



**SWIMEX**

**ARCHITECTURAL GUIDELINES**

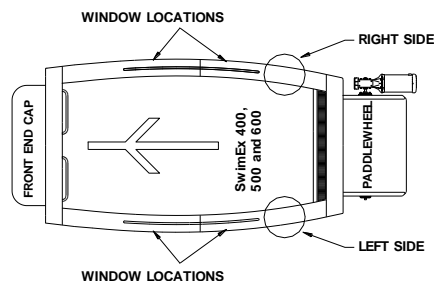
**FOUR-PIECE COMMERCIAL**

**MODELS 480T/500T/600T & 600TDW**

## ARCHITECT GUIDELINES FOR SWIMEX FOUR-PIECE COMMERCIAL INSTALLATION

### 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 (SX418). 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 460 lbs./sq. ft. (2245 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 12' (3.66m) wide by 20' (6.09m) long and 68 1/2" (173.99 cm) deep (For 500T 58 1/2" (148.5 cm) 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 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 and 4 observation windows. Based on the orientation of the pool within the room, these elements need to be placed in the optimum locations. Please familiarize yourself with the SwimEx orientation, and make sure that the order specifies the side for the ladder. The ladder can be placed on either side for no charge so long as the order indicates the location. (This is done in the molding process; thus, we must know at the time the order is placed)



- Allow access to equipment and pool via access hatch for inground, or access panels for above ground installations.
- Patient lifts must be considered for the proper installation. Lifts differ for above and in ground applications. Please specify pool installation method for proper lift specifying. (Aquatic Access is our preferred supplier 800-325 LIFT)

### **Delivery Requirements:**

- Clear passage for 18-wheel 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 600T; door openings must be 48" (1.22m) 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 be 70" (1.77m) wide by 84" (2.13m) tall.  
**\*\* Please review Site Preparation Section of Manual.**
- 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 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.
- 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, 110 Amps
  - GFCI Breakers to be provided by electrician
    - Paddlewheel Controller: 50 Amp 208/240V Single Phase (38 FLA)
    - Heater: 30 Amp 240V Single Phase (208V, 50 AMP Available)
    - Pump: 20 Amp 240V 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 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 provided by owner.

- Conduit needed for an ethernet cable from 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 room but you may want it higher up on the wall so it is a bit more out of sight.
- Ozonator Option, 120/240V hardwired unit. Should be connected through same line or shut off as Pump to ensure that it shuts off when pump is turned off.
- 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. Air button provided to turn light on and off
    - Jet Option:
      - Jet Pump 230V 2 HP pump controlled through ES Combo Switch
        - Electrician wires 240 Volt to Timed Switch controller and makes 3 wire connection to jet pump. (Pump and Timed Switch air switch control provided.)
    - MOTORIZED TREADMILL OPTION: With this option it is required to have 70 Amps to SwimEx Control panel, 10 additional Amps over the standard pool
  - 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 2" (5.08cm) 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.
  - Recommend floor drain in deck near ladder area to drain water from pool deck.

## ❑ **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 used, appropriation for water supply and drain must be made. Typical pool lifts need a ¾" (1.9cm) line with 55 psi (3.86 kg/sq.cm).
- ❑ Ventilation and exhaust from pool room. Small water area exposed to air eliminates 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 EQUIPMENT**

The following is a list of the standard pool equipment supplied with SwimEx Models 600T, 480T, and 500 T Series. Other pumps and filters are available if these do not meet health codes, please inquire to Engineering.

### **PUMP:**

#### **Pentair Pool Products**

Intelliflo - VSF Variable speed and flow pump

3 HP filtration Pump

Up to 135 GPM (511 LPM) @ 60TDH

Electrical Requirements:

240V, single phase

20 Amp GFCI breaker

SwimEx 600T, 480T - 3200 Gallons (12,113 L) turnover at 120 GPM: 27.0 minutes

SwimEx 500T – 2600 Gallons (9842 L) turnover at 120 GPM: 22 minutes

NSF LISTED

### **FILTER:**

#### **Pentair Pool Products**

Model: Clean & Clear Plus - CCP 420

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 150 GPM (454 LPM)

Connections 2" (5.08cm) PVC Glue Unions

Dimensions: 49" (109cm) T x 21.5" (54.6cm) diameter

Removal of cover req. 68" (172.72cm) Height

NSF LISTED

### **HEATER:**

#### **Coates Heater Company**

Model 12406ST 5.5 KW Electric Heater OR 12008 8 KW FOR 208

Dimensions 17 ½" (44.45cm) L x 4" (10.16cm) W x 14 ½" (36.83cm) H

Electrical Requirements:

208/240V Single Phase (240 is standard unless otherwise specified)

50/30 Amp GFIC Breaker feed