

# Fibreglass, One-Piece Swimming Pool Guide

Produced by XL Pools Ltd. www.xlpools.com





## Introduction

Thank you for visiting our website and downloading this guide to buying a one-piece swimming pool. We like to help our customers' consultative by offering the best advice, giving you the ability to make educated decisions on your choice of swimming pool.

Our commitment to you is honesty and transparency, and our greatest hope is that you'll use the information we provide to make an empowered decision for your family. Even if you don't buy a pool from us, we want each step of this process—from the investigation to sales, to construction—to be a great experience. We feel this is the only way to conduct ourselves as a business in our modern age.

In this comprehensive guide, we are going to tackle the most relevant questions pool consumers have about buying a fibreglass pool today.



## Contents

How Do I Find the Right Size Fiberglass Pool?	4
Are Fiberglass Pools Too Small?	5
How Do I Find the Right Fiberglass Pool Design?	6
What features do you want in your pool?	6
What Pool Shape Do I Prefer?	8
What Options and Accessories Should I Consider?	9
Pool Colour	10
Salt Chlorine Generators	10
Pool Lighting	11
Pool Covers	12
Swimming Pool Heaters	14
Automatic Vacuum Cleaners	16
Water Features	16
Do I Have a Good Garden for a Fibreglass Pool?	17
How Are Fibreglass Swimming Pools Installed?	19
Conclusion	24



## How Do I Find the Right Size Fiberglass Pool?

In this section, you'll learn about small, medium, and large fibreglass pools and which size might work best for you. Before delving into this question, it's important to understand two things about the way fibreglass pools are measured:

- The measurements listed by the manufacturer are typically taken from the widest and longest points of the pool.
- The measurements will not include space for an inbuilt cover. If this is an option, you should reduce the length of the pool by around 750mm to allow for this.

The widest fibreglass pools are 4.5m wide because they are transported on their side. This means that we face height restrictions on public roads.



## Are Fiberglass Pools Too Small?

Speaking from experience, The XL Pools show pool is used as a family pool when not used to demonstrate our service. At home, there are two children who all have friends over during the summer. As you can imagine, the pool stays very busy.

There are regular pool parties for birthdays and other occasions. Despite its size, 7.2m x 3.3m, there has been over 15 kids in and around the pool at any one time and it has worked perfectly and everyone had a great time.

Having worked directly with many families over the years, we can't recall a single instance when a client, who had the space to get whatever pool they wanted, said their fibreglass pool didn't meet their size needs.

Here are some quick points to consider:

- When it comes to entertaining, most adults spend the majority of their time around the pool rather than in the pool, so in many cases, the patio space is just as important as the pool size.
- If you have kids and a small garden space, the kids will be happy with whatever they can get.
- The average size pool in the UK is 10m x 4m.



## How Do I Find the Right Fiberglass Pool Design?

This section will help you identify the style and features of the pool that best meet your needs.

Let's start with two basic questions:

- 1. What features do you want in your pool?
- 2. What shape do you prefer?

### 1. What features do you want in your pool?

Here is a list of popular features: -

Beach ledges • Non-skid texture on steps • Open play/swim area

- Deep end Automatic cover friendly
  - Steps integrated into pool

#### **Beach Ledges**

As one of the hottest features in the pool industry today, beach ledges are gaining popularity because they add another dimension to the swimming pool experience. On hot days, adults love to kick back and relax partially submerged while enjoying a book and favourite beverage. Kids use them as a play area where they splash and jump from the ledge to the pool. It's also a great space for smaller kids just learning to swim.





#### Automatic Cover Friendly

Automatic pool covers are safety covers that mechanically move across the pool with the turn of a switch. Because the cover's track system is straight, pools that are also straight allow the track to be concealed beneath the coping edge. Pool designs that allow for this "under-track" system are what we consider auto cover friendly.

#### Open Play/Swim Area

Perhaps you simply want to get the most space for play you can. If this is the case, pools that are designed to provide maximum play space will likely appeal to you. Traditionally, rectangular pools are known for having the most open interiors.

#### Integrated Steps

Having the steps integrated into the pool has several distinct advantages. When compared to vinyl liner pools, which typically have very conspicuous white plastic steps that protrude from the natural footprint of the pool, fibreglass pools seamlessly incorporate entry and exit points into the pool design.

#### Non-skid Texture on Steps

All pool models have a slip-resistant surface on the steps, tanning ledges and floors. The following are close up images of our non-skid surface.





## 2. What Pool Shape Do I Prefer?

There are two broad categories of pool shapes:

- Linear
- Freeform

### Linear Pool Designs

Linear pools can be divided into two broad categories: rectangular and roman end pools. Roman end pools are distinguished from their rectangular counterparts by the arch at one end of the pool. Both rectangular and roman end pools are automatic cover friendly, meaning they allow the cover track system to be located beneath the pool coping.

### Freeform Pool Designs

Freeform pools have curve appeal, but typically at the cost of sacrificing some swimming space. Freeform designs are much more popular in hotter climates as they typically won't cover the pool when not in use. In the UK it is essential to have a cover on your pool due to the colder climate and debris that can enter the pool. Freeform pools are not compatible with automatic covers and are very difficult to cover by other methods.



## What Options and Accessories Should I Consider?

Choosing the size and shape of your pool is only the beginning. We offer a range of options and accessories to help you personalise your pool and experience.

In this chapter we will cover:

- Pool colour
- Salt chlorine generators
- Pool lighting
- Pool covers (automatic, safety, standard winter, solar)
- Pool heaters
- Automatic vacuum cleaners
- Fountains and water features



## Pool Colour

Before the turn of the century, the majority of fibreglass pools installed were white. Today, pool owners have embraced the warm and welcoming feel of coloured pool finishes.

Compass Swimming pool come in a range of colours to suit your style and personality.



### Salt Chlorine Generators

Salt chlorinators work by converting salt, which is dissolved in your pool water, into pure chlorine. As a result, you get great water quality without the harsh side effects typically associated with chlorine pools like burning eyes and strong odours.

Considering the low maintenance benefits and exceptional water quality, salt water chlorinators are tough to beat. However, the downside of owning a salt pool is that because they are so easy to maintain, people tend to neglect them. Because you cannot detect the smell of chlorine, the chlorine level can creep up to levels that will damage the pool surface and pool equipment. It is imperative that salt pools are tested weekly regardless of how good the pool looks.



## Pool Lighting

There are some common pool lighting questions that crop up with customers:

#### 1/ Are Pool Lights Safe?

Yes, so long as they are installed correctly, they are absolutely safe. Modern pool lights are low voltage, meaning they only require 12 volts to function.

#### 2/ Are They White or Coloured?

The vast majority of pool lights installed today are coloured LED lights. In fibreglass pools, these LED lights are typically about the diameter of a drink can and offer a variety of colour options.

Most lights are controlled by a light switch and will rotate through colours as it is turned off and on. Some models can be adjusted via a special remote control.

#### 3/ How Many Lights Do I Need?

We advise getting two lights on pools 6m long or more. The colour of the pool also has an impact on the brightness of the light as darker colours absorb more light. For customers with pools over 10m who really want their pool to pop, three or four lights may be in order.





## Pool Covers (automatic, safety, slatted, winter, solar)

In the UK, pool owners need to close their pools when not in use and use a winter cover during the winter months. Consequently, all pool owners need a pool cover. Several different types of covers are available.

#### Standard Winter Cover

Standard winter covers are made of a strong material and are held down with pegs. This material lasts a long time due to its hard wearing properties. A disadvantage of this type of cover is the fact that it holds very little weight so needs to be checked to ensure no heavy debris has been collected. It does keep a lot of sunlight and debris out of the pool so long as it stays in place.

#### Automatic Safety Cover

A safety cover has a trampoline-like appearance with tracks that can be installed on top of or under the coping stones. They have a solid material that doesn't allow sunlight or debris to enter the pool. This leads to a cleaner pool in the spring when you open your pool. However, because water accumulates on the cover, it needs a cover pump and will require a watchful eye over it to ensure it continues to function properly.

#### Automatic Slatted Covers

Automatic Pool Covers are built into the shell of a fibreglass pool and are housed underwater. Automatic covers reduce maintenance by keeping debris out of the pool. The slats float on the surface of the pool and serve as wonderful solar covers, increasing the pool temperature by trapping heat from the sun and holding the heat during the night.



#### Solar Covers

Solar covers work exceptionally well but can be unsightly and can be a pain to work with as a reel needs to house the cover when not on the pool which will sit at the end of the pool. They retain heat well and soak up the heat from the sun during the day. One common misconception about solar covers is that they are effective at keeping debris out of the pool. Not so. The debris does collect on top of the cover, but you still have to take the time to remove it or it all ends up in the pool anyway. It's just as fast to vacuum the pool.



Slatted Cover

Winter Cover



Solar Cover

Safety Cover



## Swimming Pool Heaters

There are two common types of pool heaters on the market today:

- Natural gas/propane heaters
- Heat pumps.

#### Natural Gas/Propane Heaters

These heaters burn natural fuel, propane (LP) or natural gas (NG), to heat the water. They do require hookup to a fuel source as well as electricity to operate.

Pros:

- Heats the water very rapidly
- Heats the water regardless of outside air temperature
- The initial cost of the unit is somewhat less expensive than a heat pump

#### Cons:

- Grossly inefficient
- High cost to operate





#### Swimming Pool Heat Pumps

Swimming pool heat pumps work on the same principle as heat pumps for a home. They condense heat from outside air to heat the water. They require electrical hook-up. Because of the amp draw of the units, this will cost more than the electrical cost of a natural gas/propane heater. However, there is no expense to run propane or natural gas to the unit.

Pros:

- Up to 75% more efficient than gas heaters
- Low operating cost

Cons:

- Higher initial cost
- Works most efficiently when air temperature is about 10°C or higher
- Heats slowly (give it 2–3 days to aet to 28C)

We find that 9 of 10 customers choose heat pumps simply because of their dependability and low operating cost. Basically, if you want absolute control of your pool temperature year round and you're not worried about a hefty fuel bill, go with the gas heater. If you're looking to heat your pool at the lowest cost, a heat pump is probably for you.





#### Automatic Vacuum Cleaners

The number of automatic vacuums available on the market has increased exponentially in just the last five years. Where there were once only about 3 or 4 options, now there are about 50.

Automatic vacuums range in price from about £800–£2,500 and vary in their effectiveness as well. The three main types of automatic vacuums are suction-side, pressure-side, and robotic cleaners.

We tend to gravitate toward the robotic cleaners because they are a stand-alone unit that do not require additional plumbing or booster pumps, which can fail over time.

Are they a requirement? No, because you can always vacuum the pool with standard cleaning equipment. They are a nice option, but one that could be a future addition if necessary.

#### Water Features

Water features are an amazing accent to any pool…and they don't have to cost a fortune. Below are some of the most popular water features.

#### Cascade Waterfalls

Cascades are great because they are beautiful and affordable, don't take up patio space, and fill the pool area with the rich sound of falling water. They are controlled at the filter system and need very minimal plumbing to work.

#### Deck Jets

Soaring arcs of water from strategically placed jets add visual interest. We can install deck jets in outdoor swimming pools or indoor pools – either way, the addition of some deck jets can add a touch of style to your pool.



## Do I Have a Good Garden for a Fibreglass Pool?

In this section, we give you the tools you need to conduct a basic assessment of your garden for a fibreglass pool.

There are actually quite a few things we look for when surveying a backyard for an inground pool. Here are two that we look for immediately:

- The amount of area we have to work with
- The slope of the garden

If there's not enough space to install a pool, that's an obvious deal breaker. We also look at the slope or grade of the garden, which is important because it determines if there is a need for retaining walls, which can dramatically impact the cost and design of the overall project.

Other than garden space and slope, there are several other factors to consider when surveying a backyard for a pool:

#### Access

A pool is often the largest project that will ever happen in a garden. It usually involves hauling massive quantities of dirt out, and multiple truckloads of other materials in... not to mention a huge one-piece pool shell that needs to make its way from the street to its new home. All this happens through whatever pathway you can provide. We can work with even the tightest access lanes, so if you have a challenging site, don't get discouraged. We have even used cranes to lift a pool and materials over the top of a house before!



#### Trees

We are often asked, "How close can trees be to the pool?" Think of it this way: a tree often looks about the same under the ground as it does above the ground. We need to take care not to disturb too much of the root system. Ideally, the pool and patio will be located outside of the "drip line" of a tree, or just outside of the outer extremities of the branches, although many times this is not possible.

#### Privacy

Even if your garden isn't completely concealed, there are many ways to screen the pool area if you feel the need. Privacy fencing and landscaping are two common ways to accomplish this. Just keep in mind that plants and trees, although great at providing a visual barrier, don't provide a good noise barrier.





## How Are Fibreglass Swimming Pools Installed?

Flbreglass swimming pools have been around for many years, however they are often overshadowed in general knowledge to their counterparts such as lined or concrete pools. At XL Pools we feel that fibreglass, or one-piece swimming pools as they otherwise known, are superior in quality and style. Some people, however, may wonder how a one-piece pool is installed. Below we have outlined the main phases of a fibreglass swimming pool installation to help you understand how this is done.



### Phase One: Excavation



#### So what happens first?

On day one we hope to see your excited faces as we start excavating your pool.

Our team will arrive in a large van which will hold 90% of the equipment we all need for the job. Later, an excavator and dumper truck will arrive on a low loading lorry. The excavator is used to dig the hole and also to lift the pool shell into place, the dumper truck to transport the soil away from the dig site.

The first thing we will do is paint the pool size on the ground and use a laser level to determine how high to set the pool in your garden. This will then give us an indication of how deep we need to dig the hole. Once this is established we will commence the excavation and using the dumper truck to take the soil excavated to the pre-agreed soil dumping area. One member of the team will be using the excavator and another will be on the dumper truck.

Excavation of the hole usually takes between 3 and 5 hours depending on the size of the hole required and how long it takes to dispose of the soil.

Our team use what is known as a dig sheet which is provided by the pool manufacturer to know how steep to dig the hole at certain points. We mark these points on the ground using spray paint, these marks are called hash marks. As we dig, we check the depth of each mark until the desired depth is achieved.

The excavated hole is typically 1m larger than the outside of the pool and about 50mm deeper than the pool depth. In the next phase we will place a layer of concrete screed in the hole which will serve as the foundation for the pool.

#### When does the pool arrive?

The fibreglass shell will usually show up the next day. Once the pool arrives, our team will unload the shell and set it on the ground using rubber tyres to protect the pool shell from damage.



## Phase Two: Placing the Foundation

Once excavation is complete, we add a layer of concrete screed in the hole which the pool rests on. This layer will then determine the height of the pool. We use a laser level to set this screed at precisely the right elevation. At this point, we will start to raise the pool shell using the excavator and then lower the pool shell into place.

Using a laser level, we then check to make sure that the pool is perfectly level in the hole. Some adjustments may be required and so we will raise and lower the pool as many times as necessary to ensure the pool is perfectly positioned.

Properly setting the level is very important, as the pool floor needs to rest on a solid foundation to ensure the pool is structurally sound. This prevents the pool from shifting over time. Our team will strive to achieve the goal of getting the pool within 20 mm of level, all while ensuring the pool sits firmly on the foundation.





## Phase 3: Plumbing the Pool and Filtration

#### What is the filtration system?

The filtration system is comprised of two major components: the pool pump and the sand filter. The pump circulates water and the filter removes debris and small particles from the water. Most swimming pool filtration systems also include other equipment such as salt water chlorinators, heaters, UV treatment and any other additional electronic components such as lighting.

#### Where is the filtration system sited?

The pool filtration system is typically placed within 15m of the pool. We will always discuss this prior to installation and it will be marked out on the plans we supply.

#### Are fibreglass pools pre-plumbed?

The Compass fibreglass pool shells come with fittings already installed and have some plumbing already in place. This enables us to quickly and efficiently plumb your swimming pool to the filtration system. Be assured that we always visually inspect every fitting and piece of pipe thoroughly to ensure it meets our standards prior to installation.





## Phase 4: Backfilling the Pool

Once plumbing is complete and the pool is set in the hole and levelled, it is time to start filling the pool with water and filling the gaps between the pool and the excavation.

We fill the pool with water and backfill around the pool at the same time to equalise pressure on the pool shell. It is at this point we will typically install a large corrugated tube which will allow us to drain any groundwater from around the pool in the future.

During this process, an electrician will arrive and wire up your filtration system installing your control panel and set up timers. We aim to have your pool circulating water within 1 to 2 days of it being filled. We will add chemicals to the pool to stop it from going green and also to balance the water level.

### Phase 5: Coping Stones and Ring Beam

Once the pool is completely backfilled and we have made our inspections, we are ready to install the ring beam and coping stones around your pool. The first thing we do is create a concrete ring beam around the pool. This concrete ring caps off the excavation and also provides a solid base to install your coping stones on, ensuring that they do not move over time. Once the ring beam is set we will install the coping stones. Coping stones are laid using a standard paving mix of sand and cement with an additional waterproofer additive. Copings are laid starting from a corner and working around. The coping stones are typically jointed using a silicone-based jointing compound which will allow for expansion and is also used for its waterproof properties.

At this point, any paving you have ordered will start to be laid from the coping stones outward.



## Phase 6: Electrical Hookup and Commissioning

Once our works have been completed we will commission the pool. A commission includes a full, deep clean of the pool shell, balancing the water chemistry and setting up any equipment you have, such as heaters, chlorinators and other sanitation equipment.

## Conclusion

That brings us to the conclusion of this swimming pool buying guide. We genuinely hope it has empowered you with the tools you need to make a sound decision. We wish you the best of luck and happy swimming!

