# **Product** Instructions

## **Heat Exchangers**

### Installation

#### Radiant heating / Snow melting:

Viega<sup>®</sup> Heat Exchangers may be installed in either a vertical or horizontal position, <u>piped in counterflow</u>. Note that connections are on same side of exchanger, not diagonal.



#### 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 sulphur 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<sup>®</sup> 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 Teflon tape or other sealant on male threaded part of connection to prevent leakage. Always use two wrenches when connecting piping to a Viega<sup>®</sup> Heat Exchanger to prevent over torque stress to the Heat Exchanger.

# **Product** Instructions



#### Cleaning

In some applications Viega<sup>®</sup> 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 RYDLIME 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.



### Specifications

Plate Material: 316L Stainless Steel Braze Material: Copper Max. Working Temp: 350°F Min. Working Temp: -320°F Max. Working Pressure: 450 psi UL Listed



For snow melt system, 100°F in to 130°F out ( 40% Propylene Glycol) connected to boiler, 180°F supply to 150°F return												
Part Number	Description (width x height, # of plates)	BTU/H	Boiler (Gpm)	Boiler Pressure Drop (psi)	Snow Melt (Gpm)	Snow Melt Pressure Drop (psi)	A	В	С	D	E	Depth
22006	5"x 12",16 plate	125,000	8.6	2.9	9	3.1	2.7"	9.9"	.79"	2.5"	3.5"	1.8"
22007	5" x 12", 36 plate	250,000	17.2	2.2	18.8	2.7	2.7"	9.9"	.98"	2.5"	3.5"	3.6"
22008	5" x 12", 70 plate	500,000	34.4	2.8	36.1	3.6	2.7"	9.9"	.98"	2.5"	3.5"	6.7"

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