



“We are delighted you have chosen to buy one of our wood burning hot tubs. We hope it will give you many years of trouble free use and that you will enjoy the physical and mental benefits of outdoor bathing. Overall the system is easy to operate and maintain with little to go wrong however the following document provides some important information which must be noted for safety and gives useful tips on how to get the most out of your tub.”

*Matt H* 2018

## **TIMBER HOT TUB – USER GUIDE**

### Safety Notes:

The stove and in particular the flue are hot when in operation. **NEVER TOUCH THE CHIMNEY WHEN THE STOVE IS WORKING.**

Do not use any type of coal or charcoal in the stove, as this may damage the equipment which is designed only to burn wood.

Do not use the tub under the influence of alcohol or if you have any health condition that would prevent you from bathing. If you are in any doubt check with your doctor.

Keep lids on when not in use and remove steps so to make the tub inaccessible to children.

Ensure that the water level is above the upper (hot) inlet **AT ALL TIMES** when the stove is in use.

In extreme wind remove lids to avoid any risk that they may blow off.

In periods of prolonged extreme cold, water in the tub/stove is likely to freeze. If you are not going to be using your tub; or are away from the property for long periods - drain both tub and stove to avoid risk of damage from expanding ice. Drain plugs are fitted to the rear of the stove and in the floor of the tub.

Do not allow children access to the stove when in use and **NEVER** leave children unattended in or around the tub whilst it is in use.

Do not add chemicals to the water, it is unnecessary and may damage the wood or the stove.

For safety, avoid bathing alone.

#### Choosing a site for your tub:

The tub, unfilled weighs around 300kgs. A filled tub is very much heavier. Do not attempt to lift the tub by yourself. It normally requires five strong individuals to move the tub when empty.

A flat level surface - preferably patio slabs, concrete or hardstanding should be prepared prior to installing your tub. Due to the filled weight of the tub, soft ground must be avoided however if the ground is firm sleepers can be used as a minimum to spread the weight.

Choose a site with access to water and clear of any buildings or obstructions (e.g. trees) that may create a downdraft or interfere with the chimney draw. If in doubt check you plans with a stove specialist.

Do not position the tub near flammable materials or structures.

Site the tub in a position which will allow the water to drain away effectively. A hose attachment is fitted, so that water can be directed into a drain or re-used to water plants.

#### Installation:

Under normal circumstances the tub will arrive fully constructed. Access to the site you have chosen must be considered. The diameter of the tub is 1.6m and it is approximately 300kgs in weight.

Five individuals together can lift the tub and carry it into position. It can also be manoeuvred once on the ground by lifting one edge and turning the tub.

The stove is fitted to the tub during construction so once in position is important that the stove and the tub are at the same level relative to one another i.e. if the tub sits off the ground (for example on sleepers) then provision must also be made to raise the stove to the same height. It is crucial that the upper (hot) hose rises upwards from the stove to the tub otherwise the system will not operate correctly.

The chimney is modular, the parts simply push fit into one another and into the collar on the stove.

Once tub and stove are in position, the hoses can be fitted to the inlet and secured using jubilee clips to complete the installation.

The stove is equipped with a temperature gauge to display the temperature of the water-jacket and a pressure relief valve which will activate should any pressure build up in the stove (**see operation note on page 3**). The stove and all other metalwork are made from stainless steel for outdoor use.

### Filling and Operation:

Fill the tub with cold water using a garden hose. Rainwater can also be collected and used to fill the tub.

**NEVER DRAIN WATER FROM THE TUB WHEN THE STOVE IS IN USE** firing the stove without water will permanently damage the stove and pose risk of fire.

When filled the tub contains approximately 1.8 cubic metres (1800 litres) of water.

Once the tub is filled, kindle a fire in the firebox of the stove. Ensure old ash is removed (it is beneficial for the garden). Kindle a fire directly onto the floor of the stove. Firelighters may be used.

A water jacket surrounds the fire-box, always use dry wood and keep the fire burning strongly. Energy produced by the fire is efficiently used to heat the water and if the fire is only burning weakly or wet material is used then inefficient combustion will occur resulting in excess smoke, soot deposits and condensation inside the stove.

When the stove is new, it is common to see drips coming from the base of the stove. There is a small breather hole for condensation to be released. This is also noticeable when heating the stove in cold Winter conditions.

Once the fire is going, keep feeding it with dry wood as necessary to maintain heat. For best results mix softwood offcuts in with any hardwood you are burning. Tend the fire from time to time by raking the hot embers to distribute them evenly before adding more wood.

It is best to keep lids on whilst water is heating.

Periodically stir the water in the tub to mix the temperature layers. Because heat rises and cold sinks, if you do not stir the water will stratify with the upper layer becoming hot and the lower layer remaining cold. It is difficult to ascertain the overall temperature of the water unless the layers are well mixed.

Make sure the pipes are not restricted and that water is circulating properly. To check this place hand near the hot inlet or look for heat haze in the water coming from the inlet to indicate water is circulating.

The stove is an open system vented into the tub. As such under normal operating conditions, the system should not pressurise. A pressure relief valve is fitted as a precaution to protect the stove in the unlikely event of a blockage in the pipes. This also allows manual release of air when the tub is filled by giving the cap a turn periodically during heating, until you see water coming out.

It is normal for the stainless steel flue to discolour slightly when the tub has been fired, the metal may become slightly bronze/golden in colour once it has been heated. This change is not reversible.

Whoever is in charge of the fire is entirely responsible for the heat of the water. It normally takes between 4 and 6 hours to heat from cold depending on ambient temperature, wood quality and fire management.

The recommended temperature range for bathing (which can be checked with any type of thermometer) is 38-42 degrees C.

**IMPORTANT** If you continue to fire the stove the water will continue to get hotter. Very hot water may cause burns and eventually may damage the equipment. Please monitor the temperature regularly as the water heats and stop adding wood to the stove when the desired temperature is reached.

**IF THE WATER IS TOO HOT DO NOT GET IN.** Do not rely solely on a thermometer, if you feel the water is too hot, add cold water to reduce the temperature.

**IF YOU BECOME TOO HOT, GET OUT.** Due to the volume of water in the tub your body will absorb heat without affecting water temperature - a bath for example will become colder as you use it meaning you can stay in the water for long periods. The water in the tub will remain at temperature no matter how long you stay in. Please be aware of this and use the tub for short periods only until you get used to it. Staying in too long may cause your body to overheat risking symptoms such as dizziness and fainting. For this reason we recommend you do not use the tub alone and use a timer to monitor bathing.

When bathing is completed allow the fire to go out completely before draining the tub.

#### Cleaning & Maintenance:

Once installed the tub and stove require very little maintenance.

Clean the ash from the stove before each use and periodically demount and check the chimney and inside of the stove for soot build up. Clean as necessary and if in any doubt consult a stove professional.

The water should be changed and the tub cleaned after each cycle of use to maintain hygiene. Simply drain the tub, clean all inside surfaces with hot soapy water and rinse down with a hose. Then refill the tub until you want to use it next.

If the tub is going to be left for any period of time the water should be drained the tub rinsed and then the water refilled. The tub should be left full of fresh water at all times unless freezing weather is forecast (**see safety note on page 1**).

The outside surface of the tub is treated with Osmo UV protection oil (exterior). As well as being visually appealing the oil provides some waterproofing, UV resistance and prevents fading. Over time the oil will wear off and the tub will naturally 'silver'. The surface can be retreated as necessary with an external oil to maintain appearance. Avoid using a pressure washer, as this can affect the joints on the timber. Other than aesthetics the oil is unnecessary, the tub can be left to age naturally. The external surfaces of the wood can also be varnished or painted as you wish. All internal surfaces should be left untreated.