

# Comparative Case Study

Cambridge HTHV vs. Air Turnover

## Upstate New York Warehouses

### Cambridge HTHV Space Heaters



#### Operating Costs

Based on 6,149 Heating Degree Days @ 60°

\$0.17/ft<sup>2</sup> Gas cost @ \$1.00/therm

\$0.02/ft<sup>2</sup> Electric cost @ \$0.08/kWh

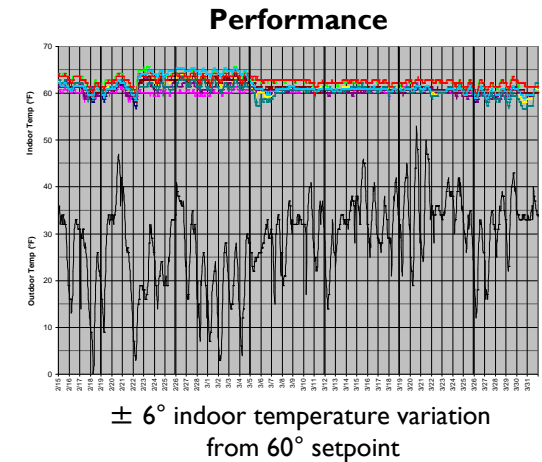
**\$0.19/ft<sup>2</sup> Total cost**

#### Building Specifications

- 1,400,000 ft<sup>2</sup> x 36' high
- R-14 Roof / R-10 Walls

#### Heating System

- (17) Cambridge HTHV Space Heaters
- Roof top mounting
- 37,400 MBH total
- 11,600 CFM average
- 197,150 CFM total
- 162.5 HP total - intermittent



### Air Turnover Heaters



#### Operating Costs

Based on 6,149 Heating Degree Days @ 60°

\$0.27/ft<sup>2</sup> Gas cost @ \$1.00/therm

\$0.06/ft<sup>2</sup> Electric cost @ \$0.08/kWh

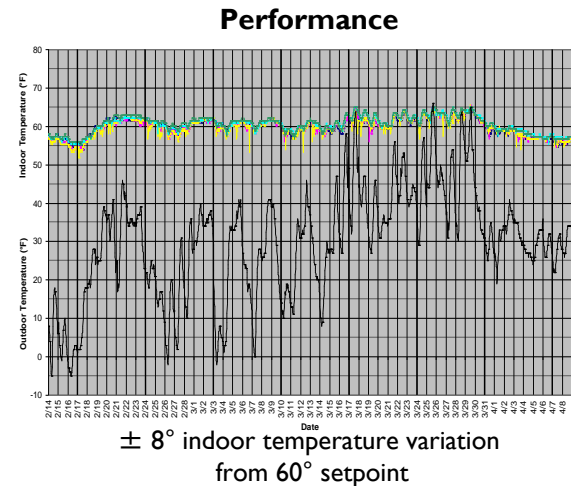
**\$0.33/ft<sup>2</sup> Total cost**

#### Building Specifications

- 775,434 ft<sup>2</sup> x 36' high
- R-19 Roof / R-12 Wall

#### Heating Systems

- (5) Air Turnover Heaters
- Floor mounting
- 15,625 MBH total
- 500,000 CFM total
- 117.5 HP total - continuous



### Summary

The Cambridge system used **42% less** total energy with less temperature fall off. If the 775,434 ft<sup>2</sup> facility had installed a Cambridge HTHV system they could have saved approximately **\$109,000/year** operating at \$0.19/ft<sup>2</sup> vs. \$0.33/ft<sup>2</sup>.