

AUXILIARY HOT WATER HEAT

OPTIONAL HOT WATER HEATING OPTIONS

Desert Aire provides auxiliary heating options for its SelectAire™ Series product line that are sized to meet the winter heating requirements of the space.

These heating elements are utilized when the air temperature in the zone drops below the customer set point. Desert Aire sizes the heating elements to precisely match the load requirement of the system. The heaters are automatically controlled by the unit's microprocessor to maintain an exact leaving air temperature. A customer supplied hot water control valve is modulated from the controller with a 0 to 10 VDC direct acting signal. Please refer to figure 1 for a typical installation.

HWC Design Inputs

The coil is selected for each customer's particular application based on the following criteria:

- Entering water temperature (EWT), typically between 140° F and 180° F
- Leaving water temperature (LWT), typically 20 degrees less than the EWT
- Customer specified capacity required (MBH)
- Entering air temperature (EAT), (the mix temperature of outdoor air at winter design with return air)
- Specify fluid pressure drop maximum
- Type and concentration of glycol used, if applicable

For freeze protection Desert Aire uses a capillary type temperature sensor which is attached across the downstream face of the coil. Freezestat is set at 38 deg F with an auto reset switch. If engaged the unit controls would respond by closing the outdoor air damper, wait 5 minutes and if not reset, de-energize the fan, open the hot water coil valve 100%, and log the alarm on the controller.

To size the control valve, please provide a qualified vendor the water temperature, flow rate (gpm) and the requirement for a 0 to 10VDC signal and they will select the appropriate valve to purchase.

Desert Aire offers HW valve/actuators as an option. Please consult with your Desert Aire sales representative if you wish for Desert Aire to supply this component.

Optional ElectroFin coil coating for pool environments is available.

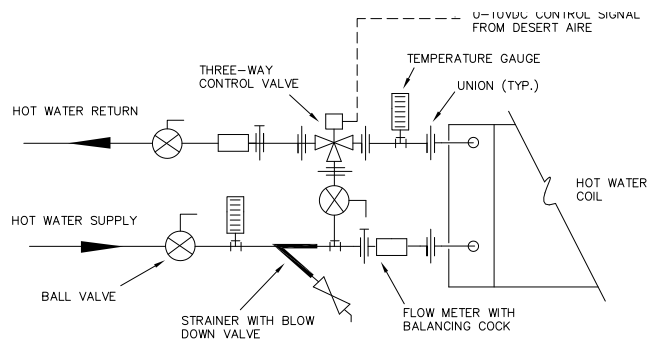



Figure 1 - Hot Water Piping Detail

OPTIMIZING SOLUTIONS THROUGH SUPERIOR DEHUMIDIFICATION TECHNOLOGY

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 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov