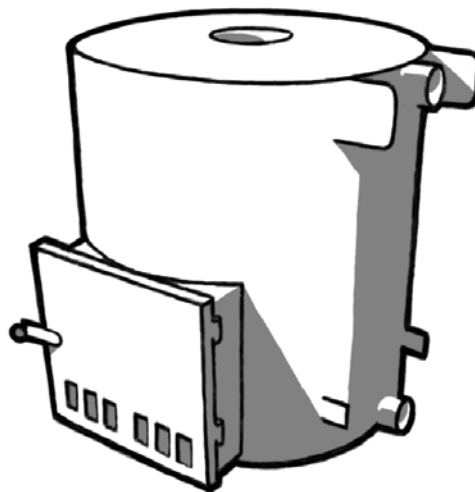
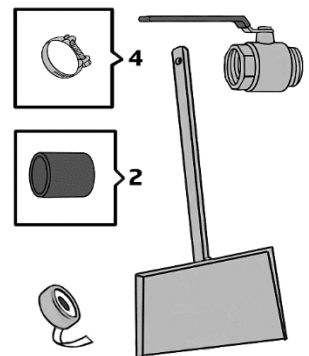


User manual TUBE outside heater



Contents:

- TUBE heater: marine aluminium (AlMg3)
- Fire grate: cast iron 2 pcs
- L-shaped grate 1 pcs
- Furnace door with steel plate inside
- Ø75mm rubber hoses for connecting the heater 2 pcs
- Hose clamps Ø80-85mm 4 pcs
- 1 ½ " emptying valve 1 pcs
- Pipe tape
- Ash shovel
- This user manual



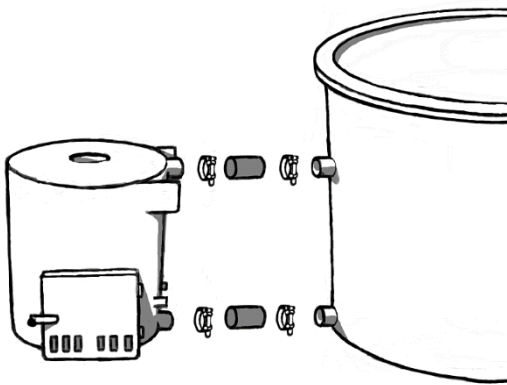
Necessary tools

- 13mm wrench or similar
- Pipe wrench for valve connection
- Soap / silicone spray

Inspect the contents of the delivery immediately!
Read this manual carefully and store for future reference.

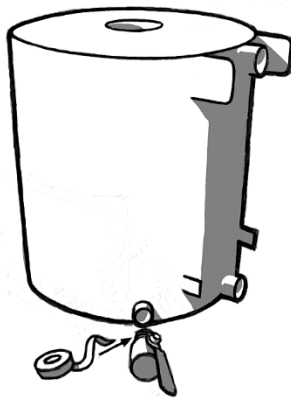
NOTICE! Minimum water level before fire!
See page 15!

Installation



The heater is connected to the tub with rubber hoses. It is advisable to spray silicon spray or other lubricant like soap inside the rubber hoses to tighten the hose clamps evenly and to prevent the hoses from wrinkling. First connect the hoses to the pipes on the tub and add the clamps. The clamps on the tub side can be tightened at this point. Next you push the heater pipes inside the hoses (picture on the left). Now tighten the clamps on the heater side.

On an even surface, there should be approx. 20 mm of space for the support below the stove. However, the proper height of the support should always be checked at the installation site.



The emptying valve is installed into the 1 ½" thread behind the heater. Use good amount of pipe tape when installing these parts. Tighten with pipe wrench (picture on the left).

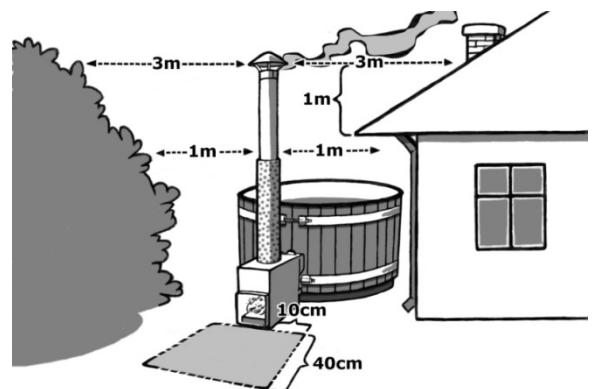
Installation further away from the tub

This heater is suited for installation further away from the tub since it has an emptying valve. You will need separately ordered pipes between the heater and the tub and an extra set of fixing hoses and clamps. When installing further away the heater must be a bit lower than the tub so that the natural circulation of heated water works. Remember to install the emptying valve and remember to empty the heater from its own valve after use. Notice that the extension pipes should be insulated since otherwise lots of heat will be dissipated.

Fire safety

If the heater is located near buildings, for example on the side of a terrace, the distance of the chimney from any combustible materials must be adequate. Remember to check the distance both laterally and vertically so that there isn't any risk of fire. Safe minimum distance, from the chimney's upper end, laterally is three (3) meters. Shorter distance laterally is adequate in other parts of the chimney. If the chimney is closer to any combustible materials you must use special insulated chimney, which has to be purchased separately.

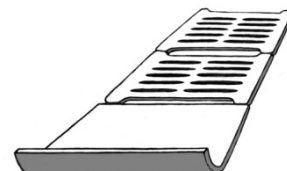
When positioned close to the roof or when taken through it, the top end of the insulated chimney must be at least one (1) meter above the surface of the roof. Ask your local fire officer for more information.



Notice also the fire safety in front of the furnace. There shouldn't be any combustible materials in front of the furnace. There should be an area, which is demonstrated in the picture that should be made of incombustible material such as concrete, sand or metal.

Grates

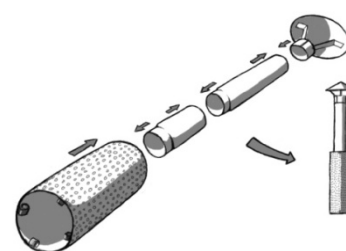
For the TUBE heater, two cast iron grates and one L-shaped iron plate will be delivered. Those are to be positioned on the tracks in the heater. The order of the grates is shown on the right side. L-shaped iron plate is to be installed bended edge upwards. It will deflect the air and also prevent the firewood to drop out from the heater.



Chimney

You can use a Ø150mm outer diameter acid-proof chimney with this heater. The reduced end of the chimney fits inside the heater. The chimney parts can be purchased separately in three different lengths: 25 cm, 50 cm and 100 cm. There are also available adjustable chimney corners and 100 cm long protective sleeves for the lower part of the chimney.

We recommend a chimney kit for the heater. This package includes 200 cm chimney + 100cm protective sleeve and a standard hat. There are also spark protective hats available for the chimney.



If you have purchased a chimney kit with the heater. It is supplied in a separate box and has four parts (see picture right) and it has to be assembled.

Remove the protective film from the thermal protection and place the assembled chimney to the chimney outlet of the stove.

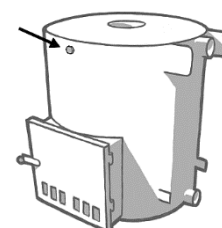
Be careful, the edges of the chimney are very sharp. Use protective gloves!

Magnesium anode rod

Magnesium will work as anode, meaning that magnesium will corrode before heater's aluminium does.

The magnesium rod should be replaced annually or after it has been depleted. If the rod hasn't been changed on time the heater won't have guarantee left.

Replacement instructions are on the replacement rod package.



NB! Before heating up check that the thread is waterproof. If water is leaking through the thread then fasten it more and check that o-ring is in place.

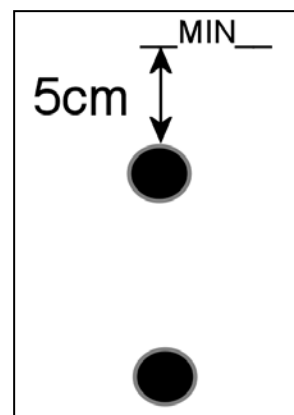
Usage

Warning!

Never start the fire when the tub is empty or the water level is insufficient! Heating a non full tub will destroy the heater!

The tub must always be filled so that the water level is at least 5 cm above the upper pipe of the heater (picture on the right). Only then it is safe to start the fire.

Do not start emptying the tub until the fire in the heater is completely out! Heating a non full tub will destroy the heater!



The water in the tub must not be allowed to freeze during the winter. Empty the tub or make sure that the water is heated adequately.

The heater cannot be connected with a circulation pump! It will not stand the pressure, since it has been designed to use only gravitational free circulation.

Before using the tub for the first time, we recommend to rinse the stove's water circulation pipes carefully. Rinse the inside of the heater through upper pipes with water so that possible garbage comes out of the heater. When filling the tub, make sure that the rubber hoses used for connecting the stove do not leak. If necessary, tighten the hose clamps.

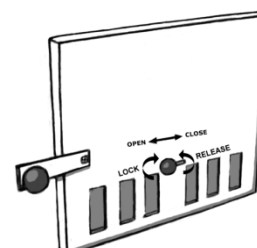
Do not overheat the water. We recommend a bathing temperature of no more than +37°C. Empty the heater from ashes after every use. If the grates stay inside the ashes, it will shorten the lifetime of the grates considerably.

Use only small and dry firewood for the heater. The use of big and moist wood will easily double the heating time. Use of common alder is not recommended, since it causes more soot and stickier soot than other firewood.

The use of the heater that is loaded from outside of the barrel is as easy as the use of any other normal fireplace. We recommend the use of small firewood when starting the fire and then gradually add bigger ones, if needed.

While heating the water, it is advisable to keep up a fair-sized fire in the heater so that the wood would burn properly and the maximum output can be achieved. When keeping a small fire the heating time will be much longer.

Air intakes in the furnace door should be adjusted according to your needs. When fully open the fire runs well but power might not be optimal. Please find the best position for your needs.



Cleaning and chemicals

Take care of the sanitation and hygiene of the barrel by washing and drying it often enough. You can wash the barrel with pine soap and scrubbing brush, or using some other bio soap. If the barrel is in public use it is important to use chemicals that kill bacteria, in other words chlorine. When the barrel is only in home use there are oxygen-based alternatives for chlorine. These chemicals are suitable for disinfecting small tubs. You can find the instructions for dosages on the packages of the chemicals, and the instructions should be followed carefully. Over dosages might cause corrosion of the barrel / heater parts. **NOTICE!** When using chemicals, it is important to follow the pH level of the water and it should remain within 7,0 – 7,6. The use of chemicals usually lowers the pH level, which might again result in corroding the barrel parts. The use of trichlorine-based and other tablet combinations is prohibited in the barrels, except for 20 g tablets, which do not raise the concentrations too high. **Use only chemicals recommended by the manufacturer.**

Warranty

Our products have a 24 month warranty on materials and workmanship.
The warranty is valid when the user reads the product instructions and follows them.

NOTE! Differing from the above mentioned. Products used for commercial purposes are granted only 6-month warranty period.

Warranty does not cover normal wear and tear caused by use, such as deformed, rusted or burnt through grates and fire plates.

The guarantee does not cover damage caused by misuse.

The guarantee does not cover damage caused by freezing, because they can be avoided with correct use.

The guarantee does not cover corrosion due to the faulty use of chemicals. Especially the pH value should be appropriate and the dosages of chemicals cannot be too high.

Do not use automatic chemical dispensers in the tub.

The warranty does not cover any indirect costs incurred, e.g. costs of building or disassembling the terrace.

Contact the dealer about guarantee matters. If you try to repair the product yourself, it will cancel the guarantee.

Disposal of the product

The metal parts of the product are to be taken to metal recycling, the wooden parts can be burned. Other parts belong to mixed waste.

Kirami wishes you enjoyable bathing experiences.

We hold the rights for changes in the product without separate notice. If this manual is supplied with a third party hot tub, Kirami is not responsible for any issues with the tub.

Technical drawing

