Infiltrator IM-Series Tank Riser Connection Guidance Document for EZsnap Risers

Before You Begin

This document provides recommended procedures for the connection of EZsnap Riser products to Infiltrator Water Technologies' (Infiltrator's) IM-Series 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. 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 IM-Series tanks must be purchased separately from the tank. All parts and supplies are commercially available. Contact Infiltrator or the riser manufacturer for assistance obtaining parts and supplies.

Required Tools for EZsnap Risers

- Rubber Mallet
- Screw Gun
- 7/16" Hex Nut Driver Screw Gun Bit
- #3 Square Head Robertson Driver Bit, 6" Length
- #2 Phillips Driver Bit, 6" Length
- 3/8" Hex nut driver screw gun bit
- Rags
- 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's recommended that all gaskets and connection surfaces be wiped clean. Each riser section

Risers nest together for efficient shipping.

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.

Riser-to-Tank Connection





Use mallet to engage the rest of the tabs.

Screws required for riser to tank connection only.

Riser, narrow end down into the IM-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. Then using a rubber mallet pound down on the top of the riser engaging the rest of the tabs. It is helpful to move around the circumference of the tank opening. It is required for the tank to riser connection only to secure the connection with the supplied (10) #14 x 2" stainless steel screws. Tighten screws in a "star" pattern, tightening screws on opposite sides of the EZsnap Riser.

Riser to Riser Connection

The EZsnap Risers come in multiple heights to generate the desired finished grade. Each Riser is tapered to have a large end and small end align like-diameter ends of riser segments. Rotate until the tabs on the upper riser segment drops 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 hitting on the top surface of the riser if manual pressure is not adequate.

The 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



Engage one set of tabs into proper position.

degrees allowing it to collapse and fit through a 24" opening.

1. Install the Infiltrator Safety Star at an EZsnap narrow riser to riser connection closest to the ground surface. A minimum of a 6" riser is required to accommodate the safety star and to attach the lid properly.

2. Fasten the Safety Star in place using #14 x 2" stainless steel screws.



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

Lid-to-Riser Connection

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





Fasten the lid to the riser with screws provided prior to backfilling.

Use the ten #14 stainless steel screws provided to fasten the lid to the riser. There are nine (9) hexagonal head stainless steel bolts and one (1) #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 smallerdiameter end of the riser. Call-outs on the lids clearly define the proper screw pilot holes to use for the different scenarios. Adjust the screw gun settings to prevent stripping out the pilot holes. Do not over-tighten screws.

Required Tools for Riser Pipe Installation

- Screw gun
- Caulk gun and ISI-1500 Sealant
- Marker or marking pencil
- Brush
- Rag
- #14 x 2" stainless steel lid screws
- (supplied with IM-Tank)
- #14 x 2" stainless steel SNAPPAR to tank screws (supplied with SNAPPAR)
- (4) #12 x 1/2" stainless steel screws (not provided)
- 7/16" Hex nut driver screw gun bit
- #3 Square head Robertson driver bit, 6" length
- #2 Phillips driver bit, 6" length
- 3/8" Hex nut driver screw gun bit
- Infiltrator Pipe Adapter Ring (SNAPPAR-2400)

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 (SNAPPAR-2400). **1.** Install riser assembly prior to backfilling tank.

2. Cut IPEX pipe along an inner corrugation to allow lid to fit properly. Cut should be smooth and even.

3. Apply 2 continuous 3/8" beads of ISI-1500 Adhesive Sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the IM-Tank manhole opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.

4. Align the Pipe Adapter Ring with the IM-Tank opening by lining up the arrows on the 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 IM-Tank manhole opening using ten $#14 \times 2$ " stainless steel screws. Tighten in star pattern. Repeat star pattern at least twice, without over tightening screws.

6. Mark (4) evenly spread 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 (4) 1/8" (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.

8. Apply (1) bead of ISI-1500 Adhesive Sealant to the first taper on the Infiltrator Pipe Adapter.

9. Place the IPEX pipe over the Infiltrator Pipe Adapter Ring until it is seated at the base of the flange.

10. Insert ISI-1500 Adhesive Sealant into the (4) pre-drilled pilot holes.

11. Fasten IPEX pipe to Infiltrator Pipe Adapter Ring using (4) $\#12 \times 1/2$ " stainless steel screws from the inside of pipe.

12. 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.

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 IM-Series septic tank 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 and fasten using the factory supplied (10) $\#14 \times 2^{n}$ stainless steel lag bolts



with washers. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid.

Note: when using the Infiltrator lid, apply the factory supplied adhesive back 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 hours 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 (SNAPPAR-2400).

1. Install riser assembly prior to backfilling tank.

2. Cut HDPE pipe along an inner corrugation to allow lid to fit properly. Cut should be smooth and even.

3. Apply 1 continuous 3/8" beads of ISI-1500 Adhesive Sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the IM-Tank manhole opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.

4. Align the Pipe Adapter Ring with the IM-Tank opening by lining up the arrows on the 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 the IM-Tank manhole opening using ten $#14 \times 2$ " stainless steel screws. Tighten in star pattern. Repeat star pattern at least twice, without over tightening screws.

6. Mark (4) evenly spread locations on 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 (4) 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 HDPE pipe to Infiltrator Pipe Adapter Ring using four $#12 \times 1\frac{1}{4}$ " (5.5 mm x 31 mm) 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 ISI-1500 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 IM-Series septic tank 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 and fasten using the factory supplied (10) #14 x 2" stainless steel lag bolts. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid.

Note: when using the Infiltrator lid, apply the factory supplied adhesive back 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 hours sealant cure-time before testing or putting into service.

Backfill Tank and Risers

Backfill tank and risers in lifts properly supporting all sides of the risers as you move up.

Note: Always install and secure lids prior to backfill.

Disclaimer: These recommended procedures have been developed to identify best practices for achieving a watertight connection between the tank and riser under typical tank installation conditions. These procedures have been shown to result in a watertight connection between the riser assemblies identified in this document and the Infiltrator IM-Tank. Infiltrator does not guarantee a watertight connection between tank and riser because achieving a watertight connection is dependent upon a combination of installer practices and procedures, and field conditions. Please contact Infiltrator's Technical Services Department at 800-221-4436 if difficulty is encountered during riser connection installation. Please contact the appropriate riser manufacturer for concerns associated with anything that does not involve the tank to-riser connection.





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