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Five Minutes With — John Dean 'Daikin systems'

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At 33, John Dean has a lot of experience in the air conditioning business. Working for his dad's general contracting business in high school, Dean was intrigued with the air conditioning systems installed by his Uncle Jeff's company, Beyer Mechanical. Out of high school, he went to work for the company. He's been at Beyer since, with the exception of a three-year hiatus where he honed his skills at Friedrich Air Conditioning. His career at Beyer has taken him from mechanic to lead mechanic, then to project manager and now senior estimator for commercial HVAC construction.

As more builders seek U.S. Green Building Council LEED certification, demand for more efficient air conditioning units is growing. Today, Beyer represents some of these more efficient systems, including units manufactured by Japan-based **Daikin Industries**. Daikin AC now has a presence in Carrollton, where Dean spent a week learning the ins and outs of the systems. Beyer has installed two Daikin systems so far and is currently working on the installation of its third.

Q. When did Beyer start representing/buying Daikin AC systems?

A. Silver Ventures, a developer, had a need to retrofit the existing Pearl Brewery with air conditioning and was interested in Daikin's technology. They approached Beyer Mechanical in 2006. We were enthusiastic about the challenge and able to design a complete system that was LEED compliant, which aided in breathing life into the historic landmark. We buy our systems through Direct Expansion Solutions, a locally based authorized factory representative.

Q. How do they work? Are there any drawbacks?

A. Daikin uses cutting-edge inverter technology which gives control over the function of the compressor. Simplified, standard compressors can only function at 100 percent or not at all. Air flow must then be controlled by an internal zoning system. Daikin's technology allows the compressor to modify its level of function for the required need, so the outside unit can work at 100 percent or as little as only 20 percent, depending on what the need is in the building. This saves energy and allows for flexible and space saving design. The only drawbacks are the initial investment and the specialized training required to work on them. But at Beyer, we now have 15 people qualified to work on them.

Q. Which types of clients are they best suited for and why?

A. Daikin has a flexible product line ranging from ductless wall mounted units to concealed units. This product is ideal for older buildings desiring to add air conditioning or retrofit an existing system. A common issue with adding AC in older buildings is available space. Standard systems require large amounts of space for the units and the ductwork. Daikin systems allow designers to combine different units together on the same system to best fit the situation.

Q. Take a small business that has roughly 10,000 of space? What difference would they see?

A. A standard system for a 10,000 square foot building would run about \$70,000 to \$75,000. For a Daikin system, the price would somewhere in the neighborhood of \$12 to \$14 per square foot, or \$120,000 to \$140,000. However, with the Daikin, the business can anticipate an approximate savings of 20 – 25 percent on utilities above a standard air conditioning system.

Q. Are there any competitors on the horizon?

A. Daikin's strongest competitor is **Mitsubishi**. We're in the process of preparing a bid for one right now. The technology is similar, and the price is about the same. But with that type of system, Daikin has done more advertising so they have more name recognition. Other competitors are on the horizon. Sanyo and **LG Electronics** are coming out with something using similar technology. Prices have come down since they first came out, and I expect competition and growing usage will further drive down prices. I expect Daikin's business to grow as office buildings embrace green building design, and businesses become interested in supplemental air conditioning for existing HVAC systems. This (these type of systems) is going to be the future, even in the home market. Already, we've trained 15 people to work on Daikin systems so that we always have someone available.