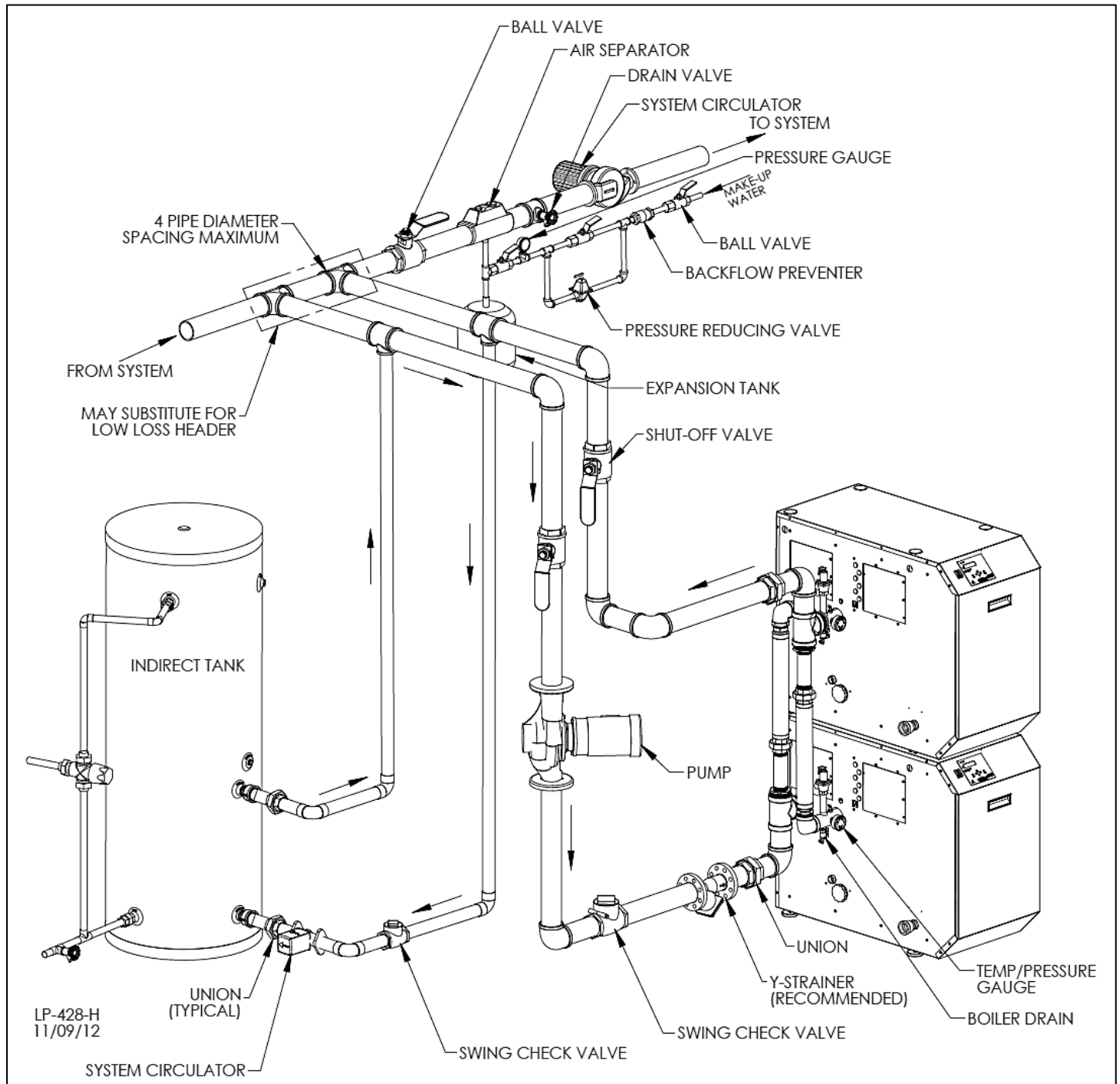


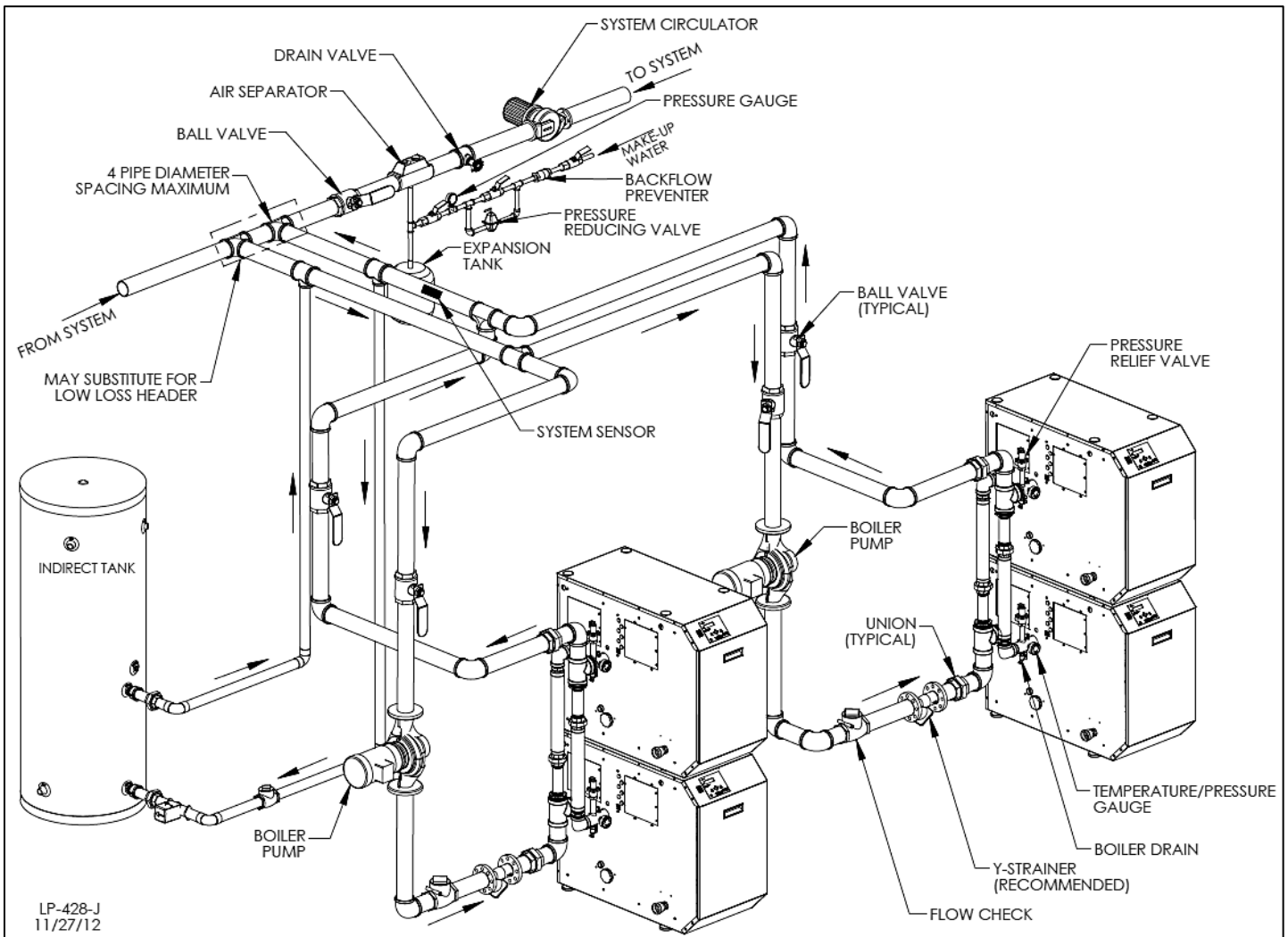
## M. BOILER PIPING DETAILS



**Figure 7 – Single Boiler Space Heating – Indirect Priority**

### FIGURE NOTES:

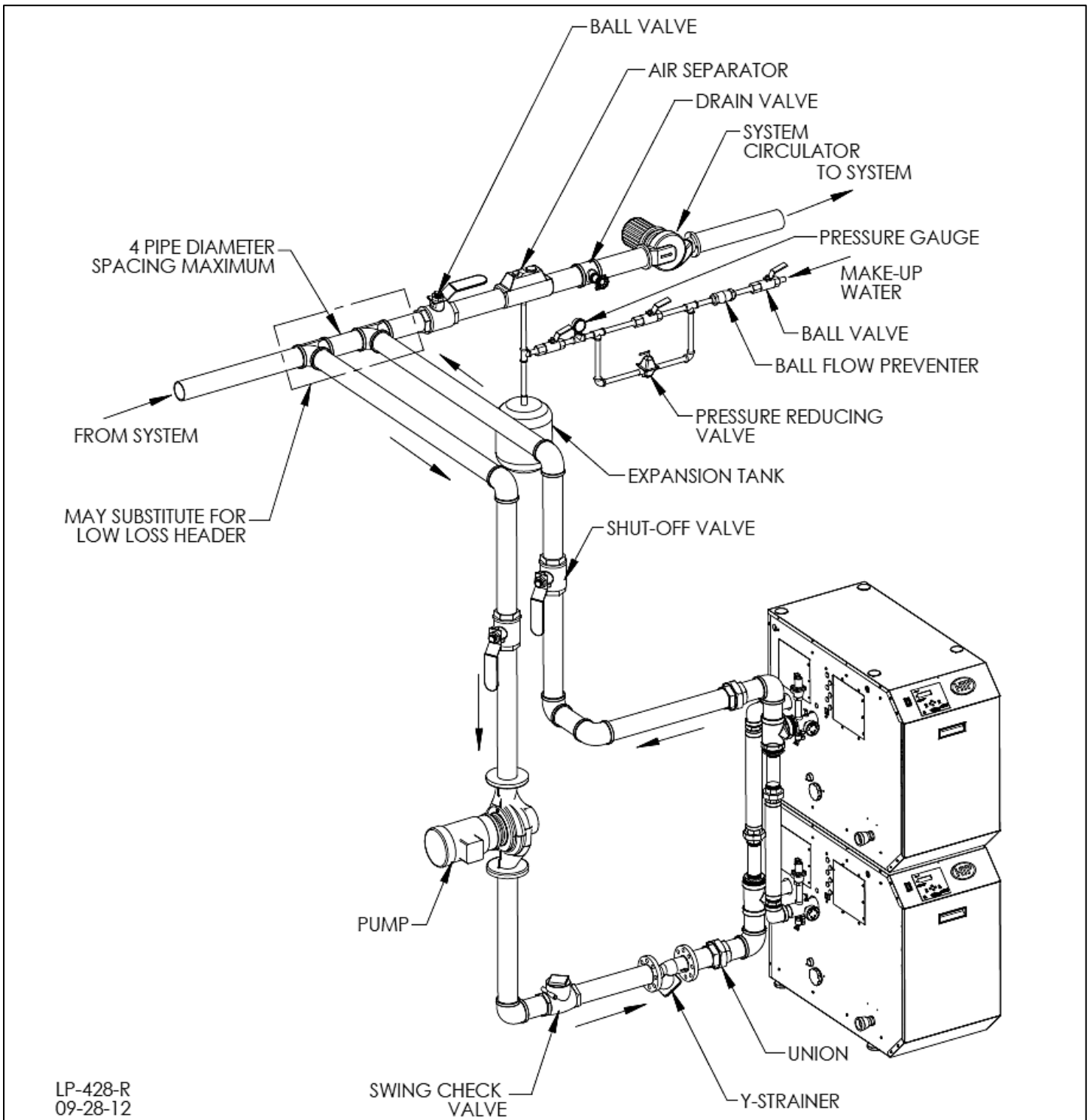
1. This drawing is meant to demonstrate system piping concept only.
2. A mixing valve is recommended if the DHW temperature is set above the factory setting of 119°F.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
5. Piping shown is Primary/Secondary.
6. The minimum pipe size for connecting an HTP indirect fired water heater is 1".
7. The minimum pipe size for connecting a Mod Con boiler is 3" minimum for both the 1000 and 1700 models.
8. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
9. Installations must comply with all local codes.
10. In Massachusetts, a vacuum relief valve must be installed on the cold water line per 248 CMR.



**Figure 8 – Cascade Multiple Boilers – Indirect Priority on One**

**FIGURE NOTES:**

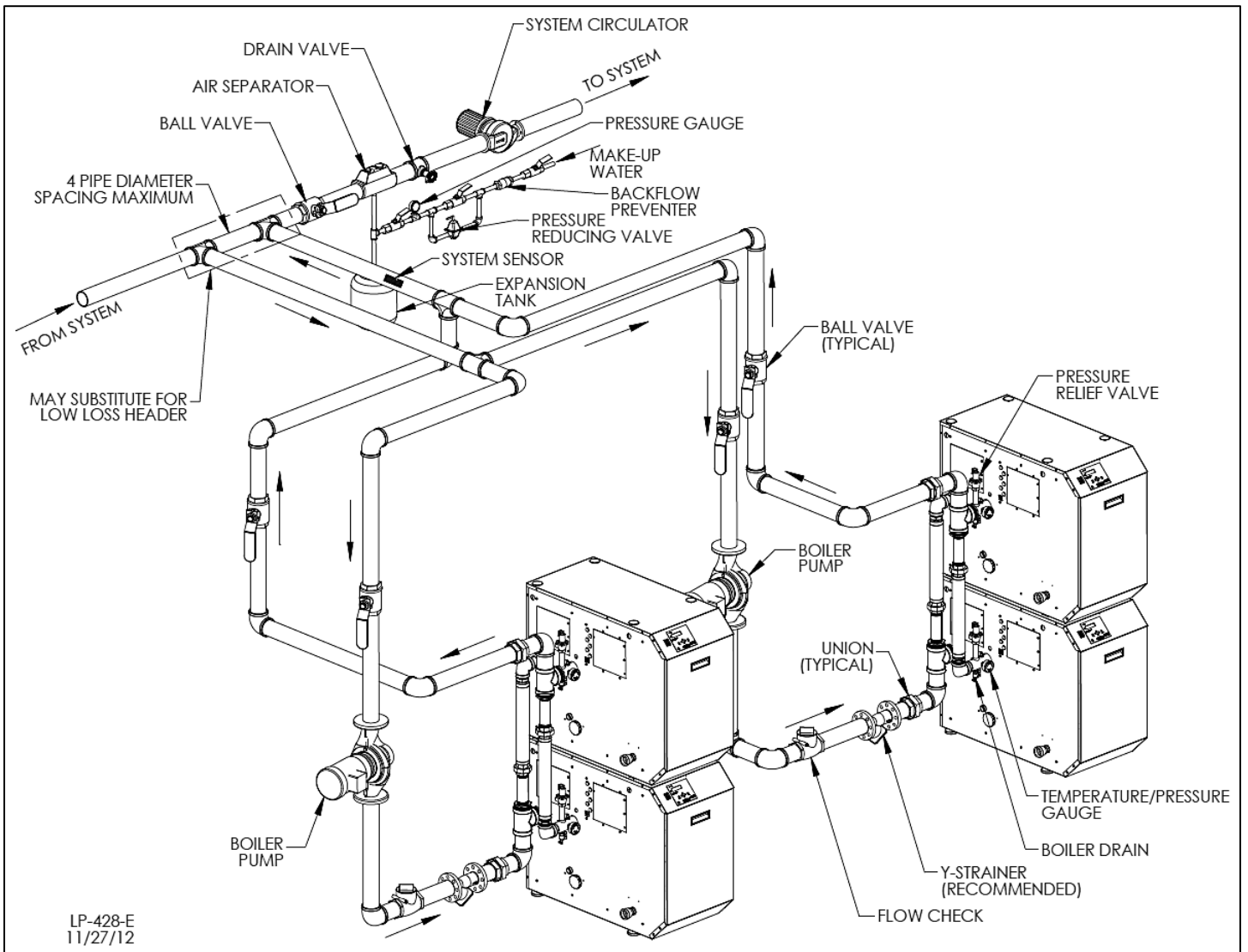
1. This drawing is meant to demonstrate system piping concept only.
2. A mixing valve is recommended if the DHW temperature is set above the factory setting of 119°F.
3. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
4. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
5. Piping shown is Primary/Secondary.
6. The minimum pipe size for connecting an HTP indirect fired water heater is 1".
7. The minimum pipe size for connecting a Mod Con boiler is 3" minimum for both the 1000 and 1700 models. Reference Multiple Boiler Manifold Piping chart, when installing multiple boilers.
8. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
9. Installations must comply with all local codes.
10. In Massachusetts, a vacuum relief valve must be installed on the cold water line per 248 CMR.
11. System sensor must be placed as shown in drawing.



**Figure 9 – Single Boiler Space Heating**

**FIGURE NOTES:**

1. This drawing is meant to demonstrate system piping concept only.
2. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
3. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
4. Piping shown is Primary/Secondary.
5. The minimum pipe size for connecting a Mod Con boiler is 3" minimum for both the 1000 and 1700 models.
6. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
7. Installations must comply with all local codes.



**Figure 10 – Cascaded Boilers – Space Heating**

**FIGURE NOTES:**

1. This drawing is meant to demonstrate system piping concept only.
2. Install a minimum of 12 diameters of straight pipe upstream of all circulators.
3. Install a minimum of 6 diameters of straight pipe up and downstream of all closely spaced tees.
4. Piping shown is Primary/Secondary.
5. The minimum pipe size for connecting a Mod Con boiler is 3" minimum for both the 1000 and 1700 models. Reference Multiple Boiler Manifold Piping chart, when installing multiple boilers.
6. System flow (Secondary Loop) must be greater than the boiler's Primary Loop flow.
7. Installations must comply with all local codes.
8. System sensor must be placed as shown in drawing.