

# Hospital Patient Tower

East Coast U.S.A.

Matthew Peyton

Structural Option

## General Building Statistics

Size:	216,000 SF
Number of stories:	12 Above Grade
Cost:	\$161 Million
Durations of Construction:	Summer 2010—Fall 2012
Delivery Method:	Design-Bid-Build



## Architecture

- ◆ 174 private intensive care and medical/surgical rooms.
- ◆ 360° patient access for improved care.
- ◆ Two story atrium connected to the lobby with a living roof.
- ◆ Cantilevered aluminum louvers with glazing as lobby canopy.
- ◆ Precast concrete exterior façade with curtain wall sections.

## Mechanical

- ◆ 5th Floor mechanical space.
- ◆ Five fan cooled AC units.
- ◆ Four steam boilers.
- ◆ One central and 4 exterior building mechanical risers.
- ◆ Stairwell pressurization fan 10,000 CFM.

## Structural

- ◆ Foundations of piles and grade beams with a 5" S.O.G.
- ◆ 9 1/2" Flat plate concrete slab with 2 way steel reinforcing
- ◆ Concrete columns with drop panels and edge beams.
- ◆ 12" thick concrete shear wall in 7 locations.
- ◆ 9 1/2" Flat plate concrete roof slab with Helipad supports .
- ◆ 14" Penthouse Slab with steel reinforcing.
- ◆ 1 1/2" Metal roof deck on wide flange steel for penthouse connection.

## Project Teams

General Contractor	Turner Construction
Architect	Wilmot/Sanz
Structural Engineer	Cagley & Associates
Civil Engineer	Dewberry & Davis
MEP Engineer	RMF Engineering INC.

## Electrical/Lighting

- ◆ Two 2000 KVA transformers provided by DVP.
- ◆ 2000 KW Generation feeding a 2000KVA transformer for Emergence back-up.
- ◆ 277 V lighting system mostly fluorescent with specialty lighting where needed .

