



*"Life Just Got A Little Better"*

## **What Makes a Pool Concepts Pool?**

In this part of Texas, we enjoy gorgeous weather nearly year-round. Accordingly, we feel that your backyard environment should be the architectural focal point of your home. Your swimming pool is an integral part of that environment. It should appropriately reflect your pride of ownership, represent your lifestyle, and be uniquely creative in its design, elevations, and presentation. It should graciously attract and accommodate large gatherings of friends and family, as well as provide endless possibilities for quiet and private romantic evenings.

On the practical side, owning a pool should not become your "second job". You should expect your pool to integrate easily into your busy schedule, as the care of something so large could become disruptive or controlling. Your pool should therefore include the right blend of care and maintenance accessories that will enhance the enjoyment of your new backyard. You should expect any such accessories to be cost-efficient, thus reducing continuing expenses such as electricity, chemicals, and equipment.

You should also expect your pool to be well engineered and free from poor design and disappointing workmanship. Compromises will always cost you more in the long run, either in repairs or upgrades.

With these factors in mind, we ask you to carefully consider your budgetary restraints with the features and conveniences that you feel are important. Please feel free to discuss any of these features with us in the designing process. Pool Concepts will work diligently with you to satisfy your expectations of what a quality pool construction company should be.

# EXCAVATION

The excavation of your swimming pool is started shortly after signing a contract and obtaining any necessary permits and HOA approval. The jobsite is established and any necessary pre-grading, including the deck area, is completed. Your pool is then marked for excavation according to its design. The project can begin once you have given the final approval of the pool's location. Pool Concepts will excavate your pool using a backhoe and a hydraulic ram hoe if rock is encountered. Blasting is NEVER permitted due to the potential risk and danger of cracking house foundations, driveways, and walls.

The position of your pool and its excavation is one of the most important parts of the construction process. Everything must be precise. Walls must be tapered properly in order to insure a good contour of the pool. Our excavation crew will dig straight down before we start shaping the bottom of your pool. Steps and benches will be formed by the excavator. In addition, gravel is sometimes placed on the floor of the pool to allow additional work to be completed.



# STEEL REINFORCEMENT

Steel bars, called rebar, are used to strengthen and reinforce your pool. Pool Concepts uses ½ inch rebar (#4 reinforcing bar) placed on 9 inch centers throughout the pool. In pools that are more than 6 feet deep, additional steel is added throughout the deep end, and across the pool midpoint reinforcing walls and corners at slope changes. This extra steel results in approximately 70% of the pool structure reinforced on 4 ½ inch centers. All of the steel is then blocked up 3 inches to insure that it will be in the center of the gunite shell. Furthermore, a double curtain of steel is installed in sections of the pool that exceed 36 inches out of the ground.

The beams of your pool must be able to withstand pressure from both the water and the soil; therefore, Pool Concepts adds extra reinforcement in the walls to insure strength. This is done by placing four #4 steel bars in the beam while stirrups are placed 27 inches apart and allowed to extend out of the beam where needed. These stirrups will later be used to attach to the deck steel. Skimmers are also wrapped in steel for support.



# PLUMBING

The ability to efficiently remove water from your pool, filter it, and return it to the pool is very important. Our plumbing process is done in the most efficient manner while using the highest quality products, which exceed the required standards. Our system is hydraulically balanced and designed to produce maximum performance and safety. Pool Concepts never places our pipes underneath the shell of your pool, with the exception of the main drain or in pools with an in-floor cleaning system.

Also, plumbing leaks, which are not covered by most company warranties, would be next to impossible to locate and very expensive to repair. Pool Concepts will only use rigid Schedule 40 PVC pipe to plumb your pool. Some companies choose to use flex pipe in their projects. Flex pipe is a cheaper material which can collapse over time and cause major problems. Be very aware of what type of plumbing is being used when you are choosing your contractor.

The following highlights some of the standard features found in Pool Concepts' Pools:

- Use of Pentair valves made out of highly durable plastic, in lieu of brass valves, as they give the greatest flow possible, provide strength, and resistance while adding convenience and ease of use.
- Install two skimmers on all pools over 350 square feet, instead of one, for more effective turnover and filtration of pool water, thus reducing overall maintenance.
- In addition to the main drain, each skimmer is plumbed separately to insure a balanced suction and efficient turnover of pool water. Since each works independently of one another, your pool's circulation system will always be able to function, regardless of circumstances.
- Return lines are plumbed separately in order for the filtered water to be returned to your pool in a balanced and more efficient manner.

## PLUMBING (CON'T.)

- We use at least 2 inch pipe versus the standard 1 ½ inch pipe to plumb both the pool and spa, which gives a balanced entry, equalizing the pressure, and increasing overall activity.
- Fill lines and/or automatic water levelers are installed for the ease (convenience) of adding water to your pool.
- Overflow lines are standard features, which keep your water level constant, eliminating the need to pump down your pool following a rain.
- An Automatic Freeze Protector is installed to protect your pool, spa and equipment from unnecessary repairs due to freezes in the winter.



Once the plumbing job is completed, we pressurize the system to insure there are no leaks prior to the continuation of the construction process. The plumbing will remain under pressure for the duration of construction. If any pipes are accidentally damaged by our crews we will promptly and properly repair the damage as needed.



# GUNITE

The concrete that is used by Pool Concepts to construct your pool structure is commonly called gunite. Gunite is a mixture of hydrated cement, sand, and water pneumatically applied over and under a grid of reinforcing steel rods (rebar) directly against the soil. The mix is very dry and is “shot” from a nozzle under high pressure to form a monolithic shell that is stronger than any other type of mixed concrete.

There is another, less expensive “wet” concrete mixture used in the construction of most pools in the San Antonio market, called “shotcrete”. However, in order to construct the very best pool possible, Pool Concepts only utilizes the more expensive, widely-accepted dry gunite method. This is why Pool Concepts backs every pool shell with a lifetime structural warranty.



# DECKS

Since your pool will become the focus for outdoor activities and entertainment, you should consider including enough space around your pool for swimmers and non-swimmers alike. Pool Concepts recommends some form of decking around all pools. We are a custom pool builder, and our design staff is very experienced with a variety of backyard elevation situations. They will advise you as to the best way to accommodate a pool and deck into your backyard while minimizing tree loss.

Pool decks not only add to the aesthetic value of a pool, but they also maintain a functional purpose. Pool decks allow swimmers convenient access to the pool, help keep mud and dirt out of the water, prevents the yard from becoming waterlogged, and permits the person cleaning the pool to work unhindered. For complete comfort, sitters, loungers and sunbathers need a minimum space of about 3' x 6', and 3' apart. For a table and four chairs, you will want an area measuring at least 10' x 10.' One rule of thumb is that the area for poolside activities should be at least equal to the area of the pool. So, hypothetically speaking, a 20' x 40' pool (800 square feet) should have a minimum deck area of 800 square feet.

The installation of your decks around your swimming pool is a critical phase of the final construction process. If the decks are not constructed properly, problems such as poor drainage and major cracking can occur. Pool Concepts employs some of the finest masons in the pool business, each specializing in a particular type of deck construction. We will strive to construct your decks free of any imperfections. All decks are placed on compacted base material and reinforced with steel. This gives us a solid foundation on which to pour your decks and will minimize shifting, which reduces the chances of cracking in the long term. Potential drainage problems are recognized in advance and taken into account during construction. We will also place special drains in planters, and advise you to reroute gutters, if necessary.

The following are a few types of deck surfaces from which you may choose (in order from least to most expensive):

**Rock-Salt Finish:** Considered a step above smooth or broom-finished concrete, a salt finish leaves a speckled pattern of shallow indentations on the concrete surface, similar to the appearance of slightly pitted, weathered rock. You also have the option of staining or integrating dye into the concrete for an additional cost (commonly known as salt stained decking). *Advantages:* Surface is inexpensive and more attractive than smooth or broom-finished concrete, especially if stained. *Disadvantages:* Concrete tends to draw more heat to the surface, particularly with darker stains.

**Rainbow Seeded Pebble:** Small, multicolored pebble rock is hand applied to a wet concrete surface and trowelled down to a smooth finish. *Advantages:* Surface is inexpensive, attractive, durable, and blends well with most stone and brick coping. *Disadvantages:* Surfaces exposed to direct sunlight may become quite hot and people with sensitive feet may prefer to wear footwear.



**Spray Deck:** A special coating combining the best properties of elasticity and compressive strength in epoxies and acrylics to provide a smooth yet non-slip surface. *Advantages:* Surface is cool, affordable, and is available in different colors and patterns. It is also easily maintained by an occasional hosing. *Disadvantages:* Possibility of staining and could chip if something heavy is dropped on it.



**Stamped Concrete and Overlay:** Freshly laid concrete is textured or imprinted to replicate more costly materials such as natural stone, slate, tile, brick, and even wood. If you would like to re-vamp your existing concrete deck, you might consider a decorative stamped concrete overlay to be applied over your existing concrete or sub deck, thus eliminating the hassle and expense of concrete replacement. Either way, you also have the option of staining or integrating dye into the concrete to acquire your desired color. *Advantages:* More affordable than natural stone



applications and just as eye-appealing. *Disadvantages:* Concrete surfaces may become quite hot when exposed to direct sunlight.

**Flagstone:** Flagstone is available in several different colors and applied over a brushed concrete deck base to give a beautiful, more natural look to the pool environment. *Advantages:* A natural look for added aesthetic value. *Disadvantages:* One of the most expensive types of deck. Some of the darker colors absorb heat. Many of the irregular, uneven stones sometimes create small water puddles following a rain or hosing.



**Travertine Tile and Pavers:** Travertine tile needs to be mortared in on concrete while tumbled pavers can either be mortared in on concrete or dry-set on top of sand and gravel. *Advantages:* Durable and hard-wearing, yet beautiful. The travertine tile especially adds an element of sophistication to project. The tumbled pavers typically absorb water instantly, making these decks virtually slip-free. *Disadvantages:* The most expensive type of decking.



## STONE/BRICK COPING

One of the most important aspects of the construction of your pool is the installation of the pool coping. Coping is the material used directly around the perimeter of the swimming pool. If it is not done correctly the coping can ruin the functional and aesthetic quality of a truly fine pool. Pool Concepts uses only the very best, highly skilled masons available, which gives your pool a mark of distinction. The following describes the variety of coping materials used by Pool Concepts:

**STONE:** Natural Stone has a quality unmatched by any other material. Its unique combination of durability, warmth, and beauty have inspired artisans throughout the ages. Pool Concepts only uses top quality stone. Each stone is individually trimmed and set on a twelve inch footing or on the top of a wall. The joint between each stone is then smoothed, giving it a more defined appearance. The inside edge of the stone is saw cut and the top edge is mitered. This will provide a comfortable edge and will not snag swim suits while entering or exiting the water. The different types of stone coping we use include the following:

**FLAGSTONE:** We only use Select flagstone coping and pavers. Select grade affords you a more consistent color with superior density and integrity of stone. Rich in earth-toned colors and textures, this type of stone is ideal to be used around a pool because it has a non-slip surface, looks attractive, and can withstand constant use.

**TRAVERTINE:** Travertine is durable, hard-wearing yet beautiful, and has good slip-resistance. Bullnose travertine pavers can be used to create soft and attractive curved edges to steps, sills, or in capping walls.

**LUEDERS:** Lueders Limestone is best known for its color range, distinctiveness, and durability. These slabs come from Lueders, Texas where the limestone is more dense.

**CANTERA/ADOQUIN:** Cantera Stone is a quarried, volcanic rock that is mined exclusively in various regions of Mexico and Central America. Its properties are unique, in that it offers color, texture, durability, and a softness that allows for detailed carving and cutting. Adoquin is a stone whose properties are similar to those of the Cantera stone, only much harder and more durable.

**BRICK (HOUSE OR BULLNOSE):** Although waning in popularity, brick coping can be used on geometric shaped pools and comes in a variety of colors and sizes, thus allowing you to match deck coping with any existing house brick or outdoor features. Each corner is mitered so that every brick comes together in the desired manner.

## EQUIPMENT

The support system for your Pool Concepts pool has been custom designed for proper performance. We make every attempt to select the very best equipment available, based on its reliability and maintenance-free operation. There are several different options for equipment. We can balance your objectives for energy efficiency and your budget to truly customize how your pool operates. The following highlights the equipment utilized by Pool Concepts in our pools and spas.

**Filter** – Pool Concepts only uses Diatomaceous Earth (DE) Filters. This type of filter uses a network of grids which are coated with DE powder. This powder will trap any dirt and debris your filter pump sends through it. The filter is paired with a multiport backwash valve for ease of operation and the best water quality available. DE filters will filter down to 2 microns. All other types of filters only filter to 25-50 microns.

**Pumps** – There are a variety of pumps on the market today. Some are designed for large volumes of water and others are designed for energy efficiency. Pool Concepts recommends a pump which combines these two elements. The Intelliflo variable speed pump will give you the water volume you need to operate any features you have chosen; while at the same time allowing you to slow down the pump during normal filtration. When the pump is set to a lower speed it's energy usage diminishes drastically. A variable speed pump will run at low speed and still achieve 95% efficiency. A dual or 2 speed pump will run at a lower speed for

filtration however while in low speed it only operates at 25% efficiency. The Intelliflo variable speed pump delivers both in water quality and cost savings. Pool Concepts will size any additional pumps your project may require with the same function and cost-saving ideas used for the main filter pump.

**Sanitation** – Every first-time pool owner is apprehensive about taking care of their new investment. The correct combination of traditional sanitation and complimentary products can make keeping your pool water fresh and clean hassle free. Pool Concepts recommends using a traditional chlorine feeder with the addition of liquid borates which act as a secondary sanitizer. By using a smaller amount of chlorine in the pool, along with a secondary sanitizer, fewer chloramines (the byproducts that generate the chlorine smell and other adverse effects such as eye irritation and respiratory problems) are produced and some of the ones that are produced can be destroyed through exposure to ozone or UV. The presence of ozone and/or UV systems offer germicidal benefits that enable the control of pathogens while also enabling the reduction of chlorine consumption. Pool Concepts offers you the option of adding an ozonating system and/or UV filtration to your pool.

**Automatic Cleaner** – Every Pool Concept's pool will have an automatic pool sweep included in the design. The Pentair Kreepy Krauly Platinum is the top of the line in automatic pool cleaners. This efficient cleaner is powered by its own booster pump, creating maximum cleaning performance. Its improved tire/wheel design and dual-thrust jet design delivers more cleaning power, four times greater cleaning coverage, and 20% faster cleaning. The Kreepy Krauly Platinum is a pressure side cleaner which means it will operate even if your filter becomes dirty.



Pool Concepts also offers a **PV3 in-floor cleaning and circulation system** as an alternative, upgraded cleaning system. Built right into the pool shell, PV3 is engineered to clean your entire pool, including floors, steps, benches, even spas.



When not operating, PV3 disappears back into the pool floor, making it virtually invisible and free of vacuum hoses.

## INTERIOR FINISH

The interior finish of a pool can transcend its design to a whole new level of style and grace. Pool Concepts only uses the most reputable and skilled pool interior professionals in the region to ensure that the quality of your interior finish meets our exceptionally high standards. There are several types of pool finishes Pool Concepts offers, with each type available in an array of colors and textures—from more traditional blends, to sparkling iridescent glass tiles, to a kaleidoscopic of river pebbles or glass beads. Explore the different pool finish options below to find out which options will best suit your needs and design aspirations.

**Finest Finish Blends™:** These smooth-to-the-touch interior finishes are crafted using only the highest quality raw materials and are held together with an industry leading patented pozzolon blended cement giving this type of interior finish unmatched strength and durability. You have the option of enhancing any pebble finish with the brilliance of Pebble Radiance, which are iridescent, multi-hued, gem-like pebbles that capture sunlight, enhance water reflection, and add dramatic sparkle to any plain pebble pool surface.

**Gemstone Products:** Gemstone aggregates offer a rich palette of multi-hued pebble surfaces that will conjure the reflective quality of the light on your pool throughout the day. These stunningly beautiful pool finishes offer durability, versatility, and the ability to maintain their original color.

**Wet Edge Finishes:** Similar to Gemstone Products, these cutting-edge aggregate finishes are durable yet beautiful. All Wet Edge finishes are handcrafted and custom-made for each swimming pool. Each finish is white cement based, but with blended polymers to make them denser and more durable. Wet Edge only uses smooth round stones – not crushed, which means a more seamless and polished texture.



Designer Mini Gemstone in Bahamas Jewel

# EDUCATION & SUPPORT

After the interior of your pool is completed and filled with water, Pool Concepts will balance your water chemistry for approximately 10 days and then give you a “POOL SCHOOL.” We will teach you everything you will need to know to keep your new investment looking great for many years to come. If you do run into trouble, don’t worry, we have service technicians that are just a phone call away and always ready to help. Pool Concepts has a service department available exclusively to its customers. We also have multiple Pentair Warranty stations to assist in getting your service scheduled as quickly as possible.

Thank you for choosing Pool Concepts during your design process. There are a number of components which set some pool builders apart from others, and you will need as much information as possible to make the right choice for you and your family. Please do not hesitate to call our office if you have any questions about our construction process or would like more information about what makes Pool Concepts different from our competitors.



