

General Conceptual Diagrams
Hot Tub with ACC System, Clearblue Ionizer, Massage Pump with 6 HydroAir Jets

Order of Components Overview

*Note: components have been spread out to provide a simple schematic view.
See following pages for recommended installation layouts.*

Hot Tub Controller and Electric Heater

Gas Heater (Optional)

Filter

Ionizer Controller

Ionizer Mineral Cell

Ozone (Optional aftermarket)

75gph+ flow needs bypass valve between inlet/outlet

Primary Pump

Component Order:

The components are illustrated in the correct order of flow. As water comes out of the suctions of the tub it goes through the system components in the following order:

Pump

Hot Tub Controller (all) and Electric Heater (optional)

Filter

Gas Heater (optional)

Ozone (optional aftermarket addition, not included)

Ionizer Mineral Cell

Components with electrical power supply (Pump, Hot Tub Controller and Electric Heater, Ionizer Controller) should be at least 5' from the tub, OR there should be a barrier between tub occupants and these pieces of equipment, per national electric safety code.

The ionizer controller can be powered from the spa pack, or the end can be changed to a standard 120V grounded (3-prong) cord.

Don't overlook the ionizer that the instructions specify the mineral cell to be oriented in such a manner that the point where the cord comes out be on bottom (best) or on the side (ok), but not on top. Also, if you can move it closer to your tub without running out of cord, do so.

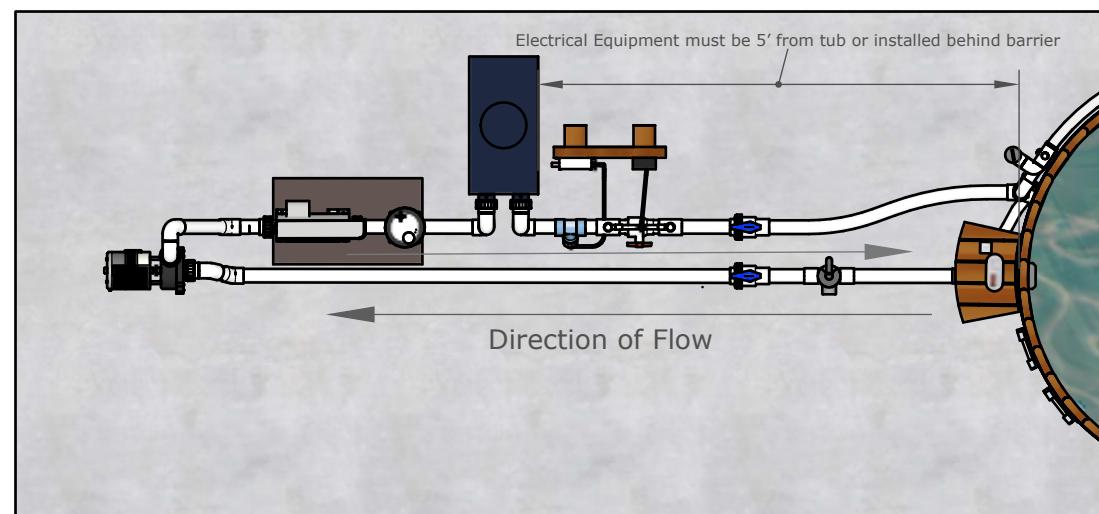
Outside of this, and except for where instruction manuals further direct, various orientations, proximities, etc. can be flexible to your particular installation.

Notes:

The post where the ionizer control box is mounted is just for example, and was not included.

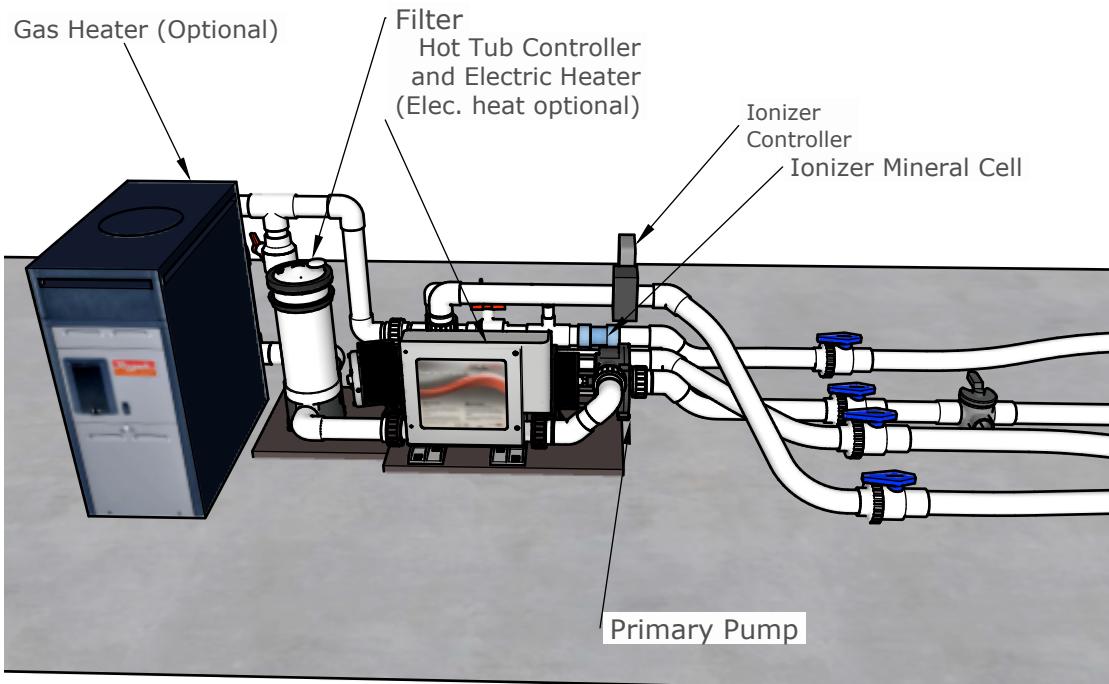
On a Hydro-Jet system, the main system components and connecting plumbing is 2". On a Circulation-Only system, the plumbing is 1.5" The tub wall plumbing is always 1.5"

You will likely have leftover plumbing fittings. Enough were sent to plumb different configurations. Conversely, depending on your installation you may need to purchase additional SCH. 40 PVC parts.



Compact Installation

Note: the additional bends used to 'fold' the system will cause a moderate decrease in jet pressure. However, it is much more compact and still gives a great massage.

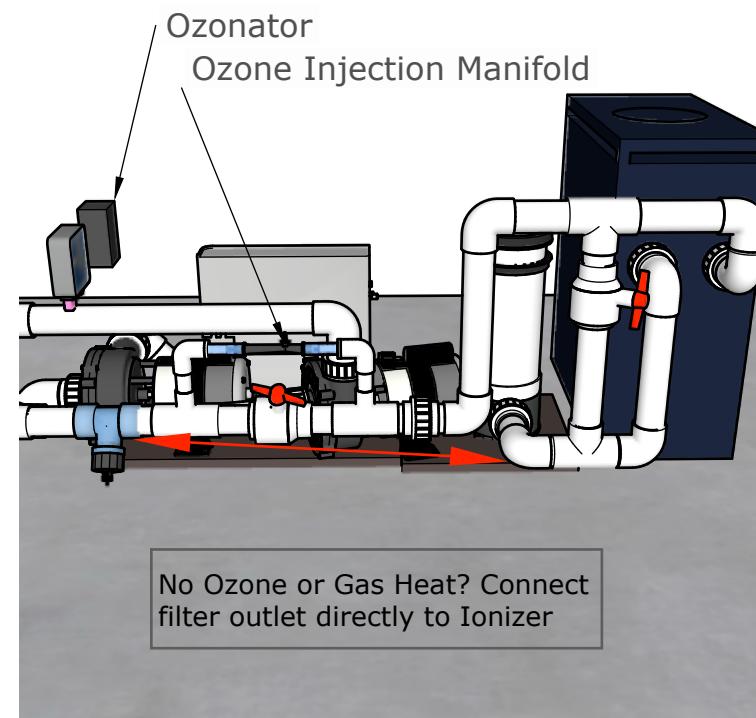
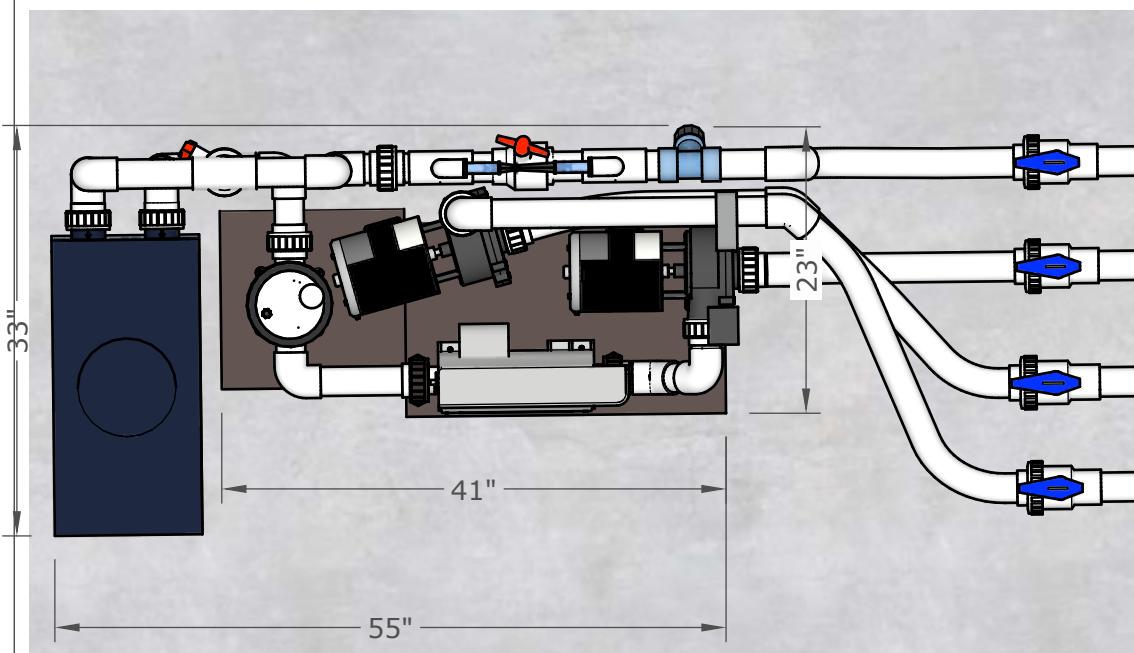


Compact Layout:

These views show a very compact installation option. For illustration purposes, we have included the Gas Heater option, the Auxiliary Massage Pump option for a second bank of jets, and an injection manifold (not included) to allow for the installation of aftermarket Ozone or AOP sanitation systems in addition to the included ionizer.

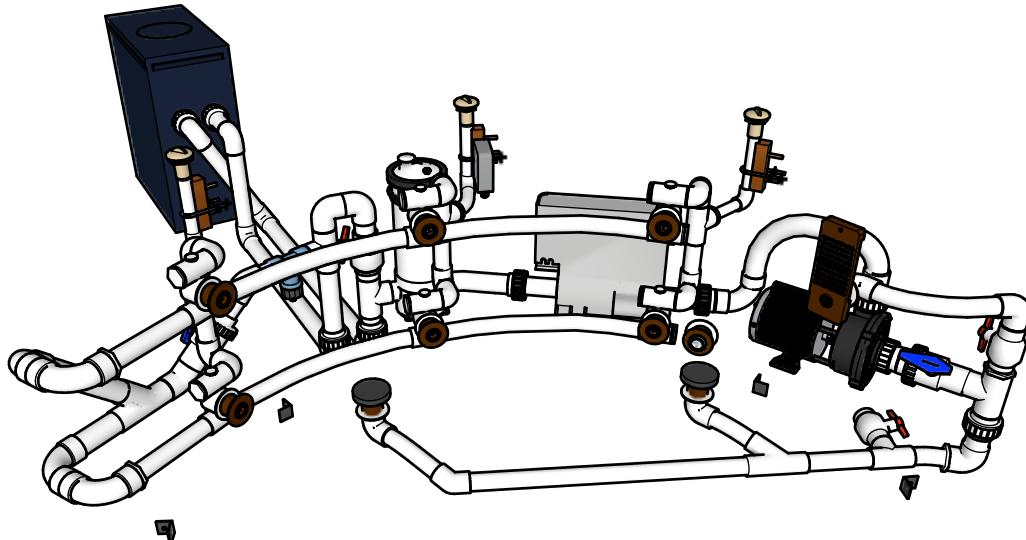
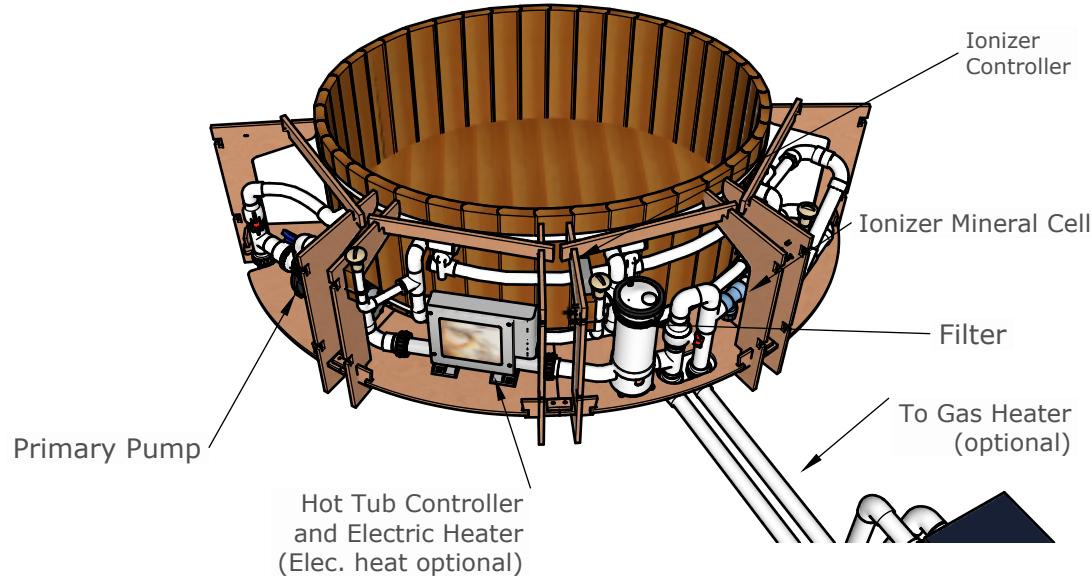
With Electric Heat, and without provisions for Ozone, the system can be even more compact.

There are two compromises with compactness. First, the added number of tight bends robs a small but notable amount of flow, jet pressure, and system efficiency. Second, there is less room available to access components for maintenance.



Max Water Flow Installation

Note: eliminating as many bends as possible delivers the highest possible pressure at the massage jets. This installation fits in our Surround (framing shown) or under a deck.



Compact Layout:

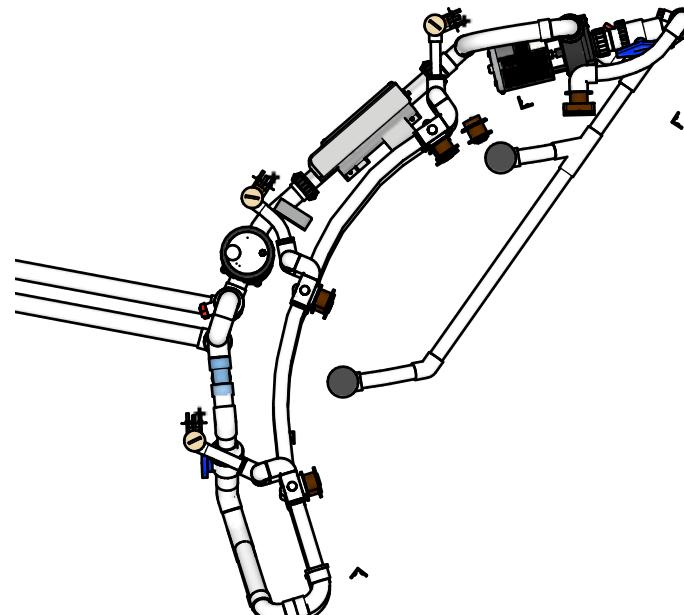
Wrapping the system around the tub helps to limit the number of bends in the system in favor of one gradual curve for improved water flow efficiency.

Keeping the system as close as possible to the tub also maximizes flow and jet pressure, as the friction of the water moving through the pipe can become significant over distance.

While the example shown turns 180° at the jet manifold, it is also possible to continue in the same direction around the tub if, for example, the tub is fully set into a deck to hide all the plumbing.

The Gas Heat option is shown. The gas heater does introduce an additional 180° turn and the associated flow restriction regardless of where it is located. (Gas heater must be 5'+ from tub and open to the sky)

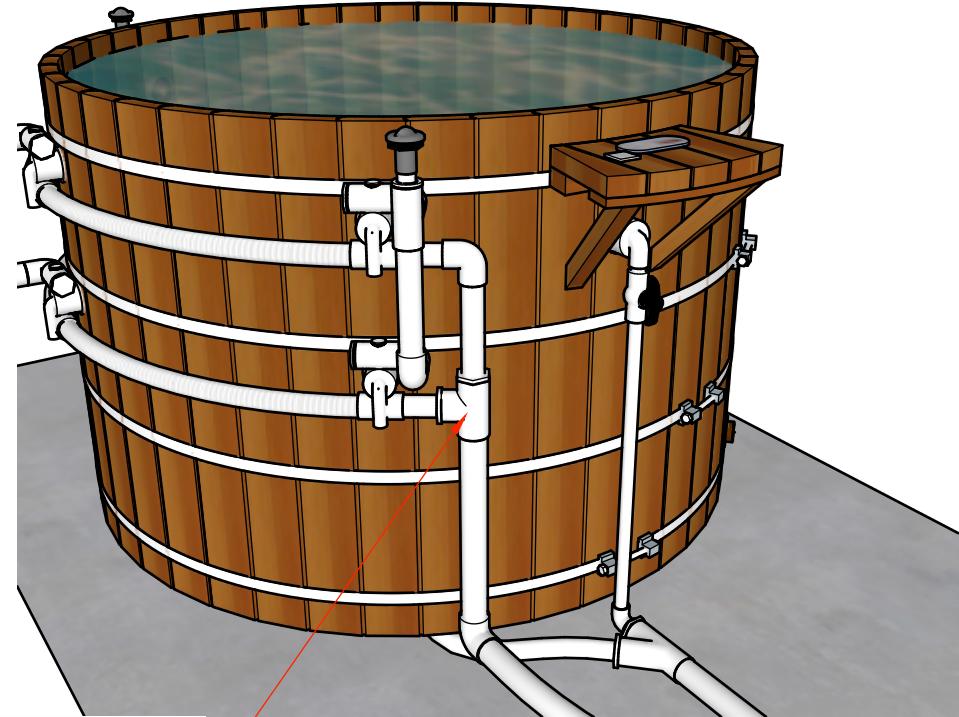
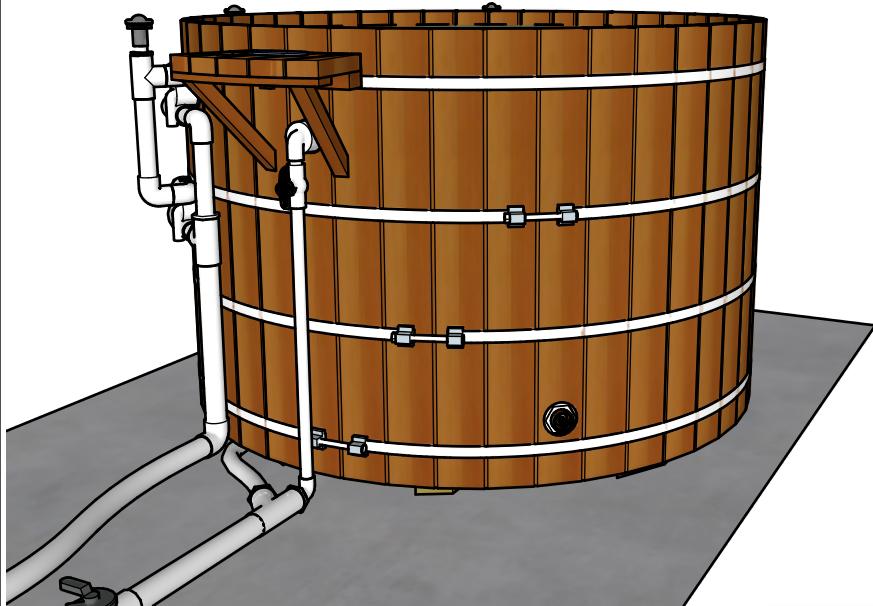
While reducing flow restrictions is a concept that is well worth keeping in mind, don't worry if your installation requires a few additional bends for one reason or another. By considering these concepts wherever possible, you will ensure an exceptionally powerful massage.



General Conceptual Diagrams

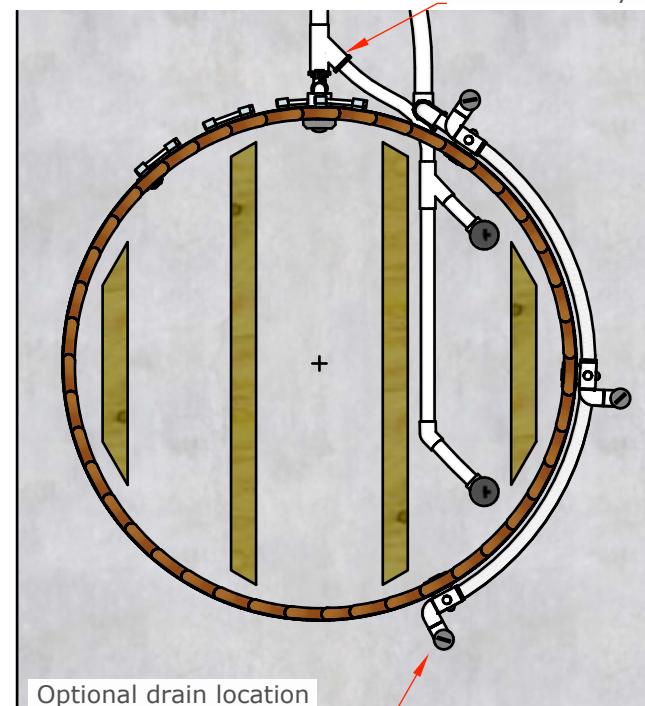
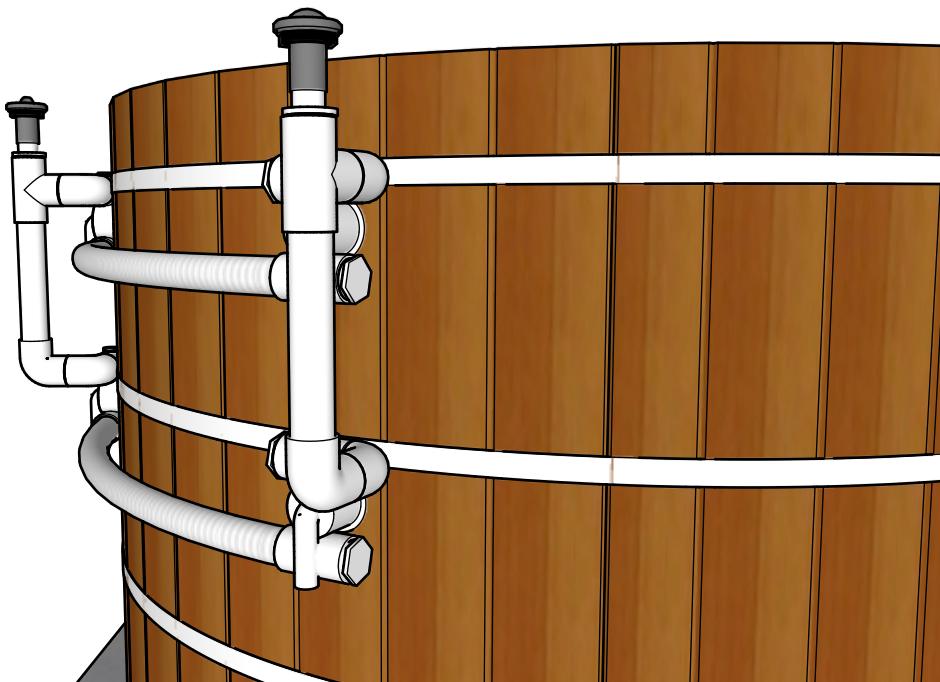
Hot Tub with ACC System, Clearblue Ionizer, 6 Massage Jet Package

Tubside Plumbing: Hydro-Jets



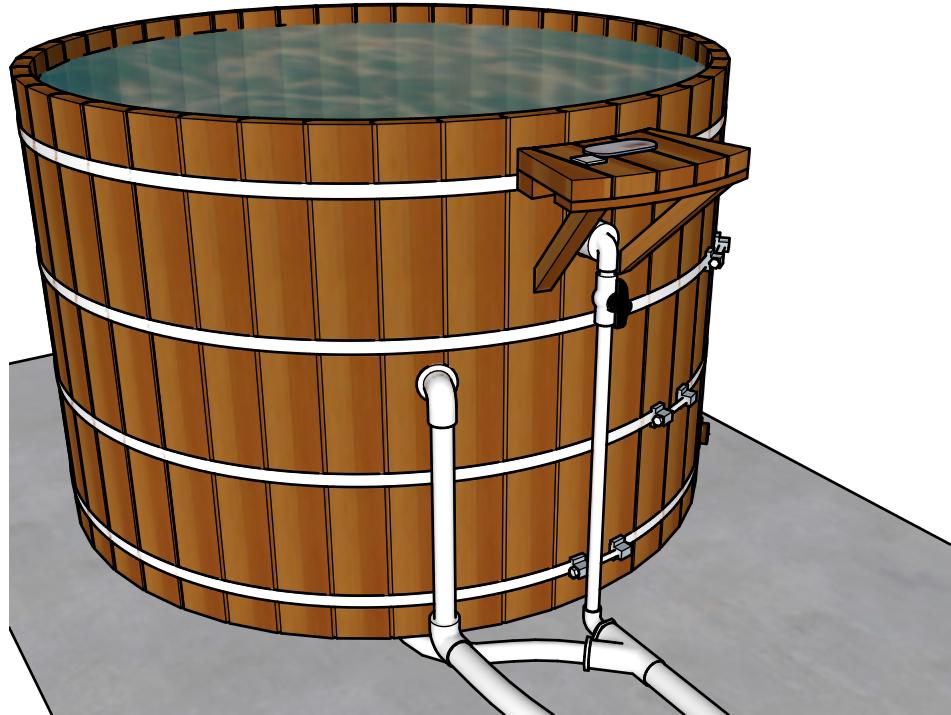
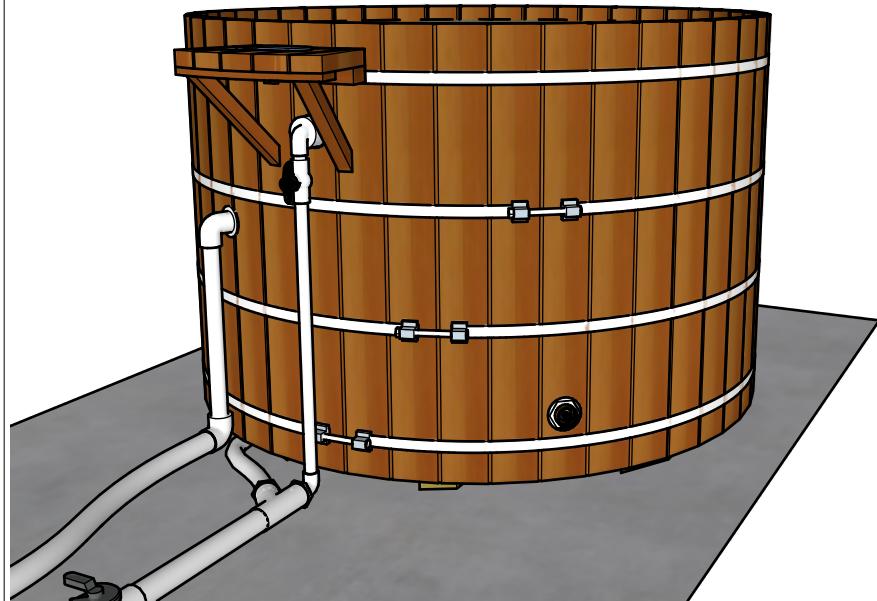
Reduce from 2" to 1.5" at tee

Reduce from 2" to 1.5" at wye



Optional drain location

Tubside Plumbing: Circulation Only



Circulation-only system uses 1.5" PVC throughout

