

# The Pennsylvania Academy of Music

Lancaster, PA

David Smith  
Lighting/Electrical Option

## Design and Construction Team

**Owner / Occupant** - The Pennsylvania Academy of Music  
**Architect** - Philip Johnson Alan Ritchie Architects  
**MEP** - Cosentini Associates, **Structural** - Robert Silman Assoc.  
**Lighting** - HLB Lighting Design, **GC** - Benchmark Construction

## Building Information

65,000 square feet in three stories above grade and one story below grade. Current cost is \$21 million as a Design-Bid-Build project. The building is used as a music school, conservatory, library, and concert venue.

## Building Architecture

The building is a contemporary, limestone-clad structure with a two-story, curved glass atrium. The interior spaces include a library, a 364-seat recital hall, smaller performance spaces, classrooms, a recording studio, a roof terrace, and offices.

## Structural System

The structural foundation system consists of 8" slab on grade with 3' piers and 5' caissons. Columns are all steel ranging in size from W8 to W10. Composite decking system consists of 2" steel deck with 3.5" concrete slab. Shear walls take up the lateral loads.

## Mechanical System

The mechanical system utilizes twelve air conditioners and eight air handling units. Variable air volume air distribution is used. The boiler and heating systems are gas-fired. The building employs sound trap and attenuation systems for performance spaces.

## Electrical System

The electrical distribution to the building is at 12.47 KV. A 30 KVA UPS system in conjunction with a 250 KW emergency generator are used to keep the communications and safety systems online. Both 480Y/277V and 208Y/120V distribution are used within the building.

## Lighting System

The lighting system consists of both direct and indirect 120V lighting systems using compact and linear fluorescent, incandescent, and HID sources. Atrium glows at night from wallwashers on walls. Recital hall has DMX512 control system for dimming and theatrical control

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/DBS176/>

