

## Infiltrator Tank Riser Connection Guidance

### Before You Begin

**This document provides recommended procedures for the connection of EZsnap Riser products to Infiltrator Water Technologies (Infiltrator's) tanks.**

The intent of this document is to provide procedures for making the connection between the riser and tank. Risers must be installed according to state and/or local regulations, which supersede the guidelines in this document. If unsure of the requirements for a particular site, contact the local health department or permitting authority.

**Note:** The method of PVC and HDPE riser construction shown in this document is not allowed under Florida regulations.

### Parts and Supplies

The parts and supplies necessary for installation of a riser system on Infiltrator tanks must be purchased separately from the tank. All parts and supplies are commercially available. Contact Infiltrator or the riser manufacturer for assistance obtaining any of the following parts and supplies.

| Infiltrator Riser Products     |                                   |
|--------------------------------|-----------------------------------|
| Item                           | Item Number                       |
| EZsnap Tank Pipe Adapter Ring  | SNAPPAR-2400                      |
| EZsnap 24" x 2" Riser (Green)  | SNAPIS-2402                       |
| EZsnap 24" x 6" Riser (Green)  | SNAPIS-2406                       |
| EZsnap 24" x 12" Riser (Green) | SNAPIS-2412                       |
| EZsnap 24" Safety Lid System   | SNAPSALT-2400                     |
| 24" Riser Lid (Green)          | IMLID-2400                        |
| Adhesive Sealant               | ISI-1500 (or E6100 as equivalent) |
| Infiltrator Safety Star        | SNAPSALT-2400                     |



Risers nest together for efficient shipping.

### Materials and Equipment Needed for EZsnap Riser Installation

- Rubber mallet
- Screw gun
- Ten #14 x 2" stainless steel tank-to-riser screws (supplied with EZsnap Riser)
- Ten #14 x 2" stainless steel lid screws with washers (supplied

with Infiltrator tanks)

- 7/16" hex nut driver screw gun bit
- #3 square head Robertson driver bit, 6" (150 mm) length
- #2 Phillips driver bit, 6" (150 mm) length
- 3/8" hex nut driver screw gun bit
- Rags

**Note:** Install riser assembly prior to backfilling tank.

**Note:** The EZsnap Riser segment includes factory-installed gaskets on both ends of the riser segment, so the application

of a sealant or mastic on the connection surface is not required. Proper care must be taken to ensure the gasket surface is clean and free of debris. It is recommended that all gaskets and connection surfaces be wiped clean. Each riser section is tapered to have a narrow end and a wide end. When shipped, the EZsnap Risers are stacked wide end down and nested together. When making riser connections, the narrow ends are designed to connect to the narrow end and the wide end is designed to connect to the wide end. It is a recommended best practice that the taller sections be installed at the deepest points of the installation.



Engage one set of tabs into proper position.



Use mallet to engage the rest of the tabs.



Screws required for riser to tank connection only.

### Riser-to-Tank Connection

Insert the EZsnap Riser narrow end down into the tank opening. Rotate the riser until the riser connection tabs align with the tank indexing tabs on the tank opening. Screw pilot holes will be in alignment on the riser and tank when in proper position. On one side of the tank, insert the riser connection tabs into the tank indexing tabs and engage into the proper position. Using a rubber mallet pound downward on the top of the riser to engage the remaining tabs. It is helpful to move around the circumference of the tank opening while engaging tabs. **A screwed connection is only required for the tank-to-riser interface, created using the ten #14 x 2" stainless steel tank-to-riser screws supplied with the EZsnap Riser.** Tighten screws in a star pattern, alternately tightening screws on opposite sides of the EZsnap Riser.



Risers are available in 2", 6" and 12" height for desired finished height.

## Riser-to-Riser Connection

The EZsnap Risers come in multiple heights to align with the desired finished grade. Each riser is tapered to have a large end and small end align with like-diameter ends of riser segments. Rotate until the tabs on the upper riser segment drop into alignment on the lower riser segment. With tabs in alignment, push directly down on the top rim of the upper riser segment until the connection tab engages into the lower riser segment. A rubber mallet may be necessary to engage the tabs by striking the top surface of the riser if manual pressure is not adequate.

## Infiltrator Safety Star Installation

The Infiltrator Safety Star is designed to be mounted to the screw pilot holes at a narrow-end riser connection. One arm on the Safety Star folds down 15 degrees, allowing it to collapse and fit through a 24" (600 mm) opening.



1. Install the Safety Star at the EZsnap narrow riser-to-riser connection closest to the ground surface. A minimum of a 6" (150 mm) riser is required to accommodate the Safety Star and attach the lid properly.



*Infiltrator's five arm Safety Star system is equipped with a folding arm for easy installation.*

2. Fasten the Safety Star in place using #14 x 2" stainless steel screws (supplied with the EZsnap Risers).

3. Rotate the Safety Star until the five screw slots are aligned with the screw bosses on the riser. Fasten the Safety Star in place using five (5), #14 x 2" stainless steel screws provided (SS1410-HEX).

**Note:** If the Safety Star is installed at the riser-to-tank connection, the five screws used to fasten the risers to the tank also secure the Safety Star. The Safety Star is designed to allow up to a 4" (100 mm) pumping hose to enter the tank while installed, allowing for ease of maintenance without removal.

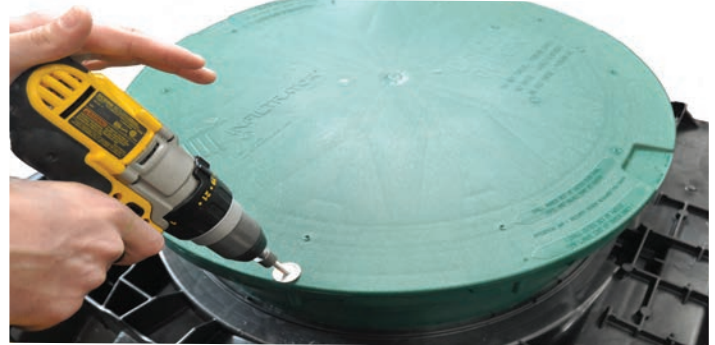


*Set lid on uppermost riser segment and rotate to receiving pocket on riser.*

4. Five screws shall be secured tightly into place following a star pattern to complete the Safety Star installation. If the Safety Star requires removal, 5 riser-to-tank screw locations will remain fastened at all times.

## Lid-to-Riser Connection

The EZsnap Lid will accommodate both the narrow and the wide end of the riser. To install, set the lid on top of the uppermost riser segment and rotate until the riser tabs recess into the receiving pockets on the lid. The lid will drop downward approximately 1/2" (13 mm) and stop rotating when seated properly. With the lid properly seated, the screw pilot holes are in alignment.

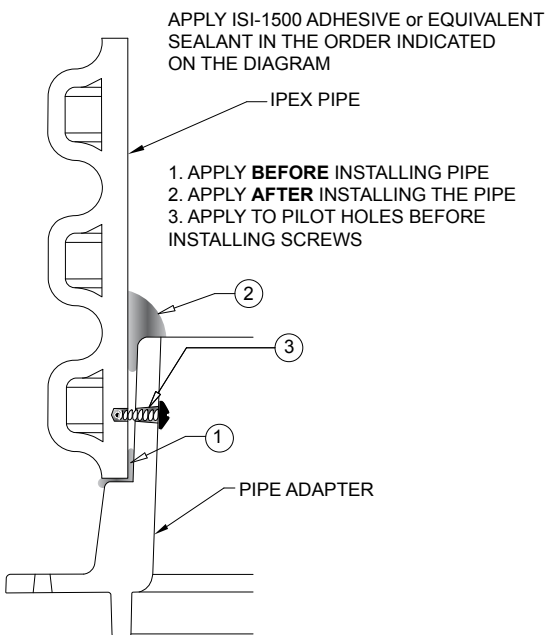


*Prior to backfilling, fasten the lid to the riser with screws provided.*

Use the ten #14 x 2" stainless steel lid screws with washers provided with the tank to fasten the lid to the riser. There are nine hexagonal head stainless steel bolts and one #3 pan-head Robertson screw, which is used as a tamper-resistant fastener. Depending upon which end of a riser segment is being used for the lid connection, use the outer-diameter screw pilot holes on the lid for the larger-diameter end of the riser and the inner-diameter screw holes for the smaller-diameter end of the riser. Call-outs on the lids clearly define the proper screw pilot holes to use for the different bolt patterns. Adjust the screw gun settings to prevent stripping-out the pilot holes. Do not over-tighten screws.

## Materials and Equipment Needed for Riser Pipe Installation

- Screw gun
- Caulk gun and ISI-1500 sealant or equivalent
- Marker or marking pencil
- Brush
- Rags
- Infiltrator Pipe Adapter Ring (SNAPPAR-2400)
- Adhesive-backed gasket (supplied with SNAPPAR-2400)
- Ten #14 x 2" stainless steel lid screws with washers (supplied with lid)
- Ten #14 x 2" stainless steel SNAPPAR-2400-to-tank screws (supplied with SNAPPAR-2400)
- Four #12 x 1/2" (for IPEX, Ultra-Rib™ PVC pipe) or #12 x 1 1/4 (for HDPE pipe) stainless steel screws (not provided)
- 7/16" hex nut driver screw gun bit
- #3 square head Robertson driver bit, 6" (150 mm) length
- #2 Phillips driver bit, 6" (150 mm) length
- 3/8" hex nut driver screw gun bit



## 24" (600-mm) IPEX, Ultra-Rib™ PVC Pipe

**Note:** Method not allowed in Florida

**Note:** 24" (600-mm) IPEX pipe must be installed using the Infiltrator Pipe Adapter Ring.

1. Install riser assembly prior to backfilling tank.
2. Cut IPEX pipe along an inner corrugation to allow lid to fit properly, taking care that the cut is smooth and even.
3. Apply two continuous 3/8" (10 mm) beads of adhesive sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the tank opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.
4. Align the Infiltrator Pipe Adapter Ring with the tank opening by lining up the arrows on the Infiltrator Pipe Adapter Ring with the arrow on the tank inlet or outlet. The ring will seat on the tank tightly when properly aligned. Center and press to create an even distribution of the sealant.
5. Fasten Infiltrator Pipe Adapter Ring to the tank opening using ten #14 x 2" stainless steel SNAPPAR-2400-to-tank screws. Tighten in a star pattern. Repeat the star pattern at least twice, without over-tightening screws.
6. Mark four evenly distributed locations on the inside of the Infiltrator Pipe Adapter Ring for pilot holes to accept screws. The pilot holes should be at a height half way up the interior flange of the Infiltrator Pipe Adapter Ring.
7. Drill four 1/8" (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.
8. Apply one bead of adhesive sealant to the first taper on the Infiltrator Pipe Adapter Ring.
9. Place the IPEX pipe over the Infiltrator Pipe Adapter Ring until it is seated at the base of the flange.
10. Insert adhesive sealant into the four pre-drilled pilot holes.
11. Fasten IPEX pipe to Infiltrator Pipe Adapter Ring using four #12 x 1/2" stainless steel screws from the inside of pipe.
12. Tighten screws in a star pattern, tightening screws alternately on opposite sides of the Infiltrator Pipe Adapter Ring. Repeat the star pattern at least twice, without over-tightening screws.
13. Apply a generous bead of sealant into the groove at the top of the pipe adapter and then smear the sealant into the groove between the pipe and Infiltrator Pipe Adapter Ring.
14. Use the Infiltrator lid or equivalent product as a lid for the riser pipe. The lid will require the installation of the factory-supplied, adhesive-backed gasket to the bottom side of the lid to ensure a snug fit. Set and center the lid onto the riser pipe. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid. Fasten using the ten factory-supplied #14 x 2" stainless steel lid screws with washers.

**Note:** When using the Infiltrator lid, apply the factory-supplied, adhesive-backed gasket to the bottom side of the lid to ensure a snug fit.



**15.** Backfill tank in accordance with Infiltrator's tank installation instructions.

**16.** Following tank backfilling, visually examine the riser-to-Infiltrator Pipe Adapter Ring connection for damage resulting from backfill placement. Repair or replace if damaged. Allow 24-hour sealant cure time before testing or putting into service.

## **24" (600-mm) HDPE Pipe**

**Note:** Method not allowed in Florida

**Note:** The 24" (600-mm) HDPE pipe must be installed using the Infiltrator Pipe Adapter Ring.

**1.** Install riser assembly prior to backfilling tank.

**2.** Cut IPEX pipe along an inner corrugation to allow lid to fit properly, taking care that the cut is smooth and even.

**3.** Apply two continuous 3/8" (10 mm) beads of adhesive sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the tank opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.

**4.** Align the Infiltrator Pipe Adapter Ring with the tank opening by lining up the arrows on the Infiltrator Pipe Adapter Ring with the arrow on the tank inlet or outlet. The ring will seat on the tank tightly when properly aligned. Center and press to create an even distribution of the sealant.

**5.** Fasten Infiltrator Pipe Adapter Ring to the tank opening using ten #14 x 2" stainless steel SNAPPAR-2400-to-tank screws. Tighten in a star pattern. Repeat the star pattern at least twice, without over-tightening screws.

**6.** Mark four evenly distributed locations on inside of the the Infiltrator Pipe Adapter Ring for pilot holes to accept screws. The pilot holes should be at a height half way up the interior flange of the Infiltrator Pipe Adapter Ring.

**7.** Drill four 1/8" (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.

**8.** Center the HDPE pipe over the Infiltrator Pipe Adapter Ring.

**9.** Fasten the HDPE pipe to the Infiltrator Pipe Adapter Ring using four #12 x 1 1/4" stainless steel screws from inside the pipe.

**10.** Tighten screws in a star pattern, tightening screws on opposite sides of the Infiltrator Pipe Adapter Ring. Repeat the star pattern at least twice, without over-tightening screws.

**11.** Apply adhesive sealant in the space between the pipe and Infiltrator Pipe Adapter Ring to seal the gap between the pipe and adapter ring.

**12.** Use the Infiltrator lid or equivalent product as a lid for the riser pipe. The lid will require the installation of the factory-supplied, adhesive-backed gasket to the bottom side of the lid to ensure a snug fit. Set and center the lid onto the riser pipe. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid. Fasten using the ten factory-supplied #14 x 2" stainless steel lid screws with washers.

**Note:** When using the Infiltrator lid, apply the factory-supplied, adhesive-backed gasket to the bottom side of the lid to ensure a snug fit.

**13.** Backfill tank in accordance with Infiltrator's tank installation instructions.

**14.** Following tank backfilling, visually examine the riser-to-Infiltrator Pipe Adapter Ring connection for damage resulting from backfill placement. Repair or replace if damaged. Allow 24-hour sealant cure time before testing or putting into service.

## **Backfilling Tank and Risers**

Backfill tank and risers in lifts in accordance with Infiltrator Tank General Installation Instructions, supporting all sides of the risers as the backfill height increases.

**Note:** Always install and secure lids prior to backfill placement.