

# Case Study Report



## Project Identification

Customer: Allpoints 6  
Location: Plainfield, Indiana

## Design Specifications

Facility Warehouse 950,000' x 40' High  
Winter Operation 65° – 0°



## Project Challenge:

To design a system that will heat the facility to 65° efficiently and meet all code requirements for new construction. Air Energy Systems proposed a combination system of Energy Rotation Rack Units with 80/20 Makeup Air Units to meet .06 cfm/sqft as an alternate to (4) Direct Fired Recirculation MAU.

## Equipment Solution:

Air Energy Systems provided a system to use (8) ER-242-800 Rack Systems in conjunction with (2) Rupp RAM 30 MAU. The Racks and MAUs heat the facility and bring in 57,000 cfm of outside air during occupied operation hours. During unoccupied operation hours, the MAU will shut off and the (8) ER-242-800 units will heat the facility.



## Results of Rack System:

Allpoints 6 experienced Annual Savings totaling **\$106,500**:

- Electrical – 320,000 kW at \$.10/kW
- Natural Gas – 93,196 therms at \$.80/therm

**Allpoints 6 saved \$ .11/sf in operating costs**

Allpoints 6 received verified Electric and Gas Rebates:

- Vectren – Natural Gas– **\$50,000**
- Duke Energy – Electrical - **\$16,000**

