The Hilton Baltimore Convention Center Hotel

Baltimore, MD

Project Overview
-Size: 850,000 square feet
-Cost: $250 million, $16 million mechanical
-Construction Dates: February 2006-August 2008
-Delivery Method: Design-Build
-Building Use: 750 hotel guest rooms, conference/ meeting rooms, restaurant, grand and junior ballrooms, swimming pool, and parking garage

Project Team
Owner: Baltimore Hotel Corp.
GC: Hensel Phelps
Architect: RTKL
Mechanical: Southland Industries
Structural: RTKL; Hope Furrer
Electrical: MC Dean
Civil: Whitney, Balley, Cox, and Magnani

Mechanical
-Comfort Link district chilled water with two 1,000 ton heat exchangers
-Trigen district steam at 150 psig
-8 AHUs (274,000 cfm) serving VAV systems in public spaces and lower levels
-4 MAUs (86,000 cfm) supply conditioned outdoor air to guest room towers
-750 Guest rooms conditioned by 2-pipe vertical FCU's with electric resistance heat

Architecture
-Three story East Podium and 21 story West Podium with guest towers are connected by a walking bridge over Eutaw St.
-Lower levels are brick and glazed aluminum curtain wall, while guest room towers are silver metal wall panels with fixed aluminum windows
-Both podiums utilize a green roof system, and guest room towers have a traditional PVC membrane roof

Structural
-Steel encased concrete columns
-Two way flat concrete slab floor construction
-Exterior walls are non-load bearing
-Columns bear on drilled caissons or caisson cap
-Spread footings bear on reinforced soil
-Connecting bridges supported by steel beams

Electrical
-BGE service enters West Podium and splits three ways. 2000A 480/277 serves East Podium while two 4000A 480/277 serve West Podium
-1100KW Emergency Generator
-Public spaces lit by recessed and surface mounted compact fluorescent lamps

Andrew Rhodes

Mechanical Option

http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/ARR171/