

When you may need to use a Stack Pipe?

There are a number of options regarding the installation of Papa pump systems which will vary depending on the specific site geography and whether the supply is a river, stream or spring and will require considerations regarding the supply head, delivery head and flow rates which will in turn influence the particular design of the installation.

A primary consideration will always be to 'maximise' the supply head which in every case will maximise the effectiveness and efficiency of the pump system. Generally, this will involve moving the water (of whatever source) from the highest point on a customers land boundary to the lowest - which will involve the laying of pipes to facilitate.

Here are the guidelines for a correct installation.

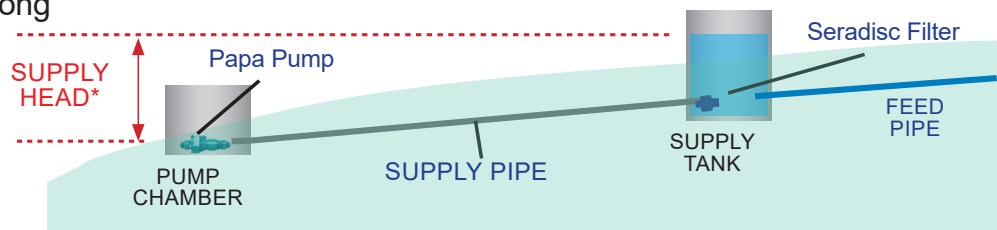
(More info can be found on our website in the Papa Pump Training handbook)

The Supply Tank and Pump Chamber should be positioned so that:

- ✓ Supply Pipe length is between 5 and 7 times the Supply Head

for example: if the Supply Head is 2 metres, the Supply Pipe should be between 10 and 14 metres long

*2m minimum recommended
(for lower supply heads please contact us via our website)



- ✓ The Supply Pipe should have a 2 inch (50mm) internal diameter
- ✓ The Supply Pipe should be Steel Pipe (for delivery heads exceeding 15 metres)
- ✓ The Supply is a minimum gradient of 1:10
- ✓ The supply pipe is straight

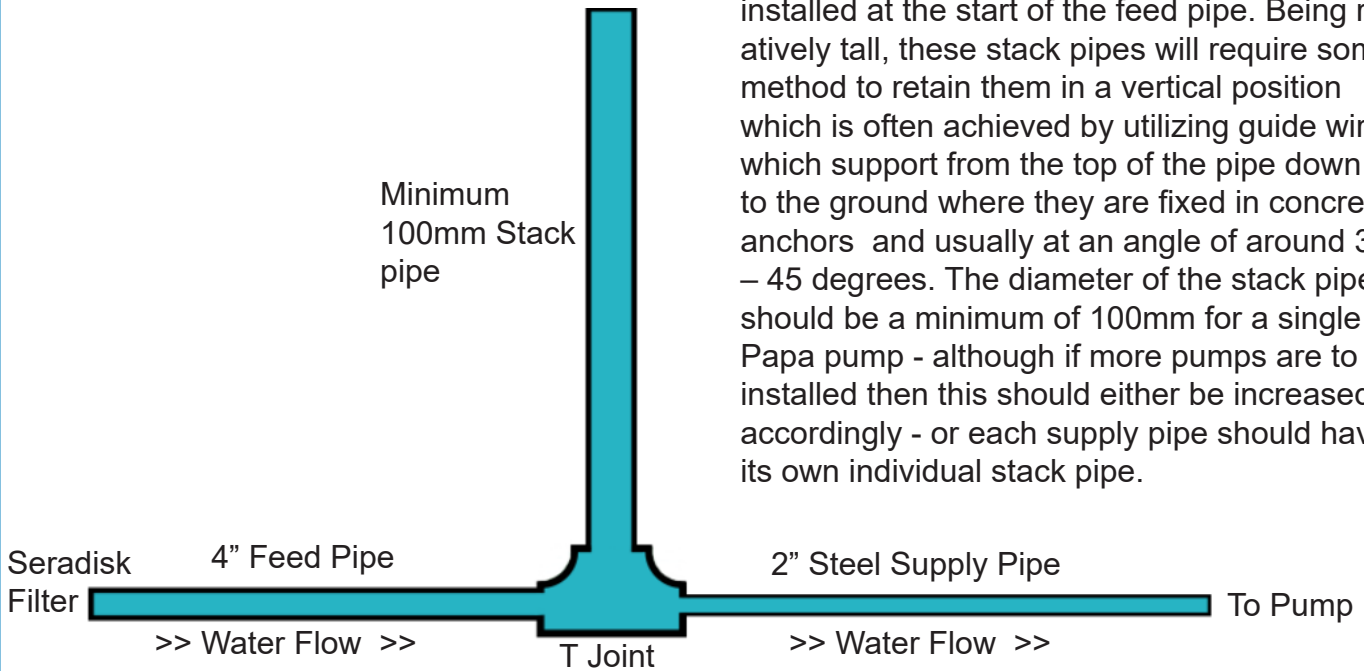
There are certain 'guidelines' that need to be followed in terms of supply pipe gradients and supply head. Sometimes on particularly flat terrain it may not be possible to locate the supply tank and pump sufficiently to meet these guidelines (you may be required to put in a very tall supply tank in if you were trying to follow the guidelines)

Papa Pump
the pump that uses no fuel!



If the Terrain is too flat to accommodate this, rather than constructing a tall supply tank – it is possible instead to simply erect a vertical pipe which we term a ‘stack’ pipe. This can be installed between the feed pipe and supply pipe and essentially achieves the same purpose as a supply tank, except that it does not allow for the

installation of a filter- which then needs to be installed at the start of the feed pipe. Being relatively tall, these stack pipes will require some method to retain them in a vertical position which is often achieved by utilizing guide wires which support from the top of the pipe down to the ground where they are fixed in concrete anchors and usually at an angle of around 30 – 45 degrees. The diameter of the stack pipe should be a minimum of 100mm for a single Papa pump - although if more pumps are to be installed then this should either be increased accordingly - or each supply pipe should have its own individual stack pipe.



To the right is an example of a stack being used.



When the supply pipe is above ground it will need anchoring, this can be done with concrete blocks like you can see in the picture to the left.

For Further enquires feel free to contact -

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