HINTS AND TIPS ON INSTALLING YOUR 'EstroSieve'

Your 'EstroSieve' is capable of efficient removal of particles from pond water, yet it only takes up a fraction of the space of typical vortex units or brush chambers. Water-flow constantly rinses dirt off the main section of the sieve element, and so reduces blocking. By lifting out dirt particles and retaining them above water level, less nutrients dissolve in the water, and algae growth can be reduced. There is also the added benefit of high levels of aeration as the water passes through the sieve. This makes the EstroSieve ideal for use as a pre-strainer before pumping to an external filter (e.g. a BubbleBead filter). The unit can alternatively be used following other forms of filtration, to provide a final polish to the water.

The large and standard sizes of EstroSieve showing the inlet and outlet and the cable gland for optional mounting of a pump within the unit.

ASSEMBLY

The unit may have been supplied with the outlet fittings packed inside, if so:

1) Remove the sieve element to give access to the sump of the unit.
2) Place one washer over the threads of the outlet fitting and position the fitting by inserting the threaded end through the hole cut in the side of the unit. Place the other washer over the threads on the inside of the filter, before threading on the locking nut. It does not matter if the plastic washer is on the inside and the rubber washer on the outside, or vice-versa. However, to reduce the risk of distorting the rubber washer, tighten the fitting by rotating the part next to the plastic washer, whilst holding the section by the rubber washer stationary.
3) Fix the cable gland in place, with the locking nut on the inside of the sump. Only remove the centre grommet if a cable is to be fitted.

SIEVE ELEMENTS

Various sieve elements are available for the unit with differing spacings between the blades. The spacings are measured in microns (µ) (100 micron = 0.1 mm). Currently the versions available are:
- 100, 150 and 200 micron – for fine particle removal (200 µ supplied as standard)
- 300 and 600 micron – for medium particle removal.

The coarser elements are ideal for use as a pre-strainer before BubbleBead units, and will maximise the time intervals between sieve maintenance. Please ensure that the element supplied with the unit is the appropriate one for the intended purpose. This is important as your supplier may unable to exchange the element for you once it has been used. Ensure that the sieve is pushed firmly down into the unit so that water flows over the weir and onto the sieve. (99% of the water passes through the sieve. To catch the last 1% you could fit an extra seal of split 6-12mm hose to the lower edge of the sieve, and/or a seal of split airline pipe to the sides of the sieve, or fix a strip of butyl onto the side support runners.)

SITING – GRAVITY-FED OPTIONS

N.B. Site the EstroSieve so that the top flange is only slightly higher (5 - 10 mm) than the typical pond water level. Water is then gravity fed into the unit, directly from the pond. The pool water level should not be allowed to drop more than 85 mm below the top of the unit. This should not be a problem if an automatic top-up system is installed on the pond.
Beside-Pond Option:

The EstroSieve is mounted outside the pond, and fed by gravity from a bottom drain and/or a side inlet fitted into the pond lining. Ensure that the unit and pipework are sufficiently supported to prevent movement.

Optionally, fit a valve to the linking pipe to enable the EstroSieve to be easily isolated for maintenance of the pump or integral flow regulator. If the unit is fed by both a side drain and a bottom drain, two separate valves may be required to control the flow between them e.g. water from the side drain in the winter months and water from the bottom drain during the rest of the year.

In-Pond Option:

The unit can be mounted inside the pond. This overcomes the need to make inlet holes in the pond lining, and is a good option when the unit is being retro-fitted to an existing pond where through-liner fittings would be awkward to add. The unit fits most neatly into a corner of the pool.

Where this option is chosen, the unit will need to be fixed particularly firmly to prevent movement – especially the risk of it rising in the pond water as the pump starts to empty water out of the sump.

• Bolt a frame to the top flange of the unit and firmly fix this frame to the pool surrounds e.g. to the deck edging or coping, or into the wall of the pond above water level.

• The frame used can be stainless steel, hardwood, or a suitably treated and sealed softwood.

• Ensure that the frame does not obstruct the removal of the sieve element and round-off or protect any sharp edges that might cause injury. e.g. Exposed sections of the top flange of the ‘EstroSieve’ can be masked with a split section of flexible 12 mm hose.
SITING – PUMP-FED OPTION

An alternative siting option is to position the unit above the pool level and pump water into the unit. Water then returns by gravity into the pool e.g. down a cascade. This is an option when the EstroSieve is being used as a final polish to the water returning from a filter system to the pond e.g. with a fine sieve. The gravity-fed options are to be preferred when feeding dirty water directly from the pond.

INLET PLUMBING

The 110 mm stainless steel inlet can be adapted to standard koi-pond piping fittings.

Use a socket type fitting:

- A sealant must be used when plumbing the unit outside of the pond:
  Aquarium silicon sealant acts as a waterproof gap filler between the stainless steel and plastic socket fitting and can usually be peeled off at a later date if required.
  Low modulus polyurethane sealants give a more permanent seal (e.g. ‘Everfix Polyurethane 40’; ‘Polyfix-LM’).
- Ring-seal sockets can be used (however, these are not always 100% effective)
- A simple push-fit is acceptable on ‘in-pond’ fittings
- Keep pipe runs as short and level as possible; where necessary use swept bends or 45° bends rather than 90° knuckle bends.
- Some form of guard must be used to prevent fish from being drawn into the unit.
  Koi-pond bottom drains will keep all but the smallest fish out.

For side feeds
a koi-pond domed filter-feed keeps fish out and is less vulnerable to clogging than grills.

A 110 mm cowling grill is a cheap and simple alternative, though this will need checked more frequently if blanketweed is present, or if there is a high flow through the pipework.

An alternative for side feeds
is a tee and twin cowling which draws water from both the base and upper layers of the pool.

PUMPS

Where the EstroSieve is gravity fed, the water is pumped out and on to the next stage of filtration. A submersible pump is mounted inside the unit, and the supply cable can run out through the cable gland.

A number of types of sump-style pump will fit inside the base of the EstroSieve, under the sieve element, and draw water from the sump of the unit. Other types of submersible pool pump will often fit inside the unit, but may require the removal of bulky outer strainer cases, if fitted. In all cases where the pump is not drawing water from the base, the inlet will need to be adapted so that air cannot be drawn from the water surface (see the diagrams overleaf). An optional plastic moulding is available to fit over the pump and under the sieve, that directs water flow evenly to the sump and reduces splashing and airbubbles.

Make sure that any pump fitted inside the unit does not obstruct the function of the float assembly. All pumps must be earthed and have appropriate RCD protection.
Remove any foam strainers and bulky outer strainer casings as these are not essential.

To prevent pumps with side-inlets from drawing in air from the surface, fit a simple bend or manifold to draw in water from the base.

Pumps suited to external use can be mounted outside the EstroSieve and plumbed to draw water from the sump area below the sieve element. Use with a manifold assembly as shown above.

OUTLET PLUMBING

The pipe from the pump can be fed through the outlet. This is supplied with a fitting, which is either 90mm or 110mm external (according to your suppliers specifications):

• For solid pipe, use internal reducers (e.g. 75 > 50mm) to gapfill between the pipe and the fitting.
• The fitting can be capped and the cap drilled to take the necessary hosetails, tank connector, or solid pipe. Alternatively, internal adaptors are available to reduce the outlet to a smaller thread & hosetail. Your dealer should be able to help you with the necessary fittings.

OTHER TIPS:

Achieve maximum flow through the unit by keeping pipe restrictions, bends and cowlings to a minimum. Typical max. flow rates are in the region of 2,000 - 2,500 gph.

Use a simple ventilated cover over the unit to keep out leaves, and keep out light that encourages algae growth.

MAINTENANCE:

• Regularly check gravity-feed inlets and remove any obstructions e.g. blanketweed or leaves.
• Keep the pond topped up to the correct level.
• Periodically lift out the sieve element and rinse dirt to waste. Regular cleaning of the sieve element removes solids from the system and so lowers nutrient loading and algae growth. A thorough clean of the sieve element once or twice a year (e.g. in a dishwasher) will remove more persistent biological slime.
• Check that the integral flow regulator and float have not become fouled. Check particularly that grit has not become lodged around the float spindle in the inlet chamber.

For further information, contact your dealer or the UK distributors of EstroSieves:
Selective Koi Sales, Telephone: 01603 897453, or
Aquatica International, Telephone: 020 8669 6643 [Fax: 020 8773 2035]
Contact your dealer before attempting any permanent modifications to your unit or you may void your warranty!

Version EN 2.1 05/03 (for EstroSieve 2002 models)