`Wet Heat' Rules in Alaska

The Spit (in background above), which juts out into Kachemak Bay, is home to Homer's harbor and the location of The **Skate Park where Eavrs** Plumbing and Heating installed a large **Buderus-based hydronic** system.



Steve Eavrs solders several Grundfos circulators into a pre-piped hydronic panel.

BY MICHAEL WEIL, EDITOR-IN-CHIEF

ALASKA: for America, it's the last frontier. When people talk about Alaska they talk about tundra, snow, glaciers, polar bears, the oil pipeline, conservation, ruggedness, beauty, and an entire vocabulary of other adjectives to describe it. Alaska is a state of extremes — politically, geographically, economically, naturally.

> or someone from the "Lower 48" like me, in Alaska for the first time, the contrasts are quite evident. First, Alaska is the largest state in the nation — more than twice the size of Texas, with a land mass of 663,267 square miles and a population of 663,661. That sounds encyclopedic until you stand

at the base of a glacier and look around at the wide open sky and the vast expanse of water that surround you, and realize just how big this place is.

Most people live along the coasts and much of the interior is Federally protected land, meaning no development is allowed. Except for the oil pipeline. And perhaps, in the near future, a gas pipeline.

Because of the sparsity of population, there are few roads and many people own small airplanes to get around. When the waterways and lakes freeze, snowmobiles (Alaskans call them snow machines) become a key mode of transportation.

In other words, Alaska is in many ways different from the lower 48. For HVAC contractors, this poses a different set of challenges.

The city of Homer is known as the "End of the Road." It's nestled among rolling hills and overlooks Kachemak Bay and the Kenai Mountains. This seaside community has 4,000 residents and another 8,000 beyond the city limits. In addition to the downtown area, a unique attraction is the Homer Spit, a long, narrow finger of land jutting 4.5 miles into Kachemak Bay. The Spit is home to the city's harbor and more than 700 charter and commercial boat operators year round.

Homer offers all the amenities of a small, first class city, including the services of plumbing and heating contractor Steve Eayrs. Eayrs has been in business for more than 20 years.

"The bulk of our business is residential new construction," he explains, "but we do about 20% of our HVAC revenues in commercial as well. And virtually all of our heating work employs hydronic technology."

According to Eavrs, using hydronics and radiant technology is substantially driven by energy audits and incentives. He says that 25 years ago, most installations in Homer, and around the southern



Eavrs Plumbing and Heating is a \$1.5 million contracting firm that specializes in residential and commercial projects.

Hydronics

cities of the Kenai peninsula, consisted of forced-air systems. But from a comfort and energy-efficiency standpoint, that changed. The preferred technology is on the wet-heat side of the industry.

Eayrs Plumbing and Heating has 10 employees and, like mechanical contractors everywhere, struggles to find good people. The problem may be more acute in Alaska because of the sparsity of the population, but Eayrs says when you do find good people and train them correctly, you can usually hang onto them.

He adds that many of his best workers come out of the commercial fishing trade. "These are hard working folks who have technical abilities. They just need to learn about plumbing and heating."

Much of the training comes from Eayrs himself.

One of the biggest differences for contractors like Eayrs when compared to their counterparts in the Lower 48 is the limited number of distributors in the area. He says the closest distributor to his operation is in the Kenai/Soldotna area, which is an 80-mile drive from Homer.

So Eayrs and other contracting firms in Homer must stock their own equipment and supplies and must plan far enough ahead on projects to have the right lead time to order equipment and have it delivered to the site.

Eayrs says, "It's part of a cycle we've grown accustomed to. The advantage to this is we develop a real sense of what's needed, and plan ahead to make it come together as efficiently as possible, and with the time we have.



A technician adjusts a Caleffi air separator in a commercial installation that Eayrs did for a local ice rink on the Spit in Homer, Alaska.

"The good news about this," Eayrs continues with a smile, "is that you don't have technicians wasting time talking and eating donuts at the distributors."

The other good news is that Homer is experiencing a newconstruction boom.

"It's incredibly beautiful here," Eayrs says, "and the cost for land and building homes is not overly high. This attracts many people to move here or to build vacation homes here.

"Many people who come here are not familiar with hydronics and radiant heat. But once the house is completed and they



New homes are continually being built around Kachemak Bay because land is currently inexpensive and the view is spectacular. Note the glacier running to the water on the far left. To keep up with demand, Eayrs builds pre-piped hydronic panels which enable his installers to be efficient when it comes to installing boilers and the radiant systems.

move in, they fall in love because of the energy efficiency and the comfort."

Homer, being the small city that it is, is a place where good news quickly spreads, by word-of-mouth. Bad news spreads even faster. Because of this, reputation is one of the most precious commodities a company can have, and marketing/advertising isn't as important as it would be in the Lower 48, according to Eayrs.

"We've installed more than 600 boiler systems in the last 16 years without spending a nickel on advertising."

One of those projects was commercial in nature. This may be hard to believe, but with all the rumored cold that sweeps through the Alaskan winter, you'd never think they'd need an ice skating rink. But the fact is, hockey is the number one sport in Alaska and ice rinks are important.

The Skate Park was commissioned by the Homer Hockey Association. The mechanical aspect of the project cost \$90,000 and included not only comfort heating for the entire facility, but also needed 160F water supply to refill the Zamboni machine. Eayrs' design called for the use of three direct hot water heaters as well as two Buderus boilers.

"But the key to a reliable system are the circulators," Eayrs says. "This design called for the use of Grundfos SuperBrute three-speed pumps, and VersaFlo variable-speed circulators, which enable us to precisely match the flow to system needs."

Eayrs adds that oxygen within most hydronic systems is a huge threat to internal components, boiler sections, and fittings.

"You need dead (oxygen-free) water within a hydronic system. Most boiler systems have some ferrous metal to protect. We like Caleffi air separators because of their effectiveness and value. They do the job with no compromise, and yet they're cost competitive."

Competitiveness is the name of the game. Eavrs says you must have established relationships to be successful in the higher-end boiler business. He works with a number of general contractors, but also finds that an increasing number of homeowners are acting as their own general contractor while building their own homes.

"We always work on educating the homeowner on the best systems for their dollar. We find, however, that most people go with what we recommend."

So from an editor's perspective, living and working in Alaska is different. But the universal "truths" remain the same. The key is taking care of and educating the customers.