



KIMBERTON ELEMENTARY SCHOOL

EAST PIKELAND TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA



BUILDING STATISTICS:

- **Size:** 104,000 sq ft – Two Stories
- **Construction:** July 2008 – Jan 2010
- **Construction Cost:** \$25.5 Million
- **Delivery Method:** Design-Bid-Build with Multiple Prime and CM Agency

ARCHITECTURE:

- 650 students Elementary
- Two main wings: Classroom and Activities
- 30 750 SF classrooms
- 2 computer labs
- 3000 SF media center
- 650 seat auditorium/cafeteria
- 6000 SF gymnasium with full basketball and volleyball courts

BUILDING ENVELOPE:

- Masonry Veneer Exterior
- Split face block on first floor
- Green cementitious siding used on second floor
- Asphalt shingled gabled roof on top of the classrooms, media center, gymnasium, and entry
- White single-ply membrane flat roof on remainder of building

STRUCTURAL:

- Structural Steel Building
- 1.5" 20 GA composite deck with 2.5" of NW concrete
- Classroom live load is 40 PSF
- Most columns are HSS8x8x1/2
- Spread footing support columns
- First floor is 4" cast-in-place concrete slab with 6x6 W2.9xW2.9 WWF



MECHANICAL:

- Water source heat pump
- Individual heat pumps for each classroom housed in the second floor mechanical room
- 6 water source heat recovery units manufactured by Des Champs housed on the roof
- Originally designed as geothermal heat pump

ELECTRICAL:

- Disturbed through building at 480/277V
- Supply Voltage is 33KV
- 5 Local Transformers step down to 208/120V
- Lighting uses 277V
- 125 KW Backup Generator
- 40 panel boards located throughout school

LIGHTING:

- 59 lighting types
- Classrooms use 3 32W T8 lamps
- Switching allows for 3 light levels
- The media center contains pendent and drop lights
- Gymnasium lighting is produced by high bay fluorescents
- Cafeteria/auditorium has dimmable metal halide lights

PROJECT TEAM:

- **OWNER:** Phoenixville Area School District
- **CONSTRUCTION MANGER:** Foreman Program and Construction Managers
- **ARCHITECT:** Gilbert Architects
- **STRUCTURAL:** Baker, Ingram, & Associates
- **M.E.P.:** Snyder Hoffman & Associates



RALPH GARY KREIDER

2009 CONSTRUCTION OPTION

[HTTP://WWW.ENGR.PSU.EDU/AE/THESIS/PORTFOLIOS/2009/RGK5000/](http://www.engr.psu.edu/ae/thesis/portfolios/2009/rgk5000/)

