

Phoenixville Area Middle School

Phoenixville, Pennsylvania

Project Overview

Architectural Features

- Building separated into four areas:

Area A - Gymnasium
Area B: Classrooms and Cafeteria
Area C: Classrooms and Library
Area D: Auditorium

- Facade composed of brick, limestone, split and ground face CMU's
- Construction based on sequencing of the four areas to allow trades to work simula-neously

Owner:	Phoenixville Area School District
Total Height:	3 Stories
Total Project Cost:	\$55,236,059
Size:	188,500 s.f.
Duration:	May 2010 - May 2012
Architect:	Gilbert Architects
Construction Manager:	Reynolds Construction Management
Geotechnical Engineer:	David Blackmore & Associates
Structural Engineer:	Baker, Ingram and Associated
MEP Engineer:	Snyder Hoffman
Civil Engineer:	Renew Design Group



MEP Systems

- Heated by 3 gas powered condensing heaters, electric cabinet heaters, and electric wall and unit heaters
- Water source heat pumps used throughout building
- VAV boxes control supply air to 42 different rooms
- Four rooftop heat recovery units service entire building
- Power supplied by four transformers operating at 480/277 V and 208/120 V
- Lighting in all rooms controlled by motion sensors

Structural System

- Shallow foundation used with reinforced concrete column piers and wall footings and reinforced slab-on-grade
- HSS and wide flange steel columns used to carry load
- Area B and C floors supported by steel wide flange beams
- Area A and D roofs supported by steel barrel trusses
- Floors composed of 2" 20 GA metal decking with 3 1/2" concrete topping
- Roof decking composed of 1 1/2" 20 GA acoustic metal roof deck

Richard Schimpf

Architectural Engineering | Construction Management

<http://www.engr.psu.edu/ae/thesis/portfolios/2012/RSS5082/index.html>