

THE RACK: THE MOST AFFORDABLE HEATING SYSTEM AVAILABLE

CASE STUDY REPORT



CUSTOMER: ESSC Enterprising Service Solutions **LOCATION:** Louisville, KY
BUILDER: Gault Developers **CONTRACTOR:** Kentuckiana Comfort Center

DESIGN SPECIFICATIONS: ESSC Enterprising Service Solutions wanted a cost effective heating and cooling system for their new facility. In winter months they wanted to maintain 68° in both the warehouse and assembly area. In the summer mode, ESSC wanted to maintain 72° in the assembly area.

PROBLEM: ESSC Enterprising Service Solutions wanted the comfort level and fuel economy of an air rotation system, without giving up any of its floor storage space.

SOLUTION: Security Capitol and Kentuckiana Comfort Center had been using Air Energy's ER system in their facilities. Heating was not a problem since they had many satisfied customers in the area. In the assembly area, it was decided to use (6) 25-ton conventional heating/cooling rooftop units. Inside the assembly area, under each of the rooftop units, Kentuckiana incorporated (6) ER-242 energy rotation units – each rated at 33,000 cfm. The rooftop unit discharges its 10,000 cfm of either heating or cooling into the ER-242, the ER-242 then distributes its 33,000 cfm throughout the area. It provides approximately (4) air turnovers in both the winter and summer months.

NEW BUILDING:
800'L x 500'W x 31'H
Roof: R-14
Walls: R-8
D/Temperature: 72° - 5°

EQUIPMENT SPECIFICATION:
Model: (4) ER-242-780
Model: (6) ER-242
DBA: 70
BTU/Hour Input: 780,000
Cooling: 150 Tons
CFM: 330,000

