LoopCAD 2014 has been released, which is now available with full Manual J support. It now offers residential heating and cooling load calculations, in addition to the radiant and snow melt design features you have come to rely on. The new edition is easy-to-use, powerful and complete, with essential features like AED calculations and graphs, automatic October cooling load analysis, and Manual J-compliant submittal reports.

LoopCAD is the premiere software for the fast creation of professional quality circuit layout drawings for radiant heating systems. The all-new LoopCAD 2014 offers advanced design features including integrated heating and cooling load calculations, detailed hydronic calculations, snowmelt design, 3D CAD views, and compatibility with OEM design methods and materials.

Radiant Custom-Built Log Home in NC

When Karl Stansell and his wife decided to build a custom log home in Hertford, NC in 2007, conventional forced air heating was not a part of their plans. "We don't like forced air," Karl explained. "It is not energy efficient and just blows dust around your house. We were convinced Infloor radiant heating was the way to go," he said.

They heard about Infloor Heating Systems and after some research, decided it was the only way to go. Infloor conducted a heat analysis on the 3,000 sq. ft. house and recommended Warmboard as the subflooring for the system. Hi Valley Supply, based in Buena Vista, CO, provided all other supplies as a distributor of Infloor Heating Systems.

The floor coverings included 3/8" wood flooring throughout most of the house with ceramic tile in the kitchen and bathrooms. Karl decided on five zones for the house, which included a finished room above the garage. "If I was to do this over again, I would have had the radiant heating installed in the garage floor and would have made the master bathroom its own zone," he admits.

The log home is located on a riverbank in a rural area and uses propane as the main fuel source. Infloor radiant heating uses an indoor/outdoor reset control, which takes the outdoor temperature into consideration to determine the water temperature needed in the system. It adjusts the temperature of the water needed to maintain the indoor temperature based on the outside temperature. This increases the energy efficiency, ensuring peak performance. Magnetic drive pumps were also included using up to 80% less electricity and senses pressure in the system to adjust the flow rate based on the number of zones calling for hot water.

Custom Mechanical Board Created

Recently, we created a custom mechanical board to meet the specific needs of a customer in Fort Collins, CO. The custom board came pre-piped and pre-wired, and included a custom drawing, overall installation guide, and a guide for each part on the board. We took the guess work out of it for easy installation and added piece of mind.

The custom mechanical board runs two different temperatures, handling five zones of radiant heating and one zone of baseboard heating. We included an indoor/outdoor reset control, which takes the outdoor temperature into consideration to determine the water temperature needed in the system. It adjusts the temperature of the water needed to maintain the indoor temperature based on the outside temperature. This increases the energy efficiency, ensuring peak performance. Magnetic drive pumps were also included using up to 80% less electricity and senses pressure in the system to adjust the flow rate based on the number of zones calling for hot water.
Radiant Custom-Built Log Home in NC Continued

very little electricity, saving them money. The house sits on a 4’ tall concrete foundation with a crawl space below that is also fully concreted and sealed. Lighting was installed in the crawl space and includes a dehumidifier to keep the moisture under control. All the piping for the radiant heating system was installed in the crawl space, along with the ducts for their central air conditioning system.

The mechanical room is located in the garage and includes an MC Series boiler that runs 19,000 - 80,000 BTUs and hangs on the wall, along with the brass manifolds, pumps, copper piping, and side-arm tank. The control board was pre-piped and pre-wired, and includes a TN4 tekmar control system with indoor/outdoor reset, and controls domestic hot water production and zone synchronization for the Infloor radiant heating system. "We recommended the MC-80 boiler because it is located in the garage," explained Infloor President Michael Willburn. "The boiler has to be at least 18" off the floor to avoid any possible gasoline vapors," he identified.

In addition to the tekmar control system, the brass manifolds are considered to be an important part of the system. Michael explains, "The brass manifolds provide flow control per loop, allowing us to dial in the system based on the appropriate flow rate with the consideration of the worst possible weather conditions of that area."

Infloor Heating Systems was a part of the project from beginning to end. "We worked with Karl for almost a year before launching their Infloor radiant heating system," said Michael, who flew to North Carolina to personally dial in the system for peak performance.

"It was a terrific experience working with Infloor and Michael," Karl shared. "Michael knows what he is talking about, and I couldn't ask for anything better," he said. "We've had no problems at all with our Infloor radiant heating system. It has been trouble-free."

"The system is energy-efficient, there is absolutely no noise, and the cleanliness is unmatched," Karl continued. "And it is really nice to get up in the morning and put your feet onto a warm floor. I always make sure to mention it and definitely recommend it," he concluded.

Success at the Des Moines Home Show

Infloor Heating Systems recently attended the Des Moines Home & Garden show to talk about the many benefits of Infloor radiant heating solutions. We had a great time working along side our friends at Comfort Products Distributors and Climatemasters Geothermal, and sharing how radiant heating and geothermal can work together.

Share Your Story

Share your story with us... we’d love to hear it! Tell us about your project today at www.infloor.com/contact-us/share-story.