



SWIMEX
ARCHITECTURAL GUIDELINES

One-piece Residential

ARCHITECT INSTALLATION GUIDELINES FOR RESIDENTIAL INSTALLATIONS ONE PIECE UNITS

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.

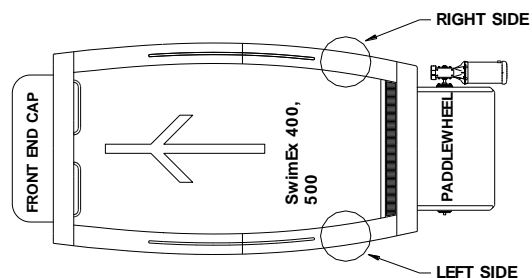
- ❑ SwimEx pools are available in different versions to accommodate new or existing construction situations.
 - ❑ One piece Models: Model 400OS and 500OS come standard in one piece. (No seams or additional assembly of pool sections are required)

- ❖ Provide a flat level surface for pool to sit on with a load-bearing capacity of 425 lbs./sq.ft.(2077 kg/sq.m) ***Footprint of pool must be level, remainder of pit or area can be sloped to drain water. (One Piece Unit Standard holds 2,600 Gallons)*

- ❑ Below ground installation requires a minimum pit of 12'(3657mm)wide by 20'(6096mm) long and 58"(1473mm) deep for 400OS and 500OS models. The pit side walls provide no structure for the pool; they are only retaining walls. Please note special pit drawings if ordering a Model 500OS with a deep well.

- ❑ Above ground installation requires a minimum ceiling height of 10'(3048mm) with no obstructions above the pool (Lights, vents, ducts, beams) ***Check local building codes for minimum ceiling height and required decking area.*

- ❑ Every SwimEx comes standard with an entrance ladder. Based on the orientation of the pool within the room, the ladder needs to be placed in the optimum location. Please familiarize yourself with the SwimEx orientation, and make sure that the order specifies whether the ladder should be on the right or left side. The ladder can be placed on either side of the unit for no charge, so long as the order indicates the location. (The entrance ladder is formed in the molding process, thus we must know the desired location at the time the order is placed.)



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- Allow access to equipment and pool via access hatch for in ground, or access panels for above-ground installations. A ladder should be provided to access the pump, filter and heater located within the pit.

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***. If site is not accessible by tractor trailer, this must be specified for special freight quotes.
- The pool will 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. (Crane provided by owner)
- A clear, unobstructed work 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.**
- Once the pool has been filled and water tested, the decking will need to 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, 115 Amps
- GFCI Breakers for filtration and options to be provided by electrician, SwimEx Control Box includes GFCI for Paddlewheel control.
- Paddlewheel Controller:
 - 5 & 7.5Hp Pools 70 Amp 208/240V Single Phase (54 FLA)
- Heater : 30 Amp 240V Single Phase
- Pump: 15 Amp 120V Single Phase
 - ** Pump and Heater can be put on a timer to run 8 hrs per day (By owner)**
- Must provide sub panel with appropriate GFCI breakers for equipment
*Please refer to **Electrical Schematic in Electrical Section of the Manual***
- Variable speed controller takes 220/240Volt 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 pump. These must be done on site by an electrician contracted by owner.
- Conduit needed from Variable Speed Controller to poolroom near front of pool for EDGE Touch Screen. Conduit must be able to let a 7/8" (22mm) diameter connector pass through. The location of the EDGE Touch Screen must be 5' (1524mm) away from the pool and should be determined by the end user of the pool.



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- Underwater Lights, 110Volt plug in unit on right or left side of pool. Provide switch to turn off and on in convenient location for owner
- Ozonator, 110V plug in unit. Should be connected through same line as Pump to ensure that it shuts off when pump is turned off.
- Other Equipment Considerations:**
 - Optional SwimEx equipment:**

*Please refer to **Other Equipment Assemblies Section of the Manual***
 - Jet Option :
 - Jet Pump 120/240V 1 HP pump controlled through ES Combo Switch
- 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.
 - Solar heat and other heat means can be tied into the filtration loop via a bypass placed after the filter and prior to the standard electric heater.

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 (contracted by owner) must make connections between pool and provided pool equipment. All connections are PVC and will vary depending on location. Typical connections are schedule 40 PVC and range from 1 ½" to 2" in diameter.(Metric to imperial adaptor will be needed)
- Water fill:**
 - ¾" 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 2" 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"(88.9mm) from floor.
 - Drain will have approximate flow of 80 GPM (5.05 l/min) when pool is full.



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- **HVAC:**
 - SwimEx recommends the use of a small dehumidifier within the pit area to keep moisture out, this area is generally below ground and occasionally gets wet due to splashing.
 - The room which the SwimEx pool is placed should have a minimum of an exhaust fan, if it is conditioned, we recommend that there be no air intake to entire home system. Cross contamination of air is possible.
 - Ventilation and exhaust from pool room. Small water area exposed to air eliminates the need for large dehumidification systems. Typical water loss due to evaporation is in the range of 4-lbs/ hour for a standard SwimEx pool.

Standard Pool Equipment

The following is the standard equipment for the Model 400OS, 500OS and 500S

Pump/Filter combo

Pentair Pool Products

Model: Clean & Clear w/ Optiflo Pump

1 Hp Pump with 75 sq.ft. Cartridge filter

Dimensions 26"(660.4mm) x 24"(609.6mm) x 26"(660.4mm)
high

Electrical Requirments:

Connections 1 1/2" PVC Glue Unions

120V single phase

15 Amp GFCI breaker (FLA 12 Amps)



Removal of cover req. 39" (990.6mm) Height

Heater

Coates Model: 12406ST 5.5 Kw Electric Spa Heater

30Amps @240V. (FLA 23 Amps)

Dimensions 17 1/2"(444.5mm) x 4"(101.6mm) x 14 1/2" (368.3mm)



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