



Drummond Island,
Michigan

DRUMMOND ISLAND MEDICAL CENTER



CHALLENGE

Finding a small, quiet HVAC system that could provide year-round comfort to a medical center in northern Michigan

SOLUTION

Zoned Comfort Solutions® from Mitsubishi Electric

RESULT

A near-silent, near-invisible system that met every need of the center

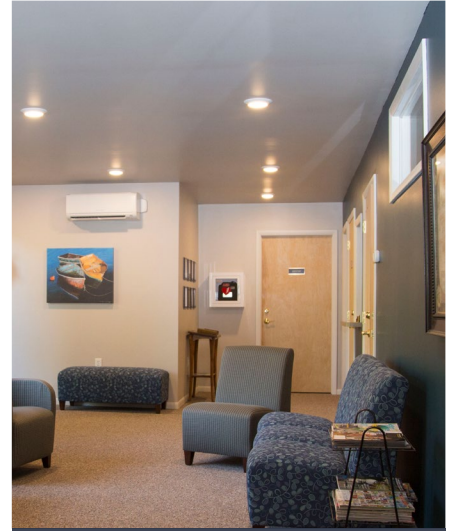
Drummond Island, Michigan, is home to just over 1,000 people. Toward the center of town sits the **Drummond Island Medical Center**, a 2,973-square-foot facility dating back to the 1950s. The center houses a medical clinic and its staff, an x-ray room, a physical therapy area, multiple labs and a dental office. After years of discomfort and needing more space, a renovation brought the facility up to current hospital standards while expanding the interior. Renovation challenges included consolidating the mechanical room, decreasing the sound traveling between rooms and ensuring a healthy environment for visitors and staff. Zoned Comfort Solutions® from Mitsubishi Electric solved every challenge while ushering in a new era of comfort.

Anne Stadler, chairman of the Medical Center Board, oversaw the renovation. She noted four key needs for the center's new HVAC system:

1. That it worked well.

2. Zoning. **"It was important for us to be able to turn the temperature down or up in individual rooms. The dentist is here just two times a month, so there's no need to heat her office if she's not there."**
3. Small footprint, flexible installation. **"We wanted the mechanical systems to be in the basement. The area where the old HVAC system was—we wanted to use that space to expand the waiting room, which we really needed."**
4. Cost savings.

Scott Aldridge, MD, board-certified family medicine, serves as the center's medical director. After 25 years of dealing with an ineffective HVAC system, Aldridge noted an **additional need: confidentiality.** **"With the prior heating system, noise moved through the building. Ductwork really transmits sound! We could hear other people's conversations"—a big problem given the private matters discussed daily.**



"I sat in the lobby one time and pretended I didn't know anything about the system. I said, 'Wow, it's so nice and cool in here. Where do you think the air is coming from?' And everyone looked around but couldn't figure it out. Nobody noticed the [wall-mounted] unit at the end of the room. Finally someone said, 'Hmm, do you think that could be it? But it's so small, and so far away.'"

— Lynne Coulter, CPBD, Drummond Island Design, Inc.

Googled brands. For Mitsubishi Electric, everything I was seeing was positive. It's a good product, and pretty innovative."

Stadler said, "Our only concern with this kind of system was the look of the units on the wall." Coulter explained, "Aesthetics are a big thing. To prove to everyone just how discreet the units are, though, Adam stuck one up at the clinic as a trial and no one noticed it."

With the decision made, installation took place. "Everything was labeled and easy to install. We were also able to work in phases," said Kidwell. Stadler explained that **working in phases meant "business as usual kept going during construction."**

Since installation, Kidwell said, "Everybody has been thrilled. The comfort, which was never attainable prior to the installation, is high. The quiet operation is great, too. Patients don't even notice the units." A couple times now Kidwell



Lynne Coulter, CPBD, Drummond Island Design, Inc., Drummond Island, was called in as the team's architect. She described yet another key need: comfort. "If people don't have the right temperature, they're not happy. If it's too hot, too cold, stuffy – you hear about it nonstop. The previous system was a propane-fueled forced-air system. Everyone complained. So I wanted a system that was a little more thinking-outside-the-box."

Coulter called on Adam Kidwell, owner of Island Breeze Heating and Air Conditioning LLC, Drummond Island. He said, "Since the clinic's needs boiled down to individual space control, I pitched the idea [of a zoned system] to the board." Kidwell's plan involved locating condensers in the basement to keep them out of the heat, cold and snow.

Drummond Island's winters can get pretty chilly—"ten degrees below zero," said Coulter.

Kidwell's pitch also covered "heat pumps' individual filtration that helps curtail the spread of disease." This was especially important to Coulter, who wanted a design that would bring patients not just comfort, but health. "This is a medical clinic, so **if someone comes in and has germs, a forced-air system blows around that unhealthy air. A forced-air register or baseboard heating unit can also drip, creating a potential for germs. Mini-splits avoid this and have filters.**"

The board was sold on the idea of a zoned system, and going with Mitsubishi Electric was an equally easy decision. Coulter said, "I

has taken visitors down to the basement “where all the units are running just six feet away. We stand there and have a conversation. It blows people away that the units are virtually silent.”

The board has also been pleased. “We opened two weeks ago, and Adam is now working to get us a rebate. We’re hoping for \$5,000 to \$6,000, which is a lot for us. And when I called the guy at our utility company with a couple questions, he said, ‘Oh my God, you picked the right system.’”

Stadler’s observations of the center have only confirmed that statement. “The rooms are cooled to our expectations, and the people who

work there seem to be really happy with it. I stop by from time to time and have overheard patients saying how comfortable it is.”

Aldridge has appreciated being able to provide that comfort to his patients. “When someone comes in, I ask them, ‘How are you feeling? Are you cold at all?’ If they are, I tell them, ‘I can fix that in 15 seconds.’ I walk over to the thermostat, push a button and the unit starts heating instantaneously. How many doctors have ever asked you if you’re comfortable and then fixed it within a minute? With a boiler, I would have turned it up four degrees and

hoped half an hour later it’s a little hotter.”

The confidentiality issue has been taken care of, as well. Aldridge said, “Instead of the old vented system with its noise, we get a nice, quiet hush.”

The result of all this change is that now the 1,000 residents of Drummond Island can visit a medical center offering true comfort and health—which is exactly what a medical center should do.

PROJECT TEAM

Facility:

Drummond Island Medical Center, Drummond Island, Michigan

HVAC Contractor:

Island Breeze Heating and Air Conditioning LLC, Drummond Island, Michigan

Architect:

Drummond Island Design, Inc., Drummond Island, Michigan

EQUIPMENT

- ▶ (2) MXZ Outdoor Units
- ▶ (1) MUZ Outdoor Unit
- ▶ (17) MSZ Wall-mounted Indoor Units