



# Livestock shelter 4 × 4 m

Dimensions 4 × 4 × 3.2 m · arch spacing 2 m

**4 × 4 m**

4 × 4 × 3.2 m

## BEFORE ASSEMBLY

## TECHNICAL DATA

WIDTH

4 m

LENGTH

4 m

HEIGHT

3.2 m

ARCH SPACING

2 m

**IMPORTANT – READ THE INSTRUCTIONS BEFORE ASSEMBLY**

Incorrect site preparation, assembly or maintenance can cause unnecessary and costly errors. Each part is marked with a code given in the parts list – follow these codes and the drawings during assembly.

- Tension the roof cover sufficiently so that no sagging ("pockets") forms on the roof, and retighten it once or twice after a few months of use.
- This applies especially to assembly in cold weather (autumn or winter): the cover is stiffer then, slackens when it gets warmer and must be retightened before the next winter.
- If snow does not slide off the roof by itself, remove it immediately.

**SAFETY DURING ASSEMBLY**

1. Keep the work area clean. Clutter increases the risk of injury. Do not erect the shelter near snowdrifts, on slippery or wet surfaces or in strong wind.
2. Children must be kept away from the work area.
3. Do not overstrain or lean out. Keep a stable stance and balance throughout the assembly.
4. Do not carry out assembly under the influence of alcohol, drugs or medication that may affect judgement or reflexes. If in doubt, do not carry out the assembly.
5. Allow for windy weather. If there is a risk of strong wind, fix the base plates in concrete. Remove the cover during a windstorm.
6. Be careful with heat and electrical power sources. Do not place heat sources near the cover and do not expose it to open fire.
7. Pay attention to personal safety during assembly and use. Take care not to trap your fingers between the clamps and tubes. When using the shelter, ensure sufficient ventilation for exhaust gases and other hazardous fumes.

**TOOLS AND EQUIPMENT**

Measuring tape

Alignment string

Stakes

Ladder or scissor lift

Hammer

Drill

Spanner

Knife

## CHECK THE DELIVERY

## PARTS LIST

| NO.   | Part name                                  | Pcs      |
|-------|--------------------------------------------|----------|
| ● 1   | Upper arch tube                            | 3        |
| ● 2   | Side arch tube                             | 6        |
| ● 3   | Vertical leg                               | 6        |
| ● 4   | Longitudinal tube (purlin)                 | 6        |
| ● 5   | Railing for front, rear and side walls     | 6        |
| ● 6   | Base plate – middle                        | 2        |
| ● 6L  | Base plate – left corner                   | 2        |
| ● 6R  | Base plate – right corner                  | 2        |
| ● 7   | Base plate for front and rear door         | 2        |
| ● 8   | Lower vertical leg for front and rear door | 2        |
| ● 9   | Upper vertical leg for front and rear door | 2        |
| ● 10L | Left door                                  | 1        |
| ● 10R | Right door                                 | 1        |
| ● 12  | Single tube clamp with bolt M10 × 30       | 16       |
| ● 13  | Double tube clamp with bolt M10 × 30       | 6        |
| ● 14  | Carriage bolt 8 × 80                       | 44       |
| ● 15  | Carriage bolt 10 × 90                      | 9        |
| ● 16  | Clip                                       | 2        |
| ● 17  | Self-tapping screw                         | 4        |
| ● 19  | Roof cover                                 | 1        |
| ● 19A | Rear cover                                 | 1        |
| ● 19B | Side shade net                             | 2        |
| ● 22  | Rope                                       | 1 bundle |
| ● 23  | Anchor stake                               | 18       |
| ● 25  | Plastic plug Ø 40 mm                       | 16       |
| ● 26  | Bolt 10 × 30                               | 2        |

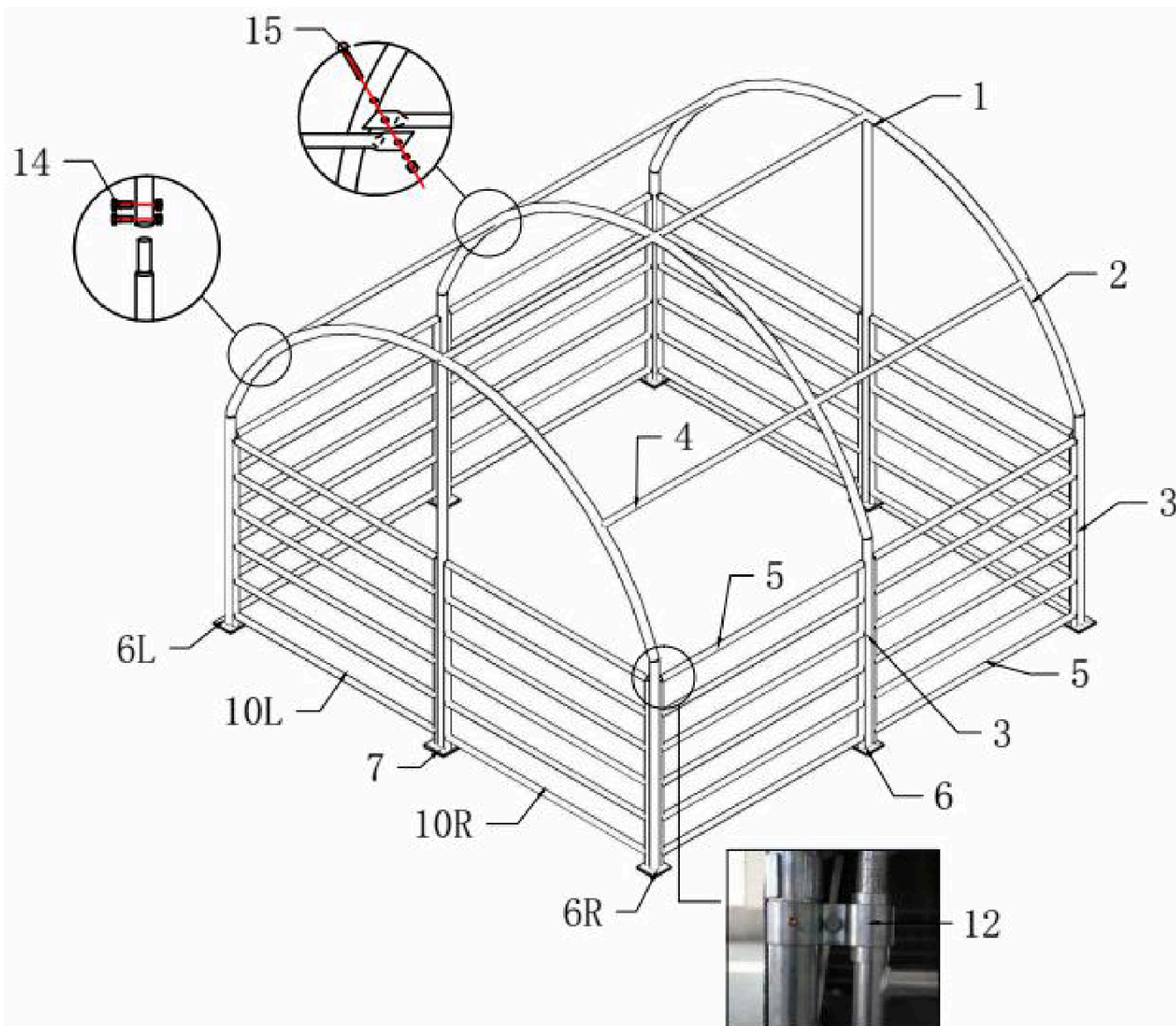


Fig. 1 - Steel frame sketch

# INSTALLING THE FOUNDATIONS

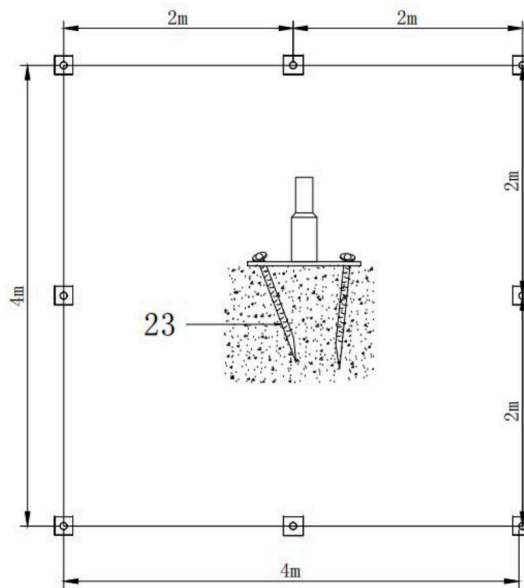


Fig. 2 – Base plate layout

**1**

Lay out the base plates (No. 6, 6L, 6R, 7) according to Fig. 2. Dimensions are measured from tube centre to tube centre on the base plates. Check the position of the base plates against the drawing.

**2**

Each base plate has three stake holes and comes with 3 anchor stakes (No. 23) – see Fig. 2.

**3**

Mark the stake positions by pushing a stake through the hole in the base plate and marking the point where it is to be driven in. Then move the base plate aside – the mark gives the stake position.



## NOTE

The anchor stakes are not intended for concrete. If you are installing on a concrete base, prepare expansion bolts (anchors).

# FRAME ASSEMBLY

## 1

Prepare 1 pc upper arch tube (No. 1), 2 pcs side arch tubes (No. 2) and 2 pcs vertical legs (No. 3).

## 2

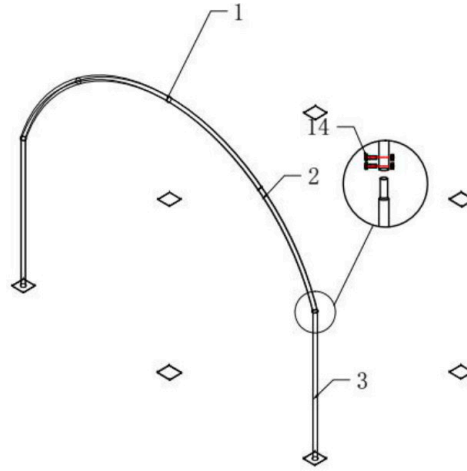


Fig. 3 - First arch

Assemble the first arch according to Fig. 3: connect the side arch tubes (No. 2) to the vertical legs (No. 3) with M8 × 80 bolts (No. 14).

## 3

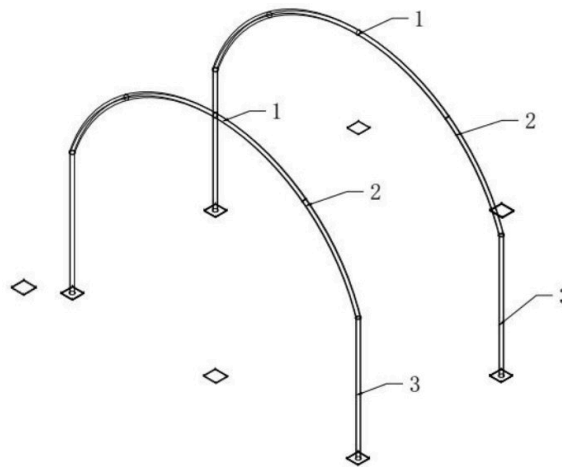


Fig. 4 - Second arch

Assemble the second arch in the same way as the first.

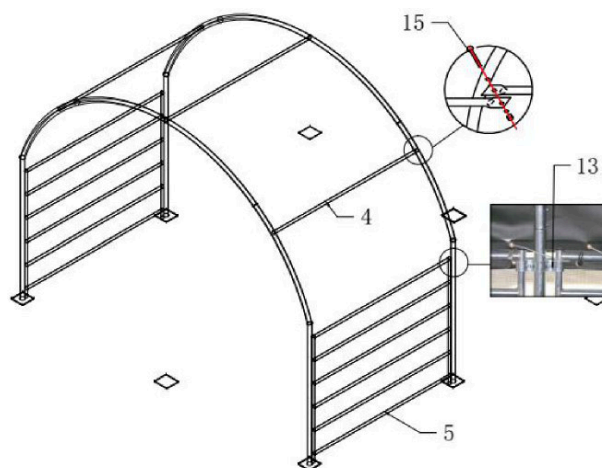
**4**

Fig. 5 - Connecting the arches with purlin and railing

Connect the first two arches with the longitudinal tube (purlin, No. 4) and the side wall railing (No. 5) using M10 × 90 bolts (No. 15).

**5**

Fix the railing (No. 5) to the arches with double clamps (No. 13) and M10 × 30 bolts (detail in Fig. 5).

# FRONT AND REAR WALL

1

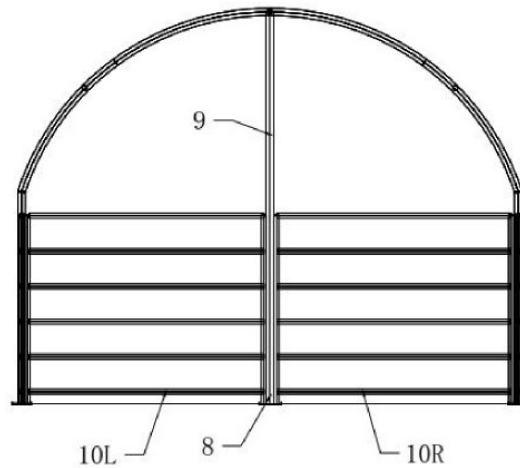


Fig. 6 - Front wall (door)

Fit the front wall according to Fig. 6: install the lower vertical leg (No. 8) and the upper vertical leg (No. 9) and, on either side, the left door (No. 10L) and the right door (No. 10R).

2

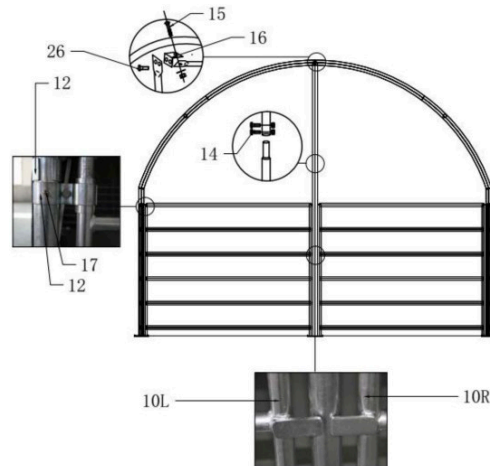


Fig. 7 - Front wall - joint details

Front wall joints according to Fig. 7: the vertical legs are connected with bolts No. 14, the upper leg is fixed to the arch with a clip (No. 16) and bolts No. 15 and No. 26, the doors are held by single clamps (No. 12) with self-tapping screws (No. 17).

3

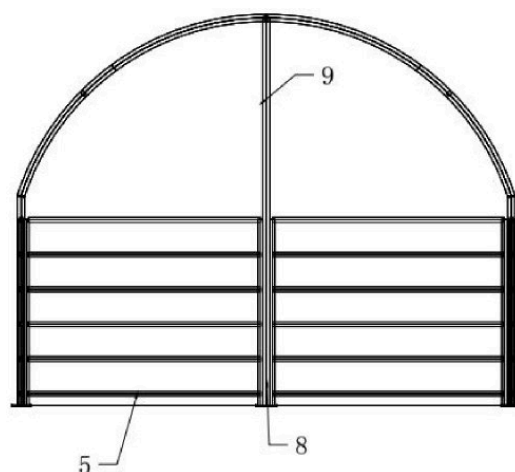


Fig. 8 - Rear wall

Fit the rear wall according to Fig. 8: vertical legs No. 8 and No. 9 as for the front wall; fit railings (No. 5) instead of doors.

4

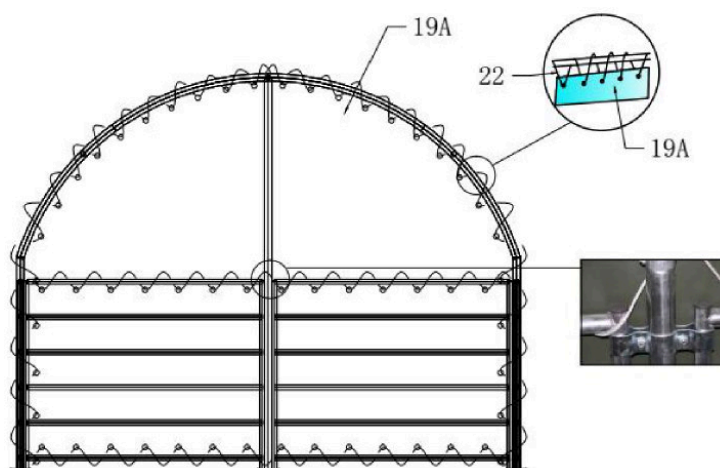


Fig. 9 - Rear cover

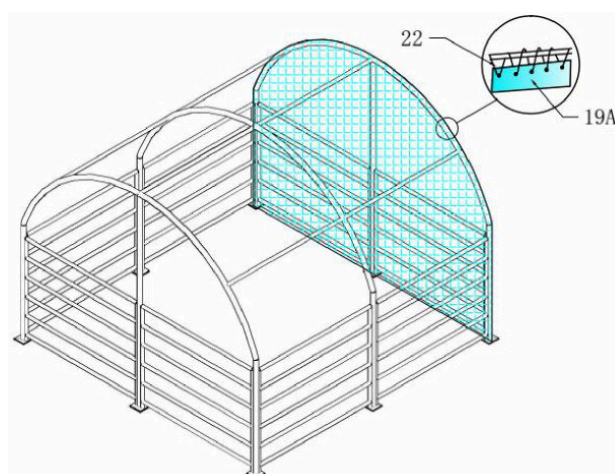


Fig. 10 - Rear cover on the frame

Fix the rear cover (No. 19A) to the frame with ropes (No. 22) – see Fig. 9 and 10.

# ROOF COVER AND SIDE SHADE NET

**CAUTION**

- Do not install the cover on the frame in strong wind.
- Pull the cover over the frame evenly, carefully and slowly.

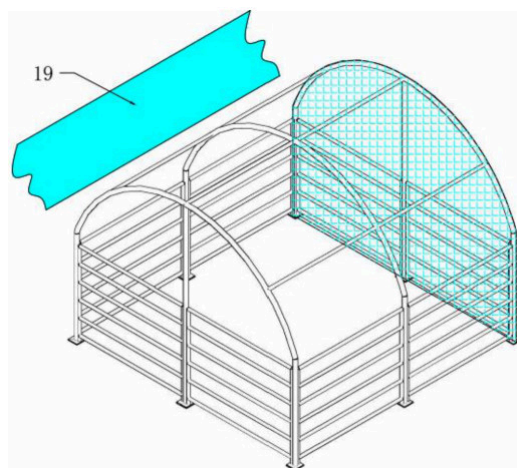
**1**

Fig. 11 – Roof cover

Insert the lower tensioning tubes (No. 18) into the pockets on the edges of the roof cover (No. 19).

**2**

Fit plastic end caps Ø 25 mm (No. 24) on the ends of the tensioning tubes (No. 18) to protect against scratches and water ingress.

3

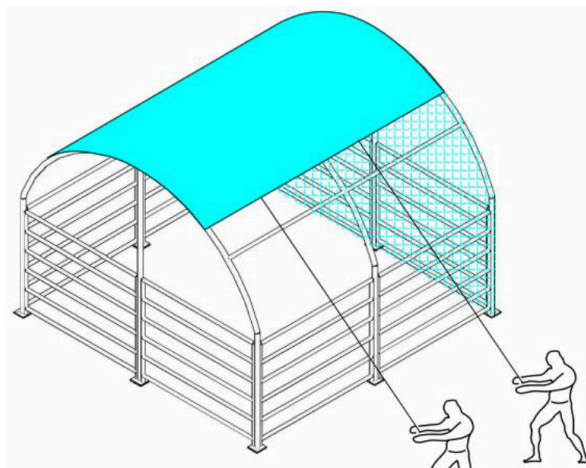


Fig. 12 - Pulling the roof cover over

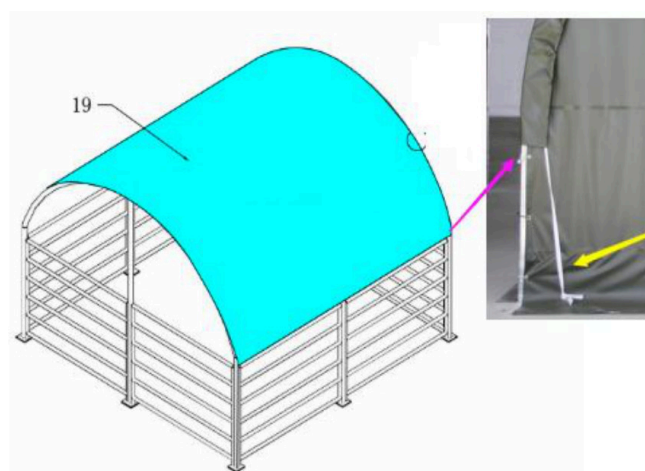


Fig. 13 - Stretched roof cover

With the help of other people, throw the ropes over the frame structure from one side to the other and use them to pull the cover onto the frame.

4

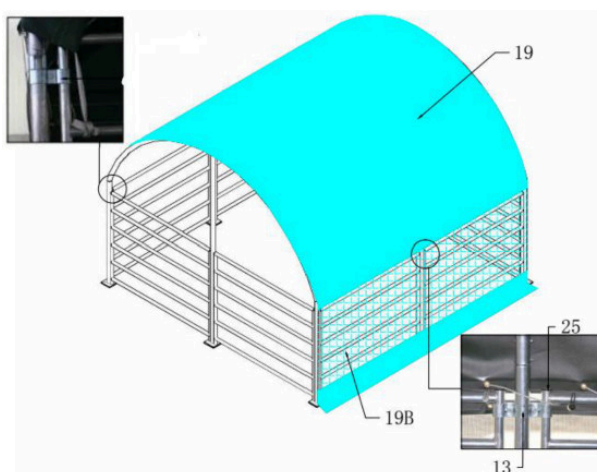


Fig. 14 - Roof cover and side shade net (No. 19B)

Lace the ropes through the eyelets of the roof cover and connect it to the steel frame.

**5**

Fit the side shade net (No. 19B) using ropes.

**6**

After aligning the cover, cut openings in the pocket to expose the tensioning tube (No. 18).

**7**

Attach the tensioning tube to the railing with a ratchet and straps – this tensions the roof cover.

**8**

There are straps at both ends of the roof cover. Tighten them so that the cover fits snugly against the frame, and fix both strap ends to the frame.

**9**

Fit plastic plugs Ø 40 mm (No. 25) on the ends of the railings (No. 5) to protect against scratches and water ingress.



**ASSEMBLY IS COMPLETE.**



**HAGRO ORAVA s.r.o.**

hagroshelters.com · hagro@hagro.sk

Contact us with any questions about assembly.