



Garden hot tub Norra
INSTRUCTIONS FOR USE

ThermoWood®

Introduction.....	3
Safety.....	4
Installation.....	5
Ground preparation.....	5
Chimney and heater installation.....	5
Operation and maintenance.....	6-8
Filling the hot tub with water.....	6
Water discharge.....	6
Lighting and heating the heater.....	6
Heating the water.....	7
Hygiene.....	8
Wood preservation.....	8
Winter time.....	8
Technical information.....	9

Dear Customers!

Thank You for purchasing Vingberg garden hot tub.

VINGBERG hot tub is designed only for outdoor use. It is manufactured from the best quality available material – thermally treated Scandinavian Pine, ThermoWood. However, due to natural features of wood the proper maintenance and preservation against bad weather conditions has a significant meaning.

It is advisable to follow our requirements in order to prolong the life span of the product that we hope will bring a lot of joy and unforgettable moments with your family and friends.

We recommend to keep this instruction in case of any doubts according to the usage of hot tub. In case of any uncertainty we offer assistance.

We wish great hot tub baths and relaxation for 365 days!

Vingberg Team

To maintain security we advise to strictly follow these requirements!

- Before purchasing hot tub please consult it with Your doctor.
- The surface inside the hot tub may be slippery- special care should be taken when going in and going out of the hot tub.
- It is not allowed to jump into the hot tub and avoid undue administrative burdens as it may cause any bodily injury and hot tub damages. Only particular number of people can use the hot tub. The number is given in the product card.
- While heating the hot tub, never touch the heater and the chimney.
- Water temperature of the hot tub cannot exceed 40°C. Temperature above 40°C may result in risk of overheating the body and serious health problems.
- High water temperature may be dangerous to the unborn child. Pregnant women and those who may be pregnant should consult using a hot tub with their doctors.
- Before going into the hot tub always check the water temperature with the dedicated thermometer. To avoid dehydration or other health problems that can be caused by the high temperature, it is advisable to keep the water temperature below 39°C and regularly hydrate the body.
- Never use unattended hot tub filled with water. After the bath is finished please make sure that the flames in the heater are not burning and cover the hot tub with the dedicated cover or make sure that the water in the hot tub is completely discharged.
- Children can use the hot tub under the strict supervision of the adults and never should be left unattended.
WARNING! The thermal or the vinyl cover does not sufficiently protect against falling into the hot tub and drowning.
- Never use hot tub after alcohol consumption, drugs or other psychotropic substances as it may lead to loss of consciousness and drowning.
- Never put any electrical devices nearby the hot tub, such lights, phones, radio or TV in the distance shorter than 1,5 m from the hot tub.
- Never use hot tub during a storm or a rain.
- For fire safety always keep an extinguisher nearby the hot tub.

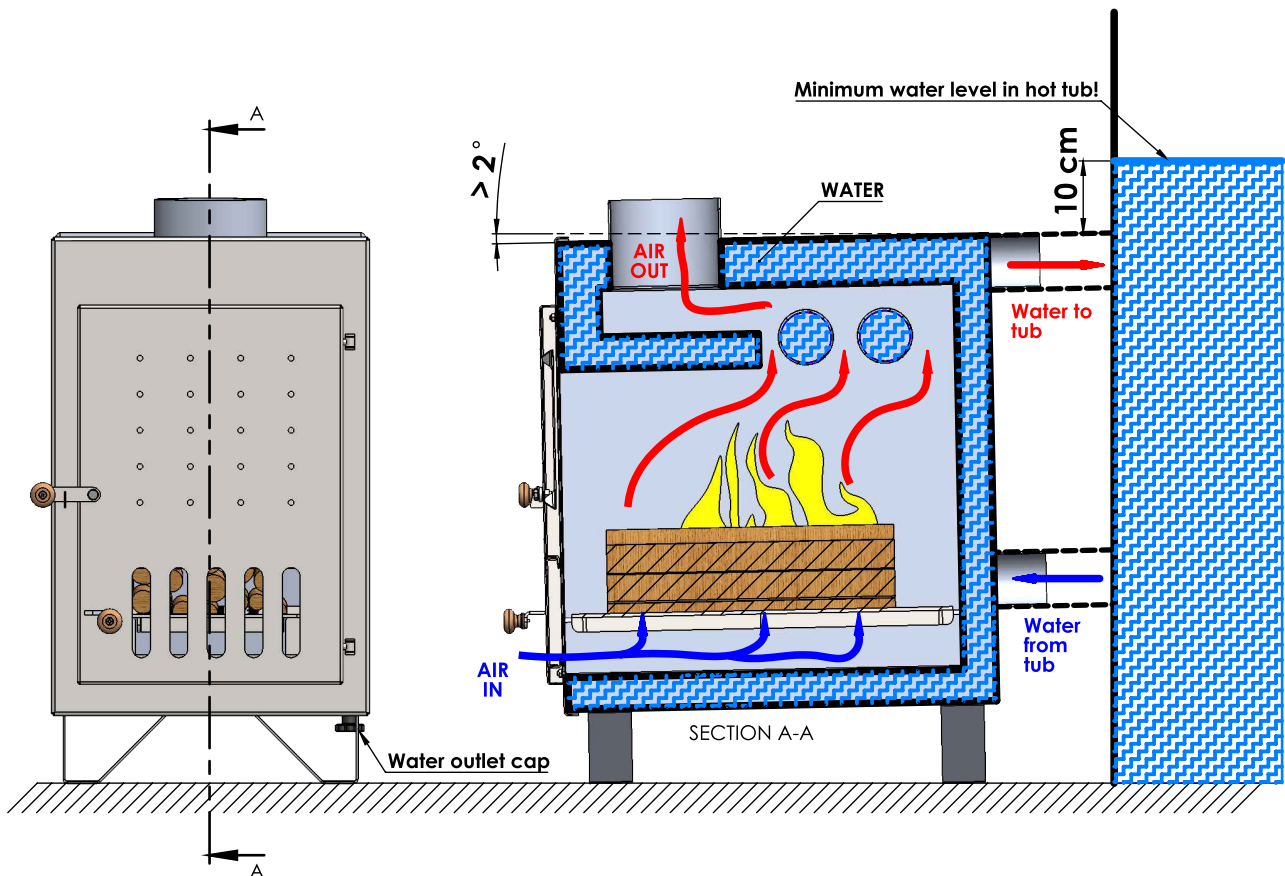
Ground preparation

The choice of the proper installation place is very important and has a serious impact on the user's safety and sauna durability.

- The hot tub needs to be situated in safe distance from the buildings and flammable objects. The fire sparks that come out of the heater may result in fire hazard.
- Placing the hot tub on an even surface that can bear its weight is important. It can be made of beams, concrete slabs or gravel embankment with minimum thickness of 15 cm. It can additionally insulate the sauna foundation, unable grass to grow and prevents the wood from breathing contributes to rotting. It is not recommended to situate the sauna directly on the ground or grass.
- Depending on the number of people using the hot tub, the total weight of the hot tub should not exceed 2 tons. Proper, solid and firm ground should be provided.
- The hot tub never should be rolled as it may cause permanent damages.

Heater and chimney installation

- The outside heater should be placed on an even surface nearby the hot tub. To connect the hot tub with the heater, use dedicated connectors, that need to be connected with the hot tub by the hoses and tighten with clamping bands (delivered in the set).



Picture 1. Connecting hot tub to the heater scheme.

To maximise the lifetime of the sauna it is recommended to follow these rules of maintenance.

Filling the hot tub with water

There are no higher priorities to us than safety, health and the security of our Clients as well as the natural environment. We do not use any artificial sealants (external walls) in the production of our hot tubs. This is the reason why the hot tub is not completely leak-proof. Daily acceptable loss of water is max. 30 litres.

When the hot tub is filled with water for the first time the wood needs to swell. The wood swelling is a natural process and the leaks will occur until the hot tub will become completely sealed. The leaks will occur mainly from the boards connections and knots. The leaks may also occur after the longer break of usage. Depending from the outside conditions the sealing can take from couple of hours up to couple days.

Water discharge

 **WARNING! Make sure that the fire is completely put out and the heater is cooled, otherwise it can melt.**

The water in the hot tub is discharged through the drain valve. The rest of the remaining water goes through the outlet in the bottom of the heater.

To avoid drying out and loss of tightness of the wood it is advisable to keep the minimum level of water in the hot tub (10 cm), even if the hot tub is not in use. This does not appear to be a case during winter time, when the humidity of the air is higher and the hot tub can be completely discharged.

Lighting and heating the heater

The heater is installed outside the hot tub and connected with the hot tub by two connecting water supply pipes. The water is heated due to gravity circulation. The draught can be adjusted with a grate in the mouth hatch on the heater door or by opening the ash box.

 **Before lighting the heater the hot tub always needs to be filled with water first!**

In case of outside heater, the minimum water level should be minimum 10 cm above the heater upper outlet. (Picture 1)

Use only hard, dry wood (beech and birch) and small parts, not longer than 30 cm.

Before each use of the heater, check the unobstructed wires and the chimney. Soot and ashes gathered in the smoke canals of the stove should be removed by using appropriate shovel.

Heating the water

After the initial start-up of the heater, when the smoke from the chimney is flowing, You may add more wood. The combustion chamber should be filled in half.

To speed up the heating up process:

- fill the 2/3 volume of the heater with wood
- add the wood in even periods of 20- 30 minutes
- use smaller and dry firewood pieces, big parts may clog the combustion chamber and extend the combustion process
- cover the hot tub with a cover- it will definitely speed up the heating process

Heating the water to temperature of 38° C can take from 1 to 5 hours, depending on the initial water and air temperature (about 6-8° C/h)



WARNING! The heater is fired only with wood! Different fuel may damage the heater or may cause serious risk of fire.



WARNING! The recommended safe water temperature is about 37- 39 °C. The bath in the higher temperature than 40° C. may be dangerous and can cause serious health problems.

Hygiene

Keeping the right hygiene of the hot tub has a significant meaning to health. It is important to remember that heating up the water has an impact on the growth of bacteria and microorganisms.

Depending of the frequency of use below instructions can help to keep the water in the hygienic and proper conditions:

- take a shower right before using a hot tub,
- do not use any antibacterial agents,
- use a dedicated hot tub cover to protect the water from leaves and other pollutions.

Recommended water disinfection agents

Do not use chlorine in the hot tubs. The dosage will be too high and it will corrode the materials. We recommend to use chlorine-free agents, such as BioCool. In order to use the same water for a long time, use both chemicals and a filter and other cleaning solutions if necessary. Only chemicals and the filter can keep the water clean and hygienic for a long time.

Wood preservation

 **WARNING! Only the outer face of the hot tub should be covered with the oil.** To keep cleanliness inside the hot tub the use of liquid soft soap is advised.


Vingberg hot tubs are manufactured by using high quality, selected thermally treated Scandinavian Pine. The process itself is based on Finnish technology and years of experience.

Using **ThermoWood®** in hot tubs is an excellent choice as the material is durable and superior product, with high resistance to water, biological and external factors like fungi and insects. **ThermoWood®** is dimensionally stable, resistant to decay and resin free. UV protection of the wood is required. Tikkurilla Vallti Wood Oil or Teknos Wood Oil is recommended to use one or two times a year. If the wood won't be protected against the UV, the brown colour of the wood will fade away and it will turn to grey after some time, but not losing its durability against decay.

Winter time

During the winter time when the temperatures fall below zero and hot tub is not in use. It is recommended to discharge the water from the hot tub, as the frost may damage the hot tub and the heater. To protect the drain valve from freezing, it needs to be halfway opened and wrapped with some fabric.

Any additional devices such as water, air pump, filter and others should be first dismantled and well protected against freezing.

 **WARNING! If the heater is frizzed and filled with water never fire the heater!** Frozen heater needs to be dismantled and left in dry room to completely thaw.

Hot tub model: Norra #185

External dimensions:

- diameter: 187 cm

- height: 113 cm

Capacity: ca. 2.000 l

Net weight: ca. 230 kg

Number of seats: 6-8 people

Materials:

- walls made from ThermoWood® Scandinavian Pine (log thickness: 42 mm)
- outside heater 40 kW made from marine aluminium, wood fired, the chimney with the rain cap
- ergonomic two steps made from ThermoWood
- interior benches from ThermoWood
- corrosion resistant steel bands
- vinyl or thermal cover (accessories)