



SWIMEX

**ARCHITECTURAL
GUIDELINES**

FOUR-PIECE RESIDENTIAL

Architect Installation Guidelines for Four-Piece Residential Installations

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.

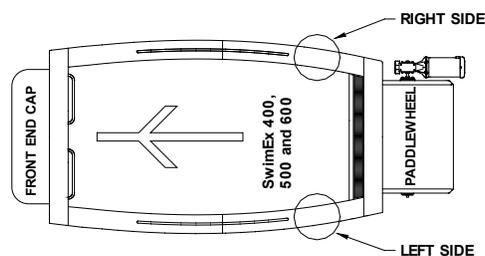
- ❑ SwimEx pools are available in different versions to accommodate new or existing construction situations.
 - ❑ Four Piece Models: Model 500S, 480S, 600S and 800S are standard in four pieces.
Optional assembly at the factory is available.
Assembled pools are delivered on a flat-bed carrier; sectional pools on common carrier.
** On-site assembly (by owner) typically requires 4 men for two days.

- ❑ Provide a flat & level surface for pool to sit on with a load-bearing capacity of: 425 lbs/sq ft (2074.31 kg/m²) for 500S, 460 lbs/sq ft (2245 kg/m²) for 480S & 600S, 789 lb/sq ft (3850.79 kg/m²) for 800S. **Footprint of pool must be level, while the remainder of pit or area can be sloped to drain water. 500S - 2,600 Gallons (9841 l); 480S&600S - 3,200 Gallons (12,112 l); 800S - 4,900 Gallons (18,546 l)

- ❑ Below-ground installation requires a minimum pit of 12' wide (3.66m) by 20' long (6.1m) and 68" deep (1.78m) for models 480S & 600S. *Model 800S needs 92.5" (2.33m) and Model 500S needs 58" (1.47m). The pit side walls provide no structure for the pool; they are only retaining walls.

- ❑ Above-ground installation requires a minimum ceiling height of 10' ((3.04m) 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.)



- 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.
- Clear passage from entry to the final location of pool. For the Model 480S and 600S, door openings must be 48" (1.21m) wide by 84" (2.13m) tall with a clear area on both sides of the door. For doors leading to corridors, the door and corridor must each be 70" (1.77m) wide by 84" (2.13m) tall. **** Please review Site Preparation Section of Manual.** If you have the Model 800S, a minimum opening of 96" (2.43m) x 96" (2.43m) and a frame width of no more than 3' (91.4cm) with no obstructions on either side (i.e. corridors, walls, etc.), you should have no problem bringing in any of the pieces.
- SwimEx units are available assembled at the factory. In these cases, 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 when complete access to the area is available. Typically, this is the most cost-effective way for new construction installations. (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 for pool assembly. ****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. (500S, 2,600 Gallons: 480S&600S, 3,200 Gallons: 800S, 4,900 Gallons)

ELECTRICAL REQUIREMENTS:

- Standard pool requires 220/240 Volt, single phase, 105 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: 20 Amp 120V Single Phase (800S 20 Amp 240 V)
 - ** 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 Manual**

- Variable speed controller takes 220/240Volt single phase in and converts it to 3 phase to drive the gearmotor.
- An 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 the Variable speed controller to the poolroom (near front of pool) for the EDGE Touch Screen Monitor. Conduit must be able to let a 7/8" (2.22cm) diameter connector pass through. The location of the EDGE must be 5' (1.52m) away from the pool and should be determined by the end user of the pool.
- 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**

 - Underwater Lights, 110Volt plug-in unit on right or left side of pool. Provide an on-off switch, in a convenient location for owner.
 - Jet Option :
 - Electrician wires 110Volt to controller and makes 3 wire connection to jet pump. (Pump and ES Combo air switch control provided.)
- 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 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 2" (5.08cm) drain with a shutoff valve, located at the front of the pool. A floor drain, or sump pump and pit, must be provided for semi-annual draining of the pool. The drain is elevated approximately 3 1/2" (8.89cm) from the floor.
 - Drain will have approximate flow of 80 GPM (302 l) when pool is full.
- 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. (1.81kg)/ hour for a standard SwimEx pool.

STANDARD POOL EQUIPMENT

The following is a list of the standard pool equipment supplied with SwimEx Models
Heater:

Coates Heater Company

Model: 12406T 5.5 KW Electric Heater (800S 11 KW Electric Heater)

Dimensions 17 1/2" (44.45cm) L x 4" (10.16cm) W x 14 1/2" (36.83cm) H

Electrical Requirements:

240V Single Phase

30 Amp GFCI Breaker feed (FLA 23 AMPS) 800S – 60 Amp GFCI Breaker Feed (FLA 46)

Pump/Filter :

Pentair Pool Products

Model: Clean & Clear w/ Superflo Pump (800S Intelliflo Pump and Clean & Clear 320 filter)

1/2 Hp Pump with 75 sq.ft. (2.12 sq. m.) cartridge filter (800S 3 HP Pump with 320 sq. ft. (29.72 sq. m.) cartridge filter)

Electrical Requirements:

Connections 1 1/2" (3.81 cm) PVC

Glue Unions

110V single phase

15 Amp GFCI breaker (FLA 8.8) (800S 20 Amp GFCI breaker (FLA 16))

Removal of cover req. 39" (99 cm) Height (800S 320 sq ft filter requires 62" clearance)