

Comparative Case Study

Cambridge HTHV vs. Direct Fired Recirculation

Central Ohio Warehouses

Cambridge HTHV Space Heaters



Operating Costs

Based on 6,153 Heating Degree Days @ 65°

\$0.16/ft² Gas cost @ \$1.00/therm

\$0.01/ft² Electric cost @ \$0.08/kWh

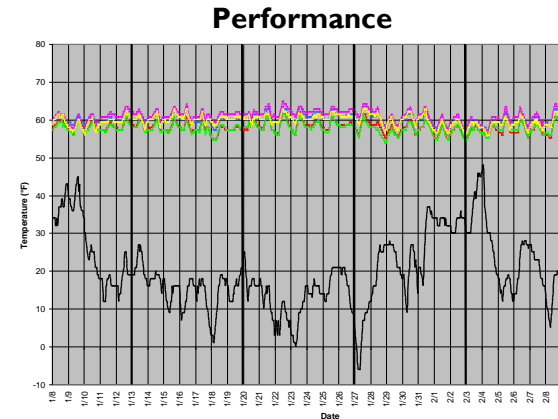
\$0.17/ft² Total cost

Building Specifications

- 150,000 ft² x 26' high
- R-15 Roof / R-12 Wall

Heating System

- (2) Cambridge HTHV Space Heaters
- 2900 MBH total
- 14,000 CFM total
- 10 HP total - intermittent



± 5° indoor temperature variation
from 60° setpoint

Direct Fired Recirculation Heaters



Operating Costs

Based on 6,153 Heating Degree Days @ 65°

\$0.21/ft² Gas cost @ \$1.00/therm

\$0.06/ft² Electric cost @ \$0.08/kWh

\$0.27/ft² Total cost

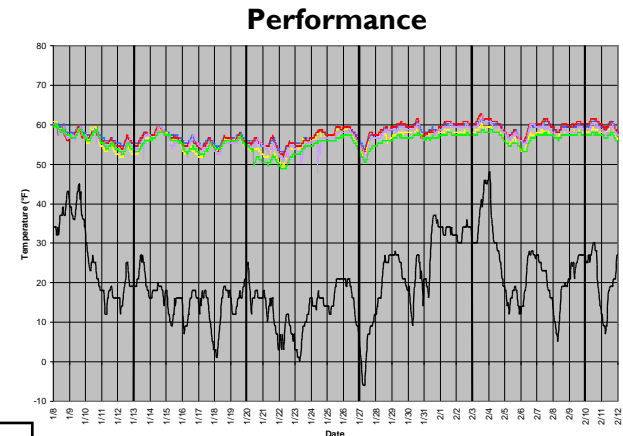
Building Specifications

- 210,000 ft² x 28' high
- R-19 Roof / R-13 Walls above 8'
R-1.5 Walls below 8'

Heating System

- (2) Direct Fired Recirculation
- Manual 90/10 controls*
- 4800 MBH total
- 36,000 CFM total
- 30 HP total – continuous

*ANSI Z83.4 standard requires 20% outside air min.



± 12° indoor temperature variation
from 60° setpoint

Summary

The Cambridge system used over **37% less** total energy with less temperature variation.

If the 210,000 ft² facility had installed a Cambridge HTHV system they could have saved approximately **\$21,000/year** operating at \$0.17/ft² vs. \$0.27/ft².



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