ULTIMATE DIY HOT TUB PLUMBING GUIDE

Wood / Cedar Tubs

Buildahottub.com

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I hope you nd it useful. Always happy to hear any feedback that you have so do feel free to drop me a line at andi@buildahottub.com

Happy Hot Tubbin'

Andi

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Structure

The structure of the tub is designed to be a wooden or Cedar vessel. These are normally not lined and are made of wooden staves that are strapped together and sealed to make them watertight.

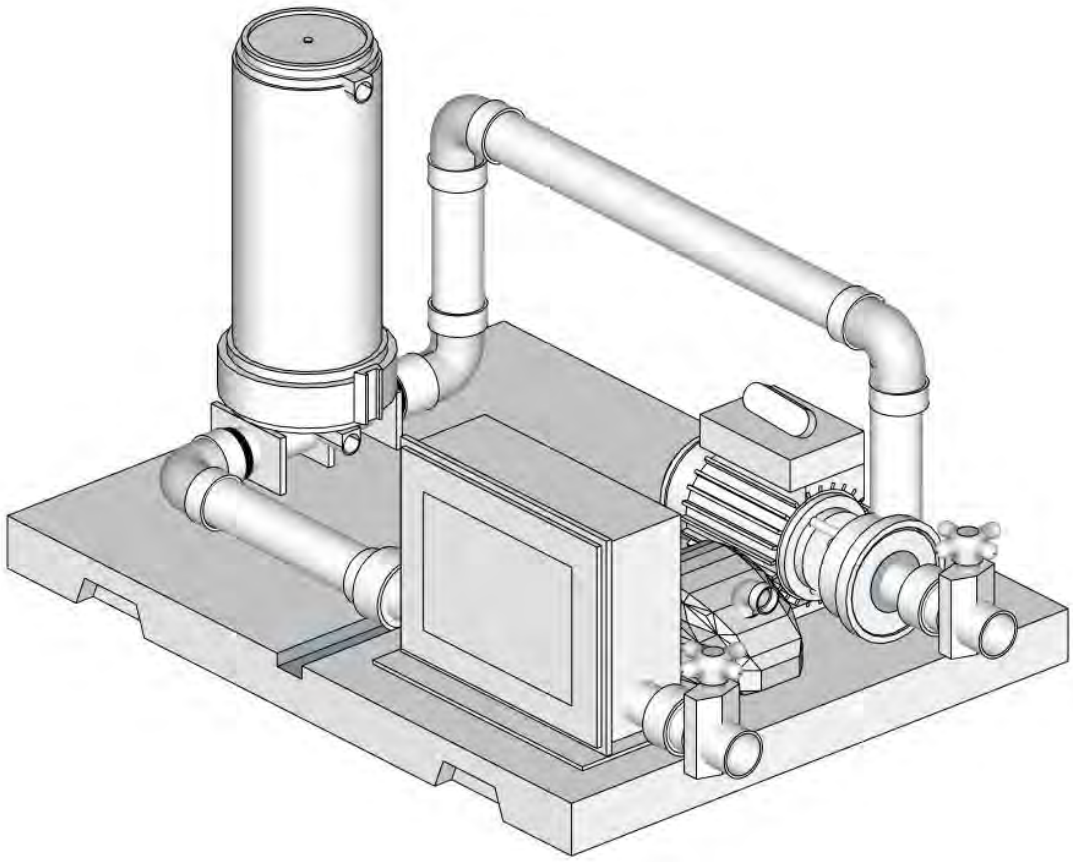
The height of the jets is totally at your own discretion. There is no right or wrong jet placement, but they should be at least 4” under the waterline on the tub.

You will need a sturdy base to place your wooden vessel on as there is the weight of the water to bear.

The control room needs to be below the water line which should not be an issue for a wood hot tub as they are not normally sunken in ground

Plumbing

This is the main control SKID and comprises of a +/- 2HP dual speed (circulation and High) Pump, Blower, Spa Control Pack (including +/- 4KW Heater) and 25 SQ Ft Inline Filter.



There is a non-return valve placed onto the blower to ensure water cannot pass into the blower. The shape of the blower may vary from the drawing above but the functionality is the same.

There are isolation taps on both ends of the system, Spa Control pack and Pump. This is so the lter and parts can be isolated for maintenance without the need for draining the Tub.

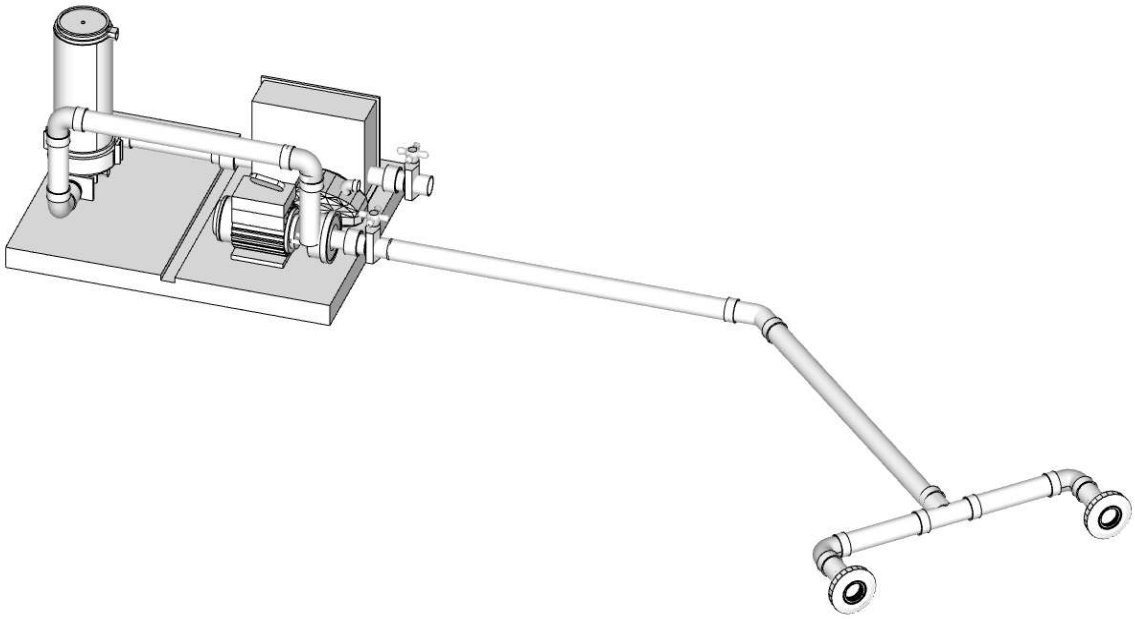
This SKID requires a 40A supply of electricity to make it function correctly at 240V and 60Hz.

You can read more about the electrical requirements here - https://buildahottub.com/a-guide-to-hot-tub-electrics/

Recommendation

An IP65 40AMP Rotary Isolator Switch is also recommended so that the hot tub can be isolated in an emergency or for service work. This is simply a rotary on/off switch but should be sited more than 6ft from the hot tub so that bathers cannot be in the hot tub whilst touching the switch.

Inward Flow



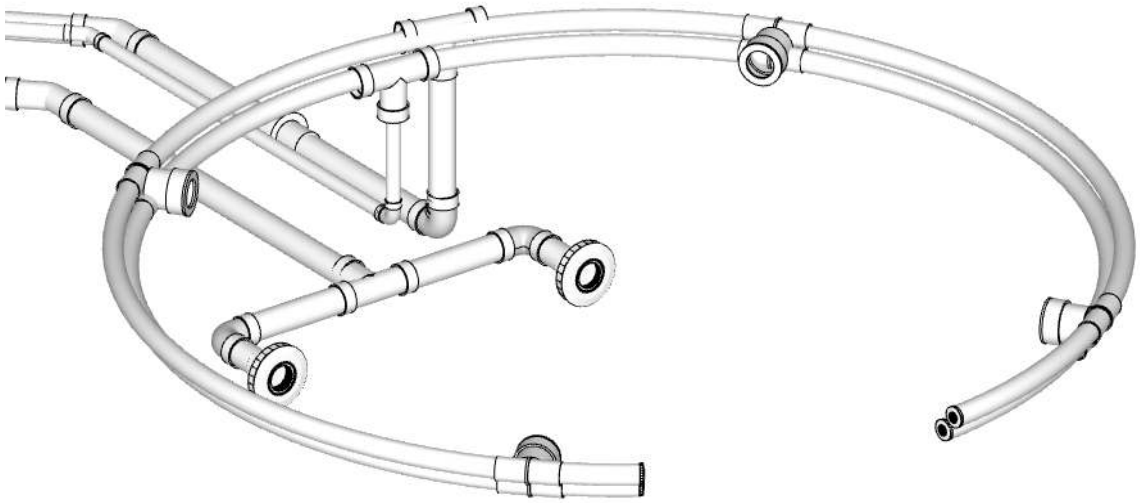
The diagram shows how the drains need to be connected to the pump. The drawing above is expanded so you can clearly see what parts connect to which pipes. Actual placement may change on site. There are additional 90 degree 2" connections in the bill of materials to allow the position to change if needed.

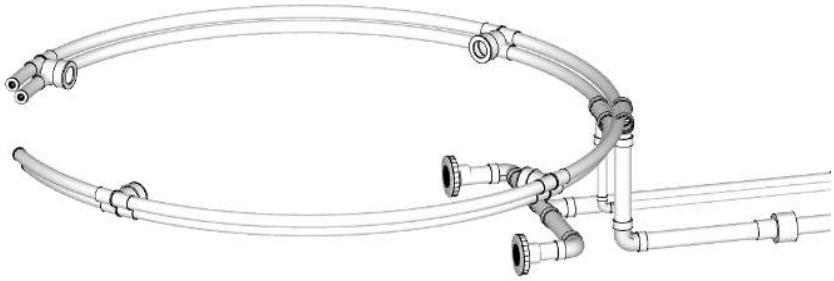
Outward Flow (into the Hot Tub)

The Outward flow of water to the hot tub is comprised of a series of Gunite Jet Bodies. Plumbing leaving the Spa Pack needs to be reduced down form 2" to 1". There is a reducing bush for this.

Whilst it cannot be 100% accurate, the plumbing is designed so that the power of each of the jets is approximately the same. This has been achieved by having almost equal runs of pipe on either side of the tub.

Please Note – these pipes terminate and it is not a complete ring. This is intentional as it increases pressure and force on the jets.



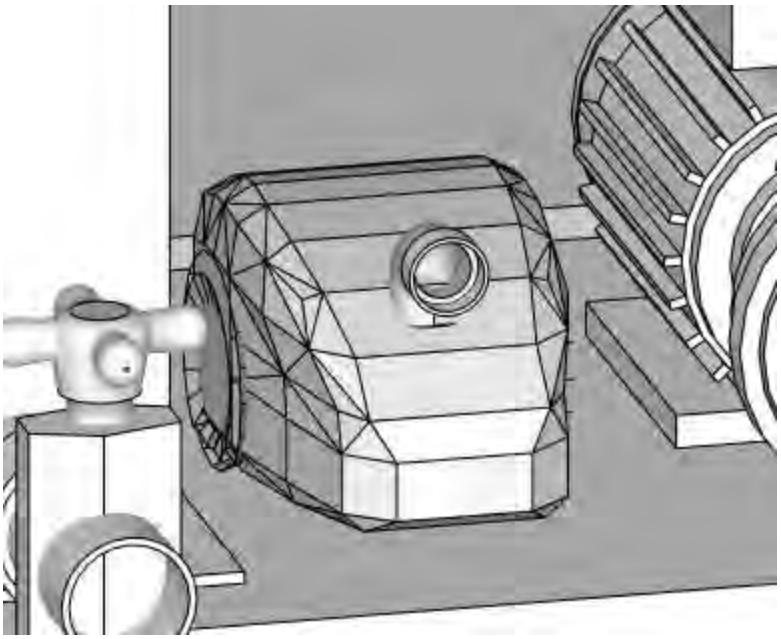


Pipe Rings

Top Ring = Air

Bottom Ring = Water

The Blower



The Blower (seen above in the centre of the drawing) provides additional air flow which increases the force of the jets as the air and water mixes inside the Gunite bodies. The air lines are on top of the Gunite bodies. The blower's shape may change from above but the power will be +/- 900W. There are two 1" to 1.5" bushes that will be needed to connect the blower to the non-return valve and then the 1" pipe to the jets.

There is a non-return valve on the Blower to ensure that water does not enter the unit. This is a preventative safety measure and is essential.