

FRANKLIN SQUARE HOSPITAL CENTER

PATIENT TOWER AND EMERGENCY DEPARTMENT ADDITION

9000 FRANKLIN SQUARE DRIVE, BALTIMORE MD

GENERAL STATISTICS:

Size: 356,000 SF

Number of Stories: 7

Function: Medical

Cost: \$176 Million Project Cost

Construction Dates: November 07 - October 10

Delivery Method: Design—Bid—Build



PROJECT TEAM:

Owner: Franklin Square Hospital Center

Project Manager: Lillibridge Healthcare Services

Construction Manager: Bovis Lend Lease

Architect: Wilmont/Sanz Inc.

Structural: Rathgeber/Gross Associates

Civil: Dewberry and Davis

MEP: Leach Wallace Associates

ARCHITECTURE:

- Precast wall panels with exposed concrete, brick veneer, and stucco finish visually offset by exposed concrete bands between floors
- Sun shades extend out from the buildings face providing shelter for the large curtain wall sections
- Main entrance leads through a large three story atrium featuring the lobby
- Spaces Include:
 - 291 private inpatient rooms
 - Expanded emergency department
 - Dedicated pediatric emergency department and inpatient suite
 - Four new medical and surgical units
 - Expanded 50 bed critical care unit

STRUCTURE:

Framing System and Lateral System:

- Concrete columns, edge beams, and 10" slabs function as both the gravity system and moment frame lateral system.

Floor System:

- 10" concrete two-way slabs spanning a typical 30'x30' bay

Foundation:

- Drilled 4' concrete piers extending 42' below grade
- 24"x24" perimeter grade beams with 5" slab on grade ground floor

Roof System:

- 1.5" deep wide rib 20 gauge galvanized metal deck on cambered steel beams and steel columns

Future Expansion:

- Portion of ground floor that extends past the tower has oversized columns for future tower addition.
- Portion of roof system is strengthened for future heliport



MEP SYSTEMS:

Mechanical:

- Onsite central plant with two three-ton cooling towers, two chillers, and two fuel oil tank boilers
- Air handling units using variable percentage of outdoor air ranging from 10% to 50%
- Variable air volume terminal units with hot water reheat and variable volume return system

Electrical:

- 208Y/120V, 3 phase, 5 wire system
- Emergency 480Y/277V, 3 phase, 4 wire system using diesel engine generators

Lighting:

- Fluorescent lighting
- Ultrasonic and infrared occupancy sensors

THOMAS WEAVER - STRUCTURAL OPTION

[HTTP://WWW.ENGR.PSU.EDU/AE/THESIS/PORTFOLIOS/2010/TWW137](http://www.engr.psu.edu/ae/thesis/portfolios/2010/tww137)