

# Cambridge Case Study

## Manufacturing Company

Romeoville, IL



### BUILDING DETAILS

**Size:** 440,000sq.ft. x 35 ft. High  
**Construction:** R-14 Roof  
 R-10 Walls

### OPERATING CONDITIONS

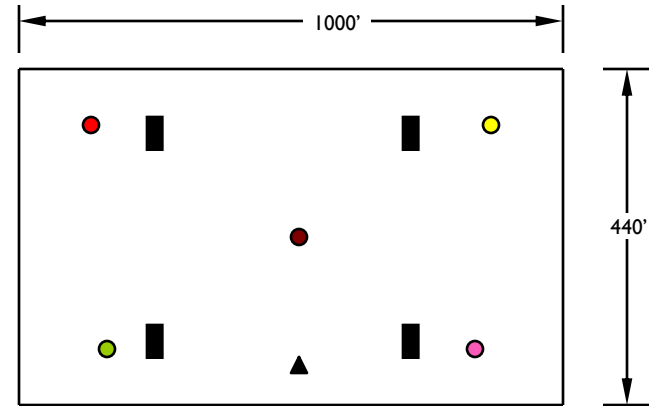
**Operating Hours:** 16 hrs/day 6 days/wk  
**Design Temperature:** 65° @ -10°  
**Thermostat Setting:** 63°  
**Average Temperature:** 61°  
**Heating System:** Cambridge Space Heaters  
 4 @ 2024 MBH / 7.5 HP  
 Roof Top mounting

### CALCULATED OPERATING COSTS \*

for 30 year (1971-2000) average heating seasons

Indoor Temp	HDDs	@ \$0.75 / therm	@ \$1.00 / therm	@ \$1.25 / therm
50°	2,953	\$0.08 / ft <sup>2</sup>	\$0.10 / ft <sup>2</sup>	\$0.13 / ft <sup>2</sup>
55°	3,868	\$0.10 / ft <sup>2</sup>	\$0.14 / ft <sup>2</sup>	\$0.17 / ft <sup>2</sup>
60°	4,913	\$0.13 / ft <sup>2</sup>	\$0.17 / ft <sup>2</sup>	\$0.22 / ft <sup>2</sup>
65°	6,095	\$0.16 / ft <sup>2</sup>	\$0.22 / ft <sup>2</sup>	\$0.27 / ft <sup>2</sup>

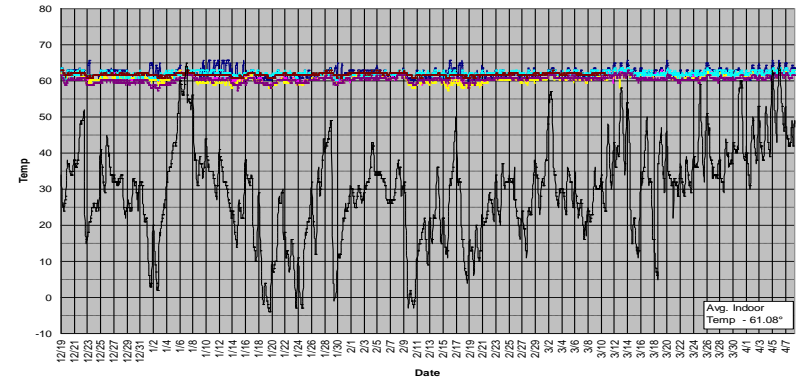
\* based on actual 2007-08 consumption of 80,926 therms for 5,195 Heating Degree Days



- Temperature Logger @ 5' AFF
- ▲ Temperature Logger @ 33' AFF
- Heater

### DATALOGGER GRAPH

**Logging period:** 12/19/07 - 04/07/08  
**Logging interval:** 30 minutes



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