



CASE NO. 10

BUILDING TYPE:

Nursing Home

NO. OF UNITS:

LOCATION

Pennsylvania

Temperature Monitoring Control Provides Peace of Mind to Nursing Care Facilities

PROBLEM: Maintaining safe domestic hot water temperatures is a critical issue for most nursing care facilities. In addition to preserving the safety and welfare of their patients, these facilities must meet strict standards imposed by state licensing boards regarding water temperature. Media Real Estate was concerned about meeting such standards at several of its nursing care facilities in Delaware County; PA. The company wanted to insure that its facilities kept the hot water temperatures within the limits of what the State of Pennsylvania dictates as acceptable: 99QF - 110oE

"It was a safety concern on their part," said Jim Pompetti of Pompetti Heating & Air, the contracting firm who Media first contacted. "They wanted *back-up* safety protection."

To Media Real Estate, this meant having more than a tempering valve in the domestic water line. They wanted back-up protection in case the tempering valve failed.

SOLUTION: When Media contacted Pompetti, he in turn consulted Nick Cozzan of Blankin Equipment, who recommended a Temperature Monitoring Control (TMC) made by Heat-Timer Corporation.

The TMC works in conjunction with the Heat-Timer tempering valve. A temperature sensor located downstream of the tempering valve sends instantaneous readings to the TMC. The TMC is also wired into a solenoid valve on the hot water supply side of the tempering valve. The solenoid motor is energized when open and de-energized when closed. In case of a power outage, the solenoid automatically closes. If the TMC senses that the water in the line has exceeded the adjustable set point by as little as a single degree, it will activate the solenoid valve to close, shutting down the hot water supply to the tempering valve so that only cold water gets through. An additional solenoid valve can be installed to "dump" any water that accumulates between the primary solenoid and the distribution line. The solenoid valve will not open until the

TMC's manual reset switch is activated, preventing alternating slugs of hot and cold water from entering the system.

Safety By Sight and Sound

Mr. Cozzan had another suggestion for Media Real Estate, an audio/visual alarm to immediately alert facility personnel whenever the TMC senses temperatures above set point. This alarm combines a loud buzz and a bright flashing light.

Cozzan is quick to point out, however, that the audio/visual alarm should not be thought of as an *emergency* alarm since it goes off *before* water temperatures have exceeded acceptable limits. An optional feature to the TMC, the alarm is there to alert facility personnel that temperatures have approached the upper limits of acceptable hot water temperature. This gives facility workers an opportunity to correct the problem before there's any safety threat to the patients.

In some cases, Media Real Estate opted to install the audio/visual alarm on each floor of the nursing home, and another alarm in the maintenance room, virtually eliminating any possibility that the alarm be overlooked.

The audio/visual alarm is not only an excellent safety



Jim Pompetti (right) of Pompetti Heating and Air and Jim Grajewski (left) maintenance supervisor for Media Real Estate, review a TMC installation.

measure, it alerts facility workers to certain piping problems that might otherwise go unnoticed. If the alarm goes off, facility workers automatically investigate *why* temperatures have exceeded set point. Their investigations may lead them to a malfunctioning valve, an improper tie-in to the domestic water line, or other system problems that could affect water temperatures.

Improved Temperature Monitoring Capability

Jim Grajewski, Maintenance Supervisor at one of the Media Real Estate facilities, has numerous praises for the Heat-Timer tempering valve/TMC combination. In the past, Mr. Grajewski has been disappointed with other tempering valves, finding them difficult to adjust because of their hypersensitivity: However, since installing the Heat-Timer

equipment, he's found that making adjustments to the tempering valve is much easier. He can adjust the valve and detect his adjustment within 60 seconds by watching the digital temperature readout on the TMC panel. Once the Heat-Timer tempering valve is set, no further adjustments are required. According to Mr. Grajewski, this ability to monitor the system temperature makes the TMC/tempering valve combination all the more worthwhile.

"It's saved us a lot of time," remarked Mr. Grajewski, who in the past has had to rely on word of mouth or manual temperature readings to monitor the system temperature.

So far, Media Real Estate has installed 8 tempering valves and 8 TMC controls at various nursing care facilities in Delaware County.

TYPICAL APPLICATION: _____

TEMPERATURE MONITORING CONTROL WITH HEAT-TIMER TEMPERING VALVE

