

Permaliner™ *Designed for Ornamental Ponds*

The installation of an ornamental pond is a simple process that will greatly enhance your garden setting, allowing you to cultivate water plants and fish, and provide you with an attractive and cost effective method of adding value to your property.

Permaliner FPA membrane is specifically designed for water storage use, and is an ideal and practical product choice for the home garden enthusiast.

The following details outline a list of suggestions that should assist you in the construction and installation of your ornamental pond.

Pond Location

Great care should be taken when selecting the site for your pond, as many factors will contribute to the success of your water feature.

Do not situate your pond in an area susceptible to water run off; the accumulation of silt and chemicals such as herbicides that may be washed into the pond will necessitate constant cleaning and will introduce levels of toxicity that will inhibit plant and fish life.

Check the position of nearby trees; large roots will be a problem when excavating and if cut and removed, may also grow back and damage the liner.

Installation Guidelines

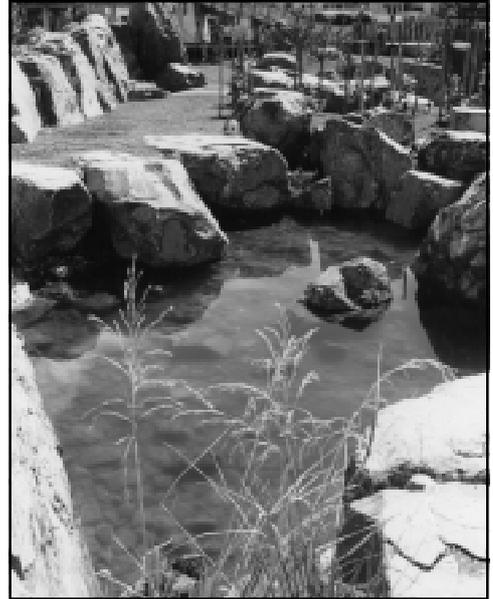
After selecting the location, outline the desired shape of the pond. Before excavating, decide on the depth of the pond in order to determine the correct amount of slope to cut for the sides of the pond. After excavating, smooth the bottom of the pond and clear any foreign material.

Add approximately 50 mm of sand to the base of the pond to act as a “cushion” between the sub-grade and the pond liner. Alternatively, Permathene Ltd can supply you with a Syntex nonwoven geotextile to place under the liner; this will assist in protecting the liner from any damage in the presence of rocks, roots or other such objects.

Using a Syntex geotextile has the added benefit of protecting the sides of your pond from any damage caused by the above objects.

Dig an anchor trench a minimum of 300mm from the edge of the pond in order to bury the liner. This is very important as it prevents water and other foreign matter from getting underneath the membrane. The trench should be a minimum of 300mm deep.

Unfold the liner on the ground and smooth out any folds and creases. Drape the liner loosely in the pond making sure it overlaps and folds down into the anchor trench equally on all sides.



Partially fill the pond with water (1/2 full). This allows the weight of the water to push the liner into any voids or ripples in the sub-base, thus allowing for ample liner on the pond bed in order to avoid stretching due to ground settlement after filling. Continue until the pond is filled with water, smooth the membrane over the edge of the pond and down into the anchor trench, lay the liner along the bottom of the trench and partially up the far side. You can now trim off any excess liner.

Replace the fill from the anchor trench back on top of the liner, pressing down firmly. Avoid contact with the liner if replacing with a shovel or spade.

If you intend to place stones or rocks around the perimeter of the pond, you may want to use a strip of the geotextile mentioned previously to protect the liner from damage. If you intend to place a pump in the pond, remember to reserve space between the stones for the power cable. Approximately 48 hours after completion of the pond add plants and 72 hours after completion, add fish.

Technical Details

Permaliner 300, 500, 750, 1mm, 1.5mm, 2mm, see physical properties (permalinerPS.pdf). Permaliner has excellent tensile strength and flexibility to withstand ground settlement and loading stresses, high tear and puncture resistance, and is free from additives such as solvents, plasticisers and lubricants. Manufactured to highest (EPA approved for potable water) standards.

For additional information regarding Permaliner™ FPA membrane and Syntex geotextiles contact Permathene Ltd. at 09 968-8888.

