



ARTIC Project Profile

CUSTOMER: Anaheim Regional Transportation Intermodal Center (ARTIC)

APPLICATION: Radiant heating and cooling

LOCATION: Anaheim, CA

CONTRACTOR: California Comfort Systems

Success through teamwork for landmark California project

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When building the Grand Central Station of the future, it's important to have a team of designers, engineers and contractors that will be there from the beginning to the end. Viega played a role in designing and installing radiant cooling and heating in the Anaheim Regional Transportation Intermodal Center (ARTIC). Centrally located in Orange County, CA, ARTIC will provide transportation service for three million local residents as well as 40 million annual visitors.

A LEED Platinum building, the structure is 67,000 square feet with three levels, connecting people to a variety of transit options as well as entertainment, dining and retail shops, all in one location.

“The ARTIC station is pretty monumental for the future,” said Paul Redgate, Pipe Fitting Superintendent for California Comfort Systems in San Diego, CA. “It has multiple resources – a bus station, large parking facility for car pools. It's the first of the high-speed rail stations that has been built today. The project itself was high profile for the city of Anaheim, much different than a typical install.”

ARTIC's unique architecture includes a large number of windows and a dome-shaped structure, which results in high solar gains. Due to ARTIC's unique architecture and size, controlling the climate inside the building with a conventional forced-air system would have been practically impossible. HVAC designers for the project chose to implement a radiant heating and cooling system instead. Radiant cooling allows for the instantaneous removal of heat through absorption. Installing ViegaPEX™ Barrier tubing at tightly spaced increments (6" on-center) within two inches of the finished surface floor gives the engineer the ability to remove the solar sensible gain instantaneously. For the ARTIC project, the cooling capacity ranges up to 40 btuh/sq.ft. This provides an energy savings of 34% over ASHRAE 90.1-2007. ViegaPEX Barrier tubing also offers the highest UV protection and chlorine resistance in the industry and meets ASTM and CSA requirements.

“We installed 44,000 feet of in-slab heating and cooling pipe, 18 manifolds and 12 pumps,” Redgate said. “It was pretty large. This was our first radiant project of this size. We've done some smaller stuff but nothing on this scale.”

Throughout all phases of design and construction, the manufacturers, the engineers, the installers and the suppliers worked together to streamline the building process. This collaboration helped improve communication through the entire project.



“Personally, I’m very impressed with the teamwork that took place between the contractors,” Redgate said. “From Clark Construction and the engineering team to vendors and field contractors, everyone was really excited to be working on such a high profile project. There was a lot of anticipation for this place to open up.”

Redgate spoke highly of the Viega representatives who worked on the ARTIC project along with his team.

“I want to really compliment them on their preconstruction efforts with us,” Redgate said. “At the beginning of this project, we weren’t very comfortable, but they were hands-on and got out there with our group and showed us best practices and installation methods — what to do and what not to do. They put on a great face for Viega, and it was great for our group.”

The ARTIC project marked California Comfort System’s first radiant heating and cooling project with Viega systems. It was also the first time the company worked hand-in-hand with Viega for the design of a project.



“From start to finish, from inception of the design to the commissioning, Viega was there by our side,” Redgate said. “Viega’s involvement was priceless — they didn’t just hand us the package and walk away. To have them out there all the way through to the end of the project was probably the best feature overall. And we still beat the industry average by 25% on the install.”

Viega offers radiant heating and cooling solutions that are easy to install. With simple connections and engineered system designs, Viega makes radiant heating and cooling projects easy, no matter the project size. And for the more complicated, large-scale projects where the installers may not be totally confident, Viega offers training and assistance from start to finish.

“I can’t express enough how impressed I was with these guys who were paying attention to our project,” Redgate said. “I don’t think I ever waited for a return phone call for more than 20 minutes. It’s about the project, but it’s about the people too. Viega has a great team of people that are very passionate about their product.”

For more information on Viega system solutions, visit www.viega.us, or call toll free: 800-976-9819.