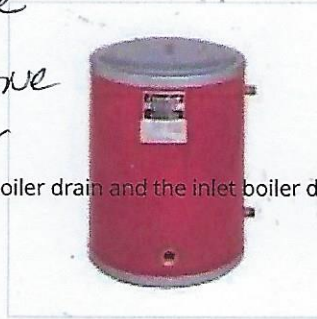


Q: Who manufacturers a good heat exchanger for this purpose?

A: Everhot (191 Arlington Street, Watertown MA 02172) makes one which I've seen work well on many jobs. Their unit is very similar to the old tank-type heaters from the Steam Era.

*See SYSTEMS HELP CENTRE
HOT RUN A HOT WATER ZONE
OFF A STEAM BOILER*



until all the air comes out. Then, shut off the discharge boiler drain and the inlet boiler drain (in that order). Now open the two ball valves (or gate

The Everhot Model RH-8 (http://www.tfi-everhot.com/pdfs/TFI_ExternalTankless.pdf) will handle a hot water/radiation load of about 45,000 Btu, which is more than you can expect to deliver through a 3/4" line to a hot water zone.

Q: Does the heated water going out to the zone flow through the coil or through the tank?

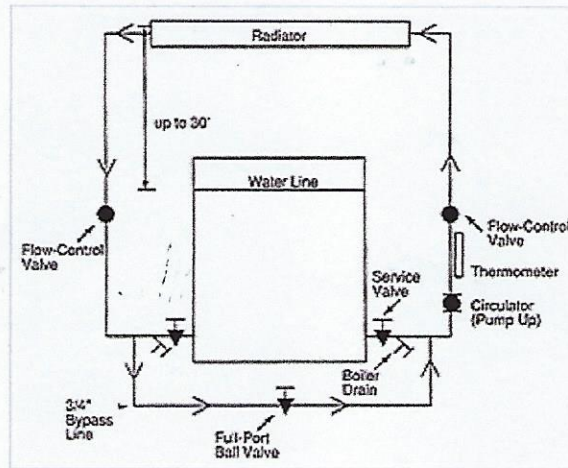
A: The zone water goes through the coil. The boiler water flows through the tank.

Q: Does the hot water radiation have to be lower than the steam boiler's water line?

A: No. If you're using a heat exchanger, your compression tank will keep the system under pressure. The fill pressure and tank size determine how high you can place the radiation above the boiler's water line. The only limit is the working pressure of the equipment you're using. It takes 1 psig water pressure to raise water 2.31 feet straight up. So, if you have equipment rated for, say, 100 psig, you'll be able to lift water about 230 feet to a hot water zone, if you ever wanted to (I don't think you'd ever want to, do you?). Let me put it another way - that two- or three-story house won't be a problem.

Q: Suppose I decide I don't want to use a heat exchanger, will my radiation have to be lower than the steam boiler's water line?

A: No, if you use 3/4" supply and return piping, and make sure you don't use any air vents whatsoever in the zone piping, the radiation can be as high as 30 feet above the steam boiler's water line.



Q: What keeps the water up there in the zone piping if there's no automatic fill valve or compression tank?

A: Atmospheric pressure. It's the same phenomenon which keeps water in a straw when you put your finger over the top end and lift it out of a glass of water.

5 psig, the water won't turn to steam until the temperature reaches 227 degrees F. At atmospheric pressure (which is what you have at the top of