

COMPARATIVE CASE STUDY

Cambridge Space Heaters vs. Make Up Air Distribution Centers - TX

Cambridge Space Heaters



Operating Costs

Based on 2,490 Heating Degree Days at 65°

\$0.018/ft² Gas cost @ \$0.50/therm

\$0.026/ft² Electric cost @ \$0.08/Kwh

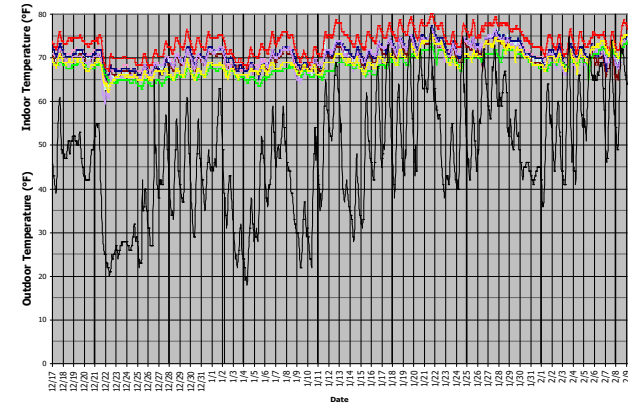
\$0.04/ft² Total cost

Building Specifications

- R-2.7 Roof / R-1.5 Walls
- 604,800 ft² x 35' high
- Located in McKinney, TX

Heating System

- (8) Cambridge Space Heaters
- Roof top mounting
- 16,717 MBH total (28 Btu/ft²)
- 112,000 CFM total (.185 CFM/ft²)
- 120 HP total (.2 HP/Kft² - intermittent)



± 7° indoor temperature variation

Make Up Air



Operating Costs

Based on 2,407 Heating Degree Days at 65°

\$0.031/ft² Gas cost @ \$0.50/therm

\$0.054/ft² Electric cost @ \$0.08/Kwh

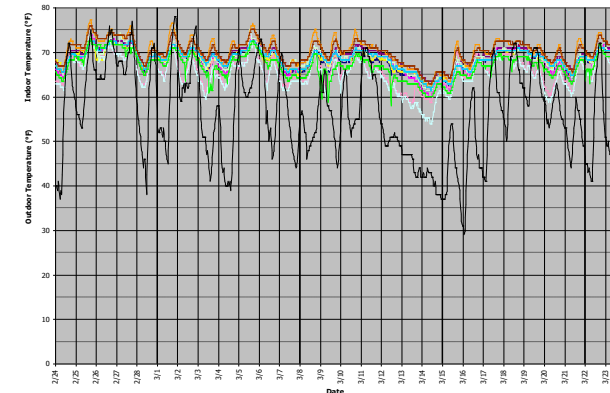
\$0.09/ft² Total cost

Building Specifications

- R-11 Roof / R-1.5 Walls
- 425,000 ft² x 35' high
- Located in Dallas, TX

Heating System

- (6) Draw Thru Make-up Air Heaters
- Roof top mounting
- 9,798 MBH total (23 Btu/ft²)
- 81,900 CFM total (.193 CFM/ft²)
- 75 HP total (.18 HP/Kft² - continuous)



± 12° indoor temperature variation

Summary

The Cambridge system used **48% less** total energy.

If the 425,000 ft² facility had installed a Cambridge system they could have saved approximately

\$21,000/year operating at \$0.04/ft² vs. \$0.09/ft².