

Christiana Hospital

2010 Project

Newark, DE

Project Team

- Architect
Wilmot Sanz
- Civil Engineer
VanDemark & Lynch, Inc.
- MEP Engineer
RMF Engineering, Inc.
- Structural Engineer
Cagley & Associates

Architecture

- Brick Veneer
- Glass curtain walls with aluminum frames
- Roofing membrane on tapered insulation



Building Information

- 299,000 square foot addition
- 8 story structurally reinforced concrete hospital
- 2 story structural steel conference wing
- 1 story below grade
- Adds 216 beds
- Creates additional operating rooms, catheterization labs and emergency exam rooms
- Expands Christiana Care's cardiovascular program
- Delivery Method - Design-Bid-Build



Lighting/Electrical

- (2) 35 KV primary feeders
- Primary Voltage – 480/277V
- Secondary Voltage – 208/120V
- Emergency Power – 1500 KVA Generator
- Linear Fluorescent and Halogen Lighting

Conference Wing

- Spread Footings
- 3¼” lightweight concrete over 2” metal deck
- 4 concentrically braced frames

Mechanical

- 8 AHUs supply air at rates ranging from 22,800 – 32,000 CFM
- Special filters for AHUs supplying clinical areas
- Receives steam and chilled water from outside source

Hospital

- 42” thick mat
- 9½” two-way flat slab with 5½” drops around columns
- 12” thick shears walls placed perpendicular to buildings perimeter

Joseph G. Sharkey
Structural

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/JGS186/index.htm>