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## Swimming Pools [Family Circle Archive]

## Family Circle Articles

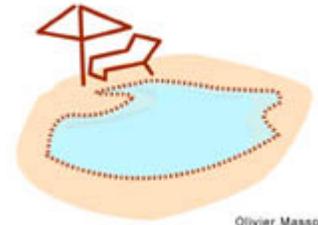
### Swimming Pools: A Reference Guide

By Al Ubell and Label Shulman

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"Having a pool has brought my family closer together," says Dolores Paolicelli of Yonkers, New York. "My husband and I used to go to the country club on weekends while our daughters joined their friends at the beach." Now all the Paolicellis lounge around their spacious in-ground pool and invite friends over.

For the Byrnes of New Jersey, their swimming pool offers comfort and convenience. "Crowded public pools are not my style," explains Sharon Byrne. "I prefer the privacy of my own pool. And with three small children, having a backyard pool makes life much easier." Their oval above ground pool, which they installed, is a lot less extravagant than the Paolicellis'. Still, it fills their needs.



Whether it's for togetherness or exercise, luxury or convenience, more and more families are getting their own pools. According to the National Spa and Pool Institute, there are over 4,134,610 residential swimming pools currently in use, and the numbers keep rising. You no longer have to be wealthy to afford your own pool: There's one to suit just about every budget.

### GETTING STARTED:

Check with the buildings department in your town or city to make sure your local ordinances allow pool construction. Then decide the size, shape and type of pool that's right for you. An above ground pool won't add to your property value; an in ground pool might.

### COST:

Installation costs range from \$700 for a small above ground pool to over \$100,000 for a designer planned "natural" pool. A 12'x30' in-ground pool with few accessories and modest landscaping will cost from \$7,000 to \$15,000. If you then sell your home, that cost can be taken as a home improvement tax deduction.

### Pool Features

- *Reinforced poured in place formed concrete:*  
**Advantages:** durable. **Disadvantages:** expensive; limited design flexibility; cannot be used for free form pools.
- *Dry Packed (hand packed) concrete:*  
A wire reinforcing frame is shaped to the form of the pool; then concrete is packed around it by hand.  
**Advantages:** allows greater design flexibility. **Disadvantages:** may erode and chip in cold weather.

- *Gunite construction:*  
In this patented process, concrete is sprayed onto a steel frame under high pressure. **Advantages:** same design flexibility as hand packed construction, but at a lesser cost. **Disadvantages:** may erode and chip in cold weather.
- *Concrete block construction:* Can be done by a masonry contractor and requires steel reinforcing. Generally not used for pools deeper than 3 feet. *Advantages:* design flexibility. *Disadvantages:* may erode and chip in cold weather.
- *Precast reinforced concrete panels:*  
**Advantages:** durable; completion time often takes less than one week. **Disadvantages:** little design flexibility; requires periodic resealing and recaulking of the intersecting joints.
- *Welded or bolted steel box with a painted surface:*  
Vinyl liners can be added to these metal sidewall pools. **Advantages:** durability; less expensive than concrete; can be installed in three to four days. **Disadvantages:** may eventually have corrosion leaks, which require extensive repair and rewelding; limited design flexibility; surface requires annual painting.
- *Wood, aluminum or plastic frame pool with a vinyl pool liner:*  
Constructed from marine plywood and support wood framing, which is then caulked and sealed; prefabricated aluminum panels bolted together or interlocked; molded plastic polymer sidewalls. A custom made vinyl liner is attached to the surface to give a finished look. The bottom rests on a bed of sand or vermiculite. **Advantages:** Plastic polymers are strong, lightweight and durable; inexpensive. **Disadvantages:** Vinyl liner is easily punctured; lacks the longevity of a concrete pool.
- *Fiberglass shells:*  
One preformed unit, which is simply installed in a hole in the ground. **Advantages:** Polymers are strong, lightweight and durable; inexpensive. **Disadvantages:** vinyl liner is easily punctured; vinyl liner also lacks the longevity of a concrete pool.
- *Above ground Pools:*  
These pools are vinyl lined, are the **least expensive** and are generally less than 4' feet deep. Reasonably easy to assemble and take down, above ground pools require no excavation. They come in a variety of sizes, from 5' feet diameter to 40' feet diameter for round pools and from 9' feet wide to 21' feet wide by 9' feet long to 44' feet long for oval pools. (Above ground pools are usually oval or round rather than rectangular.)

## Water Circulation System

All pools need a filter system, which recycles water and removes debris, insects and other nondissolvable particles from the water. Such a system consists of a combination pump and electric motor, which draws water from the pool, pushes it through a filter (and sometimes a heater) and returns it to the pool. The size of the pump and the horsepower of the motor required depend on the water capacity of the pool. Your dealer will be able to provide you with complete instructions.

- *Types of Filters:*  
Sand Filters wash the water through high grade sand. A "backwash" process enables you to clean and reuse the sand for several years. Manufacturers supply a complete package system of filter container, pump and motor. Sand filters have less cleaning efficiency than diatomaceous earth and cartridge filters, but are currently the most popular type of filter in use. **Cost:** approximately \$350.
- *Diatomaceous Earth Filters:*  
A filtering container filled with diatomaceous earth (crushed rock containing microscopic marine fossils), which acts as the filtering agent. This filter is more efficient than sand or cartridge systems, but is more expensive to install and requires frequent replacement of the earth. Not recommended for areas with hard water because high calcium content clogs the filter quickly. **Cost:** approximately \$400.
- *Cartridge Filters:*

This system uses a set of polyester, cloth or paper cartridges to filter the water. Requires frequent cartridge replacement, but does remove microscopic particles exceptionally well. It is not the most expensive filter to purchase, but it is the most expensive to maintain. **Cost:** approximately \$375.

## Pool Accessories

- *Skimmers* remove floating debris and prevent clogging of the circulation system.
- *Vacuum system* is attached to your filtering system and catches debris from the bottom of the pool in the strainer basket at the pump. Agitators float on the surface of the pool and clean the water.
- *Ladders* are usually constructed of stainless steel; they should be considered a safety "must" for getting into and out of the pool.
- *Diving board* must be anchored securely I comply with standards of National Spa and Pool Institute and be code compliant for your area. A safety course should come with it.
- *Pool slides* are fun, but dangerous. Same standards should be followed as those for diving boards.



## Pool Chemicals

Chlorine, in powder or tablet form, is the most common chemical used to kill algae and other microorganisms. All pools require a balance of alkaline and acid states (pH levels). A high pH level (high alkaline content) reduces the chlorine's ability to kill algae and bacteria. A low pH level (high acid content) leads to eye, nose, throat and skin irritations.

Chemicals such as potash and sodium bisulfate neutralize the acidity in the water. All chemicals should be used according to the manufacturer's specifications and kept out of the reach of children. Test for pH level and chlorine content regularly. Kits are available at pool supply centers.

## Insurance Requirements

Legally, a swimming pool is considered an "attractive nuisance" and you, as the homeowner, are liable when anyone is injured. Check with your insurance company to make sure that you have a homeowner's insurance policy that protects you.

## Do I Need A Pool Architect Or Contractor?

An above ground pool is easily self installed. All you need are a set of screwdrivers, some pipe, adjustable wrenches, pliers, a hammer and any tools specified by the manufacturer. Or your pool dealer may install it for a fee.

For an in-ground pool, you should hire either a contractor or various subcontractors, such as an excavator, mason, plumber, electrician and carpenter. For an additional fee, some pool architects will act as construction manager.

If you are planning an expensive, custom designed swimming pool with significant landscaping, a pool architect's skilled services may save you money. The architect can give you a creative design, utilize your property esthetically, help you avoid design and construction pitfalls and insure that everything complies with local codes and ordinances.

If you hire an architect, explain in detail what you want and discuss your lifestyle and budget limitations.

## Before You Choose A Contractor...

- Be clear about the kind of pool you want built. Have pool and landscaping specifications written out clearly so that the contractor can bid on your exact requirements.
- Get written bids from three contractors on identical requirements.
- Check the contractor's reputation with the Better Business Bureau and/or your local Department of Consumer Affairs.
- Ask the contractor for proof of liability and Worker's Compensation Insurance.
- Visit one or two families who've had pools completed by the contractor. Ask about their experience with him.
- Ask your pool architect to help you draft a written agreement with the contractor detailing the pool's specifications, estimated completion time and payments. Reserve 10% to 15% of the payment until the job has been completed to your satisfaction. Note: Any changes you make during construction will cost extra.



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