

Miller Children's Hospital Pediatric Inpatient Addition

Long Beach, CA



Project Information

Building: 4-story addition includes 7 operating rooms, a new pediatric imaging center, 48 neonatal intensive care beds, and 24 general pediatric beds

Size: 127,129 sq. ft.

Cost: \$151,000,000 (estimated)

Completion: Fall 2009

Delivery Method: Design-bid-build

Project Team

Architect: Taylor Architects

Interior Design: Taylor, Ford Design

Engineers:

MEP: JBA Consulting Engineers

Structural: Taylor & Gaines

Civil: Moffatt & Nichol

Contractor: Turner Construction

Mechanical System

- 7 AHUs located in roof mechanical penthouse plus 1 existing AHU serve separate levels
- Each space served with reheat coil
- Steam and chilled water supplied from central plant located on site
- HEPA filters used for operating rooms
- VFDs reduce energy consumption

Architectural Design

- Creates a "Safe Haven" for patients
- "Castle" architectural theme appeals to children
- Utilizes a green roof system
- Exterior features include metallic panels, metal cladding on columns, and stucco

Electrical System

- 4000A switchboard serves 480Y/277V, 3-phase, 4-wire system
- Emergency system comprised of (2) 750kW diesel generators
- Operating rooms require special light fixtures for maximum light output
- Color-Kinetic lighting uses primary colors for a welcoming feeling experience for children

Structural System

- Curtain wall system with steel supporting upper levels
- Steel frame construction utilizes proprietary system called SidePlate
- 3 ft deep mat foundation supports columns
- Cast-in-place concrete foundation retaining walls