

YOUR INDEPENDENT HOT TUB SOURCEBOOK

# Spasearch



PoolSpaForum.com

PoolSpaForum Special Edition

## HOT TUB BUYERS GUIDE

POOLSPAFORUM SPECIAL EDITION



FIND THE HOT TUB  
THAT'S RIGHT FOR  
YOU: SEE OUR  
MANUFACTURER  
COMPARISON





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Photo: Long Island Hot Tub



Photo: Strong Spas



Photo: Caldera Spas



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# A Hot Tub Survival Guide Just for PoolSpaForum.

I would like to welcome you to a special edition of SPASEARCH, designed exclusively for the PoolSpaForum.com audience. This hot tub survival guide provides local and company-specific information and commentary that you won't find anywhere else.

In this guide, you will find secrets to healing the body and alleviating stress through a hot tub (page 20), how to be energy efficient with your spa (page 8), easing your transition into a spa owner (page 15) and much, much more. PoolSpaForum.com seeks nothing but the best for its members, and this special guide goes a long way to prove it.

As always, I welcome your feedback and comments.

Warm regards,

David T. Wood  
Editor in Chief  
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**SPASEARCH Accuracy**

SPASEARCH has consolidated our buyer's guide to summarise the major players in the industry. Due to obvious logistics, we do not conduct individual independent product evaluations of each exercise pool or hot tub featured in our magazine; instead we rely on information provided by our editors, auditors, homeowners and other third parties to evaluate products before printing our magazine. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publication, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing.





Illustration by Michael Berrelleza

# Clues Your Significant Other Wants A Hot Tub

BY PAUL SEABURN

**AFTER MANY YEARS OF MARRIAGE,** I thought I knew my wife pretty well. Then one day, she served me a bowl of alphabet soup with all of the letters removed except H, O, T, T, U and B. That's how it started. I don't know about the fury of a woman scorned, but I can attest to the fury of a woman in quest of a hot tub. We're soaking happily now, but to spare you from going to a counselor when you could be spending that money on a spa, here are some clues your significant other wants a hot tub.

- 10 He refuses to buy anything that doesn't float.
- 9 You keep finding Barbie and Ken in the Crock-Pot.
- 8 He buys Alka Seltzer just to listen to the sound of bubbles.
- 7 She keeps trying to fit a plastic chair in the bathtub.
- 6 Every plant in the house has been re-potted in a wooden barrel.
- 5 During bridge games, he sighs every time someone uses the word "deck."
- 4 She asks the barista at Starbucks how many people a 'grande' will seat.
- 3 He begs his doctor to find something wrong with him that a hot tub can be prescribed for.
- 2 Every night he soaks his feet while watching his DVD of "Waterworld."
- 1 He refuses to consume any hot drink without checking the pH first.

## About Our Humorist

**Paul Seaburn** is the head writer for *Taylor's Attic*, an Emmy-winning comedy on the Hife network, and has written for *The Tonight Show* and *Politically Incorrect*. You can see more of his humor at HUMOR-



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# 10 COMMANDMENTS OF BUYING A HOT TUB

**Follow these rules to ensure a happy  
relationship with your dealer and  
your purchase**



# 10 THOU SHALT HAVE YOUR LOCATION CHECKED OUT IN PERSON

Your hot tub dealer will most likely offer a site survey before delivery, and you should definitely take them up on it. There are many things to consider when installing a hot tub — things you may not realize, but an experienced professional will know. Electrical requirements, soil conditions, access to the service panel — even overhanging trees — can all play a part in longtime satisfaction and use of your hot tub. Make sure you get most of these things figured out before the concrete pad is poured and hot tub arrives.

READ MORE  
ABOUT HOT TUB  
INSTALLATIONS  
ON PAGE 36.



DEPENDING ON  
THE SIZE AND  
MATERIALS THAT  
MAKE UP YOUR  
HOT TUB, IT CAN  
WEIGH 200 TO 950  
POUNDS WHEN  
DRY. AFTER THE  
WATER HAS BEEN  
ADDED, IT CAN  
WEIGH 2,000 TO  
5,000 POUNDS.

Photo: Master Spas

# 9

## THOU SHALT HAVE A STRONG, FLAT SURFACE

When filled full with water, hot tubs are heavy — and nothing shows how level something is more than water. The last thing you want is to see your hot tub slowly dip to one side. Not only will you have an uneven water surface, but also it could compromise the structure of your hot tub and possibly invalidate your warranty. Make sure you have a solid, flat surface that will withstand time.

# 8 THOU SHALT KNOW YOUR WARRANTY

Similar to the purchase of any major appliance or even vehicle, make sure you understand exactly what is covered under your warranty. Most hot tub manufacturers offer different warranties for different aspects of the spa. For example, you may get a lifetime warranty on the hot tub shell and surface: This would cover any major failures of your acrylic or rotomold surface that would cause leaks or disruption in use. In addition, the dealer may offer a separate five-year warranty on the hot tub equipment, like the pump and heater, and yet another five-year warranty on the spa cabinet. In some cases, like the uneven surface mentioned above, how you care for your hot tub could invalidate your warranty. If you don't treat your water properly and that causes some of the equipment to malfunction, you may be liable. Your dealer can also explain any trip charges or services for which you would be responsible.

CHECK OUT OUR  
HOT TUB AND SWIM  
SPA COMPARISONS,  
STARTING ON PAGE 16,  
TO SEE WHAT KIND  
OF WARRANTIES  
ARE OFFERED.





## THOU SHALT KNOW WHAT IT WILL COST TO OPERATE

Today's hot tubs are designed to be energy-efficient, and manufacturers are always striving to increase performance in this way. How much it will cost to run your hot tub depends on, among other things, local energy rates, the ambient temperature, the size of your hot tub, how much you use your hot tub and the temperature of your spa water. To keep costs as low as possible, there are a few

things you can do: First, be sure to purchase a fully insulated hot tub with a high R-value (read more about the different types of insulation on page 13). Second, make sure your hot tub comes with a heavy-duty cover that also has a high R-value.

Heat in your spa can be lost through a poorly made cover, meaning your hot tub must run more often and for longer time periods to keep it at the appropriate temperature. Third, look for hot tubs with efficient components. For instance, many manufacturers now offer multiple pumps for different aspects of the hot tub. For instance, a low-energy circulation pump may keep the water constantly moving through the filtration system, while another pump may only be used when you turn the jets on. LED or fiber-optic lighting will also keep operating costs low, as will using the hot tub's efficiency settings. Finally, remember that running your hot tub isn't the only cost of ownership. Besides regularly purchasing chemicals, the cover and other components will at some point need to be replaced.

**TO DETERMINE WHAT YOU WILL PAY ON AVERAGE PER MONTH, MULTIPLY THE KILOWATT HOURS IT TAKES TO OPERATE YOUR HOT TUB BY THE RATE YOU PAY PER KILOWATT HOUR. SEVERAL ENERGY CALCULATORS ARE AVAILABLE ONLINE.**



## 6

### THOU SHALT TEST BEFORE YOU BUY

After researching hot tub brands, dealerships and features, go see some tubs in person.

Two of the most important things to determine are whether the hot tub is comfortable and who will be using it most. Further assessing your wants and needs will help you determine whether you want things like a stereo, a waterfall or LED lights, or if you should focus on a hot tub that offers the most potential therapy.

"This is a fun purchase, but it's big," says Thom Halvorsen, CEO of Spas of Arizona, a Phoenix-based dealership in business more than 30 years. "I tell customers you have to be thrilled with what you get. So, don't even look at the prices; just go in and out of the tubs. See what's different about everything; see how the seats feel."

Many retailers also will let you wet test a hot tub. You and your family can get into a running hot tub to see how all the jets feel and seat configurations work for your needs. If the model you're eyeing isn't available for a wet test, you can often test a similar model. If getting into a swimsuit in the middle of a retail store isn't your cup of tea, ask if you can come back after hours. Larger dealerships may have separate wet-test rooms for complete privacy.

## 5

### THOU SHALT NOT LEAVE THE STORE WITHOUT THE PROPER ACCESSORIES

Everyone's been in a situation where you start to wonder if the salesman is trying to talk you into something. Do I really need the upgraded running boards? But when it comes to a hot tub, there are certain accessories that make your hot tub safer and more user-friendly. Many of these will depend on whether the hot tub is on a patio or sunk into a deck: Address how you will get in and out of the tub, how you will get the cover off and where you will store it. Hot tubs are too tall to safely get in and out of without steps. Your dealer will have slip-resistant steps that you can purchase, or they can recommend options for a built-in look. It may not seem like an issue when you're standing on the showroom floor, but getting a hot tub cover off can be cumbersome. Fortunately, there are dozens of cover lift options. Your dealer can help you determine which one will work best for your installation and tub location.



Photo: Michael Phelps Signature Swim Spas by Master Spas

## 4 THOU SHALT KNOW WHY YOU WANT A HOT TUB AND HOW YOU'LL USE IT

That might sound silly at first, but knowing why you want a hot tub and how you will use it can help you and your dealer quickly determine which tub will make you happiest. Who will be using it most of the time? Do you plan on hosting hot tub parties? Will your children be using it regularly? Do you want to use the hot tub for pain relief for a certain body part?

## 3

### THOU SHALT UNDERSTAND WATER MAINTENANCE AND FIND A SYSTEM THAT WORKS FOR YOU

Caring for your hot tub water is a commitment you must be prepared to make before you buy a spa. Modern hot tubs offer a plethora of built-in water care systems that make this process simple and hassle-free, but you still must be vigilant in checking and maintaining your water balance.

Out-of-balance water and dirty filters are common culprits for a hot tub on the fritz.

Before you choose which model and options you want, think about the time you can devote to this essential task. You may want to invest in a built-in system, whether it be salt, UV-C, ozone, a mineral purifier or — some combination of those — that does a lot of the work for you. But even if you can't afford to add a water-care system, basic hot tubs are easy to treat when you are faithful to testing and balancing your water.



## 2

### THOU SHALT LOVE THY DEALER

There are many great hot tub brands, and there might be one that offers features you can't live without. But what may be more important than your actual hot tub is your relationship with your dealer. Not only will your hot tub purchase require return trips to the store for chemicals, filters and other accessories, but you're also purchasing your dealer's knowledge. Hot tub retailers have seen it all, and while you might be in a panic that for some reason your hot tub just won't turn on, a quick call to your dealer could solve it in a simple step. When you're shopping around for a dealer, how they behave during the sale will give you the best indication of how you will get along afterwards. Also find out: How long have they been in business? New doesn't necessarily mean bad, but an established business that's kept its doors open for years can only do that if they have happy customers. Are they a member of any local or national groups, like the chamber of commerce or Better Business Bureau, and any industry associations like the Association of Pool & Spa Professionals. Companies that participate in these groups often will be attending seminars to further their industry education and business acumen. If the business sponsors local charities or if the owner serves on local community boards, you can be sure they know their reputation matters.





# 1

## THOU SHALT SIT BACK AND ENJOY

A frequently used hot tub is a happy hot tub — and makes for a content, relaxed you.

Photo: Hot Spring Spas

## QUESTIONS TO ASK YOUR DEALER

FOR MANY FIRST-TIME BUYERS, THE DECISION TO PURCHASE A SPA COMES WITH DAYDREAMS ABOUT HOW IT WILL ENHANCE THEIR LIVES. FOR THE BUSINESS OF SPA SHOPPING, HOWEVER, BUYERS SHOULD HAVE THEIR FEET FIRMLY ON THE GROUND. USE THIS QUESTIONNAIRE WHEN INTERVIEWING YOUR LOCAL HOT TUB RETAILER.

### COSTS

- 1) What does the cost of my spa include? (Cover, stairs, chemicals, accessories, etc.)
- 2) Does my installation include delivery and setup?
- 3) How much will this spa add to my utility bills?

### MY PROPERTY

- 4) Are there municipal codes that require an alteration of my property?
- 5) Do you conduct an in-home site inspection for spa placement?
- 6) Who is responsible for damage to the access area in the house or the neighbor's property during the spa's installation?
- 7) On what type of surface should my spa be placed? Do you assist in that installation?
- 8) What are the electrical requirements for my spa?

### WARRANTY & SERVICE

- 9) What customer service do you offer after the sale?
- 10) What exclusions do you have in your warranty?
- 11) If I have a warranty problem, does the dealer or manufacturer service the spa?
- 12) How long have you been carrying this spa brand, and why did you decide to carry it?

### DETAILS

- 13) What safety features come with the spa?
- 14) How noisy is the spa when it runs full speed?
- 15) What can I expect during freezing and thawing conditions?
- 16) What type of insulation does the spa have?
- 17) Are you TradeCertified™?



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# THE TYPES OF HOT TUBS

## Get the right hot tub fit for your body

Once your research has helped you determine how you'll use your spa, it's time to take a dip at a retail store. Making sure a hot tub works for your body type is crucial to avoid discomfort or dissatisfaction. Our guide will help you choose the right price point and accessories for you.

Photo: Hot Spring Spas





## Acrylic Shells

When you think about a hot tub, an acrylic shell is probably the image that pops into your head. Most of the hot tubs sold today are made of acrylic.

### ENTRY-LEVEL ACRYLIC

Acrylic spas accommodate two to six and are heat-molded to conform to the size of most people. Basic models use a pump and filter to recirculate water. Normally, a second speed on the pump provides low-speed therapy action, and the addition of a blower increases the therapy to high speed. A thermostat regulates heat and supplies an electrical element similar to a domestic hot water heater. Some models offer 110-volt plug-in circuitry; others offer 110 or 220 volts.

### MIDLEVEL

These models seat two to eight and sport features such as better insulation for sound and heat, stronger pumps and more jets, improved seating and lounge areas. They may also have larger filters, more attractive cabinetry and interior lighting. A shopper considering one of these models may find more than one pump, digital circuitry, standard ozone injection (a type of water purification system; see page 10) and headrests. Some include built-in stereos but often at the expense of other features.

### HIGH-END

These can include LED lighting, premium cabinetry, audio players and speakers, exterior lighting and acrylics with built-in, bacteria-fighting components, in addition to the basic, above-mentioned features. They may contain up to five pumps and always wire in 220-volt dedicated circuits. They seat two to eight, but their value comes from amenities rather than size.

## TOP PRODUCTS | ACRYLIC SUPPLIERS



### Aristech Acrylics

800-354-9858

[aristechacrylics.com](http://aristechacrylics.com)

Aristech Acrylics provides the acrylic for the hot tub shell to many manufacturers. One of its unique offerings is Quarite, an acrylic that looks like granite. Aristech's Bio-Lok acrylic has a surface that is impervious to microbes, helping to keep your hot tub clean.



### Lucite International

877-271-2039

[todaysspas.com](http://todaysspas.com)

When you're shopping for a hot tub, don't overlook the acrylic. Lucite acrylic with microban inhibits the growth of bacteria on hot tub surfaces, making it easier to clean. Available in multiple colors and textures, you can have peace of mind knowing your hot tub is sturdy and clean.



Photo: Strong Spas







## Rotomolding

This manufacturing process creates durable and inexpensive spas. They are a great alternative for those who have space or budget restrictions.

Not as well known as their acrylic siblings, hot tubs made via a process known as rotational molding (or rotomolding) are becoming more popular with the price-conscious shopper. Rotomold spas are lightweight, inexpensive and virtually indestructible.

Since the manufacturing of a rotationally molded hot tub is automated, experts say this process allows less expensive, yet still extremely durable spas. But its attractive price point is not the only benefit.

Bill Osborn, owner of Boise Hot Tubs in Boise, Idaho, says rotomolds work well for older people who want a smaller, easy-to-handle spa. "There are a lot of empty nesters out there," Osborn says. "They're not into big parties anymore, so rotomold spas make a lot of sense; they're simple and efficient."



Photo: Dream Maker Spas



Photo: Freeflow Spas



## Swim Spas

A hot tub big enough for swimming, exercising and entertaining the grandkids

Swim spas, or exercise spas, are hot tubs up to 18 feet long equipped with a propulsion system so you can swim and exercise against a stream of water. Some swim spas come with separate therapy seating, meaning you still get the benefits of a hot tub.

Whether it's swimming against a current, rowing or using another installed fitness apparatus, a swim spa means your very own underwater gym, where you can vary the exercises between swimming, rowing, aerobics or building muscle by using resistance bands.

Bob Lauter, CEO of Master Spas, says swim spas are often sold in place of backyard pools.

"This is a place that kids and grandkids are going to love to be in," Lauter says. "It's the perfect temperature; it's never too cold. My grandkids love our swim spa — they'd rather go in it than a pool."

The selection of swim spas on the market has greatly increased in recent years, with companies offering a variety of lengths and depths to fit all types of exercise needs and space constraints. Some swim spas, called a dual-temp, even have two sections: a swim lane and a hot tub separated by a barrier. Since the water temperature it is safe to swim in is lower than the temperature you may want for hydrotherapy, a dual-temp model gives you the best of both worlds.

As the popularity of swim spas has grown, not just the sizes have changed, but the technology has also improved. You can now operate the swim spa controls from a mobile app or monitor, and control your workout from an app or control panel, much like you would on a treadmill or other land-based exercise equipment. Some even come with underwater cameras so you can tweak and improve your swim stroke, or monitor how you're moving in the water.



Photo: Dimension One Spas



Photo: Master Spas



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by  MASTER SPAS®

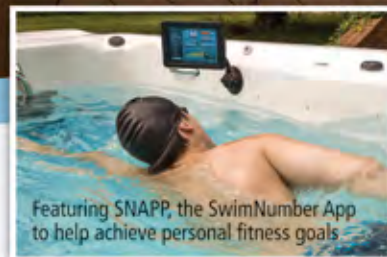
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Imagine if you could exercise, swim and relax in your backyard year-round! You can realize these benefits with a Michael Phelps Signature Swim Spa by Master Spas. Developed by the world's leading swim spa manufacturer, with input from 18-time gold medalist Michael Phelps and his coach Bob Bowman, these swim spas were designed to meet a broad range of health and wellness needs. Ideal for all types of training, swimming, fitness programs, aquatic therapy, relaxation and family fun.



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# HOT TUB COMPARISON

	AWARDS					SHELL & CABINET				WATER CARE		JET SYSTEM & TYPES					
	2015 TRADECERTIFIED™	CONSECUTIVE YEARS WON	BUCKET SEATING	LOUNGE SEATING	SYNTHETIC CABINETS	WOOD CABINETS	BUILT-IN GRAB BARS	SALT SANITIZER	UVC SANITIZER	OZONATOR	CHEMICAL FEEDER	MAXIMUM NUMBER OF JETS	MAXIMUM NUMBER OF PUMPS	INDEPENDENT SEAT CONTROLS	ROTATING/MOVING JETS	ADJUSTABLE JET STRENGTH	WATERFALLS/WATER FEATURES
<b>ARTESIAN SPAS</b> 702-307-5124 ARTESIANSPPAS.COM			●	●	●			●	●			69	6	●	●	●	●
<b>BAJA SPAS</b> 800-845-2252 HOTTUBS.COM			●	●	●	●			●	●		64	3	●	●	●	●
<b>BIRCH BAY HOT TUBS</b> 877-665-2368 BIRCHBAYHOTTUBS.COM			●	●	●	●	●	●	●	●		115	4	●	●	●	●
<b>BULLFROG SPAS</b> 877-640-0984 BULLFROGSPAS.COM			●	●	●				●			269	3	●	●	●	●
<b>CAL SPAS</b> 877-491-8108 CALSPAS.COM	●	10	●	●	●	●	●	●	●	●		80+	5	●	●	●	●
<b>CALDERA SPAS</b> 877-647-9574 CALDERASPPAS.COM	●	10	●	●	●	●			●	●		56	3	●	●	●	●
<b>CLEARWATER SPAS</b> 877-665-2368 CLEARWATERSPPAS.COM	●	7	●	●	●	●	●	●	●	●		110	5	●	●	●	●

\*Represents maximum number of jets available in an existing spa model. \*\*Spas may require more or fewer pumps depending upon customized features added. Number does not reflect strength (HP) or capacity of each pump. \*\*\*Please read the warranty carefully and understand the terms. A lifetime warranty may be subject to a period of years. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publication, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing. The Buyer's Guide to Hot Tubs (also



While nothing can replace checking out a hot tub or swim spa in person, our comparison chart can help you narrow down the brands you might want to see for yourself. We've highlighted the features we think are important and broken down which brands offer them. Some are standard features, while others are options available for an additional cost; check with your local dealer to determine what comes standard. You'll also see which manufacturers have our TradeCertified™ endorsement. We have thoroughly reviewed these companies to ensure they meet certain manufacturing and customer service benchmarks. To learn more about this program and the TradeCertified companies, see page 55.



TECHNOLOGY								WARRANTY		SPECIAL HOT TUB FEATURES		
BLUETOOTH CONNECTIVITY	WIFI CONNECTIVITY	iOS MOBILE APPLICATION	ANDROID MOBILE APPLICATION	BUILT-IN STEREO	STEREO REMOTE CONTROL	HOT TUB REMOTE CONTROL	FIBER-OPTIC OR LED LIGHTING	SPA CABINET	HOT TUB INTERIOR SURFACE			
●	●	●	●	●	●	●	●	5 YR	LIFE	3-5 YR	\$2,995-\$14,000	Built in the USA for the world, Artesian Spas sets the industry standard with the patented DIRECTFLOW® switchless motor and direct plumbing system, the patented spiral twisting pulsation of the Helix Jets, and the most advanced water-purification process called Crystal AOP™ that utilizes ultraviolet rays.
			●			●		3-5 YR	3-5 YR	3-5 YR	\$3,495-\$11,995	45 Years' Experience; Kleen H2O: Self-Cleaning with Ozone Purification System; Energy Efficient Weather-Wrap Insulation; Smartub Technology; MSI: Maximum Shell Integrity; TurboStream Jets; Lucite Acrylic with Microban; BXS Sound System; Energy Star Partnership; CEC certified
●	●	●	●	●	●	●	●	10 YR	10 YR	5 YR	\$4,000-\$12,856	Environmentally friendly spas with built-in Eco Effect Technology. Our insulation system is built to exceed the CEC energy efficiency standards. Ten-year structural warranty. Our parent company has an A+ rating with the Better Business Bureau. Thirty-eight years' experience building quality spas. Seating from two to eight people.
●	●	●	●	●	●	●	●	5 YR	7 YR	5 YR	\$3,995-\$16,995	Made in the USA, Bullfrog Spas feature the patented JetPak Therapy System, which allows spa owners to personalize the jet therapy and upgrade it at any time. The JetPak Therapy System also reduces the amount of plumbing required in a Bullfrog Spa, resulting in improved jet performance and worry-free spa ownership.
●	●	●	●	●	●	●	●	10 YR	7 YR	5 YR	\$3,999-\$14,000	Shell Material: Acrylic with exclusive fibersteel reinforcement; Insulation: High-density thermo-fill or thermo-layer blanket; Insulation Method: Full insulation, CEC energy certified; Custom Options: PURE XL UV sanitation system, listed with the Underwriters Laboratory (UL)
●		●				●		10 YR	10 YR	5 YR	\$5,000-\$16,000	A FROG in-line water care system comes standard on all Caldera® Spas. You'll use fewer chemicals and keep your spa water crystal clear with this simple and efficient system. All Caldera spas are insulated with proprietary FiberCor® for maximum energy efficiency.
●	●	●	●	●	●	●	●	10-20 YR	10-20 YR	3-5 YR	\$3,000-\$20,000	Environmentally friendly spas with built in E-Smart Technology. CEC certified to the nation's highest energy efficiency standards. Industry's best 20-year Structural Warranty. A+ Rating with the Better Business Bureau. Thirty-eight years' experience building quality spas. Seating from three to eight people.

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		AWARDS					SHELL & CABINET				WATER CARE				JET SYSTEM & TYPES			
		2015 TRADECERTIFIED™	CONSECUTIVE YEARS WON	BUCKET SEATING	LOUNGE SEATING	SYNTHETIC CABINETS	WOOD CABINETS	BUILT-IN GRAB BARS	SALT SANITIZER	UVC SANITIZER	OZONATOR	CHEMICAL FEEDER	MAXIMUM NUMBER OF JETS	MAXIMUM NUMBER OF PUMPS	INDEPENDENT SEAT CONTROLS	ROTATING/MOVING JETS	ADJUSTABLE JET STRENGTH	WATERFALLS/WATER FEATURES
<b>COAST SPAS</b> 604-514-8111 COASTSPAS.COM				●	●	●	●	●	●	●	●	●	100	4	●	●	●	●
<b>COLEMAN SPAS</b> 877-331-7924 COLEMANSPAS.COM				●	●	●	●		●	●	●		66	4	●	●	●	●
<b>DIMENSION ONE SPAS</b> 877-712-9039 D1SPAS.COM		●	10	●	●	●			●	●			84	5	●	●	●	●
<b>DREAM MAKER SPAS</b> 877-285-6517 DREAMMAKERSPAS.COM		●	1	●	●	●	●			●			35	2		●	●	
<b>DURASPORT SPAS</b> 877-609-7714 STRONGSPAS.COM/DURASPORT		●	4	●	●	●	●		●	●			29	2	●		●	●
<b>DYNASTY SPAS</b> 800-951-6224 DYNASTYSPAS.COM				●	●	●	●	●	●	●	●	●	120	3	●	●	●	●
<b>FANTASY SPAS</b> 877-913-1459 FANTASY-SPAS.COM		●	3	●	●	●	●	●		●			27	1		●	●	
<b>FREEFLOW SPAS</b> 877-520-1851 FREEFLOWSPAS.COM		●	5	●	●	●	●	●		●			25	1		●	●	
<b>HOT SPRING SPAS</b> 877-263-2045 HOTSPRING.COM		●	10	●	●	●			●	●			73	3	●	●	●	●
<b>HYDROPOOL INC.</b> 905-565-6810 HYDROPOOLHOTTUBS.COM				●	●	●	●	●	●	●	●		80	4	●	●	●	●
<b>JACUZZI</b> 877-259-7711 JACUZZI.COM				●	●	●	●		●				62	3	●	●	●	●
<b>L.A. SPAS</b> 877-267-5166 LASPAS.COM		●	8	●	●	●			●	●			99	3	●	●	●	●

\*Represents maximum number of jets available in an existing spa model. \*\*Spas may require more or less pumps depending upon customized features added. Number does not reflect strength (HP) or capacity of each pump. \*\*\*Please read the warranty carefully and understand the terms. A lifetime warranty may be subject to a period of years. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publication, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing. The Buyer's Guide to Hot Tubs (also



TECHNOLOGY								WARRANTY		SPECIAL HOT TUB FEATURES
BLUETOOTH CONNECTIVITY	WiFi CONNECTIVITY	iOS MOBILE APPLICATION	ANDROID MOBILE APPLICATION	BUILT-IN STEREO	STEREO REMOTE CONTROL	HOT TUB REMOTE CONTROL	FIBER-OPTIC OR LED LIGHTING	SPA CABINET	HOT TUB INTERIOR SURFACE	
●	●	●	●	●	●	●	●	5 YR	LIFE	5 YR
●	●	●	●	●	●	●	●	3 YR	3 YR	3 YR
●				●			●	7-LIFE YR	7-LIFE YR	5 YR
●		●	●				●	5 YR	5 YR	1 YR
							●	LIFE	LIFE	1 YR
●	●	●	●	●	●	●	●	1 YR	7 YR	5 YR
								5 YR	5 YR	1 YR
●				●		●	●	5 YR	7 YR	5 YR
●		●	●	●		●	●	5 YR	5 YR	3 YR
●				●	●	●	●	5 YR	7 YR	5 YR
●	●	●	●	●	●	●	●	1 YR	7 YR	5 YR

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	AWARDS					SHELL & CABINET				WATER CARE				JET SYSTEM & TYPES			
	2015 TRADECERTIFIED**	CONSECUTIVE YEARS WON	BUCKET SEATING	LOUNGE SEATING	SYNTHETIC CABINETS	WOOD CABINETS	BUILT-IN GRAB BARS	SALT SANITIZER	UVC SANITIZER	OZONATOR	CHEMICAL FEEDER	MAXIMUM NUMBER OF JETS	MAXIMUM NUMBER OF PUMPS	INDEPENDENT SEAT CONTROLS	ROTATING/MOVING JETS	ADJUSTABLE JET STRENGTH	WATERFALLS/WATER FEATURES
<b>LA-Z-BOY SPAS</b> 877-296-6530 LAZBOYSPAS.COM			●	●	●	●		●	●	●	56	3	●	●	●	●	
<b>MAAX SPAS</b> 866-835-9150 MAAXSPAS.COM			●	●	●			●	●		80	3	●	●	●	●	
<b>MARQUIS CORP.</b> 877-271-2052 MARQUISSPAS.COM	● 10		●	●	●				●	●	82	3	●	●	●	●	
<b>MASTER SPAS</b> 877-278-1786 MASTERSPAS.COM	● 10		●	●	●			●	●		72	4	●	●	●	●	
<b>NORDIC HOT TUBS</b> 888-GET-TUBS NORDICHOTTUBS.COM			●	●	●	●			●		53	2	●	●	●	●	
<b>PREMIUM LEISURE LLC</b> 727-573-9611 PREMIUMLEISURE.COM	● 1		●	●	●	●		●	●	●	81	4	●	●	●	●	
<b>QCA SPAS, INC.</b> 877-913-1462 QCASPAS.COM			●	●	●	●		●	●	●	144	4	●	●	●	●	
<b>STRONG SPAS</b> 877-290-1856 STRONGSPAS.COM	● 4		●	●	●	●		●	●		75	4	●	●	●	●	
<b>SUNDANCE SPAS</b> 877-684-1535 SUNDANCESPAS.COM			●	●	●	●		●			66	3	●	●	●	●	
<b>THERMOSPAS</b> 800-876-0158 THERMOSPAS.COM			●	●	●	●		●			170+	7	●	●	●	●	

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TECHNOLOGY								WARRANTY				SPECIAL HOT TUB FEATURES
BLUETOOTH CONNECTIVITY	WiFi CONNECTIVITY	iOS MOBILE APPLICATION	ANDROID MOBILE APPLICATION	BUILT-IN STEREO	STEREO REMOTE CONTROL	HOT TUB REMOTE CONTROL	FIBER-OPTIC OR LED LIGHTING	SPA CABINET	HOT TUB INTERIOR SURFACE	SPA EQUIPMENT	PRICE (MSRP)	
●		●		●	●	●	●	5 YR	5 YR	3 YR	\$2,999- \$16,999	Six C's of comfort, most comfortable underwater seating, Aquaflex massage technology — at the touch of a button you have access to 14 preprogrammed massages; convenient maintenance, cost efficiency, craftsmanship, consumer protection
●	●	●	●	●	●	●	●	2 YR	7 YR	5 YR	\$4,000- \$18,999	Physician-designed Zone Therapy System; five-stage purification; appliance-grade steel frame and Blue/MAAX insulation both with a lifetime warranty
●	●	●	●	●	●	●	●	5 YR	7 YR	5 YR	\$5,799- \$17,999	Organic styling, unique shapes; MicroSilk® beauty treatment; High Output Therapy (H.O.T.) Zone™ jets; 3-2-1-Zone Control™; ConstantClean™ + SmartClean™ water management; auto clean-up cycle, Aroma Infusions; Environments™ modules; SpaBoutique™ chemicals and accessories
●	●	●	●	●	●	●	●	LIFE	7 YR	5 YR	\$2,999- \$18,995	Fiberglass and acrylic shell; Mast3rPur Filtration System, EcoPur Filtration System; Bio-Magnetic Therapy System; noise reduction system; environmentally friendly icynene insulation; energy efficient
				●			●	10 YR	LIFE	3-5 YR	\$2,999- \$5,999	Whirlpool Turbo jet standard on every model; T-20 thermal wrap insulation; SS cabinet banding; synthetic bottom; SS Adjustable Jetting standard every model; two-pound density shell and plumbing foam. USA made
●	●	●	●	●	●	●	●	1 YR	5 YR	2-5 YR	\$3,500- \$13,000	Premium Leisure is perhaps most noted as being the company that introduced the all-in-one hot tub. We designed a modern style hot tub and filled it with options; lights, waterfalls, in-line sanitation and more. We became a value leader.
●				●	●	●	●	10 YR	5 YR	3 YR	\$3,068- \$15,256	Optional stainless-steel jets; shell colors: Blue Denim, Silver Marble, Sierra, Malibu Surf, Storm Cloud and Tuscan Sun; optional cabinet colors: Redwood, Chestnut and Gray; WOW Sound Stereo System and VibroSound entertainment options; multiple LED light packages
●				●	●	●	●	LIFE	5 YR	3 YR	\$3,995- \$9,999	Exclusive Titan™ HardCover available on our Premium, Elite and Durasport Spa Series. Our patented DURA-LAST cabinet available on our Premium Series Spas is guaranteed for life. Foldaway integrated steps and towel holder.
●	●	●	●	●	●	●		5 YR	7 YR	5 YR	\$6,210- \$20,090	Sundance Spas' patented Fluidix jets provide kneading massage without moving parts while Microclean filtration system ensures clean water through filtration of small and large debris. With the SunSmart™ WiFi Cloud Control smartphone app you can access your spa from anywhere.
				●	●		●	3 YR	10 YR	10 YR	\$4,995- \$31,500	Shell Material: Acrylic, fiberglass, resin; Insulation: insulated blanket, 1.5-inch foam panels with reflective barrier, three-inch insulated ABS base; 20-year structural warranty; custom options: stainless-steel jets, LED pillow jets, Total Control Therapy, wave lounge

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# FAMILY ROOM: A PLACE FOR GATHERING

Life can get pretty hectic. So many competing obligations sometimes get in the way of quality family time. A Caldera spa is a wonderful gathering place where everyone renews and reconnects. Isn't it time you opened the door for more relaxed communication? Have fun and make memories together.



Scan to watch  
our new owner  
videos



For more information or to find  
your local Caldera retailer visit  
[CalderaSpas.com](http://CalderaSpas.com)



# Spasearch

## SWIM SPA COMPARISON

	AWARDS					SHELL & DESIGN				JETS AND CURRENT				WATER CARE		
	2015 TRACERTIFIED™	CONSECUTIVE YEARS WON	HYDROSEAT IN SWIM SPA SHELL	DUAL ZONE	BENCH SEATING	LENGTHS (IN INCHES)	WATER DEPTHS (IN INCHES)	MAX NO. OF HYDROTHERAPY JETS	MAX NO. OF PUMPS	WATER PUMP STRENGTHS	CURRENT STRENGTHS	ADJUSTABLE SPEEDS	SALT SANITIZER	UV-C SANITIZER	OZONATOR	CHEMICAL FEEDER
<b>ARTESIAN SPAS</b> 702-307-5124 TIDALFIT.COM   ARTESIANSPPAS.COM			●		●	168 180 192	44 52	30	4	4-5 HP	500- 3500			●	●	
<b>CAL SPAS</b> 877-491-8108 CALSPAS.COM	●	10	●	●	●	144- 204	45	77	5	6 HP	900 GPM	●	●	●	●	
<b>COAST SPAS</b> 604-514-8111 COASTSPAS.COM			●	●	●	151 207 229	48.5 51 52	75	5	4 HP	3000 GPM	●	●	●	●	
<b>COLEMAN SPAS</b> 877-331-7924 COLEMANSPAS.COM			●	●	●	144- 204	45	70	5	6 HP	900 GPM	●	●	●	●	
<b>D1   AQUAFIT</b> 877-712-9039 AQUAFITSYSTEMS.COM	●	10	●	●	●	156 192 228	48 60	17	5	5 HP	600 GPM	●			●	
<b>DYNASTY SPAS</b> 800-951-6224 DYNASTYSPAS.COM			●	●	●	144- 228	45	76	5	5BHP 7BHP	1050 GPM				●	
<b>ENDLESS POOLS</b> 800-732-8660 ENDLESSPOOLS.COM			●	●		120- 228	49- 51	6- 55	1	5 HP	5000 GPM	●		●		
<b>HYDROPOOL INC.</b> 905-565-6810 HYDROPOOLSWIMSPAS.COM			●	●		176- 226	48- 52	61	6	3-5 HP	11 MPH	●	●		●	●
<b>L.A. SPAS</b> 877-267-5166 LASPAS.COM	●	8	●	●		228 192 156	47	14- 67	5-6	7 BHP 3 HP	850 GPM	●	●		●	
<b>LA-Z-BOY</b> 877-296-6530 LAZBOYSPAS.COM			●	●		176- 226	48- 52	61	6	3-5 HP	11 MPH	●	●		●	●
<b>POWERPOOL BY MAAK SPAS</b> 866-835-9150 MAAKSPAS.COM			●	●	●	144 168 198	43	70	4	3-4 HP	600 GPM	●		●	●	
<b>MARQUIS ATVS</b> 877-271-2052 MARQUISSPAS.COM	●	10	●			168	48	32	3	6 HP	480 GPM	●			●	
<b>H2X BY MASTER SPAS</b> 877-278-1786 H2XSWIMSPA.COM	●	10	●	●	●	144- 231	41 50	55	4	3-6 HP	600 GPM	●			●	
<b>MICHAEL PHELPS SWIM SPAS BY MASTER SPAS</b> MICHAELPHELPSWIMSPA.COM	●	10	●	●	●	174- 231	41 50	51	3	3-6 HP	1:09/100Y - 0:49/100Y	●			●	
<b>PREMIUM LEISURE LLC</b> 727-573-9611 PREMIUMLEISURE.COM	●	1	●	●	●	216	48	39	7	5 HP	300- 4000	●	●	●	●	

\*Represents maximum number of jets available in an existing spa model. \*\*Spas may require more or less pumps depending upon customized features added. Number does not reflect strength (HP) or capacity of each pump. \*\*\*Please read the warranty carefully and understand the terms. A lifetime warranty may be subject to a period of years. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publications, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing. The Buyer's Guide to Hot Tubs (also known as the Spa Comparison) is owned by English Publications. English Publications retains all proprietary rights to the Spa Comparison and TradeCertified™ logo (herein known as "endorsements"). Except for using one copy of the Spa Comparison for personal, non-commercial home use, it must not be reproduced, used to prepare derivative works based upon, distributed or displayed without first obtaining the written permission of English Publications. The Spa Comparison and endorsements must not be used in any unauthorized manner. ©2015



	WARRANTY					
	SPA CABINET	SPA INTERIOR SURFACE	SPA EQUIPMENT	SPA FRAME	PRICE (MSRP)	CURRENT AND SPECIAL FEATURES
<b>ARTESIAN SPAS</b> 702-307-5124 TIDALFIT.COM   ARTESIANSPPAS.COM	5 YR	LIFE	5 YR	LIFE	\$12,900-\$35,000	Current Technology: Built in the USA and recently featured on ABC's <i>Extreme Makeover Weight Loss Edition</i> ; the TidalFit® features a powerful Quad Swim Jet System that produces resistance for intermediate to pro level swimmers, while providing a heightened experience with the DIRECTFLOW™ after-workout massage seat.
<b>CAL SPAS</b> 800-CAL-SPAS CALSPAS.COM	10 YR	7 YR	7 YR	7 YR	\$13,000-\$25,000	Current Technology: SwimJet Propulsion System; Shell Material: Acrylic with exclusive fiberglass reinforcement; Water Filtration Method: Cartridge filters; Insulation Method: high-density thermo-fill or thermo-layer blanket
<b>COAST SPAS</b> 604-514-8111 COASTSPAS.COM	5 YR	LIFE	5 YR	5 YR	\$11,895-\$39,895	Current Technology: powerful river jets, buoyancy simulating levitator jets; Special Features: detachable row bars, commercial-grade pressurized filtration, large/deep workout and swim area, hydrotherapy massage seats, ISO Certified quality construction with steel reinforced shell, pressure treated frame and durable slate cabinet finish
<b>COLEMAN SPAS</b> 888-672-3815 COLEMANSPAS.COM	10 YR	7 YR	7 YR	7 YR	\$13,000-\$25,000	Current Technology: SwimJet Propulsion System; Shell Material: Acrylic with exclusive fiberglass reinforcement; Water Filtration Method: Cartridge filters; Insulation Method: High-density thermo-fill or thermo-layer blanket
<b>D1   AQUAFIT</b> 800-345-7727 AQUAFITSYSTEMS.COM	5 YR	5 YR	5 YR	LIFE	\$27,995-\$41,595	Current Technology: High Volume Swim Jets; Special Features: AquaFit comes standard with a UV-resistant Duratex Shell, five stunning, woodlike Terracina skirt options, UltraPure Water Management, strong thru-wall OptiMounts for fitness attachments, LED lighting and a durable six-gauge steel frame.
<b>DYNASTY SPAS</b> 800-951-6224 DYNASTYSPAS.COM	3 YR	10 YR	5 YR	5 YR	\$15,999-\$40,999	Current Technology: River Jets; Special Features: Seven models available, LED lighting, dual temp zones, exercise and rowing system, Bluetooth stereo system
<b>ENDLESS POOLS</b> 800-732-8660 ENDLESSPOOLS.COM	2 YR	5 YR	2 YR	10 YR	\$15,900-\$31,900	Current Technology: Resistance jets; or variable-speed, laminar Endless Pool® swim current. The swim current is generated by a 16-inch propeller inside a protective stainless-steel housing and powered by hydraulic pumps. Special Features: Arrives preplumbed, prewired and ready to use. Includes lifetime toll-free support.
<b>HYDROPOOL INC.</b> 905-565-6810 HYDROPOOLSWIMSPAS.COM	5 YR	5 YR	3 YR	10 YR	\$19,999-\$40,000	Current Technology: AquaFlex Swim Current with adjustable speed 0-11MPH/0-18 KPH flow rate; AquaFlo Swim Jet Design provides a wide, deep and smooth current; Special Features: HydroPool's Self-Cleaning Technology; Hydrowise Thermal Shield Technology keeps operating costs to a minimum
<b>L.A. SPAS</b> 877-267-5166 LASPAS.COM	1 YR	7 YR	5 YR	15 YR	\$12,495-\$34,995	Current technology: Designed to serve as a complete aquatic gym in addition to providing an excellent swim workout; full suite of exercise equipment included. Special Features: Swim lane enhanced with unique lit leveler jet, tile marker, multiple lane lights; suitable for everyone from novice to triathlete in training.
<b>LAY-Z-BOY</b> 800-465-2933 LAZBOYSPAS.COM	5 YR	5 YR	3 YR	10 YR	\$19,999-\$40,000	Current Technology: AquaFlo Swim Current with adjustable speed 0-11MPH/0-18 KPH flow rate; AquaFlo Swim Jet Design provides a wide, deep and smooth current; Special Features: HydroPool's Self-Cleaning Technology; Hydrowise Thermal Shield Technology keeps operating costs to a minimum
<b>POWERPOOL BY MAAX SPAS</b> 480-895-0598 MAAXSPAS.COM	2 YR	5 YR	5 YR	LIFE	\$14,999-\$29,999	Current Technology: TheraMAAX Current System; Special Features: Steel structure and green insulation, both with lifetime warranty
<b>MARQUIS ATVS</b> 877-271-2052 MARQUISSPAS.COM	5 YR	7 YR	5 YR	10 YR	\$24,999	Current Technology: Six turbo paired jets off of three two-speed pumps for personally customized flow design; Special Features: industry's toughest shell with high-tech polymer resins and unique colors; structural unibody gusseted frame for superior rigidity; six-time Ironman champion Dave Scott health and fitness program
<b>H2X BY MASTER SPAS</b> 877-278-1786 H2XSWIMSPA.COM	LIFE	7 YR	5 YR	10 YR	\$24,500-\$35,900	Current Technology: Swim Jets; Special Features: Fiberglass and acrylic shell, EcoPur Filtration System, environmentally friendly icynene insulation, energy efficient
<b>MICHAEL PHELPS SWIM SPAS BY MASTER SPAS</b> MICHAELPHELPSWIMSPA.COM	LIFE	7 YR	5 YR	10 YR	\$42,000-\$49,000	Current Technology: Patented Wave Propulsion Technology; Special Features: Fiberglass and acrylic shell, EcoPur Filtration System, environmentally friendly icynene insulation, Wi-Fi custom workout app: SwimNumber App for the iPad; energy efficient
<b>PREMIUM LEISURE LLC</b> 727-573-9611 PREMIUMLEISURE.COM	1 YR	5 YR	2-5 YR		\$10,995-\$35,000	Current Technology: Standard, River Stream, Turbine Driven; Special Features: Premium Leisure has entry-level to top-of-the-line swim spas. The AQ11, 12, 14 and Dual Zone16 models launched the company's line, the Swimmer's Edge has easily become its most well-known model.



Photos: The Deck & Patio Company and Long Island Hot Tub.

# CREATIVE INSTALLATION IDEAS

With a little ingenuity,  
your hot tub can blend into  
almost any outdoor setting.





To have your hot tub sunken into a deck, like these done by Long Island Hot Tubs, often the tub can sit on the ground and the deck is built around it. If the hot tub does have to be lifted off the ground, make sure it is engineered to be supported properly. Renter says either wood or composite decking can be used; the hot tub water shouldn't harm either.



## THE BASE IS STILL (OR MORE) IMPORTANT

A strong, flat surface is imperative to any hot tub installation. When you start thinking about putting it on a deck or other raised surface, that foundation becomes even more important.

Bill Renter, president of Long Island Hot Tubs, worked with a customer who wanted the hot tub on a deck five or six feet off the ground (pictured top right). To do that, the company had to build what they call a spa cradle. Concrete footings were poured according to New York state code, and several pressure-treated railroad ties made up the structure underneath the hot tub. Since the hot tub was so high off the ground, they also needed to take some extra safety measures — without sacrificing the view. A see-through enclosure was

installed around the hot tub, about 20 inches high, preventing anyone accidentally toppling over the side. Long Island Hot Tubs had an engineer design the installation.

If you'd like to have a deck surround your hot tub, another thing to consider is how you will get in and out of the tub.

"Early in my career, we always tried to hide the tub completely," Renter says. "I'm older and wiser now; we do it at seat height. So you can sit on the edge, swing your legs over and get into it. I have older photos where the deck might be right where the acrylic stops, or maybe even flush to the top of the tub, which makes it much more difficult to get into it. You have to sit down next to it and swing your legs in."



## Site Preparation

GET YOUR BACKYARD READY  
FOR YOUR NEW SPA

In the rush of excitement after a spa purchase, remember that it's not just what's inside the spa that will perfect your experience — it's also what's above, below and beside it. Be prepared to consider everything from weather to weight during your contractor's preinstallation visit.

### SITE SELECTION

Once you've chosen a hot tub, your next step is a site survey. The salesperson will come out to your house and help you understand what you need.

Most manufacturers or dealers can have a salesperson bring color samples and a full-size hot tub banner graphic. A site survey will also identify potential problems for the delivery team and help the customer start to visualize how the tub will fit into their yard. Another way to help you imagine how and where to place your new spa is by using something simple like chalk or a blanket to mark off various places you might want to put it.

### FOUNDATION

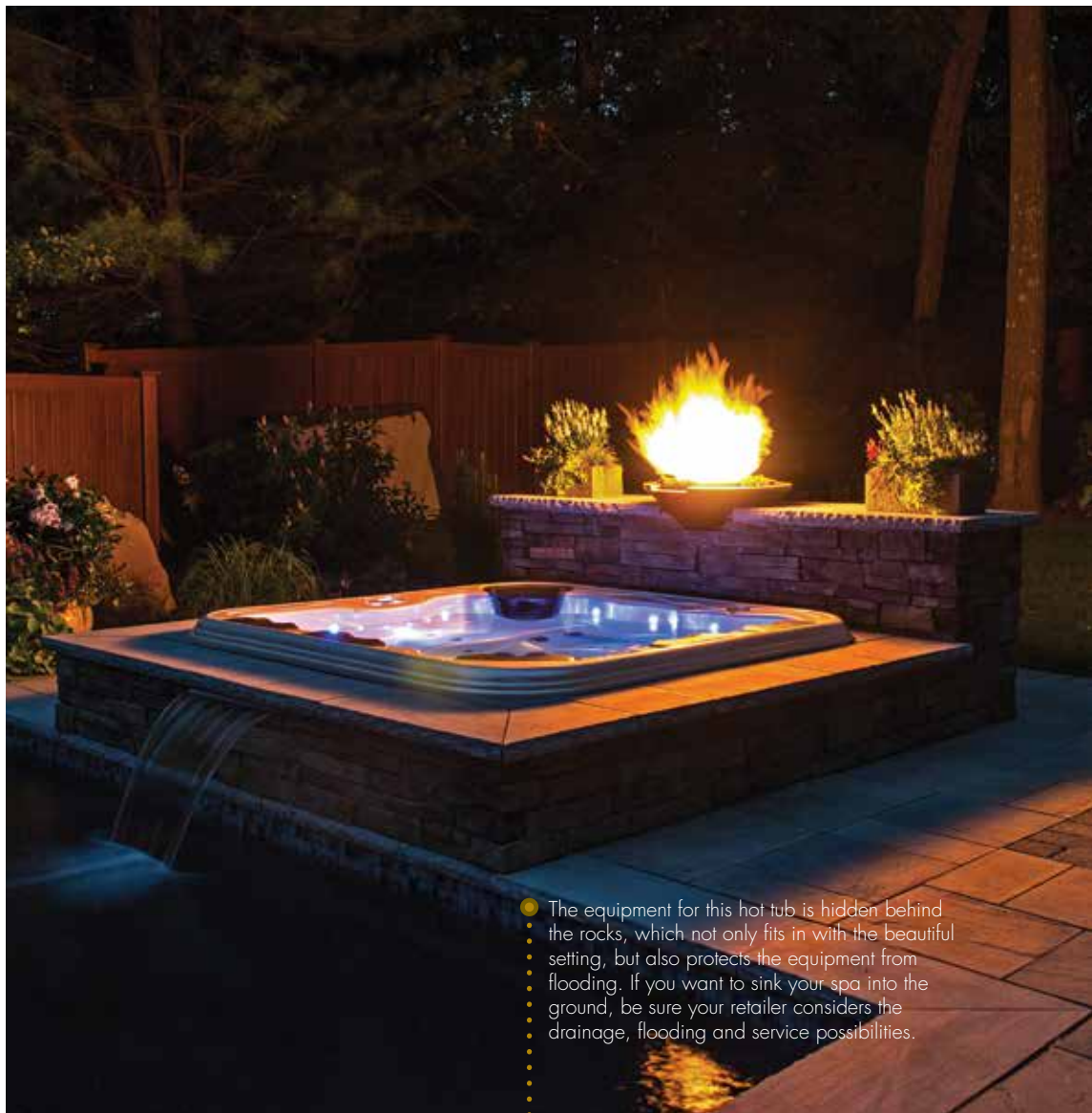
After you've chosen the site for your new hot tub, select a foundation. Anything solid and level with good drainage should do the trick. Many pour a concrete pad, and others lay patio pavers; be sure both are level and are properly installed so they won't sink or shift over time. Some hot tub dealers will be able to do this work for you. If they don't, they will most likely have some local contractors who they have worked with before and recommend.

Some companies make prefabricated, portable heavy-duty pads you can put together yourself — for example, SmartDeck by Leisure Concepts. The plastic, 24-inch squares snap together to form a durable surface that can hold the weight of a filled spa and much more.

### ELECTRICITY

Many wonder where the electrical conduit should be installed to ensure it matches up with the spa. During the site survey, the hot tub dealer should be able to provide suggestions, but the electrician will ultimately help you determine the most ideal location.

Depending on the type of hot tub you purchase, there may be special electrical requirements. Some hot tubs can be plugged into an electrical outlet, but larger tubs that have more features will require a 220-volt hard-wire connection.



- The equipment for this hot tub is hidden behind the rocks, which not only fits in with the beautiful setting, but also protects the equipment from flooding. If you want to sink your spa into the ground, be sure your retailer considers the drainage, flooding and service possibilities.

## DON'T SACRIFICE COMFORT FOR AESTHETICS

When you're building a swimming pool and you want an attached spa, many think their only option for a seamless look is to build a hot tub out of the same material as the swimming pool, for instance in gunite or with a vinyl liner. Unfortunately, that limits your hydrotherapy options.

Renter says 50 percent of the swimming pools Long Island Hot Tubs builds include a spill-over spa, the majority of which are vinyl-liner pools. "Vinyl is a little bit better than concrete because it has soft padding underneath," he says, "but it's still straight walls and is basically like a hotel hot tub."

So Renter has come up with ways to create the same look using an acrylic portable hot tub. "Hydrotherapy," he says, "is the reason why we push this type of installation on our swimming pools."

For this particular installation (pictured above), they took the equipment out of the hot tub and hid it underneath a fake rock nearby, and custom plumbed the hot tub. That way if there was ever any flooding in the area, which is possible on Long Island, the equipment is off the ground and hopefully safe from damage. This also allows a technician to easily access the equipment in case of a problem without having to take apart rock or paver work surrounding the tub.

The water running from the fire bowl is hot tub water, so the chemistry and temperature isn't thrown off by mixing water from another source. The water going from the hot tub surround into the swimming pool is pool water.

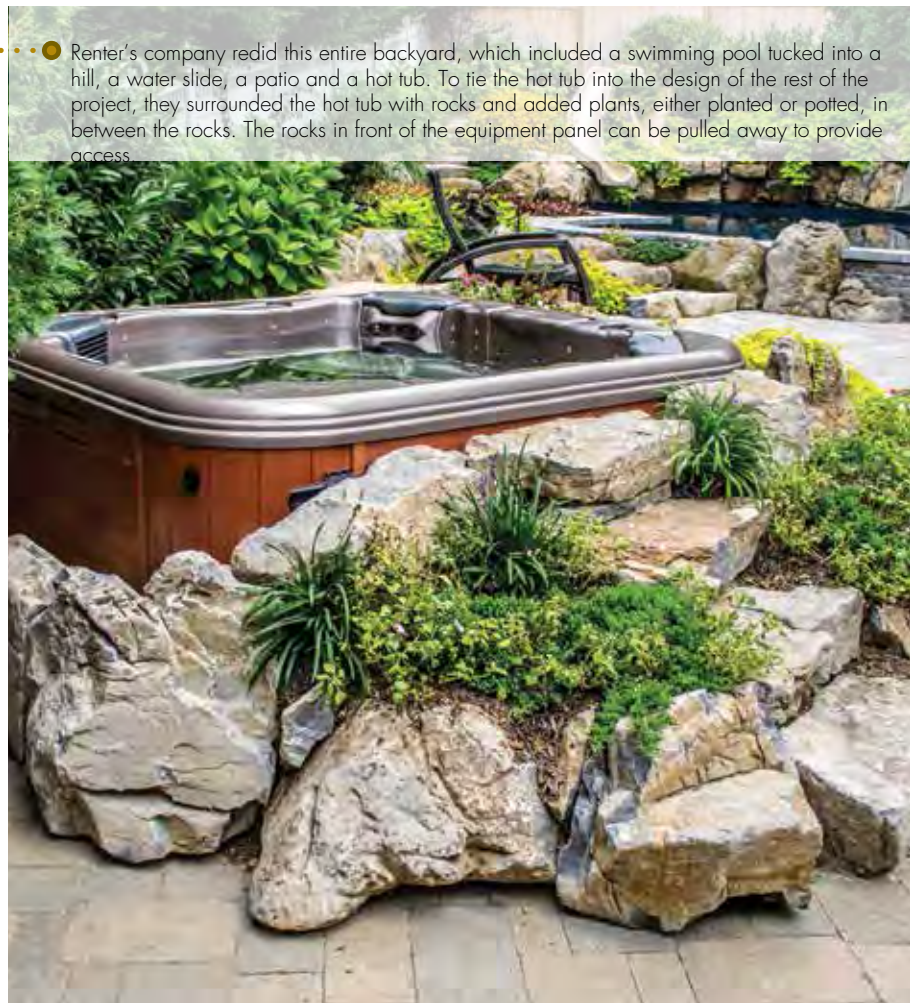


## IT DOESN'T HAVE TO COST A FORTUNE

Each installation is unique, with different challenges and circumstances, so costs for these types of custom jobs can vary. One of the more cost-effective looks is to install stones and boulders around the tub. An installation like this got Renter and his company interested in seeing how far they could take the design of a portable hot tub.

"This client had a concrete slab poured," Renter recalls. "The hot tub was sitting there and he said, 'Can you please make this thing look like a built-in spa?'" On three sides of the hot tub, they put up concrete block wall and then took boulders, soil and plants and filled in around it. "You can't really have soil and plants up against the hot tub," he explains, "so you have to protect it with the concrete."

This installation has become one of Long Island Hot Tubs' most popular looks, and has gotten lots of attention on Pinterest. As with any hot tub installation, LIHT made sure to keep the equipment easily accessible by putting planters and rocks in front that can be pulled away.



## DON'T FORGET THE VIEW

While you're thinking about how your hot tub can blend into your backyard environment, don't forget to think about what you'll see from your hot tub while you're using it. Hot tub manufacturers offer cabinet and shell finishes designed with modern backyards in mind, doing some of that blending for you. So even if you're just setting the hot tub on a concrete pad, it can look beautiful in your existing environment. When you hop in the tub, you can look over and enjoy your surroundings. ■





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# SPA GUTS

Take a look at what goes on under the hood of your hot tub.

## FILTRATION SYSTEM

The pump pushes water through the plumbing, jets and filtration system. The water passes through the filter, which cleans out contaminants. Depending on what water-sanitation system you chose, the water may also pass through an ozonator or UV-C chamber.

## CONTROL PANEL

The control panel operates all the functions of your spa. Besides turning things on and off, you can program your spa to run at peak efficiency and monitor your sanitation system. Many control panels are now Wi-Fi or Bluetooth-enabled so you can operate your hot tub from a mobile device within range.

## BUILT-IN SANITATION SYSTEM

Today's advanced water-maintenance systems include ozone, salt or UV-C technologies. While each system has advantages and unique features, they all reduce the need to refill the spa and heat new water.

## PUMP

Pumps are plumbed and wired into place in the lower area of the frame. Oversize, multiple jet pumps with high horsepower add to energy costs and are unnecessary for optimum performance. Consider a spa with a single-speed jet pump that uses only the energy needed to deliver a powerful hydromassage experience or an energy-conscious spa that uses multiple pump motors, allowing for reduced amperage and increased efficiency. Horse-power ratings are a good barometer for the strength of your pumps, but be sure to check the strength and flow the old-fashioned way, too: Just stick your hand in the water and check the strength of the jets.

## ELECTRONICS/SPA PACK

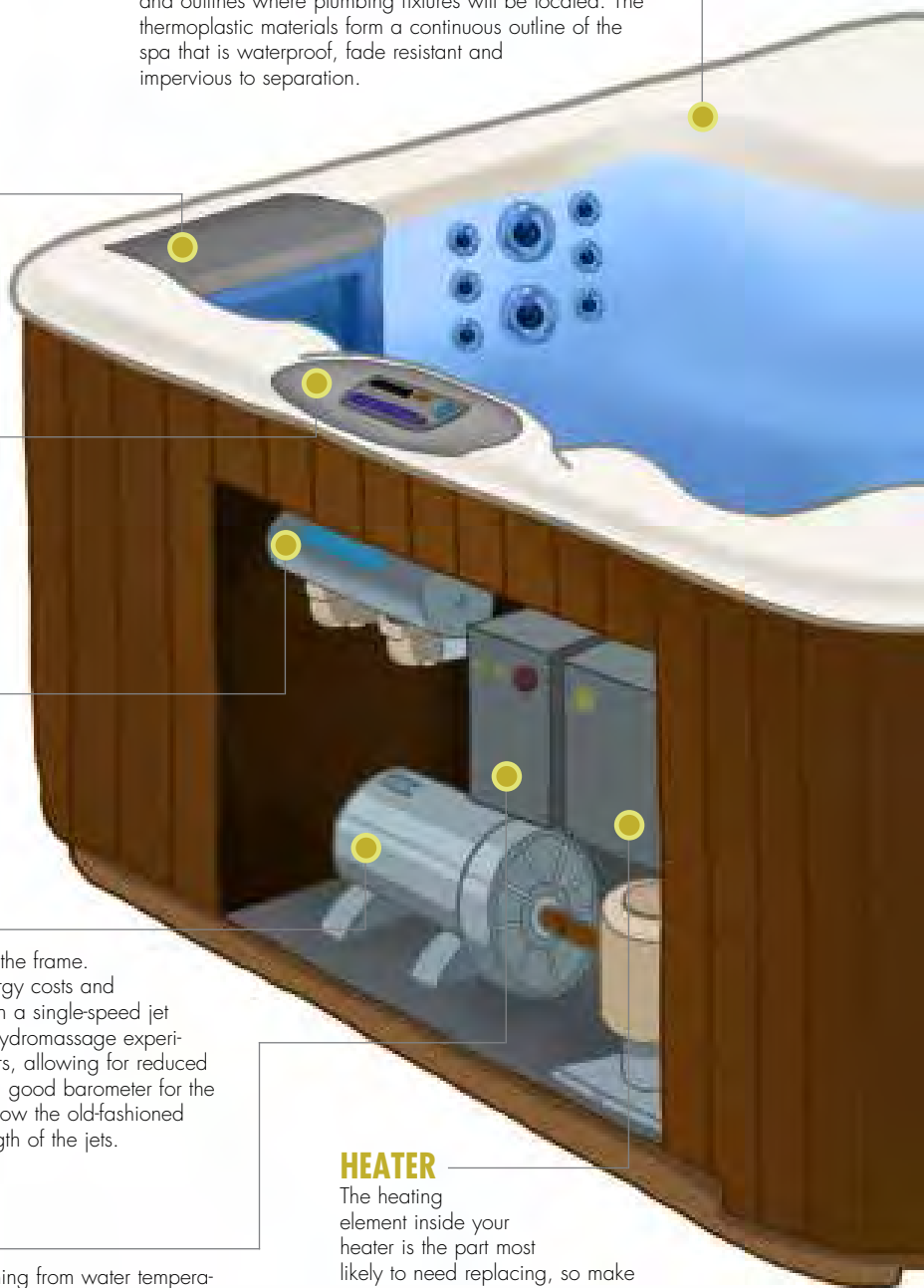
Solid-state electronics are used in most spas, controlling everything from water temperature and filtration times to aromatherapy and massage cycles. Many are equipped with filtration and smart features to make the spa nearly maintenance-free. They can also be set to take advantage of off-peak energy rates, ensuring your spa will operate in the most economical way. Some are even equipped with time-out features that will automatically turn off a pump or light should you accidentally leave it on after using the spa.

## ACRYLIC SHELL

Flat, thermoplastic acrylic sheets are drawn into molds by vacuum to form the contours of spa seats, lounges, pillows and filter well. Time and temperature are tightly controlled during this critical process, which also shapes the top edge and outlines where plumbing fixtures will be located. The thermoplastic materials form a continuous outline of the spa that is waterproof, fade resistant and impervious to separation.

## HEATER

The heating element inside your heater is the part most likely to need replacing, so make sure the heater is located in an easily accessible place. The element should either be coated or made of a material that will combat corrosion. Heaters used to have mechanical switches, which can be unreliable. Now you want your heater to have electronic sensors that will shut the heater down if a problem is detected.



## JETS

Jets work by combining warm water and air to produce a powerful burst of water, creating a massaging action. Jets are usually under water, but they can be installed above the water line, too. Jets are placed strategically throughout your spa to give different areas of your body the attention they need. Jets differ in design, variety, location, power and adjustability. For the optimum hydromassage experience, look for a spa that offers completely adjustable jets to create just the right sensation, from powerful to gentle.

Customize your hydromassage experience by looking for options that enable you to select the intensity by adjusting the mixture and diverting water to different jet combinations. Look for variety in the design of the jets. Consider a spa that offers proprietary jets tailored for the spa's pumps, plumbing, design and flow rates.

## COATING

Since the acrylic has little structural rigidity, a coating is applied to give the shell enough strength to contain hundreds of pounds of water and bathers. Some manufacturers spray or roll on fiberglass fibers and resin; others back the acrylic with ABS plastic. In either case, the shell achieves rigidity and strength, making it extremely strong.

## INSULATION

Insulation retains water temperature and reduces noise from pumps and blowers. Some manufacturers use a full-foam technique, while others use blankets of insulation around the spa shell. Full-foam insulation consists of completely filling the area between the shell and cabinet with a thick layer of solid, rigid foam. Verify that your spa is constructed with multiple layers of high-density, closed-cell polyurethane foam (typically the same material used to insulate commercial freezers), which results in low operating costs. Closed-cell foam generally provides greater efficiency because it cannot absorb water. When considering spas with layered insulation, look for materials that have high insulating (R) values. A spa designed with removable walls will allow you to easily move the layers of insulation aside if the spa requires any type of service.

## FRAME

Frames are constructed of premium-grade lumber or metal to support substantial weight. Their design uses support similar to roof trusses, and the lower members are elevated to allow air passage and avoid rot. The frames create a cavity where plumbing, pumps, insulation, heaters and electronic controllers are located.

## PLUMBING

Spas have a lot of plumbing. Each jet has to be individually plumbed, sometimes in a loop configuration to ensure even pressures. Air lines must be plumbed in addition to the water lines. Flexible PVC pipe is widely used due to its inert properties with spa water. To make the process more automated, less expensive and less likely to leak, many manufacturers are using preassembled plumbing harnesses. They are simpler to install and fit well within the confines of the cabinet.

## EXTERIOR CABINET

Most spa cabinets are constructed from polymers, which combine the appearance of wood with strength, rigidity and ease of maintenance. These will not crack, delaminate or be subject to other problems a natural material like wood might incur during the life of the spa. Companies offer polymer cabinets that are molded to look like rock or other finishes you might see in a backyard setting.

Illustration:  
Michael Berrelleza



# ACCESSORIZE

Don't leave the hot tub dealership without having all the fun things you'll want to enjoy with your hot tub.

## COVER

A high-density cover retains the spa's heat and moisture; therefore, it is imperative to look for a quality cover. Since almost all hot tub covers fold, look for a cover that uses a heat-seal gasket that will protect against vapor and heat loss in the cover's crease. In addition, look for a cover that has a generous skirting that sufficiently covers the spa's shell. Get a cover with locking, tie-down straps. This will not only ensure that your cover won't be blown off in high winds, but it will also keep unwelcome guests from accessing your hot tub.

## COVER LIFTERS

By investing in a cover lifter, you take the work out of removing the cover from your hot tub, and you will also have a place to keep your cover while you relax. There are many types of lifters on the market today; you should be able to find one that fits your particular hot tub and installation, including some that come as an all-in-one cover and lifter combination.

## STEPS

For an above-ground hot tub, consider steps for safe entry and exit of your tub. Before you make a purchase, pay attention to weight and safety ratings.

## HANDRAILS

Along with steps, handrails can ensure your safety when entering your hot tub, especially when the ground gets wet.

## MOBILE APPLICATIONS

More and more hot tubs now offer a control app for your mobile device or computer. If you want to turn up the temperature on your hot tub before you head outside, you can simply adjust it from your phone. Or if you've gone on vacation and realize you failed to put your hot tub in economy mode, simply adjust it from the tarmac.

## PRIVACY/WEATHER SHIELDS

Install your hot tub in almost any location and keep prying eyes out by installing an umbrella or gazebo.



Photo: Coast Spas

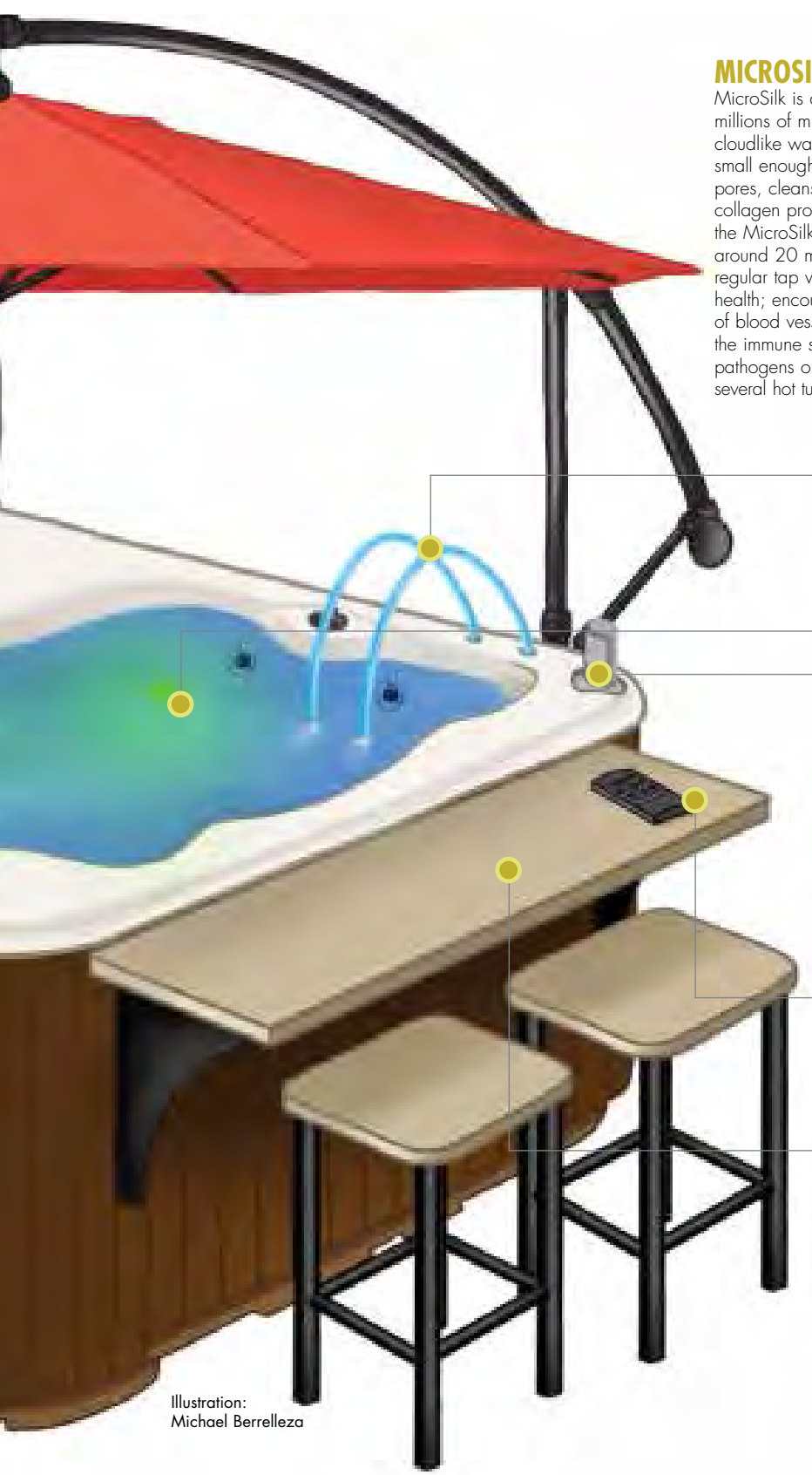


Illustration:  
Michael Berrelleza

## MICROSILK

MicroSilk is a system that infuses millions of microbubbles, which creates cloudlike water. These bubbles are small enough to get inside the bathers' pores, cleansing them and improving collagen production. For maximum benefit, the MicroSilk system should be used daily for around 20 minutes. Up to 70 percent more oxygenated than regular tap water, MicroSilk enhances skin cells' metabolic health; encourages skin-cell growth; improves the functioning of blood vessels; encourages the release of toxins; stimulates the immune system to fight free radicals; and kills anaerobic pathogens on contact. First introduced for use in bathtubs, several hot tub manufacturers now offer MicroSilk in their hot tubs.

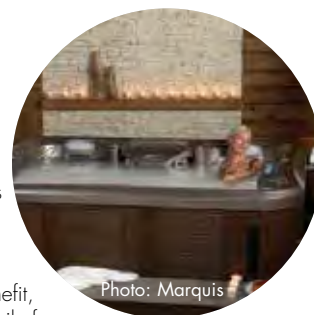


Photo: Marquis

## WATER FEATURES

Waterfalls and laminar jets are just a few upgrades you can add to your hot tub that will make the soaking experience even more luxurious.

## LIGHTING

Interior and exterior lighting can be added to your spa for safety and for an enticing visual experience. Look for hot tubs that have LED or fiber-optic lighting. These will not only look great, but will also reduce your operating costs.

## AUDIO/VISUAL

Weatherproof televisions and music players can be purchased as part of your hot tub. Many hot tubs now have the ability to stream music from a mobile device, or have a dock for a player to attach directly to the tub.

## REMOTE

A waterproof remote allows you to control the functions of your spa without having to move away from those relaxing jets.

## SURROUNDS

There are many exterior customization options for your hot tub that can give it a built-in look, such as bar tops, entry steps surrounding the tub and modular storage systems. These can often be purchased in colors and materials that match the skirting of your hot tub.





# Is My Local Dealer Certified?

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We've heard the sad tales during this economic downturn of people buying goods from retailers who had to close their doors before making good on all of their promises. Not only do Certified Pool Builders have to be in business for a certain number of years in order to be considered for the award, but also their affiliation with this endorsement as well as other required national and local trade and business groups exhibit their devotion to their customers, the hot tub industry and local community.

## THEY ARE COMMITTED TO THEIR CUSTOMERS.

In order to become a Certified Pool Builder, pool builders must have a proven track record of customer satisfaction. Through written testimonials and a customer satisfaction survey, *Poolsearch* makes sure that customer happiness isn't just lip service. Certified winners must also sign and adhere to a Customer Bill of Rights which outlines how all customers should be treated before, after and during a hot tub sale.

## THEY KNOW WHAT THEY'RE DOING.

Certified winners must engage in a certain number of education hours for their employees, which means that from the sales team to the service technicians, you should be in good hands. Their service department must also meet standards set forth by various industry organizations or local state licensing to qualify for the award. Beyond that, Certified Pool Builders must sell a superior product – a Poolsearch or Spasearch Certified manufacturer.

## CUSTOMER BILL OF RIGHTS

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Our goal is to serve you, the consumer, in a manner that speaks to the way we all would like to be treated: with honesty, fairness, respect and openness. While we certainly do this "behind the scenes," we feel it is important to specifically and openly address these issues that show our deep-seated commitment to you. To that end, we subscribe to the Poolsearch Certified™ Pool Builder standards and Consumer Bill of Rights, a rigorous guide established to ensure your purchase, ownership and service experience meets and exceeds your expectations.

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Built by Bradbury's Waterin' Hole, Inc., of Columbus, Ind., this fully-automated, vinyl-lined pool won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.



Photo: Dougherty Pools



Photo: Bi-State Pool & Spa, St. Louis

## 27 TYPES OF SWIMMING POOLS

Find the right swimming pool to complete your dream yard

## 33 POOL CONSTRUCTION

Our chart will take you through the process step by step

## 36 POOL OWNERSHIP BENEFITS

The lifelong advantages of learning to swim

## 40 POOL PREP

What kind of pool are you building





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POOLSEARCH has consolidated our buyer's guide to summarise the major players in the industry. Due to obvious logistics, we do not conduct individual independent product evaluations of each exercise pool or hot tub featured in our magazine; instead we rely on information provided by our editors, auditors, homeowners and other third parties to evaluate products before printing our magazine. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publication, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing.



## A Swimming Pool Survival Guide Just for the PoolSpaForum.com Family

I would like to welcome you to a special edition of POOLSEARCH, designed exclusively for the PoolSpaForum.com audience. This swimming pool survival guide provides local and company-specific information and commentary that you won't find anywhere else.

In this guide, you will find out how to pick the best type of pool to suit the needs and wants of your family (page 9), all the basics of in-ground pool construction (page 21), how learning to swim and keeping a regimen can dramatically change your health and well being (page 28) and much, much more. PoolSpaForum.com seeks nothing but the best for its members, and this special guide goes a long way to prove it.

As always, I welcome your feedback and comments.

Warm regards,

David T. Wood  
Editor in Chief  
david@bigfishpublications.com

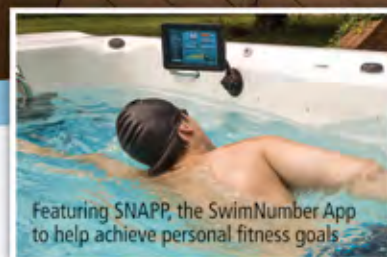
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This vinyl-lined pool installed by Chaffee's Swimming Pools in Campbell Hall, N.Y., won an honorable mention in the Association of Pool & Spa Professionals' Awards of Excellence.

## Picking the Perfect Pool

Dissecting the pros and cons of the types of swimming pools available for your family

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## In-Ground Concrete

The most customizable and common type of swimming pool.

The most common type of in-ground pool homeowners purchase, a concrete pool, is custom-built to your specifications. There are two main methods of forming the concrete that will make up its walls: gunite and shotcrete. Regional variations might dictate the type of application used in construction, and your pool builder may have an opinion as to the longest-lasting material.

Concrete pools are constructed in stages: The layout and excavation, then the installation or application of the steel, plumbing, equipment-set gunite or shotcrete, tile coping and the interior finish. Although they take longer to construct than fiberglass pools, the choices of shape, size and design of concrete pools are virtually unlimited. Construction time typically takes three to 12 weeks.

Concrete pools can incorporate a variety of decorative materials, interior surfaces and decks. Many home and landscape designers see today's in-ground pools as the centerpieces of dramatic outdoor living environments. Concrete pools are a big part of this burgeoning trend, so it's important to discuss the myriad options with your builder. Be sure to have final approval on all plans and sketches from your township and/or homeowners association before construction begins.

R'nelle Lazlo, vice president of national marketing for Blue Haven Pools & Spas, a national swimming pool contractor, says its customers are looking for "maximum pleasure with minimum effort. They want an automated, water- and energy-efficient backyard resort that makes pool ownership a fuss-free experience."

Concrete pool buyers are buying into a long-term lifestyle decision. "In ground pool buyers are seeking the highest quality pools to fulfill their long held dream of owning a pool and being able to entertain family and friends," says Mark Koide, vice president of marketing for Anthony & Sylvan Pools, a national pool builder. "In addition to creating a lifetime of memories for their families an in-ground pool adds value to their home as well."

If you can abide backhoes, bulldozers and dump trucks in your yard during the initial construction stages, you will have weathered the worst of it. "During construction, there is some organized chaos that goes on in the backyard," Palmer says. The rest of the process is relatively painless and involves installing steel walls that will brace the weight of the concrete and the water, as well as the plumbing that will support the drain system. After that, the base is installed according to your specifications, and tiling is completed.

With a concrete pool, you have the option of enhancing the rest of your yard with landscaping. Lazlo says the typical homeowners in search of a concrete pool "are more tech-savvy, environmentally friendly and time-conscious than ever before. They drive a car that's loaded with the latest gadgets, and they want a high-tech backyard oasis with all the bells and whistles, too."

If well-maintained, a concrete pool's structure can last a lifetime. The building process will not be quick, but it will be solid.





This 1,390-square-foot pool, installed by Pool Stop Custom Pools of Rockwall, Texas, features a catch basin and vanishing edge spa with glass tile. The design won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.



## Concrete Finishes

There are endless options, colors and materials available to achieve the perfect look for your swimming pool.

The last two decades reveal a rapid evolution in pool-finish techniques and materials, resulting in increased durability, easier maintenance and an almost limitless selection of possibilities. Nonplaster finishes utilize stones, pebbles, quartz crystals and even crushed shells to deliver the desired color, sheen and texture. In many cases, the mix can be adjusted to create a truly customized product.

For centuries, plaster was the standard finish for the interior of a fountain, trough, spa or pool. However, approximately 20 years ago, the concept of exposed-aggregate finishes first appeared in the marketplace and changed the face of pool finishes forever.

Jay Eaton, president of Cal Plastering in Phoenix and a veteran with more than 30 years in the industry, says finishes historically were made of plaster, but that currently, a very small percentage of pool interiors use this older technology. "Plaster is susceptible to staining, and the exposed aggregate finishes are more maintenance-friendly and stronger," he explains.

### Glass Tile

"About 30 percent of all of our projects are all tile and most of those are glass tile," says Brian Van Bower, president of Aquatic Consultants, Inc. "Within the glass tile there's a wide variety of materials. We're using some of the translucent glass tiles that add to the depth of the pool and we're using some textured tiles. On one side they have a discernable texture that is iridescent and has an oil slick-like look on it. The other side is a smooth finish but lumpy. It looks polished but still has movement to it. That's a very beautiful look."

### Pebble Tec

Pebble Tec, whose products have been on the market for almost 20 years, says brilliant riverbeds and spotless beaches inspire its finishes. Its product line includes Pebble Tec, Pebble Sheen and Pebble Fina, all of which incorporate various sizes of pebbles, allowing the customer to choose a level of surface texture from pebbly to fine. The company recently added PTx colors as an option to its Pebble Fina product. "We juiced the base material up in the Pebble Fina and fortified it with the ability to hold color better and make the colors brighter," says Bob Haning, executive vice president for Pebble Technology International. Using PTx, you can pick virtually any color for your pool finish.

### Wow Factors

Another finish option is granite or marble. Van Bower has installed some pools using either tiles or custom-cut slabs of the natural products.

If you've spent time looking at swimming pools on websites Pinterest or Houzz, you've likely ran across pools that have clear, window like sides or cut-outs. "We have a project on the bay in south Florida that has a vanishing edge on the bay side and the water overflows and runs down the outside of the acrylic into the base," Van Bower says. "If you drive by in a boat you can look into the pool and if you're in the pool you can look out into the bay. It's not for everybody but it will be a big wow factor."

### Dressing Up The Waterline

Many of the pebble, quartz and marble interior finishes allow for optional customization on the pool's bottom or sides with mosaic inlays or other specialty tile work. One place where tile work is an absolute necessity is at the waterline as most interior surfaces, whether plaster or an exposed aggregate, will degrade if exposed to air or direct sun.

A note on climate and location: Just because you live in an area of the country that gets severe winter weather or a large amount of rainfall doesn't mean you can't install or resurface a pool in the off-season, allowing it to be ready when the weather changes. Eaton has seen pool work done in almost every climate. "Often a portable plastic dome, sort of like a big plastic tent, can be erected over the pool so that work can take place in snowy or rainy weather," he says. ●



Photo: Aquatic Consulting, Inc. design; marble on all pool interior walls and vanishing edge.





Photo: Matthew Pace Photography; designed by Aquatic Consultants, Inc., and built by Regency Pool + Spa of Florida, Inc. An all-glass tile finish featuring a perimeter overflow and vanishing-edge combination.



Photo: PTx Colors



Photo: Greg Wilson Photography, DWY Landscape Architects and Aquatic Consultants, Inc. design. An all-tile project with clear panels in the floor.





Built by Bradbury's Waterin' Hole, Inc., of Columbus, Ind., this fully-automated, vinyl-lined pool won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.





## In-Ground Vinyl

The soft, flexible walls of a vinyl-lined pool now offer multiple design and pattern options.

“Vinyl pools have come a long way,” says Gary Kieser, manager at Backyard Living in Illinois. “They are usually less money up front and offer endless possibilities on size, shape and floor patterns.”

A vinyl-lined pool comes to the installer in kit form and requires an excavated hole (this can entail bulldozers or front-end loaders).

“Most vinyl builders require four to six weeks to complete the project,” says Gary McClure, owner of McClure Pools in Illinois. “The vinyl pool requires 20 percent more excavation but that should not be a consideration.”

After the reinforcing walls of steel or plastic polymer are inserted, skimmers, jets, steps, plumbing or gas lines may be added. The sand bottom of a vinyl liner pool must be floated — smoothed over with trowels — to the right specifications before the liner can be dropped in and attached. The vinyl liner is then spread over the interior of the pool to cover the excavated floor and paneled walls; it is then connected to the top of the panel walls by a vinyl rib at the outside edge of the liner. Once this is accomplished, you can see the depth and shape of your pool, and imagine what it will look like upon completion.

### ULTRA-SEAM

While there are many benefits of owning a vinyl-liner pool, there has always been one visual detractor — the seam. Depending on the size of the pool, the liner is several pieces welded together leaving a visible seam where they meet.

Latham International, manufacturers of vinyl-liner Pacific Pools, Fort Wayne Pools and Kafko Pool Products, recently developed a new type of weld called Ultra-Seam that makes the liner seam invisible.

“This is the greatest thing that’s happen to liners in the 38 years that I’ve been building them,” says Ray Bradbury, owner of Bradbury’s Waterin’ Hole in Columbus, Ind. “[The seam] just disappears.”

In addition to making the liner look better in the pool, the new welding process also makes the liner last longer.

“When we start a seam [the weld] doesn’t stop until we get to the other side,” says Will Cappiello, product director at Latham. “So you have about 30 percent fewer opportunities or exposures to have a potential liner failure [according to the company’s internal testing].”

According to Cappiello, this continuous weld process isn’t a new technology but this is the first use with vinyl liners.

“I’ve put in several of them and they’re amazing,” says Mike Giovanone, owner of Concord Pools in Latham, N.Y. “You step back and you cannot see any seams in the pool.”

**For more information: [LATHAMINT.COM](http://LATHAMINT.COM)**

Built by Johnson's Pools & Spas LLC of Owego, N.Y., this vinyl-lined pool designed for play and lounging won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.



"A steel wall vinyl or a concrete pool require more BTUs to heat over a polymer, graphex vinyl lined or fiberglass pool," says Tom Esser, sales manager at Alpine Pools Inc. in Pittsburgh.

Most liners are treated with fungicides that keep them clean. UV inhibitors also are built into many of them; by blocking out the worst of the sun's rays, your liner will look newer for longer. A liner typically holds its quality and durability for seven to 10 years, at which time it will need to be replaced. Be sure to ask your dealer how frequently liners have to be replaced in your area, as climate can make a big difference.

"In Virginia, we mostly have vinyl-liner pools with a mix of some fiberglass and concrete," says Jessica Coyner, owner at Signature Pools in Chesapeake, Va. "Where we live is below sea level, so ground water is a concern. Vinyl-liner pools are able to handle ground water better with a liner that is flexible and a pool that is more affordable than the other types."

A vinyl liner fits your pool shape like a wetsuit on a swimmer's body. Its smooth texture prevents little ones from scraping their hands and feet on the walls or floor, making it a good alternative for homeowners with children or grandchildren. A challenge of the vinyl liner, however, is the possibility of tearing if sharp objects enter into the pool.

"A vinyl pool can be customized just like a concrete pool," Esser says. "Most of our customization is done with options and hardscapes. The beauty is in the design and landscaping, not so much in what pool you go with."

#### **A BUILDER'S VIEW: WHY I SELL VINYL-LINER POOLS**

The weather in upstate New York is unpredictable, which is why Mike Giovanone, owner of Concord Pools and a member of the industry for more than 40 years, believes that vinyl-liner pools are the best choice for his customers.

"We can have three inches of rain one day and two feet of snow the next," Giovanone says. As the ground freezes and unfreezes, it expands and contracts, doing the same to whatever is buried in it.

"You can have a pool move a quarter of an inch, in and out," Giovanone says. "The vinyl liner obviously moves with that. You can have a little bit of torque and torsion in a frost laden vinyl-liner pool. Vinyl-liner pools are definitely the most climate forgiving pools out there."

Giovanone says that's not the only way vinyl is forgiving. "If you take your knuckles and you rub it on a concrete wall pool, it's not going to be a good experience," Giovanone says. "If you buy a \$200 bathing suit and you sit on a set of steps, get up and it pulls the material, that's not a good experience. The texture and feel of a vinyl-liner pool is the number one consumer choice."

Unlike when Giovanone got started in the industry (he jokes that 40 years ago your vinyl-liner options were boundless, as long as you wanted a blue rectangle), today's technology makes almost anything possible. He mentions benches, steps, swim-in grottos, beach entries and negative edges as a few of the layout and design options Concord builds for its customers.

Advances haven't come just in the pool design, but also in the building components. For example, vinyl liners are typically susceptible to sun damage, but new protective coatings can now diminish UV affects.

Additionally, liners are now cut to size using a computerized process. "I think the quality assurance and the quality consistency of computerization has helped tremendously," Giovanone says.

In the past, Giovanone built pools using steel walls for the structure. While steel is still a good cost-effective option, Concord now uses polymer walls.

"Polymer is using advanced technology," Giovanone says. "It allows us to step aside from any corrosion problems."

What Giovanone finds most exciting is the new Ultra-Seam technology from Latham International. "It is the biggest advancement I've seen in liners in my 41 years of doing this," he says. "It's an invisible seam and they're amazing. You step back and you cannot see any seams in that pool."

#### **Giovanone's Tips to Building a Vinyl-Liner Pool**

- Investigate the accomplishments and history of the builder. Make sure the company is licensed and a Certified Building Professional (CBP).
- Buy a pool from someone who gets walls, steps, liners and bracing all from one company.
- Require a personal in-yard layout and an elevation typography scale prior to sales.
- Prior to any excavation, ask for a certificate of insurance and proof of compensation insurance.
- Before the builder starts digging, make sure you're provided with an underground utility locator number.





Photo: Concord Pools, Latham, N.Y.

## Flying Over Hurdles

Award-winning design came from policy of communication.

**EACH SWIMMING POOL INSTALLATION** has its own set of challenges. For the silver-medal Awards of Excellence winner built by Concord Pools in Latham, N.Y., it was the location of the backyard and the soil.

“It was a challenging yard in the respect that almost everything had to be craned in,” says Mike Giovanone, president and CEO of Concord. Once they started digging the hole for the vinyl-liner pool, they found

that the backyard had once been essentially a tree dump. “There was a lot of organic soil that had to be removed and several hundred ton of stone product had to be brought in for stabilization.”

Fortunately, Concord was up for the job, and the company’s policy of daily communication with the homeowners kept them relaxed.

“We always tell people there are going to be hurdles, but we’re going to fly over them and we’re going to address each and every one together,” Giovanone says. “If there’s a problem, we’re going to sit and we’re not going to get up until it’s solved and it’s remediated.” ●



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All of the stone used around this fiberglass pool was procured from the farm where the pool is located. Built by Anderson Pools of Murfreesboro, Tenn., this design won a silver medal in the Association of Pool & Spa Professionals' Awards of Excellence.



Photo: Blue Hawaiian

## In-Ground Fiberglass

Just because it's quickest to install doesn't mean it has to look dull and boring.

If affordability and timeliness are what you're after, consider a fiberglass in-ground swimming pool. A fiberglass pool is factory-manufactured and resembles a giant bathtub. After an excavation, a crane is used to install it in one (big!) piece due to its weight and size. A fiberglass pool's construction time is one to two weeks, sometimes less.

"A fiberglass pool installation is like dropping a large bathtub in your yard," says Matt Rozeski, owner, Penguin Pools in Wisconsin. "The prep time takes longer [than a vinyl-liner installation] because it has to fit perfectly. However, the fiberglass pool is less labor intensive."

Previously, the lack of shape customization would discourage prospective pool owners from choosing fiberglass. However, with industry leaders such as Viking Pools and Trilogy Pools using





modular technologies, such drawbacks are less prevalent. There are also many new one-piece shapes available, including rectangles, variations on ovals and circles and even L-shaped fiberglass pools. More shapes are added annually.

“In the past, the only limitation with a fiberglass pool was size and shape,” says Todd Stahl, senior advisor to Viking Pools. “We have minimized that obstacle with our modular units, which are sections of fiberglass that are built separately and installed at the job site to create a unique design.” Stahl adds that Viking’s customers understand that fiberglass pools are technologically sound, cost-effective and eco-friendly.

Fiberglass pools ordinarily require fewer chemicals and less maintenance than concrete pools. Unlike a plaster finish, a fiberglass shell does not change the chemistry of the water, so you will likely use less acid. In addition, because of the nonporous surface, you don’t need to brush the pool nearly as often as a plaster-finish concrete pool.

Those who live along fault lines frequently ask what happens to a fiberglass pool if the earth moves. Experts tell us fiberglass has a shock-absorbing ability that allows it to flex up to two feet. However, new concrete construction techniques allow concrete to flex as well, so if you live in an earthquake-prone area, have your dealer explain the features, benefits and the possible pitfalls of both fiberglass and concrete construction.

“The beauty of fiberglass is that it’s suitable for just about any location, from the frozen north all the way to the desert southwest,” says Ted Baudendistel, general manager of fiberglass manufacturer Trilogy Pools. “Fiberglass pools are not affected by extremes in temperature or exposure. Other than the challenges that would be encountered with any other pool construction,

like changes in elevation, rocks, things of that nature, we’re no less suited for any of those environments than a gunite or a vinyl pool would.”

Fiberglass pools come complete with skimmers, drains and stairs, and as soon as the water has secured the pool into its sand base, a fiberglass pool is practically ready to use. Many fiberglass aficionados love them because the interior surface is smooth and nonporous, rendering it all but resistant to algae. If well-maintained, most fiberglass pools will indefinitely stand up to constant use and rarely, if ever, require resurfacing.

“We can compete with some very exotic designs with fiberglass pools now,” Baudendistel says. His company has created fiberglass forms that can be bolted on to the pool to quickly create some popular pool design features like raised spas, tanning ledges and other water features.

After installation, you can add a slide and/or diving board. Standard decking tends to be some type of concrete, but if you prefer brick or grass, for instance, your pool builder can work with you. Some Viking fiberglass pools have fiber-optic and LED lighting, perimeter tile, tiled skimmers, inlaid tile on the steps, seats and floor, inlaid mosaic tile, built-in cascades, vanishing edges and even aromatherapy.

Baudendistel says that if there are features you think you may want in the future, but don’t want to add now, ask the builder to prep your pool so they can easily be installed at a later time.

“It’s so simple and inexpensive to plumb for lights, automatic cleaners, waterfalls, slides and other types of water features at the time the pool is being built,” Baudendistel says. “For a couple hundred dollars, you can outfit any pool for a variety of options later on.”





Photo: Bi-State Pool &amp; Spa, St. Louis

## A Simple Project That Looks Like a Million Bucks

You don't have to spend big money to make a big impact.

**FIBERGLASS IS RICK WOEMMEL'S** favorite type of pool. For Woemmel, president of Bi-State Pool & Spa in St. Louis, it was the perfect kind of pool to install in his neighbor's yard. The result of their collaboration was a bronze medal from the Association of Pool & Spa Professionals' Awards of Excellence.

"This customer is out of town a lot," Woemmel says, "so he was looking for something with easy maintenance. In this circumstance, the Viking [brand] fiberglass pool worked out great."

Woemmel says fiberglass pools offer extensive options and bang for your buck. Besides being low maintenance, it's also a quick and easy install.

While most of Bi-State's other award-winning projects have budgets of more than six figures, the cost of this installation was much more modest.

"This customer didn't have a super high-end budget, but he loves his backyard," Woemmel says. "It wasn't low-end either. But it's a pretty reasonable project, and that guy enjoys it just as much if not more than the people swimming in their fancy backyards." ●



### A BUILDER'S VIEW: WHY I SELL FIBERGLASS POOLS

Joe Ordini, owner of Joe Ordini's Best Fiberglass Pools in Bristol, Penn., has worked in the pool industry his entire life. About 18 years ago, he had an epiphany when an industry counterpart told him he was installing fiberglass pools — in a single day. Ordini, who sold all types of pools over the years, was skeptical and insisted on seeing it for himself.

"The guy started the hole early in the morning and by late that afternoon he was grating," Ordini says. "Then the water trucks came in. It was a marvel. To me, it's absolutely the best thing going."

Now, fiberglass pools are the only he sells. Besides the quick installation, Ordini says that the warranty is the biggest benefit to his customers. For instance, the Viking fiberglass pools he sells have a lifetime structural warranty and up to a 20-year warranty on certain colors and finishes.

"Fiberglass pools are touted as being 17 times stronger than a concrete pool and that's because they'll flex instead of crack," Ordini says, explaining why the warranties are possible.

He keeps between 30 and 50 pools in stock, with even more available to order, so options are plentiful.

The smooth surface of fiberglass is enjoyable for swimmers but it has a hidden benefit. "It's virtually a maintenance free product because nothing can stick to it," Ordini says. "Any algae that starts to form on that pool would slide right to the bottom because there's nothing for it to grab onto. I tell my clients they're going to spend 15 minutes a week [doing maintenance] on this pool. That's it."

Because of the nonporous surface the pool also requires fewer chemicals to keep the water balanced. Additionally, fiberglass insulates the water, helping to retain heat.

"Fiberglass is a no-brainer for me," Ordini says.

### Ordini's Tips to Building a Fiberglass Pool

- Get everything in writing. This also helps when you're going over multiple bids. You will know if it's an even comparison.
- Use a builder who will handle the permit process for you.
- Be sure to check the veracity of all licenses.
- Buy from someone who invests in a retail location and the community. That company will be around to take care of you for years to come.



Photo: Viking



## Above-Ground Pools

Affordable and easy to install, above-ground swimming pools can bring the pleasures of water to any backyard.

For those who don't want to make the commitment of an in-ground pool, above-ground pools are an exciting and healthy solution. Today's models feature levels of automation and entertainment that can equal those of their in-ground counterparts, encompassing automatic vacuums, automatic chemical balancers, built-in fountains and lights and even surround sound systems. Innovations like space-saving, side-support systems help accommodate larger pools in smaller backyards, giving you more room to swim.

In 1945, Arkansas-based Doughboy forever changed outdoor family entertainment with the introduction of the first portable, storable, above-ground swimming pool. More than 60 years later, the company is still developing and building new pools.

One of the most oft-heard complaints with above-ground pools has been the weakness of top rails that don't stand up to kids' rough treatment. Though there's a perfectly nice ladder nearby, when a ball bounces out of the pool, enthusiastic youngsters are inclined to take the most direct route to go get it: grabbing onto the top rail and pulling themselves over the wall. On a lower-cost above-ground pool, you might end up with bent top rails.

To ensure this doesn't happen to one of its models, Doughboy uses high-tech, state-of-the-art materials, both in their support systems and in their liners, which are well above the industry standard. "We are so confident in our products that we are the only manufacturer to offer a premier warranty, giving the consumer a five-year, 100 percent limited warranty against manufacturer defects," says Doug Hollowell, president of Doughboy.

The selection of materials for the pool frame is often dictated by climate or budget. Metal frames are common, using various methods to avoid corrosion, condensation and rust. Doughboy tackles these problems by using an additional coating on walls and frames. When checking out an above-ground pool, ask about the thickness of the steel — you can actually feel the difference — and the heaviness of a pool, as these are both excellent barometers of quality.

Above-ground pools lend themselves to the do-it-yourselfer. By following installation directions, a handy homeowner can set the pool up in a weekend, but if you

have doubts, a seasoned installer can help you avoid less-obvious installation pitfalls, such as grass that can snake its way through the bottom of the liner. Installers will most likely use power equipment that makes the manual labor of ground-leveling quick and precise, being careful to avoid gas lines and septic tanks.

Once set up and full of water, the above-ground pool is tended like any other. Water chemistry is tested routinely during the swimming season, filters are cleaned and debris is removed when needed.

For many years, the shape of above-ground pools was limited to just one: round. How things have changed: High-tech materials have been incorporated into pool walls, enabling above-ground pools to grow in size and water capacity, meaning huge rectangular and oval above-ground pools are possible — and still for a lot less money than the cost of an in-ground pool.

A person who buys an above-ground pool should carefully read the instruction book, which the law requires to be included with the pool. The sheer height of the pool walls, for example, meets some safety codes, but only if steps and ladders are removed. Pools installed flush with a deck should be treated as an in-ground pool, using fencing or automatic door closers with high latches.

Above-ground pools are intended for swimming and wading only, not diving. Parents should stress this to their children and all visitors, regardless of age. Basketball, volleyball and other water games are fine as long as they are monitored by a responsible adult. ●



Photo: Doughboy



After a year of searching and research, the Ficetti family chose to install a Doughboy above-ground pool. For them an above-ground pool was ideal.

"We didn't want to go with the great investment of the in-ground," says Sharon Ficetti. "Just in case down the line we ever wanted or needed to expand on the house or anything like that, we had that option of removing it if we had to."

John and Sharon Ficetti wanted a pool that their four children, ages 9 to 18, could all enjoy. So they chose a large oval pool, with all the add-ons.

"We ended up going with all the different options that in the beginning we weren't going to go with," Sharon says. "And it was well worth it."

Now that their pool has been installed, Ficetti says that she is able to keep better track of her children and that they interact more with each other.

"They spend more time together doing something other than fighting," Sharon says. "It seems like they get along better out there than they do in the house. Then they spend more time at home. They have friends over every day."

Ficetti says their friends and family of all ages enjoy their pool. "It was a good investment," she says.



## Swim Spas & Hot Tubs

Whether you build a hot tub that's attached to your pool or purchase a portable spa to place elsewhere in your backyard, hot tubs offer a bevy of health benefits.

The National Swimming Pool Foundation has released the results of year one of a two-year study on the effects of hot tub immersion. When you're submerged up to your shoulders in warm water, it found, more blood is forced to your central organs.

"To accommodate that increased amount of blood, your heart also has to stretch to pump more of that blood," says Dr. Tom Lachocki, CEO of the NSPF. "Stretching your heart muscle is just as important as increasing your heart rate when it comes to cardiac health."

For people who haven't exercised for a long time or who are unable to exercise, these results can have a significant impact on health.

To help get the message out, the Foundation has published *Hot Water & Healthy Living*, by Dr. J. B. Smith of Indiana University in Pennsylvania. The book pares down the science of the study and explains how hot-water immersion creates healthier bodies, hearts, minds and lifestyles.

In addition, a study in the scientific journal *Sleep* showed soaking in a hot tub before bedtime can help achieve a deeper, more relaxing sleep for the more than 70 million Americans who, according to the National Institutes of Health, suffer from mild to chronic insomnia.

Swim spas, or exercise spas, can be up to 18 feet long and are equipped with a propulsion system, so you can swim and exercise against a stream of water. Some swim spas come with separate therapy seating, meaning you still get the benefits of a hot tub.

Whether it's swimming, rowing or using another installed fitness apparatus, a swim spa means your very own "underwater gym," says Bob Hallam, founder of Dimension One Spas. "You can vary the exercises — you could swim one day, row one day, aerobics one day."

Bob Lauter, president of Master Spas, says swim spas are often sold in place of backyard pools. "This is a place that kids and grandkids are going to love to be in," Lauter says. "It's the perfect temperature; it's never too cold. My grandkids love our swim spa — they'd as soon go in that as a pool."

If your backyard is too small for a swimming pool, or if you live in climates where a pool can only be used a few months a year, a swim spa can be a great option. ●



Photo: Pacific Pools



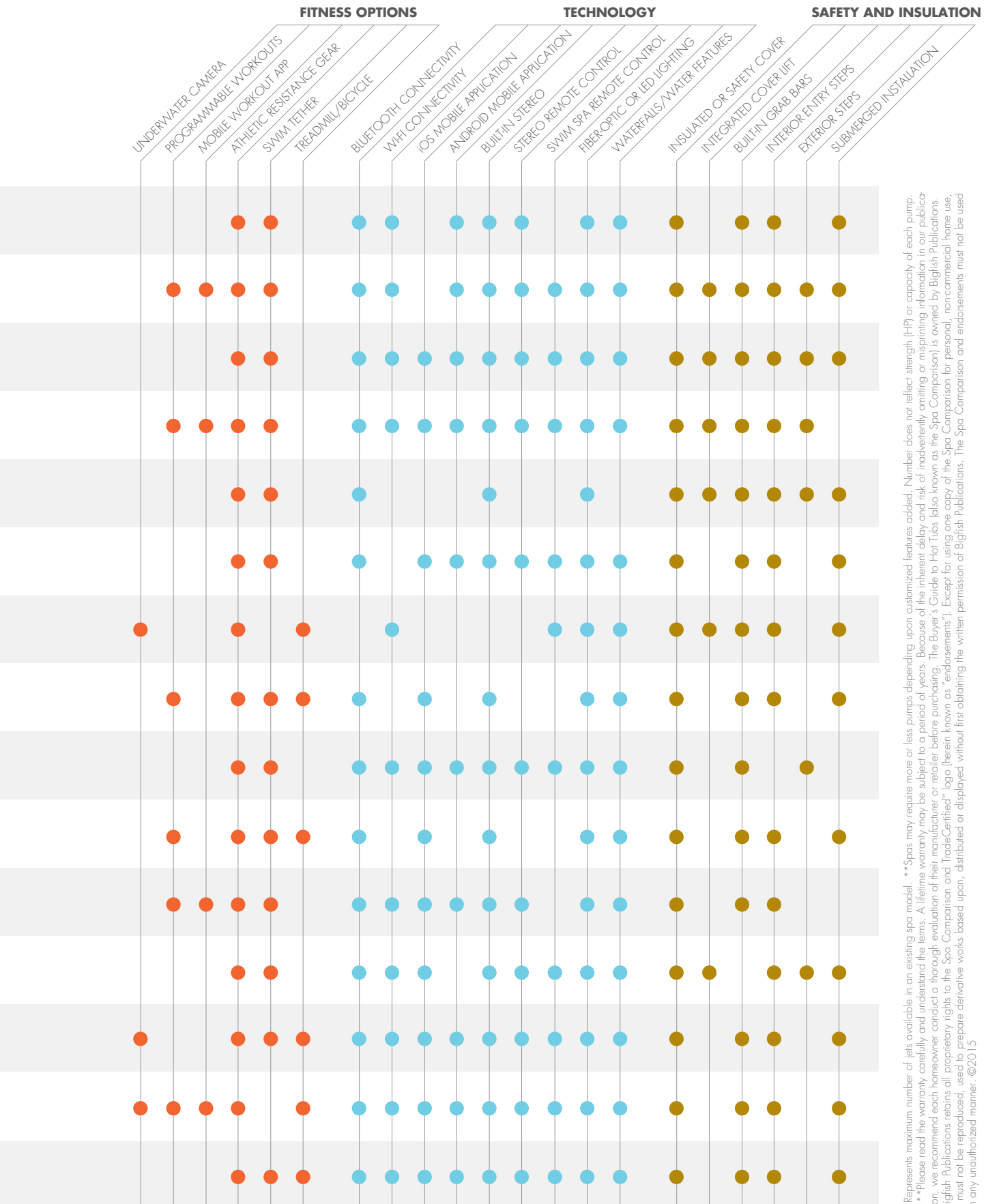


# Poolsearch

## SWIM SPA COMPARISON

	AWARDS				SHELL & DESIGN				JETS AND CURRENT				WATER CARE			
	2015 TRACERTIFIED™	CONSECUTIVE YEARS WON	HYDROSEAT IN SWIM SPA SHELL	DUAL ZONE	BENCH SEATING	LENGTHS (IN INCHES)	WATER DEPTHS (IN INCHES)	MAX NO. OF HYDROTHERAPY JETS	MAX NO. OF PUMPS	WATER PUMP STRENGTHS	CURRENT STRENGTHS	ADJUSTABLE SPEEDS	SALT SANITIZER	UV-C SANITIZER	OZONATOR	CHEMICAL FEEDER
<b>ARTESIAN SPAS</b> 702-307-5124 TIDALFIT.COM   ARTESIANSPPAS.COM			●		●	168 180 192	44 52	30	4	4-5 HP	500- 3500			●	●	
<b>CAL SPAS</b> 877-491-8108 CALSPAS.COM	●	10	●	●	●	144- 204	45	77	5	6 HP	900 GPM	●	●	●	●	
<b>COAST SPAS</b> 604-514-8111 COASTSPAS.COM			●	●	●	151 207 229	48.5 51 52	75	5	4 HP	3000 GPM	●	●	●	●	
<b>COLEMAN SPAS</b> 877-331-7924 COLEMANSPAS.COM			●	●	●	144- 204	45	70	5	6 HP	900 GPM	●	●	●	●	
<b>D1   AQUAFIT</b> 877-712-9039 AQUAFITSYSTEMS.COM	●	10	●	●	●	156 192 228	48 60	17	5	5 HP	600 GPM	●			●	
<b>DYNASTY SPAS</b> 800-951-6224 DYNASTYSPAS.COM			●	●	●	144- 228	45	76	5	5BHP 7BHP	1050 GPM				●	
<b>ENDLESS POOLS</b> 800-732-8660 ENDLESSPOOLS.COM			●	●		120- 228	49- 51	6- 55	1	5 HP	5000 GPM	●		●		
<b>HYDROPOOL INC.</b> 905-565-6810 HYDROPOOLSWIMSPAS.COM			●	●		176- 226	48- 52	61	6	3-5 HP	11 MPH	●	●		●	●
<b>L.A. SPAS</b> 877-267-5166 LASPAS.COM	●	8	●	●		228 192 156	47	14- 67	5-6	7 BHP 3 HP	850 GPM	●	●		●	
<b>LA-Z-BOY</b> 877-296-6530 LAZBOYSPAS.COM			●	●		176- 226	48- 52	61	6	3-5 HP	11 MPH	●	●		●	●
<b>POWERPOOL BY MAAK SPAS</b> 866-835-9150 MAAXSPAS.COM			●	●	●	144 168 198	43	70	4	3-4 HP	600 GPM	●		●	●	
<b>MARQUIS ATVS</b> 877-271-2052 MARQUISPAS.COM	●	10	●			168	48	32	3	6 HP	480 GPM	●			●	
<b>H2X BY MASTER SPAS</b> 877-278-1786 H2XSWIMSPA.COM	●	10	●	●	●	144- 231	41 50	55	4	3-6 HP	600 GPM	●			●	
<b>MICHAEL PHELPS SWIM SPAS BY MASTER SPAS</b> MICHAELPHELPSWIMSPA.COM	●	10	●	●	●	174- 231	41 50	51	3	3-6 HP	1:09/100Y - 0:49/100Y	●			●	
<b>PREMIUM LEISURE LLC</b> 727-573-9611 PREMIUMLEISURE.COM	●	1	●	●	●	216	48	39	7	5 HP	300- 4000	●	●	●	●	

# Poolsearch SWIM SPA COMPARISON



\*Represents maximum number of jets available in an existing spa model. \*\*Spas may require more or less pumps depending upon customized features added. Number does not reflect strength (HP) or capacity of each pump. \*\*\*Please read the warranty carefully and understand the terms. A lifetime warranty may be subject to a period of years. Because of the inherent delay and risk of inadvertently omitting or misprinting information in our publications, we recommend each homeowner conduct a thorough evaluation of their manufacturer or retailer before purchasing. The Buyer's Guide to Hot Tubs (also known as the Spa Comparison) is owned by English Publications. English Publications retains all proprietary rights to the Spa Comparison and TradeCertified™ logo (herein known as "endorsements"). Except for using one copy of the Spa Comparison for personal, noncommercial home use, it must not be reproduced, used to prepare derivative works based upon, distributed or displayed without first obtaining the written permission of English Publications. The Spa Comparison and endorsements must not be used in any unauthorized manner. ©2015



	WARRANTY					
	SPA CABINET	SPA INTERIOR SURFACE	SPA EQUIPMENT	SPA FRAME	PRICE (MSRP)	CURRENT AND SPECIAL FEATURES
<b>ARTESIAN SPAS</b> 702-307-5124 TIDALFIT.COM   ARTESIANSPPAS.COM	5 YR	LIFE	5 YR	LIFE	\$12,900-\$35,000	Current Technology: Built in the USA and recently featured on ABC's <i>Extreme Makeover Weight Loss Edition</i> ; the TidalFit® features a powerful Quad Swim Jet System that produces resistance for intermediate to pro level swimmers, while providing a heightened experience with the DIRECTFLOW™ after-workout massage seat.
<b>CAL SPAS</b> 800-CAL-SPAS CALSPAS.COM	10 YR	7 YR	7 YR	7 YR	\$13,000-\$25,000	Current Technology: SwimJet Propulsion System; Shell Material: Acrylic with exclusive fiberglass reinforcement; Water Filtration Method: Cartridge filters; Insulation Method: high-density thermo-fill or thermo-layer blanket
<b>COAST SPAS</b> 604-514-8111 COASTSPAS.COM	5 YR	LIFE	5 YR	5 YR	\$11,895-\$39,895	Current Technology: powerful river jets, buoyancy simulating levitator jets; Special Features: detachable row bars, commercial-grade pressurized filtration, large/deep workout and swim area, hydrotherapy massage seats, ISO Certified quality construction with steel reinforced shell, pressure treated frame and durable slate cabinet finish
<b>COLEMAN SPAS</b> 888-672-3815 COLEMANSPAS.COM	10 YR	7 YR	7 YR	7 YR	\$13,000-\$25,000	Current Technology: SwimJet Propulsion System; Shell Material: Acrylic with exclusive fiberglass reinforcement; Water Filtration Method: Cartridge filters; Insulation Method: High-density thermo-fill or thermo-layer blanket
<b>D1   AQUAFIT</b> 800-345-7727 AQUAFITSYSTEMS.COM	5 YR	5 YR	5 YR	LIFE	\$27,995-\$41,595	Current Technology: High Volume Swim Jets; Special Features: AquaFit comes standard with a UV-resistant Duratex Shell, five stunning, woodlike Terracina skirt options, UltraPure Water Management, strong thru-wall OptiMounts for fitness attachments, LED lighting and a durable six-gauge steel frame.
<b>DYNASTY SPAS</b> 800-951-6224 DYNASTYSPAS.COM	3 YR	10 YR	5 YR	5 YR	\$15,999-\$40,999	Current Technology: River Jets; Special Features: Seven models available, LED lighting, dual temp zones, exercise and rowing system, Bluetooth stereo system
<b>ENDLESS POOLS</b> 800-732-8660 ENDLESSPOOLS.COM	2 YR	5 YR	2 YR	10 YR	\$15,900-\$31,900	Current Technology: Resistance jets; or variable-speed, laminar Endless Pool® swim current. The swim current is generated by a 16-inch propeller inside a protective stainless-steel housing and powered by hydraulic pumps. Special Features: Arrives preplumbed, prewired and ready to use. Includes lifetime toll-free support.
<b>HYDROPOOL INC.</b> 905-565-6810 HYDROPOOLSWIMSPAS.COM	5 YR	5 YR	3 YR	10 YR	\$19,999-\$40,000	Current Technology: AquaFlex Swim Current with adjustable speed 0-11MPH/0-18 KPH flow rate; AquaFlo Swim Jet Design provides a wide, deep and smooth current; Special Features: HydroPool's Self Cleaning Technology; Hydrowise Thermal Shield Technology keeps operating costs to a minimum
<b>L.A. SPAS</b> 877-267-5166 LASPAS.COM	1 YR	7 YR	5 YR	15 YR	\$12,495-\$34,995	Current technology: Designed to serve as a complete aquatic gym in addition to providing an excellent swim workout; full suite of exercise equipment included. Special Features: Swim lane enhanced with unique lit leveler jet, tile marker, multiple lane lights; suitable for everyone from novice to tri-athlete in training.
<b>LAY-Z-BOY</b> 800-465-2933 LAZBOYSPAS.COM	5 YR	5 YR	3 YR	10 YR	\$19,999-\$40,000	Current Technology: AquaFlo Swim Current with adjustable speed 0-11MPH/0-18 KPH flow rate; AquaFlo Swim Jet Design provides a wide, deep and smooth current; Special Features: HydroPool's Self-Cleaning Technology; Hydrowise Thermal Shield Technology keeps operating costs to a minimum
<b>POWERPOOL BY MAAX SPAS</b> 480-895-0598 MAAXSPAS.COM	2 YR	5 YR	5 YR	LIFE	\$14,999-\$29,999	Current Technology: TheraMAAX Current System; Special Features: Steel structure and green insulation, both with lifetime warranty
<b>MARQUIS ATVS</b> 877-271-2052 MARQUISSPAS.COM	5 YR	7 YR	5 YR	10 YR	\$24,999	Current Technology: Six turbo paired jets off of three two-speed pumps for personally customized flow design; Special Features: industry's toughest shell with high-tech polymer resins and unique colors; structural unibody gusseted frame for superior rigidity; six-time Ironman champion Dave Scott health and fitness program
<b>H2X BY MASTER SPAS</b> 877-278-1786 H2XSWIMSPA.COM	LIFE	7 YR	5 YR	10 YR	\$24,500-\$35,900	Current Technology: Swim Jets; Special Features: Fiberglass and acrylic shell, EcoPur Filtration System, environmentally friendly icynene insulation, energy efficient
<b>MICHAEL PHELPS SWIM SPAS BY MASTER SPAS</b> MICHAELPHELPSWIMSPA.COM	LIFE	7 YR	5 YR	10 YR	\$42,000-\$49,000	Current Technology: Patented Wave Propulsion Technology; Special Features: Fiberglass and acrylic shell, EcoPur Filtration System, environmentally friendly icynene insulation, Wi-Fi custom workout app: SwimNumber App for the iPad; energy efficient
<b>PREMIUM LEISURE LLC</b> 727-573-9611 PREMIUMLEISURE.COM	1 YR	5 YR	2.5 YR		\$10,995-\$35,000	Current Technology: Standard, River Stream, Turbine Driven; Special Features: Premium Leisure has entry-level to top-of-the-line swim spas. The AQ11, 12, 14 and Dual Zone16 models launched the company's line, the Swimmer's Edge has easily become its most well-known model.



## INTERESTED IN A SWIMMING POOL TO GO WITH YOUR HOT TUB?

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[POOLSEARCH.ORG](http://POOLSEARCH.ORG)

**Poolsearch**  
YOUR INDEPENDENT SWIMMING POOL SOURCEBOOK





## Construction Zone

Building an in-ground pool is a huge decision, and we're here to help

Our version of Construction 101 provides guidance and information to ensure your in-ground pool remains a worthwhile investment. From planning a layout to adding the final touches, the following tips will help make the construction process easier and give you the backyard of your dreams.

# POOL PREP

The contractor will draw a spray-paint outline of the pool in the yard to show where the wall of the pool begins; this means your pool will be slightly smaller than the outline. Stakes or spikes with bright ribbons generally are driven into the ground on top of the paint.

Avoid any disturbances to the construction site, including moving the outline or the stakes. This could end up costing you extra money.

## WHAT KIND OF POOL ARE YOU BUILDING?

### CONCRETE

#### EXCAVATION

Bender boards appear. These boards, made from redwood or fiberboard, do not determine the finished dimension of the pool — instead they determine the bond wide, which is usually a foot wide, and gives stability and rigidity to the pool.

### FIBERGLASS

#### EXCAVATION

Overexcavation is necessary to set forms and allow for the placing of the pool. Additional costs may occur due to soil conditions and water tables.

Excavators prepare the ground by compacting the sand with water or, sometimes, with gasoline-operated devices called whackers. They rake and grade the ground to conform it to the contour of the pool's bottom.

### VINYL-LINER

#### INSTALLATION

The pool is lowered gently into the space and is leveled using laser transits or a water level. A hose fills the pool while it gets backfilled with a mixture of sand and water. As the water level and backfill material gets higher, the fiberglass pool becomes more secure and locks into place.

#### WALL CONSTRUCTION

Walls are constructed from polymer or steel panels, concrete forms, concrete blocks or wood. The bottom is made of compacted sand, vermiculite or concrete, depending on the soil conditions.

### REBAR

These steel reinforcing rods are bent to form a cage or grid that approximates the shape of the finished pool.

## PLUMBING: THE PLUMBER WILL INSTALL FLOOR AND WALL RETURNS, SKIMMERS, MAIN DRAINS, AND PLUMBING AND FILTERING EQUIPMENT.



**ELECTRICAL: THE ELECTRICIAN HOOKS UP THE PUMP MOTOR AND POOL LIGHTS. HE ENSURES EQUIPMENT IS FAR ENOUGH FROM THE POOL TO BE COMPLIANT AND THAT GFCI (GROUND FAULT CIRCUIT INTERRUPTER) PROTECTION IS IN USE AS NEEDED.**

## CONCRETE POURED

**Shotcrete:** concrete premixed at the plant is then pumped into the pool on site.

**Gunite:** dry materials are pumped into the pool, then water is added on site.

## FINISHES

Crews will arrive and apply materials such as plaster, marcite, pebble-bearing coating, fiberglass resin or tile to the inside of the pool.

Once the application is complete, the builder will instruct on when to fill the pool. Typically, with plaster or marcite coatings, filling begins within an hour. Pebble or fiberglass applications take a few days or more. Pools with tiles take several days.

## FINISHES

Coping made from metal or plastic will be attached to make the transition from the pool shell to the deck.

A pool purchased with tiles will come with them preinstalled with flexible adhesives. If your pool design includes raised areas, the crew will apply mortar to adhere the tiles to the structural building material.

## INSTALLATION

Footings are poured and the area surrounding the pool is backfilled.

## FINISHES

Crews will attach coping to the top of the wall panels. Standard coping holds the liner in place and is the transition to the deck.

If the pool design includes a raised wall, the liner track will remain at the deck level with tile or stone adhered to the raised wall above it.

## LINER INSTALLATION

The liner is installed the air is sucked from behind the liner.

Once the pool is full, prime and start the pump. The time clock on your pump should allow the pool to run 24 hours a day until the water clears.

Sweep the pool several times a day. Filters may require cleaning as plaster dust collects.

Have a pool store equipped with a test laboratory analyze your source water. They will advise you on which chemicals you will need to treat the fill water.

Chemical startup will vary among localities. The pool store where you had your fill water analyzed will probably have startup directions for you. Follow them exactly.

# GET STARTED



Photo: Coverstar

## The Inner Workings

The products that make your pool work also make your life easier

Once you've chosen the right type of pool for you, it's time to customize. The technological advances in pumps, filters, cleaners and covers make choosing these parts of your pool an exciting adventure.





Photo: Coverstar

## Got You Covered

A cover is the most essential safety and energy-saving product you can add to your pool.

A pool without a cover is like a house without a roof. That is an apt metaphor for a product that brings many essential benefits in a single package, combining safety with energy savings, decreased maintenance and longer plaster or liner life.

Pool covers fall into three general categories: solar covers, winter covers and safety covers. Solar covers are commonly sold in pool stores, characterized by their blue color with bubbles on the underside. Intended to extend the swimming season, these covers trap solar energy, preventing evaporative heat loss. They also assist in maintaining heat in pools that use external heating from pool heaters or solar collectors. They are inexpensive and expendable after a few years of service. Cut to fit with a knife or scissors, owners should never consider them a safety feature because they generally float on the pool surface rather than forming an entry barrier. As a heat-saver, however, they are very cost effective.

Winter covers are custom manufactured solid vinyl and mesh polyester devices that attach to anchors around the pool with latches or with special weights. These covers come in a wide variety of quality and provide freeze protection for winterized pools. They also keep debris out of the water. Like solar covers, owners should never consider winter covers a safety feature.

Safety covers provide the attributes of solar and winter covers with one important difference: they protect children, guests and pets from unauthorized or accidental entry to the pool. They operate by using a track on the deck or tile line of the pool that allows the rolled fabric to

draw fully across the entire surface of the pool or tensioned latches to prevent entry, essentially sealing it off from the outside. These covers can be pulled manually or operated by a switch-controlled motor. A key-controlled switch is also available to operate several types of safety covers.

Safety covers should always meet or exceed ASTM (American Society for Testing and Materials) specifications for strength, intended to reduce the risk of drowning by inhibiting the access of children under 5 to the water.

“With automation systems now you can be alerted if the cover is opened at any time,” says Ted Baudendistel, Trilogy Pools general manager. “You can get an alert on your phone, you can get a text message or an email that lets you know something needs attention.”

Costs for covers vary from around \$100 for the smallest solar blankets to several thousand dollars for the largest motorized safety covers. All covers will provide energy savings. Most companies agree the use of a safety cover can achieve a 70 percent heat savings, a 60 to 70 percent chemical savings and a 90 percent savings in evaporative water loss. These returns can be substantial, perhaps even paying for the cover in reduced costs.

“If the budget allows, install an automatic cover that will further reduce the evaporation of water, loss of chemicals, energy to heat the water and save time,” says Gary McClure, owner of McClure Pools in Fairview Heights, Ill. “The auto cover will pay for itself within three to five years depending on which region of the country you live.”

Reduced maintenance can also mean increased longevity for the pool itself. “While the automatic cover does require some maintenance, it will dramatically reduce the amount of maintenance on the pool,” says Kevin Losee, cover-products director at Latham Pool Products, Inc. “When closed, a Coverstar automatic pool cover will keep the dirt, leaves, bugs etc. out of the pool allowing the pool owner more time to enjoy the pool and less time maintaining it.”

Solar and winter covers can be added to a pool at any time. For winter covers it is best to do some shopping before making the purchase. Using a reliable pool store is a good start because they will have product knowledge suitable for the local weather conditions. Mild winter areas, for example, may require a less elaborate cover than places with long, cold weather and heavy snow accumulation. Anchors in the deck with mechanical latches are preferable to weights or bungee cord restraints.

It is best to have safety covers installed along with the construction of the pool, although they can be installed after a pool is built. Licensed and bonded pool contractors are knowledgeable in the installation and maintenance of retractable covers. These covers will often be installed to comply with local barrier code requirements, so you will have the assurance of an independent inspection of the product by the building department inspector. ●

## Ask the Experts: Covers

### What are the advantages of having a pool cover? Why should a consumer purchase one?

#### LeeAnn Donaton-Pesta, Loop-Loc

Safety, safety, safety — that is the main advantage and reason why consumers purchase a cover. Safety pool covers provide a high level of security around a pool area. They also maintain a beautiful, clean look all winter long by laying tight across the pool, allowing leaves and debris to blow off the cover.

#### Wes Mathis, Pool Cover Specialists

First, automatic pool covers provide effective barrier protection to help prevent unauthorized access to a swimming pool. Second, an automatic cover can help ensure an environmentally friendly pool by keeping heat in the pool, lowering costs. Third, owners may have the additional benefit of a clean pool, while using at least 70 percent less chlorine than uncovered pools. Last, an automatic cover provides the least amount of [visual] distraction to the pool environment.

#### John St. Clair, Coverstar

Whether it's a lake, a pool or a pond, kids are attracted to water. With safety, first and foremost, parental supervision is key, but then you need to layer on protections or backup plans, and a cover is a great backup plan. Another key element is savings. It's like sealing the pool with a Tupperware container. There's no evaporation, plus the cold rainwater, dirt and debris do not penetrate the cover. That's where the energy savings come from, and with energy costs being so high, you can see tremendous savings.

### What should a consumer consider/look for when shopping for a cover?

#### Rick Clark, Cover-Pools Inc.

A pool owner should look for a cover that is convenient to use and certified to meet ASTM standards for safety covers. Look for a quality manufacturer with technological experience and time-tested warranties. Find a local installer or representative who is factory-trained and reputable.

#### LeeAnn Donaton-Pesta, Loop-Loc

It is important that a homeowner does some research. Speak with your local swimming pool professional and review online materials. Make sure the cover meets ASTM requirements and is UL approved. Before buying, a homeowner should know how the cover works and its life expectancy. Investigate the manufacturer; find out how long the company has been in business, if the company will stand behind its product and if it offers technical support. It is also important that a homeowner use a local dealer who has experience in measuring and installing safety covers.

#### John St. Clair, Coverstar

The reputation of cover manufacturers is very important. Are they introducing new products and are they on the cutting edge of new technology? Warranty is important, but look at what kind of warranty the manufacturer is willing to give. Are the fabric, rope and motor covered under the warranty? These are key elements that could potentially lead to service calls down the road. Are there local installation and service centers available to you? Finally, what information does the company have available to you online? For instance, tutorials on how to care for your cover, a parts catalog, etc., allowing you to search for the information yourself.

### How does one maintain a pool cover?

#### Rick Clark, Cover-Pools Inc.

The cover fabric and mechanism should be periodically hosed off throughout the year. We also recommend an annual spring tune-up to lubricate the mechanism.

#### Richard Rayner, Rayner Covering Systems

For a safety cover, it's pretty easily maintained. During the winter months when the cover is on the pool constantly, there is nothing to be done. But when you take the cover off in the spring, the best thing to do is wash it down with a hose to get the chlorine off of the threads and material. Just doing that simple task will lengthen the life of a cover by four to five years.

### What options do customers have for nonstandard/custom-shaped pools?

#### Richard Rayner, Rayner Covering Systems

We can custom-make a cover to any size, go around any obstacle. Whether it's a fountain, waterfalls, poles or handrails that don't remove, we can make a cover that would go around those without any difficulty. You can choose from five types of coloring to match the deck and stone walkways without an additional charge. Our solid covers have pumps or drain panels that you can put in to get the rainwater off the top of the cover.

#### Wes Mathis, Pool Cover Specialists

There are several track options for freeform pools, all designed to minimize the aesthetic distraction of the pool environment. Many pool owners have the false impression that automatic covers only work on rectangular pools. Auto covers can actually be installed on pools of just about every size and configuration and, thanks to numerous track options, automatic covers can be installed on freeform pools without detracting from the elegance of the pool environment.

#### John St. Clair, Coverstar

You can cover any pool if you can form two parallel lines, because we are utilizing a rectangular cover for an irregularly shaped pool. It's definitely easier to consider a cover during the construction process than after the fact because planters, slides, diving boards and ladders could potentially be in the way. But, during new construction, shape doesn't have to dictate the ability to have a cover.

### What is unique about your brand of pool covers?

#### LeeAnn Donaton-Pesta, Loop-Loc

The key, as Bill Donaton, founder of Loop-Loc, envisioned, was to create a new type of pool cover that would allow water to drain through, rather than collect on top of the cover, since standing water on a pool cover can create a potentially dangerous drowning situation. We are proud of Loop-Loc's commitment to safety around swimming pool areas.

#### Rick Clark, Cover-Pools Inc.

Our durable, premium vinyl fabric is one of the most time-tested formulas in the industry and is exclusive to Cover-Pools. We also offer a comprehensive array of controls that allow automatic pool covers to work in conjunction with features, such as waterfalls and fiber-optic lighting.

#### Richard Rayner, Rayner Covering Systems

Our covers are the standard established as a safety cover in the original ASTM specifications. We strap the top and the bottom of the cover, both the length and the width. There are covers that strap just the bottom and not the top. Our method gives it additional strength and additional life.

#### Wes Mathis, Pool Cover Specialists

Pool Cover Specialists is responsible for developing numerous innovations now considered standard to the industry. Aside from that, our reputation has been built around a commitment to provide not only the best products, but also the best service.

#### John St. Clair, Coverstar

Coverstar does several unique things. One of them is our patented, heat-sealed webbing that runs along the side of the cover and the tracks. This webbing doesn't deteriorate or break down like some nylon webbings. Our ropes have a two-year, no-break warranty. We have two factories in the U.S., in Indiana and Utah, so our shipping times are greatly reduced. We are a company on the cutting edge for introducing new and innovative products on the marketplace.





This vinyl-lined pool built by True Blue Swimming Pools of Dix Hills, N.Y., won a silver medal in the Association of Pool & Spa Professionals' Awards of Excellence.

## Pool Pumps

The workhorse of your pool has undergone a major revolution.

Let's talk physics, shall we? The affinity laws tell us a whole bunch about motors, pumps and fans. If you didn't adore science class, you likely found them in textbooks flanked by daunting terminology like "nominal speed," "shaft power" and "volumetric flow rate." But even with poor marks in high school physics, if you're shopping for a swimming pool pump, you should know that affinity laws can save you money.

"Tremendous, tremendous energy savings," says Zack Pickard, Pentair Pumps product manager, "on the order of hundreds or even thousands of watts."

The technology that makes these savings possible has existed for more than 50 years, and is used in such things as elevators and conveyor belts. And recently it's available in swimming pool pumps. The idea behind the advancement is simple: When you decrease the speed of a motor,

the amount of energy the motor needs to turn declines.

"It comes down to physics," says Scott Petty, products manager of pumps and above-ground equipment for Hayward Pool.

The affinity laws call this a cubic function. So, if a motor's speed decreases by half, the motor uses one-eighth the power. Thus, a motor that can run at more than two speeds and tailor its speed to the situation allows for significant energy savings. Stick that motor in a swimming pool pump, and the pool owner can cut his energy costs by up to 90 percent.

"Sometimes the pool pump is the largest electrical load in your house," says Jeff Farlow, program manager of energy initiatives for Pentair Aquatic Systems.

The rate of payback on a variable-speed pump varies based on utility costs, but Pickard says Pentair's variable-speed models often pay for themselves within the first year.

"I'm a skeptical person in my personal life," he says. "I'd be like, 'Come on. There has to be a catch.' But the

truth of it is, there is no catch. If anything, there are side benefits that are almost as good or compelling.”

A lower velocity of water places less stress on the equipment, leading variable-speed pumps to last longer. It also means the unit makes less noise.

“Quieter is a huge unintended benefit of this,” Farlow says. “It’s hard to sell that on the front end, but once it’s installed, you’re like, ‘Oh, my gosh.’ You get some of these homes with small lots, and often the only place to put your equipment panel is under your bedroom window.”

Furthering the case for variable-speed pumps, in February 2013 Energy Star began certifying the pumps. Managed by the U.S. Environmental Protection Agency, Energy Star is a domestic labeling program dedicated to helping individuals protect the environment through superior energy efficiency. ●

### CHOOSING THE PERFECT PUMP

Your pool builder will still be the ultimate authority on pump selection. There are qualities of each type of pump that make its use appropriate for a specific application. A pump for in-floor cleaning, for example, requires high gallonage at relatively high pressure in fairly restrictive plumbing. Conversely, a waterfall pump may need high gallonage in a nonrestrictive environment, but has special needs of lifting water several feet.

#### Energy Efficiency

Choose a fully rated pump so it is capable of delivering maximum gallonage for each kilowatt of electrical power consumed. Team up with your builder and compare flow rates for pumps based on the restrictions of your specific pool design. This comparison will show which family of pumps is appropriate for your pool design.

#### Quiet Operation

Obviously, the more stealthy the pump, the more desirable it is. Odd as it may seem, this feature translates into real dollar savings when the pump can run at night without disturbing you or your neighbors. Since most parts of the country enjoy lower electric rates at night, you’re likely to see reduced electric bills this way.

#### Clear Lid

Using a clear lid allows you to see debris in the pump basket without removing the lid, which means you’re more likely to clean it, ensuring a more free-flowing pump.

#### Air Cooling Fan

Heat is not good for motors. A cooling fan helps the motor last longer.

#### Large Pump Basket

The bigger the basket, the more debris it can trap before starving the pump for water. As a side benefit, the pump will be easier to prime because the contained water capacity surrounding the basket is greater.

#### Tall Base

In areas with lots of rain or in yards with standing water, it is desirable to have the pump, and especially the motor, as high off the ground as possible.

### ENERGY STAR RATINGS

As with many advanced, more efficient products, Energy Star certified pool pumps cost more to purchase. However, that incremental cost is easily recovered in energy savings in less than two years. Energy Star has created a savings calculator to make it easy for home owners to see the benefits of an Energy Star certified pool pump. The calculator is available at [ENERGYSTAR.GOV/POOLPUMPS](http://ENERGYSTAR.GOV/POOLPUMPS).

## TOP PRODUCTS | ENERGY STAR PUMPS



### Hayward Industries, Inc.

[haywardindustries.com](http://haywardindustries.com)

The variable-speed Super Pump claims up to 80 percent energy savings over traditional single-speed pumps. The Super Pump can be used in new construction and as a replacement on existing pools. Not only is the pump Energy Star rated, but the programmable timers and enclosed permanent magnet motor also meet efficiency standards for Title 20 and APSP 15.



### Pentair Aquatic Systems

[pentairpool.com](http://pentairpool.com)

According to Pentair, the IntelliFlo VS+SVRS pumps can reduce energy costs up to 90 percent over traditional pumps. The pump employs digital intelligence with variable-speed technology and permanent magnet motors to increase efficiency. The programmable pump also has built-in diagnostics to protect it from common problems.



### Waterway Plastics

[waterwayplastics.com](http://waterwayplastics.com)

The Econo-Flo VSA pump from Waterway Plastics is Energy Star rated and meets Title 20 and Title 24 regulations. The user-friendly programming allows for installation and programming of additional loads, such as a booster pump or chlorine generator. It comes with an adjustable base so that it adapts to existing pool setups. The pumps pressure is testable up to 50 psi and has built-in freeze protection.



### Zodiac Pool Systems

[zodiacpoolsystems.com](http://zodiacpoolsystems.com)

Zodiac’s Jandy-branded ePump + SVRS pool pump has eight variable speeds. It features Jandy’s Pro Series’ Quiet Technology for smooth, quiet function. The ePump comes with many user-friendly features like a large trap basket, easy-to-read indicators and ergonomic handles. The pump is completely programmable and meets Title 20 and APSP 15 standards.





## Cleaners

Maximize your me time: install a pool cleaner.

The prevailing wisdom is that a pool should take no longer to tend than the same area of landscaping. If you spend 20 minutes caring for a 20-square-foot plot in your backyard, you should spend 20 minutes caring for 20 square feet of your pool.

Years ago, they would laugh you out of the pool-supply store with that statement. During that time, homeowners cleaned pools by sweeping dirt and debris

into the main drain with a brush. This included labor-intensive sweeping of the walls, floor, steps, benches, lights and fittings. This process proved fairly effective at keeping the pool clean, but it was only as good as the skill and “elbow grease” of the person sweeping, and the frequency of the process.

Early attempts at providing automatic pool cleaning involved the use of flexible tubing with a nozzle and weights, known as wearings, which used pressurized filtered water to stir up suspended dirt; the idea was to push debris in the direction of the main drains. Known as a ‘whip’ or ‘snake,’ this tubing had an undulating and sweeping motion.

The tubing sometimes served as a source of amusement because it was prone to periodically swinging out of the water and squirting an unsuspecting guest. They also had the irritating habit of spraying nearby windows and were known to occasionally leap out of the pool and flood the yard. The first category of modern automatic pool cleaners was born from these humble beginnings.

Today, most swimming pools incorporate one of four technologically advanced cleaning systems, pressure, suction, in-floor and robotic devices that provide consistent and maintenance-free care for your pool. As a group, pool cleaners provide a vital function, enabling you to enjoy your pool and keep caring for it as simple as possible.

### Pressure Cleaners

Since filtered water returns to the pool, manufacturers reasoned that this water would be useful for driving devices that would sweep the pool and vacuum leaves and debris. Some of these cleaners use separate booster pumps to add additional power to the cleaning effectiveness; they pull debris into containment areas while using tailing whips to stir up dirt. Since these cleaners operate while the

pump is running, the pool receives constant cleaning unless the homeowner removes them while the pool is in use.

### Suction Cleaners

Since circulation systems draw water from the pool, some cleaners use this suction as their primary force, the thought being similar to a constantly moving main drain. As such, these cleaners travel around the pool sucking up dirt and debris. As a group, they are the least expensive type of cleaner because they do not require extra pumps. They also retrofit well by using the existing skimmer as a point of installation, but they work better with a dedicated suction line. They deposit debris directly in the pump basket.

### In-Floor Cleaners

Most in-floor systems use floor-mounted cleaning heads or nozzles to inject a large volume of high pressure filtered water across the pool floor. The turbulence from this water stirs up dirt and debris so the circulation system can remove it. The intention of these systems is installation on new pools because of the extensive plumbing that runs from an actuator valve, located at or near the pool equipment, to each cleaning head. Water directed to a particular set of cleaning nozzles causes the cleaning heads to ratchet 30 degrees in order to direct water to a different place in the pool. Every 12 round-trips, a sweep of the entire pool is accomplished.

### Robotic Cleaners

Robotic cleaners became popular over the years because they operate independently of the pool pump and filter. You simply take the cleaner out of the box, plug it in and most are ready to go. The cleaners either have pre-programming for the size and shape of your pool, or they automatically sense the way they should travel. Some even come with remote controls, so you can make sure all areas of the pool are clean. Robotic cleaners are incredibly energy efficient since they are powered by low-voltage electricity instead of your pool pump.

While it is a lot to consider, there are manufacturers that do an admirable job at simplifying the often mundane process of selecting pool equipment. This is mostly because a prospective pool buyer can now purchase all of his pool equipment from the same source. Consider the advantages: one-stop shopping, equipment that plays well together, and in the unlikely event your equipment requires servicing, a single source for your service needs. ●

## TOP PRODUCTS POOL CLEANERS



### Hayward Pool Products

**PoolVac XL**  
**hayward-pool.com**

The PoolVac XL is powered by the existing circulation pump, so there's no additional expense of a booster pump. It has the AquaPilot Automatic Pre-Programmed Steering, which allows it to move in predetermined series of right and left turns to systematically provide more thorough coverage of the pool's surface area.



### Pentair

**Kreepy Krauly Racer**  
**pentairpool.com**

The Kreepy Krauly Racer cleaner cleans 30 percent faster than any other pressure-side cleaner. It uses one-third more cleaning power, a massive intake and a builtin rotating brush to tackle dirt and debris with ease. The Night Cruise LED Lights add intrigue after dark. Just attach the Racer to your dedicated pressure line and watch it go to work.



### Paramount

**PCC 2000**  
**1paramount.com**

The PCC 2000 is a self-cleaning system built right into a pool's floor. Builders install pop-up jets on the pool's floor, steps and benches which rotate to help dirt flow to a debris collection zone, also installed in pool's floor. It has the added benefit of improving water circulation, which helps save heat energy and lowers chemical usage.

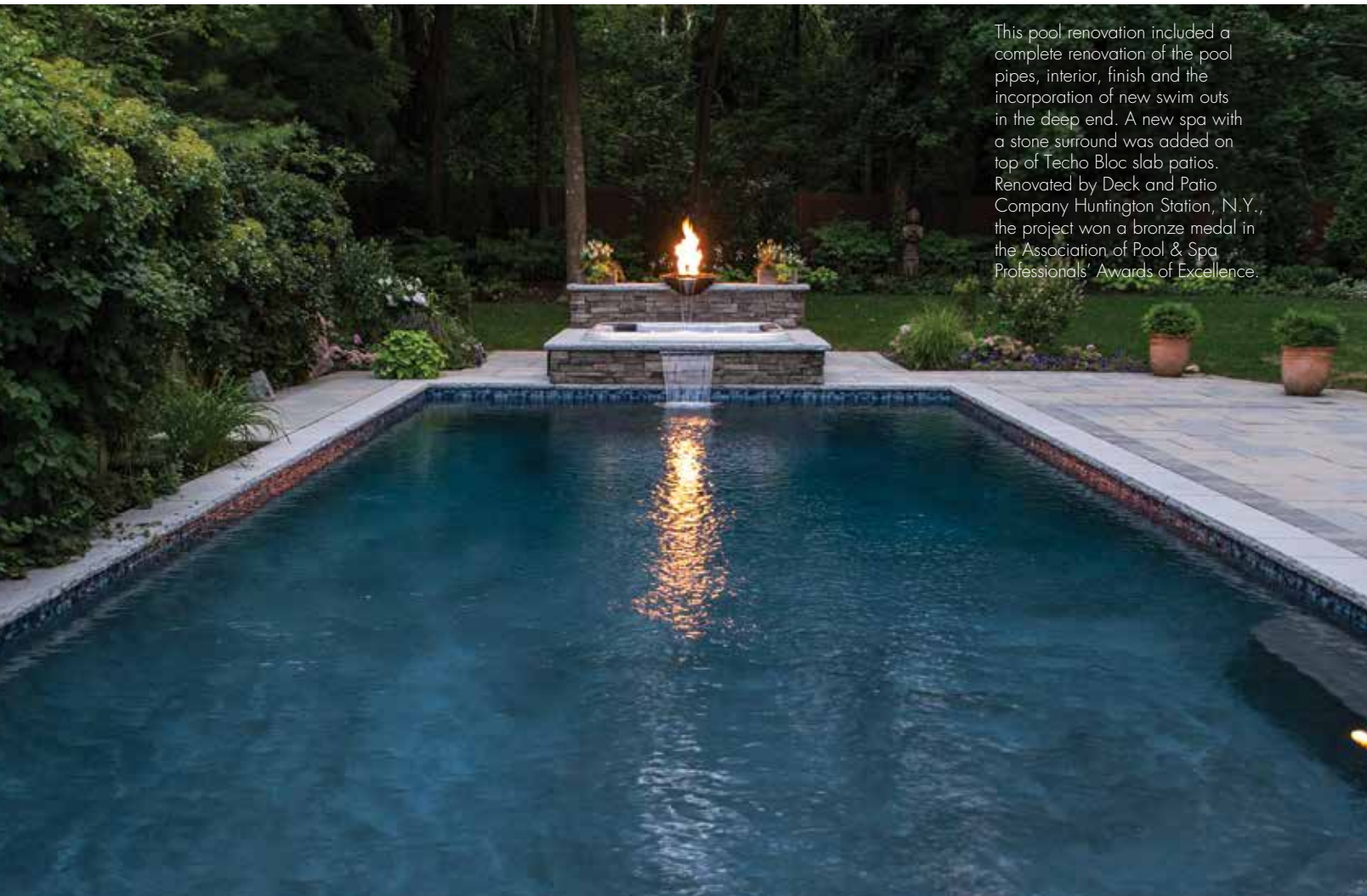


### Polaris

**9550 Sport**  
**polarispool.com**

The 4WD 9550 Sport robotic pool cleaner features has a seven-day programmable timer, with fully customizable cleaning cycles that allows you to set it and forget it. A dirty canister indicator lets you know when it's time to empty the filter canister and the Easy Lift System brings the cleaner to the surface of the pool for you to easily remove it.





This pool renovation included a complete renovation of the pool pipes, interior, finish and the incorporation of new swim outs in the deep end. A new spa with a stone surround was added on top of Techo Bloc slab patios. Renovated by Deck and Patio Company Huntington Station, N.Y., the project won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.

## Filters & Heaters

Geography matters when choosing the most efficient way to keep water clean and warm.

### Filters

Pool filters remove dirt from pool water. They do not remove algae, algae spores, bacteria, viruses or minerals. They constitute the part of the pool equipment that involves the attention of pool owners more often than any other. The choice of filter becomes one that really should be made by the owner.

Filters come in three types: sand, diatomaceous earth (D.E.) and cartridge (modular media).

#### *Sand Filter*

These filters are suitable for households where minimal maintenance is a major factor. When sand filters become dirty, they become more restrictive to water flow, so the pressure gauge on the filter shows higher than normal

pressure. The pool owner simply reverses the water flow through the filter in a process called backwashing, and dirty water is pumped into the yard through a waste hose. When the water runs clear, the filter is put back into a normal running mode again.

Sand filters, while providing the easiest maintenance, perform filtration to approximately 60 microns, allowing some particulates other filters remove to pass by freely.

#### *Diatomaceous Earth Filter*

D.E. filters offer filtration down to five microns, meaning exceptional cleaning power. These filters offer the side-benefit of being very free-flowing, meaning the pump does not have to work hard at getting water through the filter. They are backwashed just like a sand filter, but less frequently.

When backwash water is discharged, a milky powder residue flows from the hose. This is the used D.E. powder that must be tolerated or washed into the landscape. Replace the scent powder in the filter by adding it to the skimmer. Additionally, the filter must be disassembled on

a routine basis for manual cleaning.

D.E. filters provide the best water quality of all the filters, but you must use precautions when handling the powder as it has been found to be carcinogenic. In fact, some municipalities now require that the backwash residue be disposed of, not left in the environment.

### Cartridge Filters

Technical advances in the past few years make cartridge filters a very attractive choice for many pool owners. Using long-lasting elements, these filters require no backwashing. Filtration is in the 20-micron range and resistance to water flow is almost as good as a D.E. filter.

When cartridge filters require cleaning, the pressure gauge reads higher than normal. Shut off the pump, secure the circuit breaker, then remove the filter top and extract the filter. Unless otherwise instructed by your pool builder or the filter manufacturer, hose off the filter to remove dirt and soak it in detergent to remove oily deposits. Once it is thoroughly rinsed, the filter is reassembled.

Depending on pool and filter size and the amount of airborne dirt in the area, these filters may be able to run all year without cleaning. Since cartridge filters don't require routine attention, they become an attractive choice for households where annual maintenance becomes a ritual marking the beginning or end of the swimming season.

### Heaters

Pool heating involves four main types of devices that have advantages for some applications, but not for others.

These types of heaters are: natural gas, propane gas (L.P.), heat pumps and solar.

### Natural Gas

With relatively low-cost installation and operation, natural-gas heaters offer rapid heating times if the pool use is occasional or when the swimming season needs to be extended

by a few weeks in spring and fall. They can also be used to maintain heat throughout the year. Since natural gas heaters no longer use standing pilot lights, they are safe for residential applications and better for the environment.

### Propane Gas

The use of a propane-gas heater is exactly the same as a natural gas heater in areas where natural gas is not available. With propane it is critical to ensure the propane tank corresponds to the size of the heater. Using a too-small tank can lead to icing, which will prevent the heater from operating properly, if at all.

### Heat Pumps

A viable means for maintaining heat, heat pumps work well in areas that enjoy warm days and moderate nights. They do not heat water rapidly, but are effective in returning lost heat to the pool. Their big advantage is the use of free energy to do the heating, expressly heat contained in the air. The heat pump draws air in and across a collector that transfers it to pool water. Obviously, the warmer the air the more heat it contains, and the more efficiently the unit runs, so it will perform better in October than January.

### Solar

Upon installation of a solar heating system, a pool owner receives virtually free energy. The only expense is the cost to run a small recirculation pump. The system draws water from the pool, runs it through a series of solar collectors and returns it, heated, to the pool. This type of system works well for families who want to extend their swim season to include all warm and sunny days. Most homeowners in the Sun Belt can use a pool equipped with a properly engineered solar system in November and March. Some years, they may even work in December and February. ●

#### TYPES OF FILTERS

The type of filter on your pool will determine how often and what kind of maintenance it will need. These offerings from Hayward are great examples of what is on the market. Check [HAYWARD-POOL.COM](http://HAYWARD-POOL.COM) to see all its latest models.



#### VL Series

A pump/sand filter combo made for above-ground pools.



#### SwimClear and Pro-Grid

The SwimClear cartridge filter requires no backwashing. The Pro-Grid D.E. filter is designed for easy servicing.



#### ProSeries

The Pro-Series sand filter can work with any type of pool layout and cleaning systems.





## Saltwater

A popular option for water care, be sure you understand how to properly care for a salt chlorinator.

The first time you heard the words “saltwater pool,” it’s possible you imagined a mini-ocean in your backyard; in fact, the salt content in a saltwater pool is far lower than even that of a human teardrop.

Just like the ocean, saltwater pool water feels very different on your skin and eyes. While a standard chlorine pool without proper chemical balance can cause dry skin and red eyes, a saltwater pool makes skin feel soft and refreshed. The odor and irritation some people experience in common pools is not from chlorine, but from the chloramines that result from additives in manufactured chlorine reacting to sweat, oil and other solutions. A saltwater chlorinator produces 100 percent pure chlorine, so these byproducts do not exist.

The benefits don’t stop there. Saltwater chlorinators, also called chlorine generators, are easy to install, environmentally friendly and simple to operate. Most units are plumbed right into the filter of your existing system. The system delivers a consistent level of chlorine directly to the pool, so the need to purchase and transport pool chemicals is eliminated. Since the system continuously reuses the salt and generates chlorine naturally, there are no chemicals to flush and virtually no impact on the environment.

According to industry statistics, just five years ago fewer than 250,000 saltwater pools existed in the United States. Today, there are more than 1.3 million and counting. Some reports estimate 70 percent of all new pools have

a saltwater system. These systems can be used on both above-ground and in-ground pools, with above-ground pools using a smaller saltwater generator. How do these systems work? How are they maintained? And what is the driving force behind the recent boom? Why is there no salty taste? And why does the water feel so smooth and silky?

It’s all about chemistry. The ocean has a salt concentration between 31,000 and 35,000 parts per million. A human teardrop is about 7,200ppm. The ideal level for a saltwater sanitized pool is between 2,000 and 4,000ppm, with salt content equivalent to one teaspoon per gallon of water — not enough to taste or dry out your skin, but enough to kill bacteria, viruses and algae.

The way it works is simple. There are two main components of a saltwater chlorinator: the electrolytic power cell and the power generator. With the majority of systems, salt is added to the pool water in the form of crystals — similar to water softener or table salt. Once the salty water passes through the electrolytic cell, a small charge from the power generator separates the salt (sodium chloride) into pure chlorine gas, hydrogen and a small dose of ozone. The chlorine gas dissolves into the water, sanitizing the pool. When the chlorine finishes its job, it reverts into salt and the process begins again.

Because it recycles, very little replenishing of the salt is necessary after the initial dose. Usually, only splashing, water evaporation and rainwater dilution result in lost salt content, incurring a replacement cost of \$10 to \$20 per year.

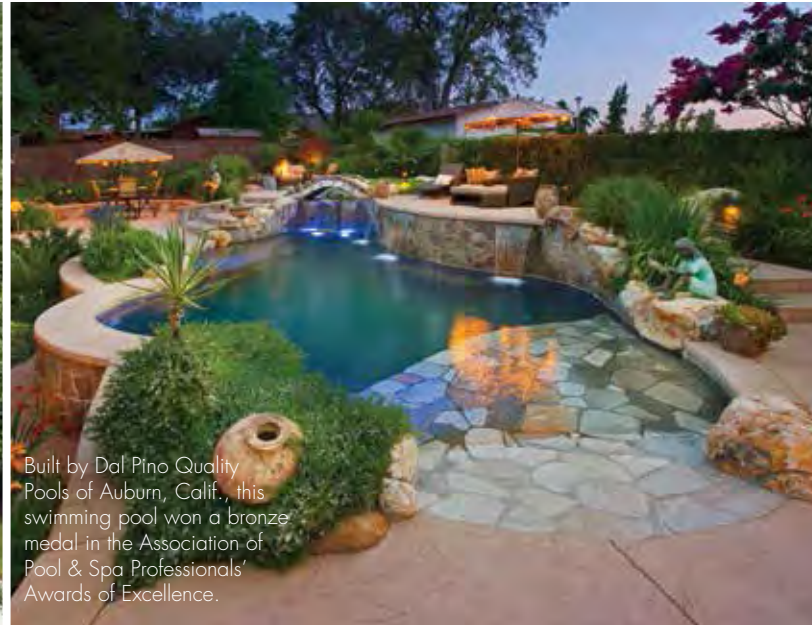
Chlorine generators lessen the amount of daily maintenance and testing needed, but do not eliminate maintenance altogether. Owners should still monitor the chlorine, pH, alkalinity and stabilizer regularly, as these levels still have an impact on the effectiveness of the system. In addition, owners should test the salt content at least twice per year.

As with any pool, bather load and/or heavy rain could require shocking the water, known as ‘superchlorinating’ in a saltwater system. Most units have a superchlorination button right on the control panel. Other models will automatically superchlorinate when the system senses the balance is off.

The cost of water maintenance on a saltwater pool is significantly less than other methods because of the recycled chlorine. Pool owners will usually break even on maintenance costs in as little as two years. But while the cost to maintain the water is lower, saltwater is corrosive and can sometimes cause problems with the other pool equipment. Maintaining proper water balance and regularly cleaning your pool equipment, should help lessen this risk. ●



Built by Caribbean Blue Pools & Spas of Pompton Plains, N.J., the slide goes from the first to second level of the pool. This design won a gold medal in the Association of Pool & Spa Professionals' Awards of Excellence.



Built by Dal Pino Quality Pools of Auburn, Calif., this swimming pool won a bronze medal in the Association of Pool & Spa Professionals' Awards of Excellence.

## Don't Forget, This is Fun!

You want a pool that is built correctly, but be sure to think about features that are purely for your pleasure.

You want to get the most enjoyment possible out of your new pool, so think about how it will fit into your lifestyle.

### AROUND THE POOL

You may not picture yourself swimming in your pool, well, much at all. Mike Giovanone, owner of Concord Pools in Latham, N.Y., says the owner of one of the most high-end installations his company has ever done doesn't use the pool very often.

"He said, 'You know, I haven't been in the pool for probably a year, but I spend at least two hours a day, my quiet time while I'm doing my thinking, outside next to the pool,' " Giovanone says.

If your swimming pool will serve as a place to relax and entertain next to, not necessarily in, consider water and fire features that will enhance your backyard landscape. You may even want to think about showpiece pool designs such as a vanishing edge, deck-level overflows or elevated perimeter overflows.

Most pool builders offer much more than pool design. They can often help you design and build your entire backyard. In addition, things like outdoor kitchens, fire pits and decks can help create the perfect outdoor living space.

"What's around the pool is just as important as what's in the pool," Giovanone says. "We don't want this yard

to be used only on 90-degree sunny days; we want it to be used to sit around the fire pit, around the BBQ, around the outside kitchens or the swimming pool. We want it to be a complete environment for family fun, entertaining and peace of mind."

### IN THE POOL

Chris Cipriano, president of Cipriano Landscape Design and Custom Swimming Pools in Mahwah, N.J., says it's important for a swimming pool to be both fun and functional. One of the most popular options his clients choose is a sun shelf, which is a very shallow raised section or entry point to the pool.

"It's great because the mother can be in the water with a young child," Cipriano says. "Once the children become teenagers, they put the lounge chairs and the beach chairs in that area. Adults tend to sit on a chaise lounge reading a book with their feet in the water, watching the rest of the family enjoy other aspects of the pool."

Another sought-after feature are water slides. But these days, slides don't have to be the eyesore bolted onto the pool deck that they were in years past. Slides can be integrated into the surrounding landscape or covered with rock so as to enhance, not detract from, the overall look of the backyard.

"Everybody loves the slides," Cipriano says, "and what's critical is how they integrate into the pool. We want to know what the entry point into the water is, how the kids are coming out of the water, how they're getting back to the slide and how it relates to the adults. You don't want kids running through the adult area to get to the slide. You want to make it aesthetically pleasing, functional and interact with the other goals of the pool." ●





### Clean Sweep

Routine upkeep will  
keep your pool  
beautiful and tidy

Adhering to a maintenance schedule and caring for your pool equipment will save you time and money over the life of your swimming pool.

## REGULAR MAINTENANCE

Preventing problems with your pool equipment can be as simple as keeping your pool clean. As needed, use a skimmer to remove dirt and debris floating in your pool, and empty your strainer basket at least once a week to prevent clogging. You should also check the strainer basket of your pump every three to six weeks; many pumps have clear plastic covering the strainer basket so you can see if debris is filling it up.

If leaves or debris too large for your automatic cleaner settle on the bottom of your pool, use a pool vacuum to suck it out. This is a good time to brush the sides of your pool to remove any dirt that's stuck, which should be done once a week.

Your filter also requires routine maintenance (read more about filters on page 52). Backwash sand and D.E. filters regularly. Not backwashing your filter will cause it to work less efficiently — you may not get enough water flow for your cleaner to move or your in-floor cleaner heads may not pop up all the way.

You should backwash your filter every two to four weeks during the swim season and every three to five weeks during the offseason. If the PSI reaches 10 above its starting point on your filter, it's time to backwash even if you've done it recently. Always check with the manufacturer of your filter or your builder to see how often they recommend a backwash.

"The maintenance [on a sand filter] is more of an as-needed basis," says certified service professional Steve Ravizza, proprietor of Arizona-based Lake Tahoe Pools. "Sand filters filter better when they have a little dirt in them. All filters have a pressure gauge, and as pressure increases that means the filter is getting dirty. When it increases past a certain point, it's time to backwash and clean it and pick your flow back up."

Every pool's base PSI will be different. You can determine what it is by cleaning all of the debris out of the pool, making sure all skimmer baskets are empty and backwashing the filter. When you turn the pump on, the reading on the pressure gauge will be your baseline PSI.

Eventually you will need to replace the sand in your sand filter, typically every three to five years. A professional should break down and clean your D.E. filter about once a year. Some states require a separation tank to catch the backwash water coming from a D.E. filter, but if you backwash it onto the ground, be careful not to let you or your pets breathe in the powder.

If you have a cartridge filter on your pool, you won't need to backwash. However, you must take the filters out and clean them every three to six months, depending on the size of your pool and filtering system. Cleaning the filters usually involves hosing off any dirt and debris. Soak the filter in a cleaning solution recommended by your manufacturer. Again, check with your builder and filter manufacturer to find out the best cleaning schedule, cleaning method and cleansing solution for your particular model.

"All cartridge filters come apart a little bit differently," Ravizza says. "The common way is shutting down the system via the main pump, opening up the air release valve on top of the filter on the pressure gauge and then disassembling the filter and removing the cartridges and hosing them off individually. And reversing the process to get yourself back up and running."

Most manufacturers and builders recommend having two filters that you can rotate — one filtering the pool while cleansing the other. This increases the life of the filters and you'll always have a clean filter on hand. How long a filter will last depends on how you maintain it, how often and how many people use your pool and how much dirt it has to filter on a regular basis. Replace your filter when the time between cleanings becomes shorter; the flow rate becomes low and the differential pressure is high; or if the filter tears or rips.

## OPENING/CLOSING

You will need to do several things to prepare your pool for the cold months.

"In areas where you have a hard freeze, you drain the water below all the pipe openings so all the underground pipes can drain," Ravizza says. Some equipment will need plugging. Add algaecides to the remaining water and then cover the pool.

Different areas will have specific needs for a proper pool closing, so be sure to ask a local builder or maintenance professional.

To open your pool for the summer, reverse all processes done for closing. Have your filter serviced, refill the pool with water and have it treated to return it to usable condition.

## MAINTAINING THE WATER

"I would say the most common problem that homeowners have is water chemistry," Ravizza says.



Water care doesn't have to be complicated, but you do need to be diligent, Ravizza says.

"It's no different from a guy who wants to tune up the engine on a car to save money from taking it to the shop. You've got to know all the little stuff, the fine-tuning," he says. "It's not just putting tablets in it and going about your day. I do repairs for people who we don't do service for, and the pools are quite old but in really good shape and are taken care of solely by the owner."

Not maintaining your water can lead to extra maintenance on heaters, filters and the interior surface of the pool.

"The water may be clear, it's healthy to swim in, but you end up resurfacing your pool or really taking the value out of the pool by not watching the water chemistry," Ravizza says. "I can get plaster to last 10 to sometimes as many as 15 years and not look bad. Someone who's [resurfacing their pool] at five years saves a lot of money on service [by doing it themselves], but that money would've saved their plaster and returned a lot more repair money."

## HIRING A PRO

"Water maintenance isn't hard, provided you actually do it," says Matt Rozeski, owner of Penguin Pools in Wisconsin. "For us to come out and clean and maintain your pool is only \$65 a week. People pay that for lawn service, why not for your pool?"

There are many reputable companies that offer weekly water chemistry and pool maintenance

services. Ravizza encourages people who want to hire a professional to do their homework.

"Make sure that they're licensed for the work they do and their reputation is clean," Ravizza says. "Interview two or three and judge their level of knowledge. There are plenty of nice people who really don't know the business very well."

Be sure you are comfortable with how they communicate with you. Most good companies will leave service slips to indicate they've stopped by. While it's smart to shop around, keep in mind the lowest-priced company will not always save you money in the long run. ●



## TOP PRODUCTS FILTERS



**Pleatco**  
877-293-0139  
[pleatco.com](http://pleatco.com)

Pleatco's new Pleatco Advanced filter fabric has more fibers per unit area than an average filter, reducing the pore size distribution and capturing dirt particles easily. A pool professional can help you find the correct cartridge filter for your swimming pool.



**Unicel**  
800-345-6650  
[unicelfilters.com](http://unicelfilters.com)

Unicel makes replacement filter cartridges for swimming pools. While Unicel does not sell directly to consumers, you can search for the filter you need on its website, and the company will put you in contact with a local professional you can purchase it from.

### TRADECERTIFIED™

To find a reputable company to do your pool service check out the list of TradeCertified™ service professionals on page 60.

A person is swimming in a pool, creating a splash. The background is a blurred outdoor pool setting with a large green letter 'S' overlaid on the left side.

# Swimming for Your Health

HOW LEARNING TO SWIM (AND STICKING WITH IT) CAN CHANGE YOUR OVERALL WELL-BEING.

BY ROCHELLE BELSITO

Swimming is a water-based aerobic exercise that you can participate in throughout your entire life.

It has many health benefits and various scientific studies have shown that swimming positively impacts the body. Nonetheless, in order to reap these benefits one must first learn how to swim.

Learning how to swim can be a fun and invigorating activity, and it also can make you water safe. Age does not matter when learning how to swim. It is suggested for infants and young children to take lessons at a well-known institute, while adults can enroll in private or semi-private classes at these same facilities.



According to Pat Hogan, managing director for club development at USA Swimming, infants can become water safe between six and 12 months. By that age, they should be able to float on their backs and get themselves to the edge of the water receptacle (i.e. pool or bathtub). It is important to supervise children while they are in water and, depending on their age, an adult should stay next to the child in the water. Hogan notes, “It is probably about age three that most kids get to the point where they have the coordination and development to actually learn how to swim.”

However, to become a confident swimmer, you need to practice. “With any skill you learn for the first time, you’re doing it at a conscious level. As you practice and develop those skills and they become automatic and something you don’t have to think about at the conscious level, that’s when you get comfortable and that’s when you are safest in the water,” Hogan says.

Mel Goldstein, director of club development and coaches services at US Masters Swimming, adds in an e-mail, “Building confidence comes with learning how to swim with proper technique; understanding the physics of the water and your body [and] knowing that air in your lungs and in your body actually keeps you afloat.”

## SWIMMING FOR EXERCISE

Swimming is a workout that engages almost every muscle in the body. USA Swimming National Team Performance Support Consultant Dan McCarthy states, “Every single stroke is a full-body exercise, the more proficient and the better you are at a given stroke and the easier you move through the water...the more that you’re connected from top to bottom.” This is important because swimming with your entire body should give you a more effective workout.

Regardless, the four strokes – freestyle, breaststroke, backstroke and butterfly – have a different muscle group that is engaged more dominantly when performing. According to McCarthy, freestyle, butterfly and backstroke are more upper body strokes while breaststroke focuses on the lower body. For the upper body, the trapezoids, back muscles, pectorals and other upper body areas tend to be exercised more often while the lower body uses the quadriceps, hamstrings, hip flexors along with others, particularly between the mid-section and the knees. The butterfly also predominantly works the lower back muscles.

While many people that swim for exercise are interested

in speed and distance, it is important to recognize that all strokes are beneficial. “I don’t know that any stroke is better than any other stroke,” states Professor Joel Stager, Ph.D. from the Department of Kinesiology at Indiana University Bloomington. “You can obviously travel greater distances freestyle, but I am not sure that distance is the best measure of the benefit of the workout. Some of the other strokes require greater technical or stroke finesse maybe more so than freestyle.” Improving your technical abilities for each stroke comes with practice and it may help to work your arms and legs separately; however, do not solely focus on one area since you may become fatigued faster.

## HEALTH BENEFITS

Jim Miller, immediate past president of US Master Swimming states, “Aerobic fitness, regardless of the type, improves cardiovascular health, raises HDL cholesterol (good cholesterol), heightens the immune system and improves metabolic rate. Improvement in metabolism helps with weight control, which in turn has benefits in the fight against hypertension, diabetes and a host of other common diseases.”

Along with helping the body from an aerobic respect, swimming builds muscle mass – something that Stager has studied for a number of years. “Our data basically shows that regardless of the age, people who swim have a greater muscle mass as opposed to people who are in a general population and that’s important and that becomes more important the older you get,” he says. “There’s a scientific term, sarcopenia, which is the gradual loss of muscles affiliated with age. Swimming has been shown to retard the loss of muscle mass virtually independent of age, so that is pretty important.” Since swimming can help reduce the loss of muscle mass, you may have the ability to stay more active in the later years of life as well as maintain your health.

If you suffer from chronic pain, swimming may be your answer as water relieves the stress on muscles and joints. In water, humans weigh one-tenth of their actual body weight and, therefore, exercise can cause less strain. The buoyancy of the water also helps since it lets you glide across the surface rather than remain with your feet planted on the ground. In the long run, this could be beneficial for them.

Miller, who also serves as a physician for the USA Swimming National Team, notes, “It is also significant that the [individual] is suspended in water. This makes

involved. Many athletes find the water to be a very kind environment if they have arthritis or have suffered losses due to a stroke or any impairment that may affect balance.”

### BEYOND THE LANES

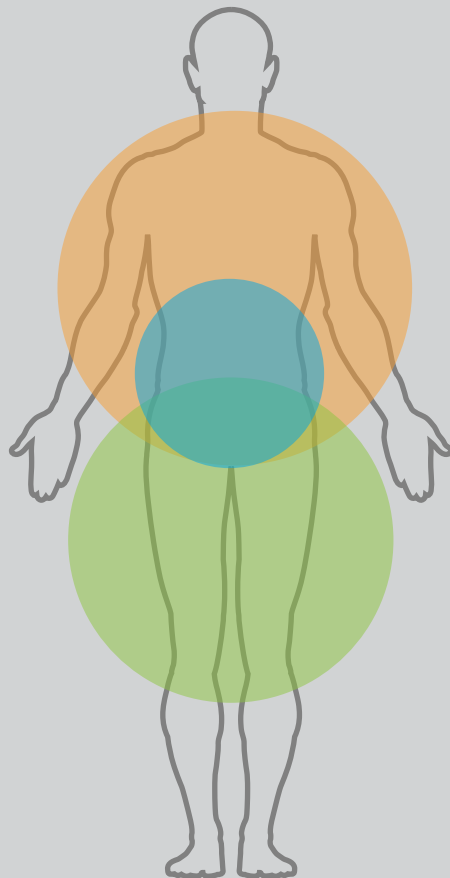
There are many sports and recreational activities that someone can take up once they know how to swim. Besides the obvious – swimming – an individual can participate in synchronized swimming, diving, water skiing, jet skiing, water polo, kayaking, canoeing, boating or triathlons, to name a few.

Since water may be therapeutic for pain, if someone knows how to swim and they participate in any physical activity, they might be able to use the water for reconditioning. For example, if a runner suffers a knee injury or a sprain they can continue practicing in the water since there is buoyancy. Since we weigh less in

water, there becomes less pressure when we run against the floor of a pool. Or there can be floating activities done such as treading water that can strengthen areas that are hard to workout outside of the pool.

Swimming is an activity that you can participate in at any age. It is one that may develop muscles and improve health while soothing aches and pains. So, while swimming may seem like it is just a sport, there are many other valuable traits to learning how to swim and becoming a swimmer. McCarthy says, “You’ll always be able to swim for your health and the health benefits that come with it. There are very few other sports that fall into that category.” ●

*Please consult with your doctor before beginning any new water workout or rehabilitation regime.*



## Work Out Your Troublespots

When you swim, you engage your entire body. However, each of the four strokes – freestyle, breaststroke, backstroke and butterfly – work particular muscle groups more intensely than others.

### FOR YOUR UPPER BODY:

According to McCarthy, freestyle, butterfly and backstroke utilize the upper body more often including the trapezoids, back muscles and pectorals.

### FOR YOUR CORE:

The butterfly stroke uses the abdominal and the lower back muscles more frequently than the other strokes, so it is important to have a strong core.

### FOR YOUR LOWER BODY:

The breaststroke focuses on the lower body – the quadriceps, hamstrings and hip flexors among others.





## Safety First

Take these steps to prevent accidents in your new pool.

**SWIMMING POOLS** today offer a variety of high-tech, visually appealing safety features. Some of these things may even be required by your local code authority.

Adult supervision is the only truly effective way to prevent a child drowning. A responsible adult should never take his or her eyes off a child whenever they are near, or could get near, a body of water. Unfortunately, most accidents occur when there is a break in supervision, even a short one. That is why safety experts and the Association of Pool & Spa Professionals widely embrace layers of protection for pools and spas.

When paired with supervision, layers of protection equips the pool or spa with several devices to delay a child's unsupervised access, or warn of the child's presence. Studies show that children are most at risk in their own backyard, when parents believe the young ones are safely inside the house. Therefore, these layers should aim at protecting the area between the house and the pool.

### BARRIERS

Traditional layers of protection include permanent fences with self-closing and self-latching gates, removable mesh barriers, pool covers and pool alarms, including alarms on doors and windows leading to the pool.

Many experts believe it's imperative to install a barrier around the entire pool to block every method a child may have to gain access to the pool, such as with a simple fence. A safety

fence should be at least four feet high and no more than four inches off the ground, with any spaces or gaps no longer than four inches wide. Because many states have fencing codes, check with local officials about the specific laws and guidelines in your area.

No matter what form of fencing you choose, the area adjacent to the outside of the barrier should be free of objects — such as chairs, tables and tree branches — that may tempt a child to climb over the fence.

### COVERS

A pool safety cover is an impenetrable covering that completely encases the pool, blocking access to water. While there are many types of covers for swimming pools, not all are safety covers.

Types of safety pool covers include a manual anchored system, a manual tracked system and an automatic cover. According to ASTM Standard F1346-91, a cover must hold a minimum of 485 pounds per five square feet to qualify as a safety device — the weight of approximately two adults and a child. The standard also requires the quick removal of accumulated water on the cover, as children can drown in just inches of water.

For a more in-depth article on pool covers, see page 44.

### ALARMS

A pool alarm can act as an additional layer of protection in residential pools. Generally there are four types of alarms for swimming pools: surface, perimeter, underwater alarms and alarms that are affixed to the child.

Surface alarms trigger when the alarm's electronic sensor detects waves or ripples on the water surface. In an effort to minimize false alarms, the ASTM says water alarms must sound when a minimum of 18 pounds hits the water.

A perimeter alarm creates an invisible laser beam around the pool. If the beam is broken, an alarm will sound at the pool. Many perimeter laser alarms also offer an optional unit that will sound inside or on your phone as well.

Underwater alarms detect movement under the water's surface. A transmitter sends out underwater sonar waves. The alarm sounds if there is an interruption in rebounding waves.

Similar to burglar alarms, gate, door and window alarms for pools go off when someone enters the pool area, or when a door or window near the pool opens. Additionally, install wireless alarms that sense heat and movement.

While pool alarm systems can be effective at catching a curious toddler, these designs are not immune to a false alarm. Use pool alarms with other methods of protection to be doubly sure your child is safe. Since pool alarms rely on a responsible party to activate and monitor them, they can never be relied upon as a substitute for adult supervision. ●

#### POOL SAFELY

To learn more about how to enjoy your swimming pool safely visit [POOLSAFELY.COM](http://POOLSAFELY.COM).



# Is My Local Dealer Certified?

**THE MOST IMPORTANT QUESTION YOU SHOULD ASK BEFORE BUYING OR SERVICING YOUR NEXT SWIMMING POOL, HOT TUB OR SWIM SPA.**

For years we have helped direct people to quality hot tub manufacturers through our certified endorsement award. Now we have expanded that independent, audited endorsement to include local builders, dealers and service professionals. But being a Certified Pool Builder means more than just being able to slap a sticker on the front door. The retailers who win this award have to adhere to a strict set of criteria, criteria that ensures that someone who buys a swimming pool from these retailers has selected the best builder in their local market.

Fair. Accurate. Independent. Local.



## THEY'VE STOOD THE TEST OF TIME.

We've heard the sad tales during this economic downturn of people buying goods from retailers who had to close their doors before making good on all of their promises. Not only do Certified Pool Builders have to be in business for a certain number of years in order to be considered for the award, but also their affiliation with this endorsement as well as other required national and local trade and business groups exhibit their devotion to their customers, the hot tub industry and local community.

## THEY ARE COMMITTED TO THEIR CUSTOMERS.

In order to become a Certified Pool Builder, pool builders must have a proven track record of customer satisfaction. Through written testimonials and a customer satisfaction survey, *Poolsearch* makes sure that customer happiness isn't just lip service. Certified winners must also sign and adhere to a Customer Bill of Rights which outlines how all customers should be treated before, after and during a hot tub sale.

## THEY KNOW WHAT THEY'RE DOING.

Certified winners must engage in a certain number of education hours for their employees, which means that from the sales team to the service technicians, you should be in good hands. Their service department must also meet standards set forth by various industry organizations or local state licensing to qualify for the award. Beyond that, Certified Pool Builders must sell a superior product – a Poolsearch or Spasearch Certified manufacturer.

## CUSTOMER BILL OF RIGHTS

### Preamble

Our goal is to serve you, the consumer, in a manner that speaks to the way we all would like to be treated: with honesty, fairness, respect and openness. While we certainly do this "behind the scenes," we feel it is important to specifically and openly address these issues that show our deep-seated commitment to you. To that end, we subscribe to the Poolsearch Certified™ Pool Builder standards and Consumer Bill of Rights, a rigorous guide established to ensure your purchase, ownership and service experience meets and exceeds your expectations.

### Sales

- A friendly, non-aggressive and courteous sales environment
- A considerate and knowledgeable professional consultant
- Truthful and accurate marketing materials
- The opportunity to privately wet test a product prior to purchase
- A complete explanation of all costs associated with purchase
- A full and confidential discussion of payment/financing options

### Delivery

- Timely and prompt delivery and/or installation
- Thorough on-site inspection and testing of all products delivered
- A comprehensive discussion related to the maintenance and recommended service schedules

- An understandable explanation and written copies of warranties on all products sold

### Facilities

- Clean, well-maintained and appealing showroom facilities
- Private, sanitary wet test facilities
- A variety of well-stocked product lines that enhance the ownership experience
- Convenient operating hours, with after-hour appointments available if necessary

### Service

- Timely, scheduled and prompt service calls
- A professional technician who is easily identifiable and shows identification upon request
- A full explanation of your service/maintenance issues, including estimated time and costs to complete

- Your approval of charges prior to work being started
- A complete description of all work performed and an itemized list of applicable charges

### Satisfaction

- Our pledge to always act in good faith
- Our commitment to the highest standards of ethics and integrity
- Our belief in honest and fair treatment for every customer, without discrimination
- Our passion to provide timely and accurate responses to inquiries and requests
- Our dedication to maintaining customer records with the utmost care in privacy and confidentiality

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**Michael Phelps Legend Series by Master Spas®** are hot tubs built to *legendary* standards. This exclusive line of hot tubs is known for its therapeutic excellence including full body massage, concentrated neck and shoulder relief, soothing foot massage, and a relaxing lounge. Enjoy contemporary style, innovative technology, and clean pure water. [MasterSpas.com](http://MasterSpas.com)

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