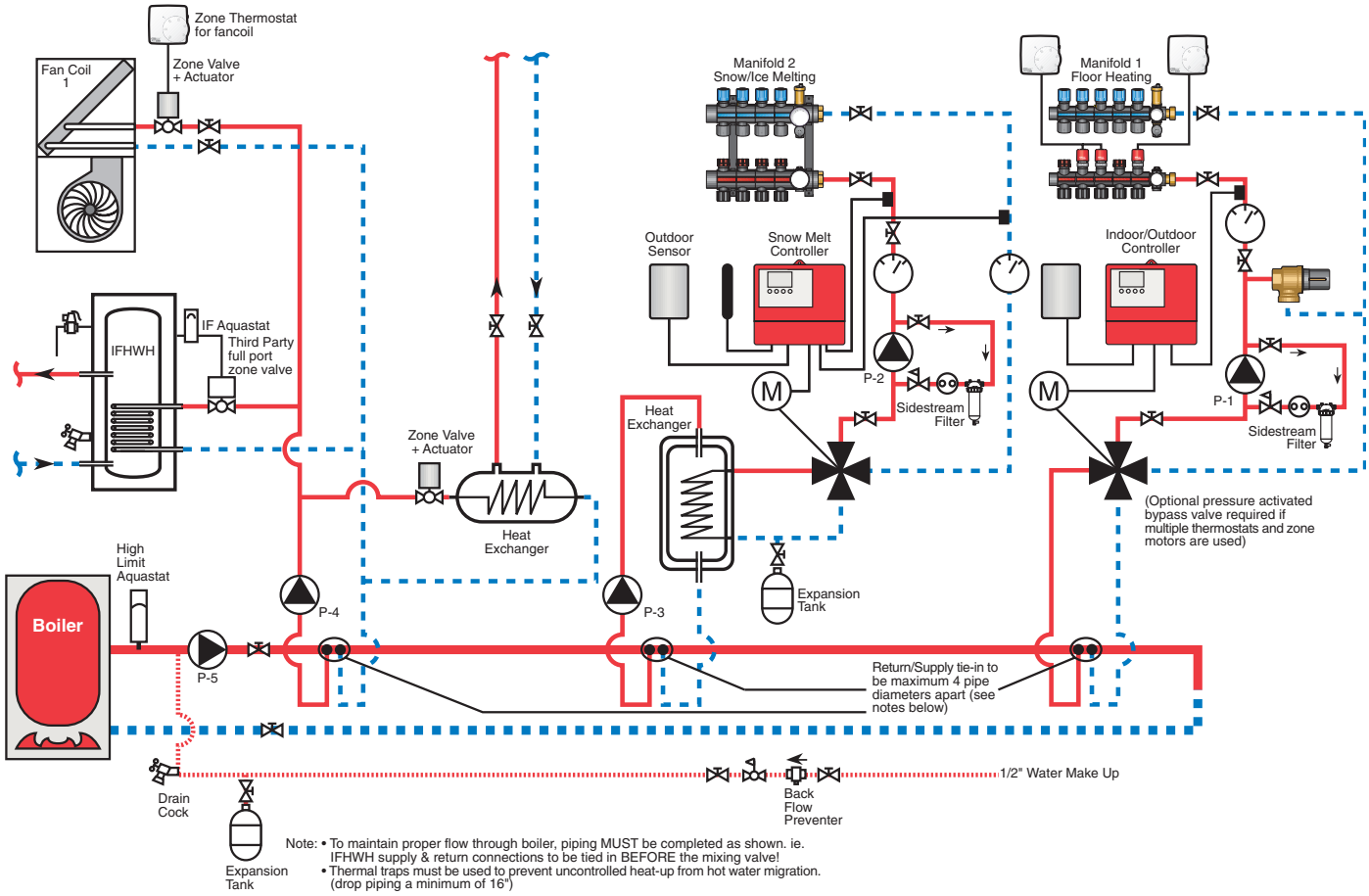
6 Circuit (Mod. Fl. Ht. & Snowmelt. plus Components)

July 17, 2008 - **TECH 5.4**

Application: **4-Way Mixing**

Cast iron high mass boiler and 6 circuits
(two low temp. circuit - fully automatic modulating water temp. for floor heating and snow melting)
(four high temp. circuits; snowmelt & pool/hot tub heat exchangers, fan coil, and indirect fired hot water heater)



Note:

- Air vents, expansion tanks, pressure relief valves etc. For boiler as per local codes.
- Drawings are for HeatLink® suggested system layout only. User must determine if system layout will work for their particular application!
- Use isolation ball valves for all circuits and components.

Control Sequence:

- Indoor/outdoor plus snowmelt control units provide the correct water temperature for the HeatLink® radiant floor heating and snowmelting systems. By correlating outside air temperature, secondary supply & return water temp., primary return water temp. & room temp. the control units then activate their respective 4-way mixing valve motors which in turn modulates the supply water temperature to the floors/slabs. (See ELECT 1.8 & 1.12 for wiring specifications). Secondary floor heating control is provided by individual room thermostats operating actuators. For the forced air system the zone thermostat will open the zone valve and in turn activate the fan coil.
- Boiler to fire either: 1) Independently on its own operating controls or 2) By activation through a relay of the controllers. APPLICATION TO USE OPTION (____).
- Primary pumps (P-4 & P-5) to be wired through a relay in series with the thermostats or aquastats of the fan coil, heat exchanger or indirect fired hot water heater and their respective zone valves. Zone valves to be controlled by an aquastat or zone thermostat. Snowmelt heat exchanger primary pump (P-2) to be controlled by a relay of the snowmelt controller. (See ELECT 5.4)
- All Pumps to be wired with their own disconnect switches. System pumps P-1 and P-2 to operate either: 1) Continually or 2) By activation through a relay of their respective controllers (See ELECT 5.4)
  FOR THIS PARTICULAR APPLICATION P-1 & P-2 TO OPERATE AS PER OPTION (_____).