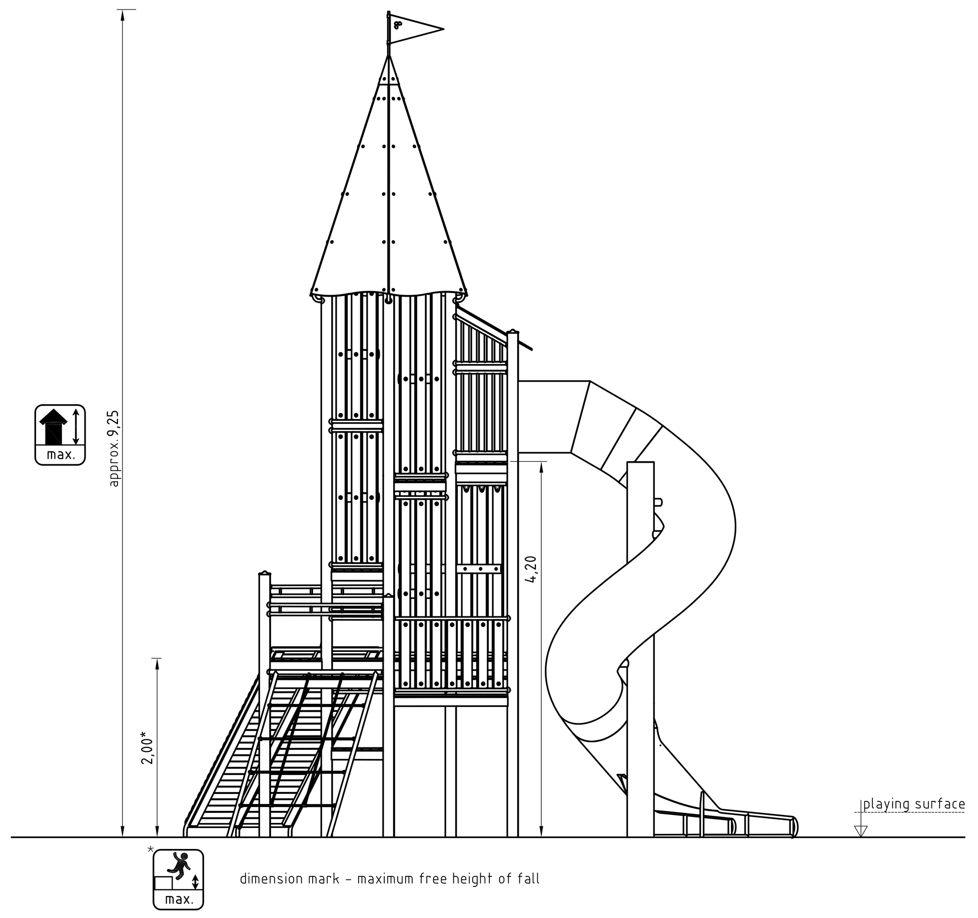
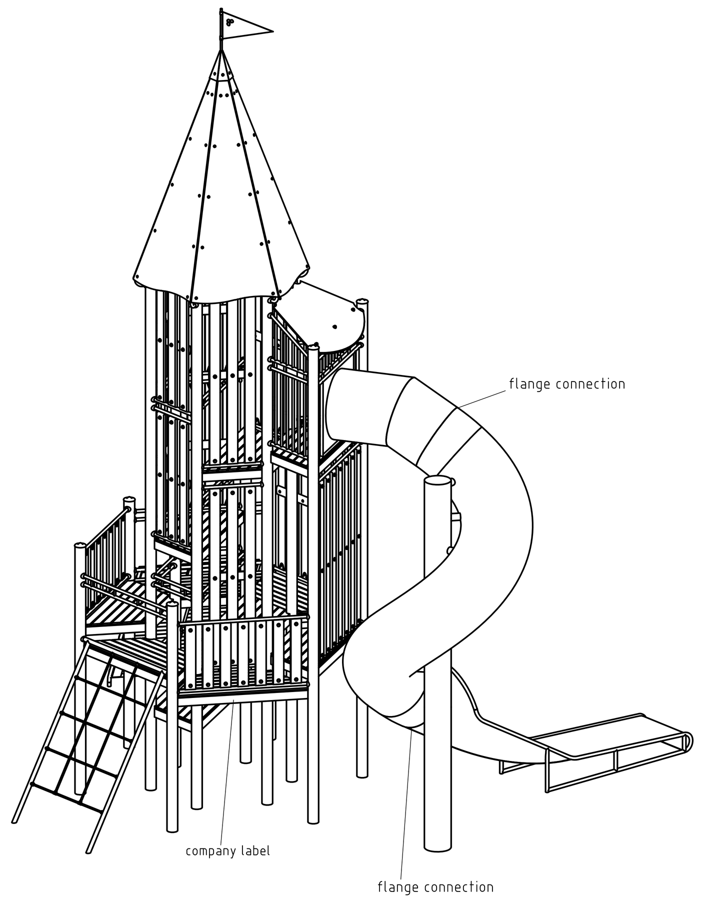
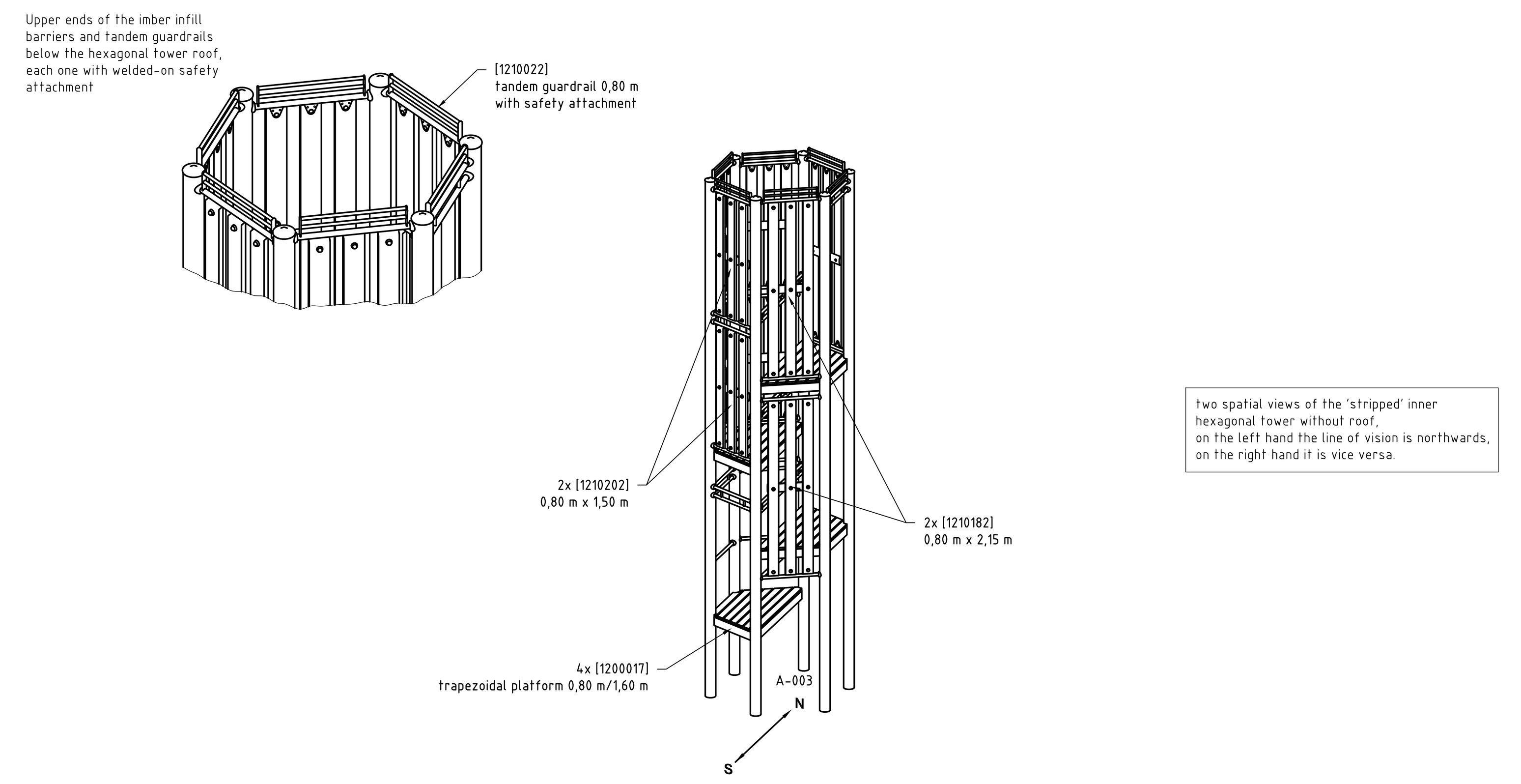
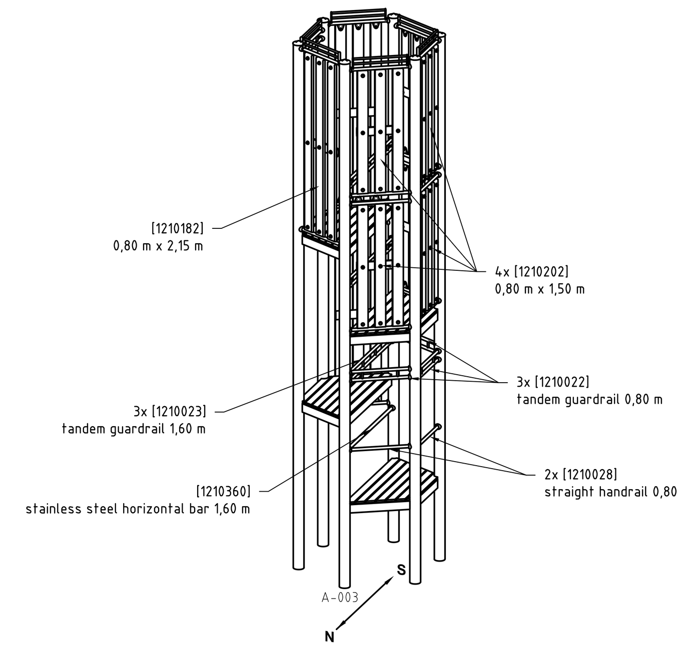
Front view









Front view

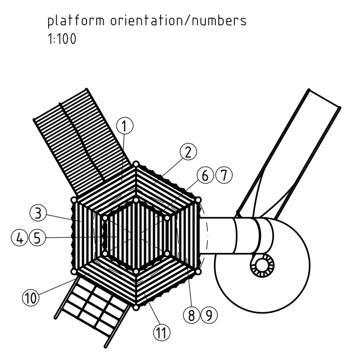
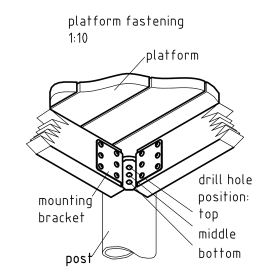


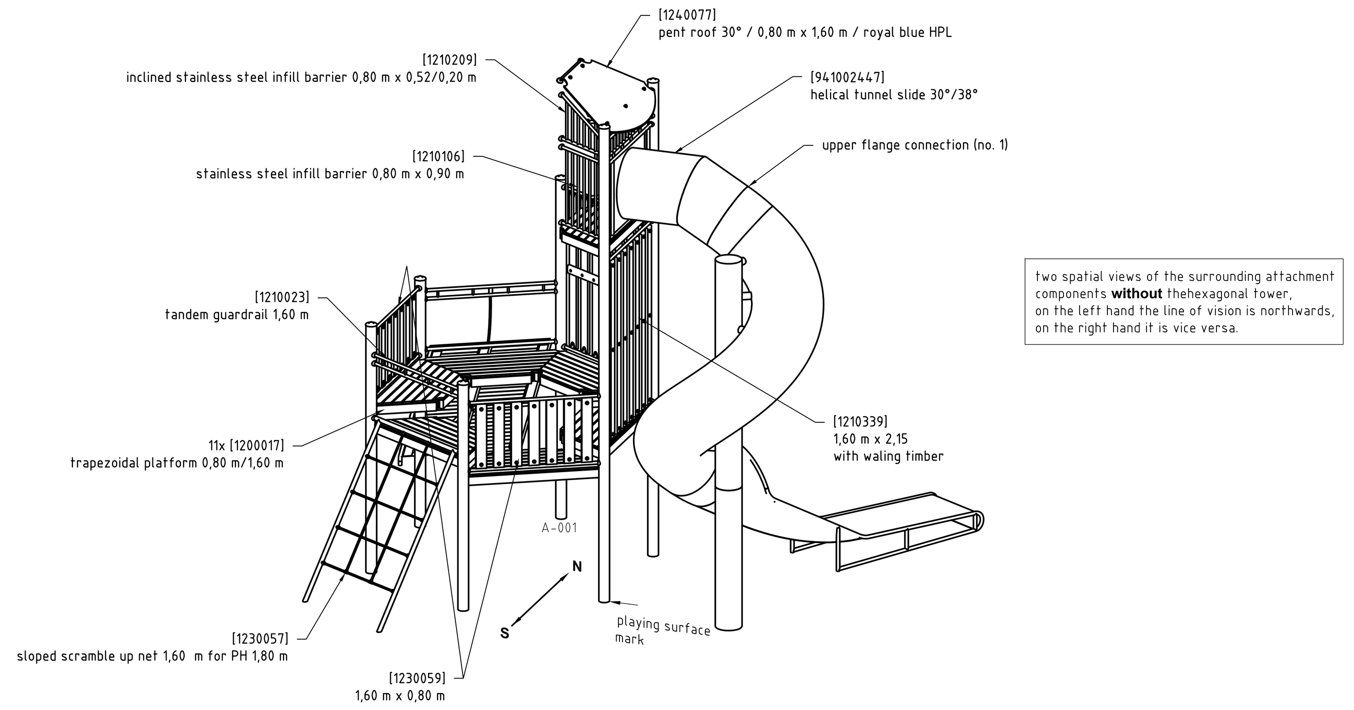
chart for platform fastenings

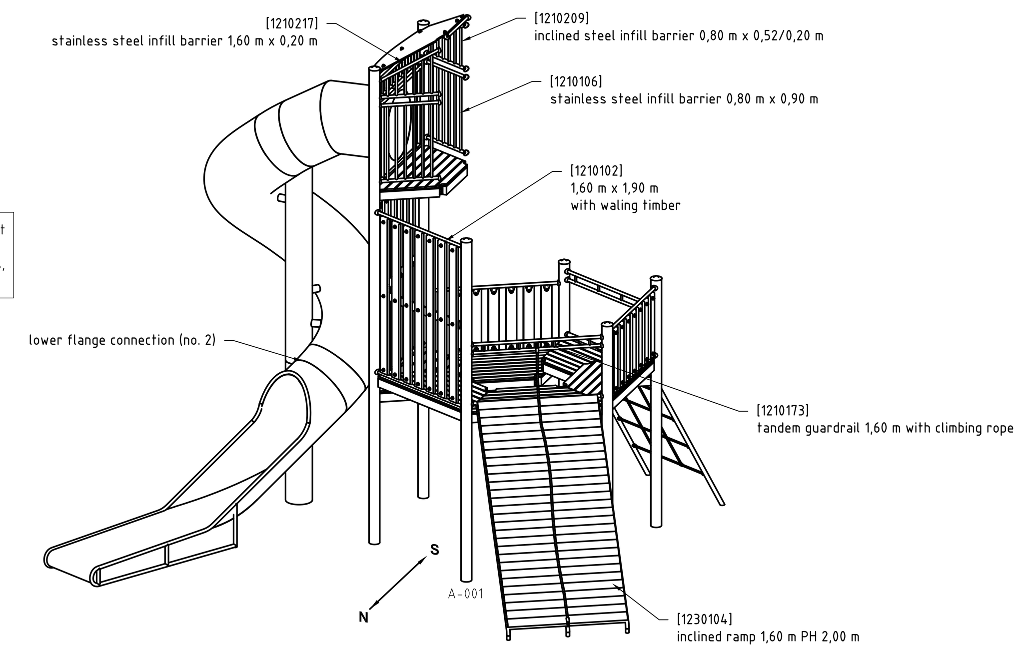
No.	height	drill hole position in mounting bracket: top	middle	bottom
1	2,00			x
2	2,00		x	
3	2,00		x	
4	1,00		x	
5	3,00		x	
6	2,00	x		
7	4,00		x	
8	1,80		x	
9	4,20		x	
10	1,80		x	
11	1,60		x	



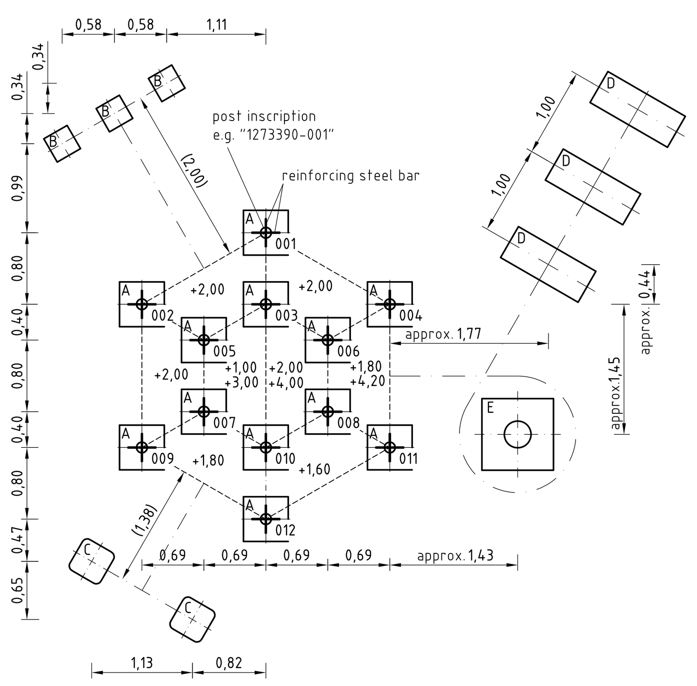
<u>Hints for the assembly of trapezoidal platforms on the same level (2,00 m): no. 1, 2, 3 and 6:</u>

- Some of the drilling holes for platform fastening might be covered by other platforms on the same level. Therefore, the screws at the relevant positions have been fixed during manufacturing.
- After mounting two platforms, for instance, there might be a difficulty in sliding the third one onto a fixed screw.. In that case, in order to attain more moving space among the attachment parts, it can be helpful to loosen the screws of infill barriers, guardrails or platforms above and below the screw in question. If that is not sufficient, the corresponding mounting bracket must be unscrewed from the platform joists and must be placed onto the screw which is fixed to the post. Afterwards, the bracket must again be fixed to the joists.

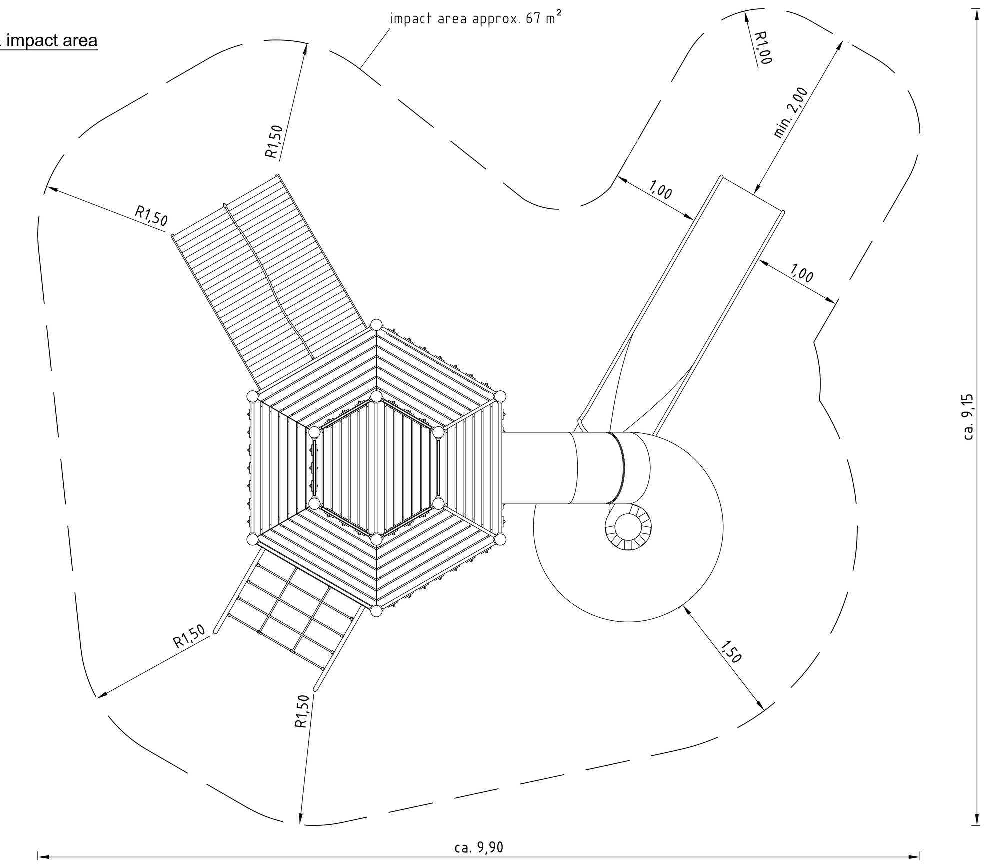


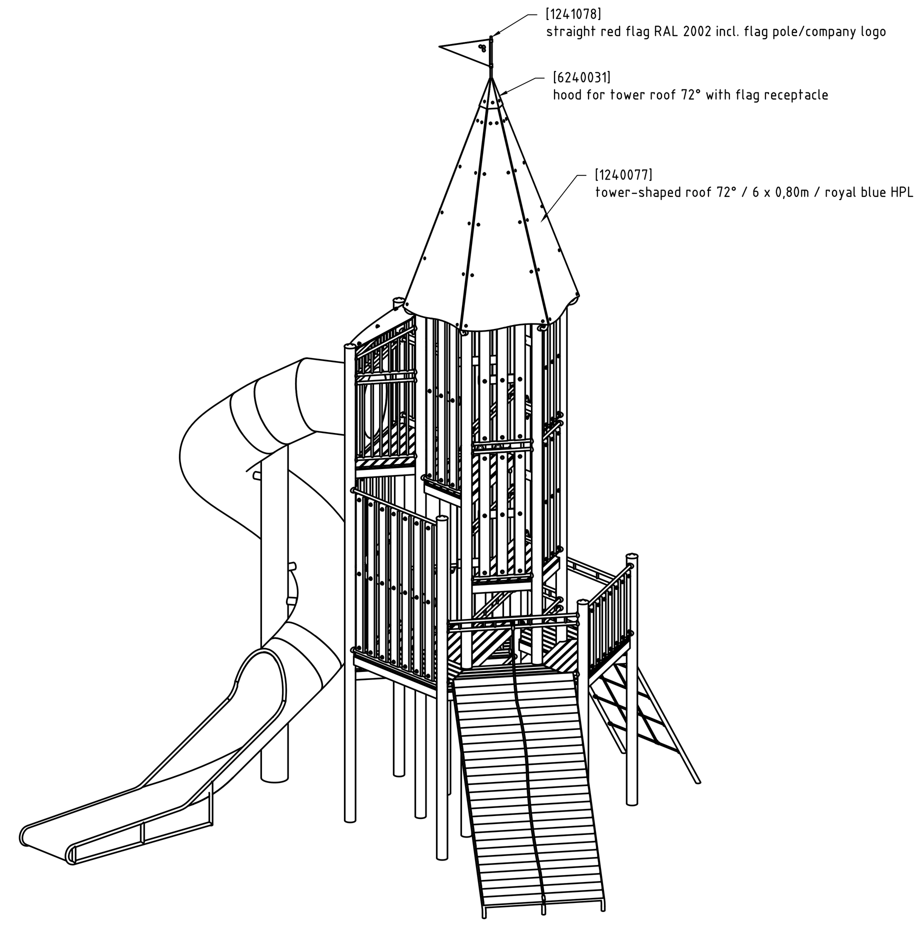


Foundation plan



Top view & impact area





<u>Some additional instructions for the installation of K&K Helical tunnel slides</u>

- The specified installation height of the slide must be observed (distance between play level and top edge of the starting platform = 4,20 m).
- The starting section of the chute must be installed horizontally.
- All sliding sections must be installed with the correct inclination (measured in the centre of the slide trough):
  30° for the straight section, 38° for the helical section. Exceptions are the adaptor section between entrance section and helical section, the adaptor section between helical section and run-out section and the run-out section itself.
- The run-out section must be installed with an inclination of 3° so that rain water can drain off.

<u>Further notes concerning the tunnel slide flange connections and the slide installation</u>

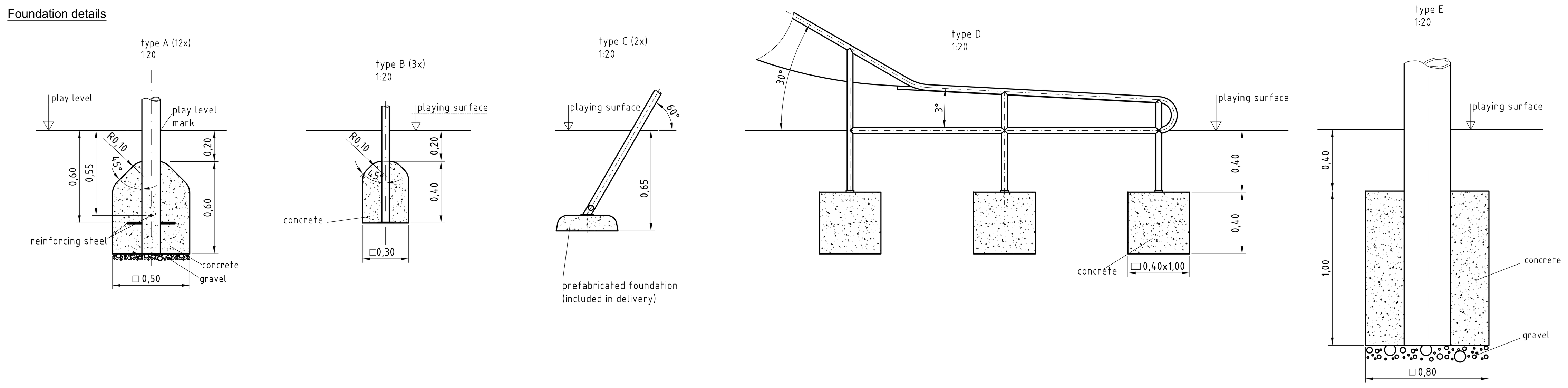
- By means of an appropriate lifting gear, place the tunnel slide entrance section and the curved section (pre-assembled to the centre post) onto supporting trestles (for instance). Adjust both flange surfaces precisely to one another.
- **Before assembly, slightly lubricate the screws with the enclosed installation paste.**
  <u>Screw connections see details in attached list.</u>
- Lift both parts to the slide position in the tower and fasten the tubular ends of the entrance section to the posts (for a first alignment, see above listed instructions).
- Fasten the run-out section to the slide already installed. See to a congruent position of both ring-shaped flanges.
- Finally align the completely assembled slide. The centre support must be in a precise vertical position. There must not be any gaps or openings within the flange connections.

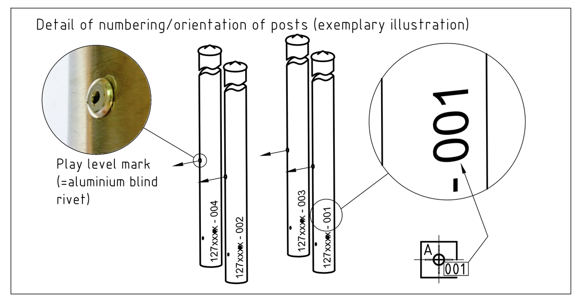
1. Assign a device location considering the space requirements (impact area). Slide direction recommended: north-east or in half-shade of trees.
2. Excavate soil for foundations, according to drawing.
   Please note: To achieve maximum stability and a safe installation, a moderate level of soil solubility is required.
3. Pour in a drain layer of gravel of approx. 10 cm thickness between the bottom of the posts and plain base of foundation.
4. Insert reinforcing steel into the corresponding holes of the posts.
5. Place posts type A according to the corresponding number (see foundation layout) into the respective foundation hole. Play level mark (=aluminium blind rivet) complies with the installation depth. Align every post by means of the play level mark facing into the same direction (see detail or foundation layout).
6. **For installation of the pre-assembled components and/or single parts, the screws slightly have to be lubricated with installation paste**!
   Screw together platforms and posts by using the respective hole in the mounting brackets (according to **"chart for platform fastenings"**).
   Tighten all screws <u>after having aligned</u> all components.
   Install the slide exit with an inclination of 3° in sliding direction.
   <u>Screw connections see details in attached list.</u>
7. Grout foundations with compressed concrete C20/25, chamfer and round off the edges, cover the foundations with a surface which meets the requirements for impact attenuation so that the critical fall height of the surfacing is equal to, or greater than, the free height of fall of the equipment (acc. to EN 1176-1). The run-out section fall zone must have surfacing with a critical fall height of at least 1000mm (acc. to EN 1176-3).
8. Release for play after concrete foundations have set.
9. According to maintenance instructions, check all screw connections after 4-5 weeks and retighten, if necessary.

Please ensure that all special tools supplied (e.g. Allen key for secured Allen screws etc.) and all specific documents which are or may be useful for safety management acc. to EN 1176-7 (e.g. invoice, delivery note, order acknowledgement, installation instructions, maintenance instructions) are forwarded to the persons responsible.

Necessarily insert all attachment parts before tightening the screws. It is NOT possible to insert them afterwards.

Foundation details





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Datum/Name	Artikel: 0-25300-502
26.06.2019 A.M	Benennung: Play structure
Maßstab: 1:50 / A0	Zeichnung: Installation

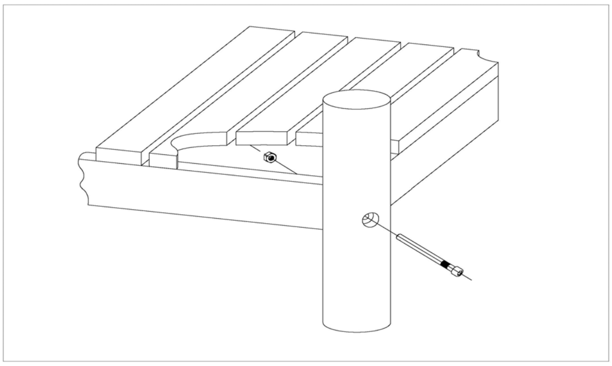
EN 1176

Item: **025300502** Order: 1293756

Play structure

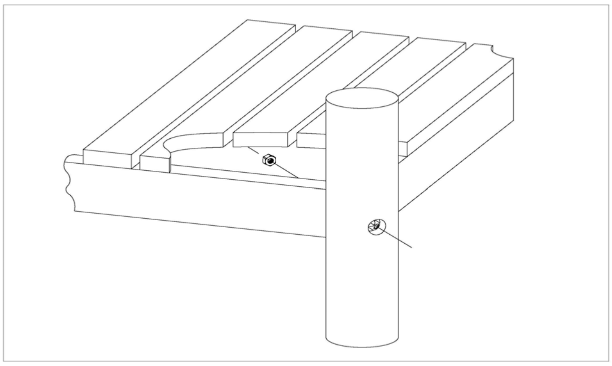
Location: Building Project:

37 x SFES1200001 **Platform fastening to stainless steel post, nut on the side of the platform**



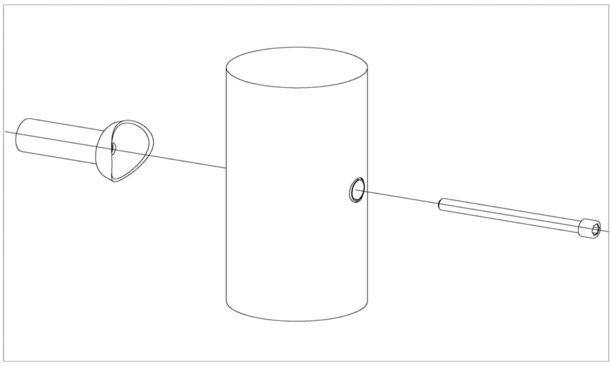
per SC	Total	K&K-Item	Marking
1 x	37 x	3430021	Lock nut M12 DIN985 A2
1 x	37 x	2030651	Cheese head screw with pin M12 x 125

7 x SFES1200004 **Platform at stainless steel posts screw fixed by manufacturer**



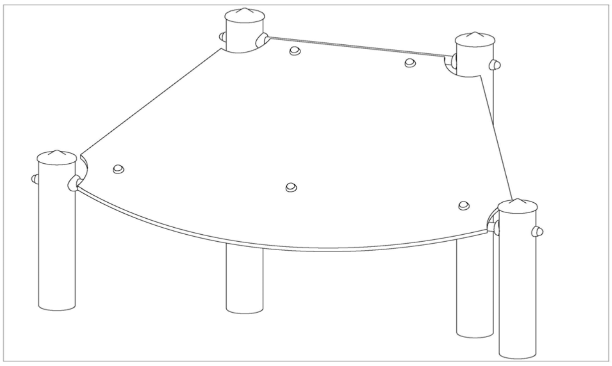
per SC	Total	K&K-Item	Marking
1 x	7 x	3430021	Lock nut M12 DIN985 A2

132 x SFES1210001 **Standard bolting of attachment parts (except platforms) to stainless steel posts**



per SC	Total	K&K-Item	Marking
1 x	132 x	2030168	Cheese head screw with pin M12x140

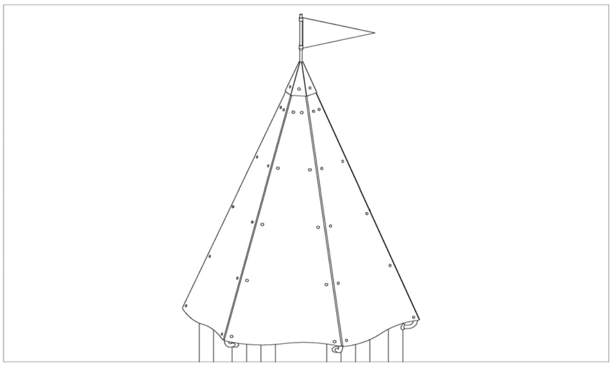
1 x SFAS1240001 **Lean-to roof 0.8 m/1.6 m x 0.8 m round eaves HPL-plates at stay tubes**



per SC	Total	K&K-Item	Marking
5 x	5 x	3430014	Washer Ø 10,5 DIN125 form B A2
5 x	5 x	3430048	Lock nut M10 DIN985 A2
5 x	5 x	3300056	white protective screw cap - lower part, M10
5 x	5 x	3300057	white protective screw cap - upper part, M10
5 x	5 x	3400024	Mushroom head screw M10 x 35 DIN603 A2

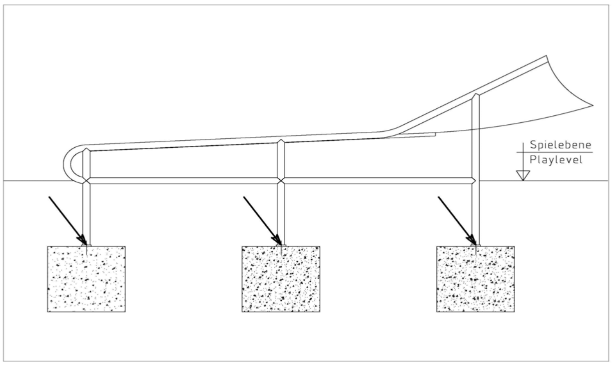
Item: **025300502** Order: 1293756
Play structure
Location: Building Project:

1 x SFAS1240012 **Fastening of HPL panels with rounded edges to steel frame of tower-shaped roof 72°**



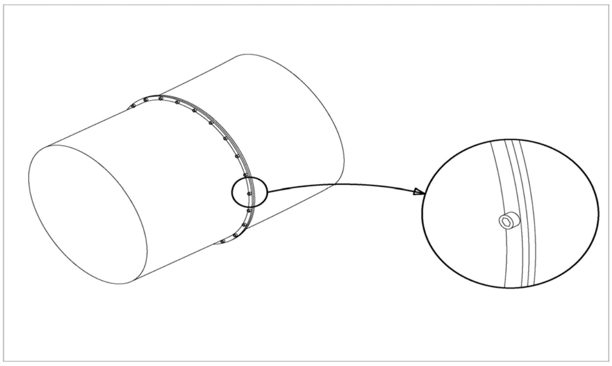
per SC	Total	K&K-Item	Marking
6 x	6 x	3400195	Dome head security screw-M10x30-Resistorx T45 A
6 x	6 x	3430086	Washer Ø 10,5 DIN9021 A2
60 x	60 x	3430011	hexagon cap nut M10 DIN986 A2
60 x	60 x	3430014	Washer Ø 10,5 DIN125 form B A2
60 x	60 x	3400138	mushroom head screw square neck M10x30 DIN 60

1 x SFXS1070011 **(Short) Tunnel slide run-out section stone bolt assembly**



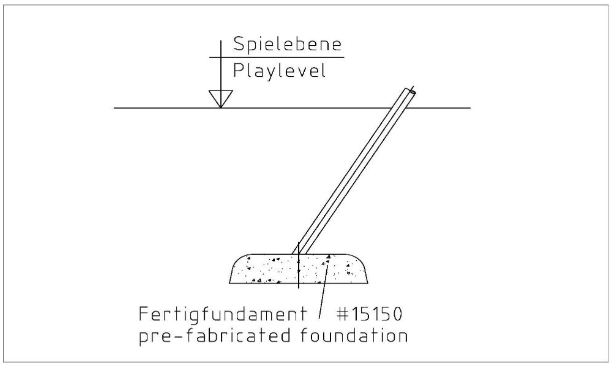
per SC	Total	K&K-Item	Marking
6 x	6 x	1070365	Set of stone bolts for slide run-out section M12x160

2 x SFAS1070014 **Flange connection of tunnel slide sections**



per SC	Total	K&K-Item	Marking
24 x	48 x	3430011	hexagon cap nut M10 DIN986 A2
24 x	48 x	3430014	Washer Ø 10,5 DIN125 form B A2
24 x	48 x	3400162	Cheese head screw M10 x 30 DIN912 A2

1 x SFXS1230009 **Scramble up net / climbing net fastening to prefabricated foundation**



per SC	Total	K&K-Item	Marking
4 x	4 x	3430025	Washer Ø 13 DIN125 A2
4 x	4 x	3400018	Hexagon screw M12 x 25 DIN933 A2

Item: **025300502** Order: 1293756
Play structure
Location: Building Project:

12 x SFES1270001 **Reinforcing steel for stainless steel posts**

per SC	Total	K&K-Item	Marking
2 x	24 x	2130000	Reinforcing steel Ø 10 x 310 DIN 488

1 x SFWZ0000001 **Security TORX wrench TR40**

per SC	Total	K&K-Item	Marking
1 x	1 x	3490081	Security TORX wrench TR40

1 x SFWZ0000009 **Hexagon insert socket driver 10mm 1/2" with borehole for Pin**

per SC	Total	K&K-Item	Marking
1 x	1 x	2030170	Hexagon insert socket driver 10 mm 1/2" with drill hole for Pin

5 x SFWZ0000012 **Lubricating metal (30g box) incl. brush**

per SC	Total	K&K-Item	Marking
1 x	5 x	5300039	Lubricating metal box 30g
1 x	5 x	5200026	Brush for lubricating metal