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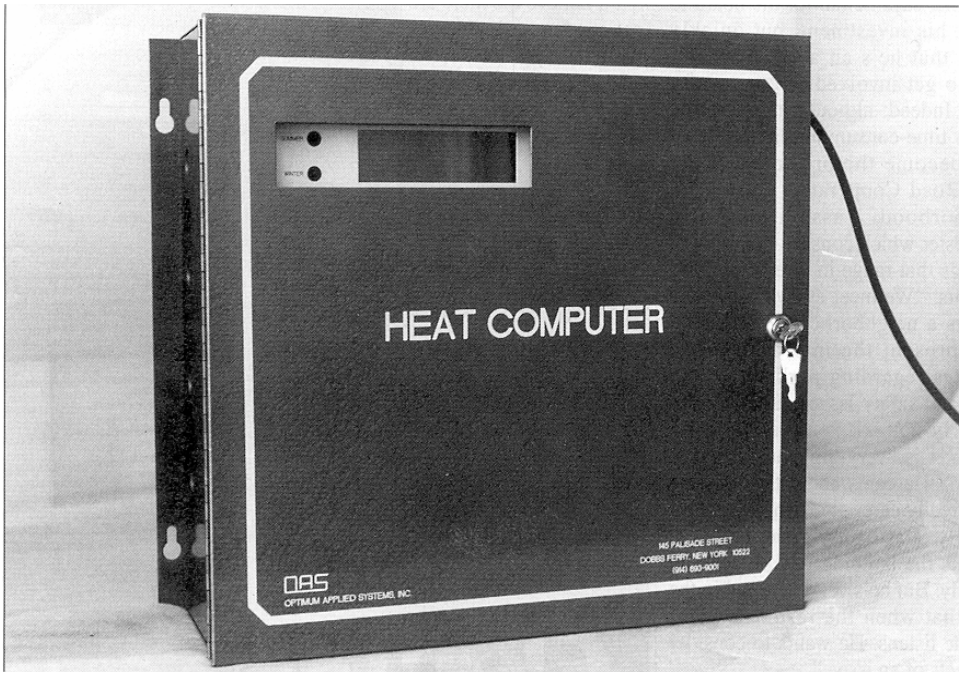
LONG-RANGE PLANNING

The Heat Is On



With heating oil prices shooting up to near $1 a gallon over the winter, many managers are probably looking into ways to save money during the next cold season, especially those in older buildings with a history of heating problems. Installation of heat sensors and heat computers, done now while the weather is warm, can prevent the mad scramble to heat buildings economically come January and February.

"This is the time of year you should be preparing for the next winter," advises Bram Fierstein, president of New Rochelle, N.Y.-based Gramatan Management, which manages buildings in Westchester and Rockland Counties, and the north Bronx. "It's better to contract this out now and fine-tune it in the fall before it gets 20 below for five days straight. There's enough Murphy's Law that the last thing you want to be doing is screwing around during heating season."

Fierstein recently installed a heat sensor system in a 78-unit Yonkers co- op on Bronx River Road. Ten sensors were installed in units that had complained of heating problems. Rather than being situated outside, these heat sensors, which look much like light switches, are placed inside the individual units. Having the heat blasting when it is in the freezing temperatures outside might make sense, unless the unit-owner has his/her windows open because it is too hot.

"You can't have a 10-to-15 degree difference," says Fierstein. "Someone's getting temperatures up to 70 and others are up to the 80s. They're the ones with the windows open. You're just burning more and more oil. That was fine when oil was 50 or 60 cents a gallon, but now it's up to 85, 90 cents. The more efficient you are the better off you will be."

The heat sensors inside will activate the heating plant when the actual apartment temperature tells it to. Also, if the sensors are reporting that it is only a few units that are accounting for colder indoor temperatures, other steps can be taken, such as checking the heating lines or installing addition- al insulation

or radiation, and, notes Fierstein, helping to "balance the system." Because the boiler will not continuously be cycling, the system can help save buildings from 30-40 percent, adds Irwin Novick, president of Manhattan-based Novick Partners, another managing agent and proponent of the energy-saving device.

The heat computer, which can be accessed by a manager online, can also monitor the amount of hot water being used, helping to determine if the building is losing water to leakage. The more fresh water being placed in the system, the more the boiler will have to heat it to get it up to 160 degrees; therefore, the more oil being used to add more heat.

"It's a great aid," Novick says. "It'll transmit information to the manager's office so they can see what's happening. Boilers traditionally have all sorts of breakdown problems. The system can alert you to repair problems and call a repairman day or night."

For instance, there were a number of useful findings by the superintendent at a Yonkers co-op who inspected the units after readouts from the heat computer: radiators were sometimes turned off; air conditioners in the window; were largely responsible for heat loss (not the responsibility of the building); a few poorly installed vinyl windows couldn't be closed and had to be replaced; and there were a number of problems in the heating system itself.

In identifying and solving the problems at that Yonkers co-op, Fierstein wasn't alone. He had help from a program called the Total Energy Management System (TEMS). TEMS is supplied by the Community Environmental Center, a counseling group for energy conservation that had previously concentrated on low- income buildings. The TEMS package included a heating plant energy audit, a review of heating and electrical costs, a heating distribution analysis, the installation of the heating system, and a three-month follow-up to insure the system ran smoothly. As a result, there were numerous improvements and repairs made, including overhauling the burner, replacing existing main steam vents, replacing problem radiators and riser vents, and repairing a leak in a return line.

"If all the buildings in Manhattan would use this system, we would save close to 200 million gallons of heating oil a year. I don't understand why all people don't use this." says Richard Cherry, president of CEC. With proposals currently in front of six more buildings, Cherry and Ray Hoey, a consulting engineer for CEC, have watched boards toil for months over whether to go ahead or not. "The logic is there:' says Cherry, "but the committee process has slowed it down."

"This is cheap, really cheap:' adds Hoey of TEMS, "but it requires an explanation. Sometimes boards get turned off when you start talking about [the issue]." Hoey should know. As board president of a 65-unit West End Avenue co-op in Manhattan, he has had to go through a long process of selling it to everybody. A hard sell at $13 a barrel, however, has become easier at $34 a barrel, he notes.

One of the best systems on the market, according to Cherry, is one made by Dobbs Ferry, N.Y.-based Optimum Applied Science (OAS). In business since 1968 (online at www.oasinc.net or www.oas-inc.com), OAS has installed thousands of sensors throughout the area. The starting price is around $4,300, with a 10-sensor model, the most common one, going for between $7,000 to $8,000. The price includes installation and a one-year guarantee. As more sensors are added, the price increases. New technology has allowed an almost limitless number of sensors to be installed. CEC can provide ongoing monitoring of the system for $200-300 a month.

The total project cost for the Yonkers co-op, including the con- tract with CEC and installation of an OAS system, was $11,415. Cherry predicts savings of about 20 percent in fuel usage.

OAS President Herb Viertl says there is "practically no risk" involved and the system usually pays for itself in a short time. "If you take the average building - 40 apartments - you'll probably get your money back in one or two seasons," he says. According to statistics provided by CEC, a building that consumes 40,000 gallons a year, for instance, at $.80 per gallon, would have a guaranteed payback on the system (at 10 percent savings) in a little more than three and a half years. At 20 percent savings, the payback would be in half that time.

"The average savings are 20 to 25 percent - we advertise 10 to 30 - and I've seen as high as 50 percent," he continues. "If the building is running at a reasonable temperature, you'll save between 25 to 30 percent."

With oil prices expected to be high again this winter, Viertl says he's waiting for people to bang his door down. The computer phobia some may feel should be more than offset by the sticker shock from heating bills this past winter. "It just makes a lot of sense."

- Michael Sullivan

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