

# RAIL AND LADDER INSTALLATION AND MAINTENANCE GUIDE



Sample rail styles shown above. Your actual rail design may differ. Not to scale.

## TABLE OF CONTENTS:

- Page 2: New Construction Installation of bronze or plastic in-deck Anchor Sockets *(sold separately)* Page 2-3: Retrofit Installation of bronze or plastic in-deck
- Page 2-3: Retrofit Installation of bronze or plastic in-deck Anchor Sockets *(sold separately)*
- Page 3: Special After Market Deck Top Mounted Rail and Ladder Installation
- Page 3: Permanent Concrete Installation
- Page 4: Caring for your Inter-Fab Rails and Ladders

## **INTER-FAB BRONZE OR PLASTIC ANCHOR SOCKET INSTALLATION (IN DECK)**

#### NEW CONSTRUCTION INSTALLATION USING IN DECK ANCHOR SOCKETS:

#### Installing Anchors in the Deck

Determine the correct positioning of each product around the pool. Confirm the maximum/minimum distance from water's edge and the correct span between anchors if using two for installation.

- First inspect the anchors for defects or missing pieces.
- For plastic anchors make sure the bonding screw is flush with the inside of the anchor.
- Using tool, lower the wedge within the anchor by turning the bolt counterclockwise. To allow maximum clearance for the product, drop the wedge as far as you can without disengaging the wedge from the bolt.
- Slip the anchor(s) onto the product to confirm fit.
- Tape/Cover the anchor socket and the hole in the bottom of the anchor to keep concrete out.
- Check your local electrical code to determine bonding requirements. Bond anchor in accordance to code.
- Make sure the top edge of the anchor is flush with the concrete surface.
- Check that the anchor is level and plumb critical for proper installation of product.
  Use concrete with a minimum compression strength of 3,000 PSI. Following concrete manufacturer's instructions; allow the concrete to fully cure prior to installing product.

#### Installing Product in Anchor Sockets

- Using tool, lower the wedge within the anchor by turning the bolt counterclockwise. To allow maximum clearance for the product, drop the wedge as far as you can without disengaging the wedge from the bolt.
- Gently slide product into anchor(s).
- INSTALLATION TIP: To avoid damage to finish and ease of installation use two or more people to install large span rails and rails with 8" on center spans. Ensure both ends of the rail are lined up plumb with the anchor and insert both ends at the same time.
- Using tool, tighten wedge anchor by turning the bolt clockwise to secure the product in the anchor. Do not over tighten.

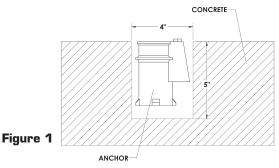
## IN DECK RETROFIT INSTALLATION USING IN DECK ANCHOR SOCKETS:

#### Installing Anchors in the Deck

You may install Inter-Fab Bronze or Plastic anchor sockets in existing concrete. The integrity of the concrete is essential to the rigidity/security of the product being installed. Professional installation is recommended.

Determine the correct positioning of each product around the pool. Confirm the maximum/minimum distance from water's edge and the correct span between anchors if using two for installation.

- First inspect the anchors for defects or missing pieces.
- For plastic anchors make sure the bonding screw is flush with the inside of the anchor.
- Using tool, lower the wedge anchor by turning the bolt counterclockwise. Drop the wedge as far as you can without disengaging the wedge from the bolt.
- Slip the anchor(s) onto the rails to confirm fit.
- Mark and drill a minimum 4" diameter hole at least 5" deep. *(See Figure 1)*



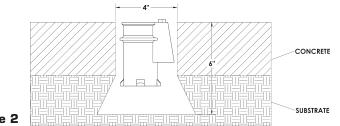
**INSTALLATION TIP:** The center of the anchor is not the center line for the product, measure correctly to keep center line measurements the correct distance apart.

- Do not make holes larger than necessary or escutcheons may not cover the installation.
- Use a pry bar or sledge hammer to break the core pieces from the base of the hole.
- Clean all debris from inside the hole, check the depth and insert the anchor to ensure proper fit.
- Check your local electrical code to determine bonding requirements. Bond anchor in accordance to code.
- Cover the hole in the bottom of the anchor with tape to keep concrete out.
- Use concrete or anchoring epoxy, mix to manufacturer's instructions.

## QUESTIONS? CALL OUR CUSTOMER SERVICE TEAM AT: 800.737.5386

#### IN DECK RETROFIT INSTALLATION USING IN DECK ANCHOR SOCKETS (CONT.)

- Fill area around the anchor with mixture.
- Make sure the top edge of the anchor is flush with the concrete surface.
- Check that the anchor is level and plumb critical for proper installation of product.
- Allow the concrete or epoxy to fully cure prior to installing product.





If the depth of the existing concrete is less than the required 5" depth, remove the fill material below the concrete to obtain 6" depth. The diameter of the hole below the concrete should be slightly larger than the core hole. **(See Figure 2)** 

#### **PERMANENT CONCRETE INSTALLATION:**

Some Inter-Fab rails can be mounted directly into the concrete deck. These rails have a hole drilled through the bottom of each support leg, 1-1/2" up from the end of the rail.

- Place a 6" long piece of #3 rebar through the hole on each support leg. Determine the correct positioning of product around the pool. Confirm the maximum/minimum distance from water's edge.
- Check your local electrical code to determine bonding requirements. Bond anchor in accordance to code.
- Support the product as the concrete is poured and during cure time.

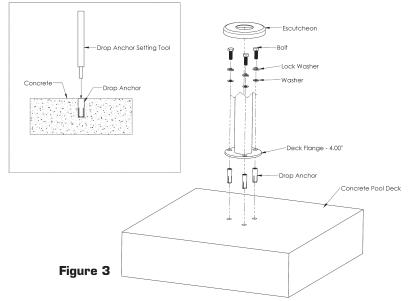
#### SPECIAL AFTER MARKET DECK TOP MOUNTED RAIL INSTALLATION:

Determine the correct positioning of each product around the pool. Confirm the maximum/minimum distance from water's edge.

- Check your local electrical code to determine bonding requirements. Bond rail or flange in accordance to code.
- With a marker, mark the 3 flange hole locations for each flange.
- Using a 1/2" masonry bit and hammer drill, drill each hole 1-9/16" deep. Do not drill further down than 1-9/16" deep. Drop in anchors must NOT extend above deck.

**INSTALLATION TIP:** Measure 1-9/16" on 1/2" drill bit and mark it with a piece of tape or marker so each hole is drilled to the correct depth.

- Place anchor in hole and tap until flush with concrete.
- Expand anchor with setting tool provided. Anchor is properly expanded when shoulder of setting tool is flush with top of anchor.
- Align product flanges with anchors.
- Secure product with flat washer, lock washer and 1" bolt. (See Figure 3)



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### **INTER-FAB RAIL CARE**

#### <u>Stainless Steel</u>:

Inter-Fab manufactures pool ladders and rails in 304 or 316L Stainless Steel. These grades of stainless are fairly impervious to swimming pool water that is in balance. However, unbalanced water chemistry and stray electrical current can cause stains and/or rust. Other possible causes are improper electrical grounding, indoor environment, administering chemicals near the rail or ladder, storing your rails and ladders near chemicals, etc.

With proper care and routine maintenance you can extend the life of your stainless steel pool rails and ladders:

- 1. Regularly inspect your stainless steel products; check for corrosion around mounting hardware and escutcheons. Replace hardware when needed.
- 2. Rinse off rails and ladders frequently with fresh water to remove chemicals from your pool water and wipe dry with a clean cloth.
- 3. To clean your stainless steel; first remove the rail or ladder from the pool. Using warm water and gentle soap or detergent and a soft cloth, rub the rail along the polish lines of the steel. Rinse thoroughly.
- 4. For stubborn stains you may try Brasso® metal polish.
- 5. You may apply marine grade wax or paste car wax to help protect your rail or ladder from the elements longer.

Do not use steel wool, abrasive cleaners, mineral acids, bleaches or chlorine cleansers on your stainless steel.

#### Powder Coated Stainless Steel:

- 1. Regularly inspect your pool products; check for corrosion around mounting hardware and escutcheons. Replace hardware when needed.
- 2. To clean your powder coated products; first remove the rail or ladder from the pool. Using warm water and gentle soap or detergents, wash the finish with a soft cloth. Rinse thoroughly with cold water.
- 3. For stubborn stains repeat step 2 and use a soft sponge to gently scrub away dirt. Do not use abrasive cleaners, scouring pads or other items that can cause damage to the powder coat.
- 4. For nicks and scratches you can purchase a touch up kit to apply to cleaned exposed stainless steel.

#### Thermo Plastic Coated Stainless Steel:

- 1. Regularly inspect your pool products; check for corrosion around mounting hardware and escutcheons. Replace hardware when needed.
- 2. To clean your thermo plastic coated products; first remove the rail or ladder from the pool. Using warm water and gentle soap or detergents, wash the finish with a soft cloth. Rinse thoroughly with cold water.
- 3. For stubborn stains repeat step 2 and use a soft sponge to gently scrub away dirt. Do not use abrasive cleaners, scouring pads or other items that can cause damage to the powder coat.

# **WARNING** IMPORTANT INSTALLATION INFORMATION

The installation of this product should be done only by a licensed and professional installer. Installation should be done strictly in conformance with all local building codes, electrical codes and other building and safety laws and regulations. Among other things, that your installer should carefully analyze the need to bond the product to prevent an electrical hazard. Failure to properly install this product could result in dangerous conditions, including but not limited to electrical and or structural hazards. Inter-fab, Inc. disclaims all liability arising from the installation and the user assumes all risk associated with the installation.