



Ishpeming, Michigan

ISHPEMING HOUSING COMMISSION



CHALLENGE

Bringing air conditioning and relief from humidity to a 1960s multifamily facility serving elderly residents

SOLUTION

Mitsubishi Electric CITY MULTI® Variable Refrigerant Flow (VRF) zoning technology

RESULT

A quick, easy installation and healthy, satisfied residents

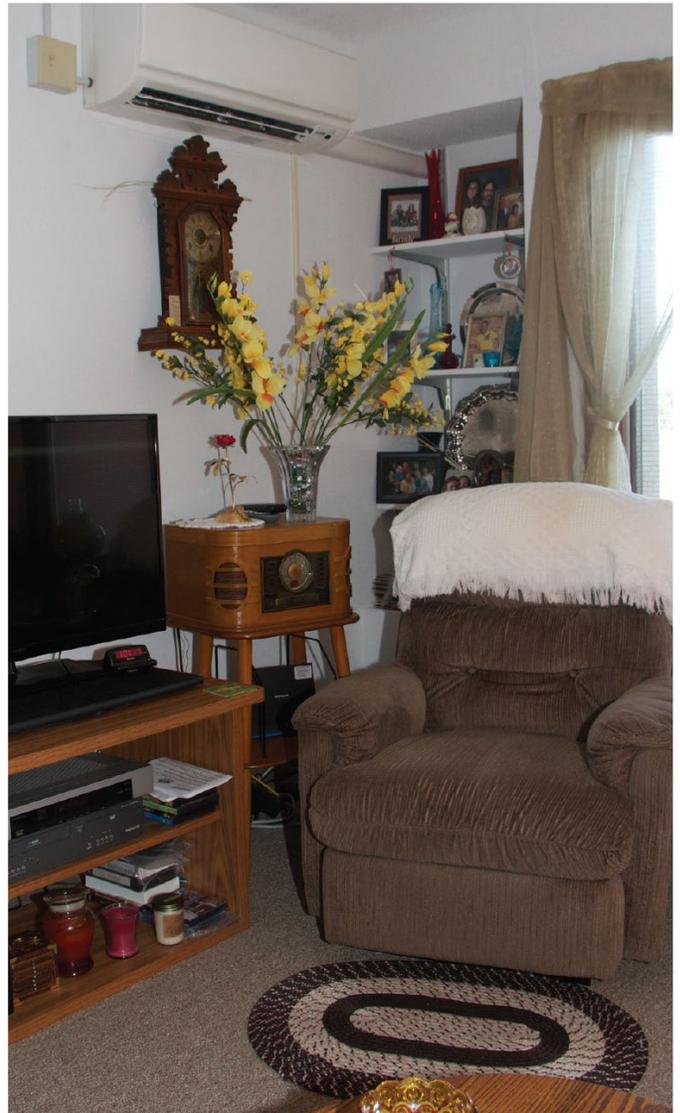
Over the last few years, the average age of residents at the Ishpeming Housing Commission has gone up. Residents of this 88-unit, 67,750-square-foot apartment building in Ishpeming, Michigan, used to move in during their 60s and 70s. Now, they move in during their 80s and 90s. The older residents have required better indoor air quality, so a recent renovation set out to bring modern-day air conditioning to the 1960s facility. Variable Refrigerant Flow (VRF) technology from Mitsubishi Electric was selected for its easy installation and reliable comfort.

Evelyn Valente-Heikkila, the facility's executive director / manager, noted that "the people living here now have a lot of breathing problems. The last few summers have gotten very humid, and when it's so hot and humid, ceiling fans just do not do the job. Our residents can't breathe."

During the day, residents gathered in a common room that had air conditioning. When they returned to their unconditioned apartments each night, though, "it was difficult for them. The building has thick concrete walls, so it holds a lot of heat. The residents really needed to be cooled."

Valente-Heikkila began thinking about what system could meet the facility's needs. "We had just gotten rollout windows – the kinds with cranks inside and windows that open sideways. These are not conducive to window a/c units. I also didn't want window units because they don't look nice."

She continued, "Central a/c wasn't an option, either. Each apartment is basically a concrete cubicle, so plumbing for a/c would have been very difficult." Tom King, vice president, Berger and King, Inc.,



Escanaba, Michigan, served as the HVAC contractor on the job. King added that “low ceilings and the design of the building limited what systems we could work with. There was also nowhere in the hallways that was conducive to ductwork, so a traditional system truly just couldn’t work.”

Sitting at home one night, Valente-Heikkila “caught the end of an ad on TV for wall-mounted units. I thought, ‘Oh, great! That wouldn’t take up a lot of space.’” In the morning, she went online and did some research. “Reading up more, I knew it was what I was looking for. These are such small apartments that it makes sense to have the [indoor] unit up on the wall. Plus then it’s in a place where no one will bang or disturb it.”

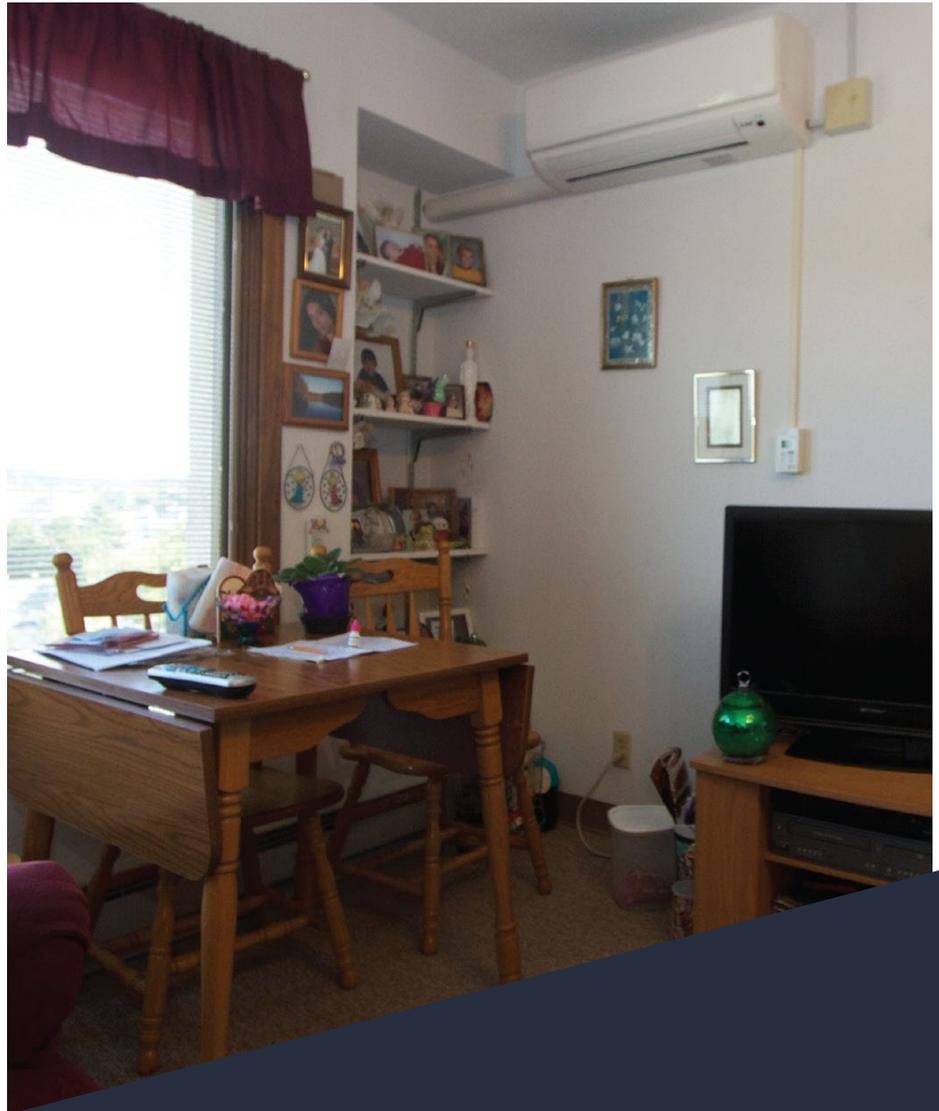
She opted for VRF from Mitsubishi Electric, specifically, because “it’s a name I recognize; the quality of their other products is good.” King preferred Mitsubishi Electric, as well: “We’ve been doing Mitsubishi Electric for quite a while. They’ve been very reliable – limited callbacks.”

The equipment was installed “with no disturbance whatsoever,” said Valente-Heikkila. King explained, “The neat part was running refrigerant piping on the outside of the building. Some of it was done on a 60-foot boom to reach the fourth floor. That meant less disturbance to the residents. Also, you’re in their apartments, near their personal belongings, so you don’t want to be drilling holes through concrete. Instead, you do it through the drywall, which keeps the mess down as much as possible.”

“ We’ve been very satisfied and the residents were so happy to get air conditioning. I haven’t found one resident who doesn’t like it! ”

**— Evelyn Valente-Heikkila
Executive director /
manager, Ishpeming
Housing Commission**

For Valente-Heikkila, the HVAC project has been a true success. "We've been very satisfied and the residents were so happy to get air conditioning. I haven't found one resident who doesn't like it! These units also have heating. Previously the building was heated with electric baseboards, but once the wall[-mounted] units were installed, the residents stopped using the old heaters. They're just very satisfied now." The bonus: what King called "a pretty substantial tax credit for green efforts."



PROJECT TEAM

Owner:

Ishpeming Housing Commission, Ishpeming, Michigan

HVAC Contractor:

Berger and King Inc., Escanaba, Michigan

EQUIPMENT

- ▶ (4) PUHY Y-Series Outdoor Units
- ▶ (88) PKFY Wall-mounted Indoor Units