

# Cambridge Case Study

Distribution Center  
Chicago, IL



## BUILDING DETAILS

**Size:** 277,248 sq.ft. x 33 ft. high  
**Construction:** R-14 Roof  
R-8 Walls

## OPERATING CONDITIONS

**Operating Hours:** 18 hrs/day 5 days/wk  
**Design Temperature:** 60° @ -10°  
**Thermostat Settings:** 70°  
**Average Temperature:** 70°  
**Heating System:** Cambridge Space Heaters  
4 @ 1900 MBH  
Roof top mounting

## Notes & Observations

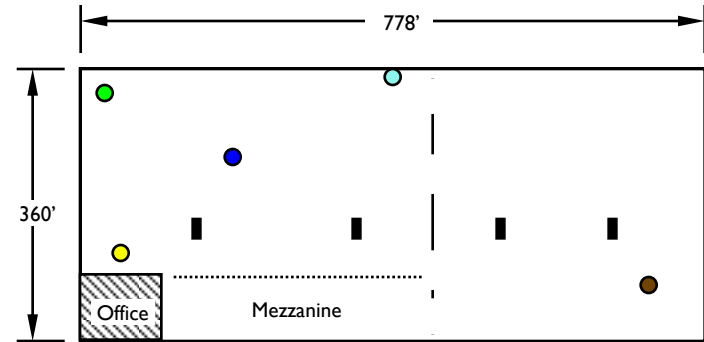
- One heater operating continuously for ventilation

## CALCULATED OPERATING COSTS \*

for 30 year (1971-2000) average heating seasons

Indoor Temp	HDDs	@ \$0.75 / therm	@ \$1.00 / therm	@ \$1.25 / therm
50°	3,201	\$0.06 / ft <sup>2</sup>	\$0.06 / ft <sup>2</sup>	\$0.09 / ft <sup>2</sup>
55°	4,158	\$0.08 / ft <sup>2</sup>	\$0.11 / ft <sup>2</sup>	\$0.14 / ft <sup>2</sup>
60°	5,250	\$0.11 / ft <sup>2</sup>	\$0.14 / ft <sup>2</sup>	\$0.18 / ft <sup>2</sup>
65°	6,485	\$0.13 / ft <sup>2</sup>	\$0.18 / ft <sup>2</sup>	\$0.22 / ft <sup>2</sup>

\* based on actual 1997-98 consumption of 49,922 therms for 6,580 Heating Degree Days

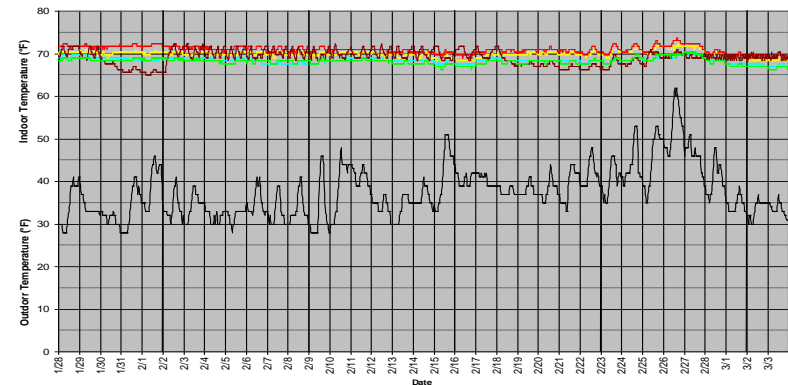


- Temperature Logger @ 5' AFF
- Heater

## DATALOGGER GRAPH

**Logging period:** 1/28/98 - 3/3/98

**Logging Interval:** 30 minutes



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