SINGLE PHASE

- 1. Select a location where the floor is level for pump installation. Be sure you will be able to connect the supply line from your water supply to the pump suction while maintaining positive head pressure on the pump. Pump will not self-prime. Suction pipe should be straight for a minimum of 18" before the connection point on the pump to reduce turbulence.
- 2. Install a full flow valve in the suction line for service use. We suggest that this valve be supervised. We also recommend the installation of a "Fernco" type flexible coupling in the suction line to reduce vibration. Do not over tighten your fittings attached to the cpvc tank adapters. A bit beyond hand tight will accomplish a good seal. If you over tighten you will run the risk of breaking the through wall adapter.
- **3.** Anchor the pump pad securely to the floor to prevent movement. Double check alignment, and be sure the unit is level.
- **4.** Connect pump discharge to your system inlet. We suggest you pipe in a valve controlled bypass, or "test loop" for routing water back into the tank. If you have purchased an "AquaFlex" tank from Firewater Systems, you may connect to the overflow port.
- **5.** Connect electrical wiring to pump controller from a 230v/or 115v (see motor label) electric source with a ground wire and neutral leg. Additional breakers are to be sized above the controller breaker, if one is necessary. Follow interior wiring as depicted on inside of controller door.
- **6.** Upon completion and safety check of above you may turn the power on to the pump and "bump" the motor to check for proper rotation. If rotation is incorrect check to see that your connection to "T1" and "T2" terminals are tight. Reverse them if rotation is backwards.
- 7. Pump is equipped with separate two leg flow switch to accommodate in-house alarm systems if desired.
- **8.** When all connections have been completed, safety check completed, valves in proper operating position, and system fully leak tested, you may remove the pressure switch cover. Start pump and allow pressure to build in system. (All air must be removed from the suction line or pump will not operate properly.) Set pump control pressure switch as follows:
 - A. Adjustments are made via the large black "finger" wheel. (Smaller wheel will adjust the differential pressure between on and off points only.) Your system remote location design and discharge rate flow points should be your guide, for pump on and off settings.
 - B. With pump running at churn level slowly reduce the pressure setting by turning wheel clockwise until pump shuts off.
 - C. Turn the same large black wheel an additional 1/4 turn, or two clicks, below this shut off point.
 - D. Pump will now turn on automatically as a point approximately 15 psi below this final shut off pressure setting.
 - E. Running water through your inspectors test valve, cycle pump on and off several times to double check settings. Adjust as necessary to meet system demand per above procedure.
- **9.** Note that the pump controller is factory equipped with a 120 second run delay timer that will prevent the pump from "shortcycling".
- **10.** If your piping systems includes runs in an attic, garage, crawl space, etc. We suggest the installation of a small expansion tank on the system piping, such as diaphragm equipped "Extrol" unit, to absorb some of the thermal expansion of the trapped water.