

# GFX Heat Exchangers - Installation Page

## Easy To Install

The GFX heat recovery unit can be quickly installed by a qualified plumber or it makes a great little money saving project for the do-it-yourselfer.

1. Locate a vertical drain pipe and remove a section to the correct length.
2. Install the GFX heat exchanger using hubless couplings such as Fernco model or equal for plastic drain pipes.
3. Reroute the incoming cold water to flow in an upward spiral in one of the two water connection methods below.

**Please read these instructions carefully before installing a GFX**

### Caution:

1. GFX installation should only be attempted by qualified persons familiar with plumbing/construction procedures, codes and specialty tools.
2. The GFX is not sold with fittings, couplings or connectors which are the responsibility of the installer as determined by on-site conditions.
3. Be sure no one uses the plumbing system until after the installation is complete on remodeling and renovation projects.
4. A GFX may be installed on the second floor, first floor, crawl space and basement – virtually anywhere there is access to a sufficiently tall section of VERTICAL waste pipe having waste hot water flowing through it along with access to a cold water supply line. The GFX may be installed in more than one location, as on-site conditions may allow. For best results, install at exit of main drain line.

## **Waste Pipe:**

1. The GFX must be installed in a VERTICAL (90 degrees) section of water pipe. Horizontal or diagonal positions are not effective. Shim as necessary when complete.
2. Determine the waste pipe diameter of the existing pipe. The GFX must be equal or greater than the existing pipe diameter. Either end of the GFX may be positioned up.
3. Properly support vertical waste pipe from top and bottom before cutting and removing. Measure, remove and replace a vertical section of the existing waste pipe being careful to allow enough clearance for connecting fittings and the GFX. Deburr exposed pipe ends.
4. The couplings used for connecting a GFX into the existing waste system may vary depending on the type of existing waste pipe and any particular on-site conditions.

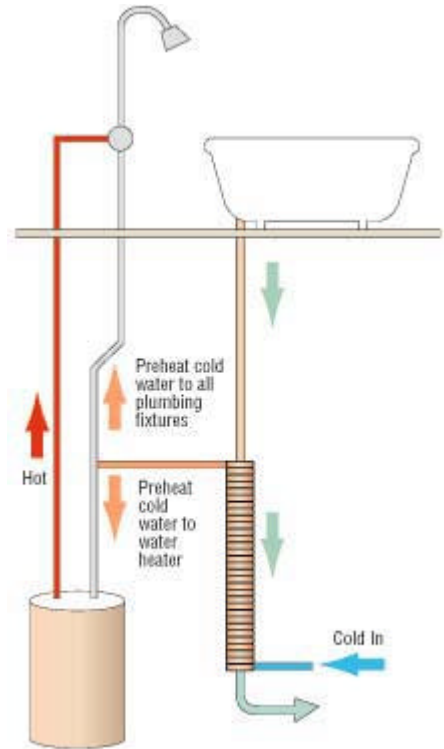
## **Water Pipe:**

1. Install appropriate plumbing fittings on both ends of the GFX coil that will be used to connect the GFX coil to the cold water supply.
2. Turn off the cold water supply and drain the water from the line.
3. Connect the INCOMING cold water to the BOTTOM port of the GFX coil.
4. Connect the OUTGOING cold water supply to the TOP port of the GFX.
5. The placement and installation of shut off, drain or bypass valves and clean out traps, while not necessary for the installation of a GFX, are determined by applicable state and local codes and are the responsibility of the installer.

## Installation Options

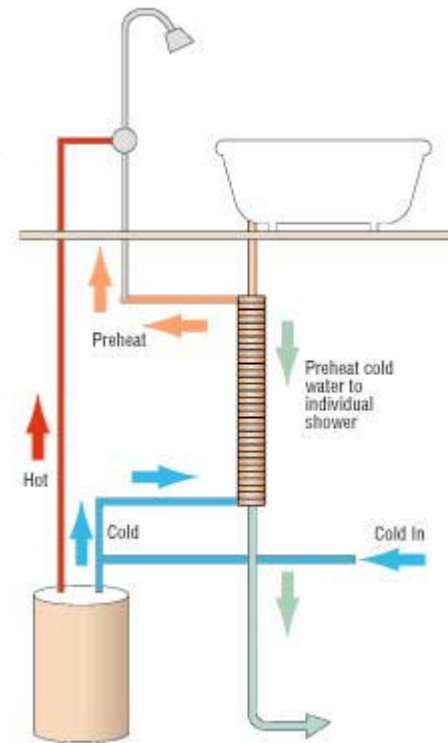
### Equal Flow

For maximum savings, plumb the pre-heated water from the GFX to both the water heater and the cold line feeding all plumbing fixtures. Preheating the cold water to fixtures like a shower significantly reduces the amount of hot water needed and maximizes savings from the GFX. This also creates an equal flow where the total preheated water being used is equal to the total water going down the drain.



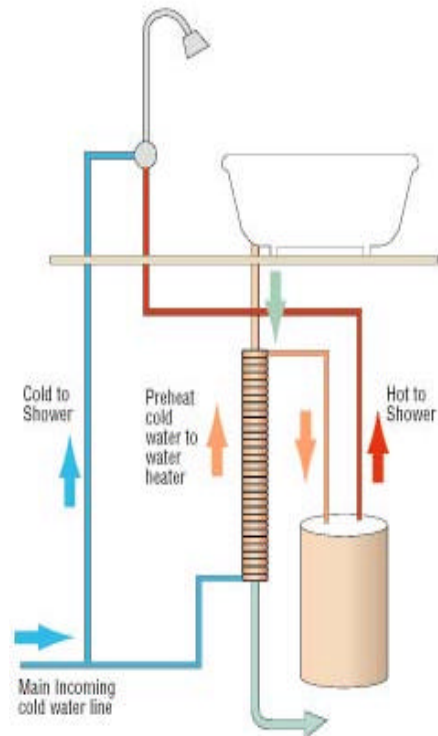
## Unequal Flow A

The preheated water from the GFX does not have to be plumbed in equal flow to be effective. As shown, the GFX can be plumbed to recycle heat from an individual shower with the preheated water going to the cold line only. This is ideal for multi-family applications, hotels, and residential applications with basement height restrictions. While slightly less efficient, the GFX still offers significant savings in a variety of installations.



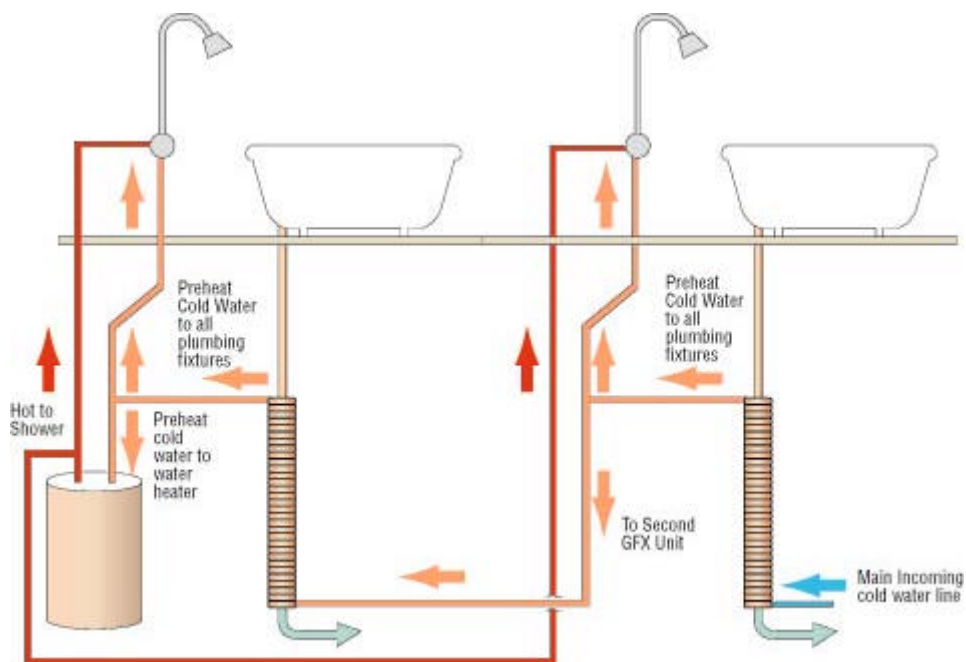
## Unequal Flow B

Feeds water heater only. No access to cold feed to shower. Located below dedicated shower.



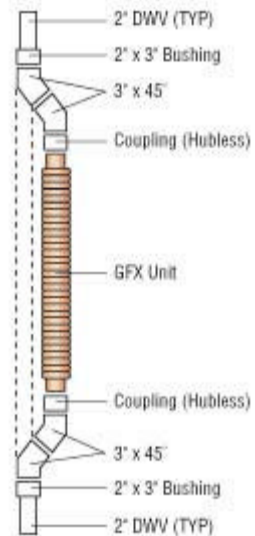
## Multiple GFX - Use "S" Models

Preheated water from first GFX feeds one set of fixtures and second GFX. Second GFX feeds second set of fixtures and water heater. S Model GFX Required.



## If Drain Pipe is Smaller than GFX

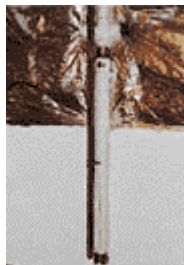
Follow this procedure. Be sure to use copper/copper, cast iron/copper, plastic/copper. Use the proper fittings.



## Installation Examples



The GFX S3-60 serving two bathrooms in typical house



The GFX S3-60 tripled the supply of hot shower water in an all-electric home