



8450 Cole Parkway ▪ Shawnee, KS 66227 ▪ Phone: 913-422-0707 ▪ Fax: 913-422-0808
E-mail: onsite@biomicrobics.com ▪ www.biomicrobics.com ▪ 800-753-FAST (3278)

Installation Guidelines for FAST® into IM-1060 rev.3.4 **Adapting a FAST® 0.5, 0.625 or 0.75 System for Use in an Infiltrator IM-1060 Tank**

GENERAL INFORMATION

All FAST® products are ETL certified for safety (electrical, environmental, etc.). One or more of the following patents protects this process: 3,966,599; 3,966,608; 3,972,965; 5,156,742. Certified by NSF International, the MicroFAST® 0.5, 0.625, 0.75 systems meet NSF Standard 40, Class 1 and Standard 245 certifications for single-residence wastewater treatment systems. If you have any questions regarding Bio-Microbics products, please contact us:

800-753-FAST (3278) or (913) 422-0707
e-mail: onsite@biomicrobics.com

Conditions:

- A. Only persons approved by Bio-Microbics, Inc. may perform this work.
- B. An approved Infiltrator person must perform the assembly of the tank. The "IM-1060 Tank Assembly Checklist & Assembler Authorization" MUST be filled out and submitted to Infiltrator.
- C. Once this modification is made it is NOT reversible. DO NOT perform this procedure, and then attempt to put the treatment liner back together so that it can hang from the tank lid.
- D. This method is only to be used when mounting a FAST® treatment unit inside the Infiltrator IM-1060 tank.
- E. Should the installation site be able to utilize the IM-1060 as a **TWO COMPARTMENT TANK** follow steps 1-11 then refer to Section 2 for additional instructions on making the tank into two compartments utilizing the baffle provided by Infiltrator.
- F. The FAST® Installation Manual and the Infiltrator's IM-1060 Septic Tank Assembler's Resource Guide are to be used for any portions of their respective installation steps not covered within this manual.
- G. The treatment liner is NOT designed to be a load bearing device for the tank.

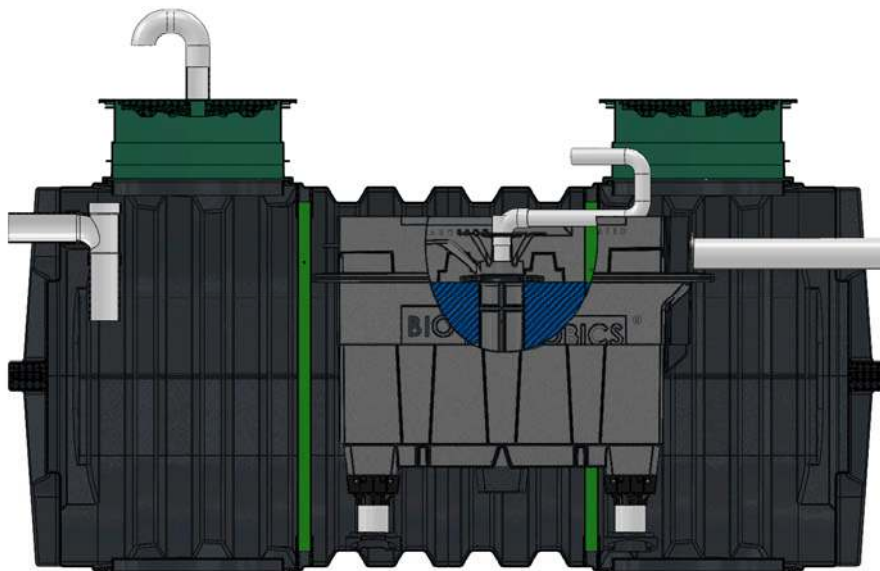


Figure 1.1

Tools & Materials Needed:

- Infiltrator kit purchased from Bio-Microbics Part Number 730-TANKINFILTRATOR inclusive of IM-1060 feet adapters.
- Saw with blade suitable for cutting plastic – ex.reciprocating, jig, jab, etc.
- Powered screw driver with Philips (plus) bit and 3/8" & 5/16" hex head drivers.
- Tape measure
- Plastic marking pen – paint, grease, chalk, etc.
- Straight edge – min 4 ft long
- At least two persons capable of the physical demands detailed in the Infiltrator's IM-1060 Septic Tank Assembler's Resource Guide.
- PVC Sched 40 pipe
 - 4" diam. – min. 80"
 - 2" diam – min. 24"
- PVC primer & glue

INFILTRATOR KIT LIST	
ITEM	QTY.
Inlet feet adapters	2
Outlet feet adapters	2
2" x 2" x 23" FRP angle cross brace	2
2" x 2" x 3" FRP angle	4
1/4"-20 x 3.5" SS bolt	4
1/4"-20 SS nut	4
1/4"-20 SS lock washer	4
#12 x 3" SS self tapping screw	10
#12 x 1" SS self tapping screw	8
2" PVC elbow	1
2" PVC down pipe	1
2" SS clamp	1
#14 x 1.5" SS self tapping screw	26
#10 x 3/4" SS screw	30
MicroFAST® Feet Top	4

MODIFY THE FAST® UNIT – The following steps are used to eliminate the air space at the top of a FAST® liner.



Only properly trained personnel should perform the work described here. Use proper safety measures and only use tools as intended and instructed by the manufacturer.

1. On the outside of the treatment liner, measure from the underside of the treatment liner lip down 9.75 inches (40.5 inches from the bottom up). Shown in Figure 2.2. Mark your cutting location with a grease pencil or similar instrument.
2. Measure and mark your cutting location several times at different locations on the outside of the liner.
3. Draw a straight line connecting all the marks you have made on the outside of the liner. The next step you perform is irreversible.
4. Before cutting, make sure to double check your measurements and markings, because once you cut the unit it cannot be reversed.
5. Use a reciprocating, coping saw or other appropriate device to cut along your pre-marked straight line on the outside of the treatment liner. You should not cut any other part besides the treatment liner and inner effluent baffle plate.
6. Remove the baffle plate piece from the cut section and place it back onto the liner with the screws that were removed from the original baffle shown in Figure 2.1
7. Pull the cut piece over the liner until the top of the lip measures 32" inches off the floor as shown in figure 2.2. **The MicroFAST® liner's outlet hole must not be obstructed.** Using the 30 (3/4" long) provided stainless steel screws to secure the top piece in place. All screws should be mounted from the outside of the liner ensuring that all exposed surfaces are free from rough or sharp edges that may cause injury to persons.



Figure 2.1

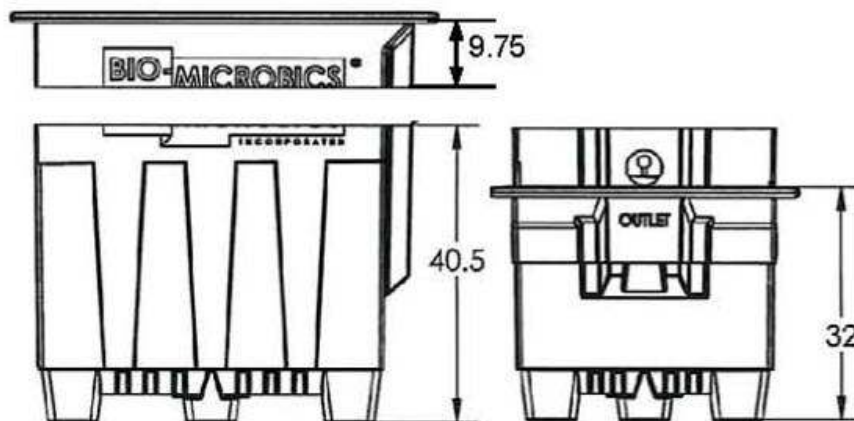


Figure 2.2

MOUNT THE FEET

NOTE: The MicroFAST® 0.5 attaches at a different location on the IM-1060 foot than the MicroFAST® 0.625 & 0.75. Additionally the inlet and outlet end foot bottoms differ and must be used at their respective ends of the liner. See Figures 3.1-3.3.

8. Fasten the supplied foot top (crown) to the FAST® liner using the supplied 1.5" self-tapping stainless steel hex head screws (#14). Four screws/ foot top.
9. Cut four equal pieces of Schd 40 PVC 4" pipe, precisely 6" long.
10. Affix each pipe piece from step 9 to the foot top using PVC primer and glue.
11. Fasten the IM-1060 feet adapters (Part # 730-TANKINFILTRATOR) to the PVC pipe
 - a. Drill a pilot hole for each screw using a 3/16" bit; failure to do so will likely result in a cracked PVC pipe.
 - b. Fasten the PVC pipe to the IM-1060 foot bottom using the supplied 1.5" self-tapping stainless steel hex head screw steel screws (#14). 2 (two) screws should be used per foot bottom.

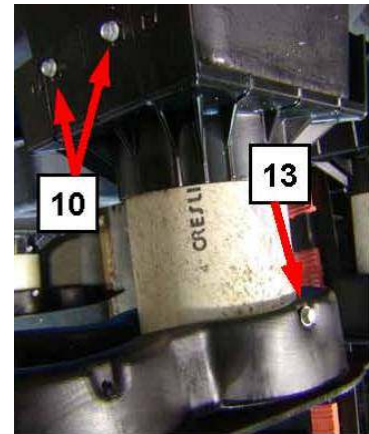


Figure 3.1

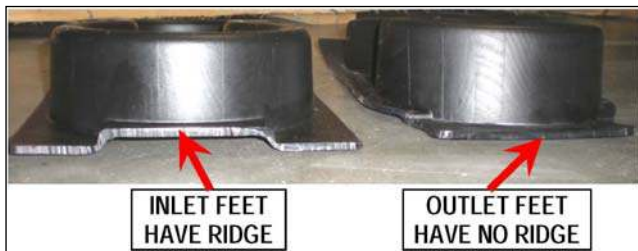


Figure 3.2

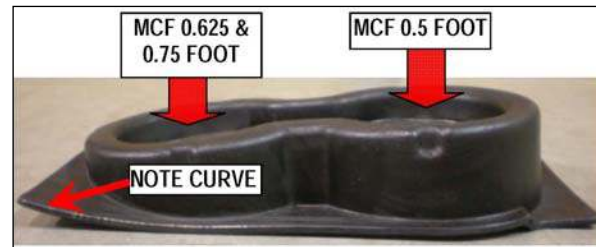


Figure 3.3

MOUNT THE UNIT IN THE TANK

NOTE: Installation of the tank support posts differs slightly from the IM-1060 Assembler's Resource Guide method.

If completing a **BAFFLE TWO COMPARTMENT INSTALLATION** refer to Section 2 (page 5) of this manual.

12. Assemble the INLET side support post cross braces by fastening (2) supplied 3" FRP angle pieces to each 23" FRP angle piece using a total of (4) supplied 1" self-tapping stainless steel (#12) hex screws. Use the support posts to properly space the 3" FRP angle pieces the proper distance from each other so the support post mounts at the center of the cross brace assembly. **DO NOT** fasten cross brace assemblies to support posts. See Figure 3.4.

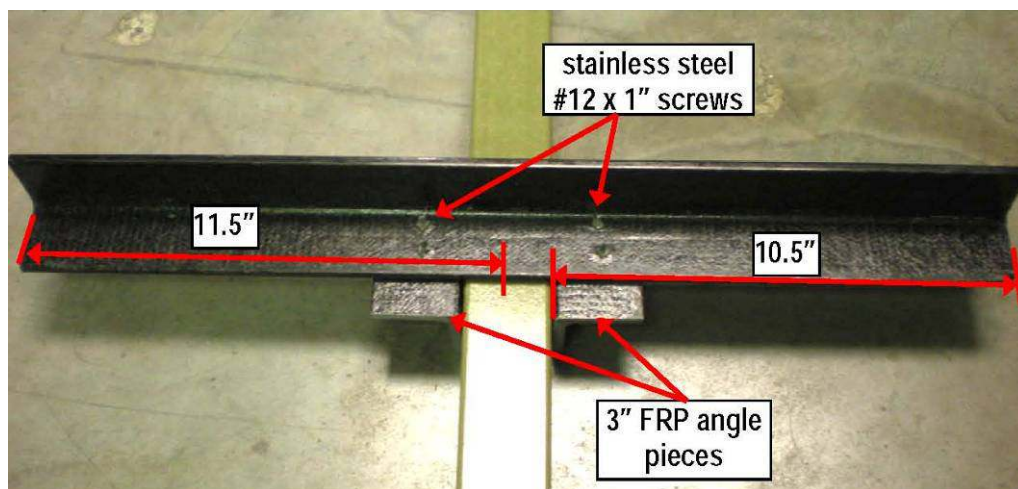


Figure 3.4

13. Carefully place the FAST® unit with attached Infiltrator tank feet adapter into the tank as shown in figure 4.3.
14. Align the FAST® unit in the tank so that it is in the **EXACT** center, and the FAST® lip is against the inlet end support post.

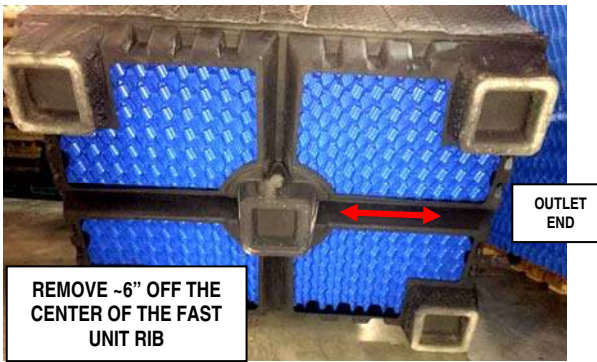


Figure 4.1

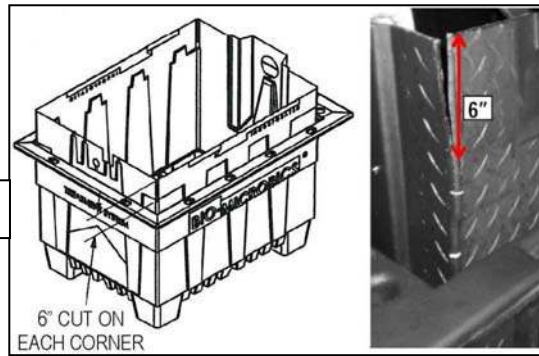


Figure 4.2

For the **MicroFAST® 0.625 & 0.75 ONLY**

- a. Remove ~6" off the center, outlet end rib on the underside of the liner. See Figure 4.1
 - b. Make a 6" long cut on each corner joint of the liner. See Figure 4.2
15. Locate the cross brace assembly on the inlet support post. The cross brace **MUST** install snugly against the FAST® lip to hold the FAST® unit in place. Drill guide holes using a 1/4" drill bit so as to install (2) supplied 1/4"-20 x 3.5" stainless steel bolts. Fasten each bolt in place by using a supplied lock washer and nut. Use (4) supplied self-tapping 3" stainless steel hex screws (#12) to secure the cross brace to the FAST® lip. The screw **MUST** penetrate both sides of the lip. See Figure 4.5
 16. Mark the location where the outlet end support post will penetrate the FAST® media. The outlet end support post's location is 6.5" from the outermost edge of the FAST® Airlift lip at the inlet end to the center of the support post. The width-wise location is in the precise center of the FAST® unit. This should put it in line with the recirculation trough. See Figures 4.3, 4.4 & 4.6
 17. Using a safe stance and position, twist the support post until it is completely through the FAST® media block. The support post **MUST REMAIN VERTICAL** through the media. **Perform this step carefully, you only get one attempt.**

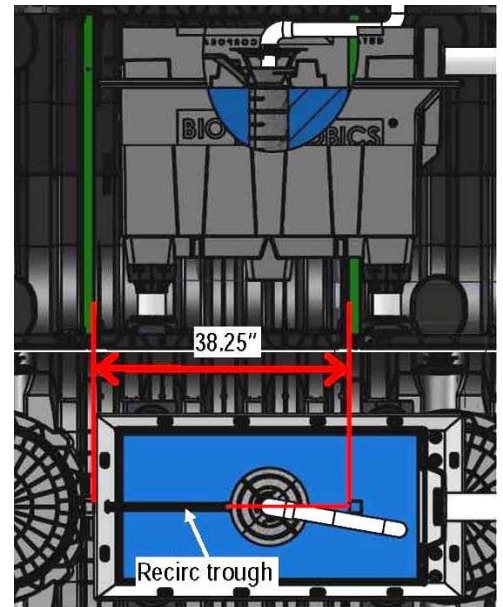


Figure 4.3



Figure 4.4



Figure 4.5

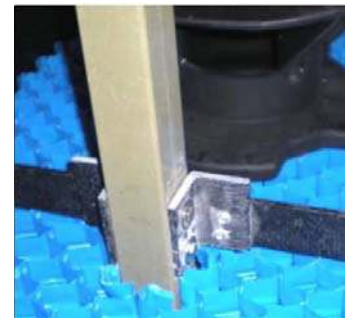


Figure 4.6

INSTALL PIPING & FINAL STEPS



Figure 4.7

18. Replace the FAST® unit's standard downpipe with supplied 2" PVC pipe. Solvent prime and glue the elbow and pipe pieces together shown in Figure 4.7
19. Run the air line through the outlet end manhole and to the blower. Use the supplied 2" clamp and the 1.5" stainless steel self-tapping hex screws (#14,) to secure the air line to the riser. Failure to do so could result in a broken air line.
20. Drill the inlet & outlet holes utilizing the predetermined drill points in the tank and insert the gaskets supplied in the Infiltrator P1 Plumbing Kit (100KIT-P1).
21. Complete installation using the FAST® Installation Manual and the Infiltrator's IM-1060 Septic Tank Assembler's Resource Guide.

22. Should the area in which you are installing the system have additional requirements please consult with Bio-Microbics or Infiltrator Water Technologies.

BAFFLE INSTALLATION (Section 2)

Use of the Infiltrator baffle for creating a two compartment tank will yield ~355 gallon settling and ~705 gal treatment compartments. The baffle **MUST** be installed on the inlet end of the tank.

1. Complete steps 1-11 as shown above in the standard IM-1060 installation.
2. When using the IM-1060 tank as a two compartment tank the baffle shall be installed on the inlet side of the tank.
3. The assembly for the inlet end support post must be completed at the same time the baffle is installed in the tank. Attach the FRP to the baffle according to Infiltrator's IM-1060 Septic Tank Assembler's Resource Guide.
4. Attach the assembled baffle to the FAST® lip as shown in Figure 5.1. Locate the cross brace assembly on the inlet support post. The cross brace **MUST** install snugly against the FAST® lip. Drill guide holes using a ¼" drill bit so as to install (2) supplied ¼"-20 x 3.5" stainless steel bolts.
5. Fasten each bolt in place by using a supplied lock washer and nut. Use (4) supplied 3" self-tapping stainless steel hex screws (#12) to secure the cross brace to the FAST® lip. The screw **MUST** penetrate both sides of the lip.
6. Outlet cross brace- Locate the cross brace assembly on the outlet support post. The cross brace **MUST** install snugly against the FAST® media as shown in Figure 5.1. Drill guide holes using a ¼" drill bit to install (2) supplied ¼"-20 x 3.5" stainless steel bolts. Fasten each carriage bolt in place by using a supplied lock washer and nut.
7. Mark the location where the outlet end support post will penetrate the FAST® media. The outlet end support post's location is 38.25" from the outermost edge of the FAST® lip at the inlet end to the support post's nearest face. The width-wise location is in the precise center of the FAST® unit. This should put it in line with the recirculation trough. See Figures 4.3 & 4.5
8. Using a safe stance and position, twist the support post until it is completely through the FAST® media block. The support post **MUST REMAIN VERTICAL** through the media. **Perform this step carefully as you only get one attempt.**



Figure 5.1



Figure 5.2

INSTALL PIPING & FINAL STEPS

9. Replace the FAST® unit's standard downpipe with supplied 2" PVC pipe. Solvent prime and glue the elbow and pipe pieces together shown in Figure 5.2.
10. Run the air line through the outlet end manhole and to the blower. Use the supplied 2" clamp and self-tapping 1.5" stainless steel hex screws (#14) to secure the air line to the riser. Failure to do so could result in a broken air line.
11. Drill the inlet & outlet holes utilizing the predetermined drill points in the tank and insert the gaskets supplied in the Infiltrator P1 Plumbing Kit (100KIT-P1).
12. Complete installation using the FAST® Installation Manual and the Infiltrator's IM-1060 Septic Tank Assembler's Resource Guide.
13. Should the area in which you are installing the system have additional requirements please consult with Bio-Microbics or Infiltrator Water Technologies.

If you have any questions call Bio-Microbics at 800-753-FAST (3278) or Infiltrator Water Technologies at 800-221-4436.