



# Hospital Patient Tower

Eastern United States

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Structural Option

## General Information

Function:	Hospital/Patient Tower
Size:	236,000 SF
Height:	175' (12 stories above grade + 1 story below)
Construction:	Summer 2010 - Fall 2012
Construction Cost:	\$76 million
Delivery Method:	Design-Bid-Build

## Project Team

Owner:	Not Released
General Contractor:	Turner Construction
Architect:	Wilmot/Sanz Architects
Structural:	Cagley & Associates
MEP:	RMF Engineering, INC.
Civil Engineer:	Dewberry & Davis LLC



## MEP SYSTEMS

### Mechanical:

- Four 50,000 CFM air handling units
- Three hot water heat exchangers
- Constant air volume (CAV) units distribute the air

### Electrical:

- Two main feeds enter at 34.5 kV
- Two 5,000 kVA transformers feed a double-ended main substation
- Two parallel 2 MW backup generators
- Mechanical and lighting loads are fed at 480/277, receptacle and other loads at 208/120

### Lighting:

- Lighting fixtures use 277 V
- Combination of linear T8's and compact fluorescents
- Facade consists of LED fixtures

## ARCHITECTURE

- Facade largely composed of a smooth finished concrete panel and a thin brick faced concrete panel with an aluminum glass curtain wall system
- First two levels are composed entirely of the aluminum curtain wall system with a large two-story rotunda
- 174 all-private intensive-care and medical/surgical patient rooms

## SUSTAINABILITY

- Native plants, water cisterns and a green roof surround the building
- Achieved LEED Silver Certification
- Use of low-VOC paints, building materials and furniture within the patient rooms
- Low flow plumbing fixtures and sensors

## CONSTRUCTION

- Due to the connection with the existing part of the hospital, construction must not cause any delays with the existing structure
- Means of weather proofing the connected areas
- Coordination between the construction crews and the hospital staff

## STRUCTURAL

- Foundation consists of auger-cast piles with pile caps
- Two-way flat slab with column drop panels comprise the floor system
- Shear walls and moment frames make up the lateral force resisting system
- Pre-engineered aluminum helicopter pad resides on the 11th floor roof