Gallaudet University WASHINGTON, DC est. 1864

PATRICK B. MURPHY MECHANICAL OPTION

www.arche.psu.edu/thesis/eportfolio/2007/portfolios/pbm119



Sorenson Language and Communication Center

Future home of

ASL and Deaf Studies
Communication Studies
Government and History
Hearing, Speech, and Language Sciences
Linguistics

Sociology

Image courtesy of Gallau det University



PROJECT INFORMATION

Building: 3 story office and research wing with mechanical

basement and 2 story classroom wing emanate

from central atrium

Size: 83,027 SF

Cost: \$24,054,000 (estimated)

Completion: Summer 2008

ARCHITECTURAL DESIGN

- Adapts to the 'visu-centric' way of being in deaf culture
- Atrium serves as functional and symbolic heart of facility
- Enclosure primarily masonry and glass curtain walls
- Attempting to garner LEED v2.1 Certified Rating
- Colonnaded classroom wing reflects repetition of columns at historic Chapel Hall across campus green
- Features several acoustically sensitive audiology labs

MECHANICAL SYSTEM

- 6 AHUs serve distinct functional zones for indep, operation
- Each space served with a VAV terminal unit
- Steam and Chilled Water supplied from campus utilities
- VFDs and Air-side economizers reduce energy use
- Sound attenuators used on AHUs and VAVs for sensitive acoustical spaces

PROJECT TEAM

Architects: SmithGroup (primary)
Kuhn Riddle Architects

Engineers:

MEP: SmithGroup
Structural: McMullan & Assoc.
Civil: Edwards & Kelcey
Acoustics: Cavanauch Tocci Assoc.
AV: Technology Design

Resources LLC

Construction Manager: Heery Int'l.

Specifications: Heller and Metzger, PC

Code Compliance: The Protection Engineering Group

ELECTRICAL SYSTEM

- 2000A switchboard serves 480/277V, 3-phase, 4-wire system
- 300 kW diesel emergency generator
- Increased ambient lighting in the many video conf. rooms
- Occupancy sensors in single offices, restrooms, and storage

STRUCTURAL SYSTEM

- Concrete caissons support cast-in-place concrete grade beams and foundation walls
- Structural steel skeleton supports upper floors
- Composite floor system supported by open web trusses

