

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 holes 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 after having aligned all components.**

Install the slide exit with an inclination of 3° in sliding direction.

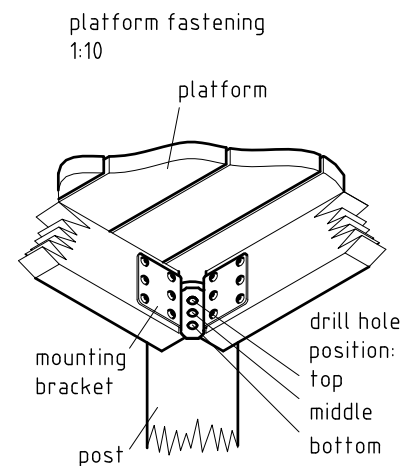
Screw connections see details in attached list.

We recommend not to insert the protection caps enclosed before first maintenance as they are only suitable for one-time use (see description below).

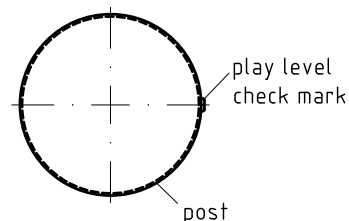
7. Grout foundations with compressed concrete C20/25, chamfer and round off the edges, cover the foundations with a surface which meets the requirements for impact attenuation so that its critical fall height is equal to or greater than the maximum free height of fall of the equipment (acc. to EN 1176-1). The run-out section fall zone must have surfacing with a critical fall height of at least 1000 mm (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. Afterwards cover the screw heads with protection caps as follows: Insert grey protection caps into the countersunk drills (e.g. for platforms). The non-countersunk drills (e.g. for railings or a slide) have to be covered with the red protection caps by placing them onto the base part. Strongly pound them (e.g. by using a plastic mallet) until they audibly snap into the base part groove.

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.**



detail of check mark  
1:5



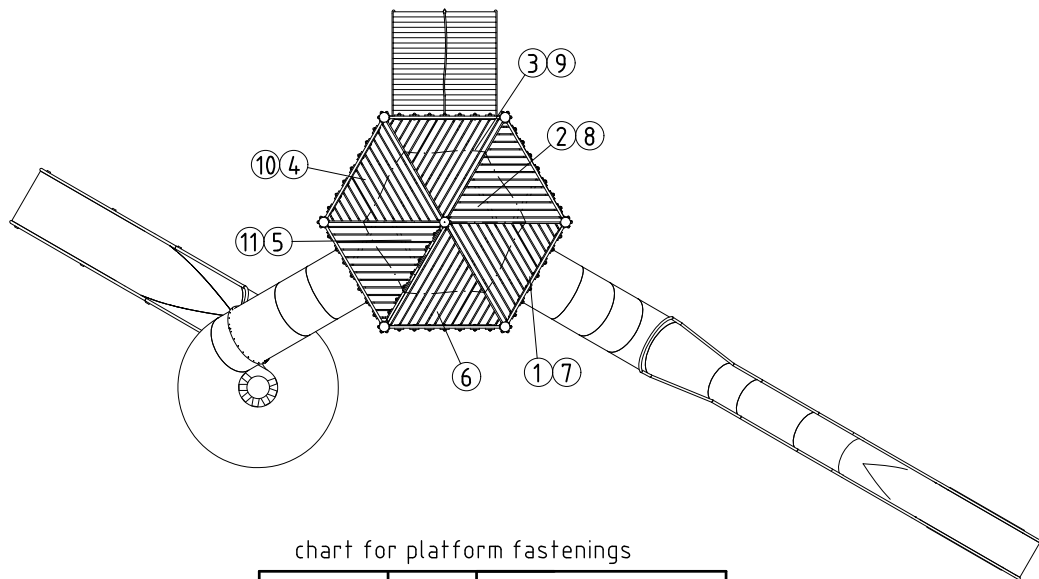
platform orientation/numbers  
1:100

chart for platform fastenings

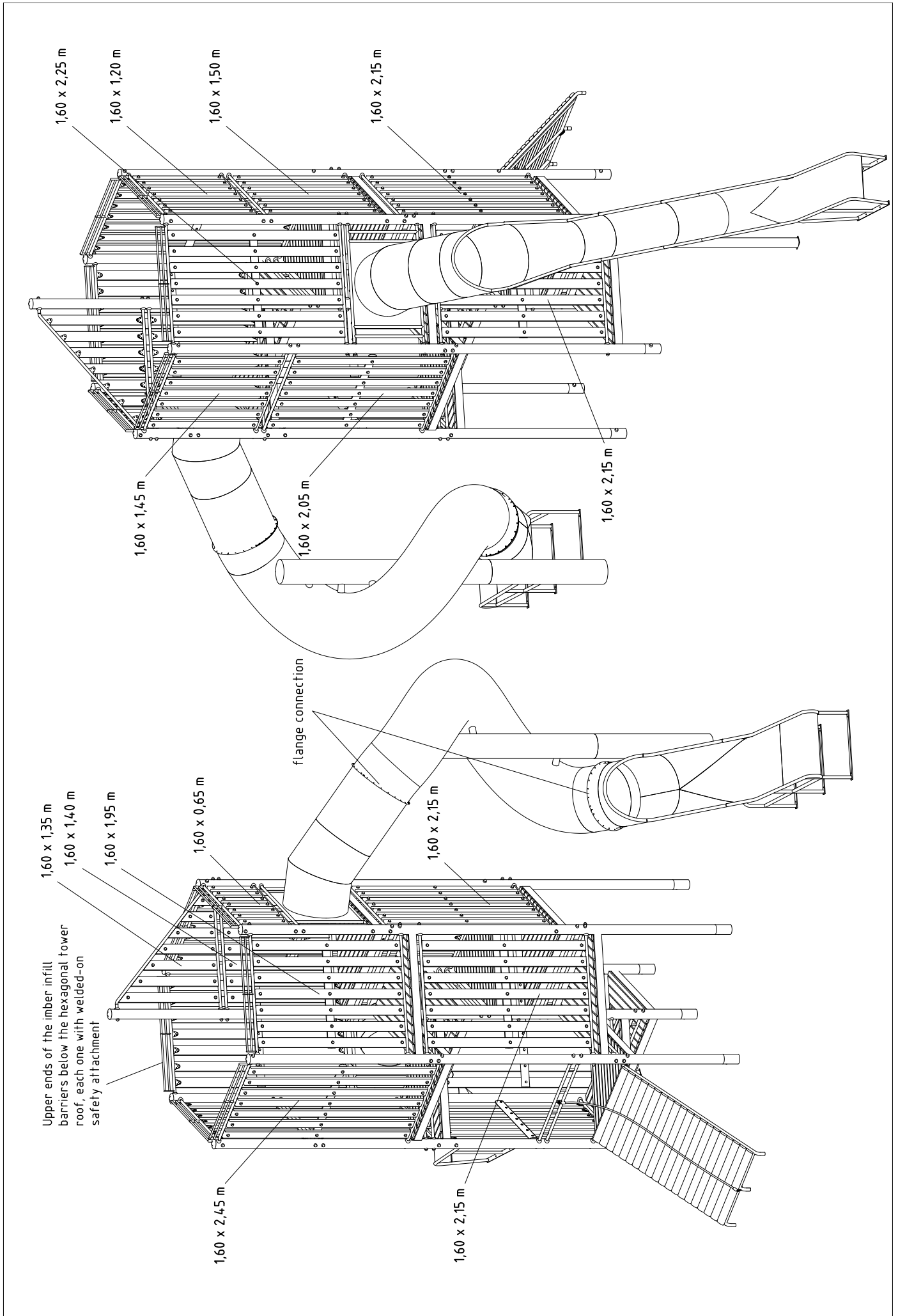
| No. | height | drill hole position<br>in mounting bracket |        |        |
|-----|--------|--------------------------------------------|--------|--------|
|     |        | top                                        | middle | bottom |
| ①   | 0,60   |                                            | x      |        |
| ②   | 1,00   |                                            | x      |        |
| ③   | 1,40   |                                            | x      |        |
| ④   | 1,80   |                                            | x      |        |
| ⑤   | 2,20   |                                            | x      |        |
| ⑥   | 2,60   |                                            | x      |        |
| ⑦   | 3,00   |                                            | x      |        |
| ⑧   | 3,40   |                                            | x      |        |
| ⑨   | 3,80   |                                            | x      |        |
| ⑩   | 4,20   |                                            | x      |        |
| ⑪   | 4,60   |                                            | x      |        |

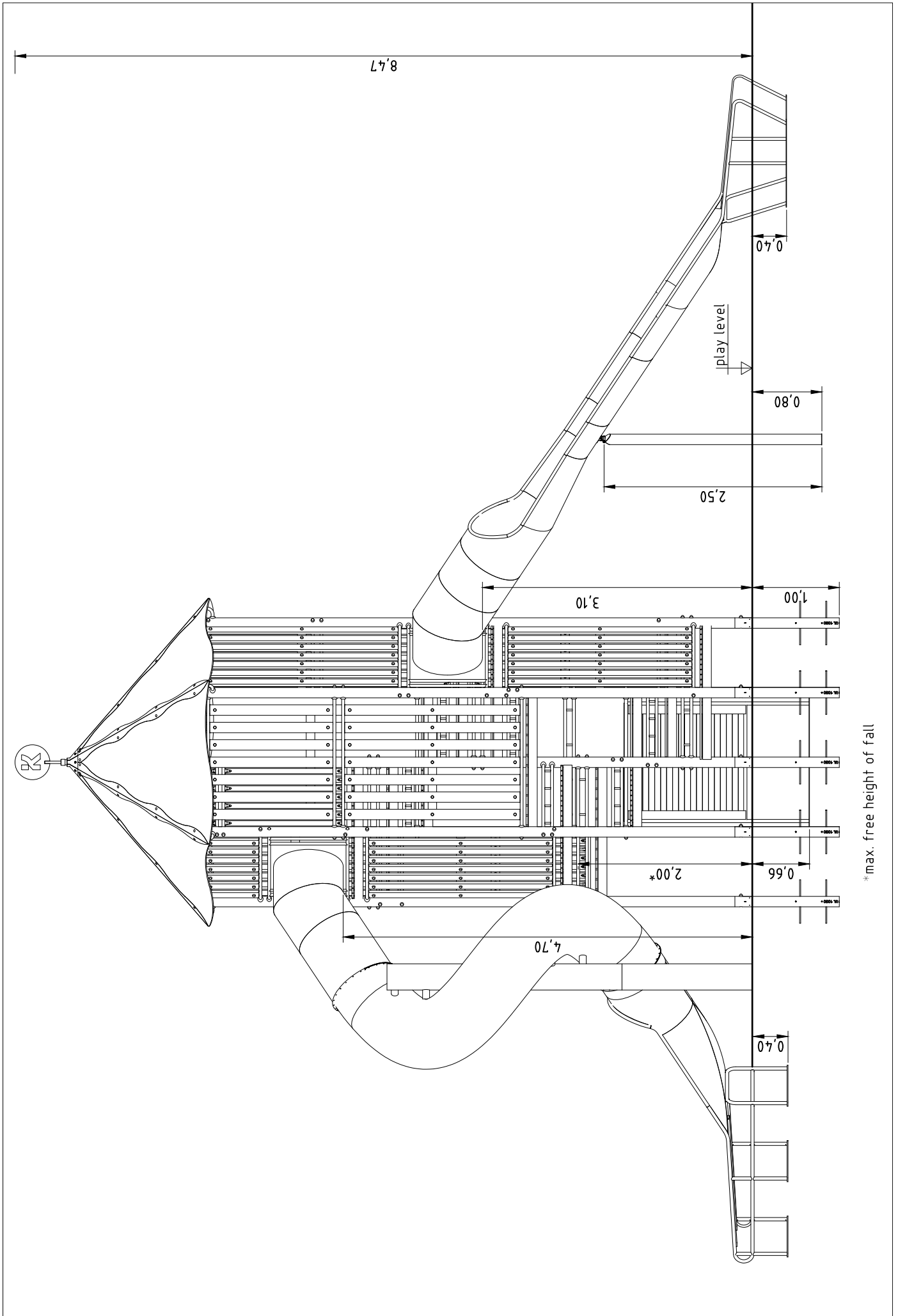
#### Some additional instructions for the installation of K&K Helical tunnel slides

- 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.

#### Further notes concerning the tunnel slide flange connections and the slide installation

- 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.**  
Screw connections see details in attached list.
- 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.





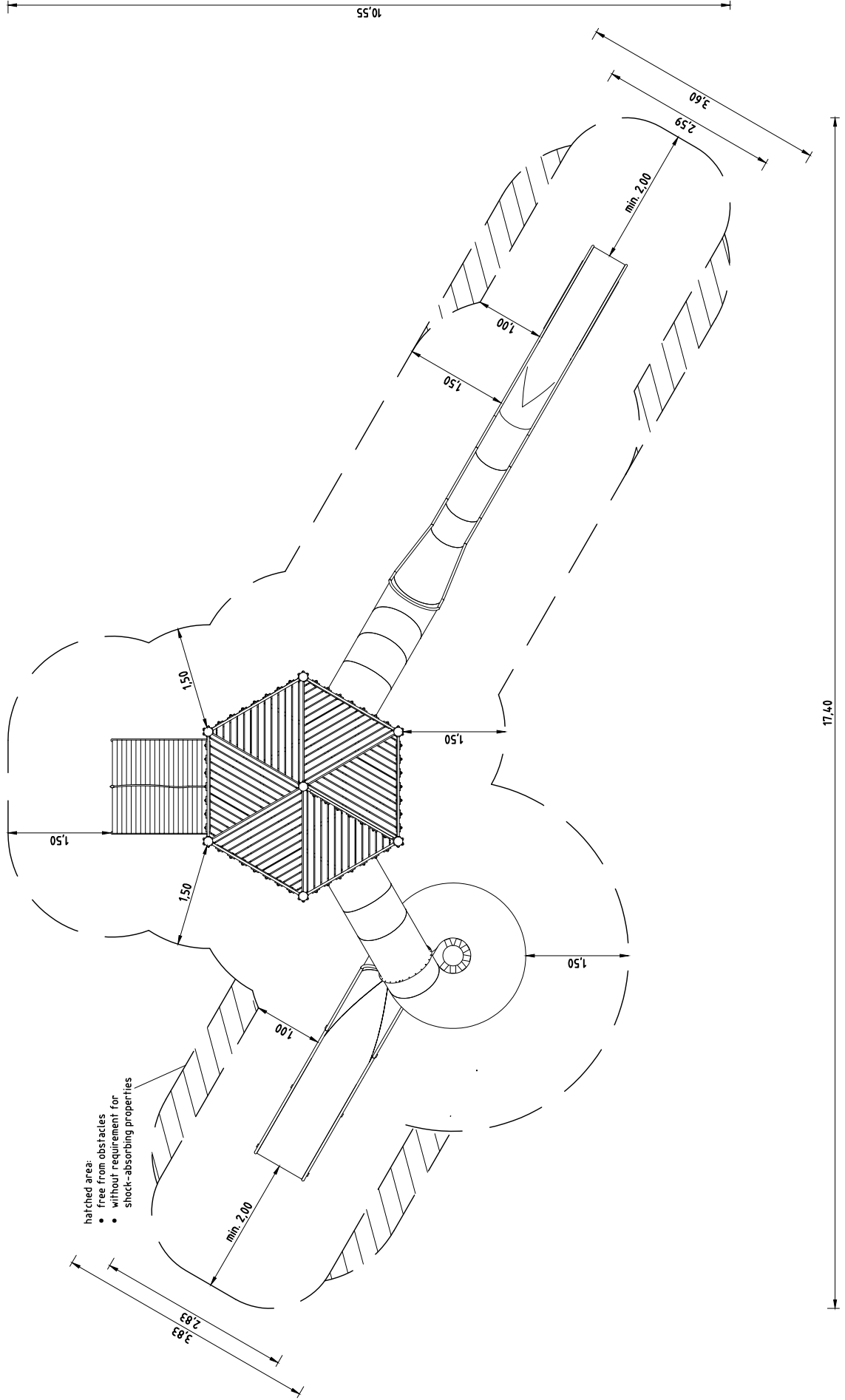


**Please note:**

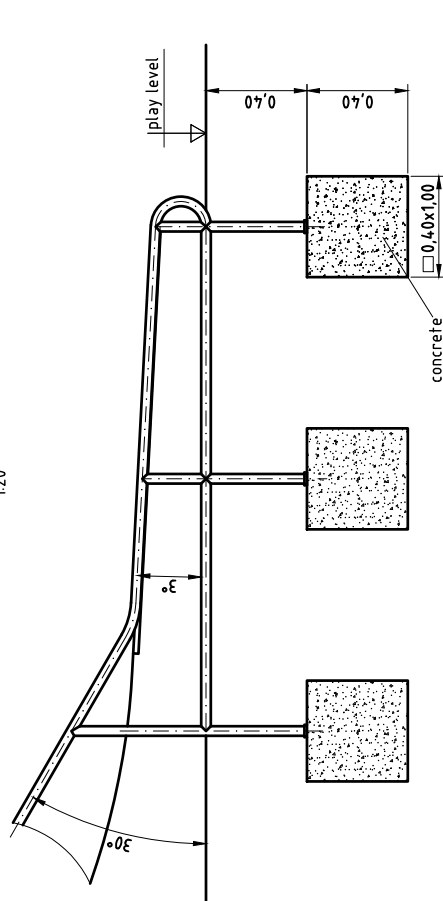
Due to the format size, this installation is not to scale (apart from single details).

Please refer to the dimensions indicated.

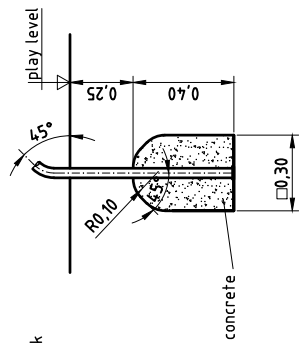
An installation documentation scale 1:50 can be submitted on request.



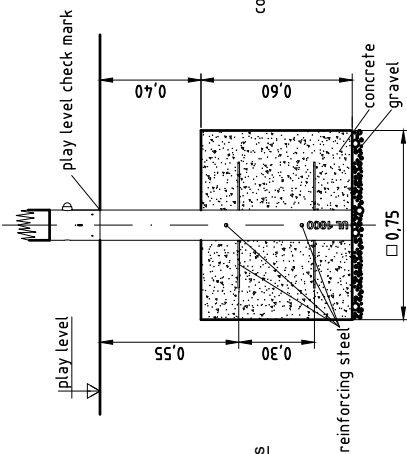
type C (3x)  
1:20



type B (3x)  
1:20

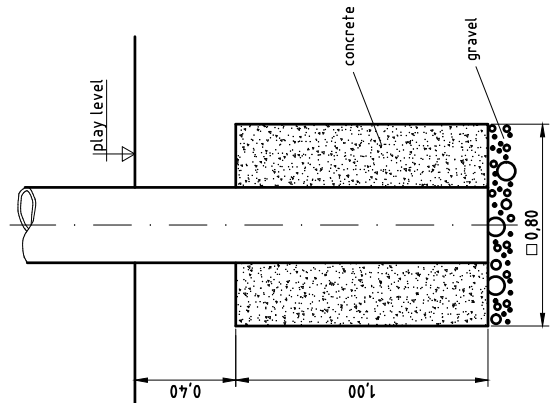


type A (7x)  
1:20

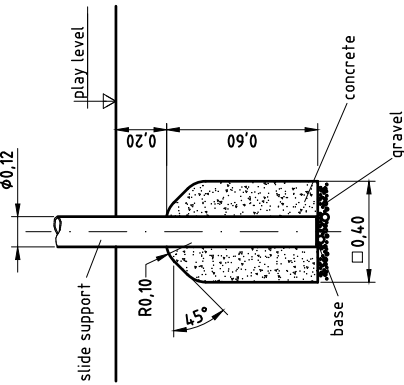


foundations (on site)  
 7x 0.75 x 0.75 x 0.60 m  
 3x 0.30 x 0.30 x 0.40 m  
 3x 1.00 x 0.40 x 0.40 m  
 1x 1.00 x 0.80 x 0.80 m  
 1x 0.40 x 0.40 x 0.60 m  
 1x 1.40 x 0.75 x 0.40 m  
 (approximate) concrete needs  
 4 m³

type D (1x)  
1:20

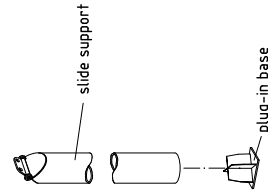


type E (1x)  
1:20

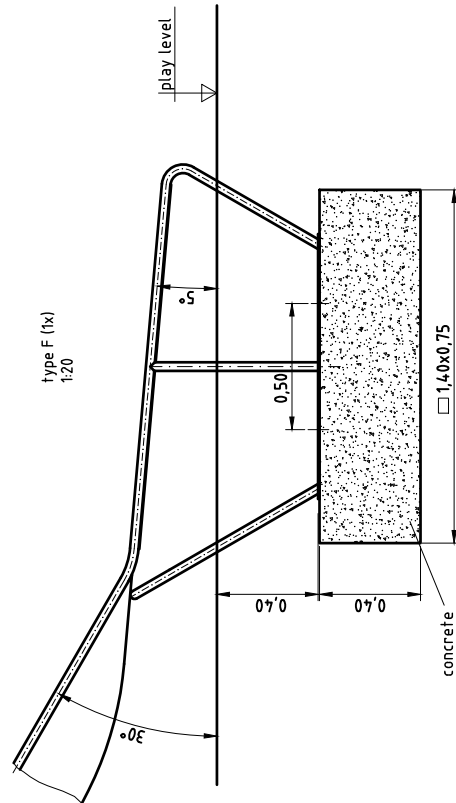


**Plug-in base for slide support**

1:20  
 To be mounted as follows:  
 If necessary, shorten stainless steel slide support to the required length (with adequate appliance e.g. angle grinder).  
 Insert base from below into the stainless steel post.



type F (1x)  
1:20



Item: **025350700**

Order:

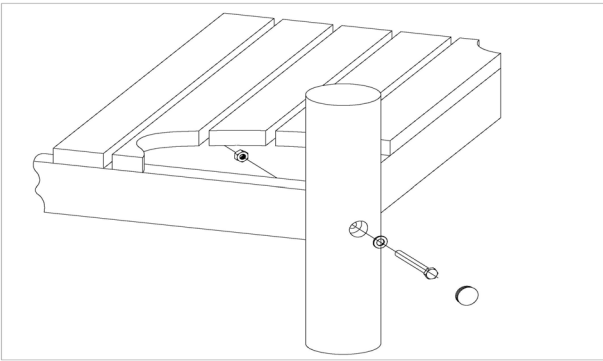
1295230

Play structure

Location:

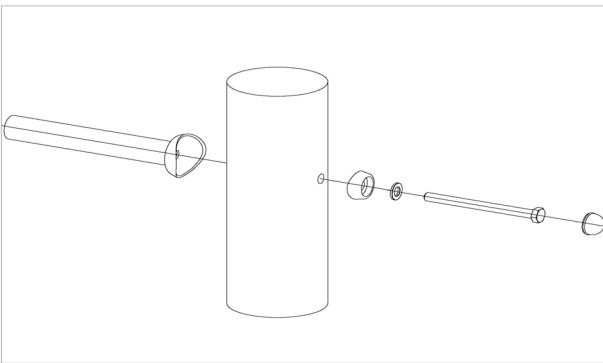
Building Project:

**33 x SFRS1200001 Platform at Robinia post, nut is platform-sided**



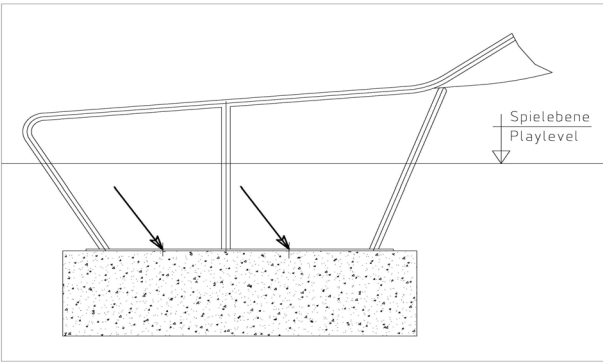
| per SC | Total | K&K-Item | Marking                                                                    |
|--------|-------|----------|----------------------------------------------------------------------------|
| 1 x    | 33 x  | 3430129  | Washer Ø 14 DIN1440 A2                                                     |
| 1 x    | 33 x  | 3430021  | Lock nut M12 DIN985 A2                                                     |
| 1 x    | 33 x  | 3300016  | Grey domed plastic cover cap SL 36 G                                       |
| 1 x    | 33 x  | 3400700  | Hexagon head screw M12 x 120 DIN931 A2 with screw security coating/FGB red |

**114 x SFRS1210001 Standard bolting of components to Robinia posts (non-countersunk drilling)**



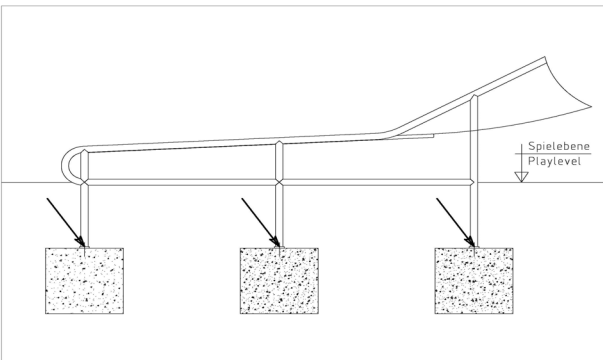
| per SC | Total | K&K-Item | Marking                                                                        |
|--------|-------|----------|--------------------------------------------------------------------------------|
| 1 x    | 114 x | 3300054  | Screw cap lower part, domed, M12                                               |
| 1 x    | 114 x | 3300055  | Screw cap upper part M12                                                       |
| 1 x    | 114 x | 3430025  | Washer Ø 13 DIN125 A2                                                          |
| 1 x    | 114 x | 3400702  | Hexagon head cap screw M12 x 160 DIN931 A2 with screw security coating FGB red |

**4 x SFXS1070008 Slide run-out section (midi) stone bolt assembly**



| per SC | Total | K&K-Item | Marking                                              |
|--------|-------|----------|------------------------------------------------------|
| 1 x    | 4 x   | 1070365  | Set of stone bolts for slide run-out section M12x160 |

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



| per SC | Total | K&K-Item | Marking                                              |
|--------|-------|----------|------------------------------------------------------|
| 1 x    | 6 x   | 1070365  | Set of stone bolts for slide run-out section M12x160 |



Item: **025350700**

Order:

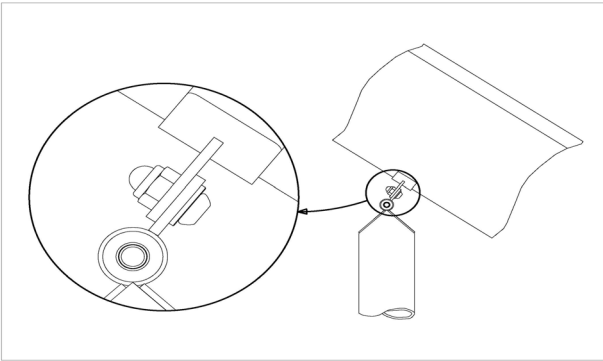
1295230

Play structure

Location:

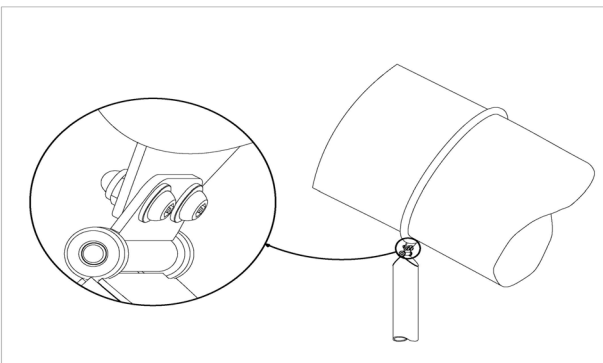
Building Project:

**2 x SFAS1070004 Slide support post below hill slide**



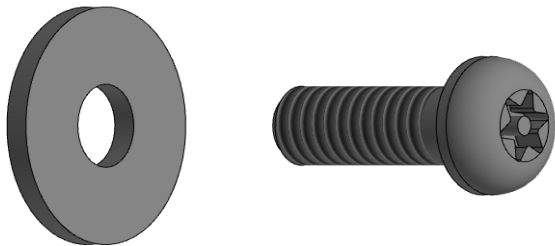
| per SC | Total | K&K-Item | Marking                                                           |
|--------|-------|----------|-------------------------------------------------------------------|
| 1 x    | 2 x   | 3430025  | Washer Ø 13 DIN125 A2                                             |
| 1 x    | 2 x   | 3400622  | Dome head security bolt M12x25 PinHexagon A2 safety coated thread |

**2 x SFAS1070005 Slide support post below tunnel slide**



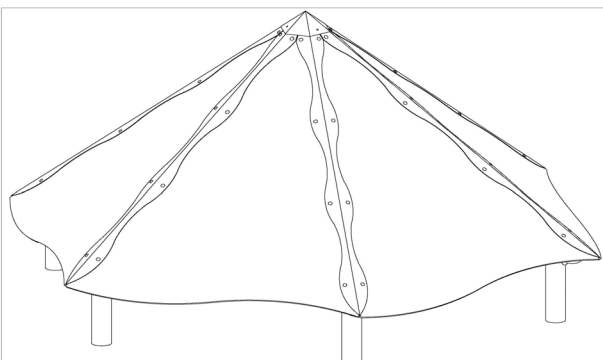
| per SC | Total | K&K-Item | Marking                                                           |
|--------|-------|----------|-------------------------------------------------------------------|
| 1 x    | 2 x   | 3430025  | Washer Ø 13 DIN125 A2                                             |
| 1 x    | 2 x   | 3400622  | Dome head security bolt M12x25 PinHexagon A2 safety coated thread |

**6 x SFAS1240032 Roof hood fastening on HPL panels**



| per SC | Total | K&K-Item | Marking                                     |
|--------|-------|----------|---------------------------------------------|
| 1 x    | 6 x   | 3430102  | Washer Ø 8.4 DIN9021 A2                     |
| 1 x    | 6 x   | 3400673  | Dome head screw M8x20 A2 Security Torx TR40 |

**48 x SFAS1240033 HPL panel with cover bracket on pipe support**



| per SC | Total | K&K-Item | Marking                                       |
|--------|-------|----------|-----------------------------------------------|
| 1 x    | 48 x  | 3430011  | hexagon cap nut M10 DIN986 A2                 |
| 1 x    | 48 x  | 3430014  | Washer Ø 10,5 DIN125 form B A2                |
| 1 x    | 48 x  | 3400138  | mushroom head screw square neck M10x30 DIN 60 |

Item: **025350700**

Order:

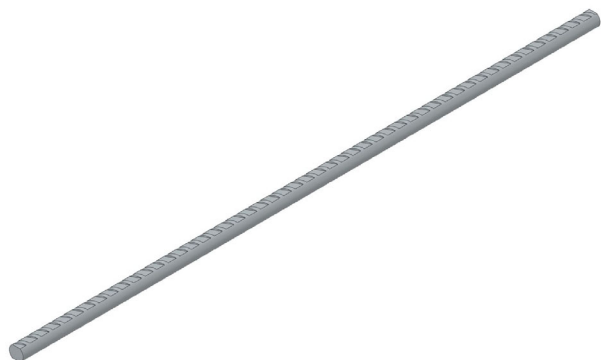
1295230

Play structure

Location:

Building Project:

**28 x 2130071 reinforcing steel bar Ø 12x500**



| per SC | Total | K&K-Item | Marking                            |
|--------|-------|----------|------------------------------------|
| 0,5 x  | 14 x  | 4130039  | Reinforcing steel BSt500S, Ø 12 mm |
| 0,09 x | 3 x   | 4130039  | Reinforcing steel BSt500S, Ø 12 mm |
| 2 x    | 56 x  | 10       | Zuschnitt                          |

**1 x SFWZ000001 Security TORX wrench TR40**



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

**1 x SFWZ000005 Allen key security hex socket AF8**



| per SC | Total | K&K-Item | Marking                           |
|--------|-------|----------|-----------------------------------|
| 1 x    | 1 x   | 3490057  | Allen key security hex socket AF8 |

**3 x SFWZ000012 Lubricating metal (30 g box) incl. brush**



| per SC | Total | K&K-Item | Marking                     |
|--------|-------|----------|-----------------------------|
| 1 x    | 3 x   | 5300039  | Lubricating metal box 30g   |
| 1 x    | 3 x   | 5200026  | Brush for lubricating metal |