

DIAMOND

 POOLS 

Pool Lingo Handbook



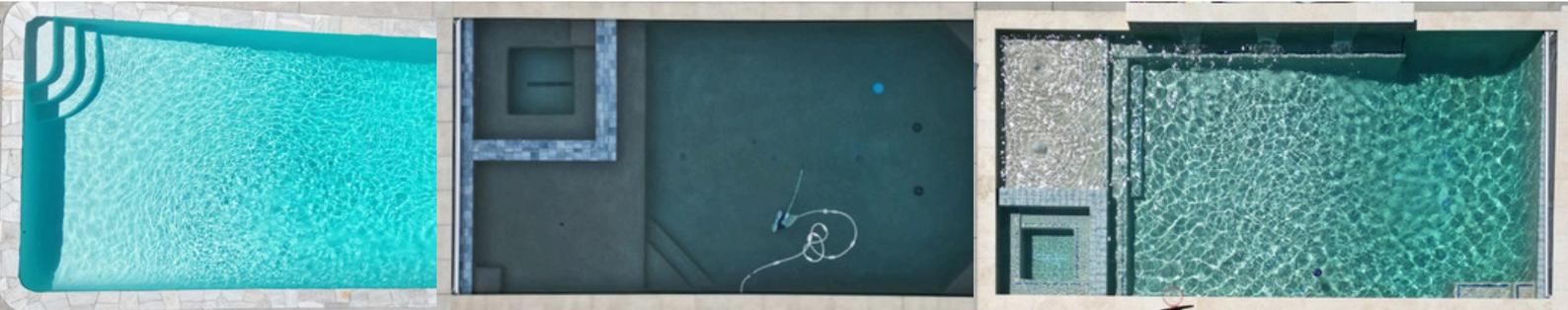
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Pool Shapes, Depth Profiles, Vanishing Edge

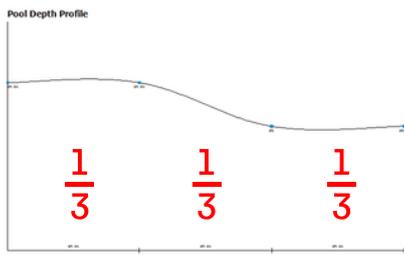
Geometric refers to a more rectangular shaped pool. Although that is not always the case, some might have arcs on the ends. Typically it can be interpreted that if you “folded” the pool in half length wise, both halves would look the same.



Freeform is a lagoon or “kidney” shaped pool with multiple custom curves.

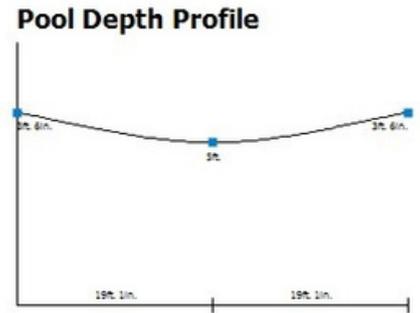


Depth Profile (Standard vs Sports Style)



Standard Depth Profile: depth is the classic run from one side of the pool to the other gradually getting deeper to the deep end. Typically we suggest $\frac{1}{3}$ at shallow end depth, $\frac{1}{3}$ transition, and $\frac{1}{3}$ deep end depth.

Sport Style is when the pool’s deep end is in the middle of the pool with the shallow end being on the ends (or vice versa). Can be a good choice for pool volleyball enthusiasts, young families, or those who want to cannonball from middle of a raised accent wall.



Vanishing Edge is usually for pools built on the side of a hill to give the appearance the pool just drops off. These require a water basin to catch any water that spills over the edge to pump it back into the pool, which will be tiled or plastered.



Rebar & Gunite

Rebar is the structural steel that is installed to give shape/strength to the pool shell. The rebar plan is determined by a licensed engineer, and the plans are part of the pool permit. Not all steps will have gunite, as interior steps are not considered structural.



Gunite is the type of concrete that makes up the shell of the pool. It is sprayed out of a hose from a large truck. The application is a loud process. After the gunite is sprayed, it will be hand troweled to smooth out the bond beam, stairs, etc. It will not be perfectly smooth or level. The **bond beam** will be “floated” when **tile** is installed, and the interior of the pool will be entirely covered by **plaster**. After gunite is applied, keeping it “wet” will help the curing process. It is the buyers responsibility to “water” the gunite 2-3 times a day for 7-14 days following application. See video below.



Follow this [link](#) to check out a demonstration on how to water the gunite after installation. This video is not produced by nor the property of Diamond Pools & Spas LLC



Bond Beam, Skimmer, Autofill

A swimming pool **bond beam** is a, thick, horizontal, steel-reinforced concrete beam that runs around the top perimeter of the pool shell. Acting as the structural, topmost edge of the pool, it supports the coping and waterline tile, while tying together the vertical steel reinforcements to prevent cracking, settling, or shifting of the pool shell.



Flagstone Coping On Top of Bond Beam

Coping is bonded directly to the bond beam, and cantilever concrete will have a membrane placed prior to concrete pour. This is because the pool structure and the decking (whatever surrounds the pool), are independent structures.

Exposed Bond Beam

The bond beam is approximately 12" (the thickness of the gunite shell) wide and will be covered with either coping or cantilever concrete.

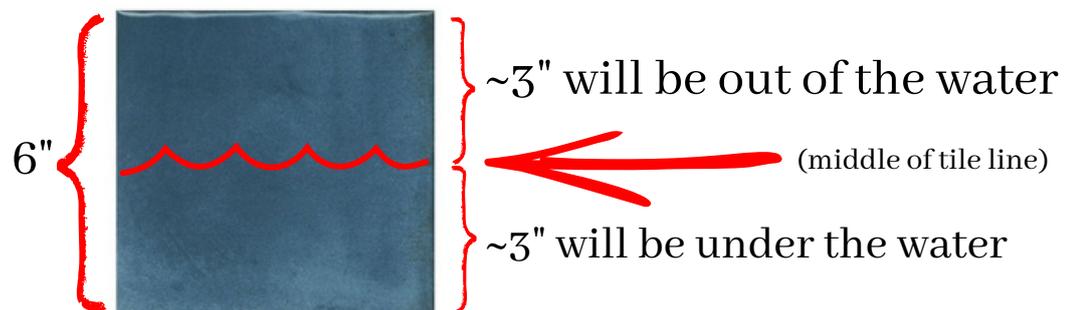


Skimmer is the cut out in the side of the pool that traps floating debris into a removable skimmer basket inside the housing. The skimmer cover is about 2' from the pool edge and is laid flush with the finish decking elevation where you can access the bucket to clean it regularly. Larger pools may have multiple skimmers. While standard skimmer covers are plastic, if the skimmer will be surrounding by concrete, we will use a "pour lid".



The "mouth" of the skimmer will be tiled in at an angle, leading into the skimmer basket. This is where floating debris will flow when the pump is turned on. There is a small plastic door called a "weir" that flaps back and forth to keep debris inside the skimmer basket.

Autofill is an optional feature that has a float valve installed connected to a waterline. It has a balloon inside that is set to rest at the correct water level, which is when the water is at the middle of the tile line. When the water level drops, it triggers the water to flow until it is back in position. If you ever suspect a leak, turn off the autofill and monitor the water loss over 24 hours and over a week.



Main Drain, Overflow Drain, Return Lines

The **Main Drain** is the drain located at the lowest point of the pool. When you are brushing the pool, the dust and debris will come this direction. When the filtration pump is turned on, it will suck water from this drain through the filter before it returns the clean water to the pool. Main drains must be compliant to the Virginia Graham Baker Act (VBGA), to prevent dangerous suction levels that may entrap a child. On remodels, we often utilize channel drains, which disperse the suction across a grated channel. On new pools, we use split main drains 3' apart minimum.



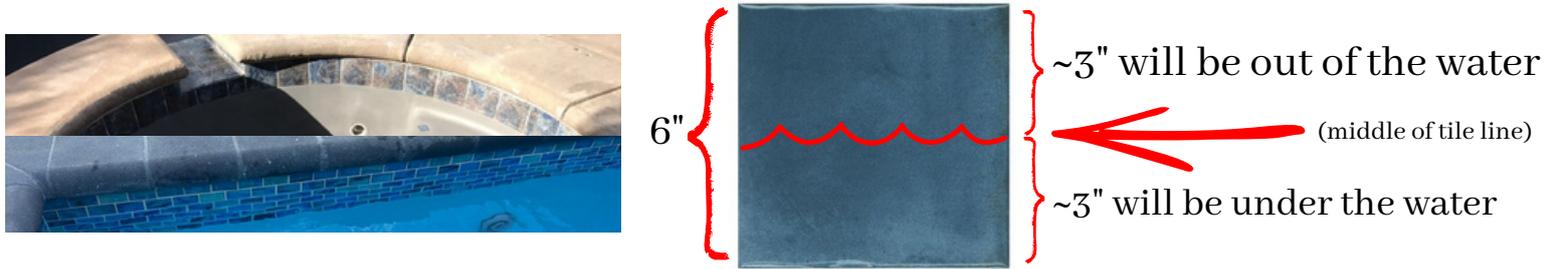
The **Overflow Drain** is a small hole, around 1" pipe, usually in the side of the skimmer that allows water to flow out to the drainage system when the water gets higher than the expected waterline like during rain storms. Because it is a 1" pipe, very large downpours may still raise your waterline level, and it will take a little time for the water to make it's way out. The overflow drain will be connected into existing rear yard drainage unless specified otherwise providing it is accessible and serviceable.

Return Lines are the plumbing lines that return clean water from the pump / filter back into the pool. By placing the return lines at the bottom, it sets up the pool to heat the most efficiently in warmer months or in the event that pool solar is ever installed.



Tile (Waterline/Step), Accent Wall, Sheer Descent, Faced/Sided

Waterline Tile refers to the tile along the waterline near the top of the pool. It is the separation between the plaster and the decking/coping. The water level is supposed to be right in the middle of the waterline tile. Waterline tile is necessary because plaster cannot remain exposed to air for long periods of time without damage. What is included in most of our contracts is 6"x6" porcelain tile, but there are additional sizes available, as well as upgraded glass tile options. To review tile options, check out the Material Handouts, or request a visit from our Mobile Showroom



Step Tile is an optional residential add on (required in commercial settings) tile that runs along the edge of steps and benches. When laid in a continuous row, 1"x1" or 1"x2" tiles are used. Alternatively, 6"x6" tiles can be cut into diamonds to form a row.



Raised Accent Walls are walls that extend above the bond beam but are not retaining a hillside or raised area. They are for aesthetic purposes (and perhaps to jump off but we can't technically endorse that). They are usually +12", +18" or +24", and can also be tiered across the back of the pool.



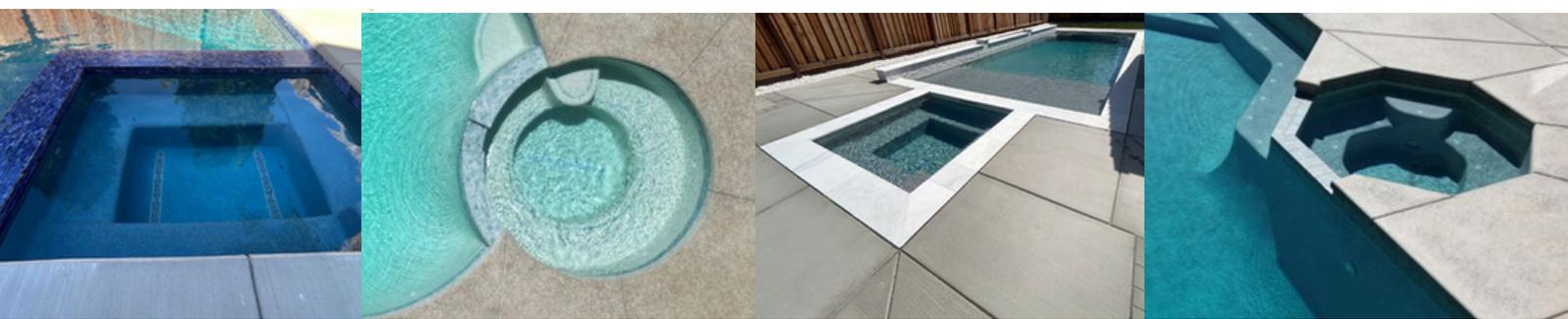
Sheer Descent is an optional water feature that resembles a waterfall. Sheer descents come in a variety of sizes ranging from 1'-6' wide.

Accent walls are often **Faced and Sided** with tile or stacked stone. This means that the tile or stone will be on the front of the accent wall (facing the pool) and the sides of the wall. The back of the wall (facing the fence) is usually left as exposed gunite, or it can be tiled, painted or stucco'd as an additional option. The tile can be the same as the waterline tile to give it a more uniform look or switch it up to have a more unique style.



Spas

Inline Spas are spas that are built with the same exterior bond beam height. The interior walls of an inline spa can be covered with tile or more elevated to be covered with coping. The tile is finished ~1" above the pool water height, allowing for a **spillover** from the spa to the pool. If the **coping cap** is chosen, a spillover cut out will be added to the spa. All spas come with 6 jets unless specified otherwise, and typically have one step and the remainder surrounding bench.



Raised Spas are spas that are built above the remaining pool **bond beam** height. Typical heights are +12" or +18", which is measured from the surrounding decking to the top of the "cap." The "cap" is the top of the raised spa, and is either finished with a coping or poured in place cantilever concrete. The exterior is **faced** with tile or stacked stone (the material allotment amount is specified in the contract). Raised spas will contain a spillover into the pool.



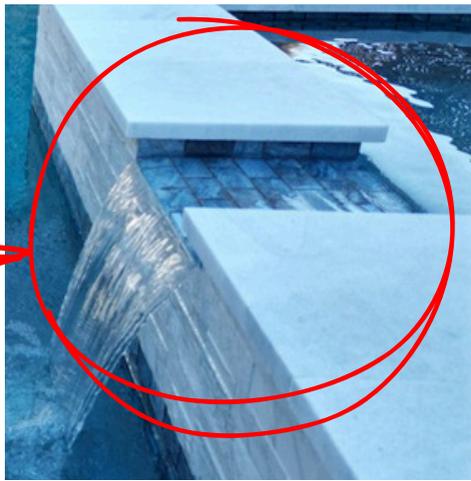
Cantilever concrete cap, with stone spillover, and specialty tile exterior



Belgard coping cap, with small tile spillover, and stacked stone exterior



Spillover (tiled) with coping cap



Coping (Belgard, Travertine, Flagstone) & Mastic

Coping refers to the material that can be installed on top of the pool bond beam. All pools with either have some type of coping or cantilever concrete (see next page). Coping has varying thicknesses, sizes, and costs. The types of coping we regularly recommend and install is Belgard (a molded concrete product), flagstone, and travertine. These can all be viewed in our Mobile Showroom upon request.

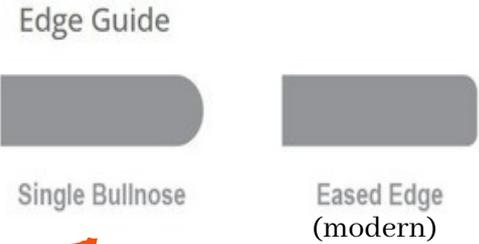
Belgard Coping is our most popular coping option. It is a molded, concrete product that is made into bricks, which come in varying sizes. We can install 4" x 12", 6" x 12", or 12" x 12". Check out our [Material Finish Options](#) and choose the Belgard Coping Options file.



Mastic is an expansive barrier that is installed between coping and concrete. It comes in white, tan, and gray, and is covered in a sand finish. The product must dry for several days before it can be walked on (including pets), and the sand can be blown away.



Travertine Coping is another very popular material. It is a natural stone product, which will have color and shading variations. The coping is honed (sanded/ground to create smoother finish). As a natural product, it may contain small cavities (pitting) which are not to be construed as a material defect, but a natural variation of the stone product. Travertine comes in a variety of colors, and sizes, which can be viewed in our Mobile Showroom. Most often the interior edge is finished in a bullnose or eased edge (modern) finish.



Flagstone is a natural rock coping that is made up of irregular shaped pieces. They are pieced together onsite to create a beautiful mosaic look. It has a natural stone edge on the interior of the pool. It has varying thicknesses, so it is important to have your material choice picked out before gunite is shot.



Plaster

Plaster refers to the cementitious finish product that is applied to the interior, underwater areas of the pool. It is sprayed in with a hose, and then hand-trialed by finishers. When the plaster installation is finished, our crew will place hose(s) into the pool to begin filling. It is the homeowner's responsibility to monitor the fill and stop the hoses when it reaches the tile line. The fill cannot be stopped for any reason until completed, or it will stain the plaster.

You will find a lot of education regarding plaster characteristics and care within the contract. You can review plaster colors available in the Matieral Options on our online [Resources](#)

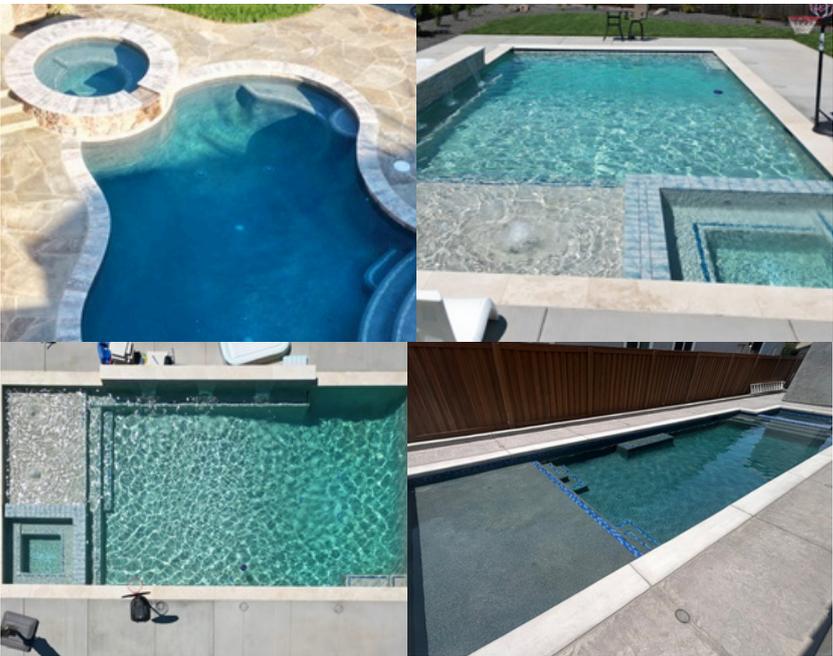
There are 3 main types of plaster we install:

Traditional Smooth Plaster: the standard level plaster that is a white base that may have dye added to it. It is the smoothest of all plaster finishes, and generally lasts around 10-15 years with the proper conditions. Smooth plaster is the most susceptible to **mottling**: a discoloration/streaking that is a reaction to how the dye interacts with chemicals and other external factors - it is not a construction defect of the plaster product.



Mini Pebble Plaster, sometimes referred to as "Pebble Tec", is plaster mixed with polished stone or aggregates. "Pebble Tec" is merely one of the brand names and not the plaster itself. Mini Pebble is not the pebble finish from the 80s and 90s that was really rough on your feet. Mini Pebble is much smoother than the older pebble finish. While it is more expensive than traditional smooth plaster, its lifespan is 15-20 years minimum with proper conditions, and more resistant to staining and discoloration. Mini Pebble also comes in a wide variety of colors with different plaster colors and colored stone. Application is a 2 day process, involving an acid wash the second day prior to filling.

Micro Pebble Plaster, sometimes called Micro Fusion, is the next upgrade above mini pebble. With all the benefits of mini pebble it is the closest in smoothness to the Traditional Smooth Plaster. Application is a 2 day process, involving an acid wash and polishing prior to filling.



Baja Shelf & Water Features

Baja Shelf otherwise known as “cabo shelf” “tanning ledge” “sun shelf” or “extended step” is the extra large step in the pool commonly used for young kids playing or pool lounge chairs. Options come with an umbrella sleeve in the middle of them for shade near the shallower end of the pool. Baja shelves range usually between 9” deep to 18” based on your preference. They are not required, and in new pool construction we do not charge extra for them so long as it is disclosed prior to excavation.



Bubblers are a common add on to add light and sound to the pool. We often install color changing LED bubblers, but can install water only bubblers for a more economical option.



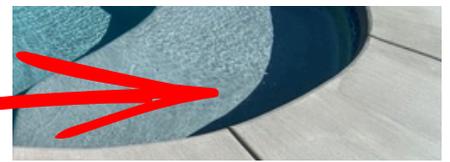
Deck Jets are fountains placed around the pool in the decking to shoot a small constant stream of water into the pool. They are height and directionally adjustable.

Laminars are like deck jets, but they have a concentrated light stream that allows it to refract and light up the entire stream.

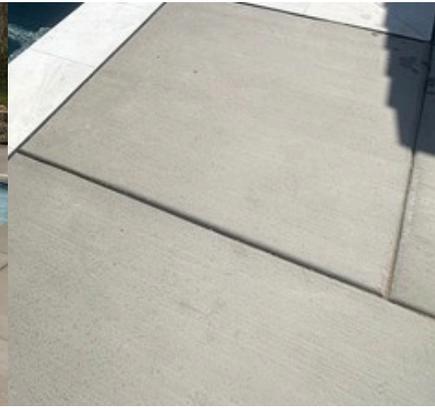


Concrete

Cantilever concrete is when the concrete deck is poured continuously and overhangs the edge of the pool bond beam instead of using coping. 



Broom finish concrete, also known as brushed concrete, involves dragging a broom with stiff bristles across the surface of wet concrete to create a textured finish. This method is widely used due to its effectiveness in providing a slip-resistant surface, which enhances safety, especially around pools.



Stamped Concrete involves pouring concrete and then embossing it with patterns or textures before it sets. This technique adds a visual dimension to the concrete, and can also minimize the appearance of aging and cracks due to the texture. Some customers choose to add integral (mixed in) color to the concrete and a decorative release powder to add further dimension and customization.



Stamped concrete has the option to be **sealed** to create a more vibrant color and preserve the coloring; however, sealing increases the slip factor. and is not always advisable around a pool.

Salt Stamped finish concrete is a decorative technique that involves embedding coarse rock salt crystals into freshly poured concrete before it sets. This process creates a textured surface with shallow indentations, enhancing both aesthetics and safety. The salt is washed away after the concrete hardens, resulting in a unique finish.

An optional **accent band** can be added around cantilever concrete applications, usually finished with room finish compared to the remainder of the decking. 