



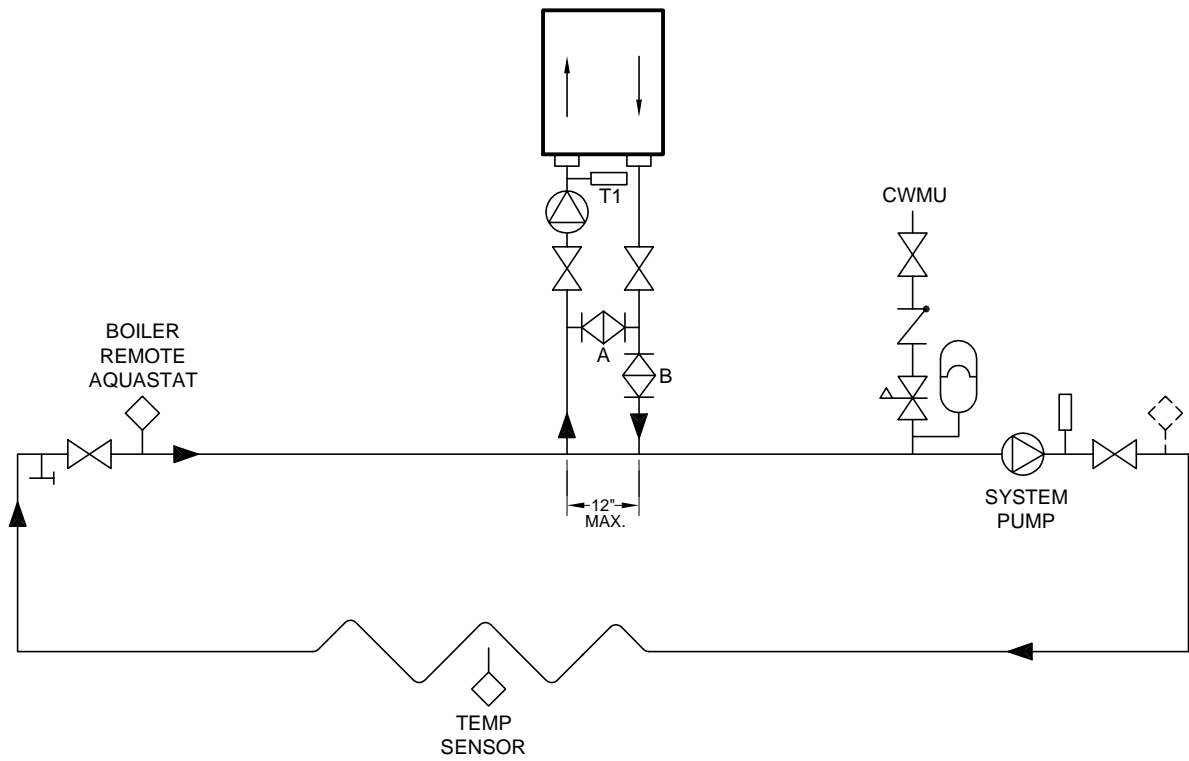
# SINGLE BOILER PRIMARY/SECONDARY RADIANT PIPE

260 North Elm Street - Westfield, MA 01089  
413.568.9571 fax 413.568.1178

Hydronic Piping H-9

- Pump
- Gate Valve
- Globe Valve
- Angle Valve
- Butterfly Valve
- Circuit Setter
- Ball Valve
- Motorized Valve
- Solenoid Operated Valve
- Self-Operated Valve
- Pressure Reducing Valve
- Check Valve
- Pressure Relief Valve
- Flow Switch
- Thermometer
- Aquastat Union
- Pressure Switch
- Gas Pressure Regulator
- Automatic Air Vent

Boiler connection Pipe Sizing and Heat Exchanger Configuration		
Heater Model	Pipe size NPS	Configurations
50-400	1 1/2"	Two Pass
420-1900	2 1/2"	Two Pass
2000-4000	3"	Two Pass
Dominator	2 1/2"	Two Pass
Futura	2 1/2"	Four Pass



**NOTES:**

1. Primary/Secondary required for variable flow systems.
2. Boiler circuit piping must equal boiler connection size.
3. Boiler Pump sized to boiler design flow requirements.
4. Boiler water connection (inlet/outlet) vary per model. Verify connection orientation.
5. All boilers furnished with factory mounted outlet water temperature gauge.
6. Dotted symbols indicate optional locations.
7. Boiler Pump requires system temp Interlocks.
8. CWMU = Cold Water Make-Up.
9. Temperature sensors require field interlocks to boiler control.

10. Remote aquastat and slab temp sensor to be attached to boiler interlock.

**ADJUSTMENT PROCEDURE TO MAINTAIN INLET TEMPERATURE ABOVE DEW POINT**  
105° FOR ATMOSPHERIC  
140° SEALED COMBUSTION

1. Turn heater on and open valves A & B.
2. After steady-state operation, if T1 is less than 105°F, slowly close valve B until T1 climbs to 105°F.
3. If T1 is greater than 105°F, slowly close valve A until T1 drops to 105°F.
4. Check after system operating temperature has stabilized. Make final adjustments.
5. Follow same adjustment procedure for sealed combustion.

Notice: This drawing shows suggested piping configuration and valving. Check with local codes and ordinances for additional requirements.