Ask Al

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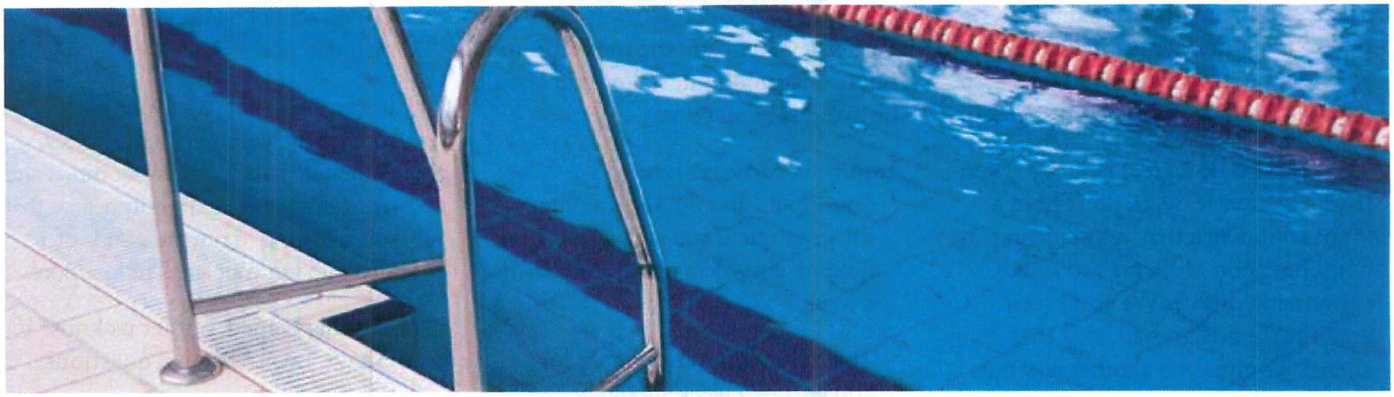

Welcome back to our "Ask the Expert" feature, designed to assist you with issues related to swimming pool water, mechanical equipment, space conditioning and code compliance. Ask a question, and we will try to answer to the best of our ability.

Q: We are looking at building a new swim school pool in a leased warehouse space, and wanted to review some of the basics, some do's and don'ts, and see if there are any new options for using above grade pools, etc.?

A: Besides a review of the basics and do's and don'ts, the options depend on the amount of space you have, your budget, and whether the landlord allows you to cut the concrete floor or not. Here goes.

Space Considerations:

Many DOH codes require a minimum 4-5' deck space all the way around the pool, and some successful swim schools prefer to have stairs (for parents and/or kids), and/or an 8-10' "staging" area on one side of the pool. So if you want a 20 x 40 pool (800 SF), then your deck area could easily be 30 x 53 or (1,590 SF) or larger. As you can see, space adds up quickly so plan carefully. This is also your "wet area" and is the main variable to size your dehumidification system, so the larger the wet area, the larger and more costly your system will be.

Skimmer Versus Gutter Pools:

Skimmer pools draw water though strategically-placed ports throughout the pool, while gutter pools draw water from the entire perimeter. For the water quality purist, the gutter pool gives you much better distribution of water (as well as chemicals and heat) and will probably help prevent some chloramines from forming (as there are fewer potential dead spots), but skimmer pools are cheaper to build. Many codes have a maximum size for skimmer pools. In Florida, it is 1,000 SF, but in other parts of the country it might be 1,800 SF. Some State Codes are pretty weak, and have no restrictions. In any event, you should have as many skimmer ports to provide a maximum of 50 GPM per skimmer, or (4) for a typical 20 x 40 pool.... but few builders will follow that guideline unless forced to.

In-Ground or Above Ground:

Simply put, you can either have the pool in the ground, or above the ground. The issue with above ground pools is that many State or Local Health Codes do not allow them to be built. Sometimes the issue is concerning the type of materials, piping, methods of construction, etc., that do not meet published codes. Other times, the issue is that these pools don't have the proper mechanical design elements: including adequate main drains, skimmers, return jets every "X" feet, etc.

Even if you are allowed to build an above ground pool, another issue is that there are few options for larger versions, and few options are available in sizes as large as the average 20 x 40 pool. Exceptions are discussed below.

How About Viewing:

Most swim schools take great pride in providing ample viewing area for parents and guests. But, above ground pools provide a challenge not only for viewing areas but for decks as well. There have been a few examples of how this can be successfully done, but they are very rare.

Can't Cut Concrete, There are Alternatives:

If your landlord absolutely won't allow you to cut the concrete, which is rare, you may be forced to provide one of the "new" alternatives, which is actually an older tried and true alternative.

If you went on the USSSA Facility Tours at Swim Otters in Denver, you were able to see an example of a modular pool that was sunk into the deck to appear like a normal in-ground pool. The difference is that this pool can be disassembled, removed, placed on truck and moved to a new location to be assembled again... either in an in-ground or above ground format. This type of pool is available in all sizes – up to Olympic dimension and above, so it provides a real solution. Sounds crazy? Actually this same brand of pool has been erected temporarily in many US and World Swimming

and Olympic Trial Championships everywhere from the Lucas Oil Center, 1996 Olympics in Atlanta, to beaches in California and overseas.

The cost is higher than a traditional pool, but it is quicker to build and gives you more alternatives down the road, so many are starting to look at this option.

This can also be a great strategy if you have a shorter lease, or don't have a lot of confidence that your existing neighborhood will stay attractive, convenient, or safe. We've all seen neighborhoods go bad, and this alternative gives you another way out.

Summary:

An in-ground skimmer pool is the least costly alternative but, as reviewed above, not necessarily the best. Given a special situation you may want to look at other alternatives as described.

While there should be a variety of capable pool builders for a smaller 800 SF or below pool, the list appears to dwindle quickly as the pool size increases, especially in some parts of the US.

Regardless, here are the most common pool construction mistakes that should be avoided at all costs:

Improper turnover rate

- You should aim for 120-minute turnover rate if you are planning on holding anywhere near 1,000 lessons a week.
- The minimum turnover rate for 500 lessons a week should be 180-240 minutes.
- Most "residential" builders or engineers don't follow these guidelines.
- In-ground pipe sizes are critical, and impossible or costly to fix later.

Improper or residential-grade equipment

- Indoor pools are very tough to operate and require good 24/7 control of chemistry, flow, heat, etc.
- UV on school pools is a must to maintain non-irritating water quality.
- It seems best not to let your pool company make equipment choices, as they are in it for the short run… and many times they don't really believe that you are going to run thousands of kids through your small indoor pool.

Hope this helped, but let us know if you have any additional questions.

Best Regards,

Alvaro G. Mendoza

Please feel free to forward your questions & comments through the USSSA office, or directly to me via email at **amendoza@ceswaterquality.com**