

# REEF TROPICAL CONSTRUCTION

## Pool Building Basics Guide for Homeowners

Create & Maintain a Beautiful Outdoor Entertainment Area



You are not alone in your ambitions to own a home with a beautiful pool. Yet, you can set yourself apart by retaining knowledge of what it actually takes to achieve this dream. This guide will educate you on what it takes to build a pool and the questions you should ask a builder. The more you can verbalize what you are looking for, the easier it will be for everyone involved in the building process. Furthermore, it is also important that you understand the process that takes place during the construction phase to eliminate unexpected surprises.

**What kind of pool do I want and what is my budget?**

We do not recommend a fiberglass or vinyl pool in South Florida due to quality, weather and draining issues. Therefore, your only option is an in ground concrete pool if you want to build it properly. On average, a basic in ground concrete pool normally ranges from \$25,000-\$40,000. Options are endless and if a basic pool is not what you are looking for, you can easily spend upwards of \$80,000. Some pools cost a total of \$200,000 if you are overly creative because it is a piece of art and the centerpiece of your outdoor entertainment area.

**\$35,000 – DiamondBrite**



**\$200,000 – Full Tile**

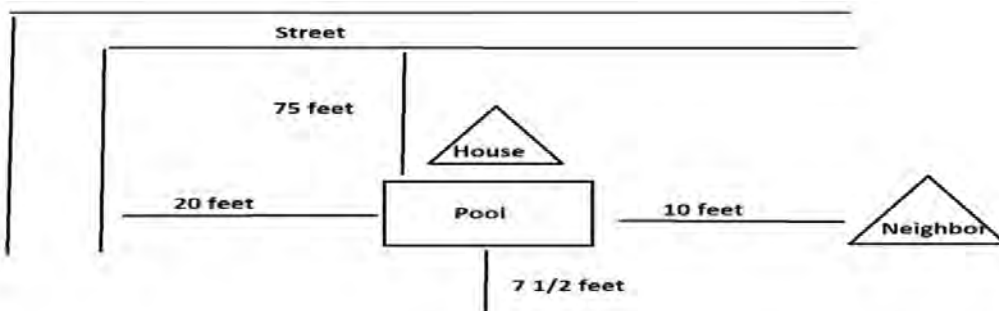


**\$70,000 - Infinity Edge with Spa**



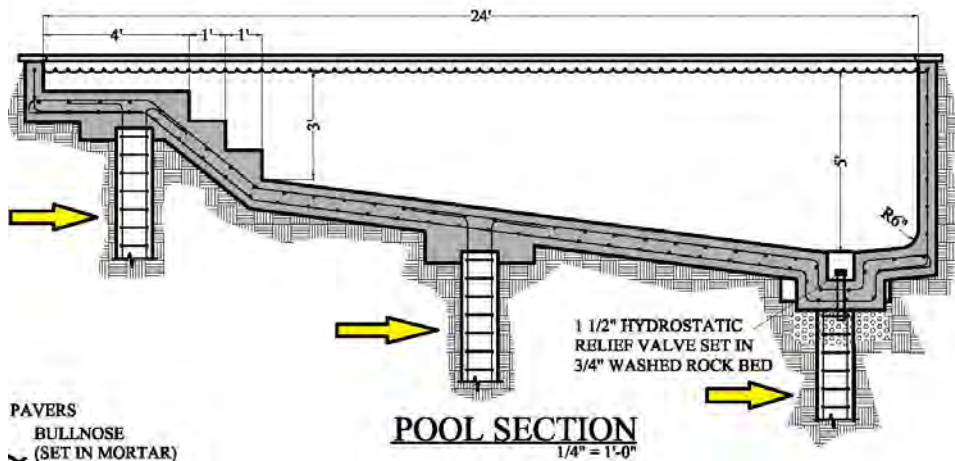
**What is the city or county set back requirement?**

This is important to learn early especially if you are looking to buy a house without a pool and plan on installing one. Consult a pool contractor, research these requirements online or call the county office. Counties, communities, associations and neighborhoods all vary. Do not settle for anyone that says, “I think” or “I heard” because every inch counts. Pool contractors should visit the yard and take measurements before they give you a price. You can always apply for a variance if it is marginal but these may take a long time to be approved if they are approved at all. As an example, on a full sized lot, these are typical requirements: 75 feet from the front street, 20 feet from the side street, 10 feet from the neighbor’s property line and 7 ½ from the rear of the property. They are different on a “zero-lot-line” yard. Example:



**Do I need pilings for my pool foundation?**

Coastal real estate has unique soil conditions requiring some concrete structures such as pools to need pilings in order to retain the integrity of the structure. A pool professional can determine if a pool needs pilings based on experience in a certain area, drilling or a soil test. Pilings are 10-16" diameter poles that are driven or twisted into the ground at specified locations around a pool. These pilings will compress the soil around the pool and cause more load bearing capacity. A soil test is the best way to determine with certainty and it costs roughly \$500 to perform. If the pool will need pilings, it will increase the cost of the pool anywhere from \$3,000 to \$5,000 depending on the size.



**What will be the size of the pool?**

The smallest we recommend for a pool is 12ft x 22ft (we have built smaller) pool but standard size is about 15 x 30. This all depends on how much space you have and how you will be using the pool. For instance, if you would want to swim laps in the pool or have children who love to swim, a larger pool would be preferred. If you want to entertain guests and need more patio space, a smaller pool would work better. The larger the pool, the more expensive it will be to build due to concrete, labor, materials, excavation, etc. Each foot is roughly \$900 more.

Approx. 10ft x 20ft with spa



Approx. 12ft x 32ft with spa



Approx. 18ft x 38ft Commercial



## What is the shape of the pool?

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This is where creativity comes into play. There are many pools in the Florida Keys that have a “three-circle” or “kidney shaped”. This all has to do with the location of the house and sometimes the architecture of the house. A square pool is simple and works well with thinner properties with limited space. Square pools are also better to swim laps if you want to exercise. The shape of the pool should not significantly affect the price unless water movement, wet edges, spillways or finishes need to be custom designed.

**Free Form**



**Circular or Kidney Shaped**



**Diamond Shaped**



## What will be the depth of the pool?

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The recommended depth of the pool (deep end) should not exceed 5ft to 5 ½ft. Unless you have another reason for a deep pool, there is no need for anything over 5 ½ feet because it is unusable (people can't stand). The deeper the pool, the more expensive it can get due to “dewatering” during the construction phase, if below the water line, along with extra concrete, steel and possibly labor.

## What features do you want?

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There are unlimited amounts of features you can add to make the pool more appealing. For instance, you can add a water feature to hear the constant flow of water or to enhance the visual effect of the pool (this can look interesting at night with proper lights). Here are some other features:

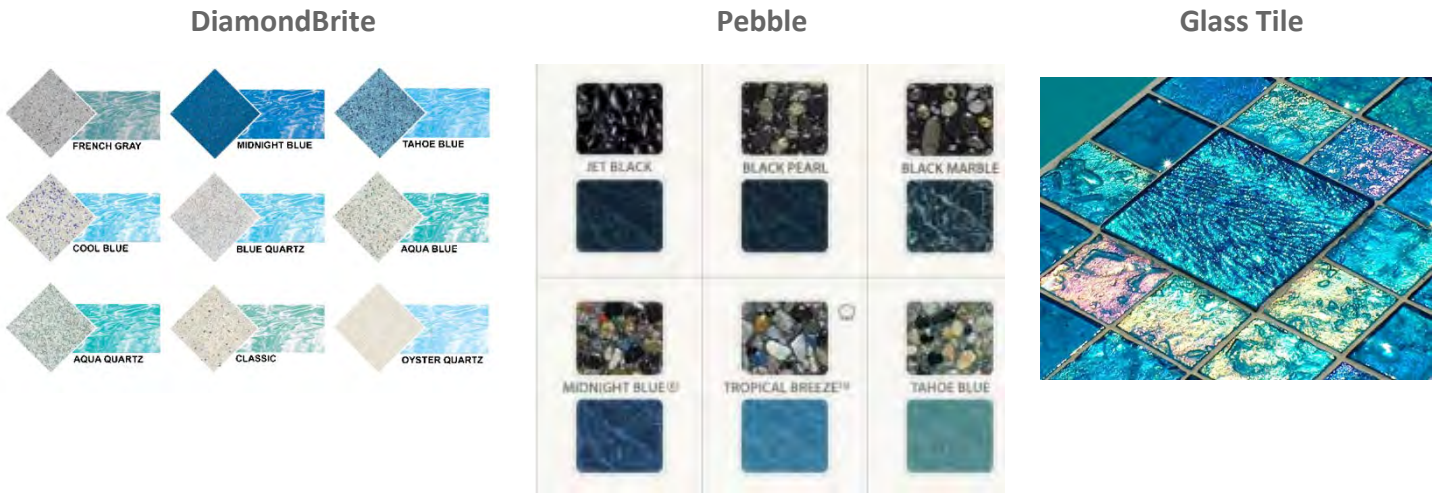
- Sun ledge w/ umbrella or swim outs
- Beach entry
- Rock structure
- Wet edge or an infinity edge
- Unique lighting – LED, SAM (add colors)
- Fire pot or fire pit with reflective value

## What finish or surface do you want?

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A finish can certainly add that extra beautification element to a pool. The standard finish is **DiamondBrite**, which can look excellent but will need to be re-finished after it fades or gets spotty. We typically refinish or acid wash a DiamondBrite pool after about four years but it can last up to 12 years. Another option is a **pebble finish**. This can add a great look to a lagoon style pool and shimmers in the sunlight. Lastly, but most

expensive is a **tile finish** which can look the most elegant depending on the tile selection. Typically, a full tile finish will cost roughly the same amount in tile and installation as the rest of the pool.



### What kind of pool equipment do I need?

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All pools need a filter and a pump. Besides that, you can choose to add a heater, a chiller, a chlorine generator, advanced control systems and unique lights. Cost for some of this equipment:

- Gas Heaters and Heat Pumps: \$2,500 – \$5,500
- Chlorine Generators: \$800 – \$1,600
- Control Systems: \$200 - \$1,200
- Lights: \$70 - \$600 per light

### How do I find a contractor?

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The best way to find a contractor would be through a referral by a friend, neighbor or family member. You can also look online for any local pool companies or call trade associations such as Florida Swimming Pool Association (FSPA). Make sure the contractor has adequate credentials, licenses, experience and insurance coverage. Lastly, it will give you confidence in building with a pool builder who has a maintenance division and will service the pool after construction is finished.

### What does the construction process entail?

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1. The Design Phase – most of the questions in this guide pertain to this phase
2. Permitting Phase – your pool contractor should provide engineered drawings to an expediter who uses the drawings to get approval from the city / county / community association – this process can take between one and thirty days depending on the location
3. Excavation & Form Phase – excavate the hole and form the pool with wood forms using the engineered drawings as a plan

4. Steel Phase - place the rebar according to the engineering
5. Plumbing Phase - place pipe for the water and the electrical to the pool, pressurize & inspect
6. Shot-crete or Guniting Phase – concrete is placed and shaped using high pressure air to the steel reinforcement
7. Curing Phase – about ten days of curing which is best when water is applied to the shell to slow down the cure making the shell stronger
8. Coping Phase - start installing the coping, waterline tile, and any water-features that might be included in your design
9. Equipment Set Phase - install all of the pool equipment including: pumps, filters, lighting, salt systems, electronics, and heaters
10. Finish & Fill Phase - apply DiamondBrite, pebble or tile finish - water is placed in the pool

### **Reef Tropical Construction**

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Reef Tropical Construction performs complete pool building along with renovations and resurfacing. We are the largest and most experienced pool construction company in all of Monroe County and now working in Dade and Broward County. We offer free proposals upon request along with designing, engineering and permitting services. We also service our pools after completion.

Our experience building pools goes back nearly 45 years. Since then we have helped hundreds of homeowners realize their dream of relaxing in their own private custom pool. We can help you revamp a tired pool or create a completely new centerpiece for your backyard. Whether it is a modern vanishing-edge, tropical lagoon or a Romanesque bath, all our pools are truly works of art.

Interested in our construction services or want more information? Send an email with the construction address and contact information to Claude Kershner IV at [claudio4@reeftropical.com](mailto:claudio4@reeftropical.com) or call the office at 305.367.2005 [www.reeftropical.com](http://www.reeftropical.com)