

INSTALLATION INSTRUCTIONS FOR THREADED CONCRETE INSERT WITH EPOXY


1. In the fulcrum roller you will find a roll of paper. This is the layout for the deck holes. First mark a centerline on the deck (preferably lining up to a spot on the opposite end of the pool). Lay out the paper template on the pool deck lining up the edge marked "Edge of Pool" with the edge of the pool or coping. The template centerline is marked. The marks  indicate the location of holes to attach the stand to the deck. Use a center-punch to transfer the hole pattern to the concrete. Double-check the layout on the concrete before drilling by placing both the main support and the ladder in place to "eye ball" the hole location. After removing the paper, draw a cross-hair extending 6 inches in each direction at each hole location.



Figure 1

2. Hole location is critical. It is difficult to drill an accurate hole location with a hammer drill. Further, a hammer drill will not drill through rebar should you encounter it. We recommend using a core-drilling rig with a diamond core bit. A core drill (figure 1) will drill an accurate hole location and drill through rebar. If no core drill is available, we recommend hiring a contractor experienced in core-drilling concrete. Skip step three if a contractor is to be hired to drill the holes.



Figure 2

3. Drill the holes in the concrete. Use a 1 1/8" diameter diamond core bit. Center the diamond core bit over one of the holes. Use the cross hairs previously marked on the deck (in step one) to line up the diamond core bit. Carefully drill the hole following the instructions for your core-drilling rig (figure 2). Drill each hole to a minimum depth of 6 3/4 inches. Use a shop vac to clean up each of the holes as you drill them. When all holes have been drilled, use compressed air (80 psi min.) to blow all debris and water from each hole. Use a shop vac to collect the debris while blowing out each hole (figure 3). Place the threaded insert into the hole to check for desired depth. The threaded insert should not protrude above the surface of the deck. Remove the threaded insert. Use the supplied brush to clean the walls of the hole. Use compressed air and a shop vac to blow out the hole (figure 4). Drill and clean ALL holes before proceeding to step 4.



Figure 3



Figure 4

4. Prepare the epoxy dispenser (figure 5) as follows: Insert the foil pack (parts A & B epoxy) as far as it will go into the plastic holder that comes with the epoxy dispenser. Screw on the supplied mixing nozzle. Before inserting the holder in the dispenser, the piston advance rods must be pulled into the rearmost position while pressing the release lever. Grip the holder by the small cylinder. Insert the holder (with the epoxy) into the dispenser from above and then swing the small cylinder down into position. Pull the trigger. A piercing point built into the junction piece opens the epoxy foil pack automatically. The epoxy components can be seen mixing as they pass through the nozzle. The epoxy that first flows out of the mixing nozzle is not mixed well enough and is not suitable to use: discard the first two full trigger pulls that come out the tip of the mixing nozzle.



Figure 5

5. The epoxy must be injected into the hole without forming air pockets. To achieve this, insert the mixing nozzle to the base of the hole and slowly withdraw the nozzle after each trigger pull. Holes should be filled approximately 2/3 full (figure 6). After injecting the epoxy, depressurize the dispenser by pressing the release button. This will prevent epoxy from leaking while installing the anchor. Insert the threaded anchor into the hole, turning the anchor clockwise while inserting. The anchor must be inserted into the hole until the top of the anchor is flush with the surface of the concrete (or tile) or slightly below. Each anchor has a plastic cap to protect the threads during this procedure. Do not remove protective caps until installation of the diving stands begins. A small quantity of epoxy should ooze from the hole once the threaded insert is inserted (figure 7). Wipe off excess epoxy from concrete. If too much epoxy comes out the hole after the threaded insert is inserted, adjust the amount of epoxy used accordingly. If gaps are visible between the threaded anchor and the concrete, immediately inject some epoxy into the crack. **Caution: This epoxy has a fast gel time and a fast cure time (see table below).** Once the gel time has elapsed, do not disturb the anchor. Stands can be installed immediately after cure time has expired. Anti-Seize thread compound (supplied) must be used with stainless steel installation bolts.



Figure 6



Figure 7

Ambient temp	Gel time	Cure time
50 degrees F	8 minutes	1 hour
68 degree s F	6 minutes	30 minutes
86 degrees F	3 minutes	25 minutes
104 degrees F	2 minutes	20 minutes