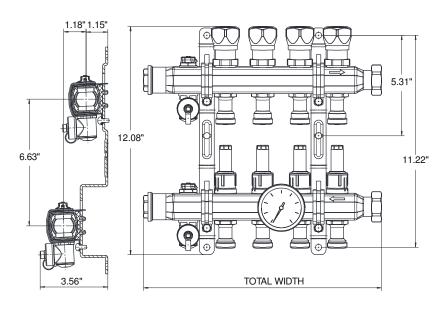


Stainless Manifold Shut Off/Balancing/Flow Meters

Stainless manifolds are intended to be used in closed loop hydronic heating, cooling and snow melting systems. These preassembled 11/4" diameter stainless supply and return manifolds come attached to two 65%" spacing brackets for compact remote mounting. Stainless manifolds can provide shut-off and balancing with flow meters for each circuit.

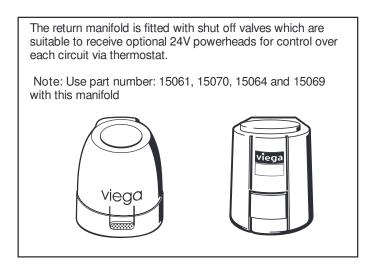
Dimensions	
Height	12.1"
Depth	3.6"
Manifold	Total Width
2 outlets	10.7"
3 outlets	10.7"
4 outlets	12.7"
5 outlets	14.6"
6 outlets	16.6"
7 outlets	18.6"
8 outlets	20.5"
9 outlets	22.5"
10 outlets	24.5"
11 outlets	26.4"
12 outlets	28.4"



^{*}When extending the manifold, Viega requires using thread sealant paste on the 1" NPT manifold end connection.

Technical Data

- · 2 GPM per circuit
- · 18 GPM per manifold
- 11/4" union connection
- 1" NPT removable end caps
- Factory tested 1½" 304 stainless manifold stock
- Supply manifold with balancing valve/ w meter
- Return manifold with shut off valves (blue caps)
- · Factory installed air bleeders and purge valves
- · Mounting brackets
- Max. operating temperature: 180°F Short periods of 200°F
- · Max. operating pressure: 100 psi





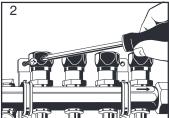
Mounting Instructions

Stainless Manifolds are typically mounted to a wall or within a manifold cabinet.

Mounting the Stainless Manifold to a Wall

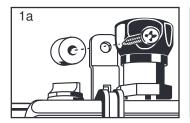
- Insert screws through the manifold bracket mounting holes and into the wall.
- The manifold should be secured at four points located at the top and bottom of each mounting bracket. If mounting to sheetrock; verify the screws are long enough to tighten into framing members within the wall.

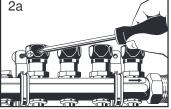




Stainless Manifold Wall Spacers

Manifold spacers should be used in conjunction with stainless manifolds, 4 wire 24 volt powerheads: part number 15064 and 15069 and 0-10VDC powerheads: part number 15068 only. [%" thick spacers)

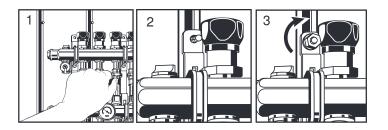




- 1a. Install a spacer between the manifold bracket and the wall at each of the four mounting locations. Mounting locations are located at the top and bottom of each manifold bracket.
- 2a. Install screws through the bracket hole, spacer and into the wall. If mounting to sheetrock; verify the screws are long enough to tighten into framing members within the wall.

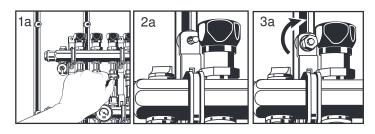
Mounting the Stainless Manifold within a Manifold Cabinet

- 1. Position the manifold bracket over the mounting hardware within the cabinet.
- 2. Adjust the rails and hardware until the manifold is located properly. The manifold should be secured at four points located at the top and bottom of each mounting bracket.
- 3. Install the four nuts over the mounting bracket and tighten all mounting hardware.



Stainless Manifold Cabinet Spacers

Manifold cabinet spacers should be used in conjunction with stainless manifolds, manifold cabinets and 4 wire 24 volt powerheads: part number 15064 and 15069 and 0-10VDC powerheads: part number 15068 only. (1/4" thick spacers)



- 1a. Install the four spacers by placing them over the mounting bolts within the manifold cabinet.
- 2a. Align and place the manifold bracket on top of the four spacers and mounting bolts.
- 3a. Install all four nuts and tighten.

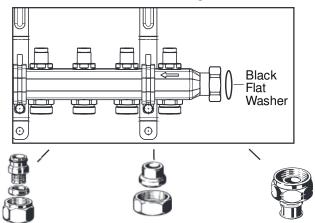


Operation

End Connections

- 1. Use only Viega's manifold adapters to connect manifold.
- 2. Make sure that the black flat washer is placed in union connection for proper seal.
- 3. DO NOT use teflon tape or thread sealant paste on union connection.
- 4. When extending the manifold, Viega requires using thread sealant paste on the 1" NPT manifold end connection.

Circuit connection configuration

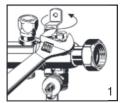


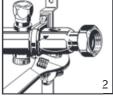
SVC Compression PEX Adapters attach PEX tubing to manifolds.

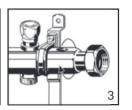
SVC Compression Copper Adapters connect ½" and ¾" copper tubing to SVC seat without soldering.

SVC Press Adapters allow the Viega press connection system to be used on manifolds.

Some applications will require the tubing to be brought to the manifold from above. In this type of situation, the purge valve and air bleeder will need to be switched along with flipping the manifold over.











- Remove air bleeder.
 Remove purge valve
- 2. Remove purge valve.
- 3. Flip manifold over.
- 4. Attach purge valve.
- 5. Attach air bleeder.

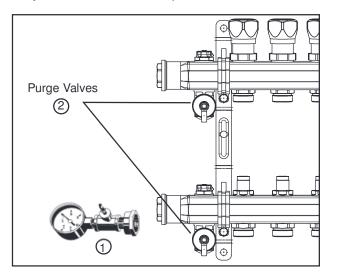
Pressure Testing

Before the finish floor is installed and during concrete pouring the radiant system must be pressure tested. Air or water may be used as the medium.

The following procedure is recommended by Viega. Check the local building codes for compliance or additional test requirements.

Note: If the tubing is damaged, repair punctured section with a coupling. Procedure:

- 1. Double check all connections to manifold to ensure proper seal.
- 2. Connect manifold pressurization kit (1) to any purge valve (2).
- 3. Pressurize the system to 100 psi to detect potential nail or screw penetrations.
- 4. The system should hold the 100 psi for a minimum of 1 hour.



Purging

- 1. Attach drain hose to purge valve hose connection on return manifold and open valve with valve cap.
- 2. Close all but one balancing valve on supply manifold using a 5 mm allen wrench or included valve key (reference steps on page 4). Close isolation ball valve on boiler return line if mixing station is attached. Remove plastic dust cap or temperature controller from 3-way valve, and make sure that high limit kit is fully open (refer to mixing station product instructions).
- 3. Open boiler fast fill valve to purge circuit. After purging first circuit, close valve and open next one. Continue with one circuit at a time until all circuits have been purged.
- 4. Close purge valve and open all balancing and boiler valves. If mixing station is attached, reset high-limit kit, and reinstall temperature controller or actuator onto 3-way valve.
- Any remaining air pockets in the system will be eliminated through the boiler's automatic air vent after a few hours of constant circulation.

Note: If the system must be purged again in the future for any reason, the high limit kit must be reopened during purging for full flow.



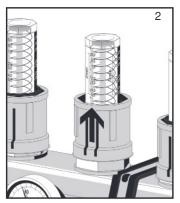
Initial Balancing

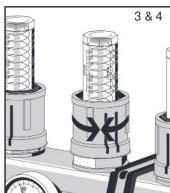
System should be properly purged before balancing is done. Many times it is not possible to design the system using equal circuit lengths, so the system must be balanced in order to ensure proper flow to each circuit on the manifold.

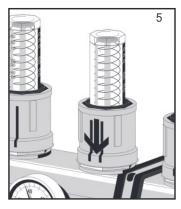
Procedure:

- 1. Start with all circuit valves fully closed. To close valves:
- 2. Pull red locking caps up about $\frac{1}{4}$ " (do not remove cap completely).
- 3. Holding onto the red locking cap, turn clockwise (with system pump still running) until flow meter reads 0 gpm. Valve is now fully closed
- 4. To increase flow, turn red locking cap counterclockwise until desired flow rate is met.
- 5. Once desired flow rate is met, push red locking cap back down into starting position.
- *Balancing/flow meter valve can be mounted up, down, left or right.
- *Flow through meter can be completely shut off.
- *Valve will go from fully closed to fully opened in approximately 5 turns

Note: DO NOT adjust flow rate by turning the clear plastic cylinder of the flow meter. To adjust flow rate, lift up and rotate red locking cap.







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