

VRF AND THE BLUEPRINT FOR A BETTER FUTURE

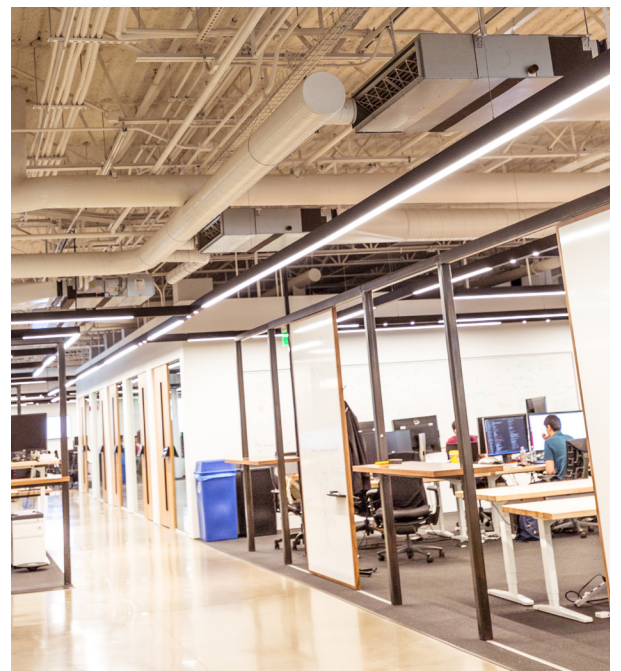
With its “[Blueprint for Better](#)” campaign, The American Institute of Architects (AIA) highlights the need for architects to collaborate with their clients and communities as thought and action leaders. Every aspect of our built environment — and every way it impacts our comfort, health, cognition and natural environment — is the function of choice. Whenever policymakers, institutions, building owners and the public must make a decision about the spaces where we live and work, architects can provide invaluable expertise and insight.

Leading architects understand the interdependence of building components and collaborate with engineers early in the design of each project to define goals for sustainability, the occupant experience, and overall performance. This includes identifying mechanical systems that fit within a blueprint for a better future and complement initiatives like the [2030 Building Challenge](#).

“ We participate in the 2030 Building Challenge and we continually seek better ways to build. As we design for decarbonization, we’re targeting energy reductions in our buildings so that they produce as much energy as they consume. Choosing energy-efficient, electric-powered VRF systems almost allows us to future proof our decisions. Decentralizing systems and transporting thermal energy in fluid instead of air is the way of the future. ”

— Channing Swanson, AIA, LEED AP, Principal, Neumann Monson Architects, Des Moines, Iowa

At [Mitsubishi Electric Trane HVAC US](#), we’re committed to engineering Variable Refrigerant Flow (VRF) systems and other innovative technologies to provide better options for architects who design superior built environments. Together, we can promote greater sustainability without sacrificing modernity and occupant comfort.



BUILDING BETTER WITH N-GENERATION

The best advocates for Mitsubishi Electric products include architects who are committed to decarbonization and require design flexibility to fully realize their occupant-centered designs. Energy-efficient technologies including CITY MULTI® N-Generation, are ideal for buildings that run on renewable energy and are also compact, modular and quiet compared to conventional HVAC systems. Raise ceilings, save plenum space and choose from a diverse array of ductless and ducted indoor unit options to realize your design vision. Visit mitsubishipro.com to discover solutions for commercial applications in all regions and climates.



FEATURES

- Reduced footprint of up to 30% (versus the L-Generation)
- Up to 295 feet of vertical separation between outdoor and indoor units
- Redesigned compressor, fan and 4-sided heat exchanger for increased efficiency
- Whisper-quiet operation and 5 new airflow settings for sound control

FAIRWAY INDEPENDENT MORTGAGE



CHALLENGE

Selecting an energy-efficient HVAC system to provide comfort to a large office building

SOLUTION

Mitsubishi Electric Water-Source VRF

RESULT

An energy-efficient HVAC system that provides year-round comfort to the office's occupants

PROJECT DETAILS

- Located in Madison, Wisconsin
- 96,000-square-foot, 3-story, office building
- Highly-efficient water-source VRF system, tied into geothermal wells, and photovoltaic panels
- Compact VRF equipment maximizes ceiling height

“We estimated that a geothermal water-source VRF system would save Fairway Mortgage \$0.50 - \$0.75 per-square-foot in annual utility costs compared to a traditional hot water VAV rooftop system.”

— Ray Del Ponte, PE, Excel Engineering