

CALIBAN ROPE PYRAMID ASSEMBLY INSTRUCTION

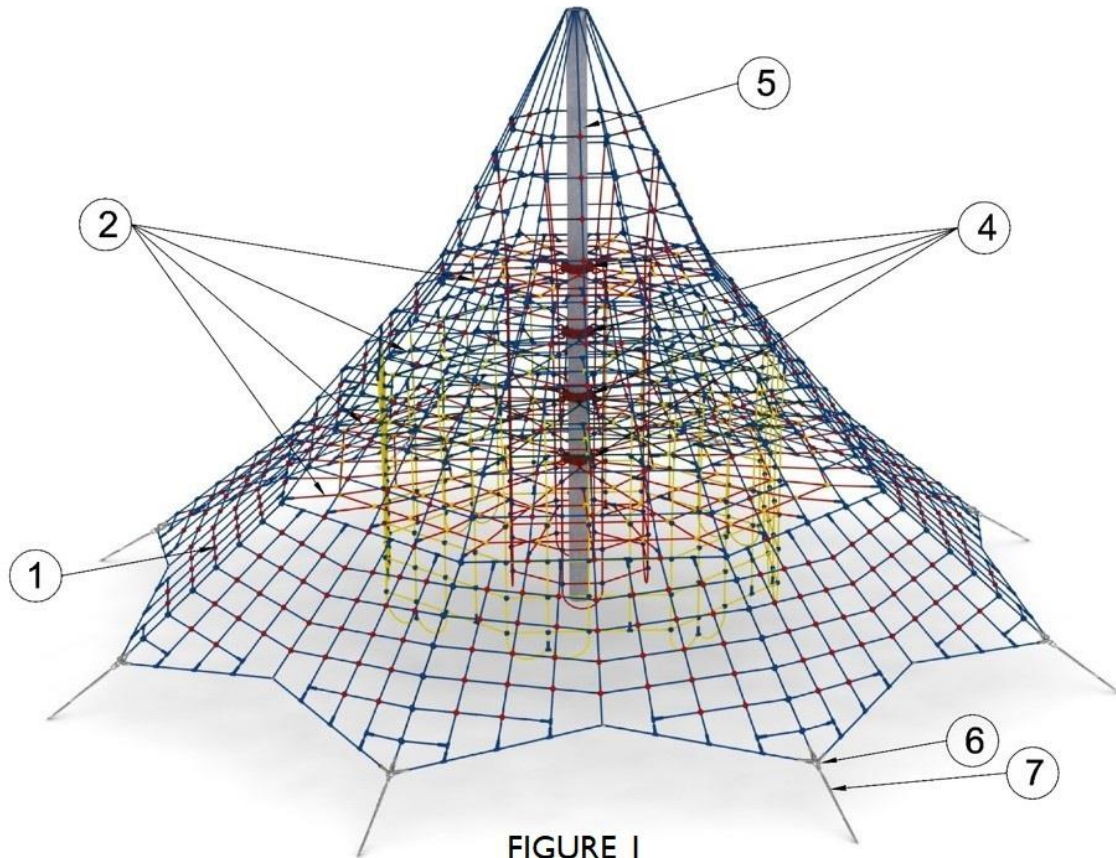


FIGURE I

Dimensions of the device:

Length- 12.3m

Width- 12.3m

Height- 7m

Minimum space- circle with a radius of 6.9m

Free fall height- 2m

Age group- 5 to 14 years old

Depth of foundation- 1m

The fall area should meet the conditions of a shock-absorbing surface for a height of 2m - this is, for example, sand, gravel or artificial shock-absorbing surface.

Installation requires the arrival of heavy construction equipment.

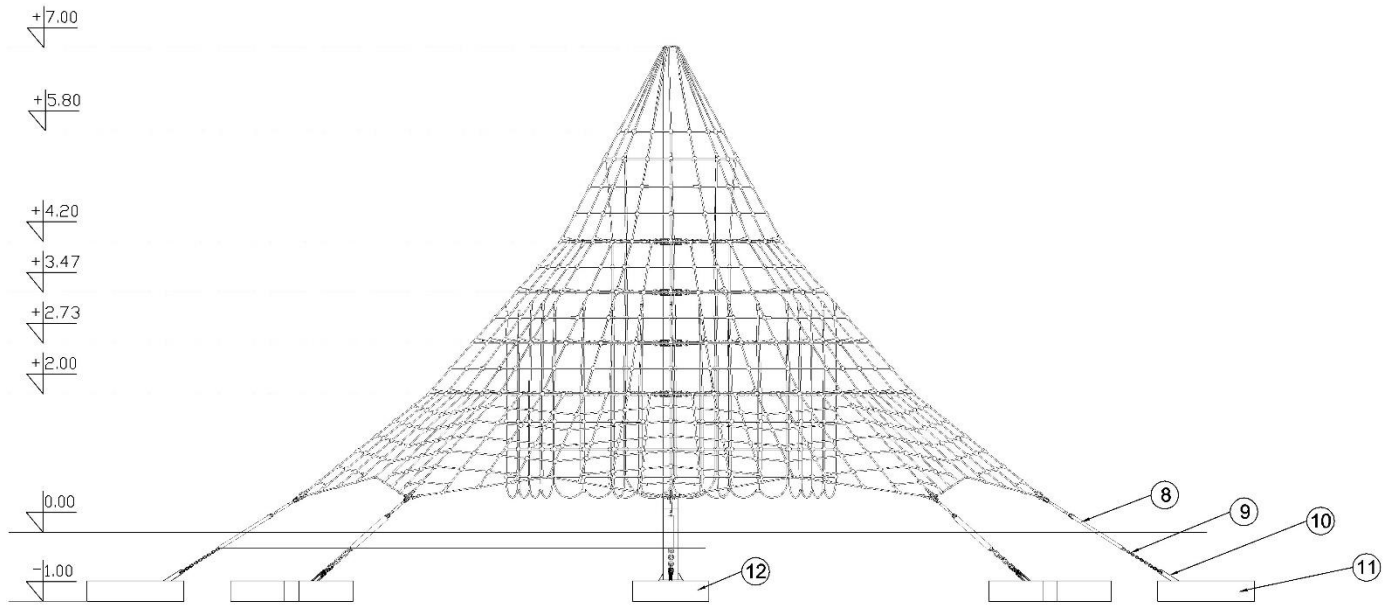
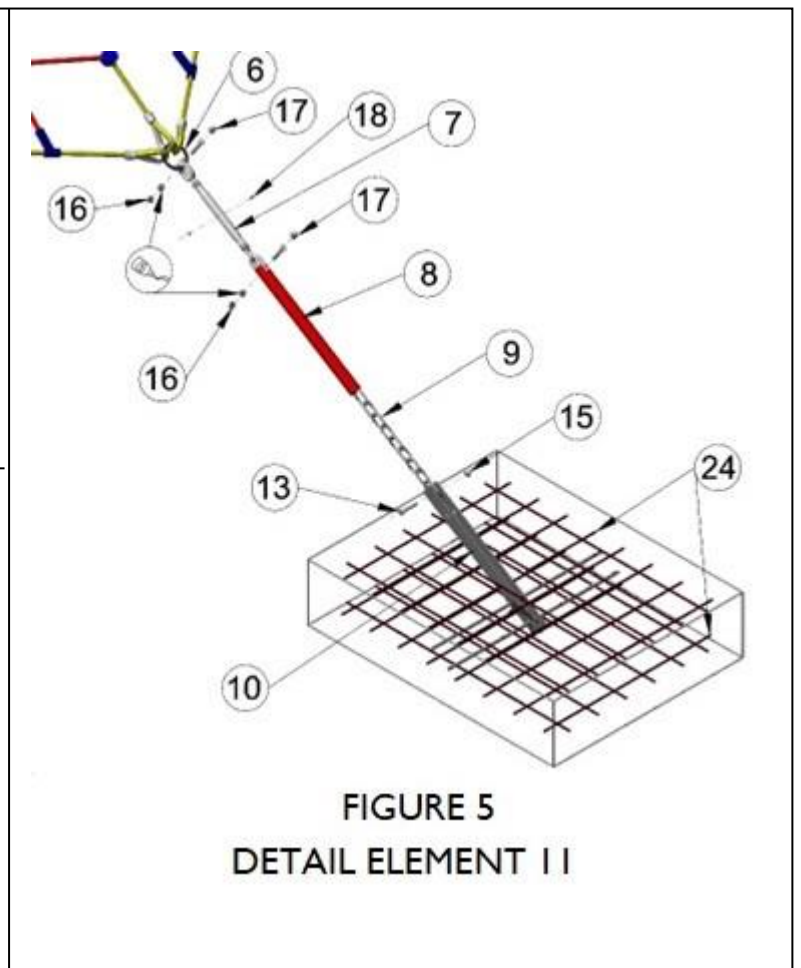
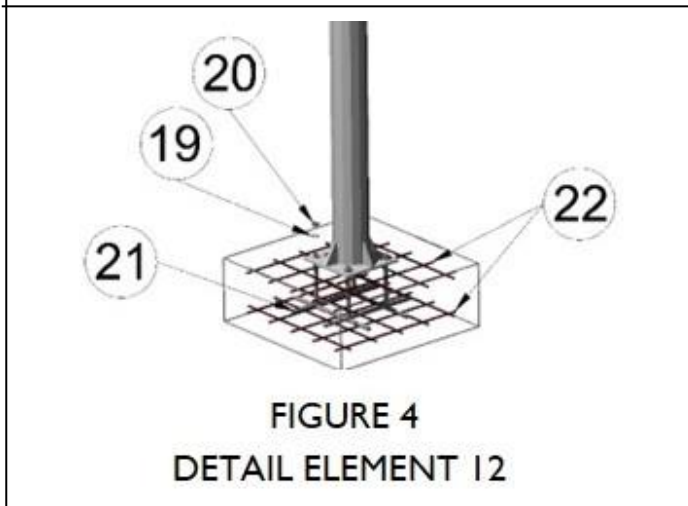
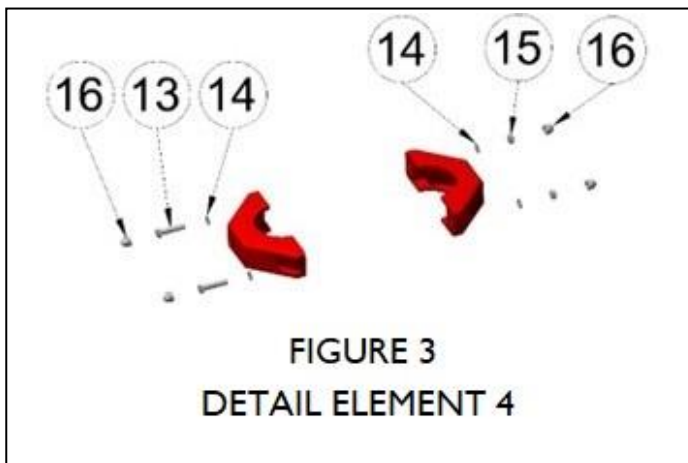



FIGURE 2



MagicNets Sp. z o.o. ul. Transportowa 4 55-020 Żórawina		Name: Rope pyramid CALIBAN		Catalogue number: 209	
Lp.	Name	Drawing number, standard number	Qty	Supply Qty	Comments
1	Rope sheath CALIBAN	—	1		
2	Floors of the pyramid CALIBAN	—	4		Rope sheath element
3	Cap of the pyramid CALIBAN	—	1		Attached to the rope sheath
4	Clamp 219,1	Figure 4	4		Attached to the rope sheath
5	Pole CALIBAN	—	1		Hot-dip galvanizing
6	Round link 12 * 75	—	8		Rope sheath element
7	Turnbuckle M20 fork-fork	—	8		Hot-dip galvanized
8	Heat shrink tube RART 80/26 L=1m	—	8		
9	Chain 13 * 45 L= 1,6m	—	8		Hot-dip galvanized
10	Anchor of the lashing foundation CALIBAN	—	8		Hot-dip galvanized
11	Foundation of lashings CALIBAN	Figure 5 Figure 8	8		Concrete min. C20/25 (B25)
12	Central foundation CALIBAN	Figure 4 Figure 7	1		Concrete min. C20/25 (B25)
13	Hex head screw M16 * 75 klasa 8,8	DIN 933	16	1	Galvanized
14	Round washer M16	DIN 125	16	2	Galvanized
15	Hexagon nut M16 with polyamide insert class 8	DIN 985	16	1	Galvanized
16	Cap plug for screw M16	—	32	2	
17	Cap plug for screw M14	—	16	1	
18	Hole plug ø 11	—	16	1	
19	Round washer M20	DIN 125	4	1	Galvanized
20	Hexagon nut M20 with polyamide Insert class 8	DIN 985	4		Galvanized
21	Anchor of the central foundation CALIBAN	—	1		
22	Reinforcement mesh central foundation	Figure 7	2		
23	Reinforcement distances h150, central foundation			1 set	
24	Reinforcement mesh side foundation	Figure 8	16		
25	Reinforcement distances h150, side foundation			8 sets	
26	Rebars ø 10 L= 1m			8	
27	Tie wire			1 kpl.	
28	Rebar for tension ø 10 * 300			1	
29	Threadlocking glue difficult to break			1	

CALIBAN assembly instructions

- 1) Determine a square-circle with a radius of 6.9m (the maximum reach of the foundations is a radius of 8.45m), keeping in mind that the entire space occupied by the device and its fall area should be free of elements that can create danger such as protruding foundations, stones, manholes, as well as other playground equipment.
- 2) Fence off the playground from unauthorized persons.
- 3) Determine the centers of the seven foundations according to the diagram below. (**Figure 6 – dimensions „a” , „b”**)

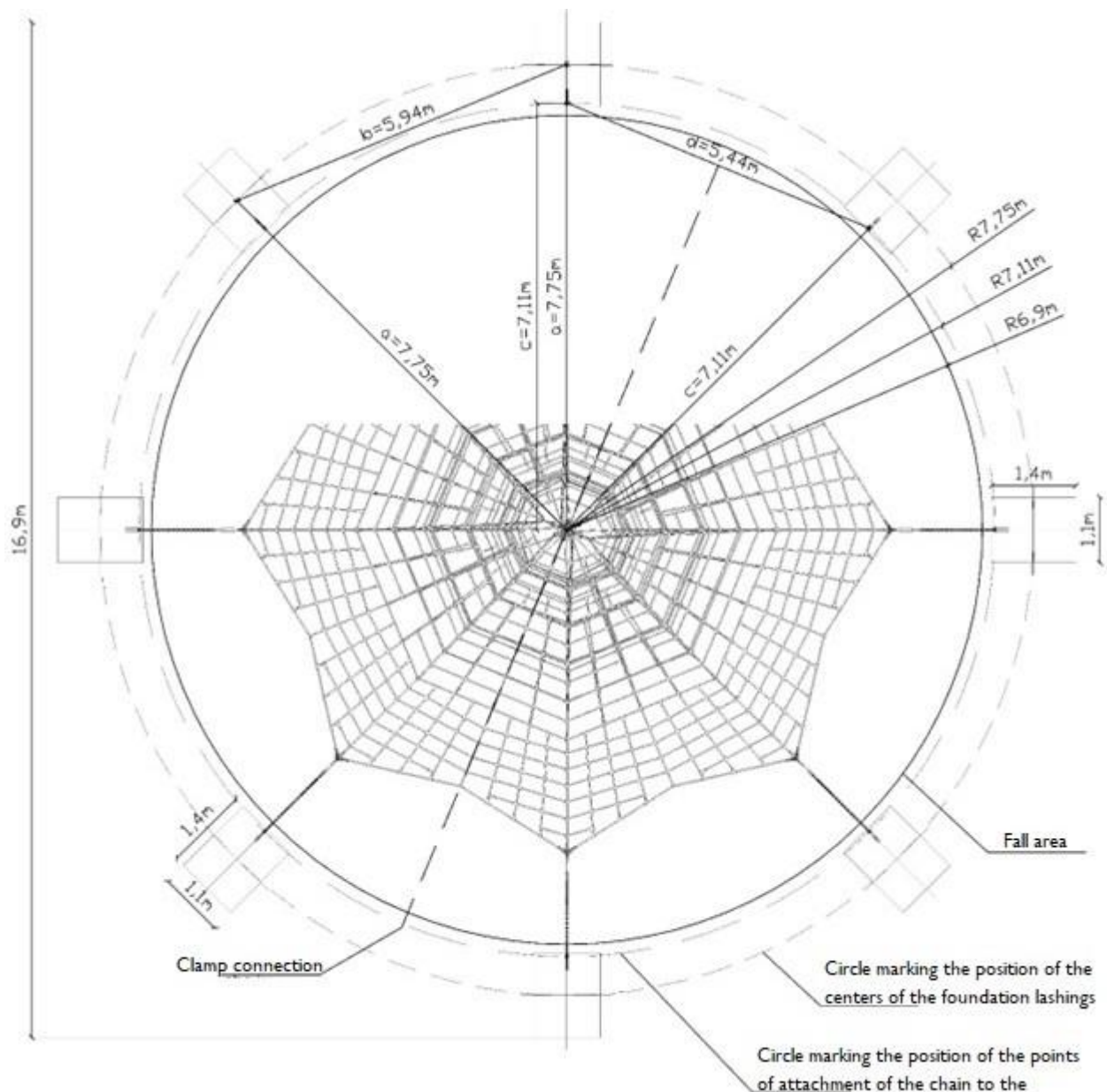


FIGURE 6

4) Determine the foundation according to the size in **Figures 6, 7, 8.**

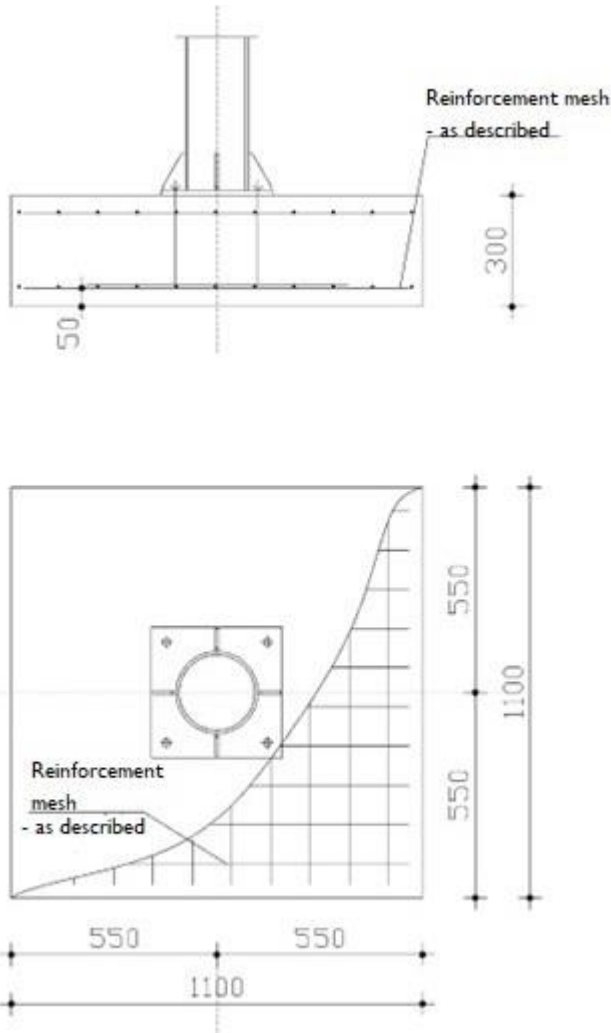


FIGURE 7
ELEMENT 12

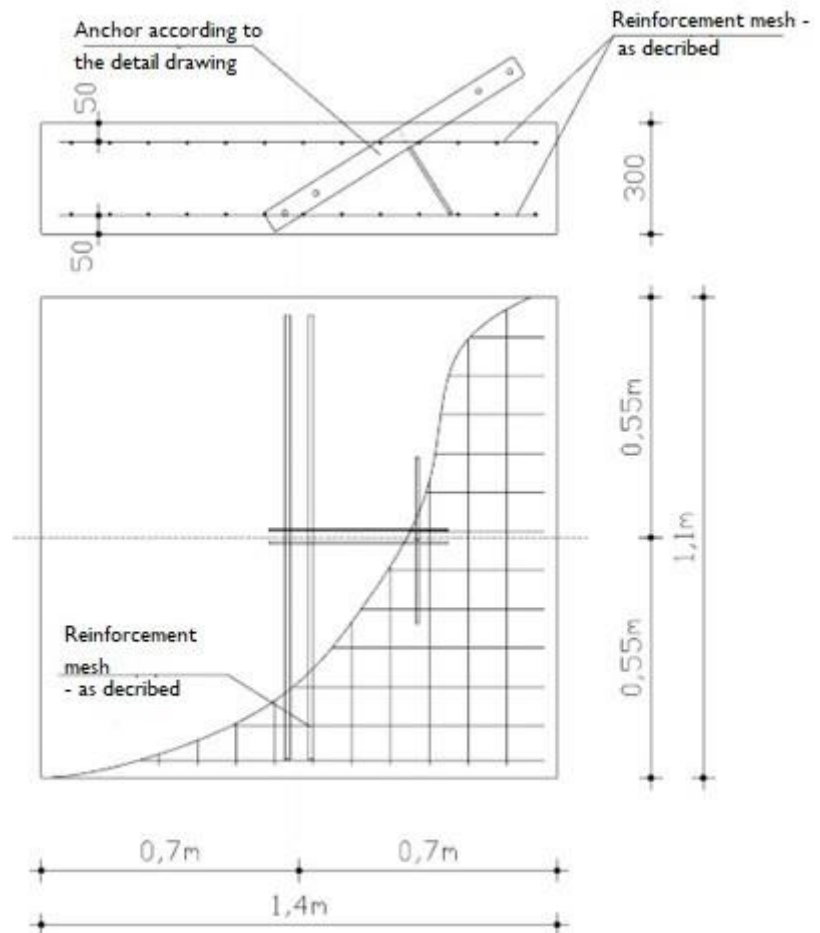


FIGURE 8
ELEMENT 11

- 5) Dig holes to a depth of 1m to the nearest 30mm.
- 6) Level the excavated holes to one level.
- 7) Make foundation reinforcements according to the art of construction by following **Figures 7,8,4,5.**
NOTE: The most important control dimension before pouring concrete is "c", "d" dimensions in Figure 6.
- 8) Lay the concrete mixture in the holes - C20/25 (B25).
- 9) After the concrete has dried, screw and set the pole (5) vertically according to **Figures 7,4.**
- 10) Using a crane, place the rope sheath (1) on the pole (5). Set the CALIBAN pyramid cap (3) with the ropes bolted on the pole (5).
- 11) Attach clamps (4) to the main pole (5) at the heights indicated in **Figure 2.** Set the clamps according to **Figure 6,** i.e., set the connecting clamps between the two foundations.
- 12) Secure the rings (6) at the bottom of the rope sheath (1) to the turnbuckles (7) (**Figure 1,5).**

- 13) Fasten the chains (9) to the anchors of the side foundation (10) (**Figure 1,5**).
- 14) Tension the turnbuckles (7) for the chains (9) by hand. Cut the chain to a length that allows it to be attached to the turnbuckle. Slide a shrinking band (8) over the cut chain and connect it to the turnbuckle (7) (**Figure 1.5**).
- 15) Tension the structure slightly until resistance is reached at the turnbuckles (7). At this stage of tensioning, make sure that all ropes are stretched with similar strength and none of the ropes pull the pole.
- 16) Continue tightening with the turnbuckles (7). Tighten the screws by hand going in a circle in one direction and making three full turns on each one until resistance is reached that prevents manual tension.
- 17) Walk on a stretched pyramid in two people on each wall and swing.
- 18) Once again stretch the pyramid following the directions in subsection 16.
- 19) The final tension adjustment should be made with a $\varnothing 10 \times 300\text{mm}$ ribbed rod passed through the turnbuckle pipe puller (7). When adjusting the tension, pay attention to the horizontal plane of the net, which should hang the same on each of the six sides after the tension adjustment. The pyramid is tensioned correctly when the 6 main ropes from the rope sheath (attached to the turnbuckles) show no deflection between the kinks. The limiting point at which tensioning should be terminated is the point at which the $\varnothing 10 \times 300\text{m}$ ribbed bar begins to bend.
- 20) Contort the turnbuckles (7) with M20 nuts screwed onto the threads.
- 21) Tighten the screws in the forks from the turnbuckles (7) with thread glue (e.g. WIKO 02K62, LOKTAJT).
- 22) Secure the holes in the turnbuckle with $\varnothing 11$ hole plugs.
- 23) Using a gas torch, shrink shrink bands (8) on chains (9). The band is not sufficient for the entire chain. Secure the part of the chain protruding from the ground starting from the lower fork of the turnbuckle (7) (**Figure 5**).
- 24) Complete the missing caps according to **Figures 3,5**.
- 25) Make any paint corrections on the pole and clamps incurred during transport or installation.

THE DEVICE IS READY FOR USE.