SwimEx

Architect Guidelines

1500 T

Architect Guidelines for SwimEx Installation
Model 1500T

General Layout

- ❑ Call SwimEx at 800-877-7946 to receive AutoCad Drawings of the SwimEx Model that you will be installing. These drawings can be placed directly into your pool room layout and site drawings.

- ❑ SwimEx pools are available in two versions: For existing construction, the pool comes standard in four pieces. For new construction we recommend that the option for the pool assembly at the factory be purchased. In this case, the pool arrives as one piece and is placed into the facility early in construction. *** See Blueprint Section for sizes of pieces and whole pool.*

- ❑ Check local jurisdiction for pool health code permit requirements and pool room requirements. Jurisdictions often require signage, lavatory facilities, shower rooms, drainage, hose bibs, and many other items to be indicated on site plans. State Pool Codes are available from the NSPI (703-838-0083)

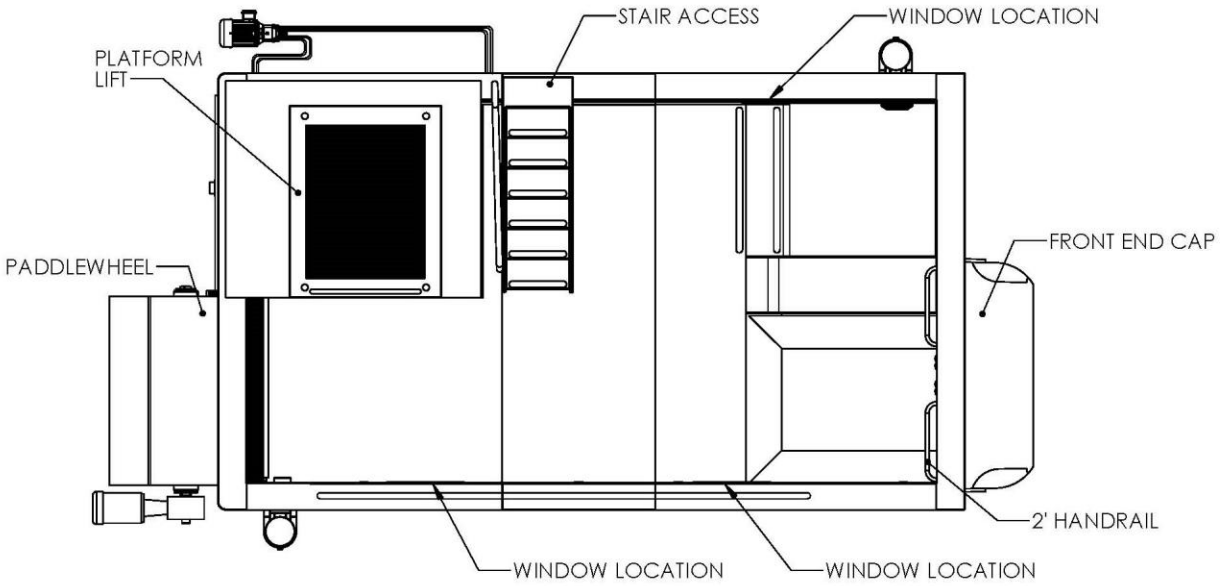
- ❑ Provide a flat level surface for pool to sit on with a load bearing capacity of 525 lbs./sq.ft. (2563 kg/sq.m) ***Footprint of pool must be level, remainder of pit or area can be sloped to drain water*.

- ❑ Below ground installation requires a minimum pit of 18' (5.48m) wide by 27' (8.22m) long and 84" (2.13m) deep. The pit side walls provide no structure for the pool they are only retaining walls for keeping back fill from falling in against the side of the pool.

- ❑ Above ground installation requires a minimum ceiling height of 14' (4.27m) with no obstructions above the pool (Lights, vents, ducts, beams) ** Check local building codes for minimum ceiling height and required decking area.

- ❑ Every SwimEx 1500T comes standard with an entrance stair, platform lift and 3 observation windows. This pool model cannot be mirrored, only rotated in that the paddlewheel and end cap are on one side. Based on the orientation of the pool within the room, these elements need to be placed in the optimum locations.

- ❑ Allow access to equipment and pool via access hatch for inground, or access panels for above ground installations.



Delivery Requirements:

- ❑ Clear passage for 18-wheel tractor trailer truck to deliver and forklift on site to off load pool from truck. ** Please review Shipping Section of Manual.

- ❑ Clear passage from entry to the final location of pool. For the Model 1500T; door openings must be 12’ (3.66m) wide by 7’6” (2.29 m) tall with a clear area on both sides of the door
  ** Please review Site Preparation Section of Manual.

- ❑ SwimEx units are available assembled at the factory. The pool will then arrive in one piece and will be craned into position. Planning must be done so that this can occur early in the construction process to have complete access to the area. Typically, this is the most cost-effective way for new construction installations.

- ❑ A clear, unobstructed working area in and around the pit must be provided for movement of the parts into the pit and assembly of the pool. No decking shall be constructed until the pool has been filled and water tested.

- ❑ **After the pool has been filled and water tested**, then decking can be constructed around the SwimEx. This is not part of the SwimEx assembly, please refer to Deck Construction Section of the Manual for instructions.

Electrical Requirements:

- ❑ Standard pool requires 220/240 Volt, single phase, 120 Amps for standard pool equipment (minus the heater) and 480V, 3 phase 30 Amp for the heater. Other voltage heaters are available, please contact SwimEx for changes to electrical.
- ❑ GFCI Breakers to be provided by electrician
- ❑ Paddlewheel Controller: 50 Amp 208/240V Single Phase (38 FLA)
- ❑ Zero Entry Lift Hydraulic Pump Motor: 20 Amp 230V Single Phase (11.5 FLA)
- ❑ Heater: 30 Amp 480V Three Phase (OTHER VOLTAGES AVAILABLE)
- ❑ Pumps: 20 Amp 230V Single Phase
- ❑ Must provide sub panel with appropriate GFCI breakers for equipment
  ***Please refer to Electrical Schematic in Electrical section of Manual
- ❑ Variable speed controller for paddlewheel takes 208-240Volt single phase in and converts to 3 phase to drive the gearmotor.
- ❑ Electrician, in accordance with local and national electric codes, must make all connections between equipment and circuit breakers.
- ❑ Connections to be made dealing with the SwimEx are from the breaker panel to the variable speed controller, controller to gearmotor, breaker panel to heater, and breaker panel to pumps, and breaker panel to the lift controls. These must be done on site by an electrician provided by owner.
- ❑ Conduit needed from Variable speed Controller to poolroom near front of pool for EDGE Tablet WiFi Antenna. Conduit must be able to let a 7/8" (2.22cm) diameter connector pass through.
- ❑ Conduit needed from hydraulic motor for the lift to lift controls that must be wall mounted within line of site of the lift controls that are poolside.

- ❑ **Other Equipment Considerations:**
  - ❑ **Optional SwimEx equipment:**
    ***Please refer to Other Equipment Assemblies Section of the Manual**
    - ❑ Underwater Lights, 110Volt plug in unit on right or left side of pool. Provide switch to turn off and on in convenient location.
    - ❑ Ozonator, 110V plug in unit. Should be connected through same line as Pump to ensure that it shuts off when pump is turned off.
    - ❑ Jet Option: Jet Pump, 230Volt controlled with ES Combo air switch controller (provided with option). Electrician must wire to controller and from controller to air blower
    - ❑ MOTORIZED TREADMILL OPTION: 220V single phase input wired from variable speed drive to motor on pool. Additional 10 Amps required.
- ❑ **Non SwimEx Equipment provided by owner**
  - ❑ Sump Pump: Plumber will locate a sump pump within pit area, connection means must be provided for
  - ❑ Lights under deck or in pit area: Pit area must have lights for future maintenance.
  - ❑ Ventilation and exhaust requirements.

Mechanical Requirements:

**Please read and familiarize yourself with the Plumbing section of the Manual

- ❑ **Plumbing:**
  - ❑ Pool is pre-plumbed with all eyeball and suction fittings. On site plumber (by owner) must make connections between pool and provided pool equipment. All connections are PVC and will vary dependent on location. Typical connections are schedule 80 PVC and range from 1" (2.54cm) to 3" (7.62cm) in diameter.

- ❑ **Water fill:**
  - ❑ ¾" (1.9cm) Cold Water fill line for pool (tempered water can be provided but is not required). The fill line must be protected by backflow preventers as required by local codes.
  - ❑ Valve for water fill should be located within poolroom so that operator can see water level as pool is being filled.

- ❑ **Drain:**
  - ❑ The SwimEx comes with a 1 ½" (3.81cm) drain from the front of the pool with a shutoff valve. A floor drain or sump pump and pit must be provided for semi annual draining of the pool. Drain from pool is elevated approximately 3 ½" (8.89cm) from floor.
  - ❑ Drain will have approximate flow of 80 GPM (302.8 LPM) when pool is full.

- ❑ **Hose Bibs:**
  - ❑ A hose bib is recommended (and required within some jurisdictions) within the SwimEx pool area for semi annual cleaning of the pool interior.
  - ❑ If an aqua-powered lift is being a used, appropriation for water supply and drain must be made. Typical pool lifts need a ¾" line with 55 psi (3.86 kg/sq.cm)

- ❑ **Dehumidification:**
  - ❑ The SwimEx Model 1500T will have a 160 Sq.ft. (14.86 sq.m) of open water area. We recommend that the pool room temperature be kept within +/- 5 degrees of the water temperature. Typical water temperature will be 85-90F (29-32C) degrees. If the air and water temperature are kept this close we estimate the loss to be approximately 6 to 8 lbs (2.72 to 3.63kg)/ hour.

Standard Equipment

The following is a list of the standard pool equipment supplied with the SwimEx Model 1500T

Pumps: (2) provided

Pentair Pool Products

Model: Intelliflo VSF Variable speed Pump
3 HP filtration Pump
Up to 135GPM (511 LPM) @ 60TDH
Electrical Requirements:
230V single phase
20 Amp GFCI breaker
Standard SwimEx 1500T
8300 Gallons (31,418 L) turnover 30.7 minutes.
NSF LISTED

Hydraulic Pump: (1) Provided

Way Marine

No Profile Platform Lift Pump
2 HP Pump 230 V AC single phase
20 Amp Breaker: FLA Amps at 230VAC: 11.5A.

Filters: (2) Provided

Pentair Pool Products

Model: Clean & Clear Plus CCP420
420 Square Feet (39 sq.m) of filtration Area
Design Flow Rate of .375 G/sq.ft. (1.41L/.09 sq.m) for a flow of up to 157 GPM (594 LPM)
Connections 2" (5.08cm) PVC Glue Unions
Dimensions: 43" (109cm) T x 21.5" (54.6cm) dia
Removal of cover req. 62" (157.48cm) Height
NSF LISTED

Heater: (1) Provided

Coates Heater Company

Model 34818CE 18 KW Electric Heater
Dimensions 18 ¼" (46.35cm) L x 10 1/8" (25.71cm) W x 11 ½" (29.21cm) H
Electrical Requirements:
480V Three Phase
30 Amp GFIC Breaker feed