

## ThermoBar 130 and 250 – installation, user instructions and care

Finally your product from ThermoBar is here! We would like to thank you for choosing ThermoBar. We suggest you read through this entire document before you install your ThermoBar. You will then know not only how to install it and use it correctly, but also how to best take care of it so it will last for many years. At [thermobar.se](http://thermobar.se) you will also find a number of really helpful films with more information and advice on most of our products.

### NB!

- Under each ThermoBar's inner base there is a foil heater and thermostat. ThermoBar's guarantee does not cover troughs that have damage to the inside base, so please make sure that your horses don't put their hooves in the trough.
- The person who installs and oversees the use of the ThermoBar is responsible for making sure it is assembled, positioned and used correctly.
- We recommend that you always remove the power plug from the power source and empty the ThermoBar when it is not in use.
- Never store your ThermoBar upside down outside – water can get into the electrical connections when it rains.
- We recommend that the power cable (high voltage) is a maximum length of 50m. If you want to use a longer cable, please consult an electrician.

**WARNING!** Children and people with limited physical, sensory or mental abilities or a lack of experience and knowledge should only use a ThermoBar under supervision or once they have been clearly instructed how it is safely used, and only if they clearly understand the risks associated with using a ThermoBar. Children should never be allowed to play with a ThermoBar. Children should not be allowed to clean or maintain a ThermoBar without supervision.

### Included in your delivery:

- ✓ 1 ThermoBar 130 or ThermoBar 250
- ✓ 1 transformer, with a two-metre, 230-volt cable, and a regular wall plug.
- ✓ 1 low-voltage cable (24-volt, 10m) with plug.
- ✓ 3 drain stoppers
- ✓ 1 strap, 350 cm

### Assembly and installation

1. Place the ThermoBar up against a fence post or wall on an even surface – for example on a wooden pallet. Position the ThermoBar so that water won't pool around it but run easily away when emptying or cleaning.
2. Secure the ThermoBar to a post or the like with the strap. Make sure it can't slide away when icy or snowy.
3. Be mindful that horses will often try to scrape a surface with their front hooves to

find water, and they might do this if the trough is ever empty. Make sure that horses cannot reach into the trough with their hooves by raising it or protecting it with a plank of wood, for example.

4. The transformer with its 230-volt cable is placed outside the paddock out of reach of the horses. Place the transformer at least one metre above the ground on a post or wall. The transformer can be outside in the weather unprotected as the cables are underneath and pointing downwards, but it is

still a good idea to build a small protective roof over it. NB! Don't build a sealed box around the transformer or put plastic around it, as it could overheat.

5. The transformer is connected to the power source with a regular 230-volt cable that has a plug that fits any regular wall socket.

Splice together with another cable if too short to make the length right. Make sure any joins are waterproof. Use a residual-current circuit breaker in the wall socket if the system doesn't have a central residual-current circuit breaker.

6. Only the ThermoBar and the low-voltage cable should be inside the horses' enclosure.

7. ThermoBar 130 and ThermoBar 250 have double power sockets, one black and one

### **Water temperature**

If you fill your ThermoBar with zero-degree water, the heated water will not reach the surface until the water at the bottom of the trough has reached about 4°C. This can take a couple of hours, and if the temperature is cold enough a film of ice can form on the surface in this time. For this reason, avoid filling your ThermoBar with ice-cold water when it is really cold. Your ThermoBar has a

### **Care**

- It is important to protect the ThermoBar from your horses – make sure they cannot stand in it or damage the inner base with their hooves. If the trough is empty and it is cold outside, this can cause damage to the thermostat.
- The guarantee is not valid for ThermoBars that have evidence of hoof damage inside.
- The best way of avoiding this is to make sure the trough always has water in it when it is out in the paddock.
- It is best if the ThermoBar is not connected to electricity if it is standing empty for a longer period as the thermostat will last for longer.

Use a soft dish brush or cloth to clean the ThermoBar. Avoid scratching the surface of

### **Electricity safety.**

There is a LED light by the power socket on the ThermoBar where the low-voltage cable

red. The black socket to the right is for the low-voltage cable that connects the trough with the thermostat. Make sure the 24-volt plug is pushed all the way into the black socket on the ThermoBar. The red socket is for a heated hose and the LED light accessories.

8. Connect the 230-volt cable on the transformer to a regular, earthed power source.

9. Fill the trough with water.

10. Don't let the ThermoBar stand empty in cold temperatures as this will cause the thermostat to turn the foil heater on. This will not damage the trough but it can cause the plastic to bulge and buckle a little, and is a waste of energy.

thermostat that turns the foil heater off automatically once the water has reached a good drinking temperature.

If you take your horses inside a stable overnight and it is very cold, it is a good idea to fill the trough in the evening and then cover it with an insulated lid. Horses like to have a warm drink in the mornings, just like we do.

the trough and use a good-quality gentle cleaning agent. We recommend Hippofix. Our carefully selected plastic is tough, can handle cold temperatures and is 4-7mm thick. The plastic is soft which means that bulges can form in the base or inside walls, but this is normal and doesn't affect the trough's functionality. The thermostat that regulates the water temperature is in the middle of the base of the trough. If it is cold and the trough is empty, the thermostat will switch the heating system on and heat up the trough unnecessarily. As long as the trough is empty there is nothing to worry about, but it is important that nothing but water is ever put in a ThermoBar. Never put hay, plastic or any other material in the trough. Do NOT use a ThermoBar to soak or heat feed!

connects. It lights up when power is reaching the trough. It doesn't show if the thermostat has switched the foil heater on or off,

however. If the light is not on, power is not reaching the trough. It is possible that the fuse in the transformer has blown. Press the button with the small transparent cover on the transformer to reset. If this doesn't help, check the fuse for the main power supply. If the residual-current circuit breaker has blown or if you can't find the problem, you should contact an electrician.

The voltage powering the ThermoBar is low, 24 volts, and completely safe. However, the current is quite high, 6-8 ampere. This means that you cannot use a really long low-voltage cable between the transformer and

**Accessories:**

Both ThermoBar 130 and ThermoBar 250 can be fitted with a float valve and heated hose automatic refilling system. Rojo DN15 is compatible with ThermoBar 130 and Rojo

the ThermoBar. If you do, the voltage will be too low when it reaches the ThermoBar. Our standard cable delivered with your ThermoBar is 2 metres but you can change this to 10 metres or 20 metres.

NB! Avoid using a longer cable than you need as this will lead to a lower water temperature and higher energy use. If you are going to lengthen a 24-volt cable, you must to get an electrician to do it. NEVER join with a plug intended for a 230-volt cable! Hold the plug (not the cable) when you pull out the 24-volt cable, otherwise the cable might get damaged.

DN20 is compatible with ThermoBar 250. The extra power socket can be used for a ThermoBar LED light. An insulated lid can be used to save energy if the animals are inside overnight.

Our products are recyclable, and this is important for ThermoBars sustainability work. When it has lived its life, recycle your ThermoBar as plastic.

If you have any questions or need any advice, please do not hesitate to contact us at [thermobar.se](http://thermobar.se).