



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

# CASE STUDY

Community Living

## Erickson Installs HPT's Passive Dehumidification System, Saving Thousands on the Cost of Reheating AC Output Air

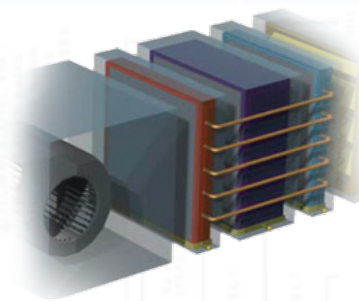
### THE PROBLEM

For its multi-story Oak Crest senior living residential buildings, Erickson Living installed HVAC units that were set up to bring in 50% outside makeup air. But with area humidity conditions, Erickson Living found that it had to extract an enormous amount of moisture from the air before it could be used in conditioned spaces. The conditioned, dehumidified air actually had to be heated back up, even in the middle of Summer, for use in the residential areas, costing \$2,300 per year, per floor.

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### THE SOLUTION



Erickson Living found Heat Pipe Technology (HPT™), a Berkshire Hathaway company. By distributing the heat *around* the HVAC cooling coil after extracting it from the incoming air, HPT's passive dehumidifier heat pipe systems allow facilities to avoid the energy cost required to reheat air. "Heat Pipe Technology's approach to humidity control involves using a *passive dehumidification system*," explained

consulting engineer Mohamad Jamal. "Passive dehumidification systems – which have no moving parts and cost nothing to operate – are designed to lower humidity levels, while avoiding the need to overcool and reheat air for use."

#### Rapid ROI

**Cost** of the HPT installation:

- \$9,000 for materials
- \$13,000 for labor
- Total \$22,000, per building.

**Savings:**

- \$14,000 per building each year

Five year projected energy savings, *per building* after all costs:

- \$48,000

### THE RESULTS

The savings that Oak Crest achieved from just one HPT installation on just one floor was a remarkable 21,000 kilowatt hours annually. At 12 cents per kilowatt hour, which is what the Erickson property management pays, they will save around \$2,300 per floor per year. Given that each floor of all 11 buildings could be retrofit with HPT's wrap-around passive dehumidifier heat pipe system, that amounts to 66 possible HPT installations. With 66 installations, the savings add up rather quickly to a large sum of money, averaging around \$14,000 per building per year, or more than \$154,000 annually. What's more, those are ongoing savings that compound year after year, with no costs to operate the HPT solutions.

