

A „Haiger“ Rope Assault Course, part no. 4591

Version: Steel post



Operator: _____

Location: _____

Revision history

Revision 0 – 2005- 05-19

First released version

Assembly instruction

Revision 8 – 2009-04-23

Note: Installation swing element

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Table of content

A	„Haiger“ Rope Assault Course, part no. 4591	1
1	Introduction installation.....	4
2	Data sheet "Haiger" Rope Assault Course part no. 4591	6
3	Scope of supply, parts list with part numbers.....	8
4	Assembly instruction	16
5	Examination after installation	39
B	Maintenance instruction „Haiger“ Rope Assault Course part no. 4591 Version: Steel post	41
6	Introduction maintenance.....	43
7	General maintenance information	44
8	Maintenance timetable	46
9	Regular maintenance (images)	47
10	Monthly maintenance (text)	48
11	Quarterly maintenance (text).....	48
12	Half-yearly maintenance (text)	48
13	Annual main inspection (text)	49
14	Maintenance printout	51
15	ÜHand-over document	53

Tables' legend

Table 3-1: Scope of supply, parts list with part numbers.....	8
Table 3-2: Scope of supply, parts list with part numbers.....	10

1 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 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 Huck Seiltechnik GmbH

Address: Huck Seiltechnik GmbH

Dillerberg 3

35614 Aßlar/Berghausen

Phone +49 (0)6443 / 83 11 – 0

Fax +49 (0)6443 / 83 11 79

Please do not hesitate to call us **+49 (0)6443 / 8311- 51** or **70** if you have any problems during installation or with 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 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 (for example HTS plus Teflon no. 893128, can be purchased from the company Würth) or another similar lubricant.

Drawings / views

All optical illustrations simply demonstrate the proportions/dimensions to be followed, but are not binding, technical equipment images.

Technical modifications supporting the advancement of our articles are subject to change.

Measurement tolerances / dimensions

Due to the quality and characteristics of equipment parts, minor dimensional tolerances over drawings data are possible.

This regards all visible dimensions, except for foundation dimensions respectively dimensions below OK ground surface/play surface.

2 Data sheet “Haiger” Rope Assault Course psrt no. 4591

- Space required: 3,10 x 0,80 m resp. depending on the play equipment (see top views) 6,10 x 3,10 m resp. 6,10 m x 4,70 m including safety distance,
Maximum height of fall: 1,00 m.

Attention: For several play equipments the installation angle needs to be at least 90°,- larger angle will be even better !!!! (see sheet no. 14)

Important! For play equipment part 4591-1 (swing seats) it has to be considered to mount adjoining parts in one row (not at angle)!

Images (individual drawings) are not true to scale!!

- Required surface:

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

*In Germany, lawn is a sufficient ground surface in the safety zone for heights of up to 1,50 m.

- Name and complete dimension of the largest part of the equipment:
Per equipment: 2 steel posts Ø 102 mm, 2,00 m long
- Intended age group: 2 years and up

Attention! Equipment to be embedded in concrete

Concrete: C20/25 (B25)

Concrete requirement: ~ 0,50 m³

Size of excavation and foundation (**per equipment**):

2 x 0,60 m long x 0,60 m wide, total depth 0,80 m incl. 10 cm percolation layer.

2 x 0,60 m long x 0,60 m wide x 0,40 m high, upper edges of concrete are rounded.



Attention

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 once steel masts are embedded in concrete:
Apr. 45 minutes (**per equipment !!!!**). Number of persons required: 2 .
Scope of supply does not include: Sidewalk slab (concrete slab ~ 250 x 250 mm)

Accessories required: Small excavator, standard tools like for example water

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

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- 7. 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 in letters (**Attention – quantities refer to 1 unit!!**)







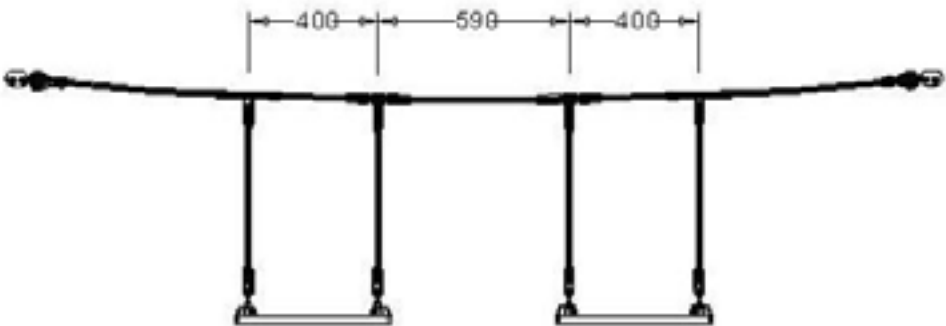
Table 3-1: Scope of supply, parts list with part numbers

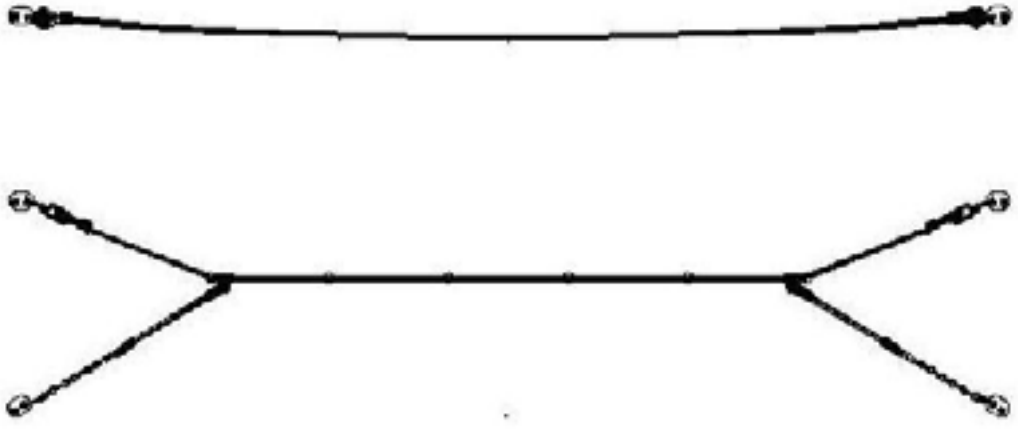
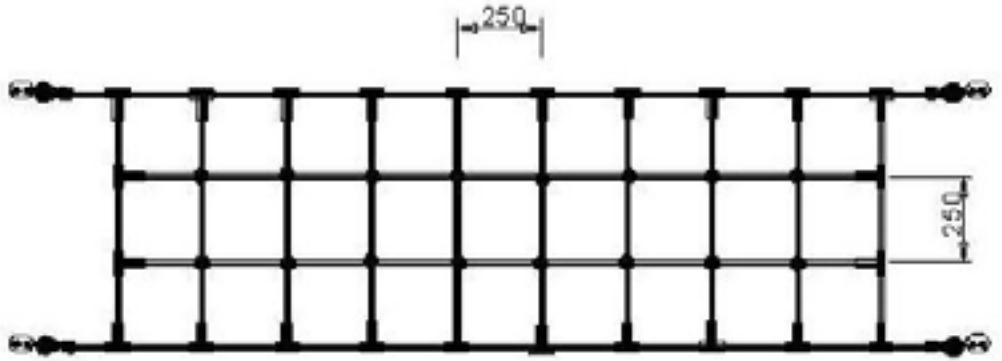
Pos.	Quantity	Element / description	Size	OK	Missing
1	2	Steel posts	Ø 102 mm, 2,00 m long		
2	2	Red plastic cap covers	for Ø 102 mm		
3	2, 4 resp. 6 (depending on type of equipment!)	Tube clamps with coach bolts and stop screw nuts	M10 x 35 mm lg.		
4	6	Self-cutting screws	5,5 x 25 DIN 9021		
5	4	Red paint (1 can) + paint brush			
6	1	Play equipment part (10 versions) 4591-1 swing seat 4591-2 rope ladder 4591-3 climbing net 4591-4 balancing rope 4591-5 rubber hammock 4591-6 rope ladder rungs 4591-7 bow rope 4591-8 hanging rope 4591-9 bouncing beam 4591-10 tyres			
7	je 1	Handrail rope resp. walking rope <u>Only for play equipments:</u> 4591-2 (handrail rope) 4591-4 (handrail rope) 4591-8 (walking rope) 4591-9 (handrail rope)			
8	2	Screw pile <u>Only for play equipment:</u> 4591-4 balancing rope			
9	1	Screw pile <u>Only for play equipment:</u> 4591-10 tyres			
10	2	Tube clamps with threaded bolt			

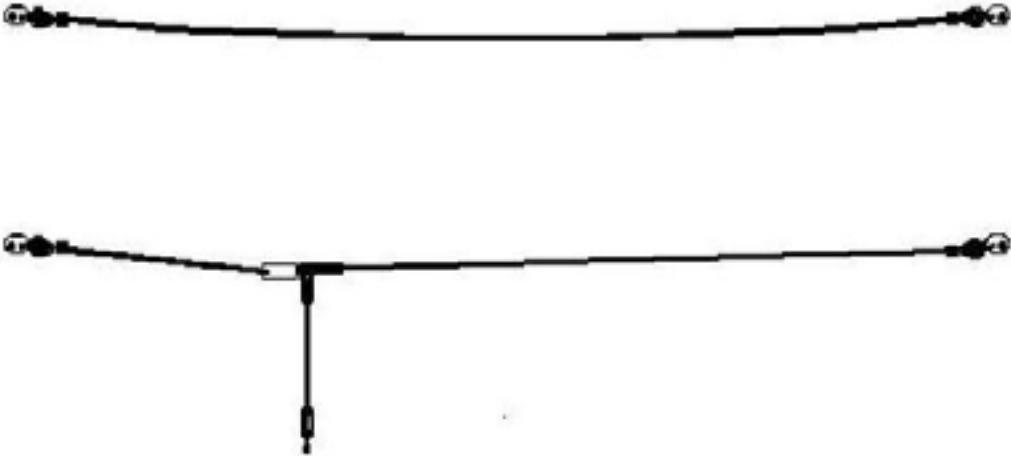

Pos.	Quantity	Element / description	Size	OK	Missing
		M10 x 150 mm + 2 nuts			
	2 each per unit	Sidewalk slabs (on-site)	Appr. 250 x 250 x 40 mm		


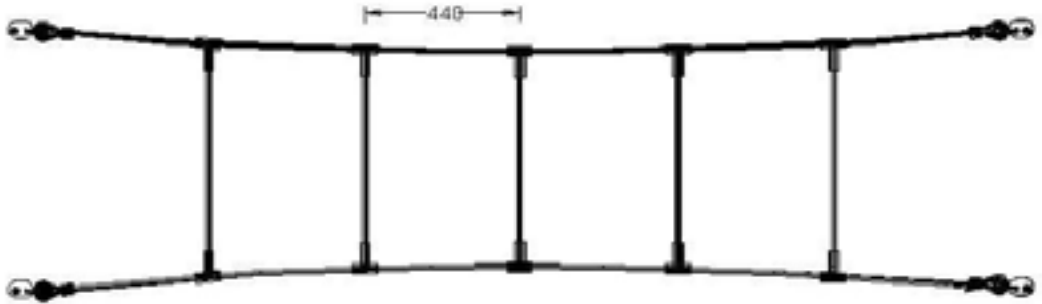
3.2 in symbols

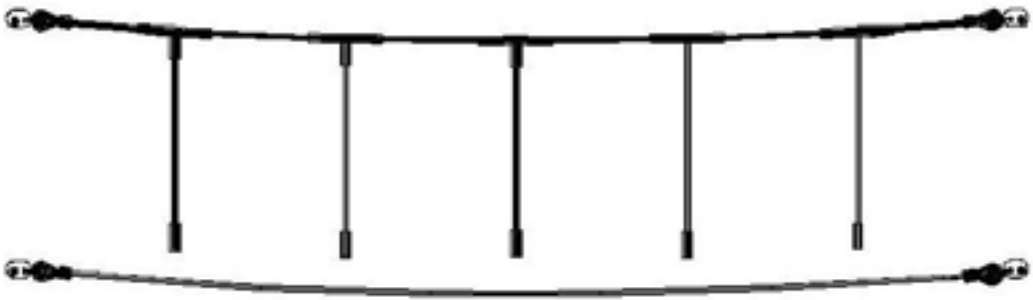
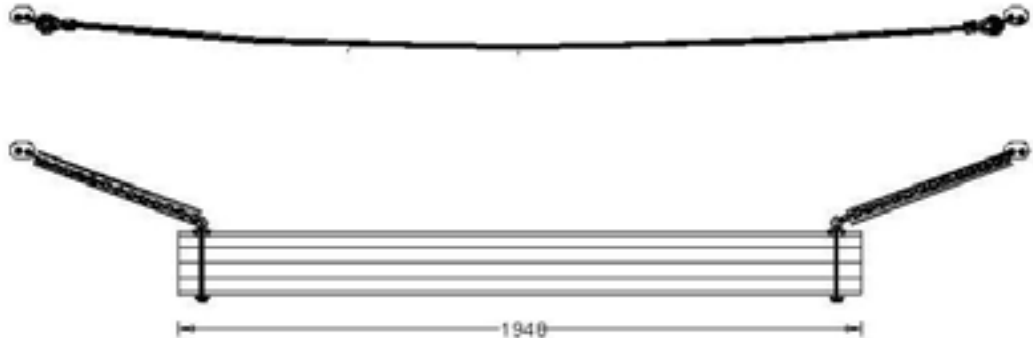
Table 3-2: Scope of supply, parts list with part numbers

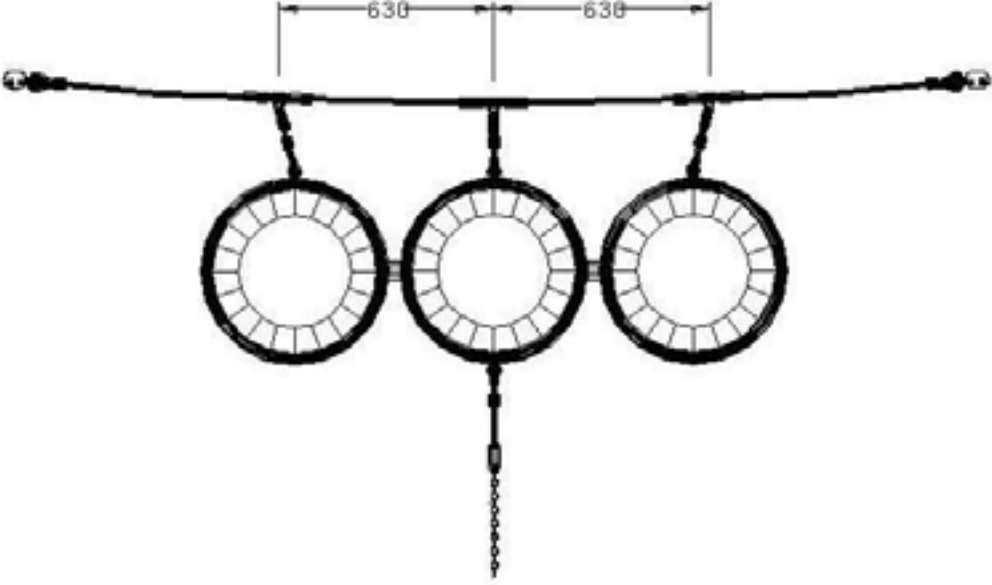





Pos.	Quantity	Symbol
1	2	 Ø 102 mm, 2,00 m long
2	2	 for Ø 102 mm
3	2, 4 resp. 6	 - for tube-Ø 102 mm, - screw: M10 x 35 mm lg
4	6	 5,5 x 25, DIN 9021
5	1	 
6	1	4591-1 

(6)	1	<p>4591-2</p> 
(6)	1	<p>4591-3</p> 

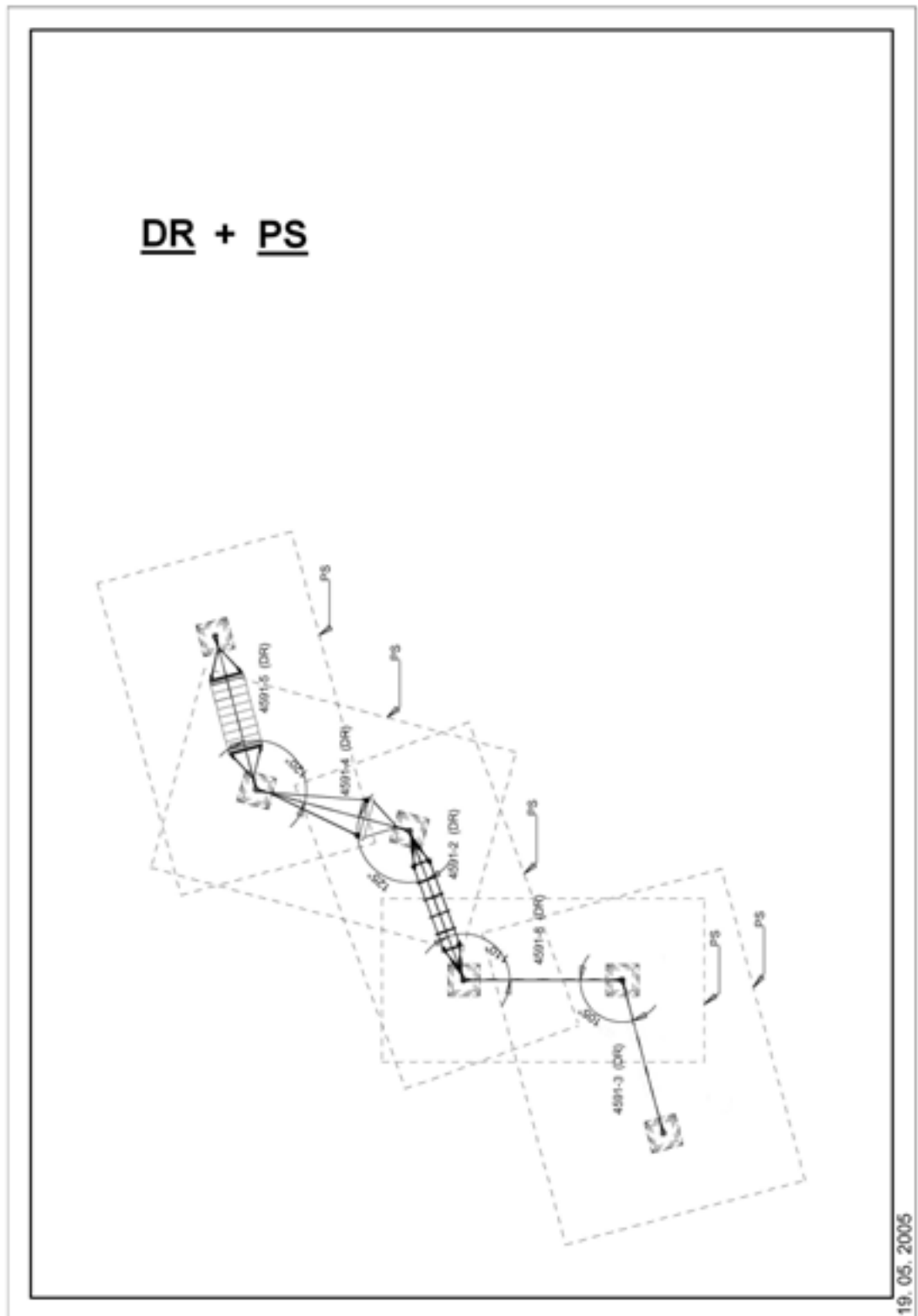
(6)	1	<p>4591-4</p> 
(6)	1	<p>4591-5</p> 

(6)	1	<p>4591-6</p> 
(6)	1	<p>4591-7</p> 

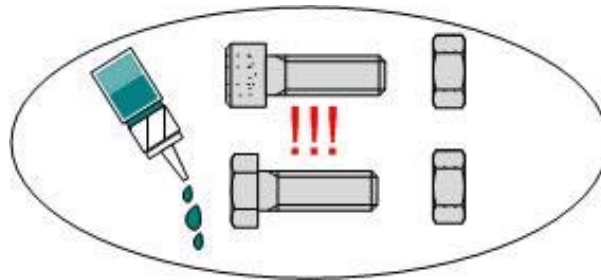
(6)	1	<p>4591-8</p> 
(6)	1	<p>4591-9</p> 

(6)	1	4591-10 
7	(1)	
8	2	
9	1	
10	2	
	2 each per unit	 Sidewalk slab 250 x 250 x 40 (on-site)

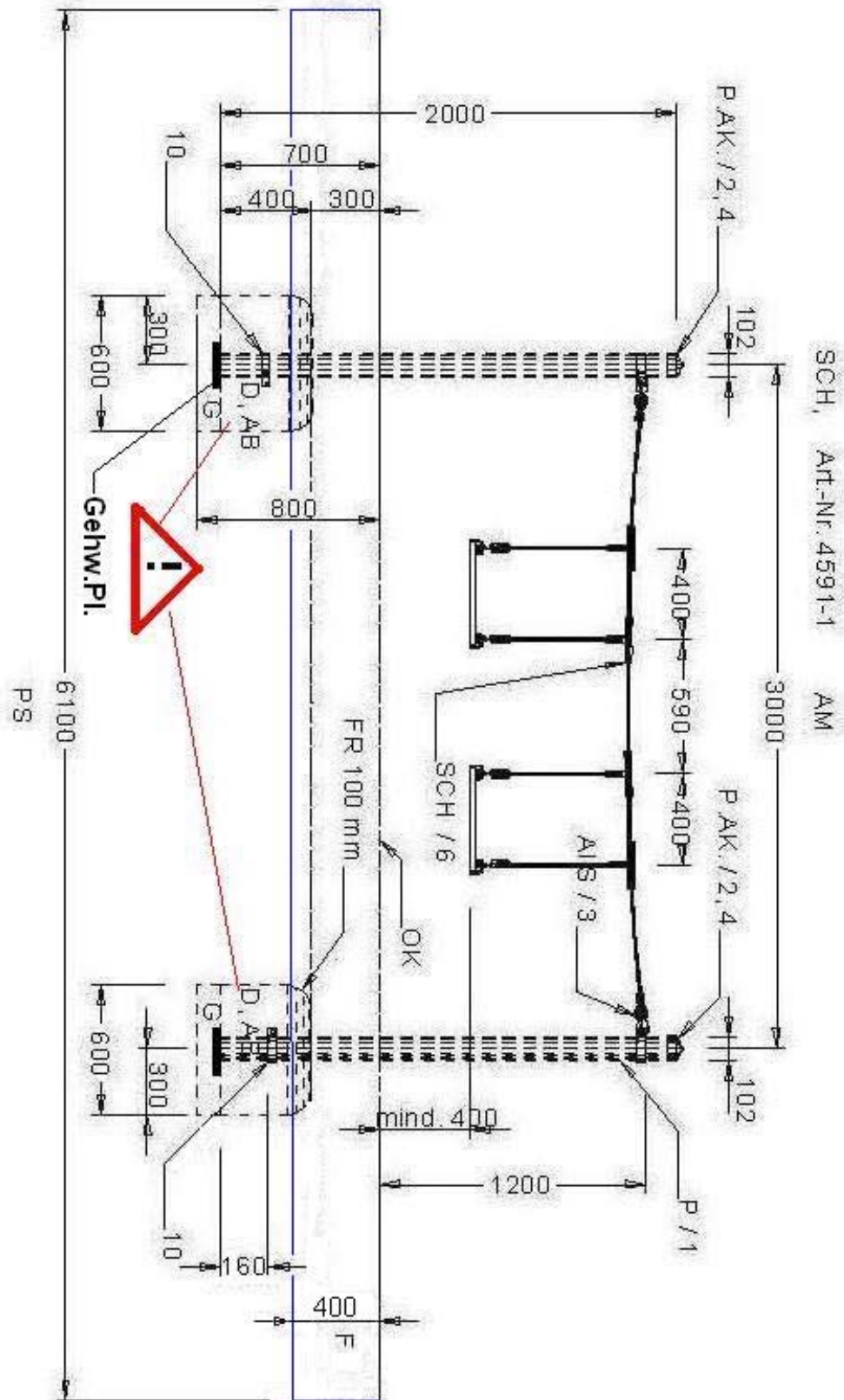
4 Assembly instruction

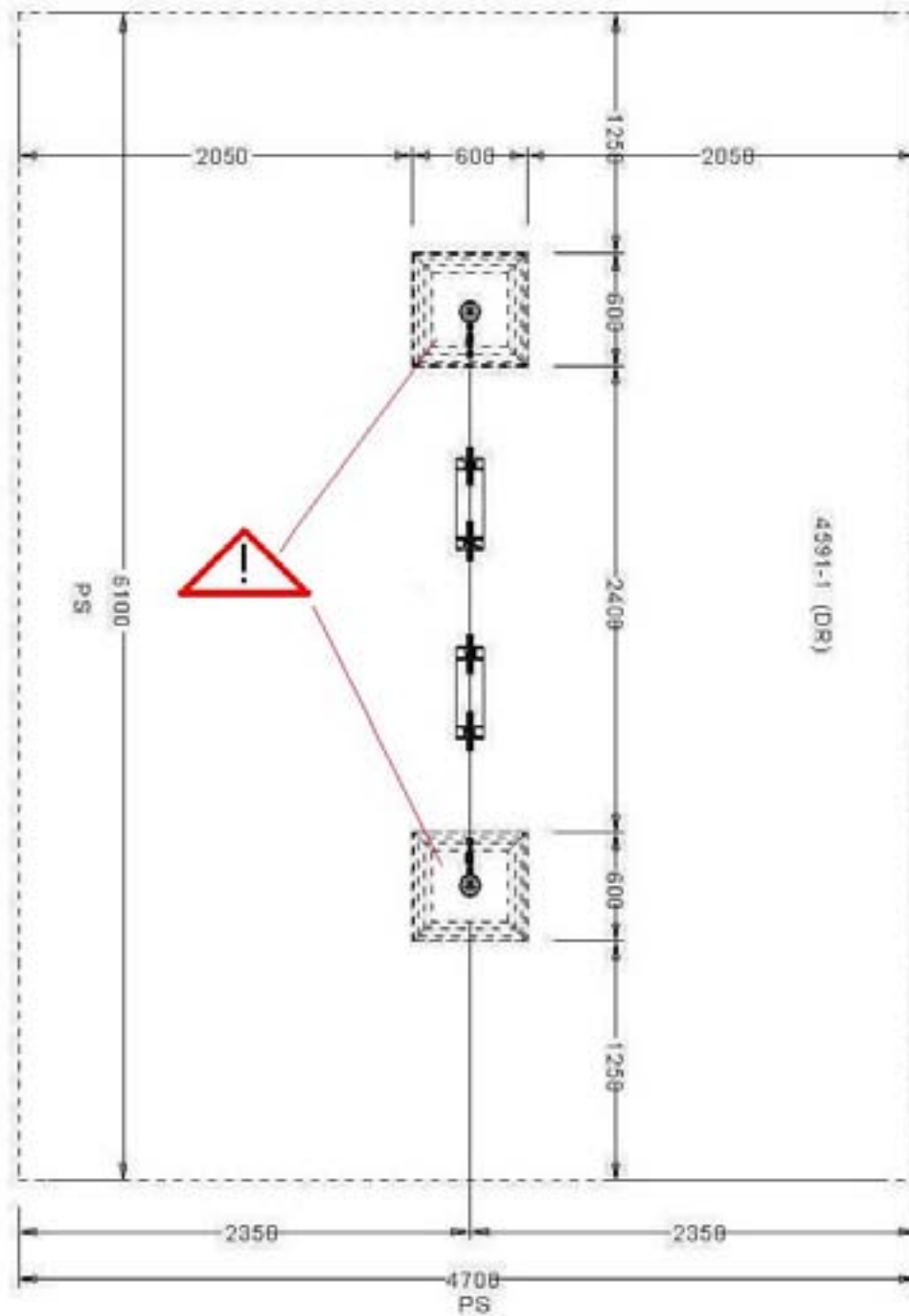


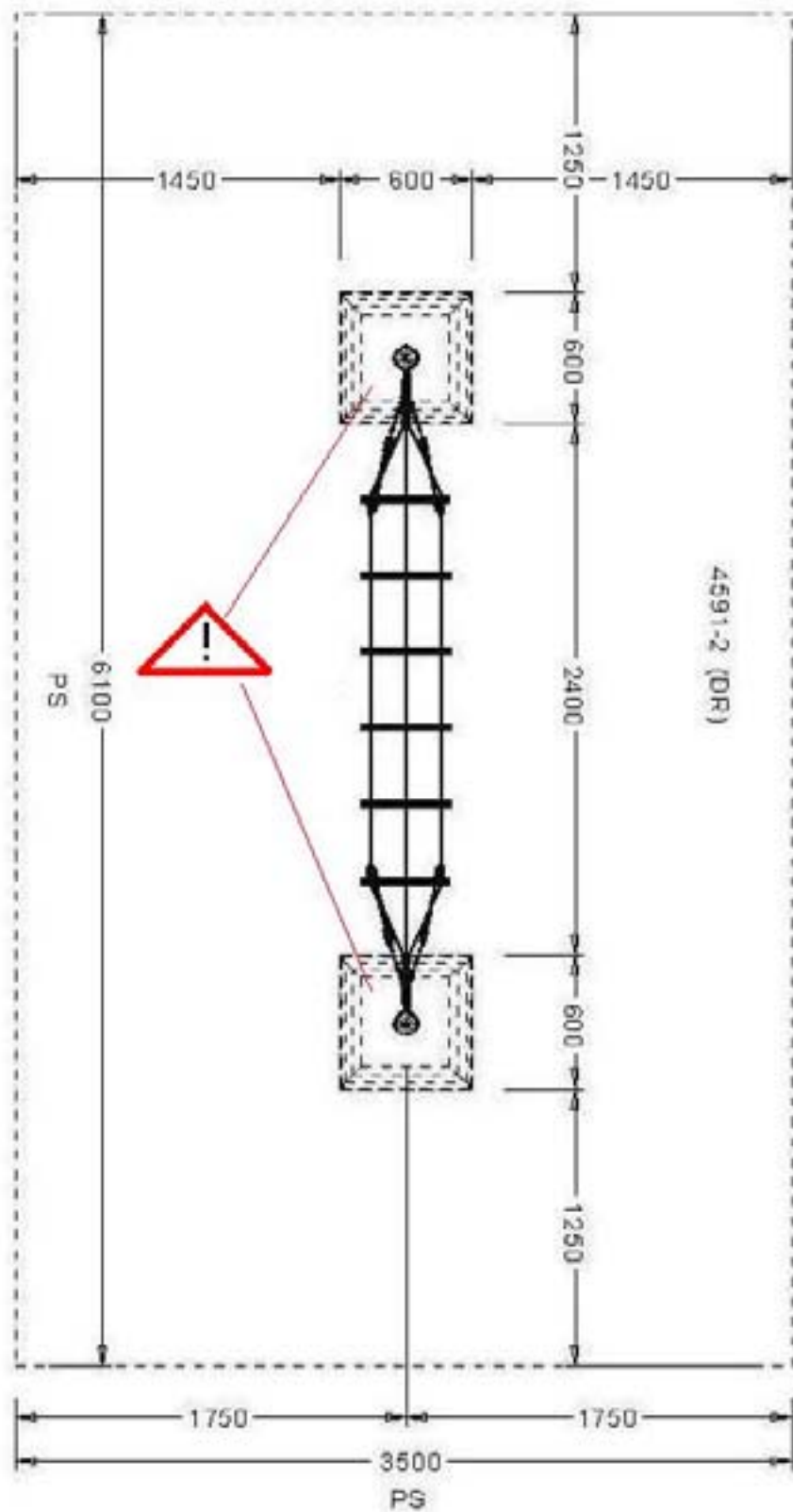
Thread locking !

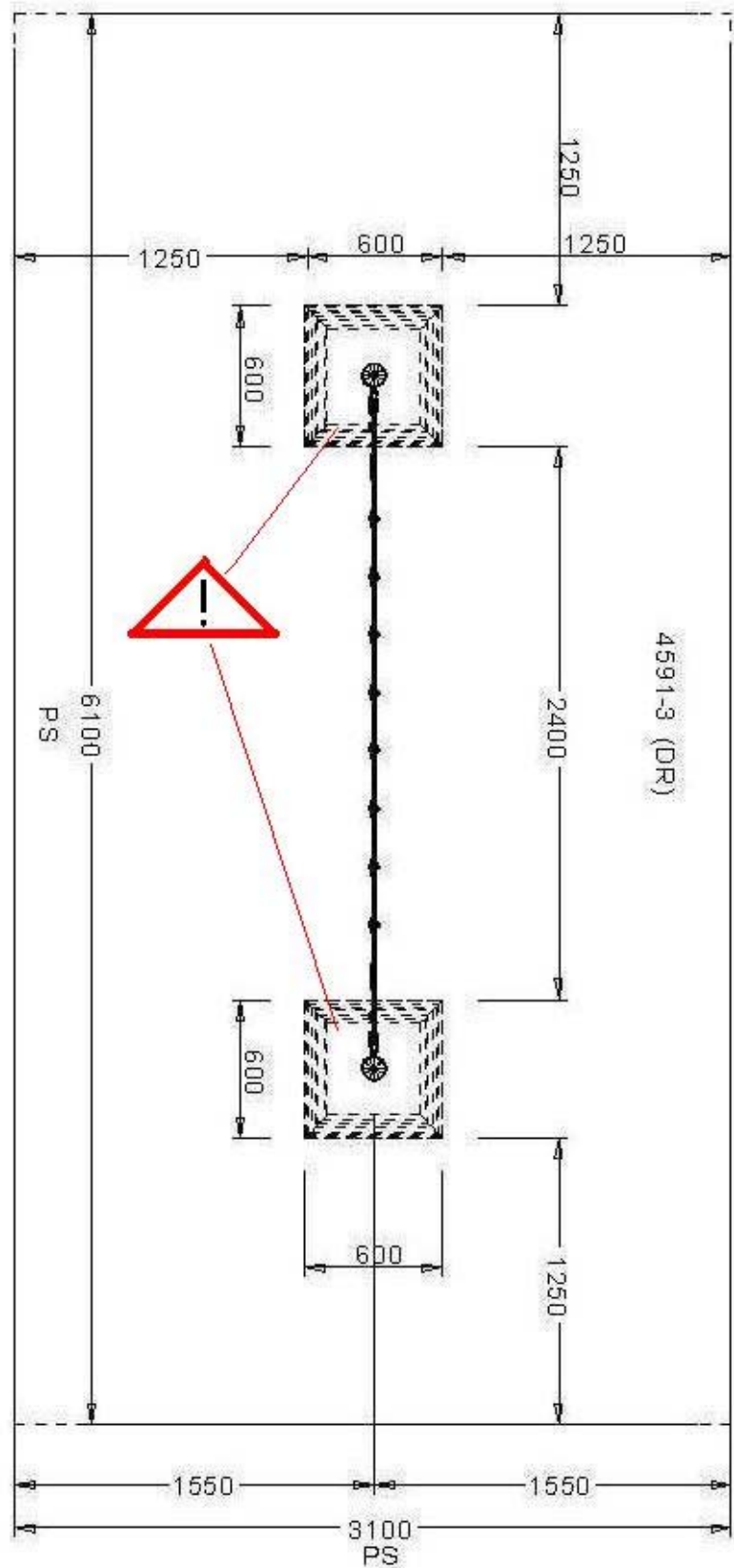


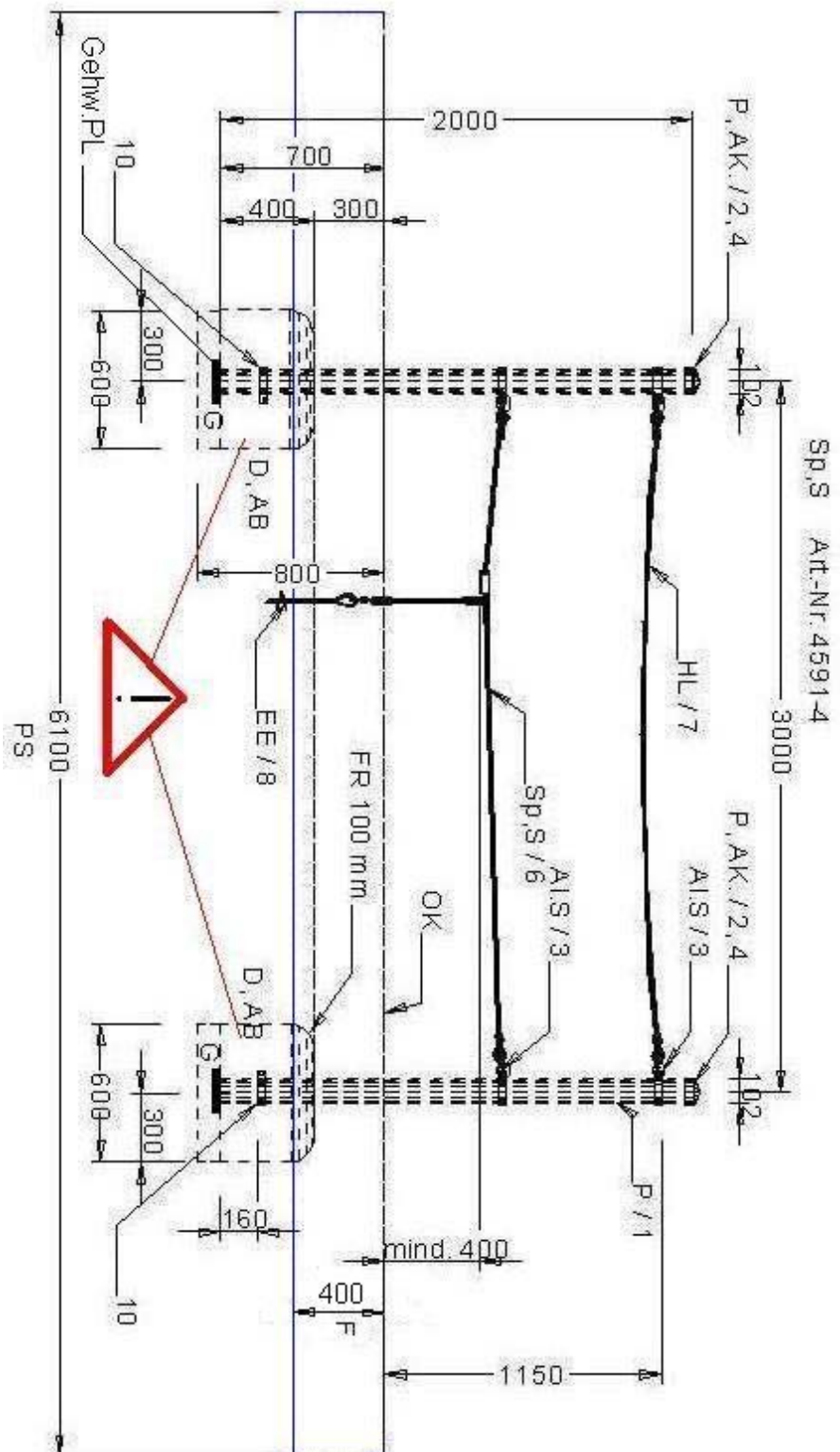
All screws, nuts and bushes must be secured by Loctite!
(stop screw nuts excepted)
(e.g. for Torx-bushes M12 x 40 at least 5 drops are required)

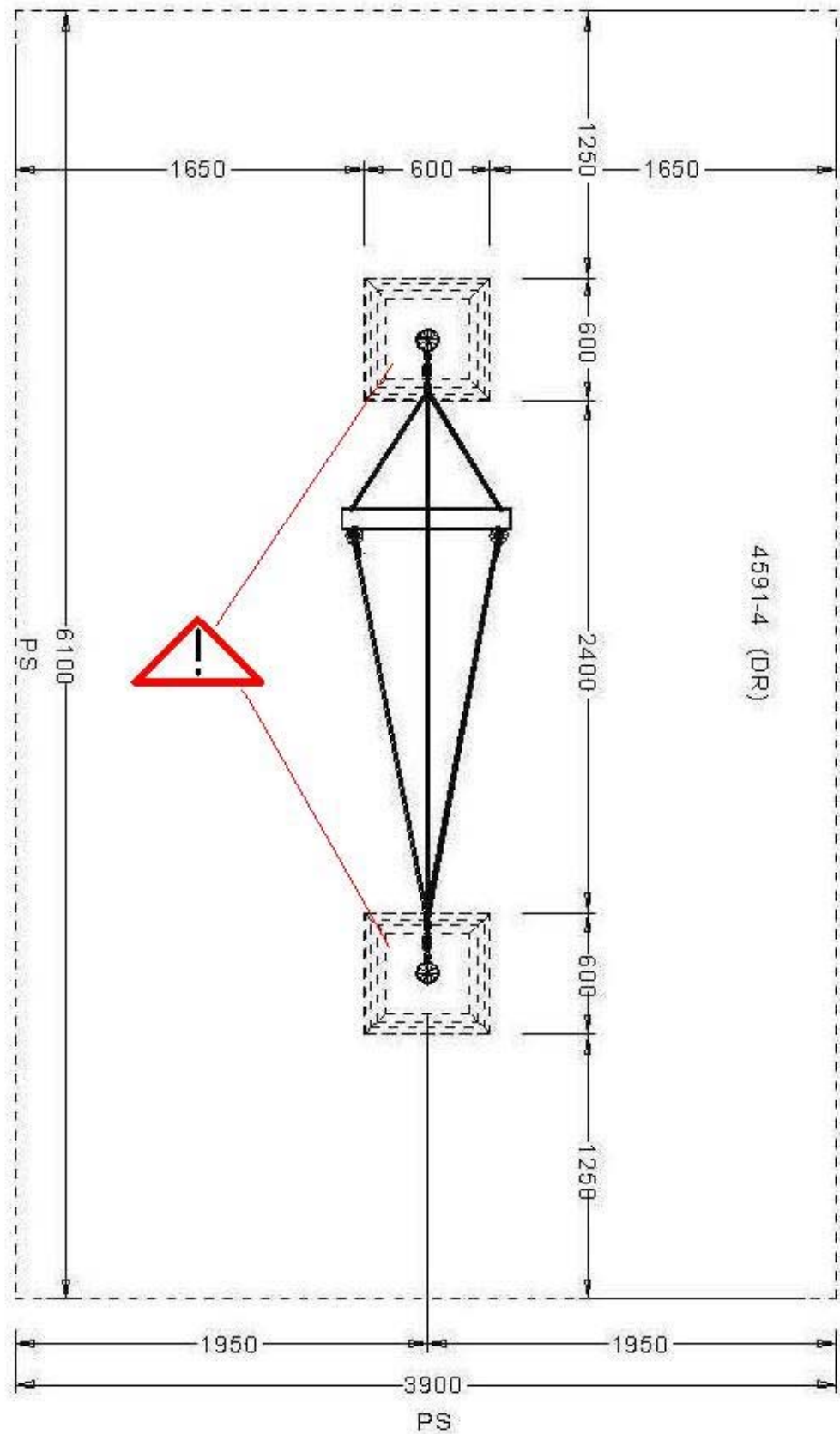


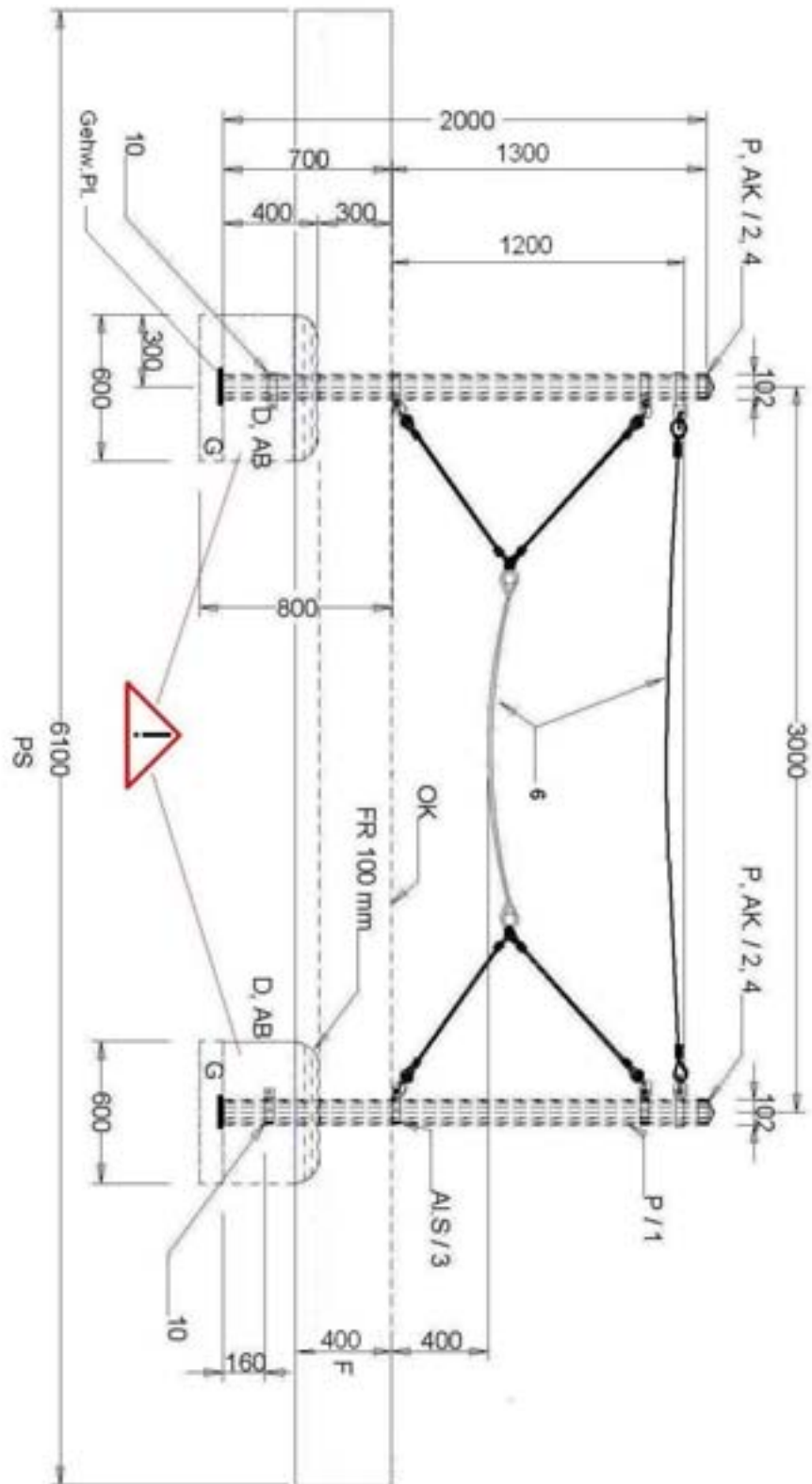




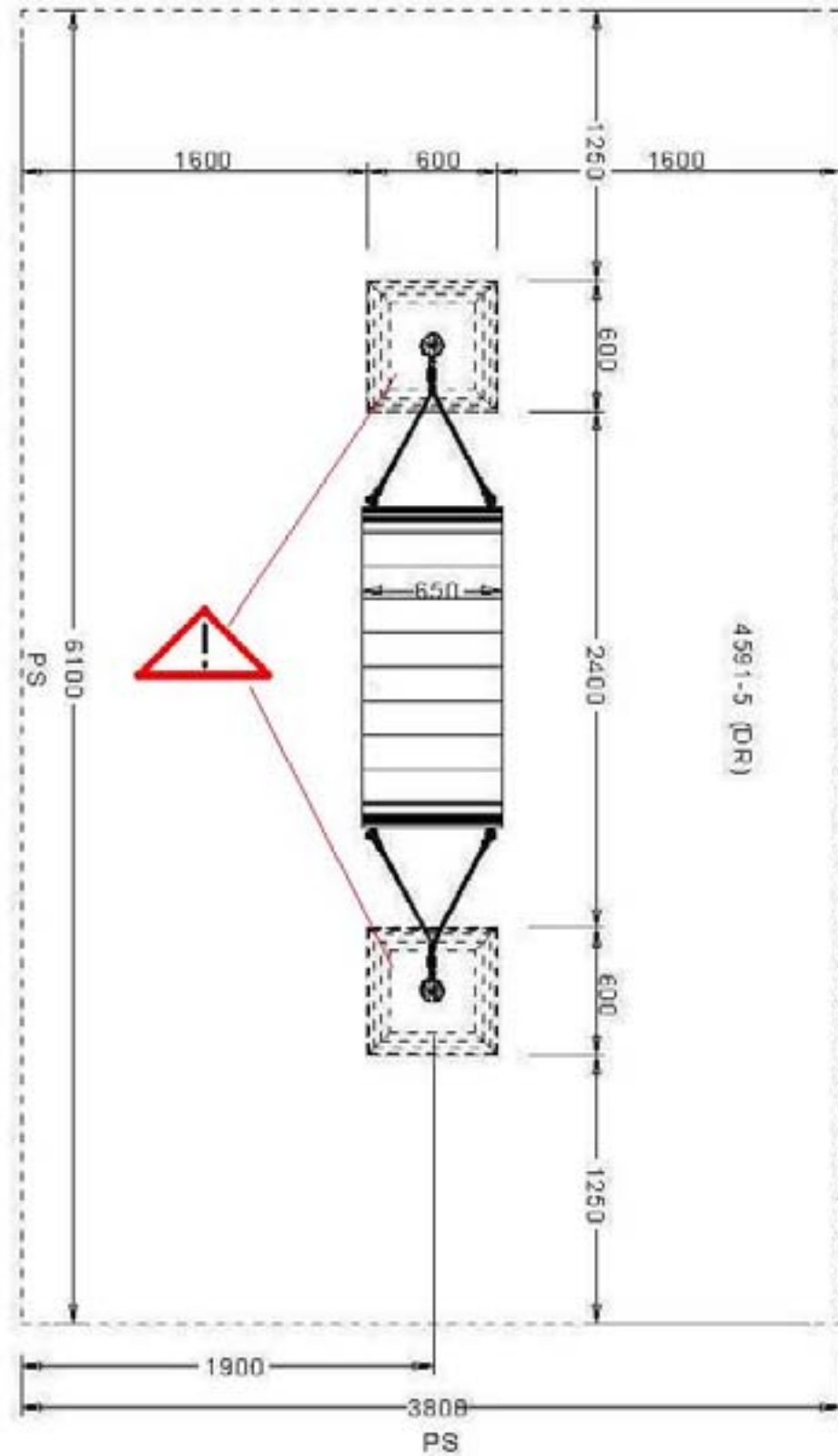


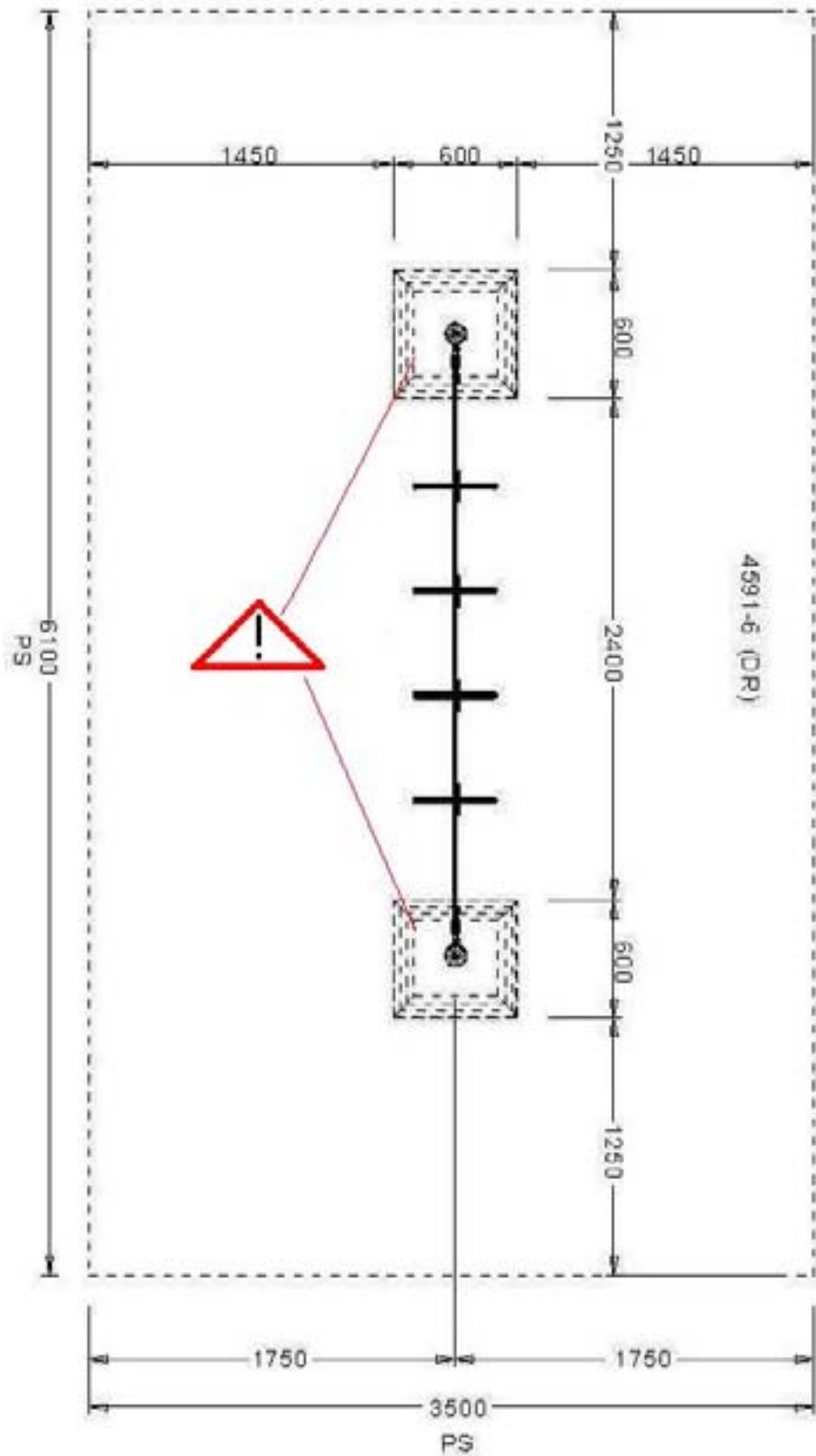


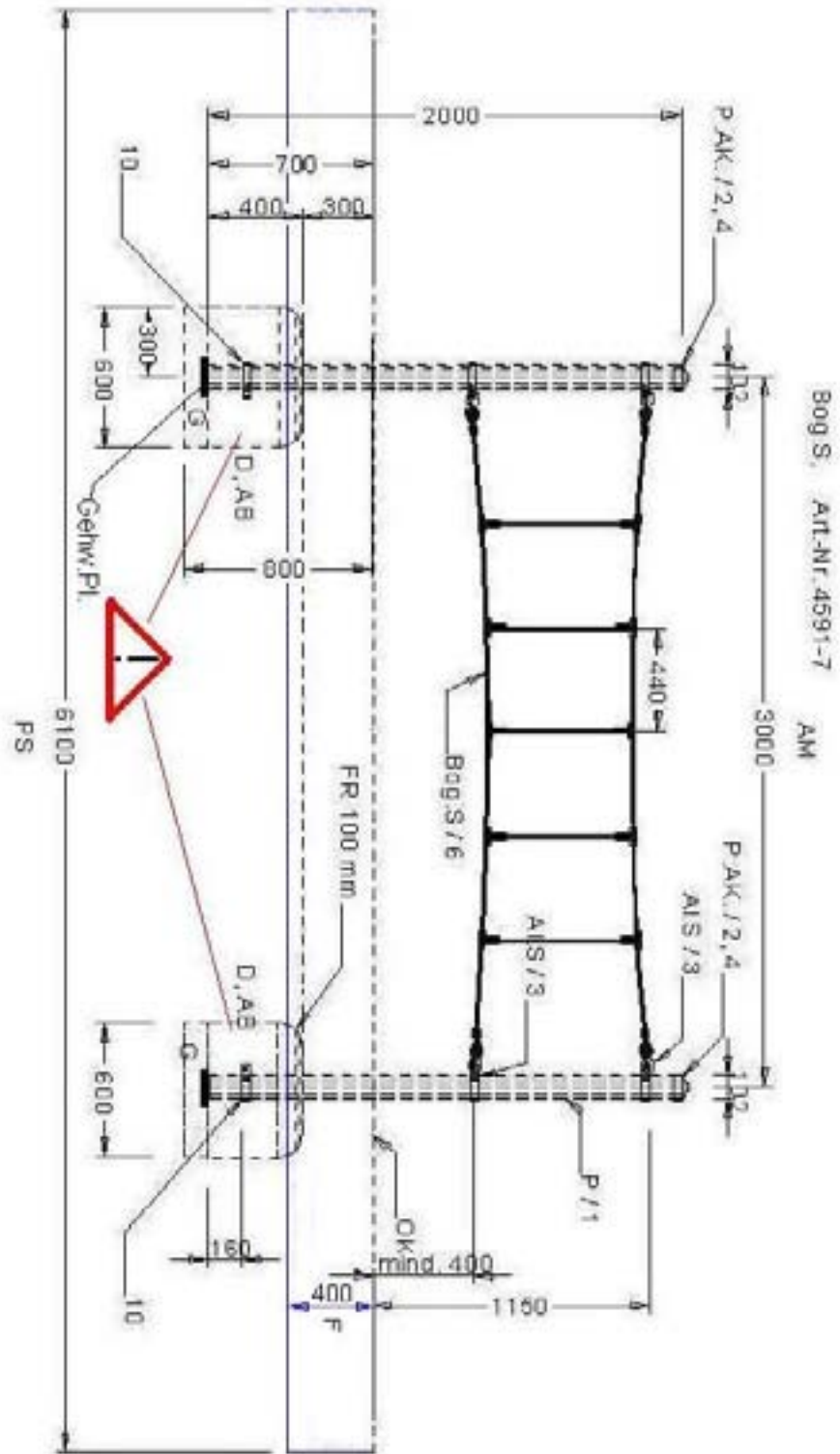


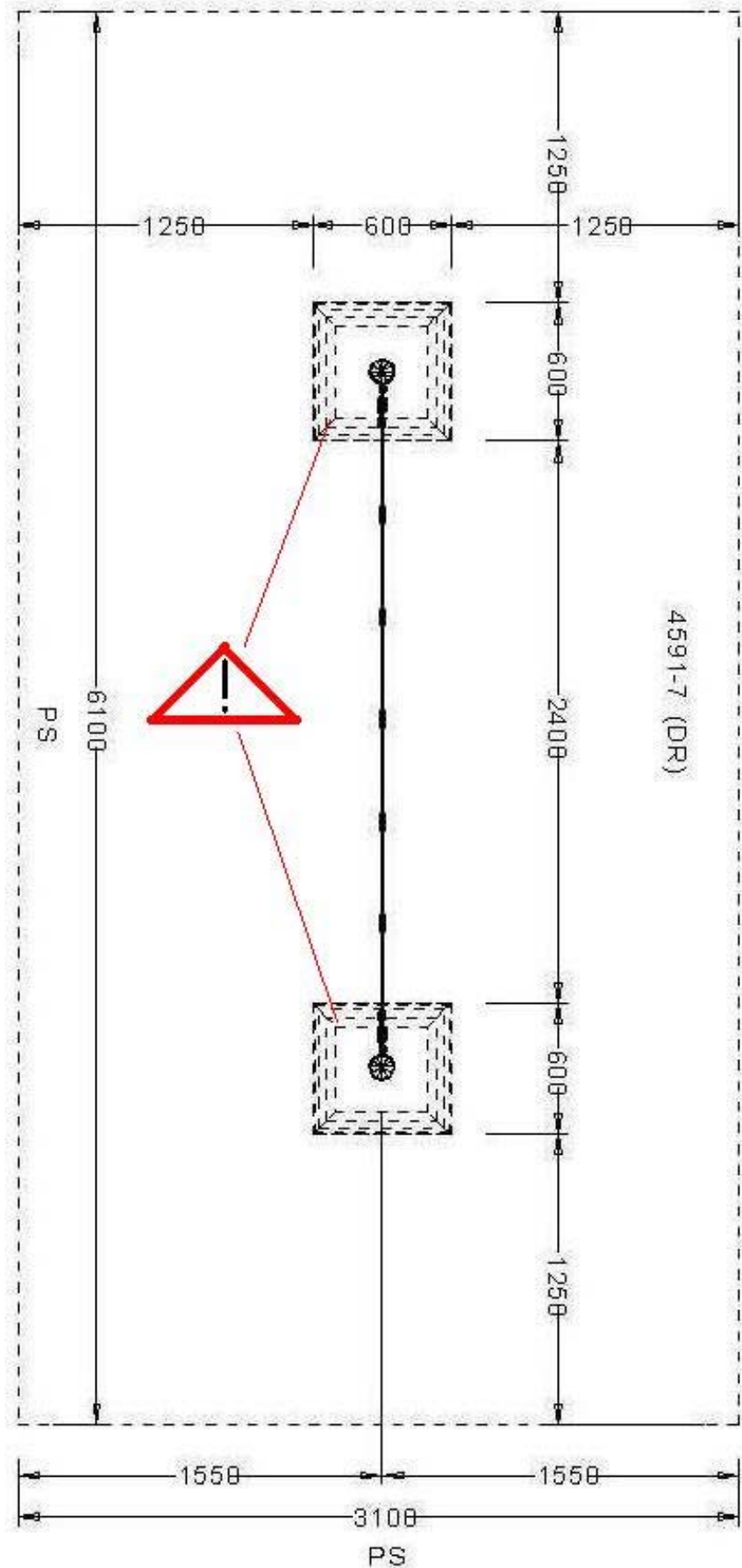


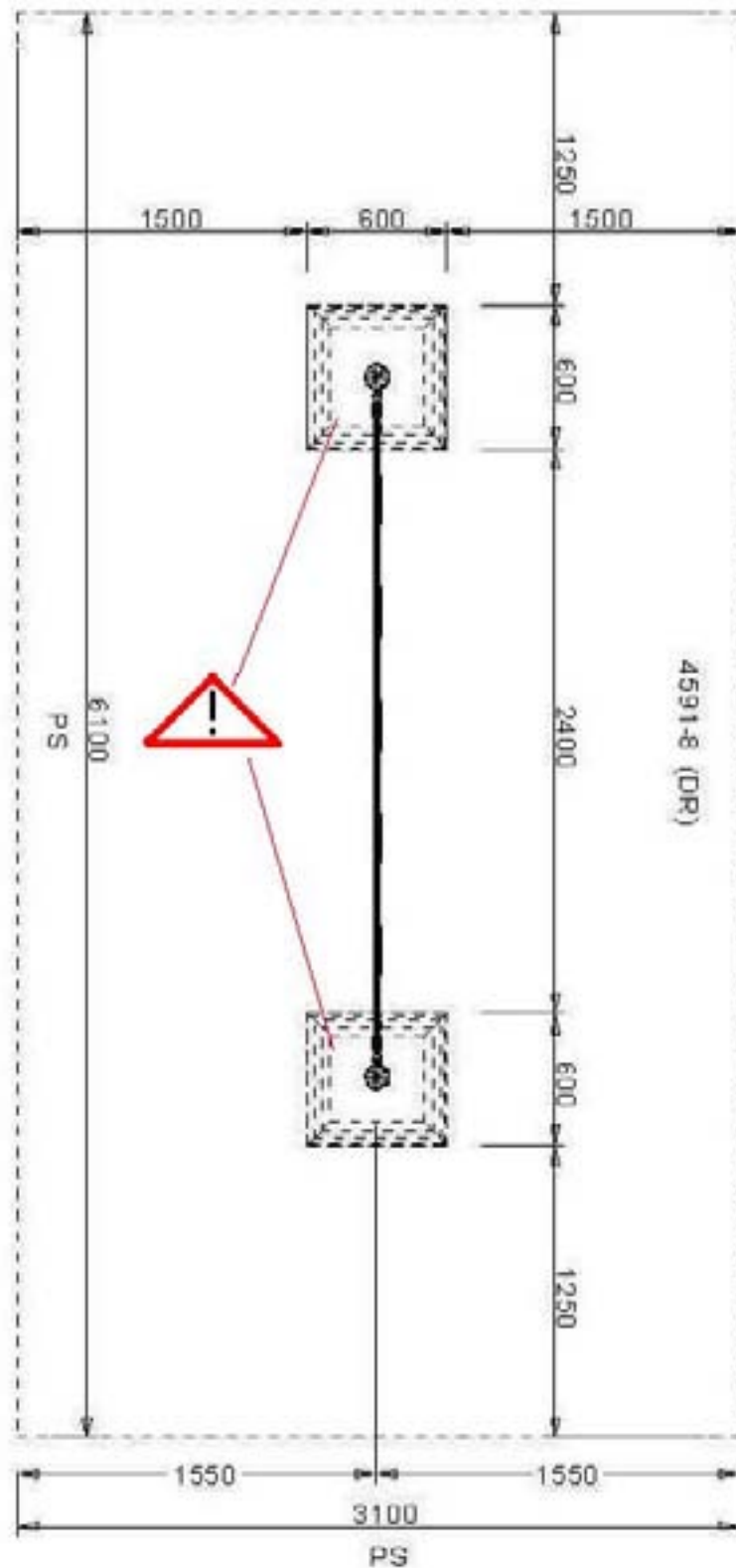
HM Art.-Nr. 4591-5

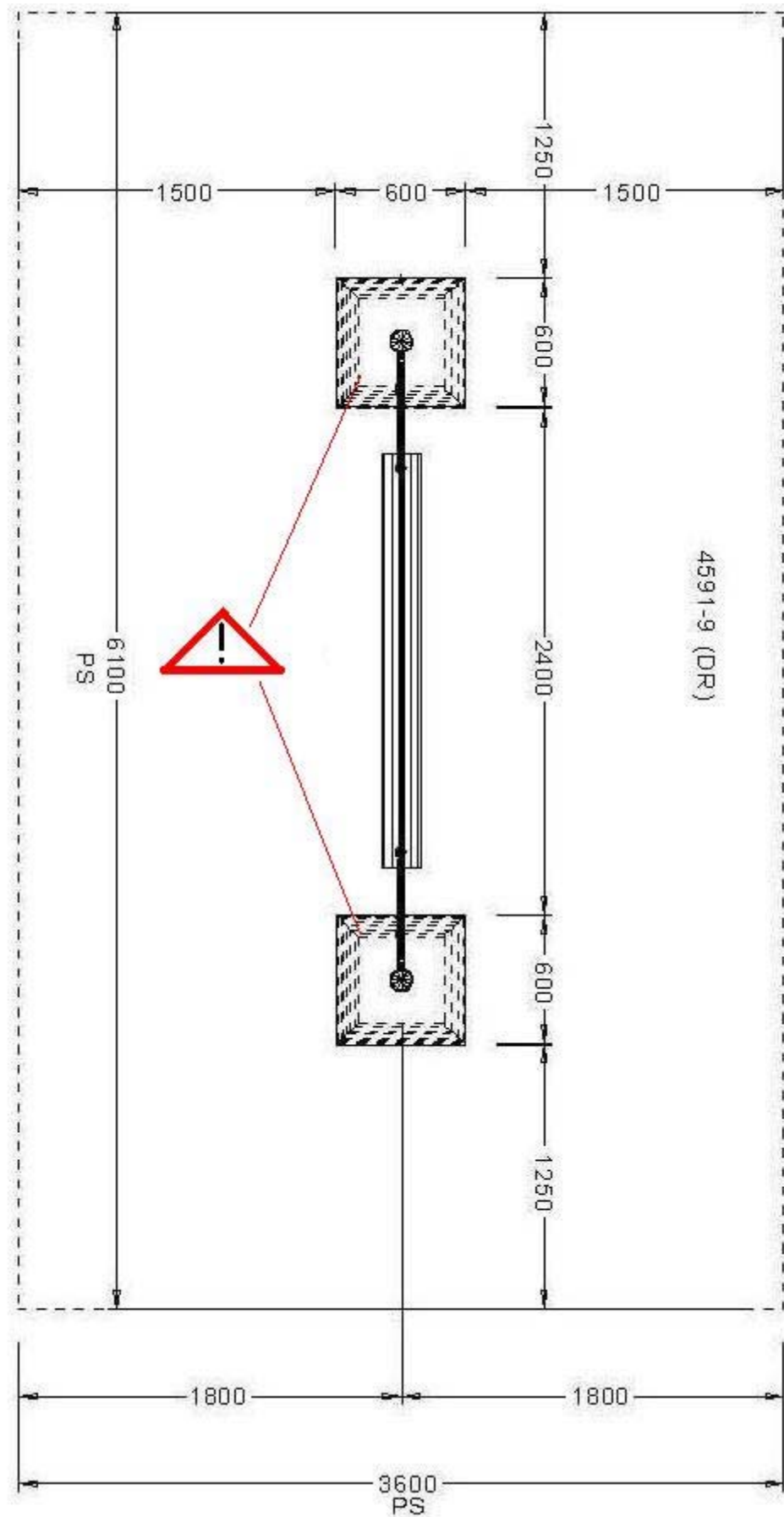


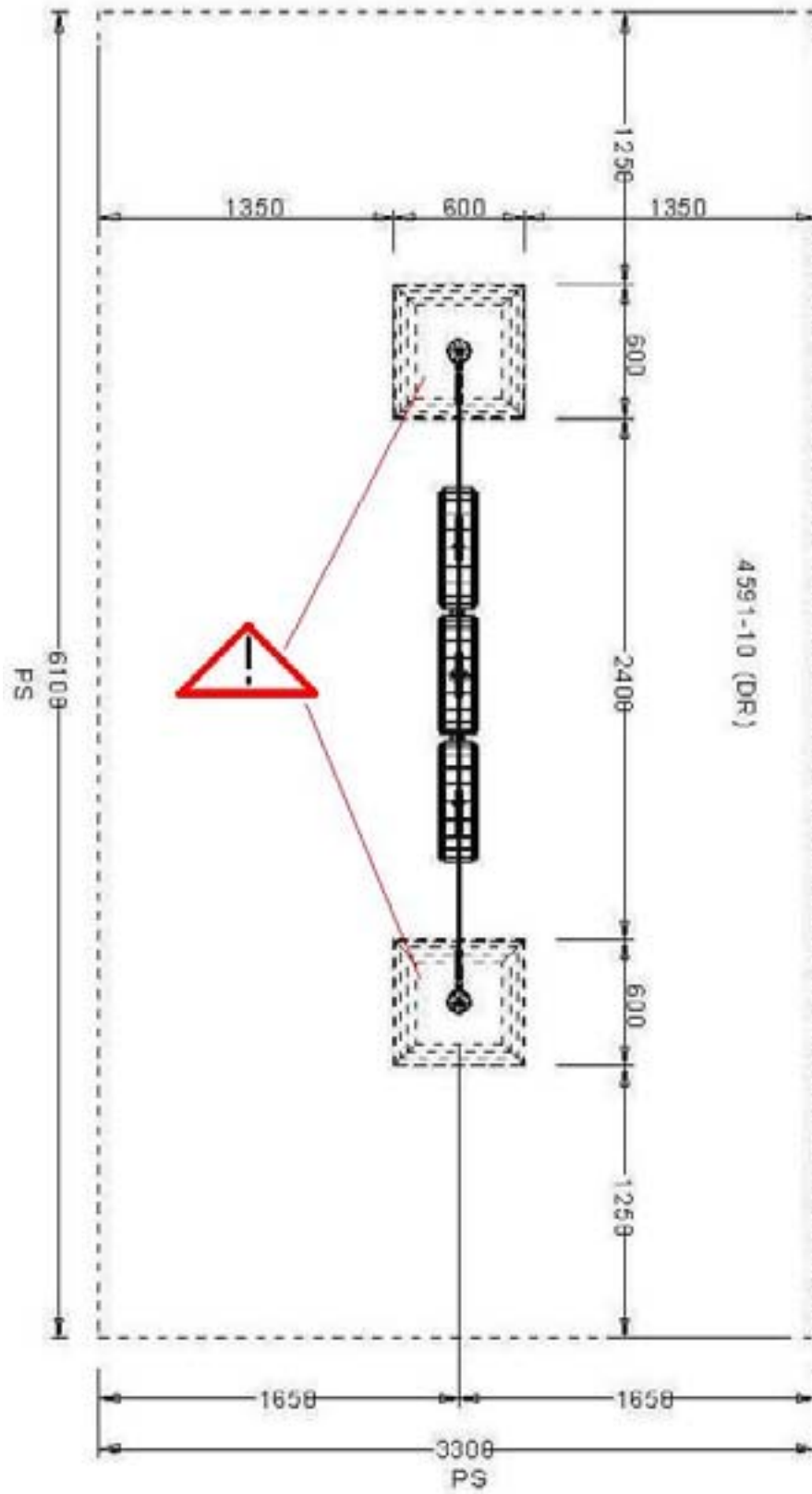













	<u>Abbreviations and signs:</u>
AB	Setting time for concrete B25 at least 4 – 5 days
D	Concrete B25 (for foundation)
F	Fall protection
FR !!	<u>Radius of foundation at least 10 cm !!</u>
G	Percolation layer 10 cm
AM	Dimension between axes
O.K	O.K. play level
P	Post
Al.S	Aluminium adaptor with steel clamp
Bog.S	Bow rope
EE	Screw pile
HL	Hand rail
HS,L	Hanging ropes with walking rope
L.Se	Walking rope
P.AK	Post cap covers
RN.S	Play equipment part „tyres“
SCH	Swing seats
St.S	Rope ladder rungs (wood)
St.Sp	Rope ladder rungs (plastic)
Sp.S	Balancing rope
W.Ba	Bouncing beam
PS	Space required including safety area
DR	Top view
	<p><u>Upper edges of concrete are rounded! Foundation sizes apply for regular soil classification 4-5 (grown surface).</u></p> <p><u>Soil classification 4: Light up to medium plasticity, interlaced, with little sediment (proportion < 30 % larger than 63 mm grain size in diameter).</u></p> <p><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></p> <p><u>For safety reasons, foundations of sandy, soft grounds should be layered with a larger surface of at least 50%.</u></p>

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 (for example of loose filling 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 upon respective maintenance.



B Maintenance instruction
„Haiger“ Rope Assault Course part no. 4591
Version: Steel posts





6 Introduction maintenance

6.1 General information

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

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Dillerberg 3
35614 Aßlar/Berghausen
Phone +49 (0)6443 / 83 11 -0
Fax +49 (0)6443 / 83 11 79



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

A copy of the inspection record is to be handed over to the operator, who must confirm receipt.

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 Drainage

All drainages must be kept free.

7.9 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.

7.10 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.

7.11 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).

7.12 Preventing equipment use

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

7.13 Guarantee resp. 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. Check ropes for abrasion. Ropes are to be re-impregnated once intensive abrasion occurs.

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.

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 comromise safety



Notice

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.

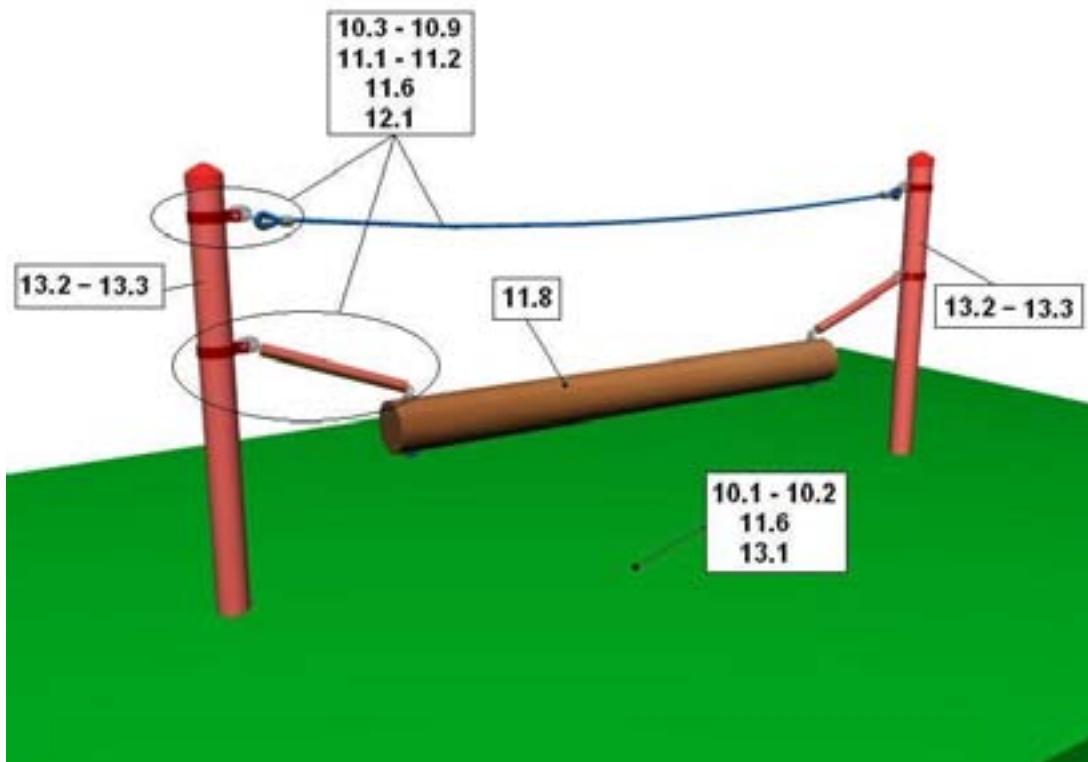
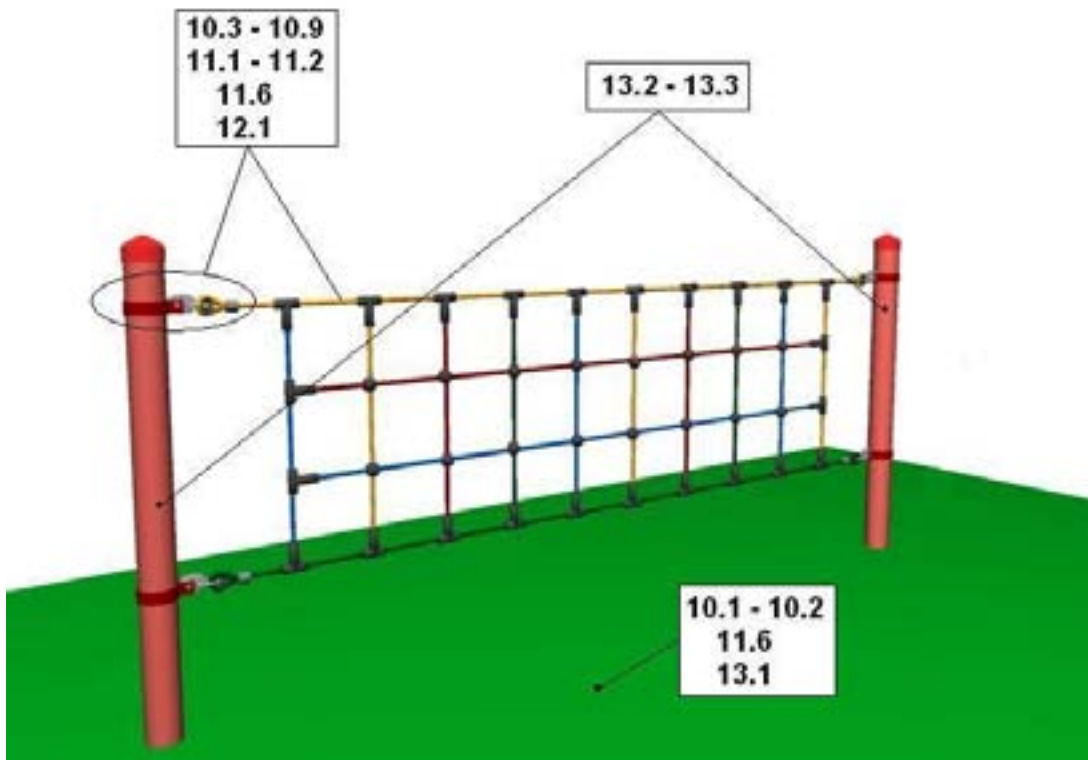
8.1.4 Faults that compromise function



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 damages should be repaired immediately.

9 Regular maintenance (images)



NOTE:

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NOTE:

A series of horizontal dotted lines for writing notes, spanning the width of the page.

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.: 4591

Type of equipment: _____ „Haiger“ Rope Assault Course

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 operator)
(Stamp)

(Signature installation company)

Date: _____