



MAXIFOLD Stainless Steel Radiant Heating Manifold

1. Attach mounting brackets securely to wall in desired location. The MAXIFOLD is designed to have the supply and return piping coming from below. If the piping will be coming from above, the air bleeders and swivel fill/purge valves on both the supply and return manifold must be switched before installation. Simply use an adjustable wrench to do this. The 1 inch supply and return piping is designed to come from the left, however if piping from the right just flip the manifold to suit your needs. If the supply/return piping is coming from the right and you will be using the optional thermometer insert, switch the thermometer well and the cap so that the well will be in the front and the cap in the back of each manifold. Remember to make sure that the air bleeder is on top of both manifolds if you intend to use them!

2. Connect the 1" full port ball valves (optional) to the end of each manifold using the gaskets supplied. Connect the 1" sweat tails (some refer to these as manifold adapters) to either the manifold or the ball valves in the same manner. Do not use any pipe sealant or teflon tape for this connection. Make any solder connections BEFORE attaching to the manifold or ball valve to avoid damaging the gaskets.

3. Use the appropriate compression fittings to attach each loop to the manifold. Make sure that the supply lines are connected to the red manifold (with the flow meters) and the return lines are connected to the blue manifold (with the blue caps). The MAXIFOLD is not designed for reverse flow. The system will not work properly if the manifolds are piped backwards. Reversing the flow will restrict the amount of water which can pass through the line and the flow meters will not work. It will also cause noise in the flow meters that will annoy homeowners and may result in callbacks..

4. Pressurize the system using air to check for tubing leaks from nail or screw penetrations in the tubing. Ensure all connections are air and water-tight (wet the filter gaskets before testing with air). The system should hold a pressure of 80 psi for at least 24 hours.

5. Attach drain hose to the swivel fill/purge valve on the return (blue) manifold. Use the top of the valve cap to open the valve (at the bottom of the valve body) by turning the cap counterclockwise.

6. Close all loops on the MAXIFOLD except for the first one (open this one all the way). To close the supply manifold, pull off the red plastic locking cap. Flip it over and place it back over the flow meter. Turn the cap clockwise to close the valve (it takes a little more than 5 turns to go from fully open to fully closed). **Do not try to open or close the flow meter by turning the clear plastic tube! Always use the red cap!** Next, close the return manifold by turning the blue caps clockwise (remove the cap on the first loop to open this valve).

7. Close the valve on the return line to the boiler or primary loop.

8. Open the fast fill valve on the boiler to fill the first loop. If you are using a mixing station, remove the temperature controller from the 3 way valve, and make sure that the high limit kit is fully open to allow enough water pressure to fill the system.

9. After first loop has been filled, close both valves and open the next loop. Repeat for all loops.

10. Close the swivel purge/fill valve using cap (turning the cap clockwise).

11. Open all of the supply and return valves. If using a mixing station, re-set the high limit kit, and replace the temperature controller onto the 3-way valve. Open valve on return line to the boiler.

12. Bleed any trapped air using the air bleeders on each manifold. Additional air should be removed by the boiler's air vent system after an extended period of circulation (24 hours or so).

13. With the pump running, close the first flow meter. **Remember to use the red cap. Do not adjust the flow meter by turning the clear plastic tube!** Gradually open the flow meter until the desired flow rate (up to 2 gpm) is reached. Repeat for each loop until all are balanced. Install optional thermometers in supply and return manifold wells. Place optional actuator zone valves on the return manifold for control of each loop.