

## TR4000 & TR3000 Installation Guidance.

### Product Information:

iCoolSport's Team Recovery range of pools are already in use in hundreds of stadiums and large recovery facilities around the world. Also many thousands of athletes own and use our other industry leading products such as our MiPods, IcePods, Hi Tech rock hard Inflatable pools and our international best in class mobile ice bath machines.

The new 2022 TR4000 & TR3000 Recovery pools are the latest version of this very successful line of pools. Designed and engineered to provide the perfect solution for medium to large physiotherapy and athlete recovery installations at the lowest cost to buy, install and operate.

We manufacture impressively strong composite pool shells using the latest glass fibre multi layer technology, made even stronger by carbon fibre support beams moulded within the pool walls, steps and full length seat. The pool surfaces are extra hard wearing and colour fast for many years of real world use. Designed and manufactured to take all the punishment full sports team can deliver.

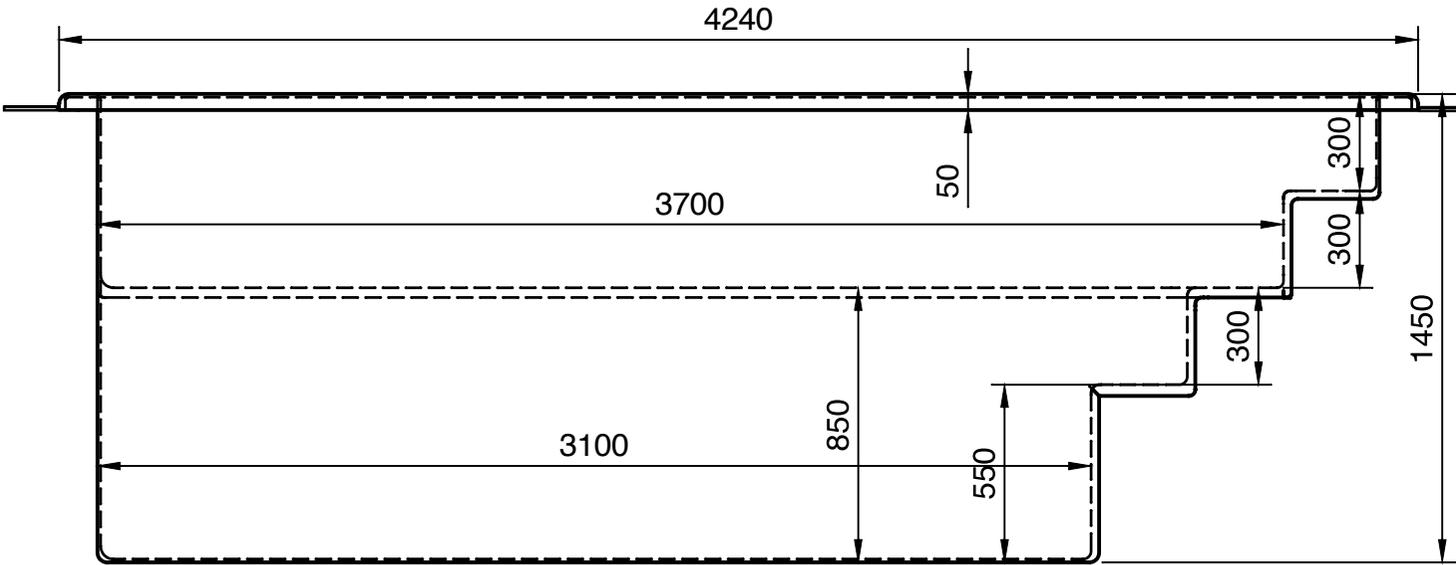
The pools are delivered as a completely assembled free standing single module supported by a strong thick cross section aluminium frame that is light but immensely strong. All pool water inlets and outlets and spa jet fittings are factory installed and tested and high grade insulation is applied to the entire outer shell ensuring fast cooling and low running costs.

The iCoolSport TR range of recovery pools are simply the best in class. Combining the highest commercial quality, the easiest handling and installation, yet the the lowest purchase price, lowest installation cost and lowest running cost of any comparable product anywhere.

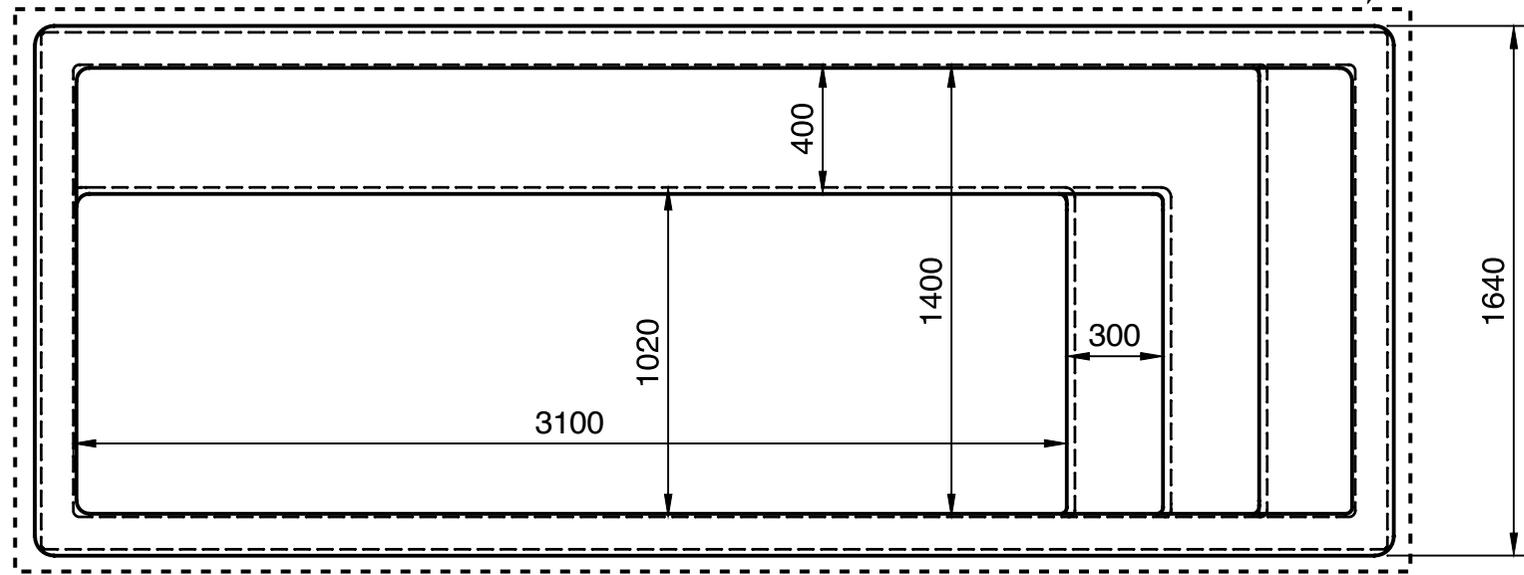
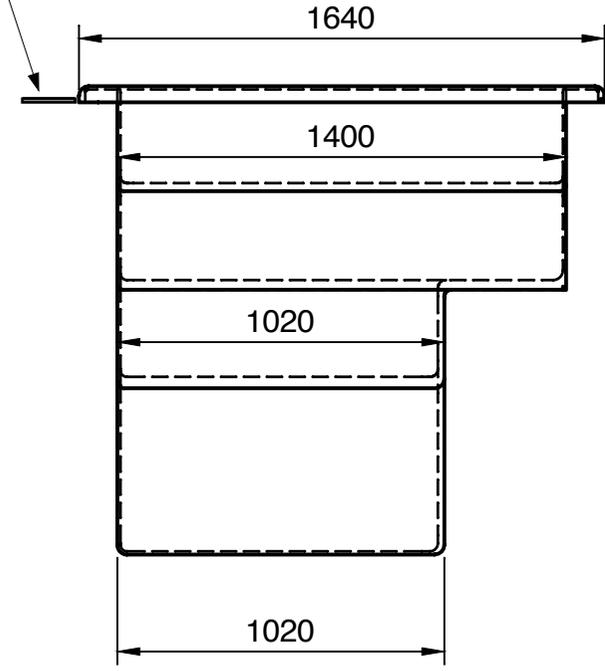
Compatible with international all standards and common pool plumbing pipes and connections.



# Outer and Inner Dimensions of the Pool Shell.



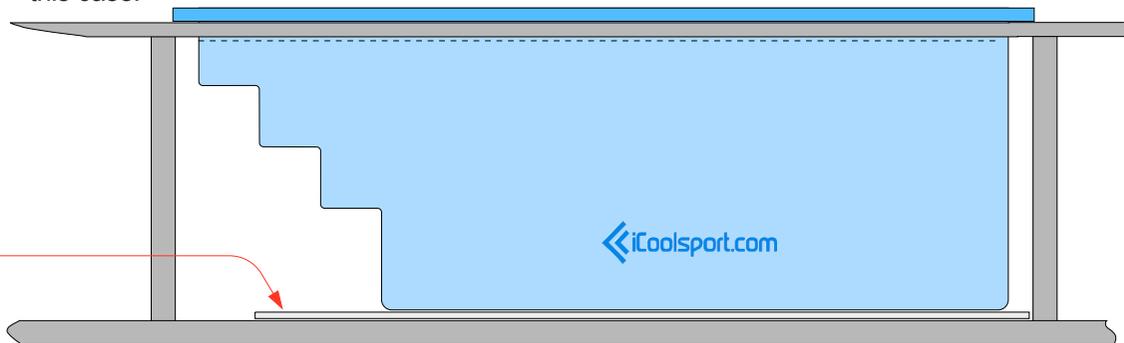
A strong 90mm flat flange is provided around the entire circumference of the top lip of the pool to assist with alignment to building structures. If it is not required it can be quickly & easily removed with a suitable cutting tool such as an angle grinder.



**PLEASE NOTE:**  
 As the pool shells are manufactured by hand so very small variations in some dimensions are possible, however the length and width at the top and the overall height will always be within +/- 5mm.  
 On request we can advise prior to shipping any exact critical dimensions required in regard to a specific pool ordered

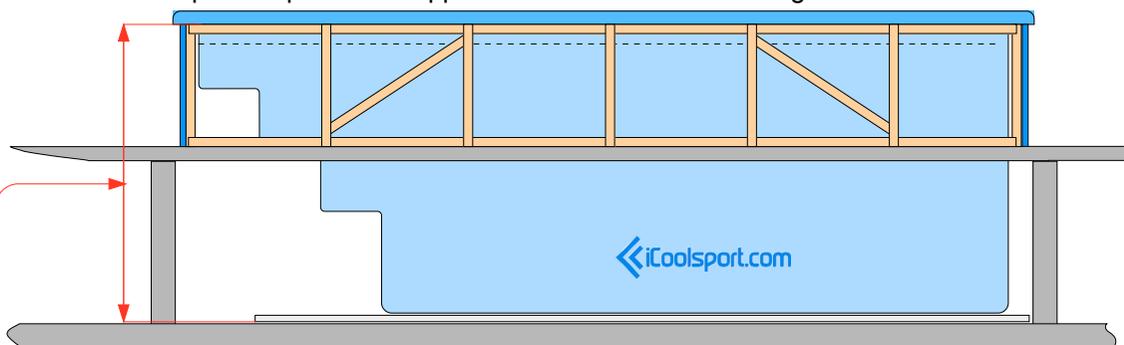
The pool can be installed in three ways shown below.

1: Fully submerged in to a pit. No side covering or external user access step is needed in this case.



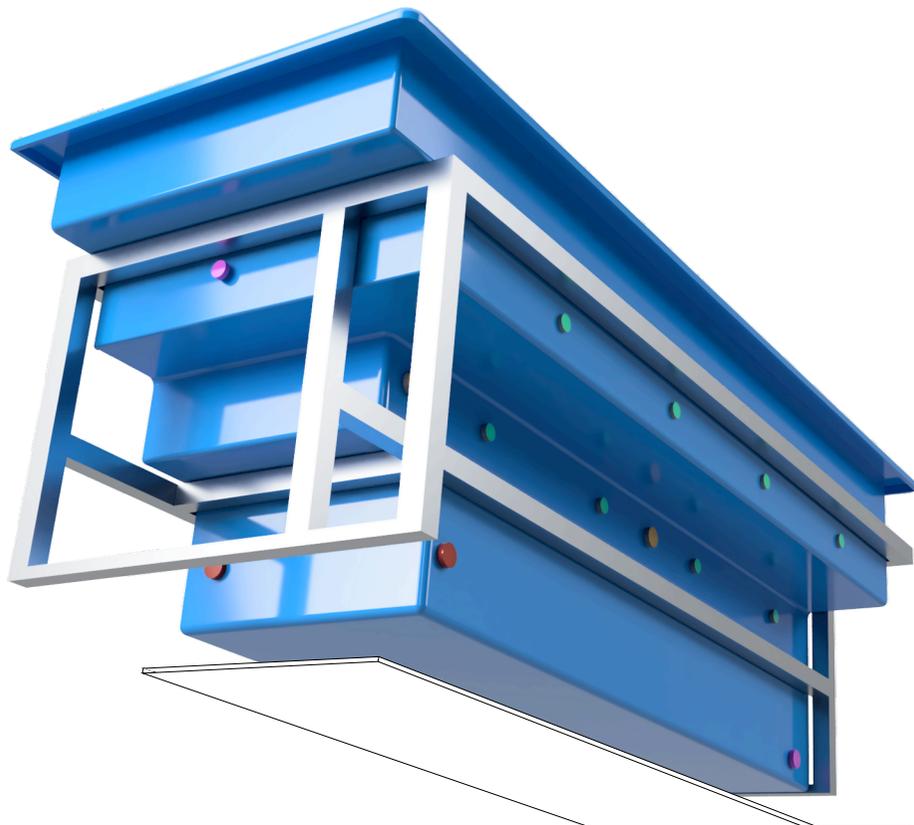
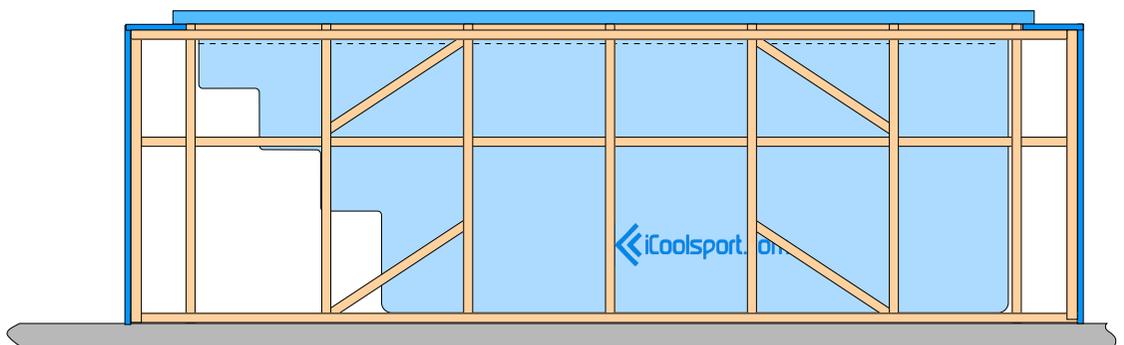
2: Partly submerged in to a pit, this may require an external step in the support structure for user access.

A light weight wooden frame is required between the floor and the underside of the lip of the pool as a support for the decorative covering material.



3: Free standing on the floor. External full height user steps or a pool ladder is required.

A full height light weight wooden frame is needed as a support for the chosen decorative side covering materials.



A strong load bearing waterproof insulation sheet is provided with the pool. This sheet **must be placed under the pool between the pool and the concrete floor.**

The pool weighs approximately 4250Kg when filled with water

The load on the floor is approximately 1300Kg per Square Meter.

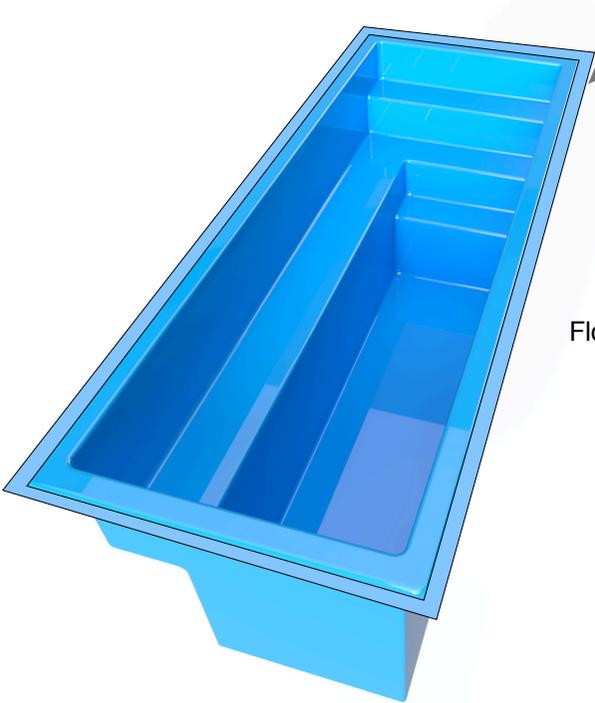
The weight distribution is well within the safe load limits of a common concrete floor slab however this should be confirmed by an engineer.

The special high density insulation sheet provided is essential to greatly reduce the loss of energy in to supporting concrete slab and to protect the fibreglass from imperfections in the concrete.

Without this insulation a great deal of the cold or heat from the pool water would be lost into the concrete which will increase the running costs unnecessarily.

**ADJUSTING HEIGHT:** If the height of the pool needs to be raised a small amount to achieve perfect level or to align the pool lip to the room floor or cladding, it is acceptable to place additional spacer sheets under the pool. Any water resistant material is acceptable for this but the sheet provided with the pool must be against the bottom of the pool. Additional spacer sheets should be under the special provided sheet.

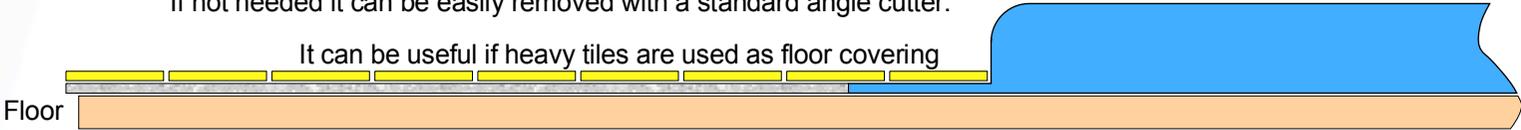
# Removable Outer Flange:



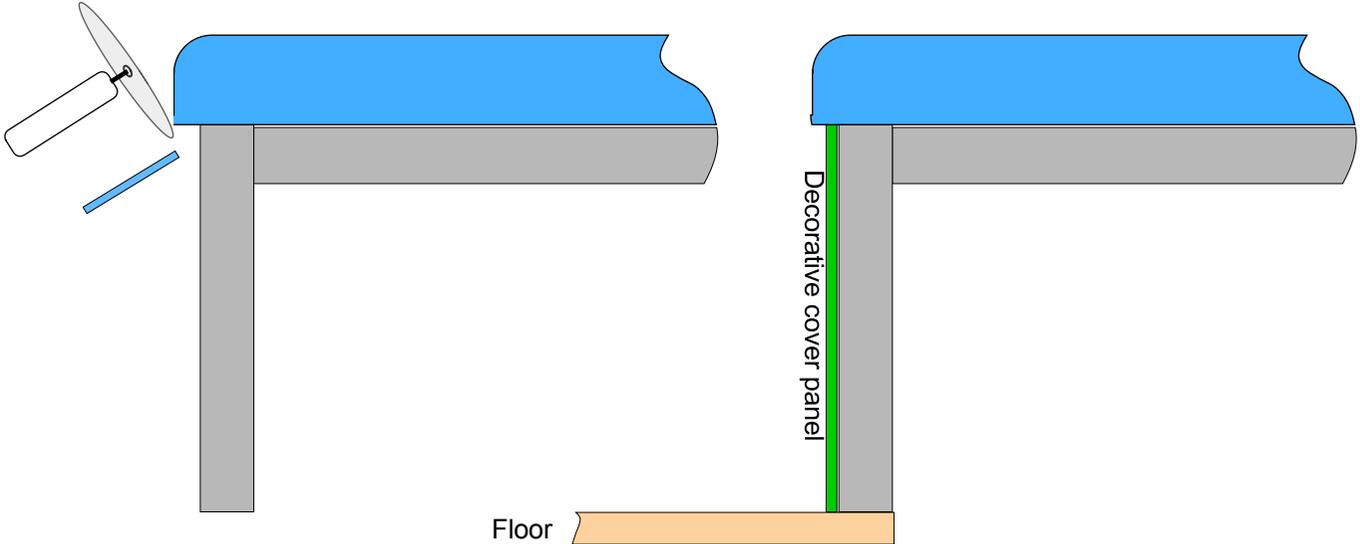
TR4000 & TR3000 pools are delivered with a removable flange to provide a strong flat support surface for attaching to or alignment with the building structure if required. This is very useful when the pool lip is at floor level.

If not needed it can be easily removed with a standard angle cutter.

It can be useful if heavy tiles are used as floor covering



If not needed the flange can be removed with a standard angle grinder with a suitably thin cutting blade. Use the edge of the lip as a useful accurate guide for the cutting.



# Plumbing Connections.

If not factory installed connect the PVC water flow plumbing as shown here using standard pool grade 40mm and 50mm PVC pressure pipe.

All pipes must be covered in 90-100mm aluminium covered foam pipe insulation to prevent serious energy loss. This is a standard product available in most countries.

The suction inlets to both the smaller TurboCool circulation pump and the larger Spa Jet pump have 2 suction points in the pool to comply with safety regulations.

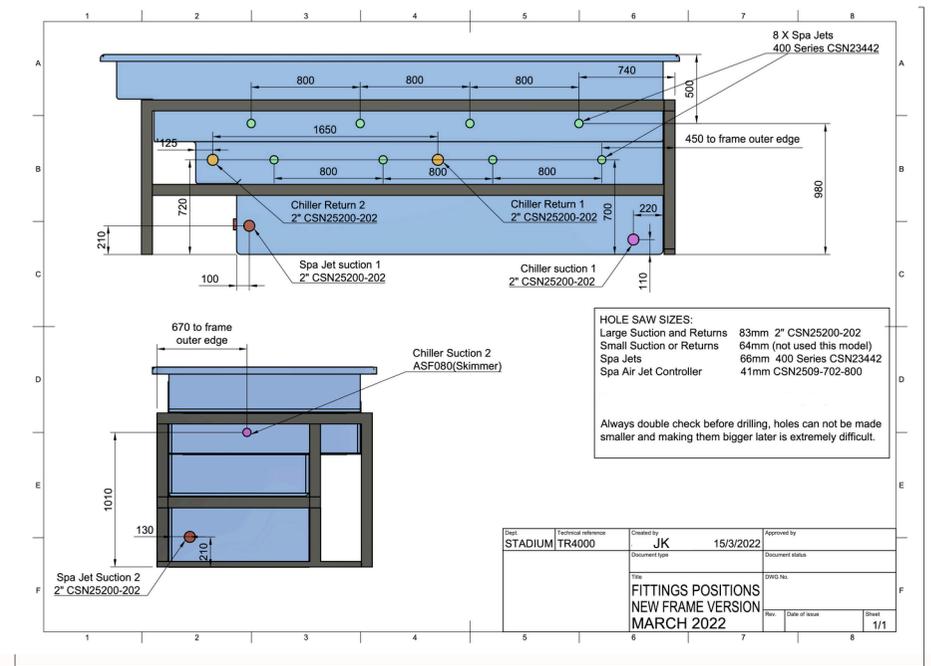
The suction lines are connected together as shown to make a single connection to each pump inlet and return ports.

The pumps are normally placed under the pool steps, but can be placed anywhere that is convenient.

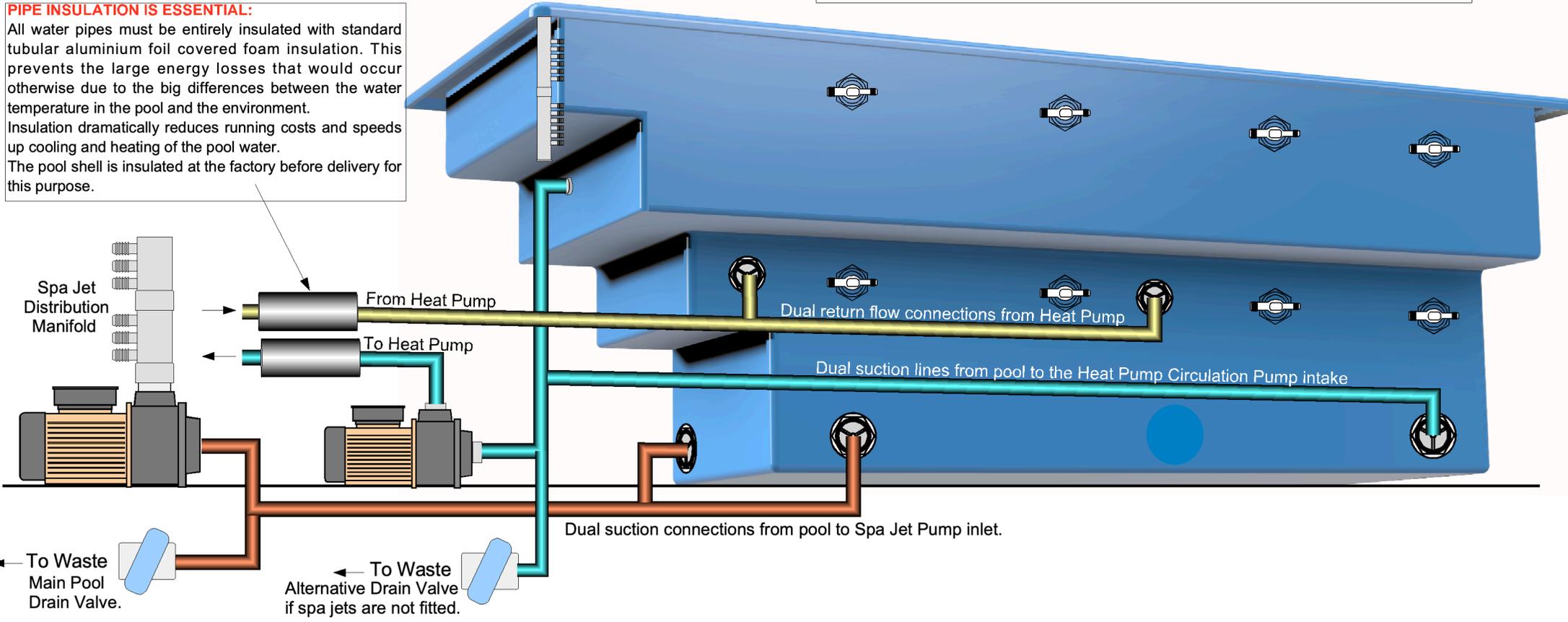
If placed under pool, access must be provided to reach the pumps for future maintenance.

A Drain Valve should be connected to the Spa Jet pump inlet to allow the pool water to be drained. If the pool does not have spa jets then a drain can be connected to the heat pump suction line.

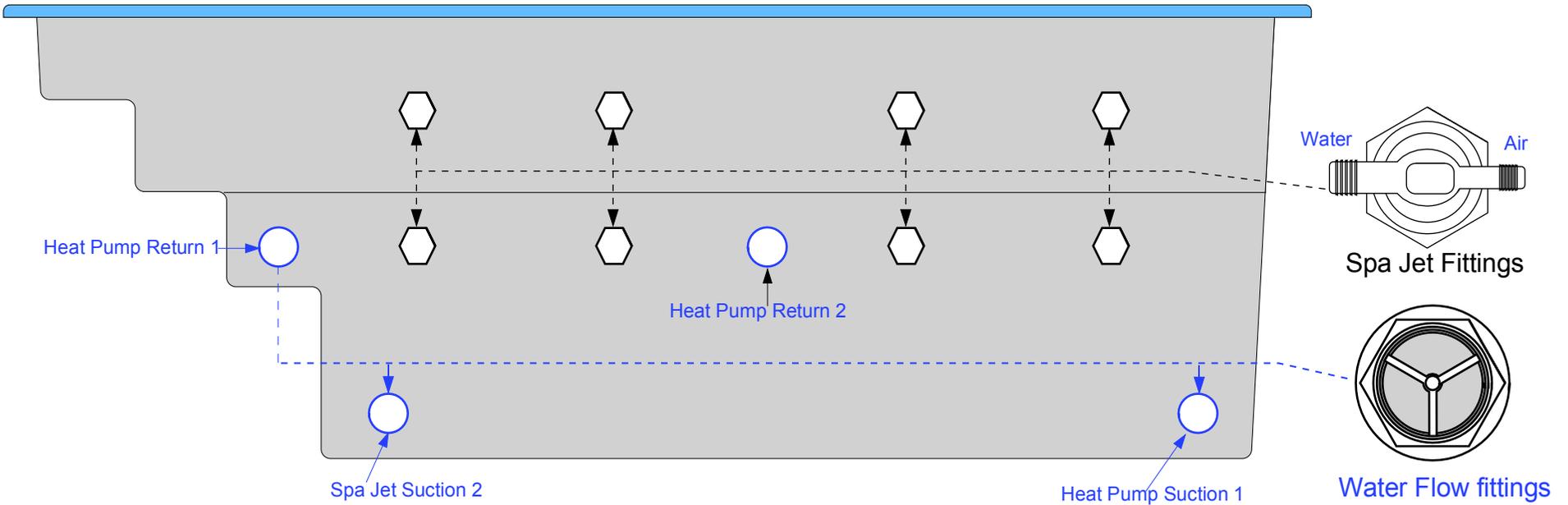
The Drain Valve must be accessible after installation. If this is not practical an electric water valve should be installed instead of the manual valve to allow remote control of the valve.



**PIPE INSULATION IS ESSENTIAL:**  
 All water pipes must be entirely insulated with standard tubular aluminium foil covered foam insulation. This prevents the large energy losses that would occur otherwise due to the big differences between the water temperature in the pool and the environment. Insulation dramatically reduces running costs and speeds up cooling and heating of the pool water. The pool shell is insulated at the factory before delivery for this purpose.



# Pre Fitted Plumbing Fixtures and Positions.



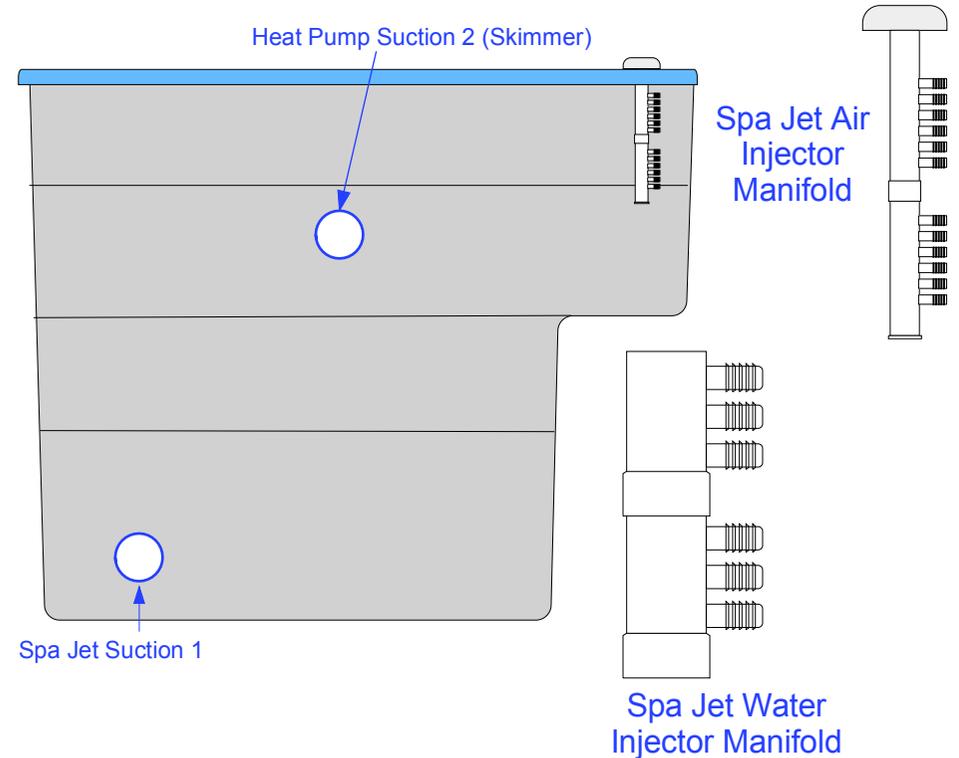
Depending on the model ordered pools are delivered with all water fittings that penetrate the pool shell pre fitted, sealed and tested at the factory.

If you ordered a pool with spa jets then they are also pre fitted and tested at the factory including all flexible air and water hoses to the spa jets.

The spa jet fittings are international standard designs that have both water and air inlets. The water and air hoses to the spa jets are factory pre fitted

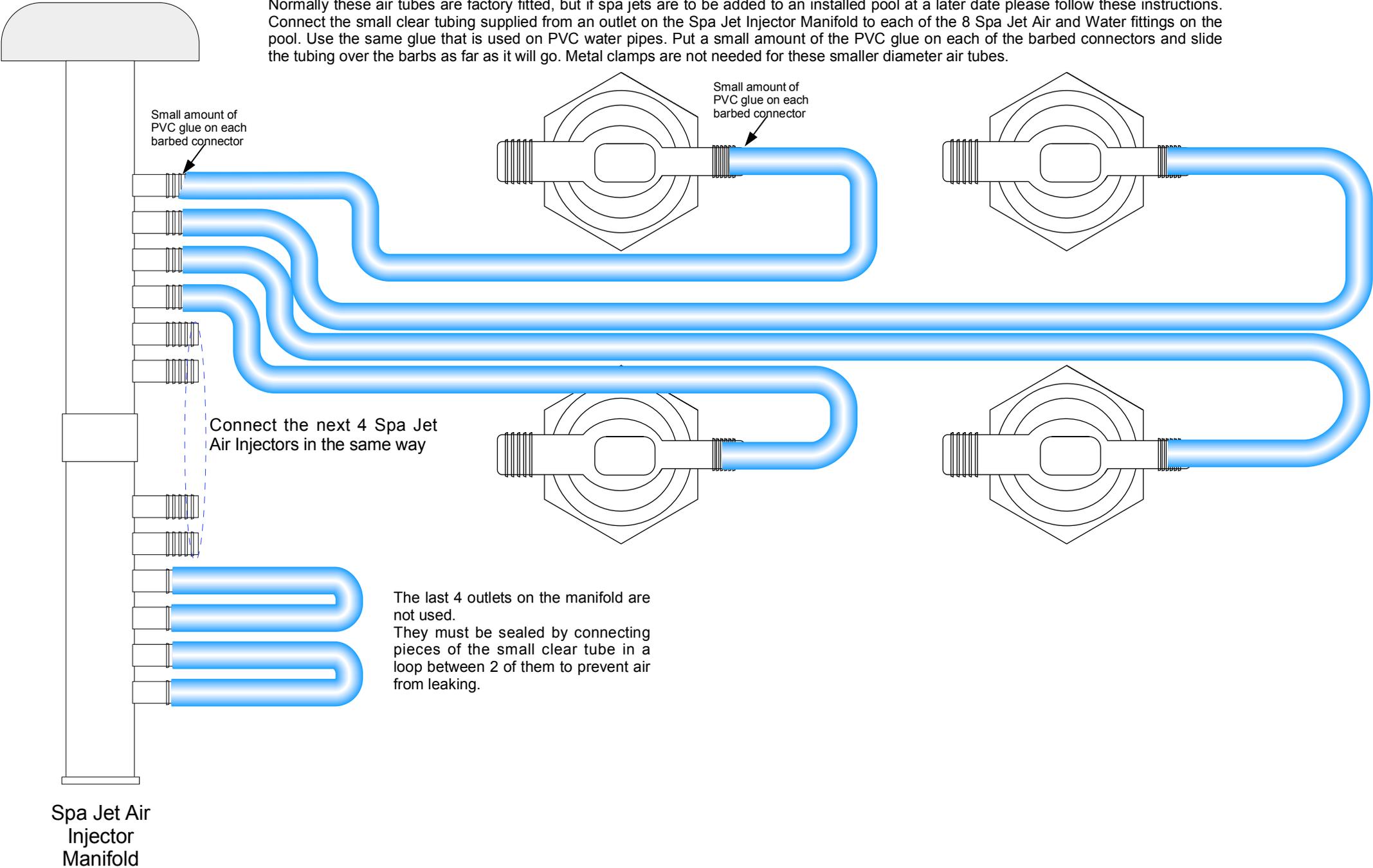
The water flow fittings are compatible with international standard 50mm or PVC pool pressure pipe.

For safety, both the spa jet pump intake and chiller/heater circulation pump intake are duplicated at a safe distance from each other to comply with international regulations. Water return outlets are also duplicated.



# Pre Installed Spa Jet AIR Injector Tubes.

Normally these air tubes are factory fitted, but if spa jets are to be added to an installed pool at a later date please follow these instructions. Connect the small clear tubing supplied from an outlet on the Spa Jet Injector Manifold to each of the 8 Spa Jet Air and Water fittings on the pool. Use the same glue that is used on PVC water pipes. Put a small amount of the PVC glue on each of the barbed connectors and slide the tubing over the barbs as far as it will go. Metal clamps are not needed for these smaller diameter air tubes.



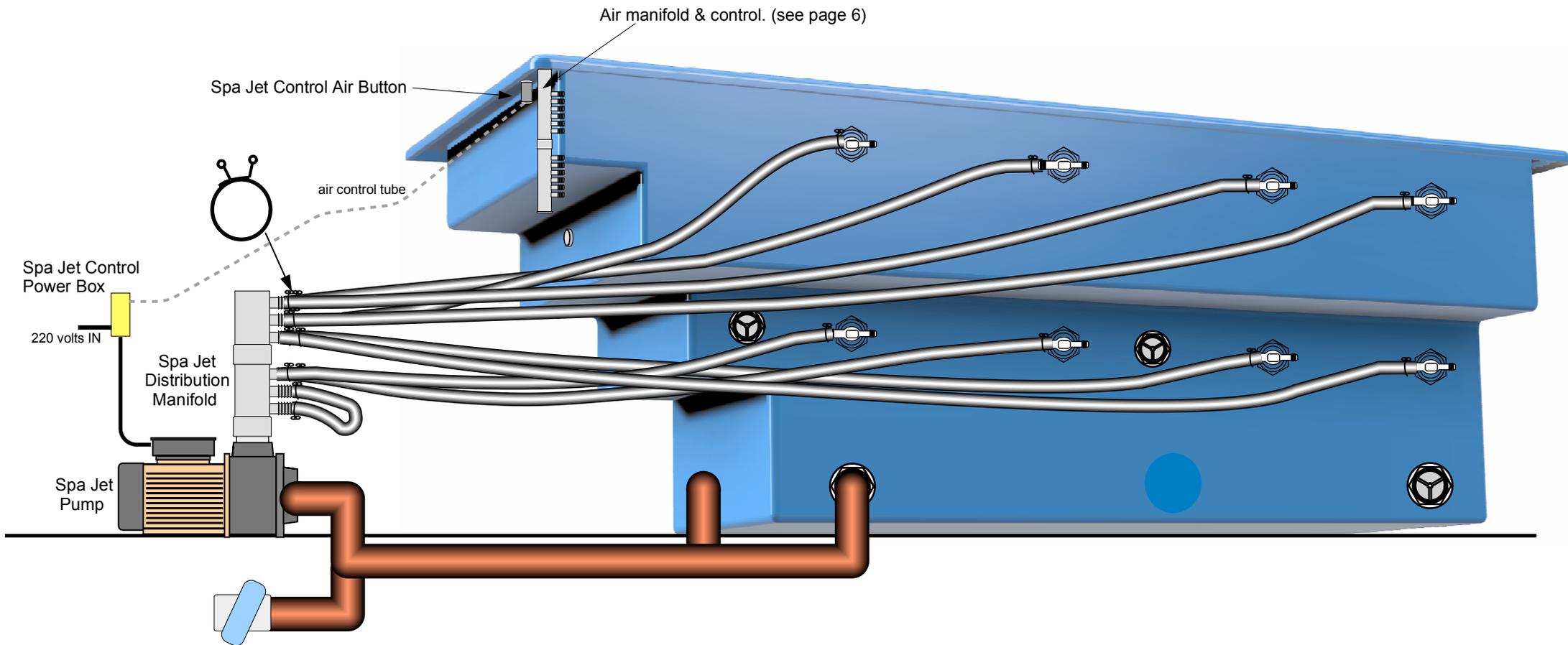
# Spa Jets Pressure Tubes layout and Pump Control.

Connect each of the water jet inlets to one of the outlet ports on the manifold as shown.

Use a small amount of PVC pipe glue inside each connection.

Place one of the black spring clips provided on each connection.

Place a small length of the clear tube between each of the unused ports as shown.



# Installing Spa Jet WATER Injector Tubes.

These tubes are usually factory fitted but if fitted on site please follow these instructions. Connect the Large clear tubing supplied from each outlet on the Spa Jet Water Injector Manifold supplied, to each of the 8 Spa Jet Air and Water fittings on the pool. Use the same glue that is used on the PVC water pipes. Put a small amount of the PVC glue on each of the barbed connectors and slide the tubing over the barbs as far as it will go. The black wire metal spring clamps provided **MUST** be installed on all water tube connections due to high pressure.

Spa Jet Air WATER  
Injector Manifold

Small amount of  
PVC glue on each  
barbed connector  
**PLUS** a wire clamp  
provided.



The Manifold is supplied in  
2 pieces. It is assembled  
using standard PVC pipe  
glue.

The last 4 outlets are not used. **They must be sealed** by connecting short pieces of the small clear tube between each 2 of the remaining connections as shown.

The Water Manifold is glued to the outlet of the large spa jet water pump using a short length of 50mm PVC water pipe as shown.

Small amount of  
PVC glue on each  
barbed connector  
**PLUS** a wire clamp  
provided.



Complete by connecting all 8 X Spa Jet Air Water & Air Injectors in this way

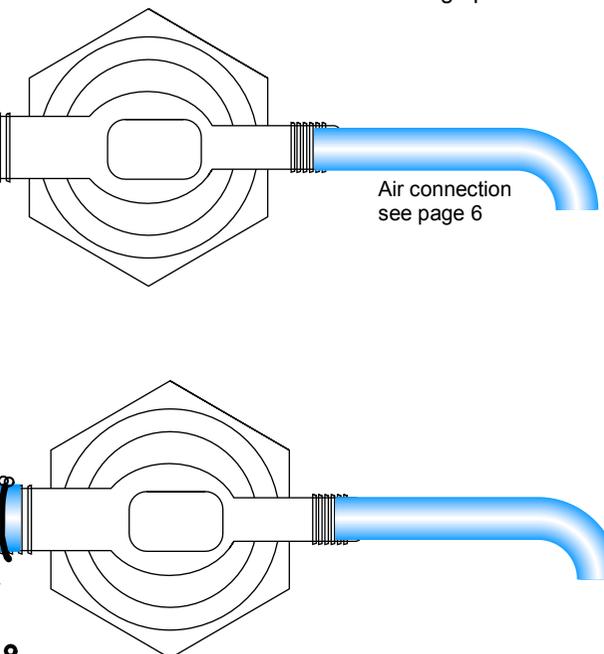
## REMOTE SPA JET WATER PUMP:

The provided spa jet water pump is normally mounted under the pool steps and the manifold is directly mounted on the pump outlet as shown. If the pump is to be mounted in a different place such as a machinery room, or if a different type of pump is to be connected, then this is done by connecting a standard 50mm PVC water pipe to the bottom of the Water Manifold instead of directly mounting on the pump and extending the pipework to the remote pump location.

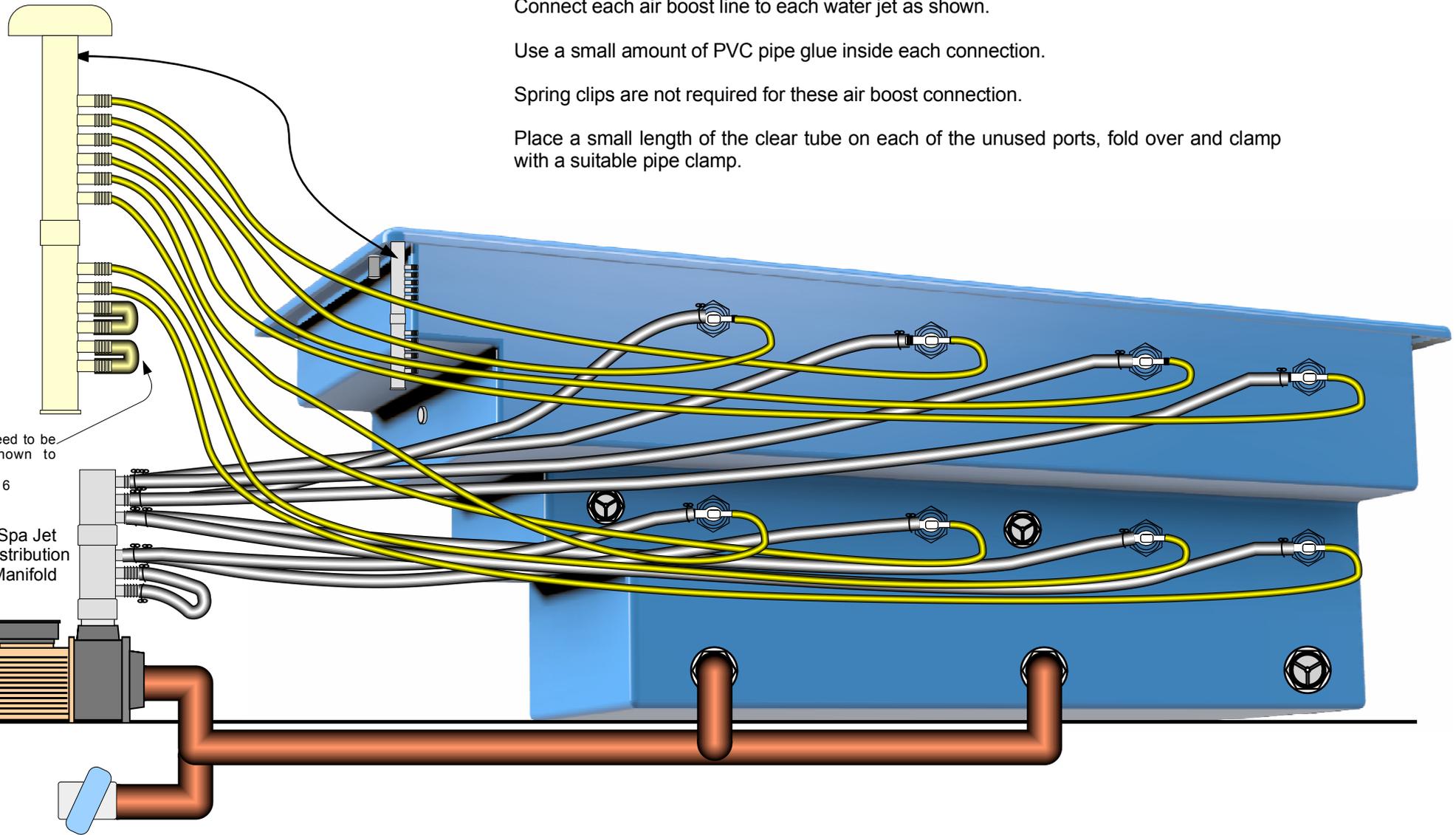
## SPA JET CONTROL:

To operate the spa jets we provide an air switch installed adjacent to the pool steps and next to the spa jet air control dial. This connects to a waterproof Electronic Control Box provided under the pool steps that provides power to the spa jet pump. The box requires a 10 amp 240v power supply. (110volt 15 amp in models for 110v countries). If a different pump or a remotely located pump is used a power cable from the pump control electronics box to the remote pump will be required.

The Large Spa Jet Water Pump normally supplied.



# Completed Spa Jet Air & Water Tubing Layout.



Connect each air boost line to each water jet as shown.

Use a small amount of PVC pipe glue inside each connection.

Spring clips are not required for these air boost connection.

Place a small length of the clear tube on each of the unused ports, fold over and clamp with a suitable pipe clamp.

The 4 unused ports need to be joined in a loop as shown to prevent air leaks  
See illustration on page 6

Spa Jet  
Distribution  
Manifold

Spa Jet  
Pump

Instructions for Plumbing, Electrical and Electronic connections to an iCool TurboCool Machine are detailed in the separate TurboCool Manual available for download from [www.icoolsport.com](http://www.icoolsport.com)