- 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 (text)

- 11.1 Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.**
- 11.2 Tighten all types of fastenings.**
- 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 fill up with loose filling material if necessary! If the posts are marked, fill up correspondingly.**
- 11.7 Retighten all bolts.**


12 Half-yearly maintenance (text)

- 12.1 The stability of supporting posts, braces, foundations etc. has to be checked. Once repair respectively replacement is completed, the entire equipment has to be verified.**

 <p>Attention</p>	<h2>Annual main inspection</h2>
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13 Annual maintenance

- 13.1 The complete equipment as well as the foundations and the surfaces are to be checked if they are generally safe.
- 13.2 The equipment is to be verified according to rotting and corrosion. For that some parts might have to be excavated.

 <p>Attention</p>	<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 is to be given to the operator, who must confirm receipt!</p>
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14 Maintenance printout

Name of equipment: Wichtelwald complete (Douglas fir posts with post shoes) _____ / Part no. 4594-50

Location: _____

Customer or operator: _____
(Town, municipal, kindergarden)

Date of inspection	Inspector	OK	Accessible	Closed	Defects	Repaired by	Date

**Please copy and return to the manufacturer by Telefax +49 (0)6443 / 83 11 79 once a year after main inspection has been carried out!
Place the confirmation form in your existing play equipment files.**

15 Hand-over document



After the installation of the equipment the installation and maintenance documents are to be handed over to the operator. The operator has to have the documents signed. The complete filled and signed hand over documents are to be sent back to the supplier Huck Seiltechnik GmbH via fax +49 (0)6443 / 83 11 79!

Part no.: 4594-50

Type of equipment: Wichelwald complete (Douglas fir posts with post shoes)

Serial number: _____

Customer or operator (town, municipal, kindergarden, etc.):

Person in charge:

Installation company (address):

Assistant in charge (assembler):

Complete assembly instruction, maintenance instruction and maintenance printout received,

(Signature of operator)
(Stamp)

(Signature of installation company)

Date: _____