

# Cambridge Case Study

## Distribution Center

Tyler, TX



### BUILDING DETAILS

**Size:** 1,625,274 sq.ft. x 35 ft. High  
**Construction:** R-14 Roof  
 R-10 Walls

### OPERATING CONDITIONS

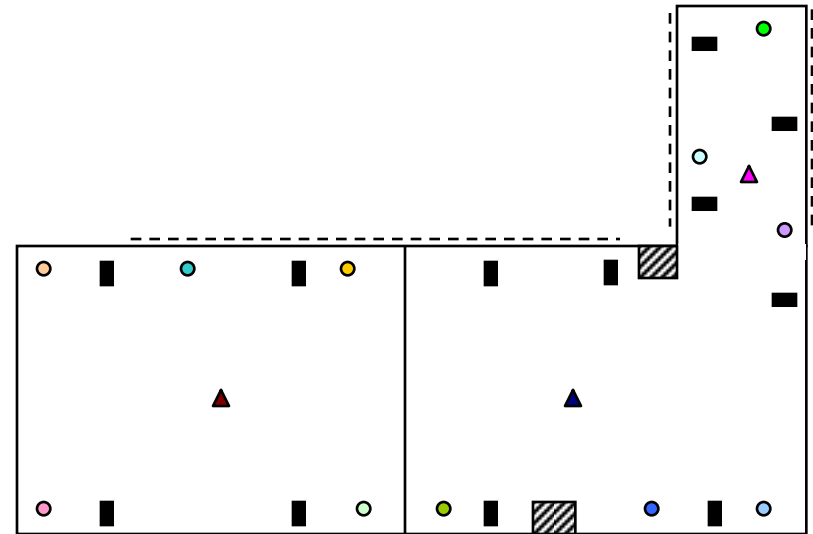
**Operating Hours:** 20 hrs/day 5 days/wk, 8 hrs/day 1 day/wk  
**Design Temperature:** 60° @ 19°  
**Thermostat Settings:** 55°  
**Average Temperature:** 70°  
**Heating System:** Cambridge Space Heaters  
 12 @ 1900 MBH  
 Roof top mounting

### CALCULATED OPERATING COSTS \*

for 30 year (1971-2000) average heating seasons

Indoor Temp	HDDs	@ \$0.75 / therm	@ \$1.00 / therm	@ \$1.25 / therm
50°	465	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>
55°	836	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>
60°	1,358	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>
65°	2,050	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>	> \$0.01 / ft <sup>2</sup>

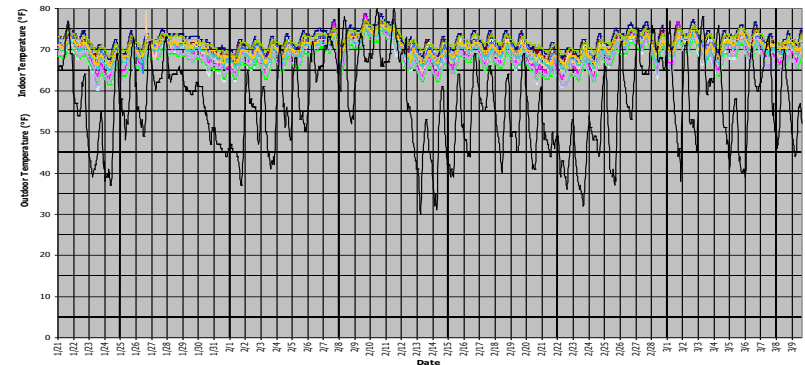
\* based on actual 1998-99 consumption of 1,570 therms for 531 Heating Degree Days



- Temperature Logger @ 6' AFF
- ▲ Temperature Logger @ 30' AFF
- Heater

### DATALOGGER GRAPH

**Logging period:** 1/21/99 - 3/9/99  
**Logging interval:** 30 minutes



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