

Climbing pyramid 650 Art. 0100650

Installation and foundation plan



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1. Parts list

1 post made of galvanized steel	L=7350 mm, \varnothing =152,4 mm, weight approx. 140 kg
1 climbing net with 3 play levels	weight approx. 275 kg
1 plastic tube	L= 450 mm, \varnothing =200 mm
8 anchor shackles with chains, hot-dip galvanised	
8 chain 1000 mm x 10 mm long version	
8 shackle 12 mm	
8 turnbuckles	

2. Preliminary instructions

A minimum area (safety zone) with a diameter of 14400 mm is required for the installation of the climbing pyramid 650.

For a fall height of max. 2000 mm, safety surfaces acc. to EN 1176-1:2008 4.2.8.5 chart 4 are required, e.g. sand with a grain size of 0.2 to 2.0 mm.

The weight of the climbing pyramid, incl. posts and climbing net is approx. 415 kg.

Only use OEM spare parts for the climbing pyramid.

The climbing pyramid complies with EN 1176-1:2008 und EN 1176-11:2008.

3. Age restriction

The climbing pyramid 650 is suitable for children aged 6 years and up.

4. Installation instructions for the climbing pyramid

In order to ensure safety, it is essential to adhere to all specified dimensions for the foundations. Concrete of grade C20/25 must be used. Make sure about the safety area of $\varnothing 14400$ mm. Think about the maximal deep of the foundations of 1000 mm (cable, pipes or similar).

4.1 Establishing the foundation for the posts

Excavation of foundations (1200 x 1200 x 1000 mm), see *drawing 2*

Fill foundation area with 50 mm of concrete bring in reinforcement and fill another 100 mm of concrete. Allow to harden, see *drawing 3*

Determine the centre of the area, vertically align the plastic tube (L=450 mm, $\varnothing=200$ mm) and fix it in place. Concrete the foundations over to a height of 450 mm (flush with tube), see *drawing 3*. Allow the concrete to set completely!

Think about soil pressure of $\sigma_{zul} \geq 150$ kN/m² under the foundation!

Fixing the 8 anchor blocks

Excavation of foundations (1200 x 1200 x 1000 mm), see *drawing 4*

Think about soil pressure of $\sigma_{zul} \geq 150$ kN/m² under the foundation!

Dig a hole of 1200 x 1200 x 1000 mm for each anchor block, see *drawing 4*

Fill in each hole with concrete 550 mm high and install the anchor shackles centrally as shown in *drawing 4*. Bring in reinforcement. Fill another 50 mm of concrete. Allow the concrete to set completely!

4.2 Erecting the climbing pyramid

For erecting the climbing pyramid 650 4 persons are necessary. Also a forklift or similar machine with a height of 7000 mm is to be used.

Place the post in the plastic tube, vertically align and fix it. Fill the remaining space in the tube with concrete and allow the concrete to set completely (see drawing 3).

Place the cap of the climbing network on the post with a lifting device. Make yourself sure that the mast is inserted into the black centre rings only and not through meshes of the climbing network. Each black centre ring should be positioned between two red lock rings.

Loosen the securing ropes and let the network down carefully. Do not let it fall down. Weight approx. 275 kg.

Fasten the turnbuckles to the network and to the chains connected to the anchor blocks.

Tighten the turnbuckles until the ropes running to the cap are rigid and give approx. 4 cm under pressure. – Ensure that all 8 ropes are evenly tensioned! If tightening the turnbuckles once does not result into enough tension, secure Pyramid net with ratchet strap to the shackle connected to the anchor, unscrew turnbuckle completely and connect it with the anchor chain again as many links below old position as you can reach. Then tighten the turnbuckle again. Repeat if necessary until ropes are rigid as described before.

Set chains of rope ladder and climbing net in concrete, see drawing 5 or 6. Fill up the remainder of the foundation area with safety surface acc. to EN 1177.

Installation of lock rings

Carry out the following working steps extremely conscientiously!

Position the lock rings such as the black centre ring has the same level as the outer rope ring which is carrying the net play level. Insert the lock ring with collar into the centre ring from the bottom. The top lock ring must be positioned right on the collar of the bottom one. Now the black centre ring is positioned right between the two lock rings.

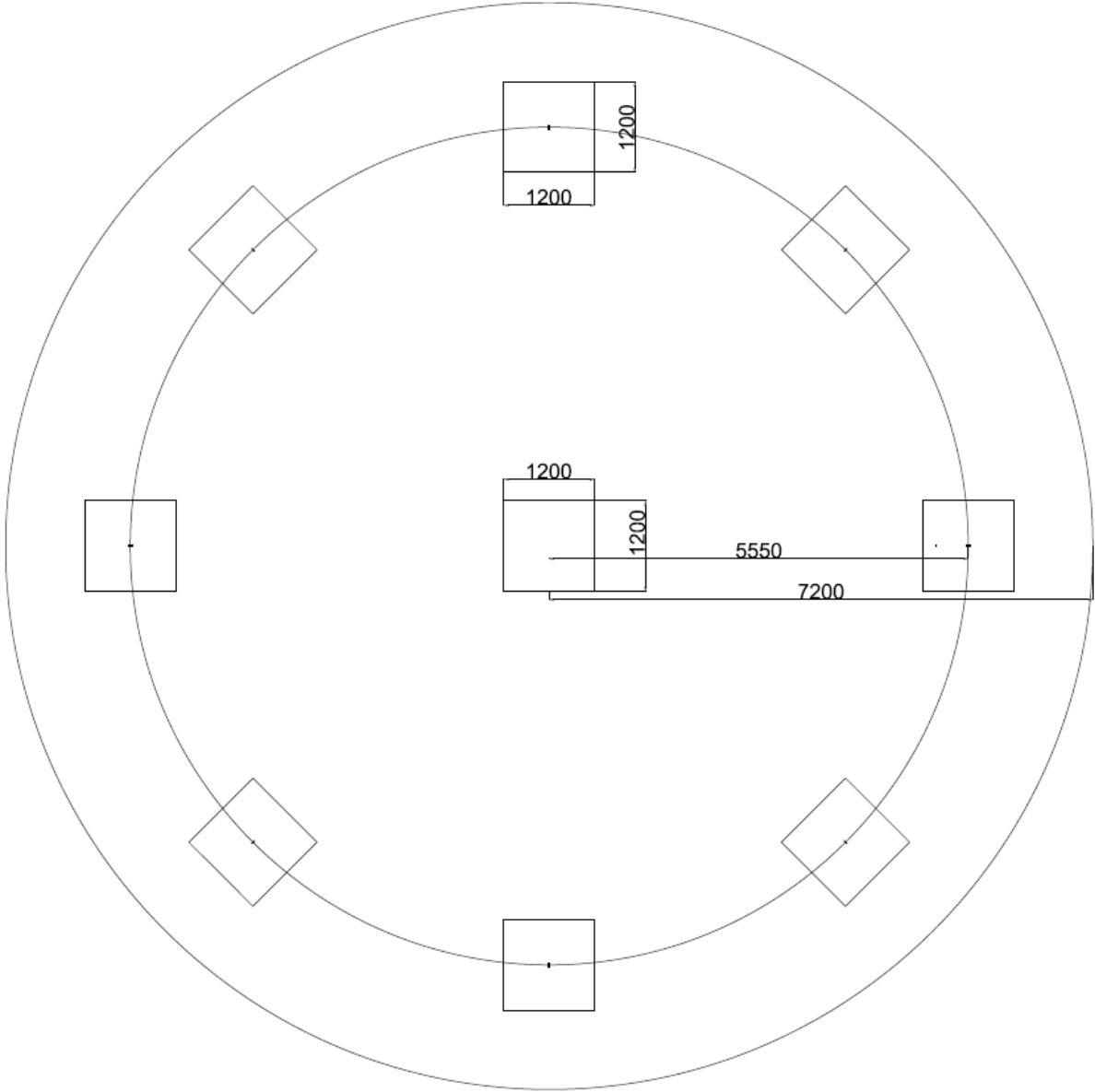
Pull the headless screws evenly and firm. Start with the lock ring with collar. Give half a turn to each of the pre-installed headless screws one after the other. Repeat until all headless screws are tight. Now the lock ring is positioned rectangular to the post and every part of the lock ring has an even distance to the post. If not, unscrew the headless screws and repeat.

Position the lock ring without collar right on the collar of the other one. Repeat installation of screws as above.

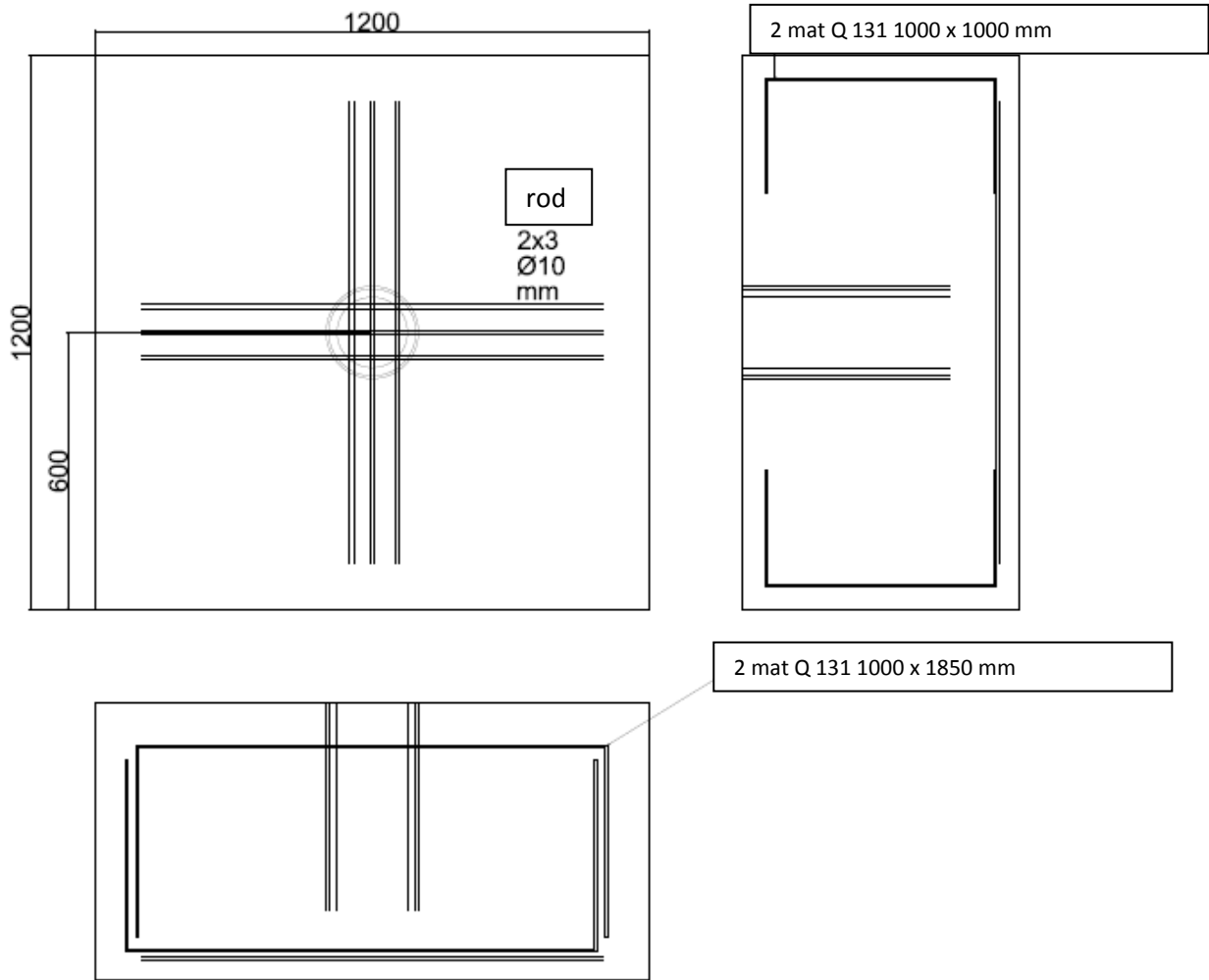
If the lock rings are installed correctly there is only a little space of 1-2 mm left between the lock rings and the centre ring.

Check if the centre ring can be moved.

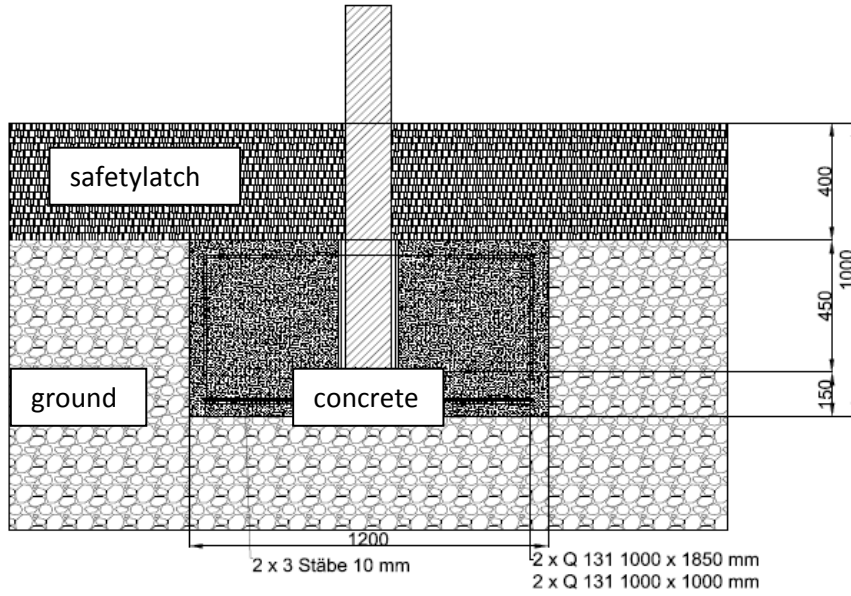
5. Drawings



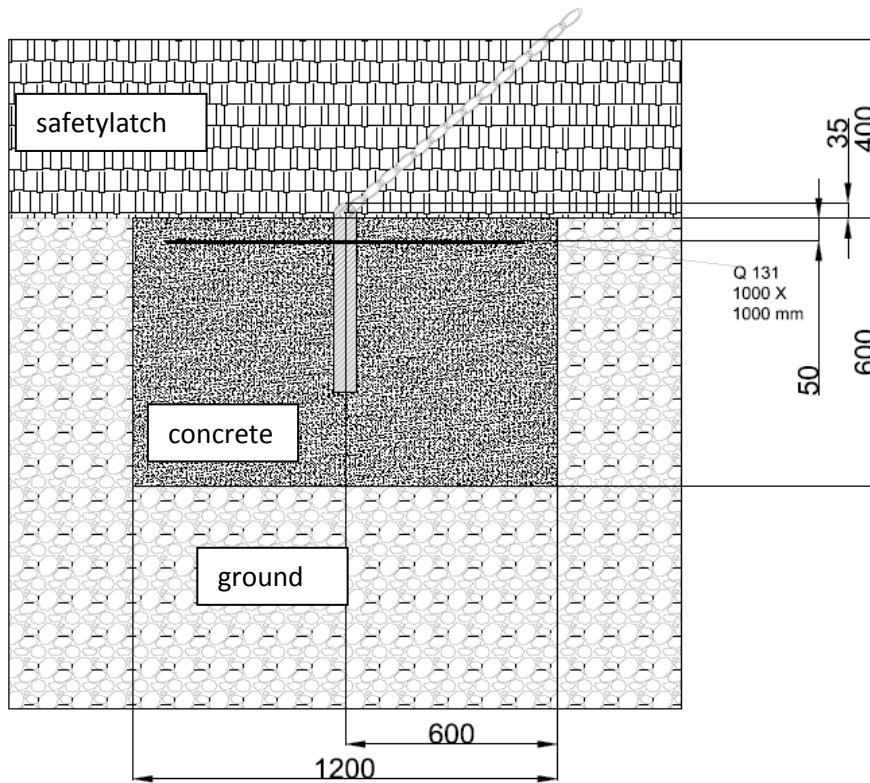
Drawing 1: foundations



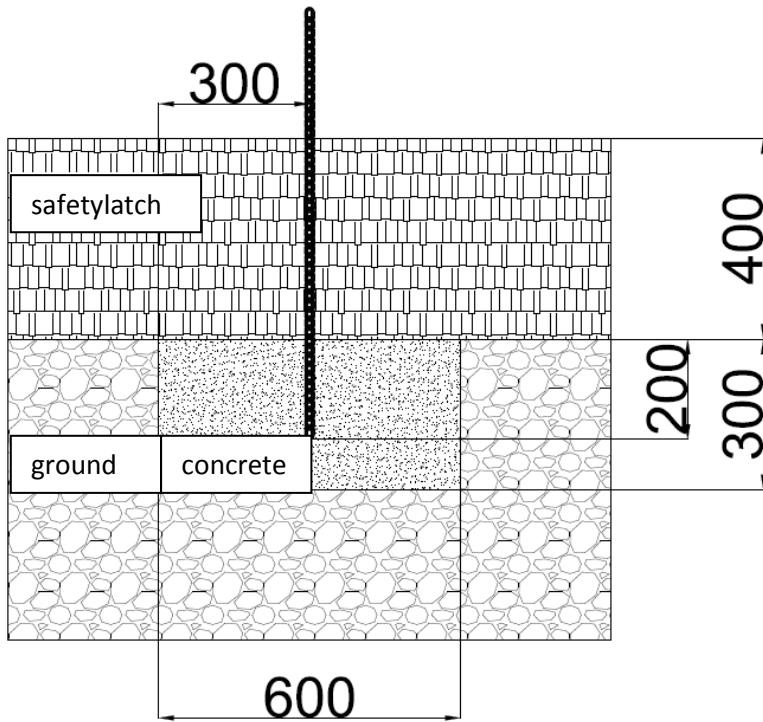
Drawing 2: Foundation post with reinforcement



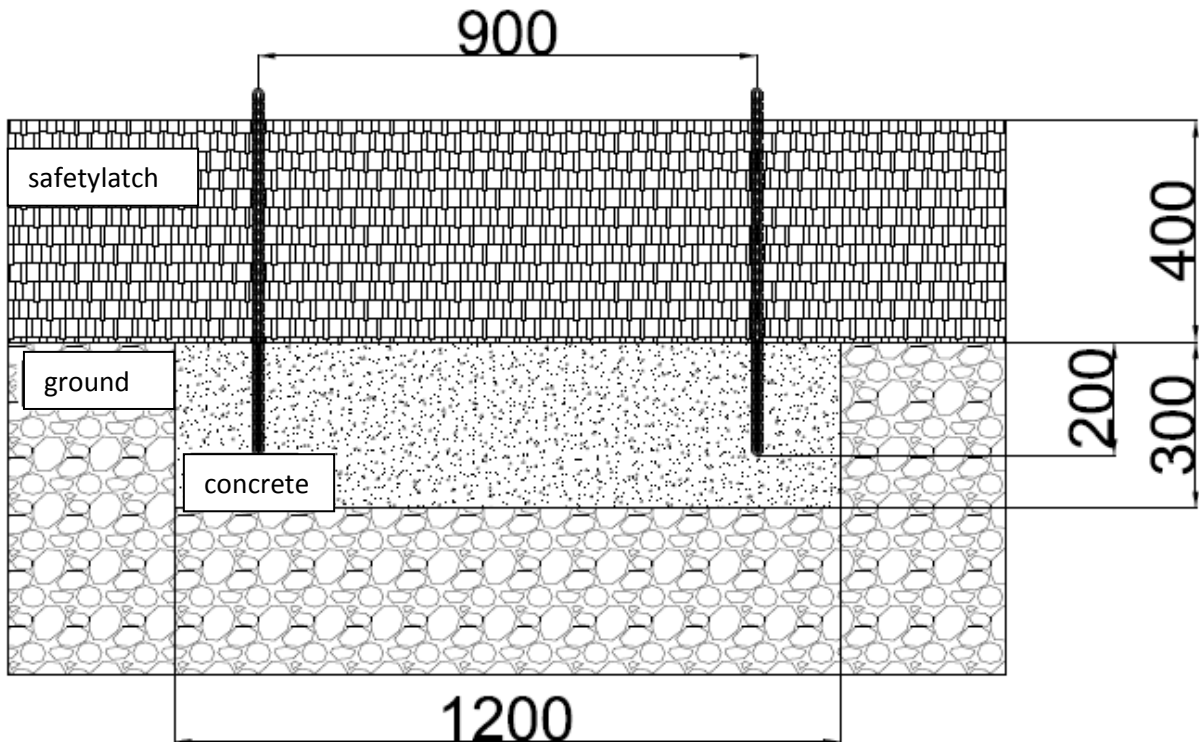
Drawing 3: Foundation post



Drawing 4: Foundation anchor



Drawing 5 Foundation rope ladder



Drawing 6: Foundation climbing net

6. maintenance instructions climbing pyramid 650

N. U.: Normal usage

Ex.U.: Extrem usage

Visual inspection of fall protection and the safety surface. Remove obvious hazards that f. e. have been caused by vandalism.

Maintenance interval: N. U.: weekly, Ex. U.: daily

Screws and other connection (T-connector, balls etc.) check if the connections are mechanically secured.

Maintenance interval: N. U.: monthly, Ex. U.: 14 days

Check ropes for damage. Check tearing strenght of ropes. If necessary use hot air blow dryer.

Maintenance interval: N. U.: quarterly , Ex. U.: monthly

Check metal surface for scratches, cracks, rust and burrs etc. and, if necessary. Repair. Replace if badly damaged by original spare parts.

Maintenance interval: N. U.: quarterly , Ex. U.: monthly

Check stability of the foundations. For this purpose, the support posts to top Exposing foundation. Then backfill again.

Maintenance interval: N. U.: six-monthly , Ex. U.: quaterly

Clean the complete installation and maintenance / repair of the safety area.

Maintenance interval: N. U.: yearly , Ex. U.: six-monthly

7. Safety and user information for climbing pyramid 650

Always comply with the following safety and user information:

- Open light or fire, burning cigarettes, etc., knives or other sharp-edged or long and sharp objects are prohibited when climbing!
- Do not wear high-heeled or sharp-edged shoes, stiletto-heeled shoes or rollerblades when climbing!
- Do not cut or set fire to ropes!
- Do not loosen screws or nuts on the shackles, turnbuckles or spherical and T-connections!
- Do not saw into strands and/or loosen their screws!
- Do not climb onto the top cap!
- Do not jump of the pyramid or push other climbers!
- Do not eat or drink on the pyramid.

8. Changes

01.05.2009 Company's name

01.06.2009 EN 1176-1:2008 and EN 1176-11:2008

17.09.2009 2. Preliminary Instructions: Safety surface

17.09.2009 1. Parts list: Turnbuckles

30.04.2010 3. Age group

09.03.2011 4. Personnel and equipment requirements

09.03.2011 4. Erecting the climbing pyramid, point e.

