Installation

Radiant Heating / Snow Melting

Viega heat exchangers may be installed in either a vertical or horizontal position and piped in counterflow. Note that connections are on same side of exchanger, not diagonal.

Viega products are designed to be installed by licensed and trained plumbing, mechanical, and electrical professionals who are familiar with Viega products and their installation. Installation by non-professionals may void Viega LLC’s warranty.

Preferred

Acceptable

Not Recommended
**Water Strainer**
When boiler water is utilized as the hot water circuit, a strainer may not be required on the inlet of the heat exchanger provided a water strainer is incorporated as an integral part of the boiler system (e.g., water inlet valves and backflow preventers have built in water strainers).

If a water strainer is not provided by the heat source one MUST be installed in the supply piping to the heat exchanger to protect against blockage and/or restricted flow (20-40 mesh recommended).

**Water Quality**
Water quality should be maintained at a pH of not less than 7.0 or higher than 8.0, for proper heat exchanger life.

Water with high sulfur content or sulfuric acid, and low pH, may cause gradual copper erosion and failure of the heat exchanger after a short period of service.

Sea water and highly chlorinated water such as pool and spa water is NOT acceptable and will cause premature heat exchanger failure.

**Glycols**
Glycols (ethylene or propylene based) can be used with Viega brazed plate heat exchangers. The glycol should be tested annually to make sure that the fluid still retains the desired properties and protection. Automotive glycols contain silicates and are not to be used.

Do not heat any glycol above 285°F.

**Threaded Connections**
Use tape or other sealant on male threaded part of connection to prevent leakage. Always use two wrenches when connecting piping to a Viega heat exchanger to prevent over torque stress to the heat exchanger.
Cleaning

In some applications, Viega heat exchangers may be subjected to severe fluid conditions, including high temperature and/or hard water conditions, causing accelerated scaling and corrosion rates which will penalize the performance of the heat exchanger.

Because of these factors it is important to establish regular cleaning schedules. A chemical cleaning process is very simple for cleaning the heat exchanger. Proper maintenance will result in continued excellent performance and extended life of the heat exchanger.

Cleaning solutions such as Safe-D-Scale or Rydyme can be obtained from your local wholesaler. Make sure that the cleaning solution is applicable for stainless steel and copper or nickel, and that the manufacturer’s directions are followed. A 5% solution of Phosphoric Acid or Oxalic Acid may also be considered.

Do not heat cleaning solution when back flushing through heat exchanger. Flush heat exchanger with fresh water after cleaning.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>No. of Plates</th>
<th>BTU/hr</th>
<th>Supply Flow Rate (Gpm)</th>
<th>Supply Pressure Drop (psi)</th>
<th>Load Flow Rate (Gpm)</th>
<th>Load Pressure Drop (psi)</th>
<th>Connection (MNPT) (in)</th>
<th>Stud Size</th>
<th>Depth (in)</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22006</td>
<td>16</td>
<td>125,000</td>
<td>8.5</td>
<td>4.1</td>
<td>9.0</td>
<td>3.9</td>
<td>¾ M8</td>
<td>1.79</td>
<td>8.2</td>
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<tr>
<td>22007</td>
<td>36</td>
<td>250,000</td>
<td>17.2</td>
<td>2.3</td>
<td>18.8</td>
<td>3.2</td>
<td>1¼ M10</td>
<td>3.55</td>
<td>14.0</td>
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<tr>
<td>22008</td>
<td>70</td>
<td>500,000</td>
<td>34.1</td>
<td>2.7</td>
<td>36.0</td>
<td>4.1</td>
<td>1¼ M10</td>
<td>6.55</td>
<td>23.8</td>
<td></td>
</tr>
</tbody>
</table>

**Flow rate and pressure drop calculated for: Supply 180°F in to 150°F out; Load 40% propylene glycol 100°F in to 130°F out**