



COMPLETION DATE

Home: October 2016

Office: February 2016

PROJECT TEAM

HVAC Contractor:

Ideal Plumbing Heating
Air and Electrical, Inc.,
San Diego

Distributor:

U.S. Air Conditioning
Distributors, City of
Industry, California

CHALLENGE

Achieving comfort
and control for a variety
of spaces

SOLUTION

Zoned Comfort Solutions™
from Mitsubishi Electric

RESULT

A discreet system offering
even temperatures and
budget-friendly control
through kumo cloud™

As a retired veteran and now business owner in San Diego, Stepheni Norton wanted to offer a creative and cozy workspace for rising entrepreneurs. An admirer of all things vintage, she decided to find a historic home, restore its beauty and create a workspace that would spark creativity for its tenants. **Norton found a small 1886 stick lake-style Victorian home in the East Village of San Diego, offering ample space for work.** Its restoration involved installing an energy-efficient HVAC system to provide each office space with superior comfort without damaging the architecture of the space, now called Tradesmen. Only one system could offer efficiency, comfort and a non-disruptive installation: Zoned Comfort Solutions™ from Mitsubishi Electric Cooling & Heating (Mitsubishi Electric).

"This property is for young businesses that are not old enough for commercial leases. We provide them a place where they can grow, and then they can eventually move out when it's viable for their business," said Norton. As the property owner, Norton oversaw the project from start to finish, ensuring that each decision wouldn't jeopardize the home's historic beauty.

To find the HVAC system, Norton brought on Matthew Getz, project manager and engineer, Ideal Plumbing Heating Air and Electrical, Inc., San Diego. Upon Getz's initial inspection, he knew the system design would be difficult based on a single factor: the architecture of the home. "Appearance was everything for Stepheni. **We needed a system that could be out of sight but also serviceable in case of emergency.**" Comfort for each office was another priority: "The six offices in addition to the meeting rooms and lobby had to have individual control. Stepheni wanted the tenants to have control over their comfort."

Knowing Norton's requirements for Tradesmen, Getz presented her with zoned technology. "Split-ductless allowed us to meet all of the parameters that Stepheni desired – especially a unit that didn't stand out. It could blend in with her wants for décor, and it would allow us to design a cost-effective system that could also meet her requirement for year-round operation."

After conducting some research on her own, Norton agreed with Getz's recommendation. "I looked at everything – from a window and air system to split-ductless. **We chose split-ductless after reading about the Strawberry Mansion project. We saw how the system wasn't obtrusive, and how it could work with an older property and run efficiently because of zoning.** This was the only system that was proven to do well while keeping the historic relevance of the home."

Getz suggested Mitsubishi Electric as the brand. "I've been using Mitsubishi Electric since they arrived in the United States. We've had issues with other companies but Mitsubishi Electric has been consistently offering top-of-line products. People are happy with them no matter the product they select." Getz also said Zoned Comfort Solutions would offer comfort for each tenant in Tradesmen: "It would allow us to give the offices, meeting rooms and lobby individual control."

Norton concurred: "We liked how Mitsubishi Electric offered a holistic view of putting a system in a house. We got caught up in cost savings and efficiency, but thinking as homeowners, **we also wanted a system that runs quietly and can create an atmosphere. Mitsubishi Electric allowed us to build the system into the house and not build the house around the system.**"

Getz and his distributor, U.S. Air Conditioning Distributors, City of Industry, California, worked with Norton to ensure the installation stayed within budget. Norton said, “The prices were fair and broken down in the way that made sense to us. It was a worthwhile purchase for us, so we bought it, and now we’re not worried about our system.”

Since installation, Norton has been pleased with the system’s zoning capabilities: “Originally, we thought we didn’t need zoning, and our top priority was appearance, but Mitsubishi Electric emphasized how zoning was important for each space. The HVAC system complements the people in the space and now tenants are much happier because they can control their space to their liking.”

The installation in Tradesmen was such a resounding success that it inspired Norton to select Zoned Comfort Solutions for her family’s home, Dickinson Farm, a large 1888 Victorian Queen Anne Cottage in National City, California. Due to the age of the home, it had similar needs as Tradesmen that only zoned technology could solve.

“Our house didn’t have HVAC, and we’re right on the coast so we thought we didn’t need an HVAC system. We were wrong! The house, in extreme, gets very cold before sunrise, and retains all of the heat on a sunny day. With only two of us living here, and since we don’t use all of the floors of the house, we wanted an energy-efficient system. We also wanted my office to be controlled separately than my husband’s. So, we needed zoning on each floor and within each room, and a system that didn’t distract from the architecture of the home,” said Norton.

The flexibility of Zoned Comfort Solutions allowed Getz and his team to easily install an eight-zone system. **“Installing the [PVA] ducted**

air handler in the home was a perfect solution for the first floor. Mitsubishi Electric has always given us the opportunity to find the right equipment for any job, and the ducted air handler’s full-size fan coil not only met the needs of the homeowners, but it was exceptional in energy savings.”

The other two floors used SEZ horizontal-ducted units, which Getz said “allowed the upper floors to be controlled in the same manner. They were hidden in the attic with the ductwork between the floors. This helped to maintain the integrity of the architecture in the home.”

Since the completion of the project, Getz has received great feedback. “The ducted air handler gave me the right solution for the first floor of this historic home. Stepheni and her husband could not be happier with the results.”

With Zoned Comfort Solutions, Norton has control of the temperature in both properties – Tradesmen and Dickinson Farm. To fully take advantage of that control, Getz proposed that she use Mitsubishi Electric’s programmable controller app, kumo cloud™, to control the temperature in Dickinson Farm. Norton said, “In San Diego, the weather is pretty stable, but on the rare days where it changes quickly, we are able to log in and turn on the heat, so when we get home, the house is perfectly comfortable.”

Looking back on the project, Norton has been satisfied with her decision to select Zoned Comfort Solutions for Tradesmen and Dickinson Farm. “The comfort is amazing. We don’t have to wait for the sun to hit to be comfortable, and we can quickly cool off any room. With split-ductless, there is no more fighting the weather. It’s perfect.”



“When people come to the house, they say how it doesn’t look different with these units. We have the energy efficiency from a modern system but the house still looks historical. Mitsubishi Electric helped us pay homage to the property.”

- Stepheni Norton, homeowner and business owner



MITSUBISHI ELECTRIC EQUIPMENT INSTALLED

OFFICE: 1 MXZ M-Series Outdoor Unit, 4 SEZ Horizontal-ducted Indoor Units, 1 MXZ C Generation Branch Box

HOME: 2 MXZ M-Series Outdoor Units, 6 SEZ Horizontal-ducted Indoor Units, 1 PUZ P-Series Outdoor Unit, 1 PVA Multi-position Ducted Indoor Unit, 7 PAC-WHS01WF-E Wireless Interfaces, 1 kumo cloud™ programmable controller app