Selecting a Swimming Pool Lift

Swimming pools can be a fountain of youth for people with disabilities. Water based activities provide a myriad of benefits for anyone, but are especially important for anyone living with mobility challenges.

Pool lifts are the most flexible and efficient method for enabling swimming pool access. When selecting a lift, there are many factors to consider in order to ensure that the lift you purchase fits your needs. These factors include; the type of pool, the type of programming, the design of the pool, and, of course, your available budget.

Pool Lift Maintenance
Before diving into the different types of pool lifts, it is worth noting that all types of pool lifts require maintenance under ADA's "Maintenance of Accessible Features" provision. This provision states that "a public accomodation shall maintain in operable working condition those features of facilities and equipment that are required to be readily acccessible to and useable by persons with disabilities".

Lift Types

Pool lifts can be broken down into three categories: electronic (battery powered) lifts, water powered lifts and manual Lifts.

Electronic swimming pool lifts, brought proven hospital patient lifting technology to the industry. These battery powered units helped create a new category of lifts that offered increased flexibility and enhanced mobility.

The battery, in these types of lifts, powers an electronic actuator which drives the lifting operation. This powerful actuator provides a high degree of lifting capacity and flexibility which in turn allows the lift to work reliably on virtually any type of swimming pool.

Interested in seeing which type of lift will work best in your facility? Then visit **www.liftconfigurator.com**

Electronic Lifts

Electronic lifts come in three styles: portable, removable and permanent (fixed).

Portable Lifts

Portable lifts are perfect for busy, multi-use commercial facilities. These lifts require no physical installation or anchoring to the pool deck since stability is provided by a counter weight system. They are simply moved into place for use, and stored when not in use. They can be used at virtually any point along the pool deck* and most meet established ADA guidelines.

Portable Pool Lift

Lift Location
Pool lifts should be placed along the pools edge in a location that allows for a minimum submerged depth of 18" below the stationary water line and where the waters total depth does not exceed 48".

Removable Lifts

Removable lifts are anchored into the deck and can be removed from their anchoring system and stored away when not in use. Normally, there is some form of transport mechanism available to facilitate

the lift's relocation. Removable lifts have the same features as portable lifts, however they can only be used from a fixed deck location. Because they are mounted into the deck, these types of lifts have a greater weight lifting capacity than their portable counterparts. In addition, removable lifts are generally less expensive than portable lifts however they do carry the added cost of installation.

Removable Pool Lift

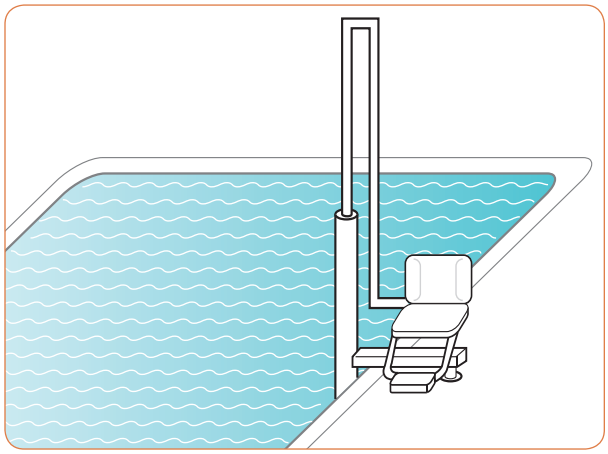
Permanent Lifts

Permanent lifts are fixed to the deck and typically have a higher lifting capacity than portable lifts. However, because they are not removable they have the potential to be viewed as a play structure by young swimmers. In light of this, it is recommended that facilities regularly check the unit to ensure it has not become an attractive nuisance and install signage that discourages misuse.

Permanent Pool Lift

Water Powered Lifts

Water powered lifts operate on a fairly simple hydraulic concept. Water fills a sealed cylinder, which creates pressure and causes the lift to rise. When the cylinder is emptied, the pressure is released and the lift is lowered. The inside of the cylinder is machined in so that the raising and lowering action of the seat is channeled to rotate around the cylinder.



Water Powered Lifts

Water powered lifts are connected to a facility's water supply through either a hose or a feed pipe. The valve that controls the lift either fills or drains the cylinder. This results in a seat position that is either up or down, there is no intermediate stop. The operation of the lift and its lifting capacity are dependent on the local water supply. If the water pressure is too low, the lifting capacity is compromised. In areas of regular low water pressure, booster pumps can be used to maintain operational pressure.

Water powered lifts are generally permanent installations. The cylinder runs down the pool wall, encroaching into the useable area of the pool, and extends upwards high enough to allow the seat to rest approximately 16 inches above the deck. Due to the cylinder having to be against the pool wall, water powered lifts can only be effectively used with simple gutter designs. Many commercial pools, which feature rim flow and roll out gutters, curbs, and other complex designs, are not suitable for water powered lifts.

Water powered lifts are capable of being operated independently and meet ADA requirements when used on a compatible pool.

Manual Lifts

Manual lifts are usually powered by a hydraulic cylinder or a hand crank that operates a turning gear. Manual lifts often times provide a sling for transferring the user and the rotational operation is provided by the attendant. These lifts are mounted to the pool deck via an anchor and are usually considered permanent installations. Manual lifts require someone to assist the user, and, for this reason, cannot be used in any public facility that comes under the jurisdiction of the Americans with Disabilities Act (ADA). Manual lifts may work well in a residential setting and are an inexpensive alternative when compared to electronic and water powered lifts.

The following chart describes various types of swimming pool applications and makes recommendations regarding the most appropriate lift for the application.

Installation Type	Discussion
Municipal or Community Center Pool	In a busy, multi-use environment, either a portable or removable lift will work, although our recommendation would be portable. Permanent lifts can become an attractive nuisance as kids look to climb and potentially may become an obstruction during swim competitions.
School or University Pool	Since these pools are used by fewer young children, the chance of the lift becoming an attractive nuisance is diminished. In light of this, either a portable or removable lift would be acceptable. Fundamentally, the choice will come down to what best supports the facility's programming.
Therapy Pool	Pools located in health care facilities are normally application specific (e.g. Therapy). As space is generally an issue in these types of applications, a removable lift would be the first choice. Additionally, these lifts can provide greater lifting capacity which may better serve the facility's interests.
Hotel or Resort Pool	Both portable and removable lifts are acceptable for this type of application but portable would be the recommended standard. Besides the possible aforementioned attractive nuisance safety issues, many of these facilities invest a small fortune in their swimming pools. So having a lift that is highly mobile, can be used where it's needed and then stored away to ensure the architectural intent of the environment are key considerations.
Residential Pool	All types of pool lifts are appropriate for this type of installation. Since ADA rules do not apply, a manual lift would work as long as there is always someone available to assist the swimmer. For more independence, either water powered or electronic lifts could also be used. Since most residential pools have simple gutter designs, almost any lift would be compatible. If the residence has a pool and a spa, either a portable or removable lift would be more desirable. Depending on the layout of the pool area, a single deck mounted lift may be able to service both the spa and the pool.