Mounting instructions for climbing equipment „astrum 2“

Item-No. 51 6522 401

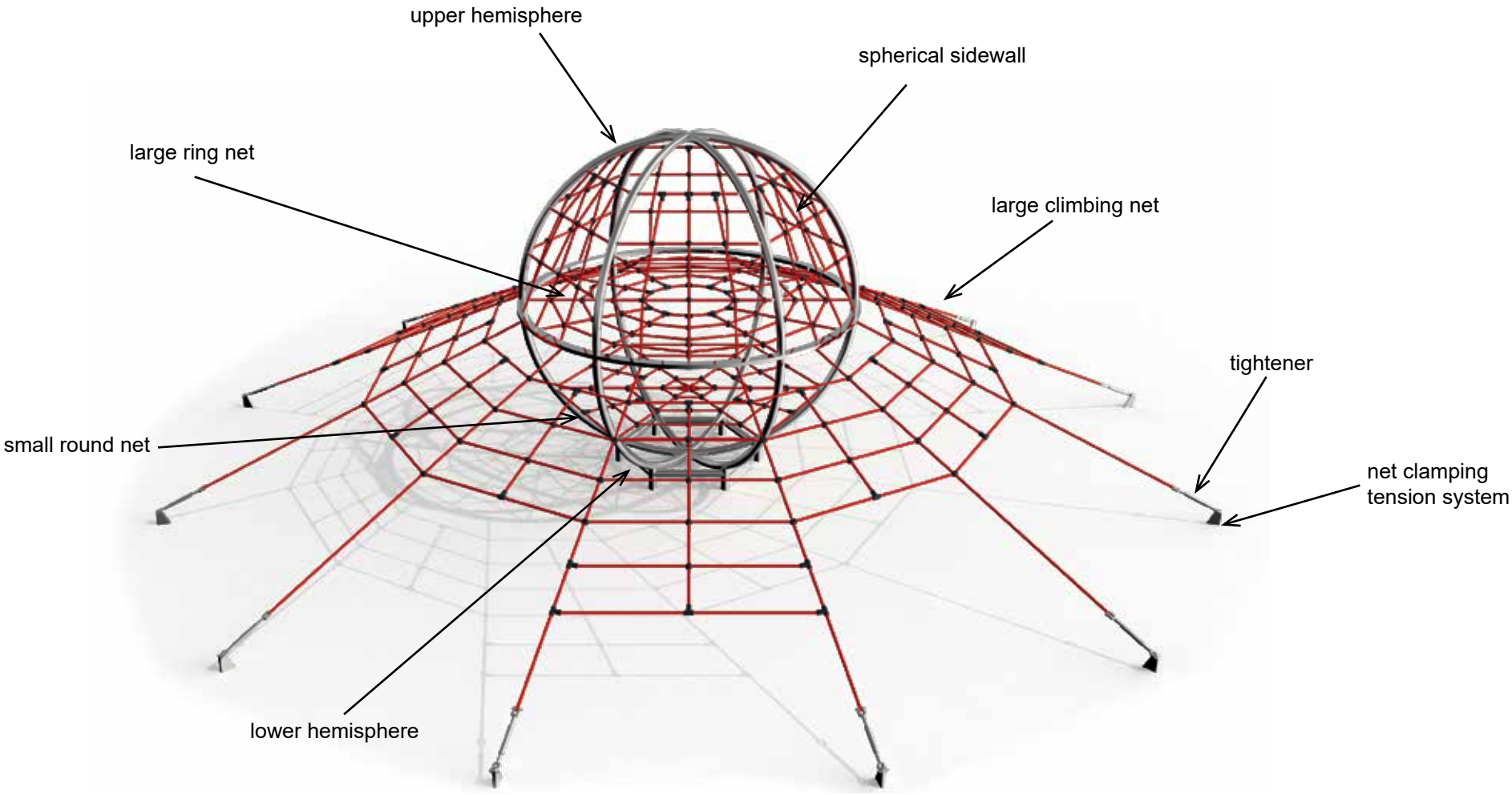

Diagram 1: Overall view of the play equipment

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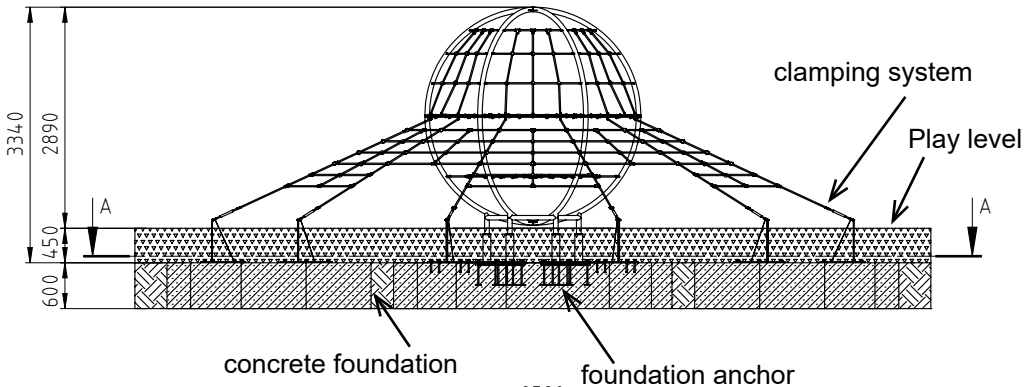

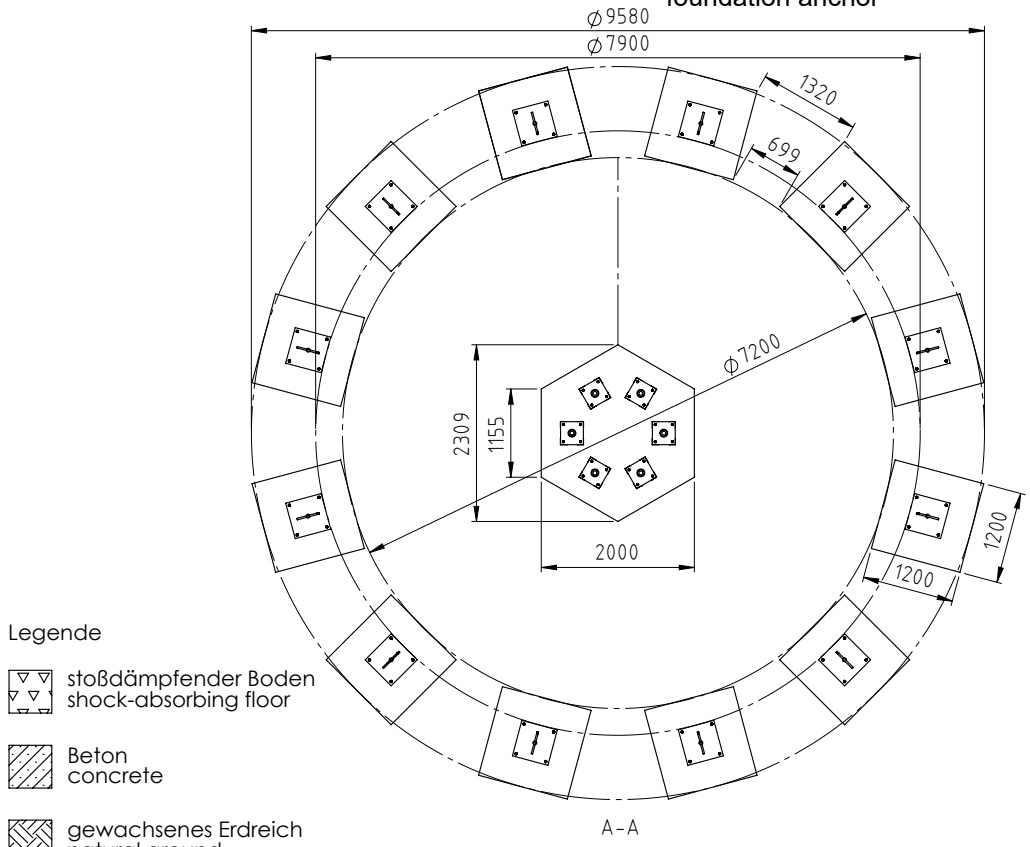

Diagram 2: Foundation plan

1. Select the location of the play equipment taking into account the required minimum space (see diagram 3).
2. Carry out excavation work for foundations as shown in diagram 2.
   After excavation compress the foundation floor.
   Note: The climbing equipment is only available in the installation depth of 450 mm. It is built in at play level. Pay attention to items marked „play level” at play equipment!
3. Fix the foundation anchors at the bottom plates of the lower hemisphere.
4. Setup the 12 foundations in a circle and the main foundation - **consider position of hexagon form!**) acc. to the dimensions indicated in diagram 2. Support the lower hemispher at installation height so that the upper ring is completely horizontal (spirit level). Pour the foundation anchors with the hexagon foundation in such a way that the upper angle frame is flush with the foundation surface.

Reinforcement plan:

Concrete foundation with reinforcement

Main foundation: BSt 500S
Stirrups Ø 8 mm lengthwise and cross
Main reinforcement lengthwise Ø 14mm
Concrete cover c_{nom}= 30 mm
Concrete quality class C 25/30

5. After the setting time of 10 - 14 days - depending on weather and size of the foundation - remove the supports and fill up and compress the holes between the foundation and the foundation hole with the excavation.
6. Clean the surface of the foundations and start with the installation of the climbing equipment.

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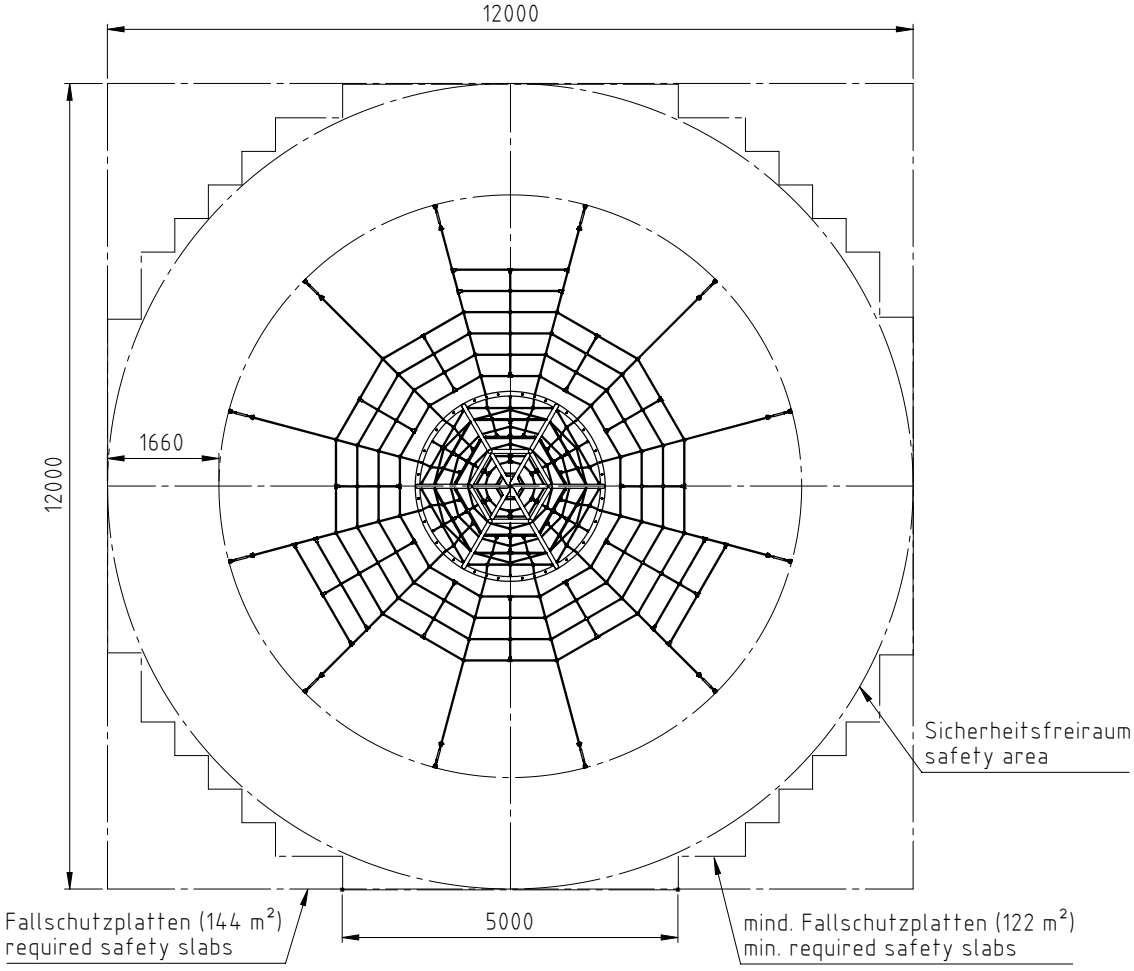

Diagram 3: Top view

7. Lay the large climbing net (diagram 4) in a circle around the lower hemisphere on the floor. Make sure that the star-shaped long struts are below the circular cross struts.
8. Place the upper hemisphere on the ring and screw together using the screws, washers and nuts provided.
9. Fasten the large ring net (diagram 5) with the 12 shackles to the inner flabs of the ring in the upper hemisphere.
10. Fasten the 6 spherical side walls (diagram 7) of the upper hemisphere to the respective flabs of the bent tubes and on the ring with the shackles.
11. Mount the small round net (diagram 6) with 6x3 shackles on the lower flabs of the lower hemisphere.
12. Attach the large climbing net to the flabs of the lower hemisphere with the 12 shackles welded down to the ring.
13. Pull the large climbing net in a star shape outwards. Note the exact alignment of the net strands to the foundations.
    Note: The net connections should run parallel to the respective lug connection to avoid lateral tension.
14. Place the net clamping tension systems on each foundation and attach the 12 net ends with the tightener.
    Note: The tightener should be slack to enable subsequent tensioning.

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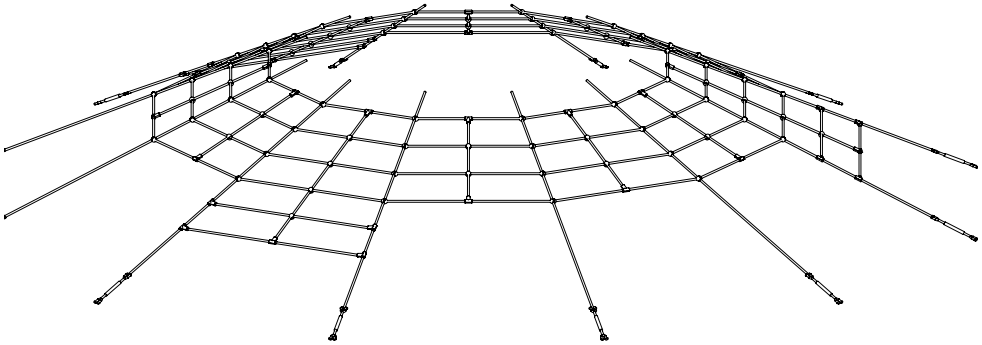

Diagram 4: large climbing net

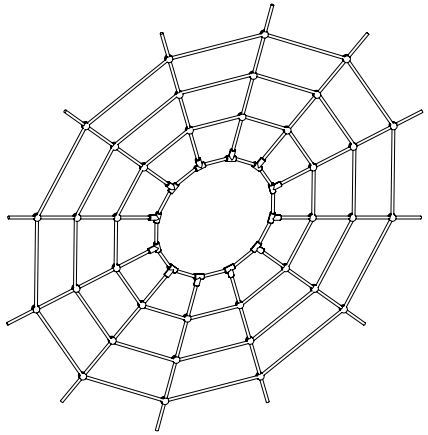

Diagram 5: large ring net

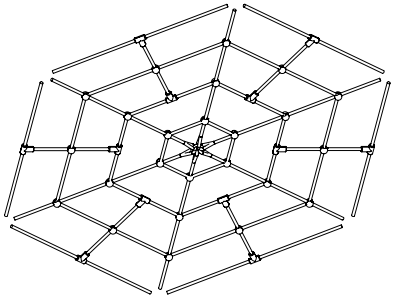

Diagram 6: small round net

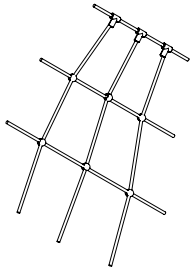

Diagram 7: 6x spherical sidewall

15. Fix the first tension system in the middle of the foundation in such a way that sagging of the net strand is avoided but not too much tension is built up yet. Fasten with the heavy-duty dowels supplied.
16. Fasten the subsequent tension system opposite in the same way. The tension is built up evenly all around. Make sure that the strands do not sag and the ball tower is still in an upright position. Fasten with the heavy-duty dowels supplied.
17. After complete fastening in the foundations, retighten the ropes with the tightener.
18. Cover the entire impact area with fall protection according to the required drop height in accordance with EN 1176-1.
    Critical drop height: 850 mm.
    Recommended surface material: sand, wood chip, gravel, synth. fall protection.
19. Do not allow children to use the equipment before the installation has been finished.
20. 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 recommend to enlongate the ropes a little during the winter months when temperatures drop below freezing to prevent excessive tensile forces on the uprights and the foundations.

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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 romoved 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 three to six months.