



Choosing A Site For Your Pond...

The ideal spot for a pond would be one where you can view it from both inside your house as well as from your deck or patio.

Your pond can be located in either the sun or the shade. The main difference in these locations is the variety of water plants you can use – but you can purchase plants for either area.

If you want water lilies as part of your pond, they will need to have 5 to 6 hours of sun to bloom properly.

Try and stay out from under tree branches if possible, to avoid leaves, keys and needles dropping in your pond.

Do not place your pond in a low spot in your yard as groundwater could float your liner up. Groundwater can also cause fertilizers and weed killers to leach in.

Constructing Your Pond

In order to decide what size of pond would look best in your particular yard, take the garden hose out to the area you are considering. Lay it out, creating a shape so that you can make certain your pond isn't too large or too small for your yard. View your designated area from both inside and outside your house, to place it in an area with the best visuals from all views. If your placement can only be enjoyed from one location, you won't be getting the best value for your time & money.

A spotlight in the water, highlighting your falls or features will help you to enjoy your investment any time of day and in all seasons

Before you dig, decide if you are going to have both waterplants and fish, and if you want to have the capability of keeping your lilies and/or fish out in your pond over the winter. A pond able to overwinter plants & fish needs to be 36"-48" deep. If you are uncertain about the need for fences around you yard, you should check your local codes. As a general rule, you can dig up to an 18" depth without a fence - anything deeper usually requires a fenced yard.

If you are concerned about raccoons around your plants or fish, you may choose not to put shelves around your pond, but rather build stands up out of the water where it's much more difficult for them to reach. Raccoons enjoy a good feast of water lily tubers, water hyacinths, or water lettuce almost as much as a fish dinner. If your pond is at least 36" deep and you have put your plants out in the middle of the pond on some type of riser, you will greatly reduce potential problems from raccoons.

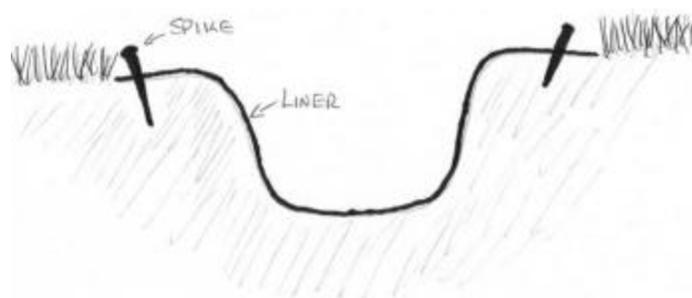
Once you have chosen the pond shape, spray paint the outline on the lawn so you won't lose your edges if you move the hose. Remove the sod in the hole and start to dig. Leave the sod around the outside of the hole in place until you have finished digging, thus holding your sides back and helping to keep them from falling in as you continue to dig.

When digging shelves, you may put them at 12", 18" and 24", making them at least a foot or more in width, allowing them to hold up to a 12" plant pot.

If you've chosen to have both a deep end and a shallow end to the pond, place the deepest end furthest from your waterfall. Your pump should be placed in this deep area to create good circulation of the water. The water will flow over the falls and be drawn back to the pump to be re-circulated.

When you dig the pond out - slope the sides inwards. This creates stability as well as to help create a vortex effect with the pump for water circulation and movement of fish waste to your filter.

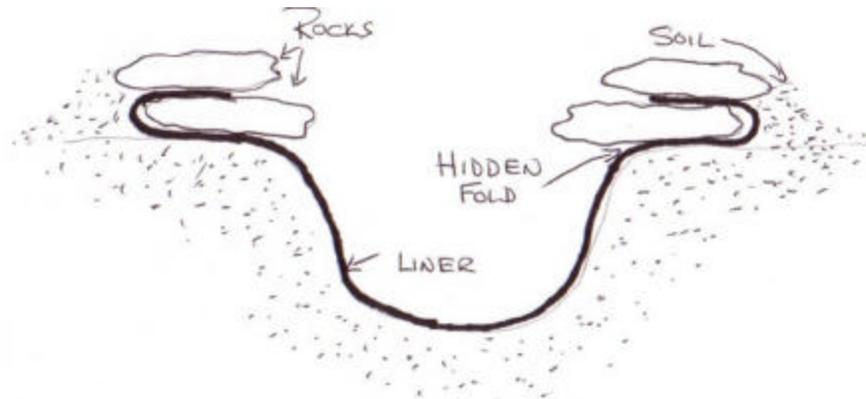
Next, place 2 or 3 inches of sand beneath a layer of underlay in the hole. This is to protect the underside of your liner from stones and debris being pushed through as the ground heaves with the frost. It does not matter if there are wrinkles in the underlay, as the weight of the liner and water will flatten it down. Should you be working with a particularly large underlay and liner, you may wish to temporarily put spikes or nails on the top, outside edge of the bank around the pond. This will help hold the underlay in place, preventing the underlay from rolling back into your hole as you drag the liner over it.



Make sure you count the number of spikes used; as you must remove them all once you get your liner in place.

When placing your liner and underlay, leave 18" of liner around the pond at the top edge, so that you can finish your stonework. Start your placement of liner and underlay at the side opposite the falls, allowing you to work all your excess liner over to the other side to where you create your falls.

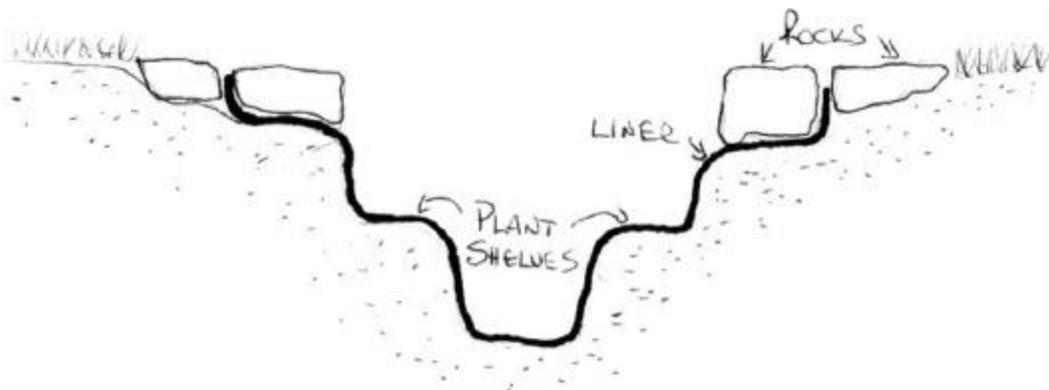
When placing the stone around the edge of the pond, use two layers of rock as shown in the diagram.



After you have placed the first layer of rock around the edge, then bring the liner back over the top of the rock. Then add your second layer of stone. Using layers of rock with the liner in between, you can fill the pond so that the water is actually up and lapping over the first layer. This wrapping also acts as a barricade, keeping soil from being washed between the rocks into the pond.

It is best to use rock that is relatively flat as it can be nicely stacked, as opposed to rounded rock which could very easily fall in.

If using a larger, chunky rock, you may find it best to create a rock shelf in the pond to set them, so the larger rock isn't standing up too high at the edge of your pond.



Leave a little slack in your liner as you place it down into the pond to that it won't stretch the liner too tightly when filling your pond.

Once all your rocks are in place around the edge, you may proceed by filling your pond with water

Building a Waterfall:

To gauge an average waterfall flow: For every 1" of width of water flow, you need a pump to perform 100 gph.

A liner is required behind a waterfall to direct the water back into the pond. A waterfall is basically a small pond on its edge.

- *Flat or square stones* are easier to manage when constructing your pond or falls.
- For extra protection, place an extra piece of pond underlay between the rubber liner and any sharp stone.
- use a hammer or file to smooth any sharp or protruding edges.

Start with large rocks at the base and then alternate and overlap large and small rocks. Use small rocks to stabilize and lock larger rocks in place. This will also produce a pleasing route for the water to dance through.

Decide how you would like the water to descend. You could have it come from one location, sheeting, or alternating locations. This is produced by placement of hoses, caps and holes. Use more than one line of hose to produce multiple sources of water to add interest to the falls remembering to keep within the maximum flow (gph) your pump will produce.

When creating a waterfall with rounded or uneven stones:

Place large stones on the edge and smaller stones near the middle which will help to direct water flow back into the pond. Use small stones to fill in gaps. Use stones with natural channels or flat spots for source of water.

When you are ready, start your pump and check for 'wicking', and leaks. Adjust until satisfied.

Sit back and enjoy!