

COMPARATIVE CASE STUDY

Cambridge Space Heaters vs. Direct-fired Recirculation

Northeastern Warehouses

Cambridge Space Heaters



Operating Costs

Based on 5,682 Heating Degree Days @ 65°
 \$0.09/ft² Gas cost @ \$0.50/therm
 \$0.01/ft² Electric cost @ \$0.08/Kwh

\$0.10/ft² Total cost

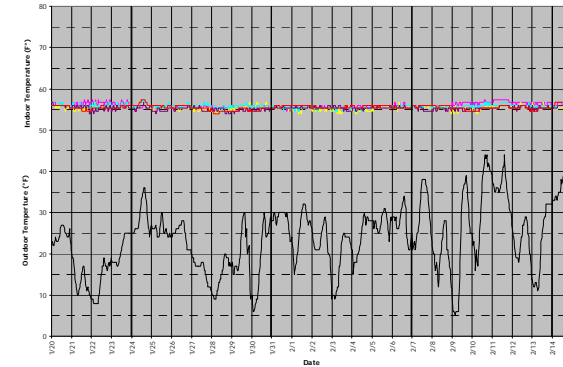
Building Specifications

- R-14 Roof / R-10/R1.5 Walls
- 579,000 ft² x 38' high
- 88 doors
- Located in Bethlehem, PA

Heating System

- (7) Cambridge Space Heaters
- Thru wall mounting
- 11,300 MBH total
- 63,500 CFM total
- 43.5 HP total - intermittent

Performance



± 3° indoor temperature variation
 from 55° setpoint

Direct-fired Recirculation



Operating Costs

Based on 5,750 Heating Degree Days @ 65°
 \$0.11/ft² Gas cost @ \$0.50/therm
 \$0.08/ft² Electric cost @ \$0.08/Kwh

\$0.19/ft² Total cost

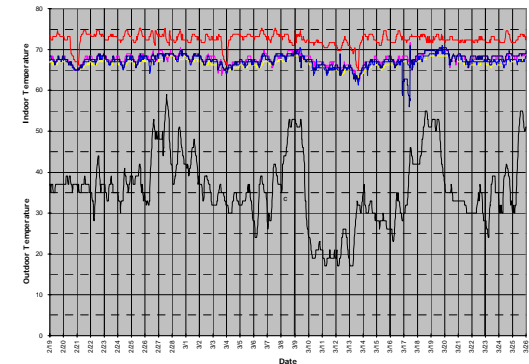
Building Specifications

- R-19 Roof / R-19/R-2 Walls
- 361,200 ft² x 40' high
- 56 doors
- Located in Dayton, Ohio

Heating System

- (2) Direct-fired Recirculation Heaters
- Roof top mounting
- 8,250 MBH total
- 210,000 CFM total (.87 AT/Hr)
- 150 HP total - continuous

Performance



± 8° indoor temperature variation
 from 65° setpoint

Summary

The Cambridge system used **47% less** total energy with more even temperatures.

If the 361,200 ft² facility had installed a Cambridge system they could have saved approximately **\$33,000/year** operating at \$0.10/ft² vs. \$0.19/ft².