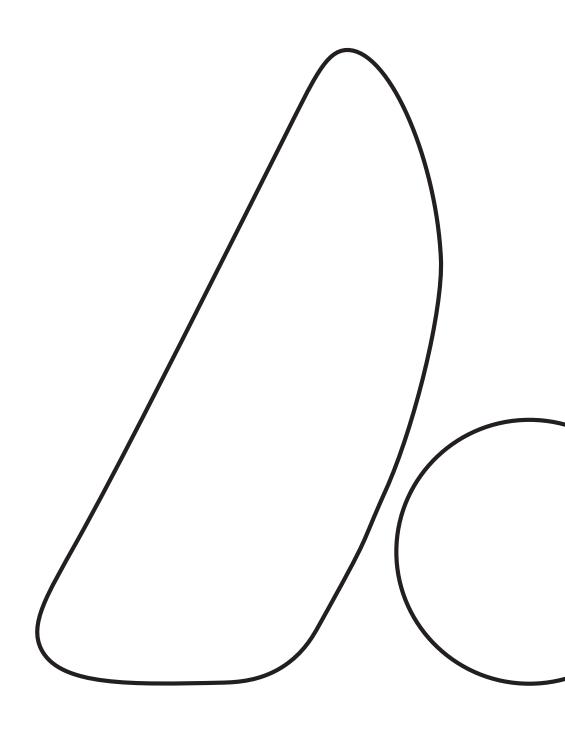


# USEL Manual and Safety Guide



# User Manual and Safety Guide

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# 1 IMPORTANT SAFETY INFORMATION

# Ensuring the safety of your Wood Fired Hot Tub is our top priority.

This hot tub is suitable for both personal and commercial use, however, it has certain restrictions for public or commercial settings. For a secure and pleasant hot tub experience, we strongly advise following these safety measures. Please make sure you comprehend these instructions prior to installation and usage:

### 1. Child Safety

Unsupervised access to the hot tub by children is strictly prohibited. Constant supervision is necessary to prevent accidents.

- We recommend lower water temperatures for young children due to their increased sensitivity to heat.
- Caution children about the risk of slipping on wet surfaces to prevent accidents during entry or exit.
- Prevent children from climbing on the thermal cover or from diving or jumping into the hot tub from the outside.

### 2. Diving Prohibition

Diving into the hot tub is dangerous and can result in severe injuries or fatality.

### 3. Thermal Lid

The thermal lid provided with your Wood Fired Hot Tub complies with safety standards for protective covers. Always lock the lid after use to safeguard children.

### 4. Water Temperature

Prior to use, verify the water temperature by hand or with a thermometer to ensure it's at a safe level and to avoid scalding or burning.

### 5. Unattended Access

Ensure there is no unauthorized or unsupervised access to the hot tub at any time.

### 6. Suction Grate

The suction grate should never be removed from the water pump as it helps prevent injury. The jets of the hot tub generate strong suction, and a damaged cover can be hazardous to both children and adults with long hair. In the event that any body part gets trapped in these fittings, turn off the hot tub immediately. Additionally, individuals with long hair are advised to tie it back to further reduce risk.

Always remember, prioritizing safety is essential when enjoying your Amber Hot Tub. Exercise caution and adhere to these guidelines consistently.

# 2 ELECTRICAL SAFETY INSTRUCTIONS

Your Wood Fired Hot Tub requires electrical connections for its operation (Off grid hot tub package doesn't require any electrical connection). It is crucial to follow these safety instructions strictly to avoid accidents, electric shocks, or damage to the tub:

### **Electrical Setup**

Make sure all electrical connections and cables are kept away from water. Only connect the hot tub to a grounded power source.

### **Power Cord Safety**

Do not bury the power cord. Using unsuitable cables or improper installation can lead to serious injury or death due to electric shock.

### Servicing

Avoid servicing the product yourself. Seek qualified service personnel if:

- Power supply cables are damaged.
- Water has entered the electrical equipment area.
- The shield shows signs of damage.
- There is other potentially hazardous damage to the equipment. In such cases, disconnect the device from the power source immediately.

### **Damaged Cord**

Immediately replace any damaged cords to minimize the risk of electric shock.

### **Electrical Devices**

Keep all electrical devices, such as lamps, telephones, radios, or televisions, at least 1.5 meters away from the hot tub to prevent electric shock if they fall into the water.

### **Drain Location**

Position the hot tub so that the water drain is away from the maintenance hatch and all electrical components.

### **Proper Connection**

Confirm that the hot tub is properly connected to the power supply, ideally by a certified electrician.

### **Extension Cords**

Avoid using an extension cord to connect the hot tub to a power source, as it may not provide proper grounding and could lead to voltage drops, overheating, and damage.

# 3 GENERAL SAFETY INFORMATION

### The Wood Fired Hot Tub is crafted for relaxation and leisure.

Adhering to the following guidelines is crucial for a safe hot tub experience:

### **Water Temperature**

Always check the water temperature with an accurate thermometer before entering the hot tub. The temperature must not exceed 40°C (104°F). For healthy adults, a safe range is 36°C to 40°C. For prolonged use or for young children, cooler water is recommended.

### Hyperthermia

Prolonged immersion in hot water can cause hyperthermia, characterized by an internal body temperature higher than the normal 37°C. Symptoms include unawareness of health threats, inability to perceive heat, failure to recognize the need to exit, inability to exit, unconsciousness, and potential fetal damage in pregnant women.

### **Pregnant Women**

Those who are pregnant or may become pregnant should keep the water temperature at 36°C and limit their time in the hot tub. Consulting a doctor before use is advised, as high temperatures can harm the fetus early in pregnancy.

### **Post-Exercise**

Avoid using the hot tub immediately after engaging in strenuous exercise.

### **Suction Fittings**

Check that suction fittings are appropriate for the pump's water flow. Do not substitute them with fittings that have a lower flow rate.

### Slip Hazards

Exercise caution when entering or exiting the hot tub due to slippery wet surfaces, particularly during frosty conditions.

### **Suction Fittings**

Refrain from using the hot tub if suction fittings are absent or damaged.

### **Health Concerns**

Individuals with infectious diseases, open wounds, or similar conditions should avoid the hot tub. Improperly cleaned hot water can promote the growth of germs.

### **Medication and Alcohol**

The use of alcohol, drugs, or certain medications before or while in the hot tub can lead to unconsciousness and increase drowning risks. If you're taking medication that affects drowsiness, heart rate, blood pressure, or circulation, consult a doctor before using the hot tub.

### **Medical Conditions**

Individuals with conditions such as obesity, heart disease, varying blood pressure, circulatory issues, or diabetes are advised to seek medical advice before using a hot tub.

### **Cold Weather**

To prevent catching a cold in chilly weather, wearing a bathing cap is recommended.

### **General Wellness**

Avoid using the hot tub if you feel unwell or fatigued. Extended use can result in dehydration and potentially lead to heat stroke in extreme cases.



# **GETTING STARTED WITH WOOD FIRED HOT TUB/ INSTALLATION**

# Proper subsurface placement and preparation are essential for the safe and efficient use of your hot tub.

### **Level Surface**

Position the hot tub on a flat surface that can support the weight of a fully filled hot tub (approximately 1600-1900 kg, depending on the model). Level the ground with gravel or use a more stable base like concrete or stone slabs.

### Vegetation

Clear all vegetation under the hot tub to prevent growth that could penetrate and damage the structure.

### **Ventilation and Protection**

Make sure the hot tub is not encircled by tall grass or shrubs, which can obstruct ventilation and encourage rot. Protect any wooden substructure from constant moisture to prevent decay and infestation.

### **Location and Accessibility**

Select a site that allows for easy maintenance. The hot tub should be movable, if necessary, even when integrated into a terrace. Note that the warranty does not cover indirect costs like terrace dismantling or reconstruction.

Following these guidelines will ensure that your Amber Hot Tub is installed safely and is ready for enjoyment.



The hot tub is equipped with a 1-inch ball valve on the lower right-hand side of the stove, serving as a water drain. Models that are 2 meters in size with an external stove also have an extra drain in the bottom/ side of the hot tub.

Choose a location for your hot tub where draining water is convenient. Should you wish to drain the water using a hose, you will require a 1-inch connection nipple for attaching the hose (not provided but can be supplied).



When placing a hot tub near a building, such as on the edge of a terrace, it's crucial to ensure the chimney is far enough from any combustible materials. This distance should be checked both laterally and vertically to prevent fire hazards. The chimney's top must be at least 3 meters away from flammable materials, while smaller distances are allowed at other parts of the chimney.

Do not place flammable materials in front of or below the combustion chamber. Only non-combustible materials such as concrete, sand, or a metal plate should be present. Although the combustion chamber is encased in water, which keeps the stove temperature equal to the water temperature, the stove hood and hatch will get hot. For further details, please refer to your local fire safety authority.

# 7 CONNECTING A FREE-STANDING WOOD FIRED HEATER

To operate effectively, the free-standing heater and the hot tub should be installed on the same level. When connecting the free-standing heater, make sure the upper connection hose extends diagonally upwards to the hot tub, while the lower connection hose can be connected straight to the hot tub.

When filling a hot tub, consider the number of users. A greater number of people will displace more water, reducing the need for filling. If you anticipate the maximum occupancy, it's best to fill the tub only to the minimum required level. Ensure the drain ball valve of the hot tub is closed before beginning to fill it.

### **Minimum Fill Requirement**

The hot tub should always have a minimum water level of 5 cm above the upper connecting pipe of the heater prior to heating. It is crucial to prevent the water in the oven from freezing during winter. To avoid this, either empty the hot tub before the onset of freezing temperatures or ensure the water is adequately heated. Additionally, the furnace is not meant to be used with a circulation pump as it is solely designed for automatic gravity circulation.

### **IMPORTANT**

Never ignite the hot tub heater when the tub is empty or not adequately filled with water. This will invariably cause the furnace to melt and sustain damage. Likewise, do not empty the hot tub until the fire in the oven has been completely extinguished and the embers are cool.

As the water warms, it will naturally stratify. It's essential to stir the water regularly during heating to get an accurate reading of the temperature. Use the thermal lid, if one is available, to expedite reaching the desired temperature.

### **Frost Precautions**

Be vigilant about the water in the hot tub during frost conditions. The water must never be allowed to freeze. In such situations, either reheat the hot tub briefly and flush the water-filled hoses frequently (every 15 minutes), or completely drain the hot tub. When draining, keep all ball valves, including those for filter connections, half-open to allow any incoming water to drain away and prevent freezing.

After draining the hot tub, to expel the remaining water from the hydro or air massage system lines, run both systems for a short duration (no more than 20 seconds).



## Operating the stove is simple, akin to using any standard fire pit.

Begin with small, dry logs, and then add larger logs incrementally every 10-15 minutes. Make sure the stove is thoroughly heated to ensure proper wood combustion and optimal hot tub heating. A small fire will significantly prolong the heating process.

Lighter cubes, such as burner paraffin bags, are the recommended lighting aids.

Condensation in the combustion chamber is common due to the temperature disparity between the cold water and the warm air, which does not signify a leak in the furnace. However, a drop in the hot tub's water level may indicate a leak.

Use only dry, small-split logs as fuel. Large or damp logs can extend heating time and create excessive smoke. Regulate the stove's air intake based on the wood type and log size to minimize smoke. Refrain from using coal, as its high combustion temperature may damage the stove.

Empty the ash from the ash pan and combustion chamber after each use. Note that components like grates and air flaps are consumables and not included in the warranty.

Ensure the stove's water inlet and outlet are unobstructed. Blocked connections can lead to water overheating inside the stove, resulting in damage.

To reduce heat loss, cover the hot tub while heating and monitor the water temperature every 20 minutes. Stir the water before taking the temperature to prevent overheating and burns. When the temperature nears 32 degrees Celsius, reduce the wood amount to avoid over-heating. After reaching the desired temperature, keep a small fire going to maintain warmth, if necessary.

Warning: There is a burn risk from hot water exiting the stove's outlet.

Lift the lid approximately 5 minutes before using the hot tub to allow for temperature adjustment.



### Hot tubs clad in thermo wood boast a beautiful brown hue.

To maintain this colour, it's essential to treat the hot tub's exterior with a UV-protective impregnation at least annually.

Initially, hot tubs receive a treatment of water-based wood oil at the factory. It is advisable to reapply a suitable wood preservative and select a brown tint of your preference. Wood-fired hot tubs utilize sustainable thermal wood, created through a natural high-temperature and steam process. This thermal modification enhances the wood's characteristics and significantly broadens its application range. Thermo wood is dimensionally stable, resistant to decay, and free of resin, making it ideal for both indoor and outdoor settings in any climate.

### **WPC (Wood-Plastic Composite)**

Composite panels and recycled plastic boast high resistance to wear, moisture, and stains, with a non-splintering surface. These materials withstand UV radiation, delaying the greying process. Maintenance is straightforward, requiring only occasional cleaning, with no additional treatment needed. However, the recycled content in the panels may lead to colour variations and surface irregularities.

### **Additional Guidelines**

Make sure the drain ball valve in the empty hot tub remains at least half-open. Closed drains can lead to frozen plumbing if water enters, potentially causing damage.

All ball valves come equipped with a safety feature to prevent unintended operation. To engage this feature, push the safety device towards the handle, allowing free movement of the lever.

Simultaneously drain the outdoor oven with the hot tub. Avoid leaving water in the hot tub during frost risk, as the metal or plastic pipes and ball valves are prone to freezing. If the oven's drain ball valve is frozen, the hot tub must be drained by disassembling the oven first.

For public use, chemicals that kill bacteria, such as chlorine, must be used. For home use, oxygen-based chemicals are an option for disinfecting smaller pools. It's essential to follow the dosage instructions on the packaging to avoid overdosing, which can corrode hot tub components.

Caution is advised when using chemicals; it's crucial to monitor the water's pH level continuously, maintaining it within the range of 7.0–7.6. Chemical use can cause the pH to drop, potentially leading to corrosion. The use of trichloride-based tablets or similar tablet combinations in hot tubs is not allowed, except for 20 g tablets, which do not excessively increase concentrations. Only use manufacturer-recommended chemicals.

Tablet-form chemicals should be dissolved using a dispenser in the hot tub, not added directly.

To extend water usability, chemicals should be used alongside filters and possibly other cleaning devices. This combination ensures the water remains clean and hygienic over time. Specialist stores can provide information on filters and chemicals.

Chemical dosing devices for swimming pools are unsuitable for low-water hot tubs, as they can cause overdosing and corrosion. Automatic dosing devices require constant monitoring, with regular checks on the pH level and other water parameters.

Maintain clean water by using appropriate chemicals. The recommended levels for a wood-fired hot tub are:

Free chlorine: 1.0–5.0 ppm Total alkalinity: 40-120 ppm

Water pH: 7.2–7.8 Calcium hardness: Standard: 75-150 ppm Salt systems: 25-75 ppm

When a hot tub lacks a filter system and has no alternative water exchange mechanism, the water should be used for a single bath before being drained.

If you use drinking water that complies with the drinking water regulations of the country where it's used, the water's maximum lifespan is five hours.

If you use untreated water that does not meet drinking water standards (according to Directive 2006/7/EC), the water's maximum lifespan is three hours.

Adhering to these guidelines ensures that the water in your hot tub stays hygienic, reducing the risk of contamination and associated health issues. It's crucial to regularly clean and maintain your hot tub to extend its service life and ensure a safe bathing environment.

# A hot tub equipped with a hydro or air massage system provides a delightful experience but demands specific care and maintenance, particularly during the winter months. Here's how to maintain it:

### **Cleaning the Hot Tub**

It's essential to keep the hot tub clean and sanitary by regularly washing and drying it. After each use, rinse the tub and its pipes. Clean with a gentle detergent and a soft cloth, avoiding scratchy sponges or abrasive cleaners. After cleaning, leave the drain tap open to allow all water to exit the pipes.

### Using the Hydro or Air Massage System

The hydro massage system operates with a robust water pump that propels six jet nozzles for a focused massage effect, while the air massage system employs a special pump to inject air currents into the water via 15/16 ventilation openings. Caution: avoid inserting fingers into the jet nozzles to prevent injury.

### Using a Hot Tub with Hydro or Air Massage System in Winter

The colder months necessitate extra care. Protect all hoses and nozzles from freezing. If pumps malfunction while the tub is filled, the hoses may become waterlogged. To avert freezing, activate the pumps at least every 15 minutes.

### When emptying the hot tub

Momentarily activate the pumps to clear the hoses of water. Drain the tub and repeat this at least three times to ensure the hoses are completely water-free.

### Frost Warning!

When the hot tub is drained and at risk of freezing, it's vital to ensure the system is devoid of water. Run the pumps with the hydro or air massage system for about 5 seconds. Do this three times to guarantee all water is expelled.