

# Cambridge Case Study

## Distribution Center

Detroit, MI



### BUILDING DETAILS

**Size:** 225,600 sq.ft. x 29 ft. High

**Construction:** R-12 Roof  
R-10 Walls

### OPERATING CONDITIONS

**Operating Hours:** 12 hrs/day 5 days/wk  
4 hrs/day 2 days/wk

**Design Temperature:** 65° @ 0°

**Average Temperature:** 63°

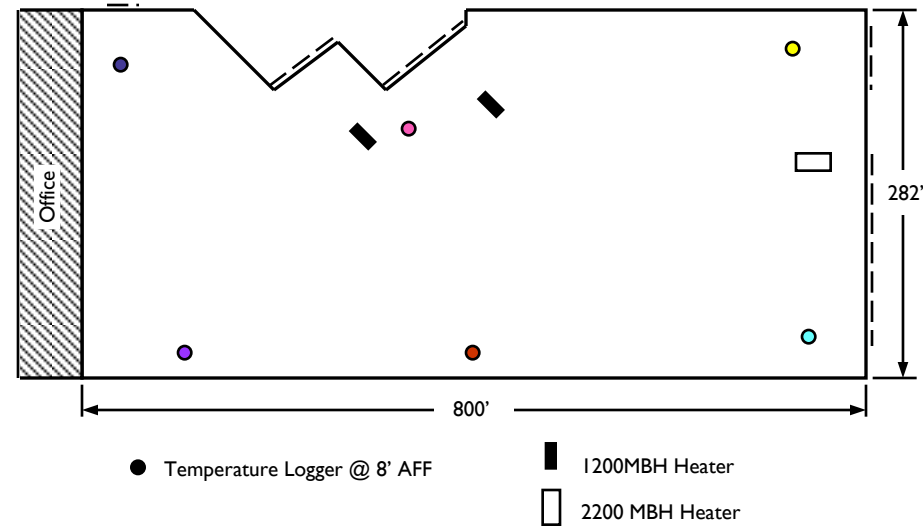
**Heating System:** Cambridge Space Heaters  
2 @ 1200 MBH  
1 @ 2200 MBH  
Roof-top mounting

### CALCULATED OPERATING COSTS \*

for 30 year (1971-2000) average heating seasons

Indoor Temp	HDDs	@ \$0.75 / therm	@ \$1.00 / therm	@ \$1.25 / therm
50°	3,109	\$0.11 / ft <sup>2</sup>	\$0.14 / ft <sup>2</sup>	\$0.18 / ft <sup>2</sup>
55°	4,080	\$0.14 / ft <sup>2</sup>	\$0.19 / ft <sup>2</sup>	\$0.24 / ft <sup>2</sup>
60°	5,189	\$0.18 / ft <sup>2</sup>	\$0.24 / ft <sup>2</sup>	\$0.30 / ft <sup>2</sup>
65°	6,440	\$0.22 / ft <sup>2</sup>	\$0.30 / ft <sup>2</sup>	\$0.37 / ft <sup>2</sup>

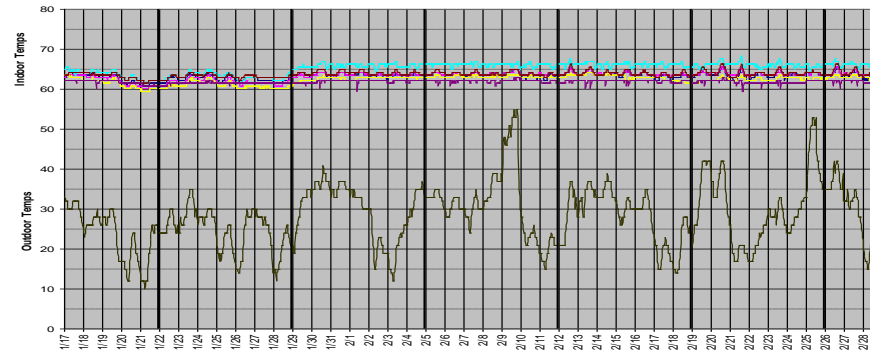
\* based on actual 2000-01 consumption of 68,915 therms for 5,810 Heating Degree Days



### DATALOGGER GRAPH

**Logging period:** 1/16/01 - 2/24/01

**Logging interval:** 30 minutes



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