### 4.7.1 Aerial Runway without ramp

Scope of delivery

| Amount | Denomination | Measure |
| :---: | :--- | :---: |
| 4 | stand posts / start station at 90 kg | 360 kg |
| 4 | stand posts / end station at 90 kg | 360 kg |
| $\mathbf{1}$ | cross beam / start station | 70 kg |
| 1 | cross beam / end station | 70 kg |
| $\mathbf{1}$ | main rope (aerial runway length $+1 \mathrm{~m})$ | 10 kg |
| $\mathbf{1}$ | box material cable railway incl. seat | 20 kg |
| Sum |  | $\mathbf{8 9 0} \mathbf{~ k g}$ |

All weights are approximate. The heaviest component is highlighted in bold.

## Tools

- spade, shovel, tape measure, ladder, hammer and spirit level, set hexagonal-spanner
- pipe / round bar / crowbar d = ca. 20 mm , I about 1.0 m for clamping the cable car
- socket wrench $13 / 17 / 19 / 24$ mm, screwdriver with insert Torx Bit (TX 10-30)
- $\quad 2$ persons ( 2 installers at 18 h ), telescopic loader with palette fork, mini excavators
- approx. concrete $4.0 \mathrm{~m}^{3} \mathrm{C}$ 20/25


## Assembling

- We recommend to the assembly and installation of the start station a telescopic loader.
- Connect the posts according to marking (Number on number and/or letter on letter // numbers indicate in brackets the screw length) with the supplied carriage bolts and distance sockets onto flat ground.
- In the foundation area of the post is to follow the included steel reinforcement.
- Check the distance between start and end station by using steel rope or tape measure (in accordance with the drawing). In an aerial runway length e.g. 30 m is the main rope length 31 m , so that there is a mounting flexibility of the rope and so it can be mounted correctly.
- Determine the foundation positions according to plan. Measures are to the check by the client/customer, because of the natural growth forms of the wood.
- Digging holes for the posts and bringing in gravel shift 10 cm in order to prevent stagnant moisture.
- Installation depths (cut) on the stand post are to consider.
- Lift the racks into the prepared holes and make them solid.

Attention: if not adequately secured play towers or attachment parts may be tipping!

- Set the cross beam according to the markings (letter to letter) in the racks.
- By moving and lifting the upright posts (racks) align the cross beam, sockets use with grommets between posts and beams and connect with accompanying carriage bolts.
- Manufacturing foundations according to drawing.
- After 3-5 days of curing time, tightening all screw joints and which fill game surface again.
- Transportation braces are to be removed after the arrangement provide by the client/customer.
- Notice: concrete needs about 28 days in order completely to harden.


Cable clamp on the drum to fixing the ropes

Teeth for the self-locking

Self-locking
(Loosen the screw size 10, size 17 screw loose)


- When the concrete has hardened, installation of the playing surface.
- Lead the riding cable from the start station with the free end through the hole of the cross beam and fix the thimble at the cable support with bolts (SW 24 mm ).
- The short spiral spring will be installed with the free end at first.
- The rope will be placed through the cable car by tipping the break of the cable car, then the rope gets through.
- Pull the extra strong spiral spring on the rope, rubber buffer in front.
- At the end station you will find the clamping device. There the rope has to be passed through the hole of the cross beam, then connect the rope with the clamping device.
- If the rope has to be reduced for reasons of space, please have an attention to the professional instructions and make new welding. For dissolving rope by a lack of sealing by the manufacturer no guarantee is given.
- Now the rope of the cable car can be clamped. Loosen the self-protection and use a 60 cm long tube or steel rod with a diameter of 20 mm (crowbar) The minimum distance between the substrate and plate seat (ground clearance) must be at least 35 cm , measured at each point at $69,5 \mathrm{~kg}$ load. The area between the frames varies according cable rider sagging.
- Make sure that the rope is wrapped around at least twice in the drum of the clamping device, only then the drum takes all the power and not the safety rope clip.
- Fix the safety rope clip and relax the drum by 1-2 teeth.
- Now pull tight the self-locking screws again.
safety rope clip


## Security guidelines



During assembly and transport on site, play towers and/or attachment parts must always be adequately secured, either through technology or through attached transportation bracing.

## Required safety areas/ falling space around equipment are indicated on the installation drawings.

Playground equipment with a potential height of fall of more than 600 mm and/or a forced movement require an impact attenuating/ shock-absorbing surface in the whole impact area below them according to the EN 1176 and EN 1177. (Non-shock-absorbing undergrounds are for example without limitation: bricks, stones, concrete, bitumen and wood.)

## Preventive maintenance instructions

An operational check of the equipment must be carried out 2 weeks after installation. Here the main attention should be paid to tight screw joints and stability. In general the equipment should be checked on a regular basis. A visual routine inspection should be carried out on a weekly basis. An operative inspection should be performed every 1-3 months and the general or main inspection has to happen on an annual basis.
We recommend to check stability of posts once a year and to expose foundations, let them dry and to repaint them also below ground level above the foundation with a solvent free glaze. (Further information concerning maintenance can be found in our Checklist for Maintenance/ Inspection, in our General Maintenance Notes and also in our catalogues, as well as on our website www.sik-holz.de/en)


