# INSTALLATION INSTRUCTIONS FOR RESIDENTIAL HYDRONIC BUFFER TANK FOR MODELS: RBT 030, 050, 080 & 119

## **△ WARNING**

Use this vessel only in hydronic heating systems. DO NOT use in potable water systems. The installer must comply with all plumbing codes. DO NOT operate above the temperature or pressure specified on the rating plate. Failure to comply may result in personal injury, property damage, or death.

# **Application**

The primary application of a buffer tank is to reduce boiler or heat pump cycling. Hydronic buffer tanks are designed to be used in systems operating below the designed load conditions, or in systems having several low BTU heating loads calling at different times.

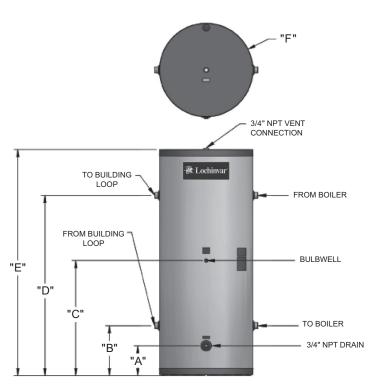
#### **NOTICE**

Short cycling can result in reduced operating efficiency which shortens the life of the appliance.

- Hydronic buffer tanks are built with four (4) connections. Two

   (2) connections can be piped to the heating appliance and two
   (2) can be piped to the distribution system. If piped correctly
   the buffer can serve as a hydraulic separator as well as a thermal
   buffer. The heating appliance is therefore de-coupled from the
   distribution system. Reference the piping diagrams on pages 2
   and 3 of this instruction sheet.
- The buffer tank is also supplied with a 3/4" NPT vent connection, 3/4" drain opening, and a 3/8" sensor bulbwell. This bulbwell is designed to accommodate sensors supplied with the boilers or a Honeywell Aquastat control (TST20016) which can be ordered from your Lochinvar distributor.

Figure 1 Buffer tank dimensions, refer to table below



### **Dimensions and Specifications**

Model Number	Gallon Capacity	A	В	С	D	E	F	Supply/ Return	Boiler Tappings
RBT 30	30	4"	9 1/2"	17 1/8"	24 1/4"	34 1/4"	20 1/2"	1 1/2"	1 1/2"
RBT 50	50	3 3/4"	9 1/2"	25 3/4"	41 5/8"	53 7/8"	20 1/2"	1 1/2"	1 1/2"
RBT 80	80	3 3/4"	11 3/4"	29"	46 1/4"	58 3/8"	24"	2"	2"
RBT 119	119	3 3/4"	11 3/4"	30 1/8"	48 1/2"	61 5/8"	29 1/2"	2"	2"

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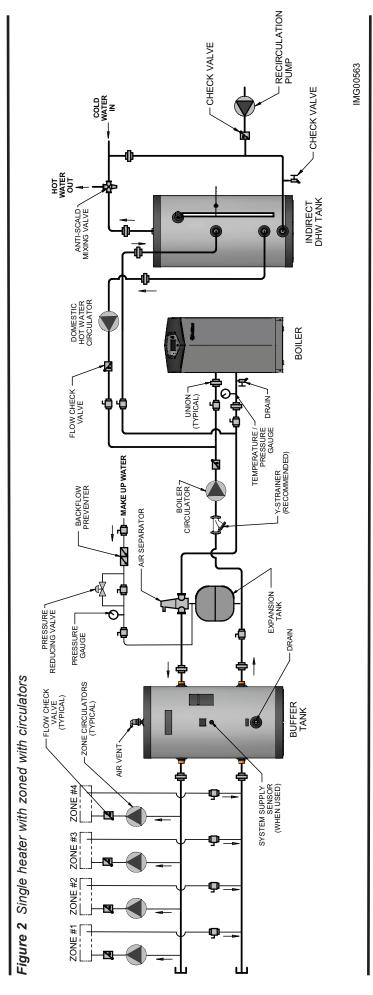


Figure 3 Multiple heaters zoned with circulators

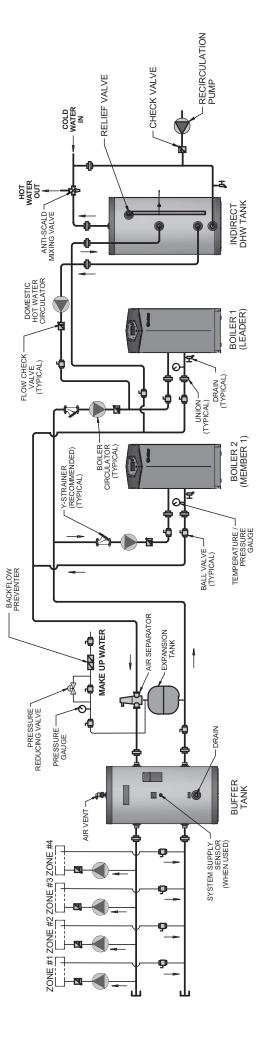
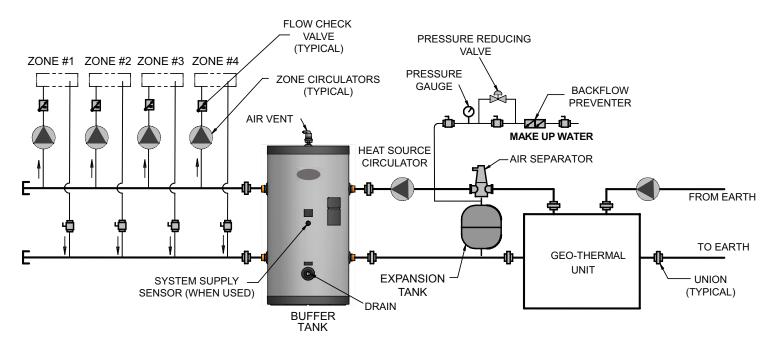


Figure 4 Geothermal heat pump



NOTICE

Please note that these illustrations are meant to show system piping concept only, the installer is responsible for all equipment and detailing required by local codes.