

Hotel uses effective humidity control

Ben Mousavi, owner of KEIV, Inc., has three Hilton franchised hotels. As a franchisee, there are specific guidelines to the design and construction of the hotel that must be approved. Hilton specifications require that the hotel be pressurized with dehumidified fresh air via a centralized make-up air system. This approach eliminates moisture at its source prior to entering the building. The constant supply of make-up air to the rooms allows for a constant exhaust from the toilets assuring the guest of a clean smelling room with good air quality.

Because Mousavi's newest franchise, a Hampton Inn, is located in Katy, Texas, (near Houston), humidity control was a major concern. "In the Houston area you can't avoid humidity- it is everywhere," Mousavi said. "The moisture is evident and mold is a problem."

Mousavi discovered that the Munters DryCool unit was capable of supplying air at much lower dew points than the refrigeration based equipment that Hilton had recommended. The DryCool unit which is a refrigeration/desiccant hybrid can deliver air at dew points of 45 deg. Fahrenheit or lower during the most humid conditions while using less energy than the refrigeration based systems use to supply 55 deg. Fahrenheit dew points.

After contacting Mark McMillan, Principal of McMillan Choate & Associates, Mousavi decided that Munters would be the best HVAC choice for his franchised hotel. Mousavi was certain that Munters was the right choice for his Hampton Inn because Munters equipment met all of the Hilton requirements, and offered many more features that he could benefit from.



Two DryCool units were installed to treat all three floors of the Hampton Inn in Katy, Texas.

Case Study: Hotels



BENEFITS

- Consistent Humidity and Temperature Control
- No Mold, Mildew, or Structural/Material Damage
- Lower Utility Bills
- Remote Monitoring
- 24 Hour National Service Network



The Humidity Expert

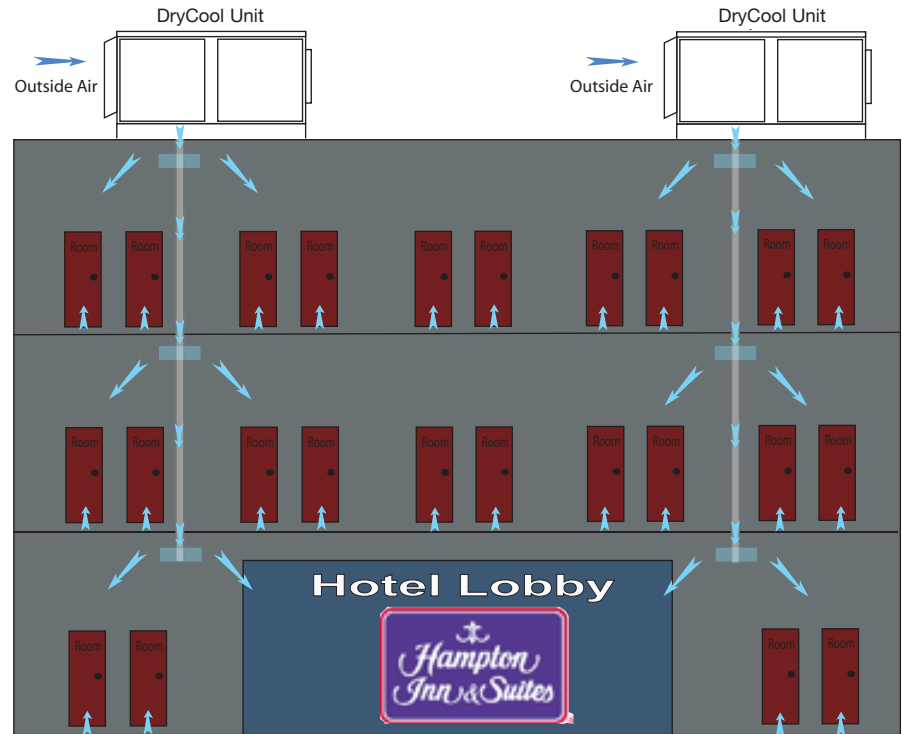
With the low dew point conditions supplied by Munters, the chance of mold and mildew can be greatly reduced. Surfaces that get wet from water events such as spills, shower & bath splashes, roof leaks, window leaks, etc. will dry much quicker. The accelerated drying time greatly reduces the ability of mold to form.

The conditions will be dry enough to minimize or eliminate condensate from forming on the PTAC cooling coils. Having dry PTAC coils eliminates the problem of PTACs overflowing down the exterior of the building or even worse the interior of the building. Since people are more comfortable at higher temperatures when the air is dryer, the hotel guests will tend to maintain the rooms warmer which can add up to significant energy savings.

"With a Munters DryCool unit, we can avoid moisture problems and save energy dollars at the same time," Mousavi said.

The Munters system design provided by McMillan Choate & Associates was approved by Hilton for providing the appropriate cooling capacity, and far exceeding their dehumidification requirements.

"The consultant for Hilton was impressed with the Munters system and even commented on whether Mousavi could afford it, but even with a slightly



Directly Above: Conditioned make up air is delivered throughout the corridors and is distributed to each room and the lobby of the Hampton Inn & Suites in Katy, Texas. Left: Munters DryCool unit prevents mold, mildew, and structural/material deterioration. The all-in-one DryCool unit constantly controls temperature and humidity in the hotel.

higher initial cost, the energy savings and moisture prevention are incomparable," McMillan said.

With the Munters DryCool units installed and no humidity problems

evident, Mousavi is extremely pleased with the advantages he incurred when choosing Munters.

"You get what you pay for," Mousavi said. "The DryCool unit has been working very good at keeping the hotel dry- no moisture on windows or walls and the hotel is full of comfortable customers."

The enhanced features offered by Munters are greatly appreciated by franchisees, especially the 24 hour support and service which, if not offered by the manufacturer, can make or break a hotel's operation.

"Even if the design does not require humidity control, I would still install a Munters system because I know the benefits it supplies to the hotel," said Mousavi.

DryCool unit Flow Diagram

