

DISCLAIMER: Below are things I ran across while researching before building my new pond. I take no credit for the ideas, nor any of the responsibility. But maybe there is something here that you are looking for or will help you.

PRE-FORMED PONDS

- When backfilling around the sides with sand, if the sand is simply poured in dry, it will settle with rains and create problems. Adding the sand with a slowly running hose washing it down around the pond form will enable it to be compacted. Filling the form with water as you proceed equalizes the pressure between the pond and the ground and prevents the form from being heaved out while work is in progress.
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LINER PONDS

- If indoor-outdoor carpet is used, slash it to prevent water from collecting and pushing up the liner.
 - For weed prevention, extend the liner a foot beyond the pond perimeter. Rocks or stonework at the pond edge can be secured to the liner with spray polyfoam.
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ALL PONDS

- **Don't have a level long enough?**- A clear hose filled with water compares the water level from one end of the hose to the other as measured against stakes pounded in around the pond perimeter.
- **Natural Filtration- The 10% Solution**- This system uses a plant basin equal in size to 10% of the pond area. The basin is filled with aquatic plants and the pond water is recycled through it once every 2 to 4 hours. Whatever its size the filter should be 12 to 18 inches deep and equipped with an overflow so that it can act as a settling chamber for solid wastes. Pond water enters the unit at the furthest point from the pond to maximize the water flow distance for settling activity. A narrow filter is more efficient than a round shaped unit.
- **Biofilter Flow Rate**- generally the rate should be one to two gallons per minute per square foot of filter surface. To determine an approximate bio-filter size for your pond, divide the pond's volume in gallons by 125 to determine the amount of media surface required in sq. foot. Multiply the square footage of media surface by one and two and then each by 60 minutes to determine the range in pump size for the necessary flow rate. If the pond contains less than 2500 gallons the water should be run through the filter once every two hours; ponds over 2500 gallons may halve that rate.
- **UV Sterilizers**- the pond water should pass through the unit at least once every 6 hours, optimally at a turnover rate of once every two hours.

- **Removing Ammonia**- Zeolite or Ammo Chips in the form of chips aids in removing ammonia from the water. Keep it on hand to deal with sudden elevated ammonia levels; they may be used as a filter media in boxes attached to the submerged pump. They can be suspended in nylon stockings containing the chips in the pond water. They can be used on the pond bottom. Using zeolite preventatively or at the first indication of ammonia presence lessens maintenance problems.
- **Need Shade Fast?**- Float a piece of Styrofoam on the surface. Likewise a Styrofoam sheet keeps the pond from freezing solid in cold climates.