



## The Swedish American Hospital - Heart and Vascular Center

### Project Team

Building Owner : Swedish American Hospital  
Architect : Perkins and Will Architects  
Structural Engineer : Simpson Gumpertz and Heger  
MEP Engineer : KJWW Engineering Consultants  
Civil Engineer : ARC Design Resources, INC  
General Contractor : Turner Construction  
Delivery Method : Guaranteed Max Price (GMP)

### Building Statistics

Location : 1400 Charles St  
Rockford, IL 61108  
Construction Dates : December 2004  
February 2006  
Size : 4 Stories  
130,000 SF  
Cost : \$36,600,000

### Architecture

Provides connection to two adjacent buildings.  
New two story Entrance Lobby serves as the gateway to the hospital with interior/ exterior fountain.  
Four triangular nursing wings surround a central Core.  
Architectural precast concrete wall panels.  
Four story structure is designed to support three additional floors.

### Mechanical Systems

Two roof top units serve each half of the building.  
Hot water radiant heat systems help control lobby spaces and glass curtain walls.  
Variable volume exhaust system installed with constant volume exhaust system to create isolation rooms where necessary.

### Structural Systems

Steel skeleton with composite columns on the first floor.  
Bolted flange plate moment connections are designed to resist lateral loads.  
Beam and Girder composite floor framing system with metal deck and 3 1/4" concrete slab.  
Continuous and spread footing foundation with 5" thick concrete slab on grade.

### Lighting/Electrical Systems

13.8kV feeding multiple 480/277V transformers.  
208/120V step down transformers supply load to interior fixtures.  
250kV emergency backup generator.  
Predominantly 277/120V fluorescent or compact fluorescent luminaries.

Philip Frederick  
Structural Option

<http://www.engr.psu.edu/ae/thesis/portfolios/2008/prkf109/>



# SWEDISH AMERICAN HEALTH SYSTEM

