

Self build of a pool is an economical way to achieve an attractive and functional pool, guaranteed not to leak. Following these guidelines will ensure that the pool is built in the most cost effective manner, ready for us to install the fittings and the reinforced liner.

Basic Construction Guidelines

- ✓ Build pool in either square or rectangle.
- ✓ Base of pool made from concrete slab approx 200mm thick
- ✓ Walls of pool built from 200x400mm concrete blocks, with buttresses every 1200mm. Not necessary to fill blocks with concrete if pool is to be in the ground. If the pool is above ground, will need filling.
- ✓ Inside must be rendered smooth.
- ✓ No curved corners. All corners to be 90 degrees.
- ✓ If there are steps to be built into the pool, they should be built across one corner at a 45 degree angle (space permitting). This avoids any sharp corners that swimmers can injure themselves with. Alternatively a stainless steel ladder can be fitted.
- ✓ The pool surround needs to have at least 20mm overhang into the pool. The surround can be prefabricated pool surround, rustic tiles, ceramic tiles etc. It just needs to be non slip and have no sharp edges.

Dimensions

Any size or type of pool can be created, but avoiding waste material reduces costs.

The maximum height of the walls is 1.58m without incurring extra cost. Using this as the maximum height gives a water depth of approximately 1.48m and avoids the need for a horizontal seam in the walls. The material is 1.65 wide, but needs to fold down onto the floor so that the the floor sections can be welded on top.

The floor should be a maximum of 3.2m wide with any length to suit. Should the floor be wider than 3.2m, then the length should be calculated in multiples of 1.6m. (eg. A pool length of 6.4m or slightly less is good, but a length of 6.5m is not. $6.4\text{m} = 1.6\text{m} \times 4$ sheets, whereas a length of 6.5m would require 5 sheets just to make the extra 10cm up)



Plumbing and Filtration

The installation of the pipe work needs to be done using 10atm PVC pipe.

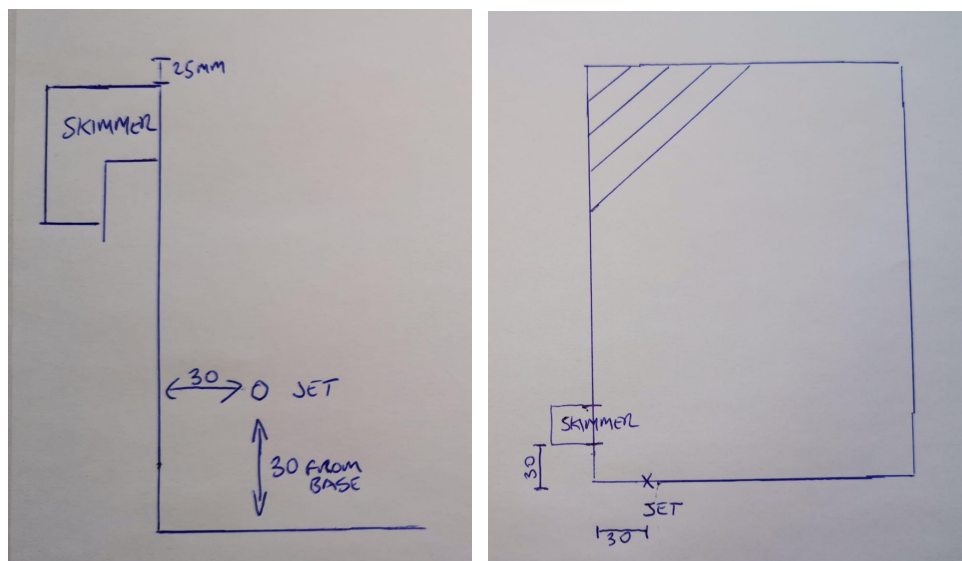
We recommend an installation using 1 jet and one skimmer, connected to a .75cv pump and 500mm high speed sand filter. (diagram below). This system filters and circulates the water far better than the standard jets at one end and skimmer at the other. It reduces maintenance as the floor stays very clean. A drain is not needed in a liner pool.

The skimmer and the jet are installed in the same corner of the pool. The skimmer 30cm from the corner. The jet is installed low down on the wall next to it, 30cm away and 30cm from the floor.

The skimmer needs to be a standard 17L AstralPool unit, that we will adapt from inside the pool. The top of the skimmer mouth needs to be 25mm below the capping stone. It must be cemented into the wall level, both front to back and side to side.

The jet pipe needs to be passed through the wall of the pool, level and at 90 degrees to the wall. If it is passed through the wall at an angle it will mean that the jet fitting will not sit flush. The jet pipe needs to be 30cm from the pool floor and 30cm from the wall. Ideally the jet needs to point at the steps (if the pool has them), to keep them clean as well.

This filtration system moves all of the water in the pool, it helps prevent build up or settlement of debris in the base. The jet forces the water across the pool floor, causing the body of water to swirl and then be sucked in through the skimmer. It is highly effective, yet very simple.



Lights

Should you want a light in the pool, the cable needs to be passed through the wall, from the pump house or electrical control panel. The light needs to be on the wall closest to the house, so that as you look towards the pool from the terrace, house or seating area, you don't see the light source, you are looking in the direction of the shining light.

Before Starting

Before starting work, ask any questions to ensure that no unnecessary work is not done. The idea is to make the installation as cost effective as possible.

