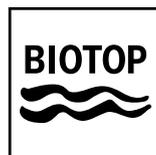




The Original Biotop Swimming Pond from the World's Market Leader



waves of enthusiasm
since 1985



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A Pond
to reflect
your
Personality



Turn your Garden into a Paradise



DI Peter Petrich
CEO of Biotop

More than thirty years ago, I pioneered a new era of swimming and recreation in Austria with the first Biotop Swimming Pond. Together with my experienced team and our partner companies, we have since realised more than 7,000 projects in Austria, throughout Europe and all around the globe. This makes us the world's market leader in the natural pool market. Every Swimming Pond is unique and blends harmoniously into its surroundings.

Our expertise grows with every new facility built. This forms the basis of what we offer, which we can confidently call unrivalled—a claim we intend to live up to, long into the future. Professional planning, execution and ongoing customer care, the exclusive use of the highest-quality pool technology and our experienced team of specialists guarantee the reliable functioning of our pools and every customer's lasting enjoyment of their private swimming paradise.

This catalogue is intended to provide you with an initial impression of the wonderful world of the Swimming Pond: Swimming pleasure in natural water without chemicals. Our individually planned and perfectly tailored services allow our customers to enjoy the highest quality swimming enjoyment, day by day and all year round. We would welcome you to join them.

DI Peter Petrich



Our Philosophy

To dive into pure, clear water completely free of chemicals, clear as a mountain lake. Especially on hot days many people are trying to find some relief from the sun's heat—even better if they can find it in their own garden. But how do you create such a haven with perfectly balanced water?

It was Leonardo da Vinci who described water as the “blood of the Earth”. It is our most valuable commodity, and we need to treat it with care. As world market leader in natural swimming pool construction and design, our concern is to preserve this vital resource. For more than thirty years, we have been striving to bring clear, living water—like fresh from an alpine lake—into our customers’ gardens. Always at the cutting edge of technology, we provide long-lasting, crystal-clear swimming pleasure entirely without

chemicals. We believe water should be alive, not deadened by toxic additives. Living water regenerates itself thanks to Biotop’s technology and has positive effects on the mind, body and soul.

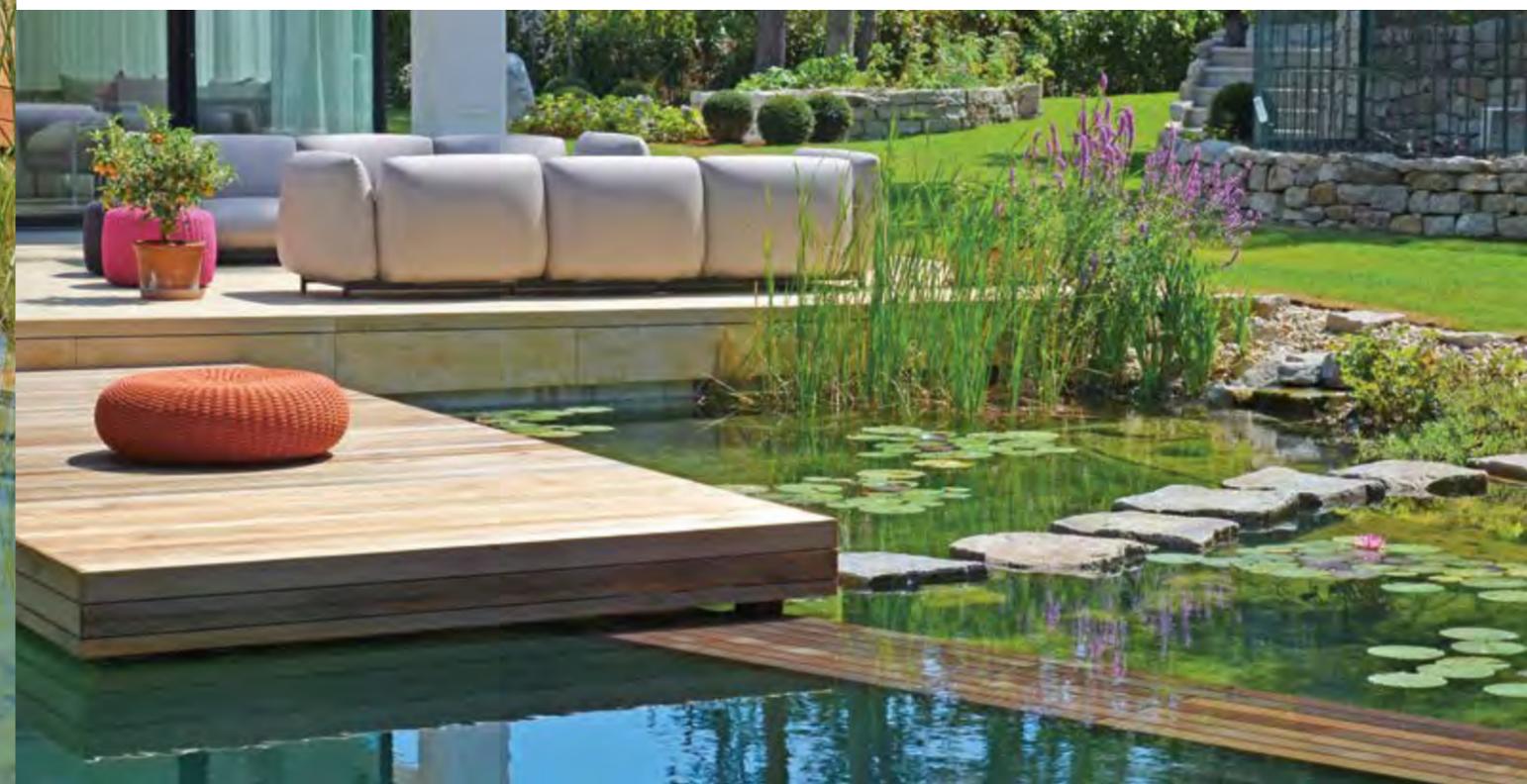
With a Swimming Pond, you can create your own carefree paradise and a place for everyday natural swimming enjoyment. Our detailed planning service and bespoke designs will complement your home and ensure your pond is integrated perfectly into your garden, to create your own oasis of well-being.

Biotop’s newest development is the Zero Energy Pool, which meets its entire energy requirements through the power of the sun using photovoltaics. Measured over the entire year, the pool’s energy balance is neutral, meaning no additional electric power is required to operate the pool.

The colours both in and out of the water, together with the playful stepping stones, make this pond a real eye-catcher in the garden. (Austria)



This Austrian turn-of-the-century villa on the outskirts of Vienna is complemented perfectly by this “Contemporary” Swimming Pond.



The “Natural” Swimming Pond in this stunning U.K. garden creates a unique hideaway.





The Swimming Pond

The desire for balance and equilibrium is fulfilled by a Biotop Swimming Pond. The foremost goal of a nature-inspired design is to create the impression that the Swimming Pond has always been there.

The calm, clear water brings a renewed quality of life into your garden and has a relaxing and calming effect. Simple and organic design, gently rounded shapes and graceful and playful marginal edges characterise every Biotop Swimming Pond. Classic pond design produces a fascinating effect throughout the year, enhancing the look of your garden even in winter. A Swimming Pond underlines the existing architecture and creates space for rest, relaxation and a feeling of peace and serenity.

In harmony with the plant world

Underwater plants take the nutrients they need to grow directly from the pond water, thereby reducing the nutrition available to unwanted algae. They also create an optimal living space for zooplankton that feeds on single-celled algae. In addition, the plants' photosynthesis releases oxygen into the pond water during the day. Water milfoil and various kinds of pondweed are particularly well-suited for this purpose.

ADVANTAGES

- » Pure, clear and chemical-free water
- » Natural self-cleaning ability thanks to aquatic plants
- » Natural design to complement your garden
- » Individualised shapes and configurations
- » Easy care and maintenance as part of your gardening tasks
- » Satisfied customers for more than thirty years
- » World market leader in the construction of natural Swimming Ponds

Water quality like in an alpine lake

The design of the Swimming Pond makes its natural self-purifying ability especially effective. Impurities are absorbed by the plants as nutrients and harmful bacteria are eliminated by natural organisms in the water, ensuring the water quality in your Swimming Pond remains unsurpassed.

← **This Australian Swimming Pond has even had the honour of cooling the British royal family down on their holidays.**

Flowering shrubs
border this “Formal”
Swimming Pond in Belgium.





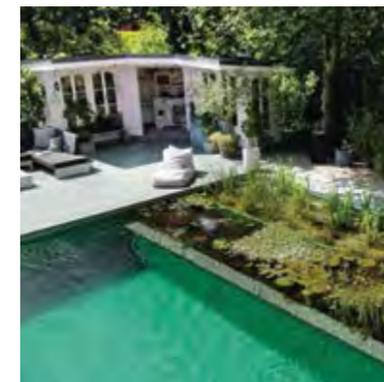
Design Possibilities

A Swimming Pond opens up an exciting new new world in your garden. Whether naturalistic or formal in design, or clear-cut and contemporary in outline, the intrinsic beauty of pure, clear, chemical-free water is a stunning addition to any garden. Treat yourself to this special luxury and create an oasis of peace and relaxation for yourself with your own Swimming Pond.



“Natural” Swimming Pond

The “Natural” Swimming Pond’s style is perfect for clients who enjoy being enveloped in nature. Water plants surround the swimming area, creating an unmatched feeling of wellness. This is particularly suited for nature-loving clients wishing to create a living space for themselves and encourage wildlife to their garden.



“Formal” Swimming Pond

Clients who appreciate timeless beauty can select this classic style of Swimming Pond, in which the rectangular swimming area is separated from the regeneration zone. Elegantly integrated into your garden, the “Formal” Swimming Pond provides an entirely new life-style.



“Contemporary” Swimming Pond

A clean cut Swimming Pond in “Contemporary” design with bold outlines and geometric shape compliments modern architecture. Hard landscaping materials are often used to create an aesthetic composition between pond, garden and the house. Dive into a new dimension of living water.

← Thanks to its shape, this Swimming Pond in Melbourne, Australia, is remarkably space-saving.



Situated on a slope, this "Contemporary" Swimming Pond mirrors the linear architecture of the house, opening up a breath-taking view with its infinity edge. (Austria)



Individual Planning

What could possibly emphasise your garden's unique character more than a personalised Swimming Pond?

Whether formal, modern or completely natural, every Swimming Pond is individually designed to work in perfect harmony within its location—an unrivalled concept reflected in over 7,000 ponds and pools built around the globe. The only limit is your own imagination.

THE PHASES LEADING UP TO A FINISHED SWIMMING POND

- 1.
- 2.
- 3.

Consultation and planning phase

We will work with you to create and finalise your perfect design, ensuring that your pond meets all your expectations and provides long-lasting enjoyment.

To create the perfect design, we will need to evaluate the following:

- » How you want to use your pond
- » A site survey of your garden
- » What style will work best for you
- » The garden's character
- » The budget available

We take great care and all the time needed when collecting the necessary information for an initial design and quote. You can then study these documents at your leisure before suggesting any amendments and discussing the estimate in more detail during follow-up meetings with our pond planners.



Construction phase

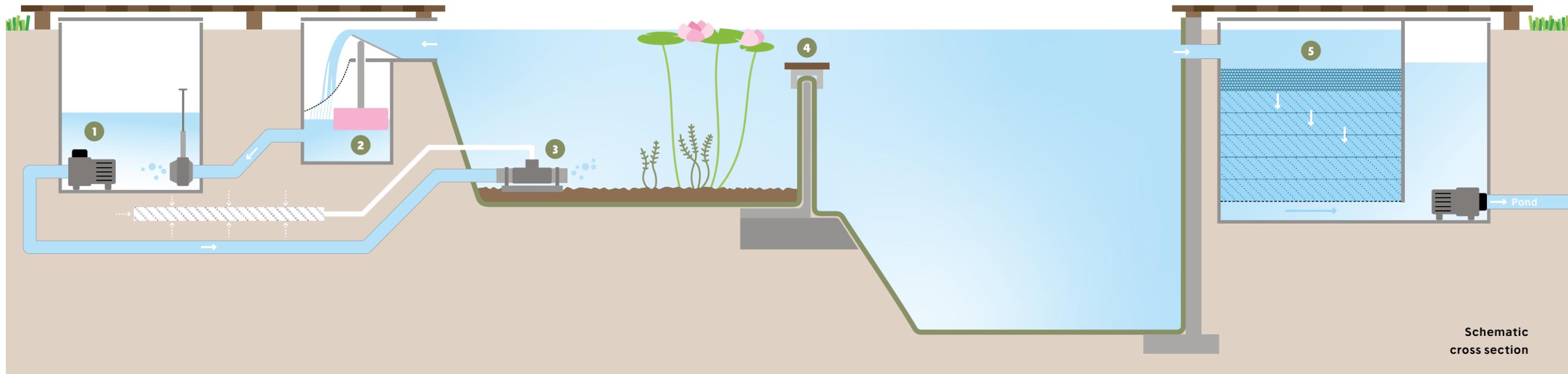
Following a detailed schedule, our experts will begin the excavation work and start the construction of your Swimming Pond. Once all work is completed, the pond is filled with water and our special system is put into operation. To make sure you will be able to swim in your new Swimming Pond as soon as possible, the original state of the surrounding area is restored or it is landscaped according to the plan.



Swimming phase

After a comprehensive instruction by your Swimming Pond expert, you will receive a handbook containing all the information needed to operate and maintain your pond. You can already swim in your Swimming Pond during the start-up phase, which lasts a few weeks. During this time the bio filter system slowly reaches its peak efficiency. Your Biotop expert will of course still be available to answer any questions arising during the lifetime of your pond.





Schematic cross section

Technology

At Biotop, we strive to make our technology as simple as possible and easy to understand for the user.

1 For the water circulation in Swimming Ponds Biotop has developed a special system. The pump is fitted in the so called **Submersible Pump Chamber** where it is completely submersed in water, allowing water to flow to it simply by the force of gravity instead of being “sucked in” by the pump. Mounted at the bottom of the chamber, the pump conveys the water back into the pond through pressure pipes.

- Advantages**
- » Submersed pumps are quiet, creating almost no noise
 - » The low noise level means the chamber can be installed underneath the wooden deck
 - » The pump does not need to be uninstalled for winter
 - » The pipes do not need to be emptied for winter
 - » Incoming and outgoing pipes can be regulated individually
 - » The pump is cooled by the water around it

2 The purpose of the **Curved Sieve Skimmer** is to remove floating particles from the Swimming Pond. The water flows over a curved screen with a mesh of only 0.3 millimetres that removes even the smallest particles. A sophisticated mechanism controls the water flow via a flexible flap so that the correct amount of water always flows over the screen. Biotop was granted a European patent for this innovation.

- Advantages**
- » Even the finest particles are eliminated from the system
 - » The screen is self-cleaning
 - » Nutrients are removed from the water

3 The **Carbonator** provides the water plants with carbon dioxide, thereby helping to regulate the pH value of the water. This unique process was developed and patented by Biotop.

4 A **separation** between the swimming zone and the regeneration zone can be created by fitting special wall units, as shown in the illustration above. You can find further methods on the next pages.

Two water circuits: Easy to operate

The separation into two water circuits allows the pumps to operate economically and with minimal use of space. The first circuit is responsible for cleaning the surface of the water and removing floating particles. Its pump runs throughout the day.

The purpose of the second circuit is to eliminate organic compounds. Its pump runs continually during the swimming season. Features like rock fountains, waterfalls or curtain fountains can be integrated into either or both of the circuits.

5 Water flows vertically through the **Bio Compact Filter** from top to bottom and is biologically cleaned along the way. Organic compounds and impurities that could cause cloudy water are broken down by microorganisms. The result is crystal-clear water. In order to optimise the microorganisms’ cleaning performance, water flows through the bio filter permanently. The biologically cleaned water then flows back into the pond.

- Advantages**
- » Biological cleaning with no need for chemicals
 - » The Bio Compact Filter is comparatively small in size and is installed under the deck, invisible to the user
 - » Takes up less space than common filter systems

 The components 1 and 5 can be installed in a single unit, the **Combi-Box**, to save space.



With an impressive total area of 1,400 square metres, this Swimming Pond forms the centerpiece of an island in the Maldives.



The way the swimming area and the plant zones are separated is especially clear to see in this Swimming Pond in New Zealand.

CONSTRUCTION METHODS FOR SWIMMING PONDS

Separation of the regeneration zone from the swimming area prevents the vegetation from spreading across the entire swimming area. It also allows the two areas to be emptied separately for cleaning and maintenance. Polypropylen lining is usually used to make it all watertight.



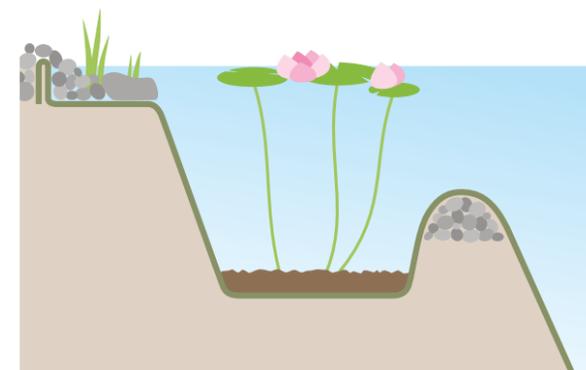
Wall unit method

In this modular building system, the division between the swimming area and regeneration zone is created using wall units. The units are recyclable and thus environmentally friendly. They can be configured to create a swimming area in various shapes and sizes, and allow the pond to be constructed quickly.



Constructed wall method

The constructed wall method is a highly stable technique that allows the greatest flexibility of space available for the swimming area. The smooth finish allows precise installation of the pond liner, which facilitates the use a pool robot for automatic, easy cleaning. Regeneration zone and swimming zone are easily emptied separately during pond maintenance and servicing.



Earth wall method

In this comparatively inexpensive construction method, which is also flexible in terms of shape, the swimming area is separated from the regeneration zone by a simple earth wall. The wide dam-like shape requires more space as well as a stable and natural foundation.



In Great Britain
a paradise was created
for the whole family.

Conversion & Refurbishment

If you have a Swimming Pond that requires refurbishment or no longer looks the way you want it, Biotop has a solution for you.

Our experts will use their knowledge and experience to transform your garden into an oasis of well-being once again.

Our Converter system is especially suitable for swimming ponds not yet equipped with technical apparatus, as well as for facilities with insufficient water quality or excessive algae growth. Prior to conversion, your pond's existing equipment will be tested to see whether it can be reused.

Retrofitting to a Swimming Pond

Depending on the circumstances on site and the available space, we will discuss options for converting your pond into a Swimming Pond and help you select the best possible option. We always use cutting-edge technology to make your Swimming Pond as user-friendly as possible and minimise the maintenance required. In most cases, a curved sieve skimmer, a submersible pump chamber, and the bio filter circuit with a phosphate filter will be installed. Let the tried and tested technology of the Biotop Swimming Pond work for you and indulge in a new quality of life in your garden.

Refurbishment of older facilities

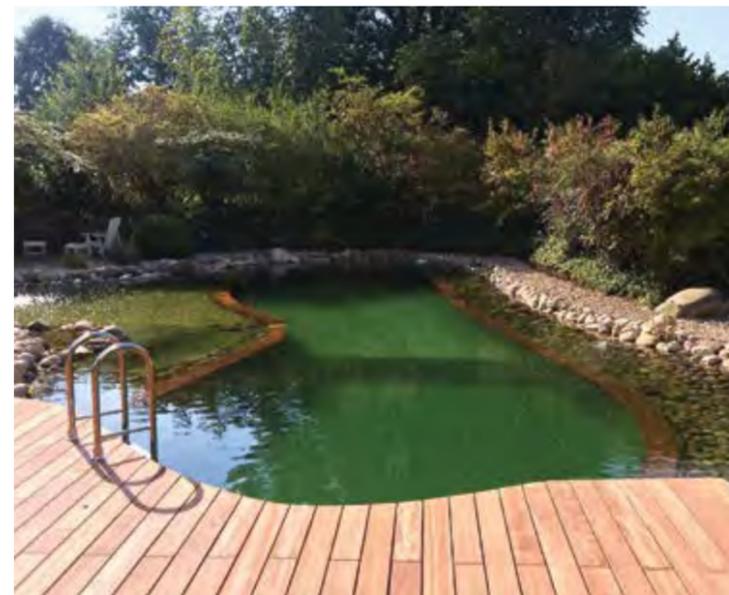
The first Biotop Swimming Ponds were built more than 30 years ago. While most of them are still beautiful to look at, some may require a technical overhaul. Over the years, abundant plant growth can reduce the water area available for swimming. Highly branched root networks make it difficult to vacuum up sediment; it cannot be removed completely, and the nutrients bound within it can re-enter the water. The effects of this natural process known as siltation can be reversed with a full refurbishment during which the regeneration zone is emptied out and completely cleaned, the substrate layer is renewed, and new aquatic plants are planted. We will be happy to plan an individual package of suitable measures to optimise your facility.



Before



After



After its renovation, this Swimming Pond in England won a Design Frog Prince award in 2015.

Individual Configuration

Are you looking for a bespoke Swimming Pond perfectly tailored to your needs? Browse through our configurations, features and accessories and create the pond of your dreams.

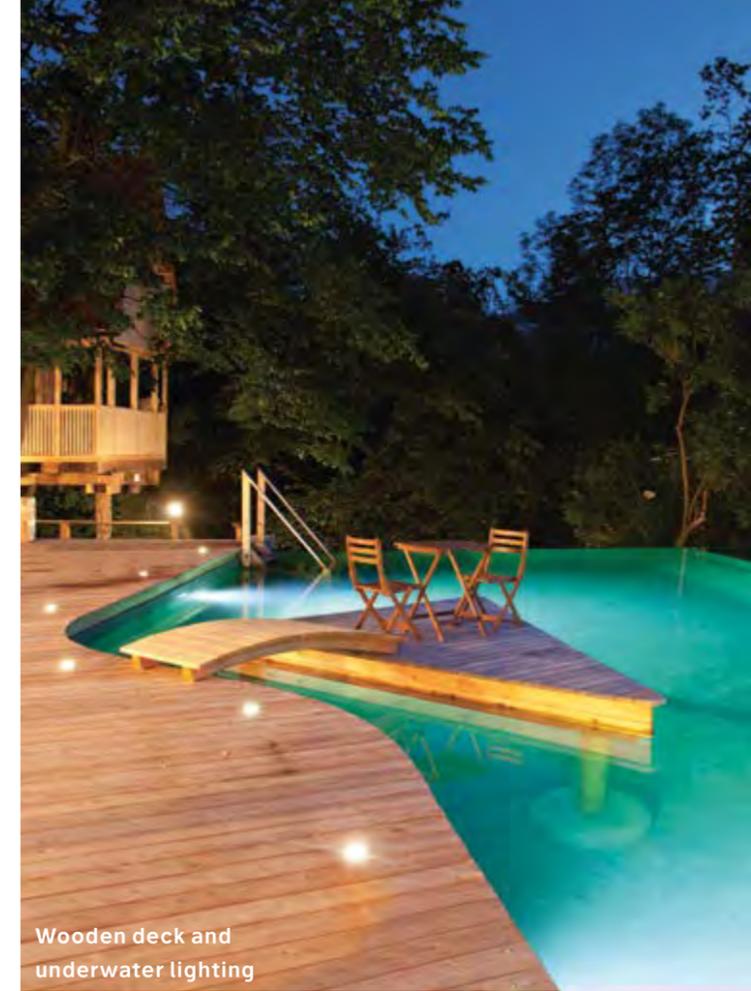
Let your ideas run wild: The look of a Swimming Pond depends largely on the design elements you choose to employ. The more wood you use, for example, the cosier your facility will look. The use of stone, on the other hand, makes for a cooler, more reserved space.

The types of plants used have a significant impact too. Underwater lighting provides an atmospheric ambience at night.

Stepping stones and wooden deck
↓



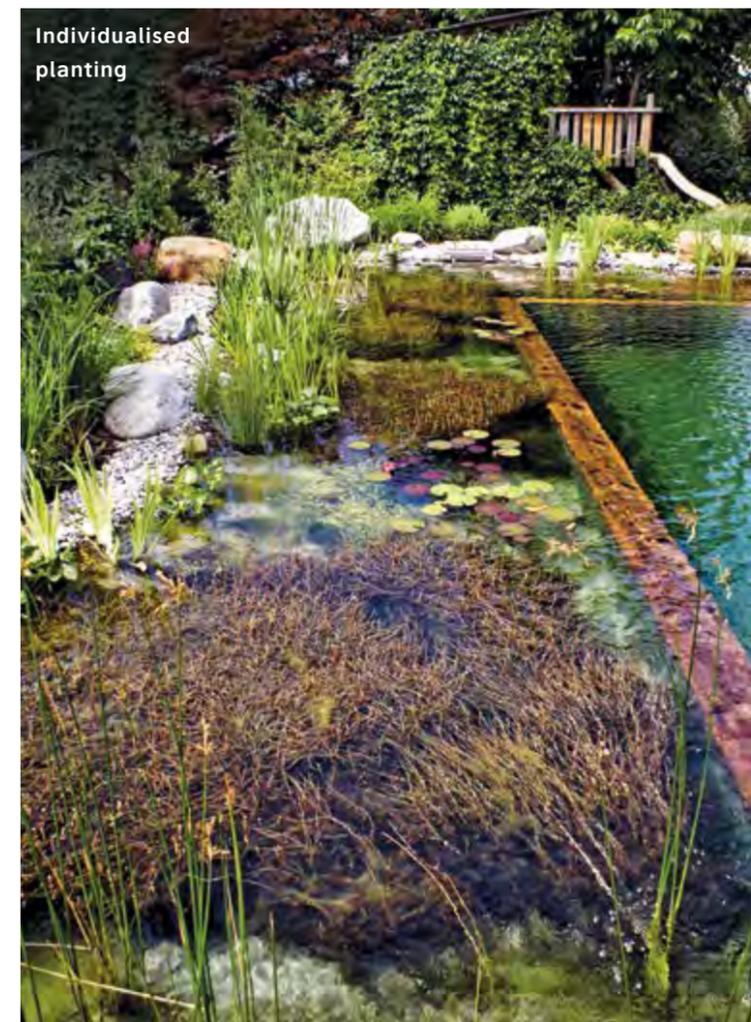
Individualised shapes



Wooden deck and underwater lighting



Stone bordering



Individualised planting



Olive green liner
RAL 6003



Blue-green liner
RAL 7031



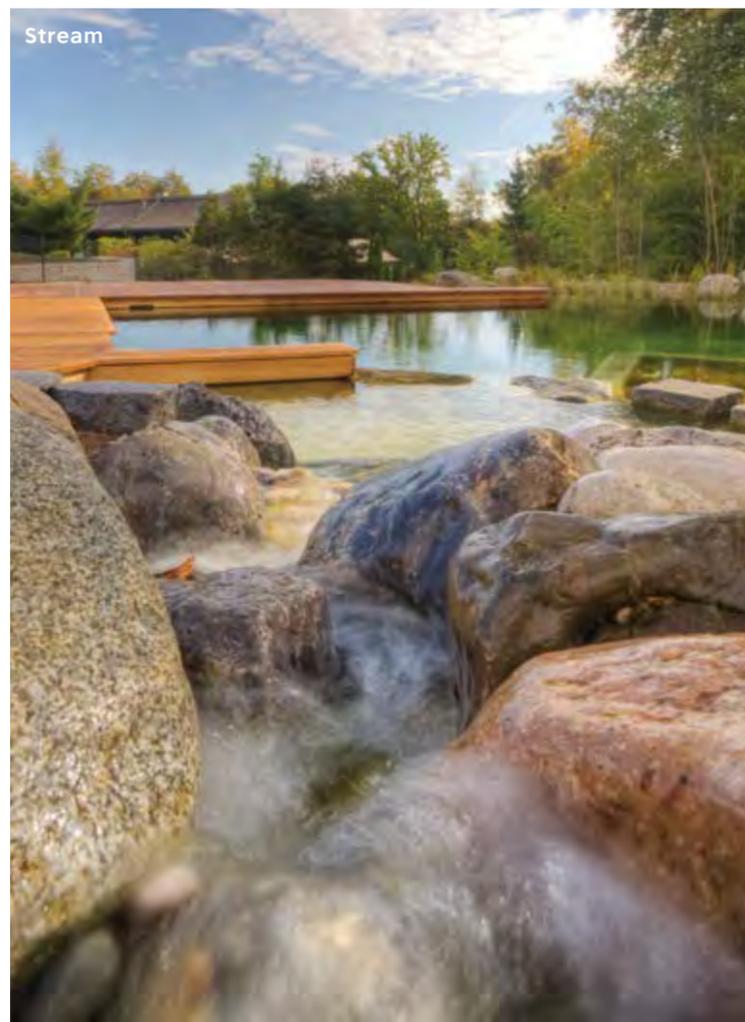
Graphite-grey liner
RAL 7024



Wooden
ladder



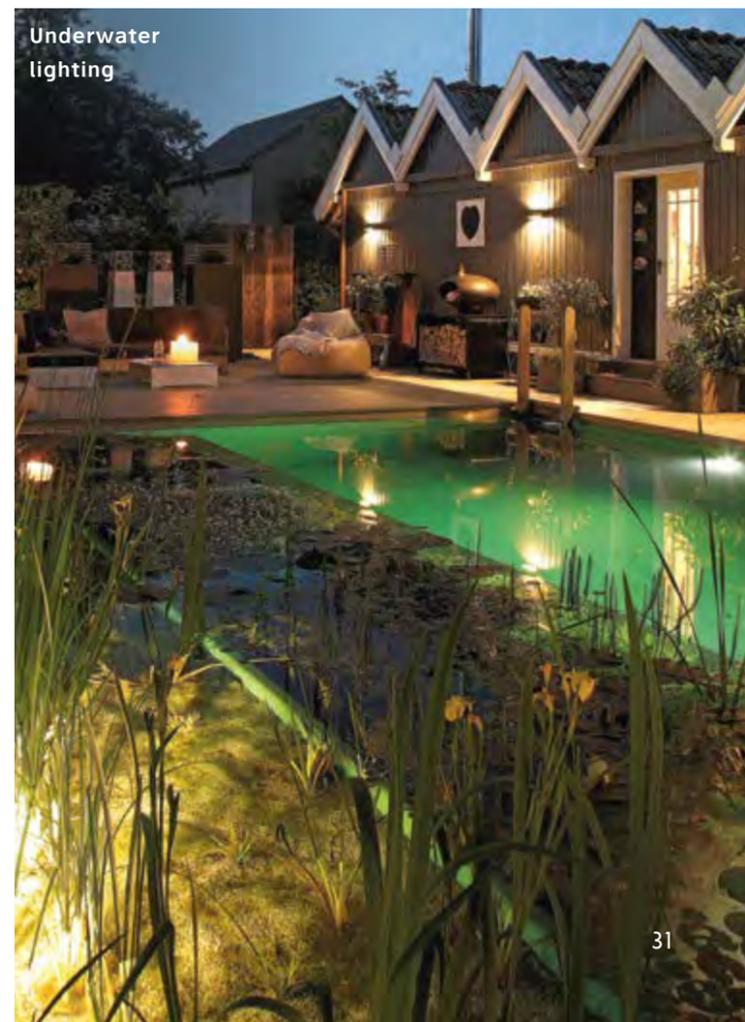
Rock fountain



Stream



Deck



Underwater
lighting

Care & Maintenance

In order to ensure optimal water quality, your Swimming Pond requires appropriate maintenance. We are happy to advise you or carry out the maintenance for you.

The best guarantee for clean water in a Swimming Pond is filling water of appropriate quality. Your local water should therefore be tested accordingly prior to being used for filling. Cloudy water, limescale deposits and algae growth can occur for a number of reasons and be eliminated effectively with appropriate measures. In most cases, this sort of occurrence will be transitory and go away by itself. If problems persist, however, professional root cause analysis by a Biotop specialist is necessary to determine which steps to take.

In newly constructed ponds, a certain amount of algae growth is normal. This can be unicellular algae, which colours the water green, or filamentous algae. The latter is removed using a net. As soon as the aquatic plants have grown and become effective, the algae growth will decrease automatically.

Even if the water in a Swimming Pond is perfectly clear, filamentous algae can form in shallow areas and near rock or curtain fountains. These algae are harmless, but may be removed with a net if desired.

Maintenance work
↓



SEASONAL MAINTENANCE & CARE

- » The skimmer strainer should be emptied daily to weekly, depending on the season.
- » Like the plants in your garden, the plants in the regeneration zone of your Swimming Pond require gardening care. The underwater plants are cut back during summer, the plants at the water's edge in winter.
- » The accumulated sediment should be vacuumed away at least once a year.
- » If the Swimming Pond is equipped with a Bio Compact Filter, the filter mats should be removed from the chamber and rinsed once or twice a year.
- » Preparing the system for winter requires only a few simple steps. Further information on this topic can be found in our service videos, which you can watch on our website any time.
- » Installation of a leaf net in autumn prevents leaves (and therefore unwanted nutrients) from entering the pond.



Algae growth ↑
and biofilm*

If the construction of your Swimming Pond is suitable, a pool robot can be used to clean its walls and bottom. Any places that the robot cannot reach need to be occasionally brushed with hand-held tools.

Despite regular use of a cleaning robot during the swimming season, some residue may still accumulate. In rare cases, usually in combination with insufficient care or heavy limescale deposits, the biofilm* may

be dark-coloured and persistent. In such cases, we recommend removal using special high-pressure cleaners. Only certified devices should be used in order to protect your Swimming Pond's liner.

* The **Biofilm** is a symbiotic community of bacteria, algae or fungi that adhere to surfaces and grow there.

FAQs

HOW MUCH SPACE IS REQUIRED FOR A BIOTOP SWIMMING POND?

Thanks to our modern technology, nowadays there are no upper or lower limits regarding the size of a Swimming Pond. Ideally, you should have a level (or gradable) area of at least 40 to 50 m².

Whether it is in the sun or shaded does not matter. But please be aware that the amount of sunlight affects the water temperature, creating both advantages and disadvantages. Each pond is individually planned and adapted to the circumstances of its site.

If the dimensions and design of the regeneration zone are correct and the right underwater plants were chosen, a Swimming Pond will function properly. In addition, zooplankton like water fleas, rotifers and paramecia are added to the water. These tiny organisms play an important role in the cleaning process. The only thing you need to do is have a little patience until your Swimming Pond finds its equilibrium.

CAN I RELY ON THE WATER CLEANING ITSELF?

HOW MUCH CARE & MAINTENANCE IS REQUIRED?

Providing the ice is thick enough, your Swimming Pond is perfect for ice skating!

After every winter, your Swimming Pond will require a "spring-clean": Sediment at the bottom of the swimming area needs to be vacuumed away, and the walls may need to be brushed. The underwater plants are cut back in summer. Autumn maintenance includes activities from further cutting to the mounting of a leaf-protection net. Every three to five years, the water in the regeneration zone will need pumping out in order to rinse and vacuum the entire area.

CAN I ICE-SKATE ON A SWIMMING POND IN WINTER?

In general, the sun heats the shallow water in a Swimming Pond, which then transfers the energy to deeper areas. The water can, however, be heated up to 28 degrees Celsius by additional means.

CAN A SWIMMING POND BE HEATED?

The gnats are eaten by their natural enemies like water striders and dragonfly larvae in the shallow water areas—you can take our word for it!

WILL THERE BE GNATS OR MOSQUITOS AROUND MY POND?

What our Customers say



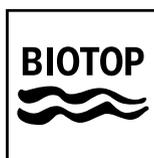
The Swimming Pond brought back all my childhood memories of holidays spent splashing and swimming in lakes.



There's no better start to a long day of work in London's busy city centre than a refreshing dip in my own Swimming Pond.



Simply marvellous—I can be active and swim here during the day and enjoy the magical reflections created by the beautiful lighting design at night-time.



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