

5 Steps to fitting a flexible pond liner



Every year thousands of people decide to add a water feature to their garden. Aside from creating a beautiful focal point, the sound of gently running water is always a beautiful thing. Even the smallest garden pond will provide refuge and drinking water to a huge variety of wildlife, from birds to amphibians and a whole host of other native fauna.

Although the prospect of building a pond using flexible sheet liner can seem daunting, it's just five simple steps.

1. Location location location!

The first thing to decide is where the pond is going to go. An ideal location would be somewhere that receives shade for at least a few hours a day. If the area you have chosen will be in full sunlight all day, algae will grow more readily and you will need to account for this by over-sizing your pond filter. If the pond will be situated under the shade of a tree, falling leaves will need to be accounted for and you will need a cover net to help to keep them off the pond as well as a good surface skimming net and a pond pump that can cope with larger solids such as the excellent laguna max-flo range.

Other things to consider are...

- Distance from the nearest electrical point as all pond pumps come with 10m (33 feet) of electrical cable but many filters come with less (please see individual product descriptions).
- Will your hose pipe reach the area you have chosen to fill the pond and top up evaporation in the summer? Is your desired location somewhere that makes it possible to drain water from the pond when maintenance is being performed?
- Do you use chemicals or fertilisers on your garden? If you do and your pond is in an area where these could be washed in when it rains, it will be impossible to create a healthy, stable environment for aquatic life.

Once you have found the perfect location for a garden pond, its time to have some fun!

2. Design, depth and digging

Now it's time to decide on the shape of your pond. Would you prefer a formal or a more natural shape? What type of fish would you like to keep? Is encouraging wildlife to the pond your priority? The beauty with using a flexible liner is that your imagination is the limit. Flexible liners can fit any size or shape of pond. Just bear in mind that sharp angles will need to have folded edges and you will need a pond liner adhesive to stick these down so that fish don't get trapped under them. A shelf around the inside of the pond at a depth of 8 to 10 inches will enable you to plant a variety of marginal plants to provide colour to your garden and cover for your fish.

Considerations

Always check the likely locations of utility supply pipes before digging. Legally, these must be no less than 60cm below ground level but many great pond builds have been halted in their tracks because this has not been the case. Safety is the most important factor when building a pond so if you aren't 100% certain about the location of pipes and wires, ask a professional to check. If your pond is for wildlife, it is best to design it with at least one gently sloping edge. This is so that birds and animals can easily get in and out. A deeper area of at least 18 inches should be incorporated to allow plants like water lilies to grow and provide cover.

For Koi ponds you should aim to provide an area of at least 36 inches depth to allow the fish to swim naturally and develop their correct body shape. All other pond fish will benefit from this depth but it is less essential.

Once these considerations have been taken into account, mark out the area of the pond with string or a hosepipe and take a final few minutes to decide if the shape and location are right.

3. Choosing and fitting your new liner

There are several types of flexible pond liner and each has its own benefit. PVC liner is the cheapest and suitable for all ponds but is thinner than other types and less tear resistant than E.P.D.M or Butyl. It is still the liner of choice for many small to medium garden ponds.

Butyl rubber has been the favorite of professionals and hobbyists for years, due to its high tensile strength, tear resistance and flexibility. It is available in different thicknesses, is very hard wearing and can stretch better than PVC to accommodate edges.

E.P.D.M also known as Epalyn rubber, shares some properties with Butyl rubber. It has an even higher tear resistance, flexibility and a greater ability to stretch than Butyl. E.P.D.M liner costs more than PVC but much less than Butyl.

How to work out what size liner you need

Measure the longest, widest, and deepest areas to be covered.

LENGTH, PLUS 2 X DEPTH, = SIDE 1

WIDTH, PLUS 2 X DEPTH = SIDE 2

ADD A MINIMUM OF 12 INCHES (30CM) TO YOUR FINAL MEASUREMENTS TO ALLOW AN OVERLAP FOR EDGING.

So for a pond measuring 200cm long x 100cm wide x 60cm deep

200cm plus 60cm plus 60cm = 320cm

100cm plus 60cm plus 60cm = 220cm

So when we add 30cm to each to allow for our overlap, the minimum liner size you require is 350cm x 250cm

Don't forget to fit a quality underlay to protect your new liner for the duration of its life. Even if the

ground seems smooth there will likely be small particles capable of puncturing it. All of the liners that we offer, come with a lifetime guarantee if they are installed properly and with the correct underlay.

4. Filling your pond and adding edging

Now is the time to fill your pond using a hose pipe and add a suitable pond dechlorinator to ensure that the water is safe for fish. As the pond is filling, gently pull the edges upwards and out to minimise any creases and folds. Once the pond is full, weigh down the edges and allow it to settle overnight. The next day you may trim any excess liner (leaving a 30cm overlap) using a sharp knife.

You can use a variety of paving slabs held down with mortar to edge your pond, be sure to check that they are inert first so that they won't alter your ponds water chemistry. If you are unsure, add a few drops of white vinegar to a piece of the rock. If you notice any bubbles or fizzing, the rock is reacting to the acidity of the vinegar and should not be used. Rocks with green, blue or red streaks running through them most likely contain metals and should be avoided.

5. Adding a pump, filter and lights

When choosing your pump and filter, it is vital to know the approximate volume of your new pond. As most ponds aren't exactly square or rectangular you should use average measurements. Using the following formula, take the average measurements of your pond in metres to work out its volume in litres.

LENGTH X WIDTH X DEPTH X 1000 = POND VOLUME IN LITRES

To convert this to gallons divide your answer by 4.5

So for a pond measuring 2m long x 1m wide x 0.6m deep

$2 \times 1 \times 0.6 \times 1000 = 120$ litres

$120 \div 4.5 = 26.7$ gallons

Pumps

Pond pumps fall into two main categories:

- Fountain pumps are designed for pumping already clean water through a fountain head attachment with little or no back pressure.
- Filter pumps can pump water with particles up to 8mm to an external filter and can also be used for pumping water to a waterfall. These are both jobs that require stronger internal parts than standard fountain pumps have.

Filters

Filtration can either be gravity fed (the filter is outside of the pond and usually sat at least partially above ground) or Pressurised (The filter is outside the pond but below ground level). Gravity fed filters can vary from basic boxes which contain layers of filter media to self cleaning machines such as the OASE Proficlear Premium Compact.

Lighting can make even the most humble of ponds take on a magical hue at night and will allow you to benefit from your new ponds beauty 24 hours a day.

We will talk in more detail about these different options in our next article ["Pond pumps, filtration and lighting made easy."](#)

For now, remember to enjoy designing and building your beautiful new garden pond and it will bring years of happiness and relaxation to the ones you love!

