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Golf Course Villas Swing to Mini-Splits



An Aloha Air Conditioning technician runs flex duct to the Fujitsu unit's main multizone air handler.

The Hawaiian Islands are among the most sought-out destinations for everyone from vacationers and retirees, to entrepreneurs and celebrities. For many, the favorite island in the chain is Maui. On that island, a premier residential community sits on a palm tree bluff with panoramic views of the Pacific.

Hokulani Golf Villas, encircled by the fairways of the Elleair Maui Golf Club, combine luxury condominium living with the privacy of secluded, single-family homes. Residents of the 152 units can access all the activities and services at the seaside community.

The development rests at the foot of the West Maui Mountains. Rising highest among them is the old volcano, Haleakala ("House of the Sun"), which rises 10,000 feet.

"It's true - it's just about perfect here in the Hawaiian Islands," said Mike Hazen, president of Maui-based Aloha Air Conditioning. "But it's not exactly right for full year-round comfort. Even here in a tropical paradise, we've got to help Mother Nature just a bit."

Aloha AC began operations 12 years ago with retrofit and maintenance work; now Hazen has shifted the firm's employees almost entirely into new construction work. "Mostly it's custom work that we do," he said. "One of the biggest changes we've seen has been the recent push for high-efficiency HVAC systems. There may be a lot of money on the islands, but the people here hate wasteful spending and want a clean environment."

EASTWOOD AND OPRAH

Hazen's higher-profile clients include Clint Eastwood (who owns and routinely visits a modest beach home on Maui) and Oprah Winfrey (whose gated ranch includes an expansive home). "We've installed



Kaeo Kauai, Aloha A/C installer, attaches refrigerant lines at the air handler hidden above the great room ceiling.

Fujitsu mini-split systems for both homes,” Hazen said.

He explained that he’s been installing mini-split systems from the manufacturer for years. The efficiencies also appeal to Chet Zoll, superintendent, and Bob Leistikow, manager of Signature Homes of Hawaii, developer for Hokulani. They gave their nod for Hazen to go with Fujitsu multizone systems at the condo development.

Most of the condo units are about 2,300 square feet. Some have two bedrooms; others have three, including a downstairs master suite. Six one- and two-story models are available; all designs include a great room, den, and enclosed garage with courtyard access. The homes are typically under construction for six to nine months, with prices beginning at \$1.2 million.

“Most of our buyers purchase these condos as a second or third home,” said Leistikow. “Most are 50-plus in age, and fall into the empty-nester category.” He added that they are currently in the Phase 1 stage,

having concentrated their efforts on the first 50 homes. Aloha AC has completed work in the first 40 or so.

MODEL IN PROGRESS

As the development takes shape, tiled roof work, plumbing, wiring, and HVAC installations all happen at several condominiums simultaneously.

Stepping inside a main entry, careful not to trip over one of several electric cords and air compressor lines, Hazen headed upstairs where Kaeo Kauai and Cory Wallace, HVAC installers, were stretching yards of insulated, reflective flex duct between 2-by-4 rafter supports.

“Most people are familiar with the high-efficiency mini-splits as ductless systems,” said Hazen. This multizone line is engineered to transport compressed refrigerant to and from central, hidden air handlers, “typically secured above suspended ceiling tiles, or in attic areas — and this feeds cooled air to all of the zone-controlled spaces,” he

continued. “Energy efficiency remains very high because the ducts, which can rob an HVAC system’s efficiency, are so short.”

The model in progress was at an ideal stage to see all facets of the high-efficiency mini-split installation, before the insulation or drywall had been installed. Looking up from the great room, three air handlers are supported centrally, with a network of flex duct flowing in all directions of the home. HVAC supervisor Marty Pierce was connecting refrigerant lines into one of the air handler’s main junctions.

“Most of the homes require three to four air handlers,” said Hazen. “The beauty of it is that we get separate zones for greatest flexibility and comfort. It takes about five days to install the HVAC completely with a two- or two-and-a-half-man crew — less if I’ve got a larger crew on the job.”

The multizone units provide individual air conditioning capability, providing separate comfort levels to individual rooms from a single, compact, outdoor condens-



Marty Pierce, foreman (left) and Scott McDonald, foreman, Aloha A/C, move equipment into one of the condos at Hokolani Golf Villas.

ing unit. “Yet, one condensing unit can handle the needs of four 9,000-Btu air handlers,” said Hazen.

“So they’re perfectly suited for any use here in the condo development.”

The “zonability” is one of the biggest advantages cited by Hazen. “We avoid all of the challenges with problematic zone dampers,” he said.

“And with those, even with just one zone damper operating — say with a five-ton [60,000-Btu] central system — you’re still operating a five-ton system. But the Fujitsu equipment modulates operation for only those zones calling for air conditioning.

This is HVAC zone control at its best, and most efficient.

“We also like the condensing unit’s quiet operation,” he added.

“It’s really difficult to tell if the systems are operating, inside or out. That’s quite a shift, especially for people who’re used to the sound of forceful air movement inside, and the rattle and hum of condensing unit noise outside. These condensing units are so quiet that you have to be right on top of ‘em to know they’re running — and that makes them ideal for the developer here, because the condo units are rather close together.”

MIX AND MATCH

He continued: “Another advantage for us is the ability to mix and match the air-handler type and capacity, choosing the indoor unit that best fits the need.” Standard features include the option of a wireless remote control or a wired remote control, sleep timer, programmable timer, dry mode, auto louver, auto restart/reset mode, quiet mode, and efficient operation with low- or high-ambient temperatures.

“We’re delighted with the way these systems have worked out,” said Leistikow. “As more and more homeowners move into the completed units, we’re confident they’ll be as pleased with them as we are.” ■

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