

I. Applications

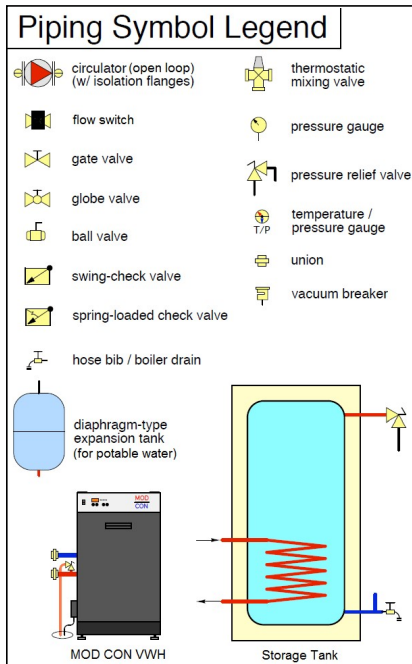


Figure 6 - Piping Legend

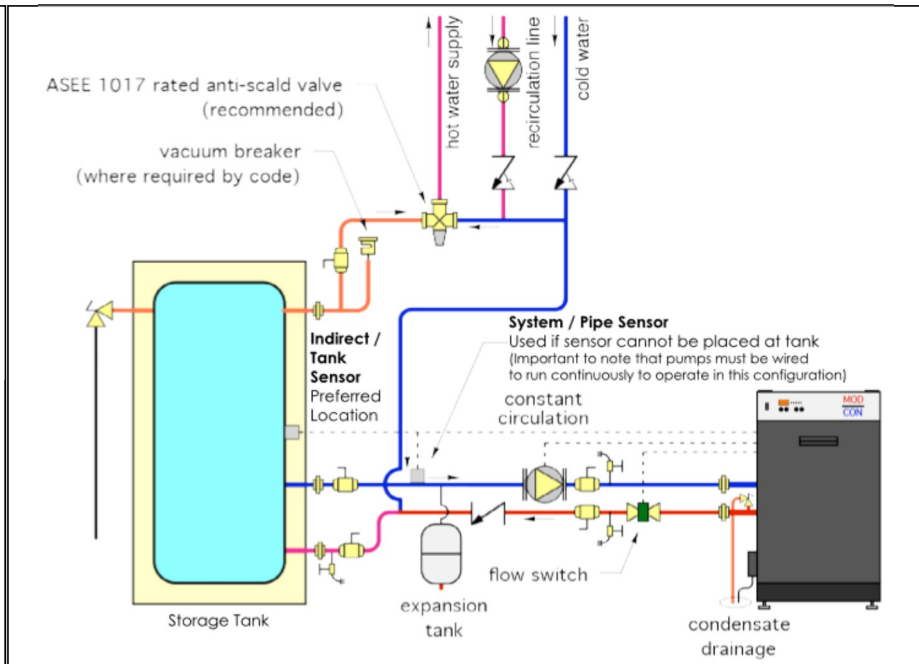


Figure 7 - VWH Boiler with Storage Tank

FIGURE NOTES:

1. This drawing is meant to show system piping concept only. Installer is responsible for all equipment & detailing required by local codes.
2. Boiler circulator must be rated for open loop application. Do not use cast-iron circulators.
3. Boiler circulator(s) operate continuously.
4. The minimum pipe size for connecting a storage tank is 1 1/2".
5. The minimum pipe size for connecting a boiler is 2". When sizing and installing a multiple boiler system, see Multiple Boiler Manifold Piping Chart, this manual.
6. All pumps are shown with isolation flanges or full port ball valves for isolation. The alternative is standard flanges with full port ball valves and a separate flow check valve.
7. Install a minimum of 12 diameters of straight pipe upstream of all circulators and check valves.
8. Install vacuum relief valve in accordance with local code requirements.
9. Multiple boilers and storage tanks shall be installed with reverse return piping (as shown).
10. Expansion tank must be rated for use with potable water.
11. Use either indirect/tank sensor or system/pipe sensor mounted on common return to the boiler.
12. Aquastat or system/pipe sensor connects to DHW sensor input on boiler.
13. The minimum storage tank size for a 500VWH is 119 gallons. The minimum storage tank size for a 700/850VWH is 175 gallons.



Figure 8 - VWH Boiler with Two Storage Tanks

WARNING

An ASSE 1017 thermostatic mixing valve is recommended on all tanks if the hot water temperature leaving the tank is above 119°F. Failure to do so could result in substantial property damage, serious injury, or death.

The piping will not support the weight of the circulators. Refer to the circulator manufacturer's instructions to properly support the circulator. Failure to comply with these instructions could result in property damage, severe personal injury, or death.

FIGURE NOTES:

1. This drawing is meant to show system piping concept only. Installer is responsible for all equipment & detailing required by local codes.
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6. All pumps are shown with isolation flanges or full port ball valves for isolation. The alternative is standard flanges with full port ball valves and a separate flow check valve.
7. Install a minimum of 12 diameters of straight pipe upstream of all circulators and check valves.
8. Install vacuum relief valve in accordance with local code requirements.
9. Multiple boilers and storage tanks shall be installed with reverse return piping (as shown).
10. Expansion tank must be rated for use with potable water.
11. Use either indirect/tank sensor or system/pipe sensor mounted on common return to the boiler.
12. Wire the tank or system/pipe sensor to the DHW sensor terminals input on the follower boiler addressed as #1.
13. Wire the tank or system / pipe sensor connected to the DHW sensor terminals on the follower boiler addressed as #1.
14. The system / pipe sensor must be placed on common piping to the tank as close to the tank as possible.
15. The system / pipe sensor is wired to the system sensor terminals on the master boiler.
16. The minimum storage tank size for a 500VWH is 119 gallons. The minimum storage tank size for a 700/850VWH is 175 gallons.

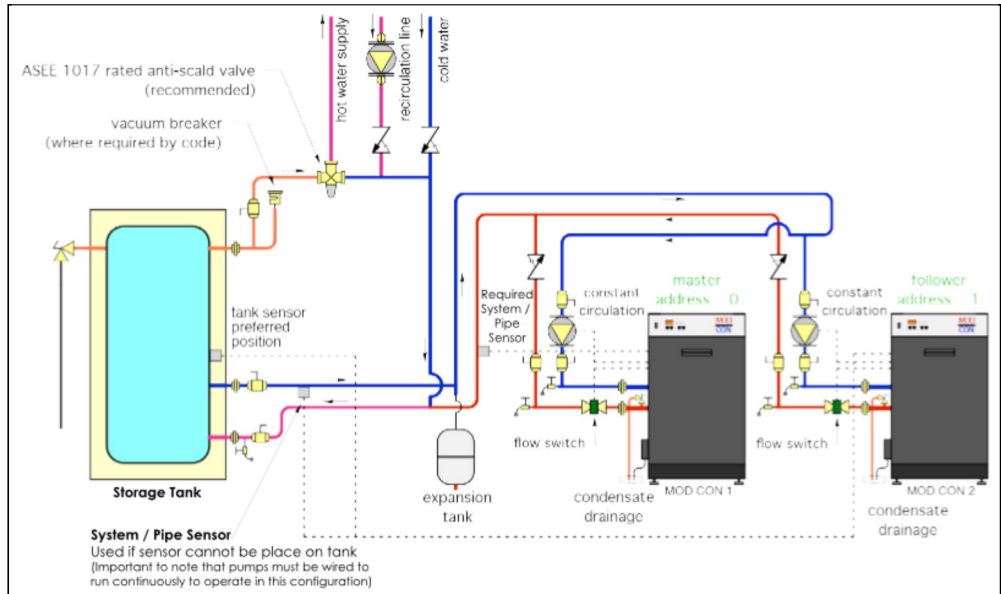


Figure 9 - Two VWH Boilers with Storage Tank

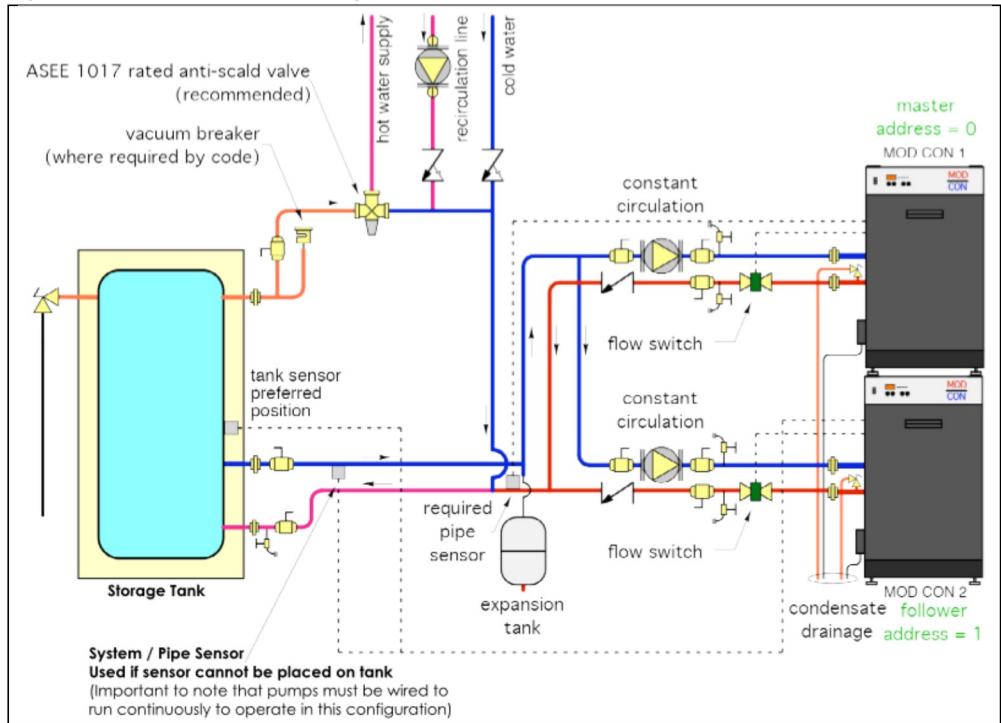


Figure 10 - Two Stacked VWH Boilers with Storage Tank

WARNING
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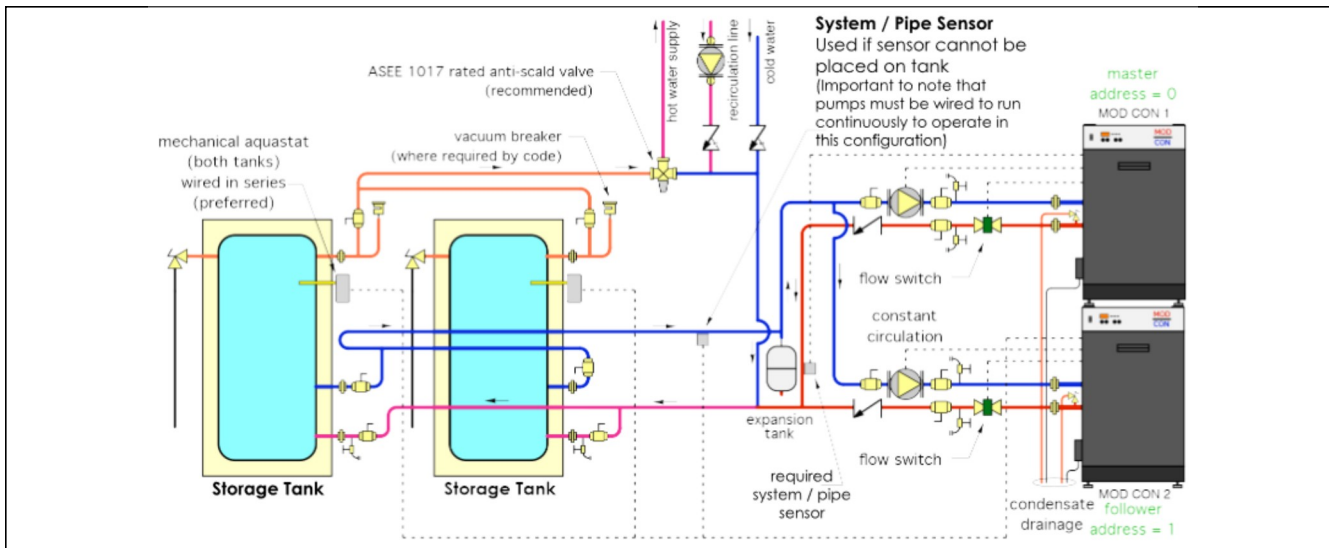


Figure 11 - Two Stacked VWH Boilers with Two Storage Tanks

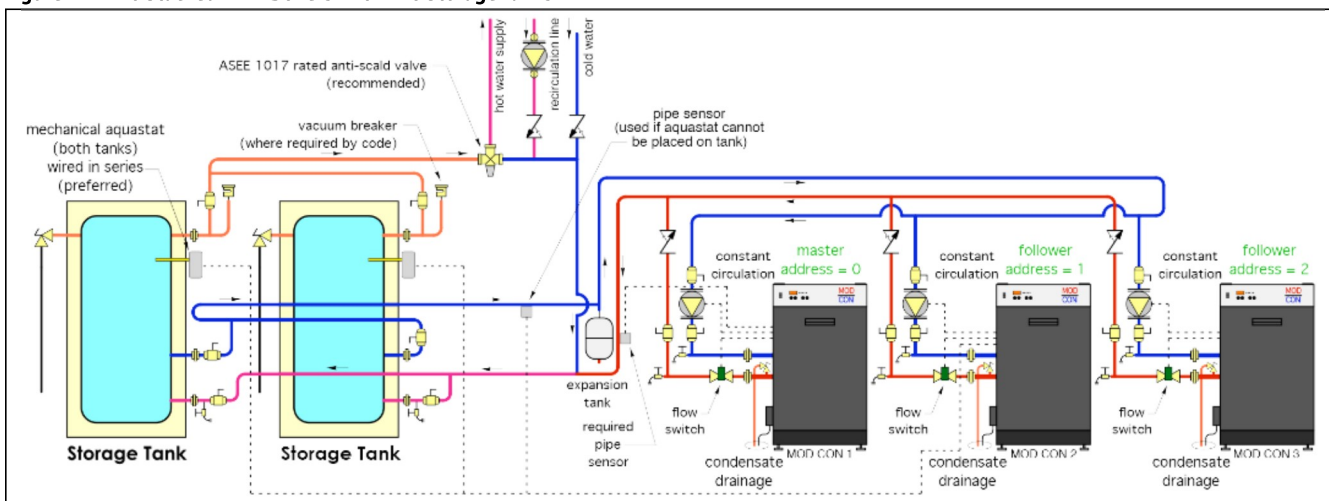


Figure 12 - Three VWH Boilers with Two Storage Tanks

FIGURE NOTES:

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3. Boiler circulator(s) operate continuously.
4. The minimum pipe size for connecting a storage tank is 1 1/2".
5. The minimum pipe size for connecting a boiler is 2". When sizing and installing a multiple boiler system, see Multiple Boiler Manifold Piping Chart, this manual.
6. All pumps are shown with isolation flanges or full port ball valves for isolation. The alternative is standard flanges with full port ball valves and a separate flow check valve.
7. Install a minimum of 12 diameters of straight pipe upstream of all circulators and check valves.
8. Install vacuum relief valve in accordance with local code requirements.
9. Multiple boilers and storage tanks shall be installed with reverse return piping (as shown).
10. Expansion tank must be rated for use with potable water.
11. Use either indirect/tank sensor or system/pipe sensor mounted on common return to the boiler.
12. Wire the tank or system/pipe sensor to the DHW sensor terminals input on the follower boiler addressed as #1.
13. Wire the tank or system / pipe sensor connected to the DHW sensor terminals on the follower boiler addressed as #1.
14. The system / pipe sensor must be placed on common piping to the tank as close to the tank as possible.
15. The system / pipe sensor is wired to the system sensor terminals on the master boiler.
16. The minimum storage tank size for a 500VWH is 119 gallons. The minimum storage tank size for a 700/850VWH is 175 gallons.

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