



PHOENIXVILLE EARLY LEARNING CENTER AND ELEMENTARY SCHOOL

Phoenixville, PA 152,000 SF (GROSS) Two Stories \$80 Million (Overall)



Learning Studio



Learning Stairs Atrium



First Floor Media Center

CPEP: <https://www.engr.psu.edu/ae/thesis/portfolios/2016/noa5100/index.htm>

DESIGN TEAM:

Owner: Phoenixville Area School District
 Architect: SCHRADERGROUP architecture LLC
 MEPFP: Barton Associates Inc
 Structural: SCHRADERGROUP architecture LLC
 Civil: T&M Associates
 Landscape Architecture: T&M Associates

Building Systems

Architectural	<p>Function: Education, including; classrooms, offices, cafeteria, gymnasium, media center, art studio</p> <p>Façade: Prefinished cementitious siding product system with lapped and stacked assemblies. As well as a sand blasted CMU Veneer.</p>
Structural	<p>Lateral System: Braced Framing with reinforced CMU Shear Walls, Moment Frames may be used if brace frames cannot be accommodated.</p> <p>Foundation: Concrete Piers will be used and sized on specific loads.</p> <p>Floor System: 3-1/2" Normal Weight Concrete topping on 2" 20 GA composited metal floor deck. Slab is reinforced with #4 rebar at 16" spacing.</p>
Mechanical	<p>Heating: Three High Efficiency Condensing Boilers provide heating for the water to serve 88 water source heat pumps. Condenser water units circulate water from heat pumps to boiler and cooling tower.</p> <p>Cooling: One Cooling Tower provides chilled water to the rest of the building and uses a flat plate heat exchanger to condense water.</p> <p>Ventilation: Water Source Heat Pumps are found in every class room as well as 10 Energy Recovery Ventilator Units on the roof.</p>
Electrical/ Lighting	<p>Supply: Building is serviced by a 277/480V, 3-phase, 4-wire, 1600A Underground service from a utility transformer.</p> <p>Lighting: Primarily is 277V fluorescent lamp fixtures. They will be long-life T8. Exterior Lights, downlights, and accent fixtures will be LED.</p>

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