

Natural gas humidification

Breathing comfort with lower costs

Becketwood high-rise Minneapolis, MN

Residents of the east wing of Becketwood high-rise in Minneapolis were among the first to sing the praises of a natural gas-fired humidification system installed in their building in January 1996. DRISTEEM Humidifier of Eden Prairie developed and provided the unit and CenterPoint Energy Minnegasco covered costs to install it.



Natural gas central humidifier, 300,000 BTU with four burners; 120-unit wing of Becketwood high-rise in Minneapolis.

An end to dry winter air

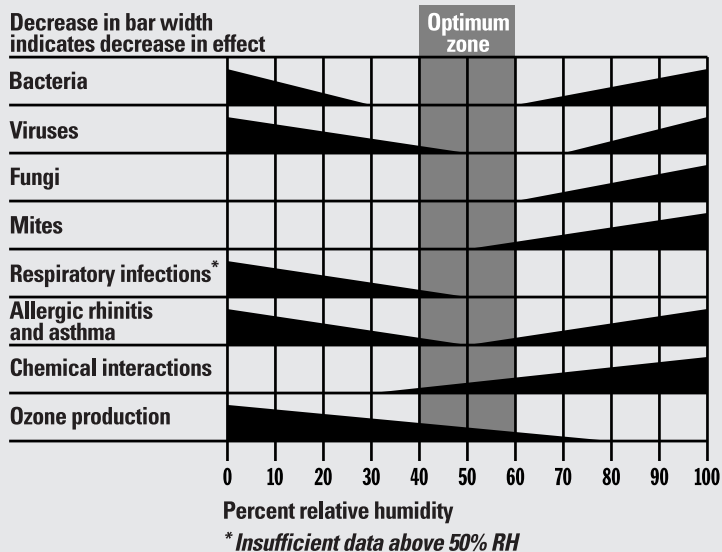
“I found I could sleep through the night because I’m breathing better, and my skin feels better...it’s not so dry,” said resident Mary Jean Ritter. “Conditions are vastly improved. I used to have red, itchy eyes; that condition just vanished with the new humidifier,” said resident Eleanor Bole. William Howell added, “This is the biggest improvement this place has had since I came here 10 years ago.”

Lower operating cost

DRISTEEM developed its natural gas humidifiers because of their savings potential. While first costs with the DRISTEEM are higher than with a traditional electric unit, payback comes quickly. “In most cases, it should make up the difference in just a few months,” said Chris Morton, DRISTEEM’s chief operating officer.

Herb Doty, a Becketwood resident and CenterPoint Energy Minnegasco retiree agrees: “The DRISTEEM unit runs us about 75 percent less than an electric central unit would.”

Optimum relative humidity range for minimizing adverse health effects¹



¹ Theodore D. Sterling & Assoc. Ltd., Vancouver, BC Canada, Sterling et al 1985 Ashrae Transaction Vol 91 Part 1

Better for people and buildings

Dry skin and static are minor compared to other problems posed by dry air. Scientists have found that proper humidity levels can reduce bacteria, viruses and respiratory infections. (See table above.)

Another benefit of humidification is the health of the building. With the added moisture, furniture, door jambs, cabinets and walls last longer.

A simple principle with big benefits

The DRISTEEM natural gas humidifier works very simply. Natural gas burners inside the humidifier boil water, producing steam that travels through a pipe and into the building's air handler. The air handler then blows the moist air into the building.

"It's like a big tea kettle," Doty said. "You're basically just boiling water."

For more information, call DRISTEEM at 952-949-2415 or 1-800-328-4447.



The DRISTEEM humidifiers range in size from 75,000 to 400,000 BTU, and from 56 to 300 lbs/hr output.

A cost-effective option for businesses

While studies have shown the importance of humidification, only about two percent of commercial space built in 1995 was humidified. One reason was the lack of an economical alternative to electric humidifiers. "Facilities such as nursing homes, schools and high rises such as Becketwood that can most benefit from central humidification are usually reluctant to add the high annual cost of electric humidification," Morton said. "With the natural gas-fired humidifier, operating costs can be as much as 75 percent lower than with electric."