

Comparative Case Study

Cambridge Space Heaters vs. Draw Thru Make-up Air

Texas Distribution Centers

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

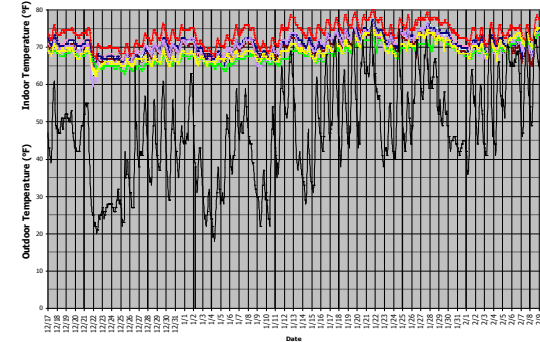
Building Specifications

- 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)

Performance



± 7° indoor temperature variation

Draw Thru Make-up Air Heaters



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

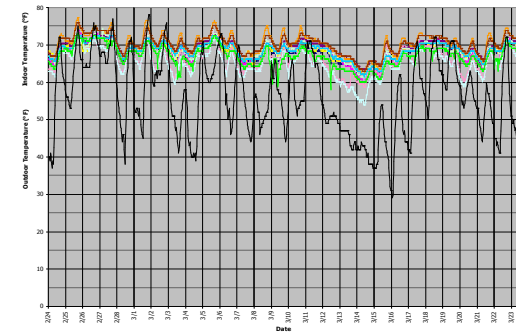
Building Specifications

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

Heating Systems

- (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)

Performance



28° 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.



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