

ARE YOU AN ACE TROUBLESHOOTER?

PM's Hydronics Editor John Siegenthaler, P.E., has been challenging heating professionals to take a closer look at how radiant and hydronic systems should be designed to fit today's efficiency-minded world. His website, www.HydronicPros.com, offers some of the industry's leading software for creating these properly designed systems.

Plumbing & Mechanical is looking to test your mettle, too. In each issue of this magazine, John will pose a question to you, our readers, to review a system's schematic layout and discover its faults, flaws and defects. **The solution to each issue's question will be revealed in PM's eNewsletter, Radiant & Hydronics eNews.** To sign up to receive this free, twice-monthly newsletter in your email inbox, visit www.PMmag.com. PM also will archive all of its "The Glitch & The Fix" exercises at its radiant-focused website, www.radiantandhydronics.com.

Good luck!

Radiant + 'hydro-air' zone

Overview

An installer is asked to build a system to supply both radiant floor heating and a "hydro-air" zone. All heat will be supplied from a gas-fired cast-iron boiler. The installer decides to use variable-speed injection mixing to reduce the supply water temperature to the radiant floor portion of the system, and operate the radiant floor distribution pump continually to help even out floor temperatures.

Exercise

The schematic below shows how the system was installed. Can you spot a few problems in the making?

