

# COMPARATIVE CASE STUDY

Cambridge Space Heaters vs. Make Up Air  
Large Retailers – Kansas and Ohio

## Cambridge Space Heaters



### Operating Costs

Based on 5,215 Heating Degree Days @ 65°

\$0.14/ft<sup>2</sup> Gas cost @ \$1.00/therm

\$0.01/ft<sup>2</sup> Electric cost @ \$0.08/kWh

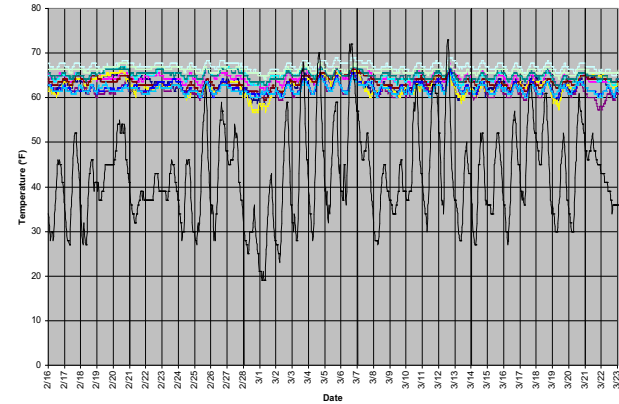
**\$0.15/ft<sup>2</sup> Total cost**

### Building Specifications

- 1,291,950 ft<sup>2</sup> x 36' high
- R-19 Roof / R-10 Walls
- Located in Topeka, KS

### Heating System

- (15) Cambridge Space Heaters
- Roof top mounting
- 27,806 MBH total
- 132,340 CFM total
- 95 HP total



11° indoor temperature variation

## Draw Thru Make Up Air Heaters



### Operating Costs

Based on 5,545 Heating Degree Days @ 65°

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

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

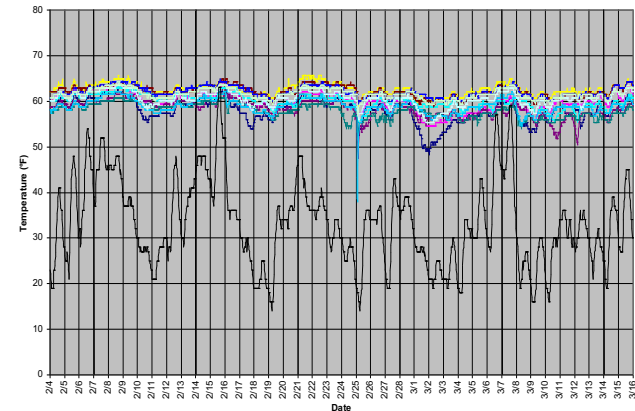
**\$0.29/ft<sup>2</sup> Total cost**

### Building Specifications

- 1,291,950 ft<sup>2</sup> x 36' high
- R-19 Roof / R-10 Walls
- Located in Columbus, OH

### Heating System

- (15) Draw Thru Make-up Air Heaters
- Roof top mounting
- 30,315 MBH total
- 210,000 CFM total
- 150 HP total



28° indoor temperature variation

## Summary

The Cambridge system used **47% less** total energy.

If the Ohio facility had installed a Cambridge system they could have saved approximately

**\$177,000/year** operating at \$0.15/ft<sup>2</sup> vs. \$0.29/ft<sup>2</sup>.