



SWIMEX

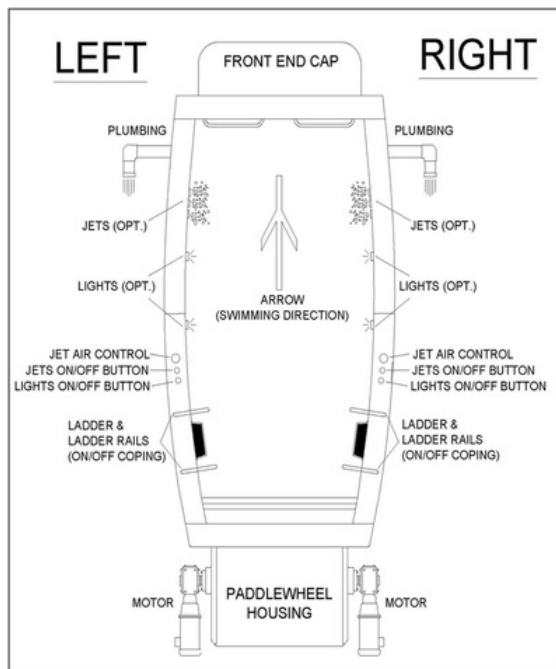
ARCHITECTURAL GUIDELINES

Four-Piece Residential
480S - 800S

General Layout

Note: Decking is NOT included with any SwimEx pools
Drawings are for conceptual use only
Do not use as construction drawings

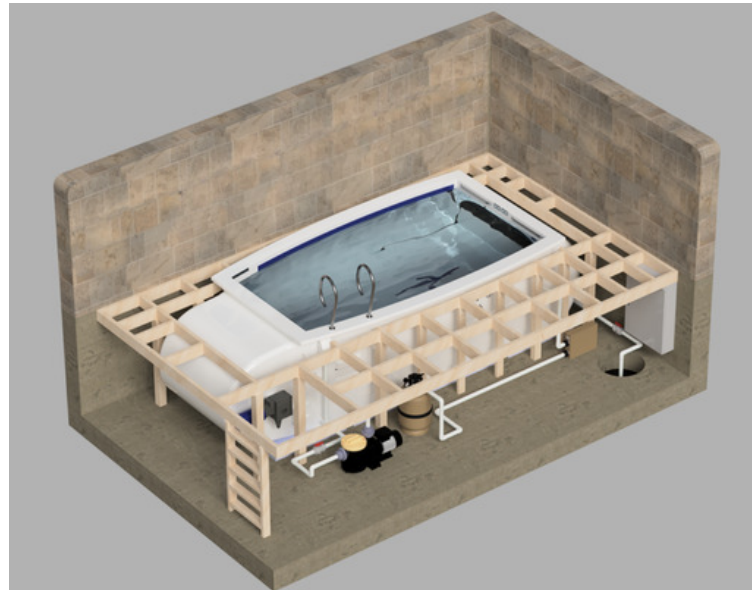
1. Call SwimEx at 800-877-7946 to receive AutoCad® Drawings and or Revit Files of the SwimEx Model that you will be installing. These drawings can be placed directly into your pool room layout and site drawings.
2. SwimEx pools are available in different versions to accommodate new or existing construction situations.
 - 2.a Four Piece Models: Model 480S, 500S, and 600S and 800S come standard in four pieces. *Optional assembly at 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.
3. Provide a flat & level concrete 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 lbs./sq ft (3850.79 kg/m²) for 800S. **Footprint of pool must be level within ¼", 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)
4. Below-ground installation requires a minimum pit of 20' long (6.1m) 12'wide (3.66m) by and 58.5" deep (1.49m) for model 500S . *Model 480S and 600S needs 68.5" deep (1.74m) and Model 800S needs 92.5" (2.35). The pit side walls provide no structure for the pool; they are only retaining walls. (+/- ½" or 13mm for all dimensions).
5. 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.
6. 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. The ladder, motor and plumbing connections can be placed on either side of the unit for no charge, so long as the order indicates the location. (These items are formed in the molding process; thus we must know the desired location at the time the order is placed.)



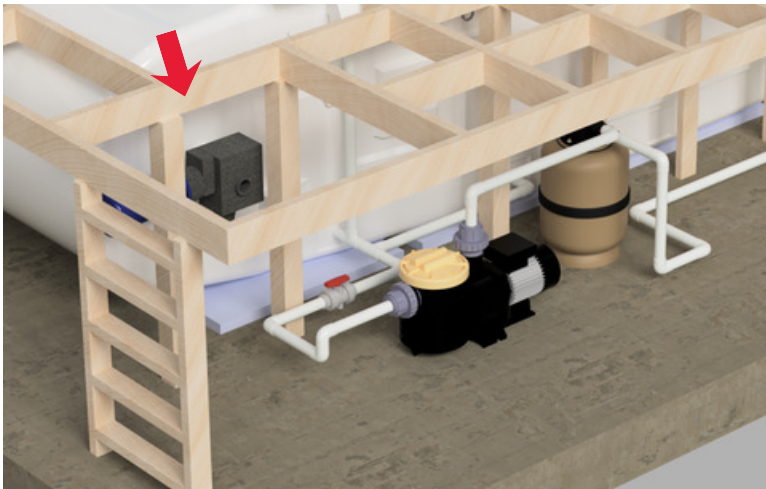
7. Allow access to equipment and pool via a minimum 3' x 3' access hatch for in-ground, or access panels for above-ground installations. A ladder should be provided to access the pump, filter and heater located within the pit.



Concrete slab with retaining walls. See #3 above



Room Dim. 20' x 12' x 58.5" See #4 above



Hatch opening in decking to access pit. See #7 above



Hatch opening in finished decking to access pit.
See #7 above

Electrical Requirements:

Must provide sub-panel with appropriate GFCI breakers for equipment.

Standard pool configuration requires 220/240 Volt, single phase

105 Amps GFCI Breakers for Paddlewheel Econodrive controller, Heater, and Pump

Paddlewheel Econodrive Controller: 50 Amp, 208-240V Single Phase (38 FLA) for either the 5HP or 7.5HP Paddlewheel Gearmotor. I converts to 3 phase to drive the gearmotor.

Heaters: 480S - 600S : 30 Amp, 240V Single Phase (50 Amp heater for 208V available upon order)

800 S : 60 amp, 240V, Single Phase (50 Amp heater for 208V available upon order)

Pumps: 480S - 600S : 20 Amp/15 Amp, 115V/208-240V Single Phase (FLA 13.6/8.6-7.1 Amps)

800S : 20 Amp, 115V/208-240V Single Phase (FLA 13.9/11.1-10.1 Amps)

** Pump and Heater can be put on a timer to run 8 hrs. per day (By owner)

An onsite electrician, contracted by owner, 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 Pool are from the breaker panel to the variable speed controller then the controller to the gearmotor, breaker panel to heater, and breaker panel to pump.

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 40/80 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" (50mm) 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. A small sump pump (not supplied) may be used to remove the remaining water in the pool. Drain will have approximate flow of 80 GPM (302 l/min) when pool is full. If sump can't handle that flow rate, the shut-off can be throttled back.



480S - 600S Standard Pool Equipment:

Pump:

Pentair Pool Products
Model: Superflo VST Pump
1.5 HP Variable Speed Filtration Pump
85GPM @ 50TDH
Electrical Requirements:
115V/208-240V single phase
20 Amp/15 Amp GFCI breaker (FLA 13.6/8.6-7.1 Amps)

Filter:

Pentair Pool Products
Model: CC100 100 Square Feet of filtration Area
Connections 2" PVC Glue Unions
Dimensions: 33" T x 15.5" dia. Removal of cover req. 61" Height

Heater:

Coates Model: 12406ST 5.5 kW Electric Spa Heater
30 Amps, 240V (FLA 23 Amps) GFCI Breaker
Note: 11kw heater recommended for some outdoor installs (check with SwimEx)
Dimensions 17.5(444.5mm) x 4" (101.6mm)x 14.5"(368.3mm)
Option for 208 Volt Electrical: coates Model 12008ST 8 kW Electric Spa Heater
50 Amps @208V. (FLA 39 Amps)
Optional Upgrade: Natural Gas or Propane Heaters are available

800S - Standard Pool Equipment:

Pump:

Pentair Pool Products
Model: Whisperflo VST Pump
2 HP Variable Speed Filtration Pump
95GPM @ 50TDH
Electrical Requirements:
115V/208-240V single phase
20 Amp (FLA 13.9/11.1-10.1) Amps)

Filter:

Pentair Pool Products
Model: Clean & Clear Plus
CCP 420 NSF Listed
420 Square Feet of filtration Area
Connections 2" PVC Glue Unions
Dimensions: 49" T x 21.5" dia. Removal of cover req. 68" Height

Heater:

Coates Heater Company
Model: 12411CE 11 kW/8 kW (208) Electric Heater
Dimensions 18"L x 10 1/4" W x 11 1/2" H
Electrical Requirements:
60 Amp, 240V Single Phase (FLA 46 Amps) GFCI Breaker
Optional Upgrade: Natural Gas or Propane Heaters are available



Other Equipment Considerations:

Optional SwimEx Equipment: Please refer to Other Equipment Assemblies Section of the Manual

EDGE Tablet Drive: (Upgrade from Econodrive Controller)

- 208-240V Single Phase, 50-Amp Feed (GFCI Included in Edge Control Box)
- Conduit needed for an ethernet cable from the Variable Speed Controller to poolroom for location of a WiFi access point for the EDGE Touch Screen Tablet.
- The WiFi access point can be mounted anywhere in the pool room, but you may want it higher up on the wall, so it is a bit more out of sight.

SwimEx Speed and Time Touchscreen

Underwater Lights: 110 Volt plug in unit on right or left side of pool. Provided with a mounted air button switch to turn on/off and change color selection.

Jet Option: 230V, Single Phase 15 Amp, 2 HP Jet pump controlled through ES Combo Switch
Electrician wires 240 Volt to ES Combo Switch controller and makes 3 wire connection to jet pump. (Pump, ES Combo, and Air Button control provided.)

Treadmill Option: will run off the Edge Tablet Drive and require an additional 20-Amp feed (70 total).

Ozonator Option: 240V hardwired unit. Should be connected through same line or shut off as Pump to ensure that it shuts off when pump is turned off.

Non SwimEx Equipment provided by owner

- **Sump Pump:** Plumber will locate a sump pump within pit area.
- **Ventilation** and exhaust requirements.
- **Lights** under deck or in pit area: Pit area must have lights for future maintenance.
- **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.
- **GFCI Outlet** in pit for future maintenance.
- **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. This can be tied to the sump drain. The SwimEx pool room should have a minimum of an exhaust fan. If the room is conditioned, we recommend that there be no air return to the rest of the home. The air should be exhausted directly outside. Ventilation and exhaust from pool room: Because the pool has a small water surface area this eliminates the need for large dehumidification systems. Typical water loss due to evaporation is in the range of 4-5lbs/ hour for a standard SwimEx pool. It is recommended to maintain the pool room air temperature to within 2 -5 degrees of the pool water temperature (up to a maximum of 86 degrees room temperature).
- **Hosebib:** It is recommended (and required within some jurisdictions) within the SwimEx pool area for semi annual cleaning of the pool interior.



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 96" (2.45m) 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 78" (1.98m) 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) 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 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. (500S: 2,600 Gallons; 480S & 600S: 3,200 Gallons; 800S: 4,900 Gallons)