

Biotube[®] Effluent Filter Installation

FT12__ and FT15__, Concrete Tank Wall Mount (U.S. Patent Nos. 5294635 / 4439323)

Before You Begin

Be sure the tank is empty before you attempt to perform this installation.

In existing tanks or in tanks with poorly located access ports, it may be necessary to extend the tank outlet fitting by using a coupling. A coupling may also be needed to bush from 3034 PVC to the schedule 40 outlet of the filter.

IMPORTANT: Take proper precautions and wear personal protection equipment (PPE) whenever working in an enclosed area, such as a septic tank.

Step 1: Measure And Mark Mounting Bracket Location

Step 1a: Measure and record the distance from the invert of the vault's outlet to the center of the effluent filter vault's lower support coupling.

Step 1b: Use the measurement from Step 1a to mark the location for the mounting bracket on the inside of the tank wall.

- If there is a tee fitting installed on the tank outlet stub, remove it.
- Measure down from the invert of the tank outlet stub.
- Align the mark vertically below the tank outlet stub.

Step 2: Drill Anchor Holes

Step 2a: Center the mounting bracket on the mark inside the tank.

Step 2b: Use the holes in the bracket's flange as a template and drill the anchor holes into the concrete.

- Use a 1/4-in. (6 mm) masonry drill bit.
- Drill the holes a minimum of 1-3/8 inches deep (35 mm) into the concrete.

Step 2c: Remove the tank adapter and clear any debris out of the holes.

Step 3: Install Mounting Bracket

Step 3a: Thread the nuts onto the concrete anchors until they are flush with the ends of the concrete anchors.

- This protects the threads on the anchors when they are driven into the holes.

Step 3b: Drive the concrete anchors straight into the anchor holes until the anchors bottom out in the anchor holes.

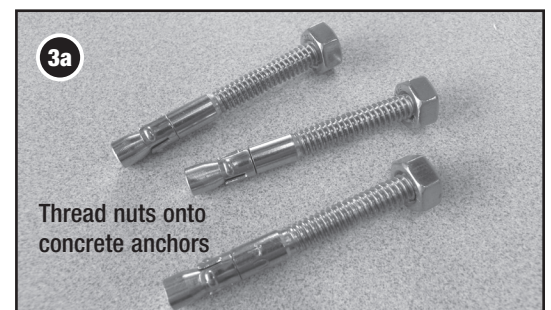
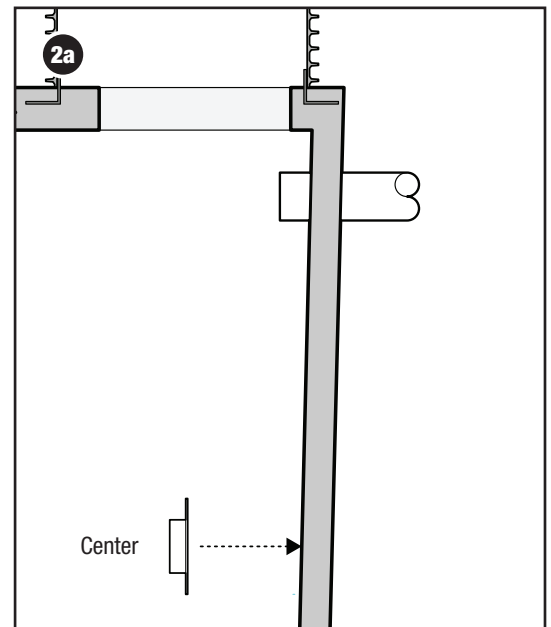
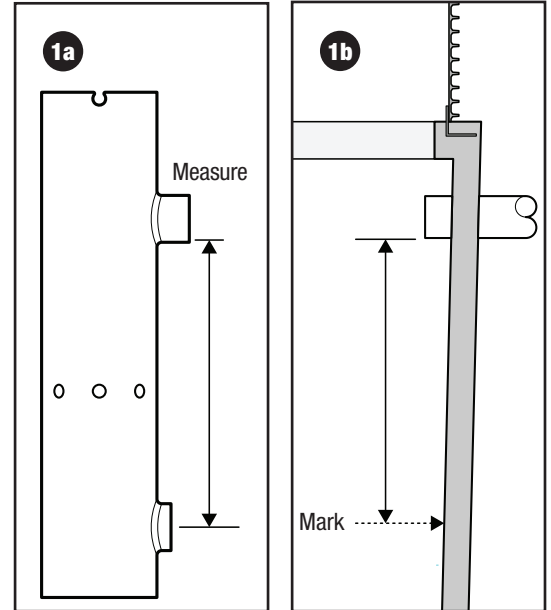
- Align the anchors correctly to avoid damaging the anchors or holes.

Step 3c: Remove the nuts from the anchors.

Step 3d: Place the mounting bracket.

- If necessary, you can use stainless steel washers to shim the mounting bracket for better vertical alignment.

Step 3f: Install a washer and nut on each anchor.



Step 3: Install Mounting Bracket, cont.

Step 3g: Tighten the nuts until they are snug.

- Do not overtighten the nuts.

Step 4: Install Mounting Bracket Pipe

Stainless steel self-drilling screws can be used in place of PVC cement in this step.

Step 4a: Dry fit the vault's outlet to the tank outlet stub.

- Make sure there will be enough clearance at the tank opening to easily remove the Biotube® filter cartridge.
- Make sure the vault remains vertical while you dry fit.

Step 4b: Measure the distance from the inside cup on the mounting bracket to the inside of the vault's lower support coupling.

- Make sure the vault remains vertical while you measure.

Step 4c: Remove the vault from the tank outlet stub.

Step 4d: Cut a section of 4-in. (100-mm) PVC pipe to the measured length.

Step 4e: Use PVC cement or self-drilling screws to install the pipe section in the mounting bracket.

Step 4f: Dry fit the vault to the tank outlet stub and the PVC section on the mounting bracket

- Check that the vault is straight and vertical.

Step 4g: Remove the vault from the stub and PVC section.

Step 5: Install Vault And Filter

Stainless steel self-drilling screws can be used in place of PVC cement in this step.

Step 5a: Apply PVC cement to the outside of the tank outlet stub, mounting bracket PVC section, and the inside of the vault's outlet and support coupling.

- Do not use PVC cement if you are securing the vault with screws.

Step 5b: Press the vault into position on the stub and PVC section.

- Make sure the vault is straight and vertical.
- Adjust the fit of the vault to make sure it is straight and vertical, if necessary.
- If you are securing the vault with screws, install screws now.

Step 5c: Install the Biotube filter cartridge into the vault.

- Make sure the handle tees snap into the vault body.

Step 6: Adjust Handle Length, If Necessary

If necessary, extend the handle of the cartridge to an elevation above the top of the tank for easy access.

- Use 1-in. (25-mm) schedule 40 PVC for the handle extension.
- Secure the extension on the handle with stainless steel self-drilling screws or PVC cement.

