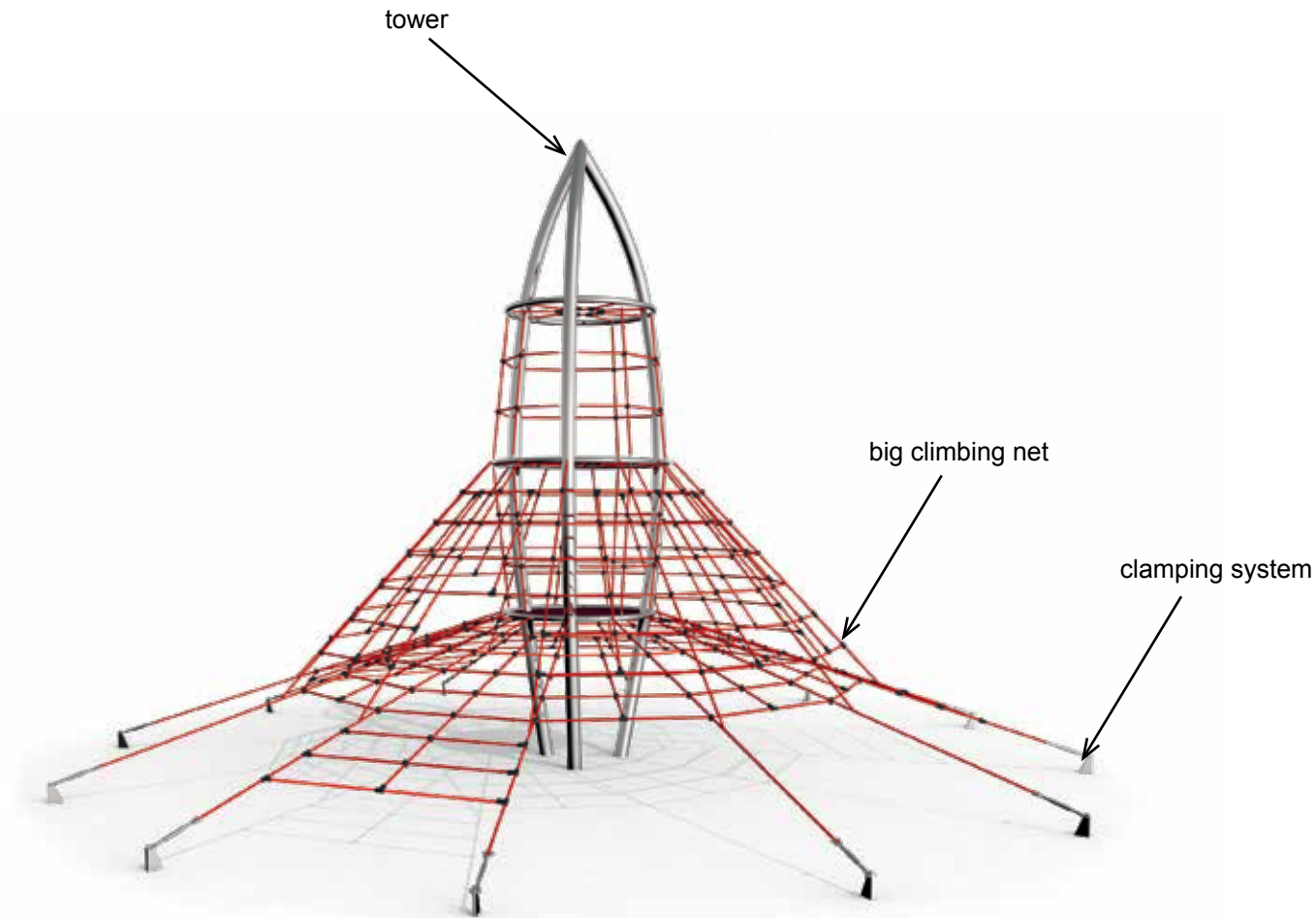


# Mounting instructions for climbing equipment „astrum 1“

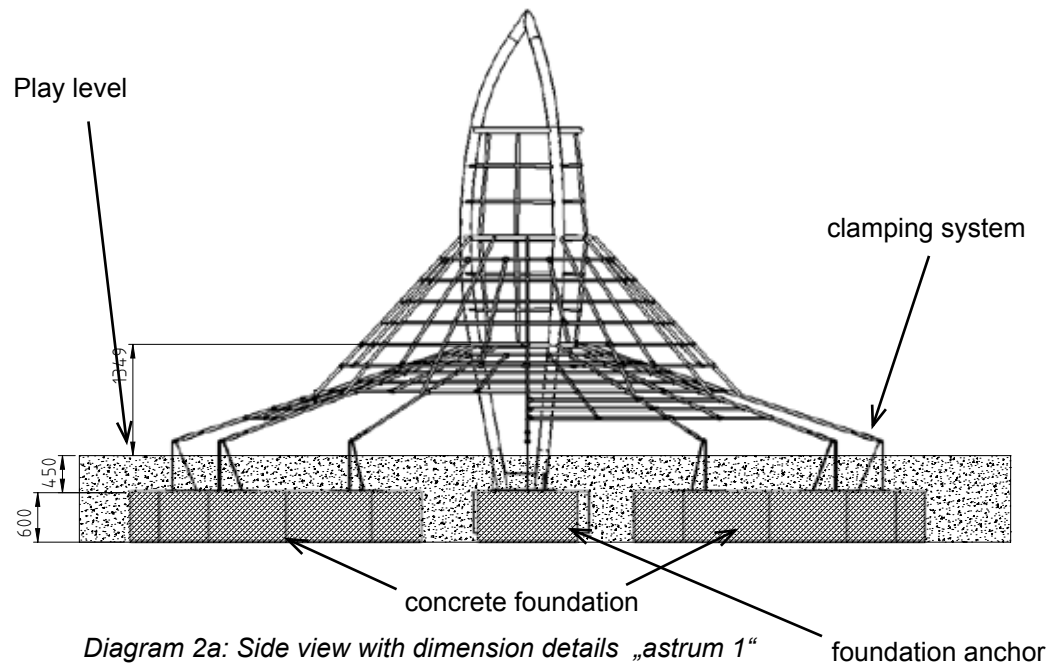
Item-No. 51 5620 401



*Diagram 1: Overall view of the play equipment*

# Mounting instructions for climbing equipment „astrum 1“

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1. Select the play equipment location in consideration of the required safety area (see diagram 3:  $\varnothing 12000\text{mm}$ ).
2. Carry out excavation work for 5 foundations as shown in Diagram 2a and 2b. After excavation, compress the foundation floor.  
**Note:** The climbing equipment is only available in the installation depth of 450. The combination equipment is built in on the play level. Pay attention to items marked „game level“ of play equipment!
3. Setup the 12 foundations (LxBxH 1200 x 1200 x 600mm) in a circle and the main foundation (LxBxH 1400x1400x600mm) acc. to the dimensions indicated in diagram 2a and 2b in the quality class C 20/25 with horizontal reinforcement. It shed the supplied anchor bolts with the foundation that the upper angle frame is horizontal and flush with the foundation surface.  
**Attention:** Take care that both of the holes with a smaller distance of the foundation anchor are parallel to one of the outer foundations (see the extract in diagram 2b, Position 10)

## Reinforcement plan:

Concrete foundation with reinforcement

Main foundation: BSt 500S

Ever 4 stirrups  $\varnothing 8$  mm lengthwise and cross

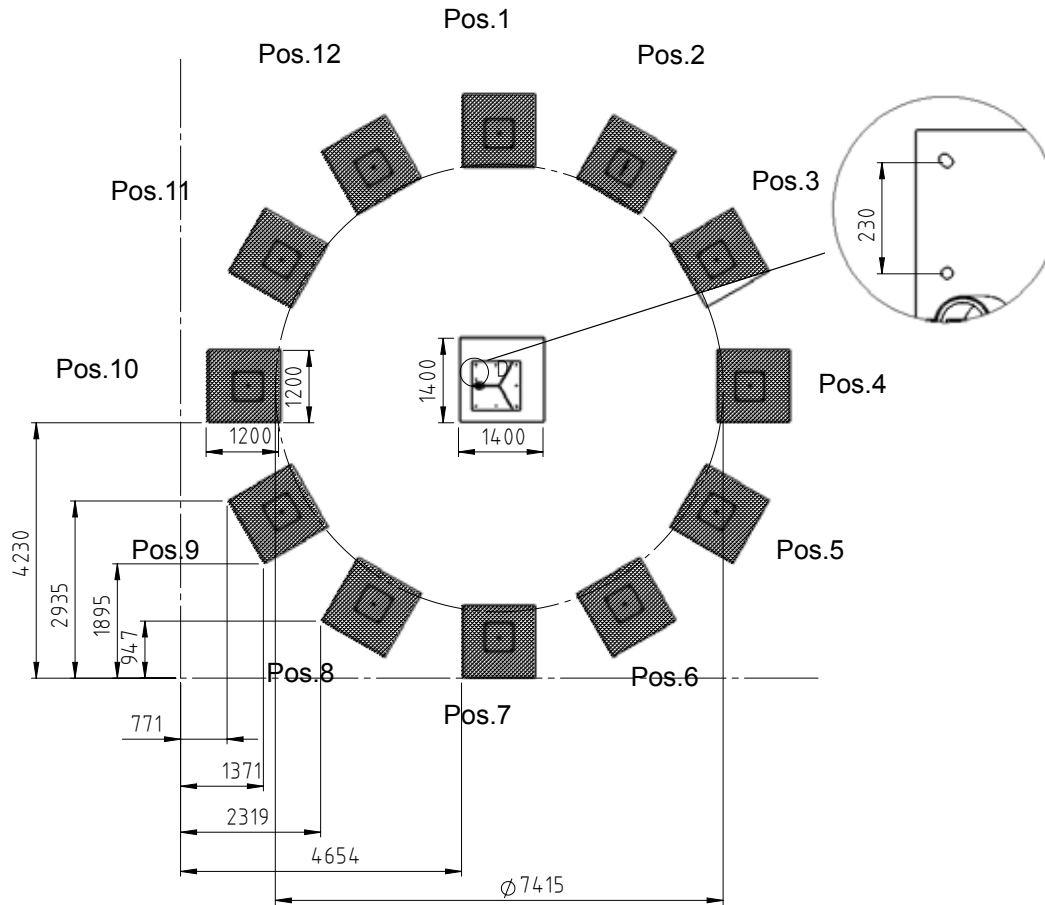
Concrete cover  $h' = 3$  cm

Concrete quality class C 20/25

Foundations for attachment parts are no-reinforced

# Mounting instructions for climbing equipment „astrum 1“

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4. After a setting period of 10-14 days, depending on weather conditions and foundation size - clean the surface of the foundations and start with the installation of the climbing equipment.
5. Put the big net circularly around the main foundation. Take care that the long, starlike struts lies at the bottom of the net (check diagram 2a and 1).
6. Place the tower at the main foundation and angle it according to the foundation anchor and screw it with the nuts included in the delivery.  
**Note:** Take care that the tower is rectified horizontally onto the foundation. A subsequent alignment with the ropes is not possible and strongly advised against doing it.
7. Hook the big climbing net at the intended locations at the tower and net.
8. Pull the suspended climbing net starlike externally, considering the exact orientation of the ropes.  
**Note:** The net connectors should be parallel to the respective foundation to avoid lateral tension.
9. Place the net clamping system at every foundation and hook in the net.
10. Fit the first clamping system (Pos.1) onto the foundation. Avoid sagging of the rope.
11. Establish the tension with three ropes which are arranged in a triangle (Pos.1, Pos.5 and Pos.9, see diagram 2b). Avoid sagging of the ropes, but make sure that the tower is still upright.

Diagram 2b: Top view

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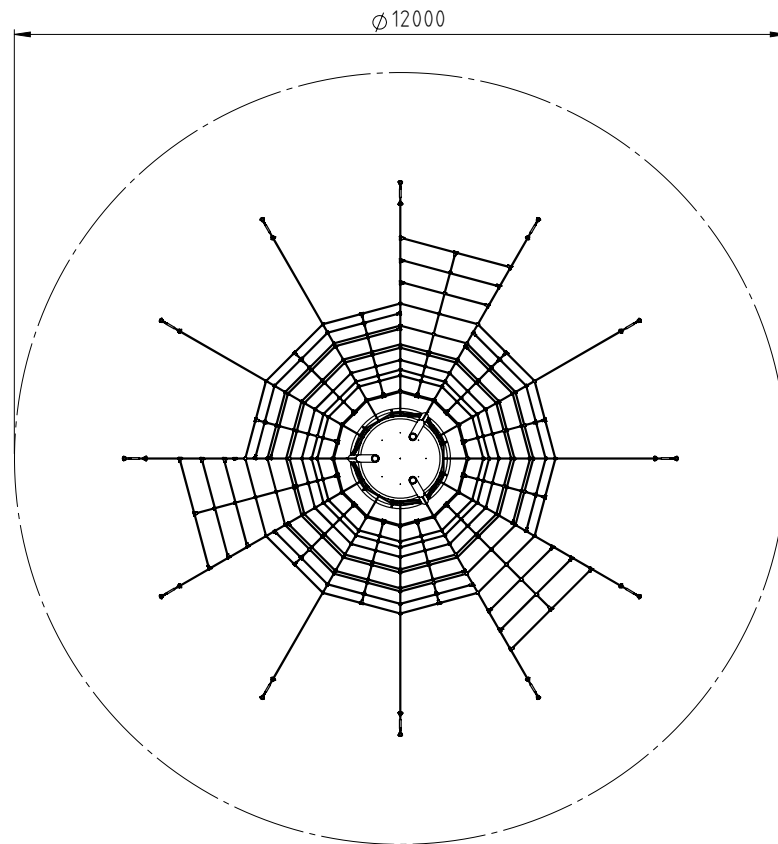


Diagram 3: Top view with safety area

12. Establish the same tension with three ropes which are arranged in a triangle (Pos.7, Pos.3 and Pos.11, see diagram 2b). Avoid sagging of the ropes, but still make sure that the tower is still upright.
13. Mount all the other clamping systems and span them.
14. Fill up and compress the holes between the foundation and the foundation hole with the excavation.
15. Seal the foundation with the safety cover required for the height of fall indicated.  
**Critical drop height: 800 mm.**  
Recommended surface material: grass, sand, wood chip, gravel, synth. fall protection.
16. Do not allow children to use the equipment before the installation has been finished.
17. During the first days of usage, it is possible that the rope elongates. A few days after the first use, check the ropes and if necessary re-stress the rope.

**Note:** We suggest to elongate the rope during winter with month below freezing point to prevent extra burdens to the foundations and the platforms.

# Mounting instructions for climbing equipment „astrum 1“

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**Attention:** If the play equipment has been incompletely installed or partly dismantled when carrying out maintenance and repair work, this may lead to particular risks of injury for the user. For this reason, make clearly visible that the equipment shall not be used in such cases.

**NOTE:** Play equipment, which contain components made of stainless steel should not come with „normal“ steel parts in contact. Those steel parts may rub off and leave small steel particles in combination with moisture brown rust stains. If such corrosion occur on stainless steel parts, they are fine with an abrasive (240 grit) to remove.

Please take care when transporting and setting up the fact that the components are made of stainless steel with no „normal“ steel parts in contact.

In order to preserve a good visual appearance of your stilum playground equipment over a long period one should take care of maintenance of the stainless surface even despite of their corrosion resistance.

Especially areas, which can not be reached by rainfall should be frequently cleaned from dirt and deposits due to air pollution and dirt caused by the atmosphere.

Light soiling can easily be removed by using a high pressure cleaner.

For persistent deposits use a clean cloth moistened with a special liquid cleaner (e.g. on phosphoric acid) and rinse off with clear water after a short application time. During cleaning with mild abrasive components, only wipe over stainless steel surface in polishing direction.

For heavily soiled surfaces, polishes can be used (e.g. for cleaning chrome on cars) or for greasy and oily dirt alcoholic cleaning agents and solvents (e.g. ethyl alcohol, isopropyl alcohol or acetone).

However, it should be noted that the dissolved soiling is not spread over the surface again.

Do not use any chlorid or hydrochloric containing cleaning products nor scouring powder, bleaching - or silver polish cleaner. Cleaning intervals depend on type and degree of soiling as well as on demands made on optical characteristics.

Therefore cleaning is advisable at intervals of six to twelve months – whereby in the case of strong soiling it is appropriate to clean the playground equipment at intervals of 3 to six months.