

Comparative Case Study

Cambridge Space Heaters vs. Draw Thru Make-up Air

Electronics Retailer

Cambridge Space Heaters



Operating Costs

Based on 6,338 Heating Degree Days @ 65°

\$0.06/ft² Gas cost @ \$0.50/therm

\$0.01/ft² Electric cost @ \$0.08/Kwh

\$0.07/ft² Total cost

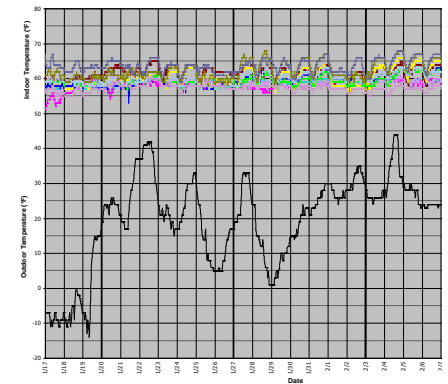
Building Specifications

- 725,477 ft² x 40' high
- R-19 Roof / R-14 Walls
- 128 doors
- Located in Central OH

Heating System

- (9) Cambridge Space Heaters
- Roof top mounting
- 15,000 MBH total
- 87,000 CFM total
- 54 HP total – intermittent

Performance



**± 8° indoor temperature variation
from
60° setpoint occupied / 55° setpoint
setback**

Draw Thru Make-up Air Heaters



Operating Costs

Based on 5,307 Heating Degree Days @ 65°

\$0.10/ft² Gas cost @ \$0.50/therm

\$0.04/ft² Electric cost @ \$0.08/Kwh

\$0.14/ft² Total cost

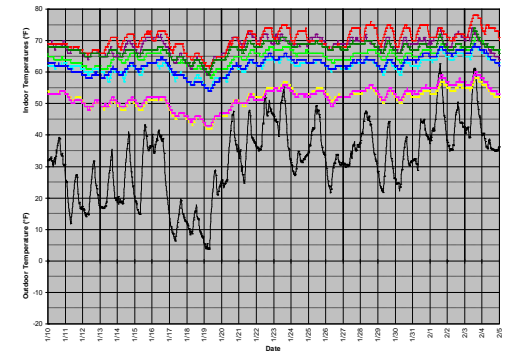
Building Specifications

- 665,000 ft² x 30' high
- R-14 Roof / R-2 Walls
- 82 doors
- Located in Shenandoah Valley, VA

Heating System

- (7) Draw Thru Make-up Air Heaters
- Roof Top mounting
- 10,885 MBH total
- 126,000 CFM total
- 70 HP total – continuous

Performance



**23° indoor temperature variation
(setpoint unknown)**

Summary

The Cambridge system used over **50% less** total energy in a climate with 19% more heating degree days.

If the 665,000 ft² facility had installed a Cambridge system they could have saved approximately **\$46,000/year** operating at \$0.07/ft² vs. \$0.14/ft².



760 Long Road Crossing Dr. • Chesterfield MO 63005
800-899-1989 • www.cambridge-eng.com