The Original Biotop Living Pool from the World's Market Leader

BIOTOP

waves of enthusiasm
since 1985

BIOTOP
living pool

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Individuality
knows
no boundaries

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Introducing Nature to your Pool

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The Biotop headquarters has been located in Weidling, Klosterneuburg, Austria since its foundation in 1985.

Over three decades ago, Biotop company founder DI Peter Petrich introduced a new era of leisure and swimming pleasure to Austria. Together with a well-coordinated team and our partner companies, we have since been able to build over 8,500 projects in Austria, all over Europe and now around the globe. We are therefore the world market leader in this field. Each Living Pool is unique and harmoniously embedded in its environment.

Our know-how grows with every new installation. It forms the basis for our range of products, which we can justifiably call unrivalled—a claim we want to fulfill also into the future. The professional planning, execution and continuing customer support, the use of exclusive components, plus our experienced team of specialists guarantee the reliable operation of the system and long-lasting enjoyment of your private bathing paradise. For owners of conventional swimming pools, we have developed the Converter System. This allows for an economically justifiable conversion to a chemical-free Living Pool.

In the following pages we would like to invite you on an inspiring voyage of discovery.

Your Biotop Team

A curtain fountain is the perfect feature to go with a Living Pool in modern, clear-cut design.

Our Philosophy

To dive into pure, clear water completely free of chemicals, clear as a mountain lake. On hot days especially, many people try 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 good, and we need to treat it with care. As world market leader in the sector of Living Pool construction, our concern is to preserve this vital resource. For more than 35 years, we have been striving to bring clear, living water—like fresh from an alpine lake—into our clients' 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 Living Pool, you can create your own garden paradise and a place for everyday natural swimming enjoyment. Individual adaptation to the existing architecture and detailed planning will integrate your Living Pool perfectly into your garden and create an 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 photvoltaics. Measured over the entire year, the pool's energy balance is neutral, meaning no additional electric power is required to operate the pool.

This pool impresses with its crystal-clear water quality. Natural stone slabs and wood were used for the terrace.
↓

Activity in the chlorine-free water is clearly a joy and makes you forget the stress of everyday life.

The Living Pool

The Living Pool is an organic version of the traditional swimming pool. It looks like a conventional pool but requires no chlorine or other harmful chemicals to provide the ideal swimming enjoyment in pure, crystal-clear water.

Instead of the regeneration zone with plants and wildlife required for a Swimming Pond, a subterranean Biotop bio filter and the specially developed PhosTec Upstream phosphate filter provide natural biological treatment of the water in a Living Pool, maintaining its clarity and vitality.

ADVANTAGES

- Crystal-clear water, without chemicals
- 100 percent biological
- No regeneration zone or plants
- Unlimited design variety and equipment options
- Low maintenance
- Conversion from conventional pool possible
- Decades of proven technology and simple handling
- Low energy and water consumption
- Resource-saving, as no emptying in winter is necessary

This Living Pool has been edged with natural stone to match the rustic style of the house. Anthracite grey liner

A clinker-brick pool planted with grass is connected to the actual pool by a waterfall.
↓

This extraordinary infinity Living Pool was awarded 2nd place in the Biotop Design Award competition. Granite grey liner

Design Possibilities

All of your Living Pool's design elements can be individually tailored to your needs. The spectrum ranges from contemporary minimalistic designs without plants to designs featuring stylish planting zones next to the pool, emphasising its natural character. Further attractive options include specially designed basins for water lilies or fish.

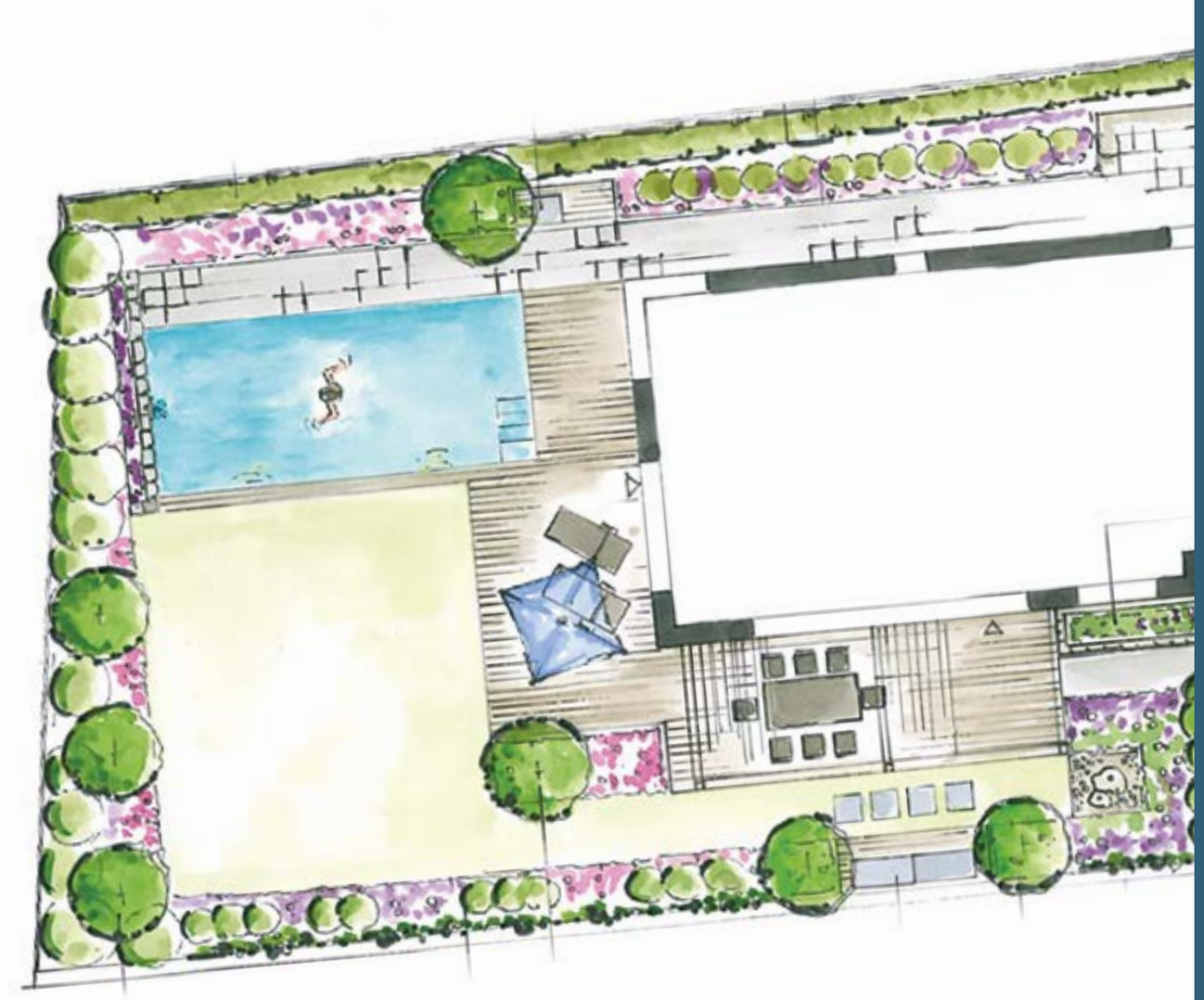
Living Pool without plants

The purest form of the Living Pool. It looks just like a conventional swimming pool but features our exclusively natural water treatment.

Living Pool with plants in a separate area

If you wish, a separate pool containing plants, e.g. water lilies, can be built right next to the swimming area. This plant pool is completely independent from the swimming pool and forms a separate unit.

With an indoor Living Pool you create your own private oasis of well-being. Slate grey liner



Individual Planning

What could possibly emphasise your garden's unique character more than a personalised Living Pool? No matter what shape or form, the Biotop Living Pool leaves nothing to be desired.

When we plan your Living Pool we keep the overall concept of your garden in mind to ensure your new pool blends seamlessly into its environment. As global market leader, with over 8,500 pools and ponds built around the world so far, Biotop stands for unrivalled quality and almost limitless possibilities. The only boundary is in fact your own imagination—so what are you waiting for?

THE PHASES LEADING UP TO A FINISHED LIVING POOL

1.
2.
3.

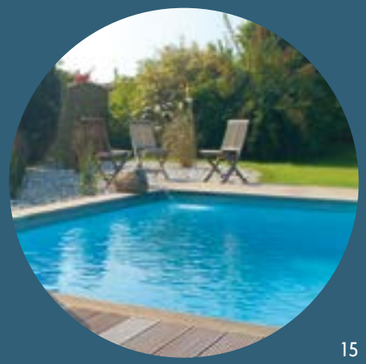
Consultation and Planning phase
Together—and ideally on-site in your garden—we work with you to formulate your wishes as precisely as possible based on your needs and ideas to ensure that your Living Pool meets your expectations and provides long-lasting swimming enjoyment.

The following factors play an essential role in this process:

- Understanding how you use your garden
- The layout and circumstances on site
- Your personal style preferences
- 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 pool planners.

Construction phase
Following a detailed schedule, our pool experts will begin the excavation work and start the construction of your Living Pool. Once all work is completed, the pool is filled with water and the technical components are put into operation.
To make sure you will be able to swim in your new Living Pool as soon as possible, the original state of the surrounding area is restored or it is landscaped according to the plan.

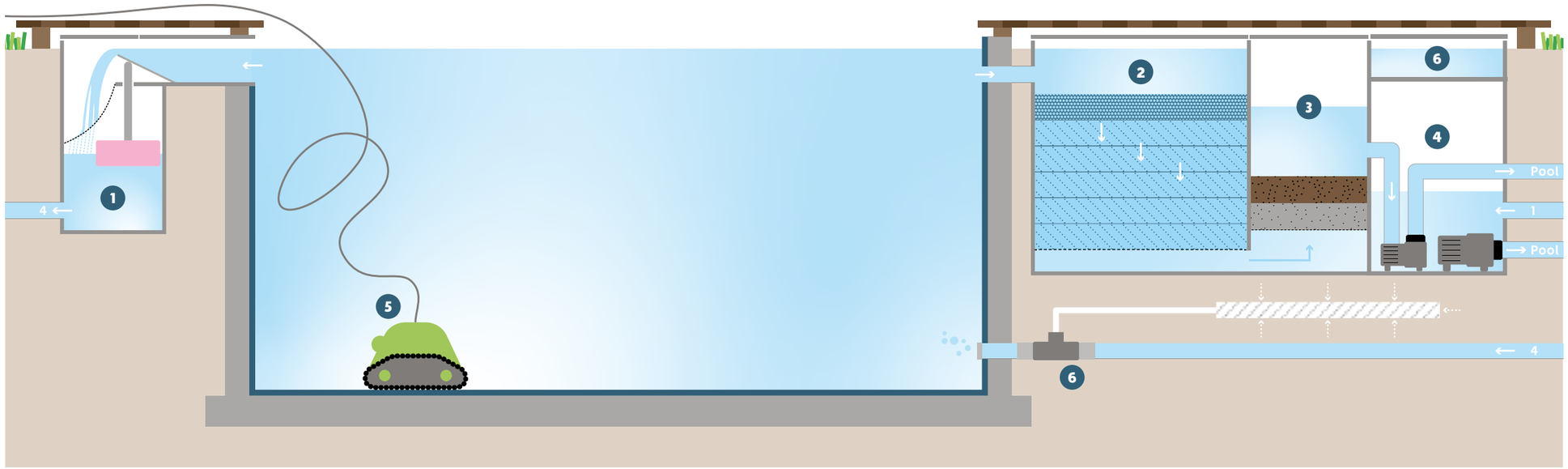


Swimming phase
After a comprehensive instruction by your Living Pool expert, you will receive a handbook containing all the information needed to operate and maintain your pool. You can already swim in your Living Pool during the start-up phase, which lasts a few weeks. During this time the bio filter 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 pool.

A Living Pool with separate aquatic plant pool on historic grounds.

Technology

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



↑ **Schematic cross section**

1 The purpose of the **Curved Sieve Skimmer** is to remove floating particles from the Living Pool. The water flows over a curved screen with a mesh width 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

2 Water flows through the **Bio Compact Filter** from top to bottom and is biologically cleaned along the way. Furthermore, impurities are held back by the filter. The result is crystal-clear water. In order to optimise the cleaning performance, water flows through the bio filter permanently. The biologically cleaned water then flows to the PhosTec Upstream filter.

Advantages
- Biological cleaning with no need for chemicals
- Functions with low energy requirements
- 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

3 The **PhosTec Upstream phosphate filter** efficiently binds the phosphorus dissolved in the water without the use of chemicals. Phosphorus promotes the growth of algae. By binding it, the algae are literally “starved”. The pool water flows through the filter from bottom to top to minimize the risk of clogging the filter. Nutrient-poor water is then pumped back into the pool by a small pump. Biotop was granted a European patent for combining the bio filter with the PhosTec Upstream filter.

Advantages
- Phosphorus is reliably removed from the water
- The filter’s compact size saves space
- Easy handling
- Simple replacement of the filter material
- Long lifespan

4 For the water circulation in a Living Pool 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 pool 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

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 The **pool robot** cleans the walls and bottom of the pool automatically.

6 A **Carbonator** or a Carbonatorbox feed natural CO_2 into the swimming water. As a result the biofilm in the Living Pool is supplied with carbon, and the pH value is regulated. This unique process was developed by Biotop and is patented.

The components 2, 3 and 4 can be installed in a single unit, the **Combi-Box**, to save space.

This anthracite coloured prefabricated pool with skimmer skilfully extends the outdoor living area.

CONSTRUCTION METHODS FOR LIVING POOLS

There are basically two types of Living Pool construction: the liner pool construction and the prefabricated pool construction. Budgets and necessary construction times significantly influence the choices made here, and must be taken into account from the planning stage.

Liner pools
This is the most commonly used construction method for Living Pools. A base plate is made on-site and a wall is built. The pool is then sealed using a polypropylene liner.

Prefabricated monopools
The Living Pool can also be delivered as a prefabricated monopool. In this case, a pit is excavated at the construction site and a concrete slab is cast as a foundation. This requires precise planning and preparation, but the monopool's long lifespan, the short construction time and perfectly smooth surfaces are its distinct advantages. Further, this construction method is ideal for organic pools, since monopools are very easy to clean.

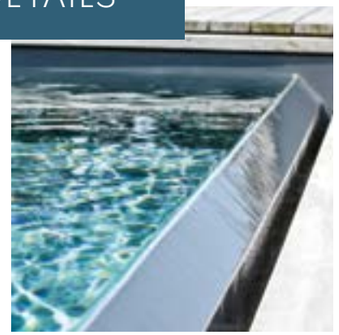
The monopool is not made of the commonly used epoxy resin. Instead, polypropylene sheets are used. These sheets are welded together by the manufacturer beforehand, according to the dimensions and shapes required.

This means the completed monopool can be transported to the customer in one piece. Thanks to the large variety of shape and design possibilities, there are no limits to your imagination—yet another advantage over epoxy resin pools.

↑
The monopool is delivered in one piece. It is lifted into the excavated pit by a crane. A concrete slab forms the base of the pit.

» MONOPOOL—DETAILS

Overflow



Infinity

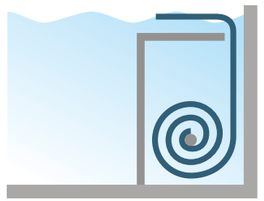
Skimmer

Monopools can basically be divided into the three types overflow, infinity and skimmer. This makes them ideal for all different terrains and design requirements.

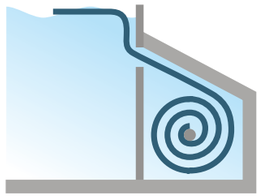
Staircases can be integrated into the pool directly during manufacture, or stainless steel ladders can be fitted later on. On top of the standard configuration, a multitude of accessories and fittings such as lights, massage jets and counter-current systems are available.

Pool covers are used to protect against dirt and to improve heat storage. They reduce evaporation on hot days and thus help to save water. The covers can be supplied either as a standard form, with a chute, or installed within a bench seat.

The trending colours for the new generation of pools are various shades of grey. They are particularly suited for organic pools. Due to its natural look and excellent cleaning properties, Biotop recommends the colours blue-grey or anthracite.



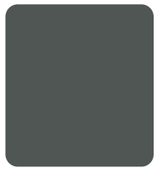
with flat section



with rucksack chute

with bench seat

Blue-grey



Anthracite

Customised features, such as corner staircase and overflow, create a flowing transition to the living area.
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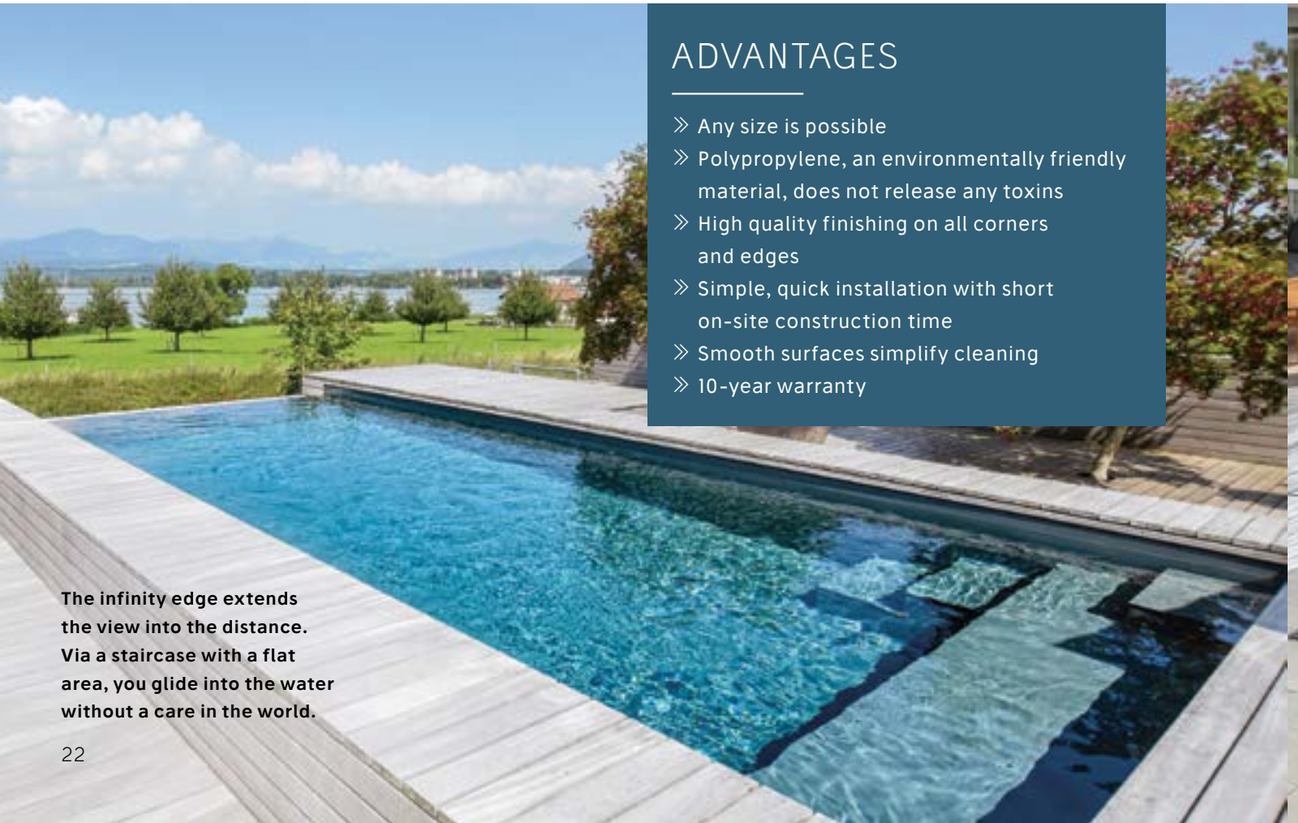


ADVANTAGES

- » Any size is possible
- » Polypropylene, an environmentally friendly material, does not release any toxins
- » High quality finishing on all corners and edges
- » Simple, quick installation with short on-site construction time
- » Smooth surfaces simplify cleaning
- » 10-year warranty

The infinity edge extends the view into the distance. Via a staircase with a flat area, you glide into the water without a care in the world.

Conversion & Refurbishment

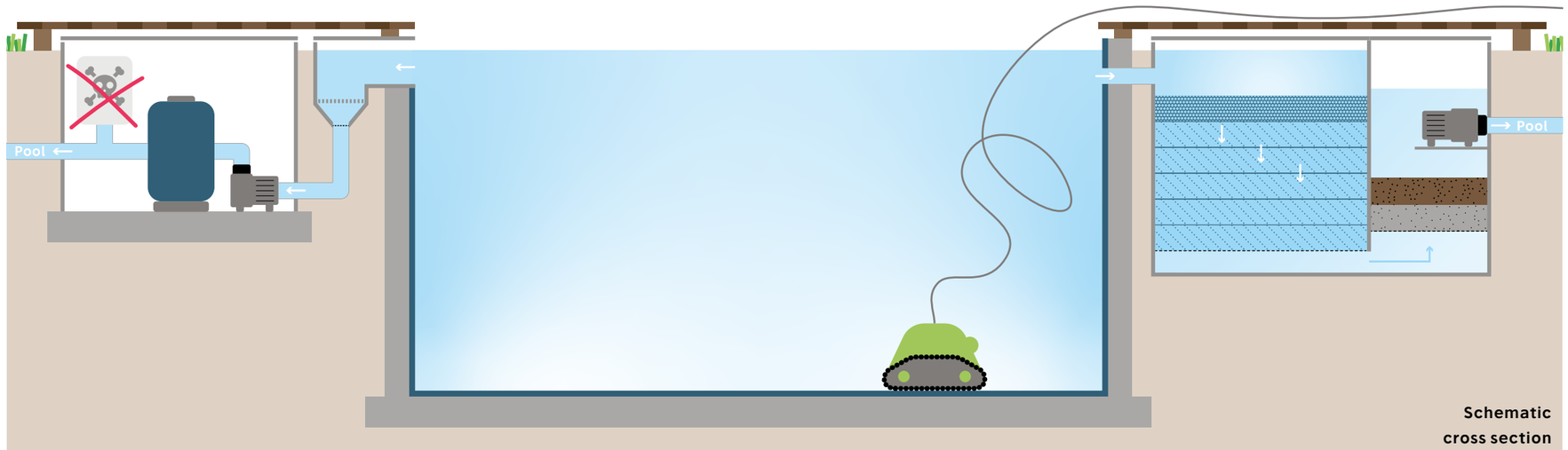
The Living Pool converter-system
makes it possible to convert an existing pool
from conventional to organic operation very easily.

Before ↑
After →

Turning a conventional pool into a Living Pool

When converting a chlorine pool into a Living Pool, the existing water circuit consisting of skimmer, pump and sand filter can usually still be used. Only the chlorination is discontinued. Instead a converter chamber containing the biological filter, the PhosTec Upstream filter and a pump is installed.

This chamber measuring about 2x1x1 metres is installed right next to the existing pool and connected to it by a feed and a return pipe. The pump for the bio filter circuit only requires very little electrical power, which is also why the pool's operating costs can be reduced significantly through such a conversion.



Schematic
cross section

↑
The pre-existing water circuit consisting of skimmer, pump and sand filter remains, only the chlorination is shut down.

↑
In addition, a biocirculation system is installed, the converter chamber.

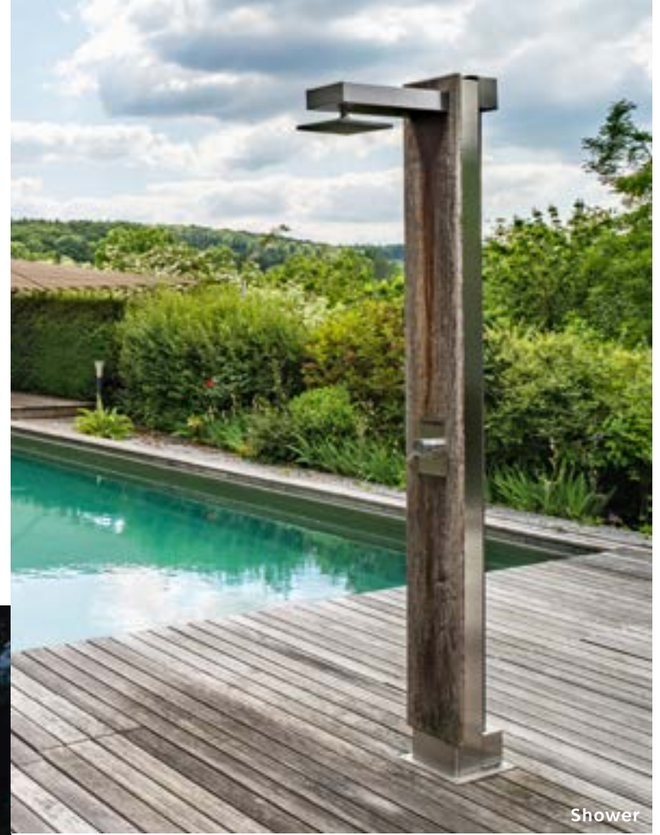
Surrounded by historic stables, this Living Pool invites you to swim for lengths. Black liner

Individual Configuration

Selected features and materials
can enhance your Living Pool.
An exclusive pool cover, an exquisite
staircase access, solar heating
or a heat pump—you name it.

Only the finest materials will be used for your Living Pool. Our range of additional features includes underwater lighting, solar-heated showers and many more. Let your imagination run wild and choose accessories that satisfy your every need.

Underwater lighting ↓



Shower

Stone stairs

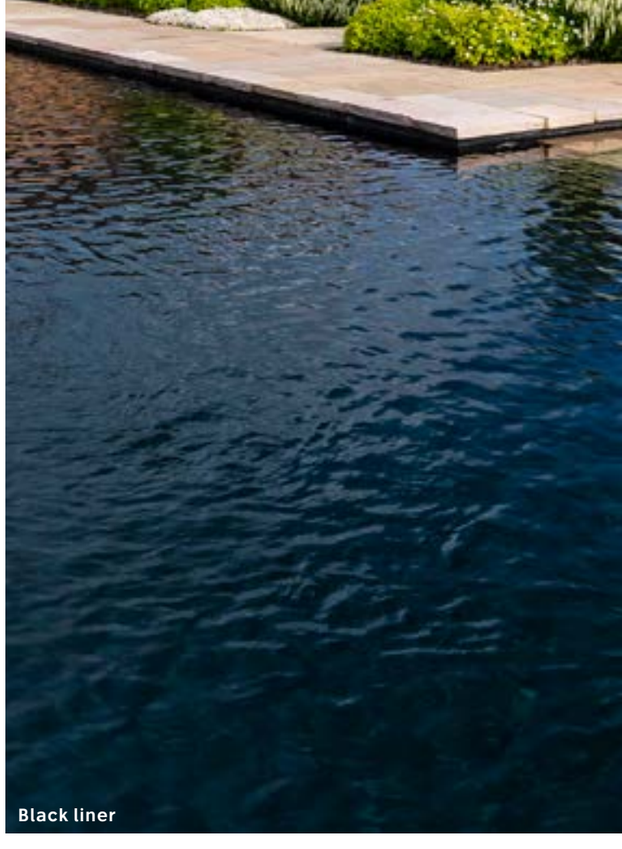
Stainless steel ladder

Pool cover


Blue grey liner


Graphite grey liner


Anthracite grey liner


Black liner


Heat pump

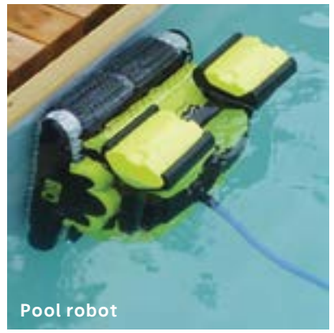

Pool cover

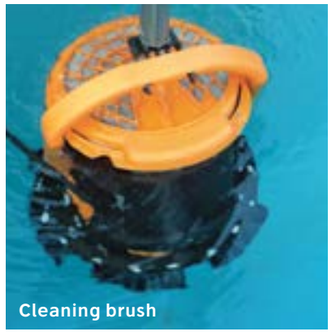

Counter-current system

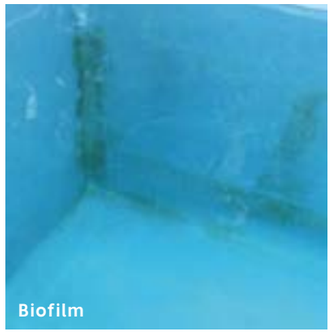

Water curtain

Care & Maintenance

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


Pool robot


Cleaning brush


Biofilm

The walls and bottom of the Living Pool can be cleaned automatically by a pool robot, which should be operated daily during the swimming season to effectively prevent a biofilm* from appearing. Any spots that the robot cannot reach need to be brushed with hand-held tools from time to time.

However, despite the regular use of a cleaning robot, some residue may still accumulate during the swimming season. In rare cases, usually in combination with insufficient care or heavy limescale deposition, 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 Living Pool's liner.

Filling water of suitable quality is the best guarantee for clean water in a Living Pool. Your local water should therefore be tested accordingly prior to being used for filling. Murky water, limescale deposition and algae growth can occur for a multitude of reasons and be eliminated effectively with appropriate measures. A professional cause analysis by your specialist is essential to determine which steps should be taken next.

SEASONAL MAINTENANCE & CARE

- The skimmer strainer should be emptied weekly.
- The filter mats in the bio compact filter should be removed from the chamber and rinsed once or twice per year.
- The PhosTec Upstream filter should be rinsed thoroughly as required, at least once per 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.

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

A Living Pool with integrated seating makes hearts beat faster.

FAQs

IS THE BIOTOP LIVING POOL HYGIENICALLY SAFE?

While publicly used pools are subject to strict legal threshold values regarding their hygienic water quality, these regulations do not apply to privately used pools. You can, however, be sure that your Living Pool meets the same water quality standards. Scientific tests performed by Biotop have also shown that our pools' water quality is excellent.

WHY IS A LIVING POOL BETTER FOR THE ENVIRONMENT?

A Biotop Living Pool uses no chemicals that pollute the environment. Its energy and water usage are very low too, since a Living Pool is only filled with water once. In contrast, a conventional pool, needs to be emptied in autumn and refilled in spring, releasing thousands of litres of chlorinated water into the environment.

WHICH REQUIREMENTS NEED TO BE FULFILLED IN ORDER TO BUILD A LIVING POOL?

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. Each pool is planned and adapted according to the circumstances given on site.

CAN A LIVING POOL BE HEATED?

Yes, a Living Pool can be heated to a comfortable swimming temperature, e.g. by means of a solar heating system. A heat pump or heat exchanger can also be used. In addition, a pool cover helps to prevent temperature loss.

HOW MUCH CARE & MAINTENANCE IS REQUIRED?

Since the water is not disinfected, a biofilm can naturally appear on the pool's walls. It must be removed daily by a pool robot. Any spots that the robot cannot reach need to be brushed with hand-held tools from time to time. The skimmer strainer should be emptied regularly. The bio filter must be cleaned once a year. The exchange of the PhosTec filter material is only necessary every few years. The pool is made fit for spring or winter by following only a few simple steps. Those don't take much time and can also be done for you by our service team.

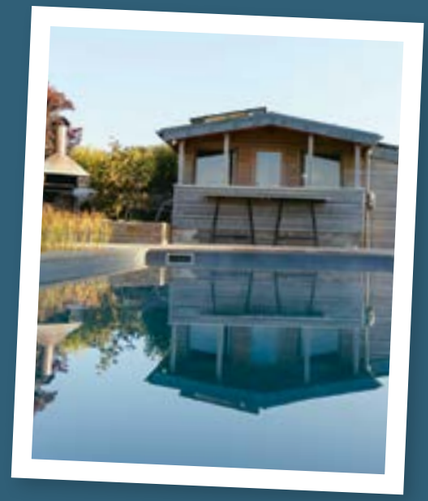
IS A SALTWATER POOL ORGANIC?

No, contrary to popular belief, saltwater pools are not organic. The only difference to standard chlorine pools is that the chlorine is not poured into the water, but is produced by electrolysis from common salt dissolved in the pool. The effect is the same—it is still a chlorine pool.

What our Customers say

"Because we feel very close to nature, we wanted a pool without chemically treated water whilst maintaining the traditional character of a swimming pool. That's why we decided on a Living Pool, and we feel it enriches our life every day!"

"Our Living Pool has turned our garden into an oasis in the middle of the city—and into our family's outdoor living room for the summer."



"In my dreams, my house was always located near the water. With the Living Pool, I was now able to make that dream come true."

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