



HEAT PIPE TECHNOLOGY
a subsidiary of MiTek® • a Berkshire Hathaway company

CASE STUDY

Hotels & Resorts

Grand Hyatt Tampa Bay Keeps High Energy Costs at Bay

THE PROBLEM

The 226,700 sq/ft Grand Hyatt Tampa Bay, whose chief aim is the comfort of its guests, is located in some of the most challenging weather in the U.S. when it comes to HVAC system performance. The Tampa area's relative humidity is famously high most of the year and peaks during the summer months. Combine the high humidity with average regional temperatures that range upwards of 90°F in the summer, and you have quite a challenge on your hands when it comes to providing comfort air conditioning for hotel guests and employees.



Given these conditions, any HVAC system would have to substantially over-cool the ambient air just to remove enough moisture, then reheat the air, to achieve 60% relative humidity and a target 65°F before delivering this makeup air to the corridors outside guest rooms. Not doing so would result in cold and clammy guest rooms. Sadly, the traditional method of overcool and reheat is wasteful, expensive, and ineffective. The engineers had to find a way to save energy and lower costs.

THE SOLUTION

Custom Site Installed Wrap-Around Heat Pipes

A local team was formed including a consulting engineer, a controls contractor, and manufacturer's representative. After some research into heat pipes, it was obvious that they were the best choice for the Grand Hyatt. They are passive with no moving parts and would offer the best value for the hotel and most comfort for their guests. While free reheat energy is extracted from the hot incoming air, reducing the load on the cooling system at the same time. The facility was occupied throughout the renovation, so the project had to go smoothly. It took only 15 days on site and ten weeks from planning to completion to implement.

THE RESULTS

The new HVAC design at the Grand Hyatt now includes HPT components, and performance data is already showing dramatic efficiency gains. With HPT, the Grand Hyatt Tampa Bay will save 464,000 kilowatt hours each year, totaling a **yearly savings of \$37,000**. With those savings, the hotel will also reduce its CO2 output by 320 metric tonnes.



With HPT's solutions in place, the Grand Hyatt Tampa Bay has consistently recorded the targeted 65°F and 60% relative humidity on its guest floors, even during the hottest part of the Florida summer, while the hotel has substantially reduced its HVAC operating costs.

The Grand Hyatt Tampa Bay will see a complete return on investment for the new HVAC system in approximately 3.5 years and will experience the ongoing savings for many years to come.

"Throughout many implementations, in facilities of all types, Heat Pipe Technology has shown rapid return on investment and ongoing savings for our clients," said HPT's Senior Vice President of Sales and Marketing, Mazen Awad.

For more information, visit www.heatpipe.com